

Annual Report on the National Health System of Spain 2020-2021



REPORTS, STUDIES AND RESEARCH 2025
MINISTRY OF HEALTH

Annual Report on the National Health System of Spain 2020-2021

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Contents

Presentation	11
Executive summary	13
1 Introduction	53
2 Population	55
2.1 Population Figures	55
2.2 Population protected by the SNS	57
3 Health status	59
3.1 Well-being	59
3.1.1 Life expectancy	59
3.1.2 Healthy Life Years	62
3.1.3 Perceived health	64
3.1.4 Quality of life for children	65
3.2 Morbidity	67
3.2.1 Respiratory diseases	67
3.2.2 Cardiovascular disease	72
3.2.3 Mental health disorders	77
3.2.4 Malignant tumours	82
3.3 Mortality	86
3.3.1 General mortality	86
3.3.2 Respiratory diseases	88
3.3.3 Cardiovascular disease	91
3.3.4 Malignant tumours	95
3.3.5 Death by suicide/mental health disorders	98

4	Social determinants of health	102
4.1	Socio-economic determinants	102
4.1.1	Dependency ratio	102
4.1.2	Population with basic secondary education or less	104
4.1.3	Population at risk of poverty and exclusion (AROPE)	105
4.2	Lifestyle habits	107
4.2.1	Tobacco use	107
4.2.2	Alcohol use	109
4.2.3	Obesity	114
4.2.4	Physical activity	116
5	The healthcare system	118
5.1	Healthcare activity	118
5.1.1	Preventive healthcare activity	118
5.1.2	Primary care activity	123
5.1.3	Hospital care activity	127
5.1.4	Emergency and urgent care	132
5.1.5	Morbidity attended	137
5.2	Accesibility	147
5.2.1	Waiting times in primary care	147
5.2.2	Waiting times in specialised care	148
5.3	Patient experience	151
5.4	Pharmaceutical benefits	161
5.4.1	Medicines and health products included in the SNS pharmaceutical benefits package	161
5.4.2	Consumption of pharmaceutical benefits through SNS medical prescriptions dispensed in pharmacies	165
5.4.3	Pharmaceutical benefits provided in hospitals	168
5.4.4	Consumption of biosimilar medicines	169

5.4.5	Consumption of orphan medicines	170
5.4.6	Dispensing pharmacies	170
5.4.7	Pharmaceutical manufacturers supplying medicines and health products to the SNS	171
5.5	Physical resources	172
5.5.1	Primary care centres and local primary care centres	172
5.5.2	Hospitals	173
5.5.3	Medical technologies	178
5.5.4	Reference Centres, Services and Units (CSUR) of the SNS	179
5.6	Human resources	180
5.6.1	Medical practitioners	181
5.6.2	Nursing professionals	187
5.6.3	Other professionals	193
5.6.4	Newly graduated physicians and nurses	196
5.6.5	Specialised healthcare training	197
5.6.6	Other aspects of healthcare training	197
5.7	Expenditure	198
5.7.1	Public health expenditure managed by the autonomous communities	205
5.7.2	Out-of-pocket expenditure on healthcare goods and services	212
6	The healthcare system's response to COVID-19	215
6.1	Context	215
6.2	Diagnostic capacity for COVID-19	217
6.2.1	PCR and antigen tests	218
6.2.2	Diagnostic tests by age and sex	224
6.2.3	Positivity in school children (2020-2021 school year)	227
6.2.4	Reinfection rate	228
6.3	Care capacity	229

6.3.1	Intensive Care Units	229
6.3.2	Field hospitals and non-medical buildings	231
6.3.3	Primary Care health centres	231
6.4	Primary Care activity related to COVID-19	232
6.5	Hospital activity and occupation related to COVID-19	235
6.5.1	Activity – Hospitalisations due to COVID-19	235
6.5.2	Activity and occupation – Intensive Care	238
6.5.3	Characteristics of hospitalised COVID-19 patients	239
6.6	Impact of COVID-19 on access to the healthcare system	241
6.6.1	Access to primary care physicians	241
6.6.2	Waiting list for surgery	242
6.6.3	Waiting list for outpatient consultations with specialists	243
6.7	Impact of COVID-19 on ordinary care activity	244
6.7.1	Primary care activity and indicators	244
6.7.1.1	Morbidity patterns in primary care	248
6.7.2	Hospital indicators and activity	249
6.7.2.1	Cases attended – results RAE-CMBD	249
6.7.2.2	Morbidity pattern in hospitalisation	252
6.8	Vaccination against COVID-19	253
6.8.1	Unvaccinated population, by reason	255
6.9	Experience and opinion of the population in relation to the pandemic	256
6.9.1	Use of healthcare services	256
6.9.2	Need for reforms in the healthcare system	259
6.9.3	Attitudes regarding COVID-19 vaccination	259
Table Index		263
Graphs Index		268

List of abbreviations	285
Sources and information systems	291
Work Team	302

Presentation

The purpose of the Annual Report on the National Health System of Spain is to provide an overall vision of the health status of the population and of how of the country's public healthcare system works. To do so, it presents data about health and its determining factors and also data regarding the system's activity, its structure and resources, as well as citizen perceptions of it. The report thus constitutes a very useful element for guiding and improving the policies and strategies that seek to protect individual and collective health.

This edition, conditioned by the pandemic situation, brings together information from the period immediately prior to the pandemic as well as the years 2020 and 2021, offering some data about healthcare provision during COVID-19 and also about how citizens view the system in this regard.

Collaboration on the part of the regional ministries of health and the National Institute of Health Management (INGESA) in the provision of data is what makes it possible to present much of the information contained herein, and for this reason I want to take this opportunity to express to them my sincerest gratitude.

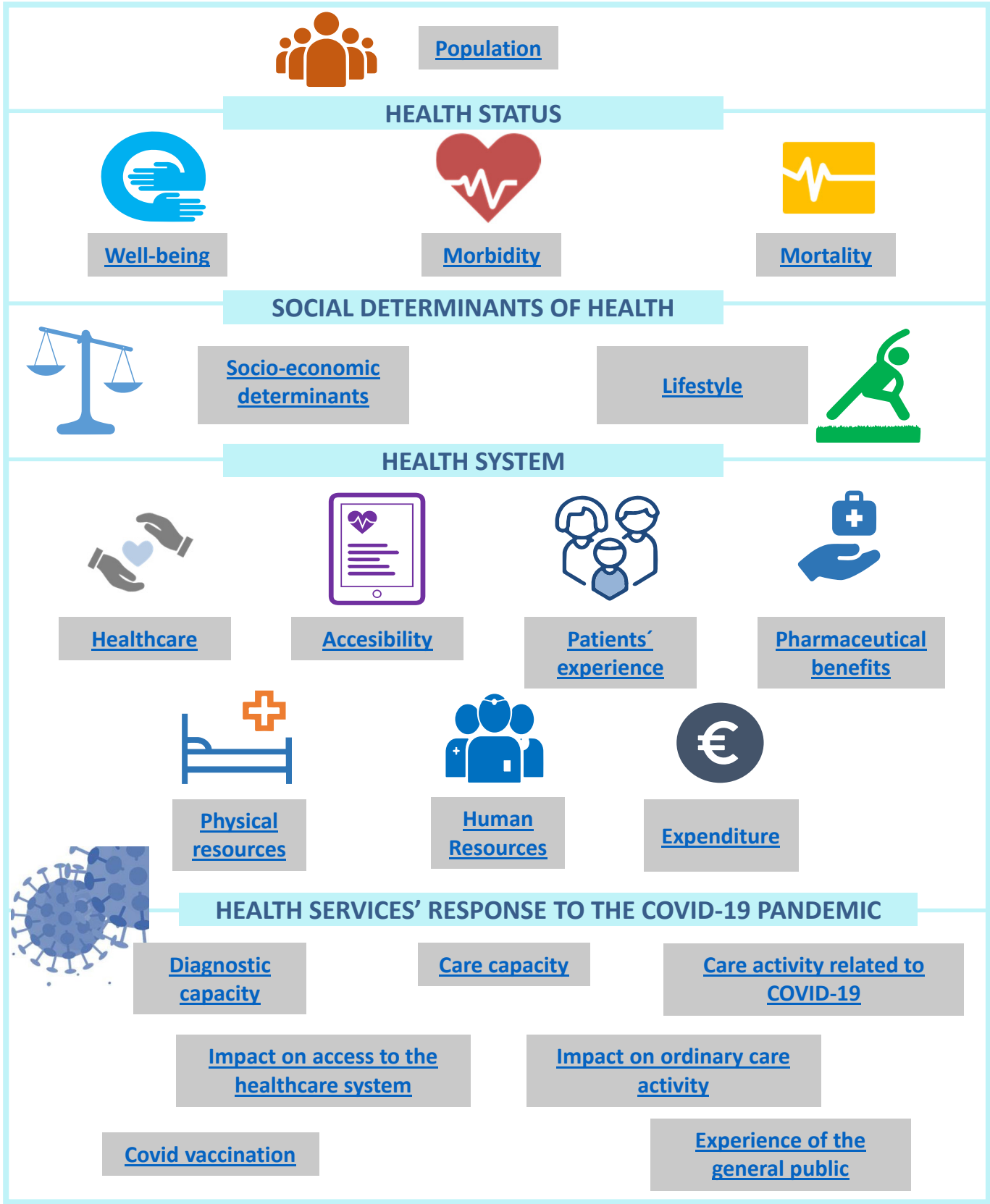
But above all I must, and also wish to, acknowledge the work of all the professionals who join forces every day in the many health centres and facilities, and in the different health administrations, to achieve a healthcare system capable of performing the tremendous amount of activity and services described in the report. Together these women and men make it possible for Spain's public healthcare system to be truly universal, equitable and of outstanding quality.

Finally, my gratitude to all the individuals, units and institutions who, with their work, contribute to this publication and are essential in the creation of the Annual Report on the National Health System of Spain.

D.^a Carolina Darias San Sebastián

Spain's Minister of Health

Executive summary

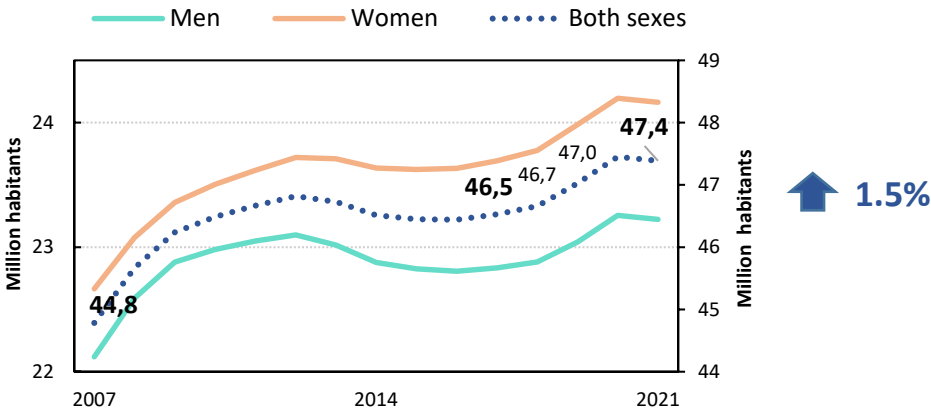




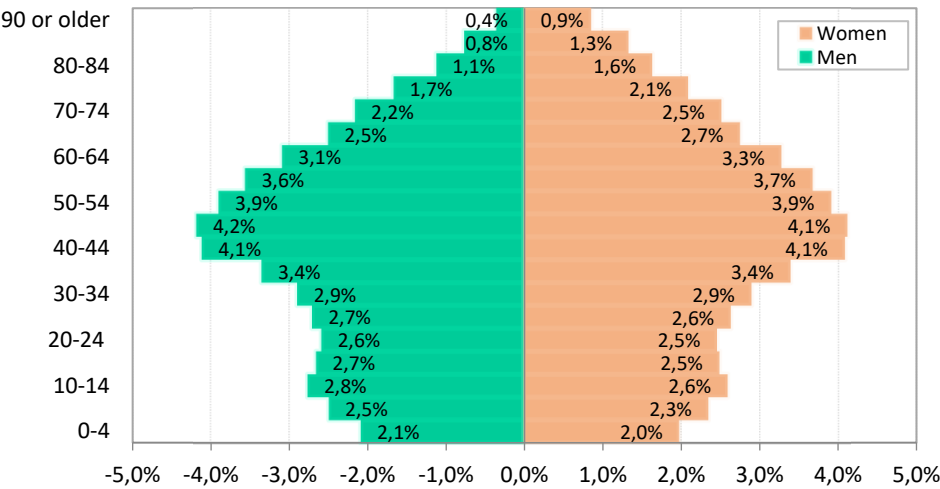
POPULATION

POPULATION FIGURES

47,385,107 people



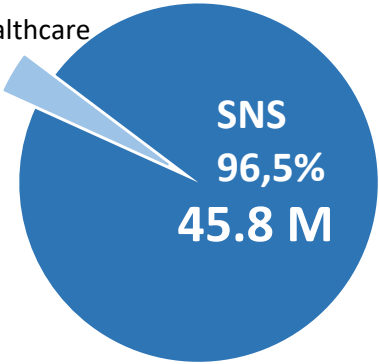
The population pyramid is clearly **REGRESSIVE**



POPULATION COVERED BY THE SNS

100% population with healthcare covered with public funds:
47.4 M people

Insurance Schemes receiving private healthcare
3,5%

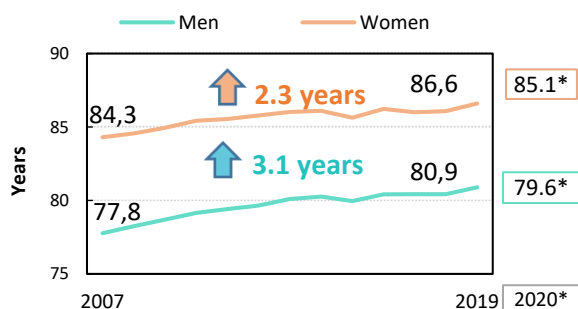




WELL-BEING

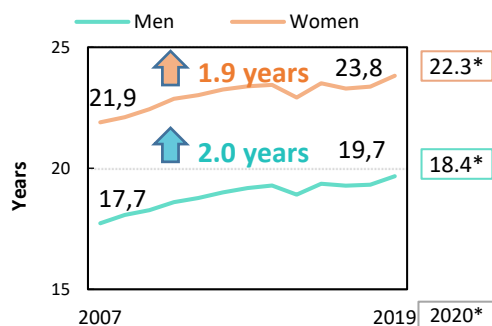
LIFE EXPECTANCY

AT BIRTH

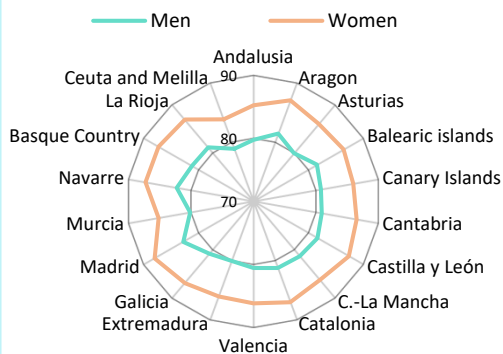


WOMEN'S life expectancy at birth is **86.6 years** and **MEN'S** **80.9 years**.

AT 65



At 65, **WOMEN** are expected to live **23.8 more years** and **MEN** **19.7 more years**.

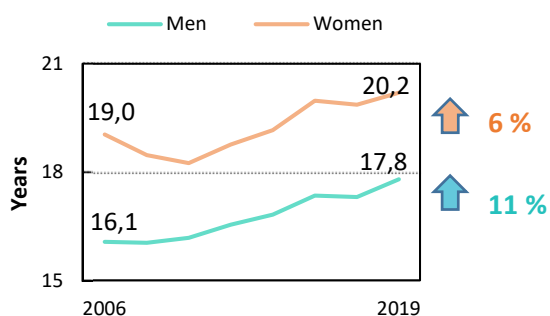


At birth, **WOMEN'S** life expectancy is **5.9 years longer** than **MEN'S**

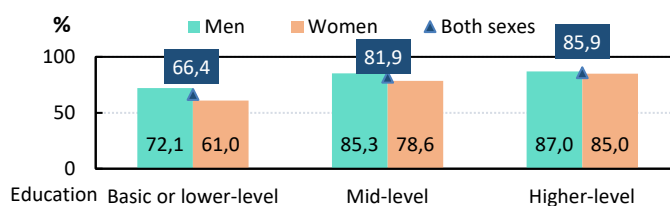
***2020 data:** published after the closing date of this report. The data available during the preparation of the report were for 2019.

QUALITY OF LIFE

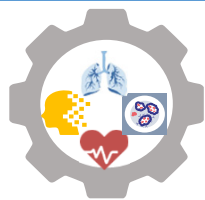
The average score for health-related **QUALITY OF LIFE IN CHILDREN** is **87.4** points in children aged **8 to 14**.



Since 2006 **HEALTHY LIFE YEARS** at 65 increased **1.7** percentage points for men and **1.2** for women.



A **POSITIVE PERCEPTION OF HEALTH** in people aged **15 or older** is clearly lower among people with basic or lower-level education, especially women.



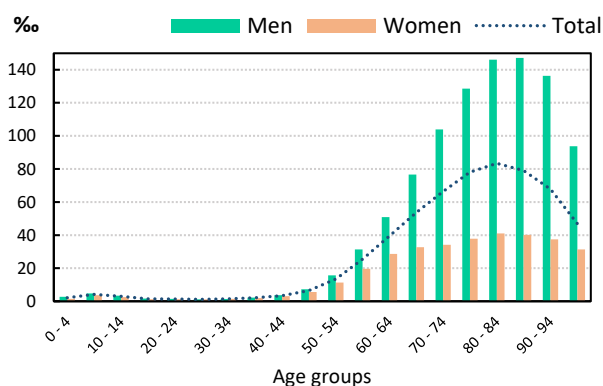
MORBIDITY



RESPIRATORY DISEASES

Chronic Obstructive Pulmonary Disease

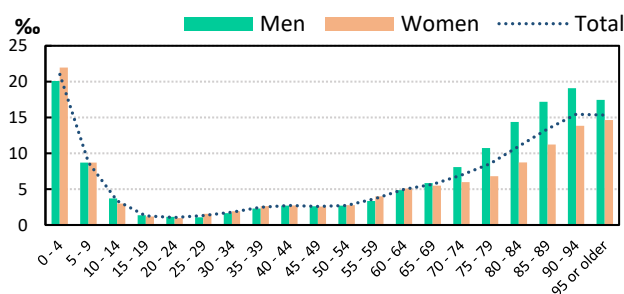
5 out of every 100 **MEN** and **2** out of every 100 **WOMEN** aged **40 or older** suffer from **COPD**.



Age-adjusted hospitalization rate is **12 hospitalizations per 10,000** inhabitants, **three times higher** in **MEN** than in **WOMEN**.

Pneumonia

20 out of every 1,000 **children under 5 years** and **10** out of every 1,000 people aged **70 or older** suffer from **pneumonia**.



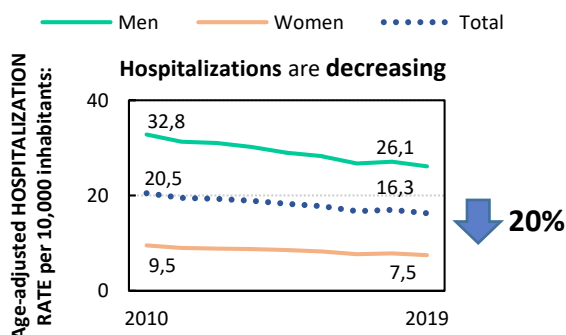
Age-adjusted hospitalization rate is **16 hospitalizations per 10,000** inhabitants, **higher** in **MEN** than in **WOMEN**.



CARDIOVASCULAR DISEASES

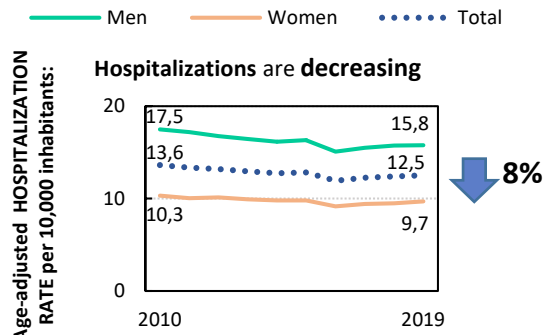
Ischaemic heart disease

3 out of every 100 **MEN** and **1** out of every 100 **WOMEN** suffer from **ischaemic heart disease**.



Cerebrovascular disease

The prevalence of cerebrovascular disease is **15.1 cases per 1,000** people, **10.8 for MEN** and **14.3 for WOMEN**.

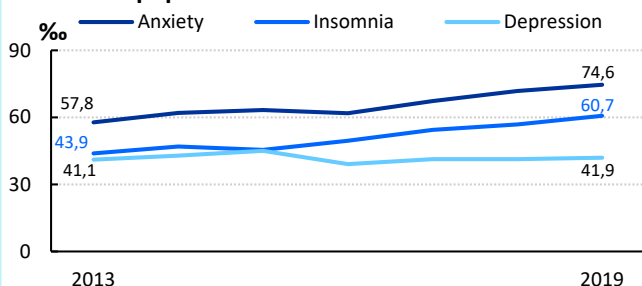




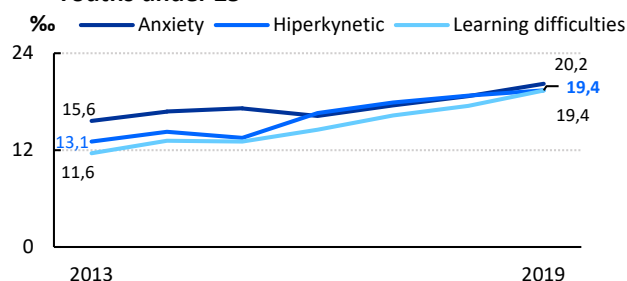
MENTAL DISORDERS

Most common mental disorders

General population

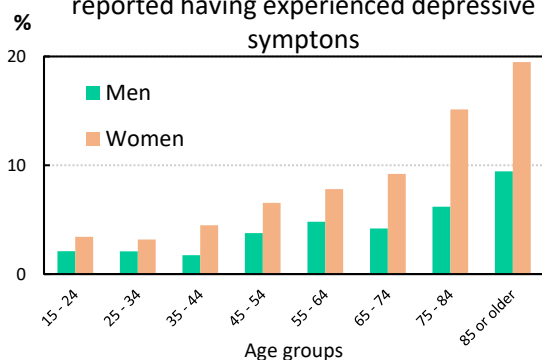


Youths under 25

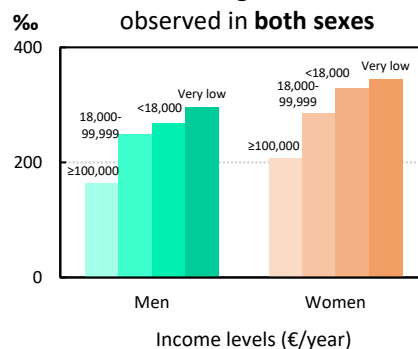


29% people have some type of mental disorder

1 out of every 10 people aged 75 and older reported having experienced depressive symptoms



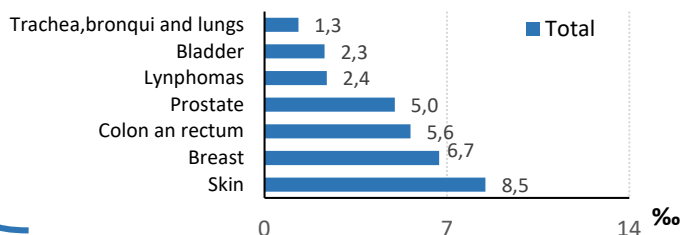
A clear **social gradient** can be observed in **both sexes**



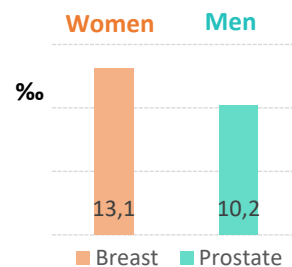
MALIGNANT TUMOURS

Prevalence is **40.2 cases per 1,000 inhabitants**

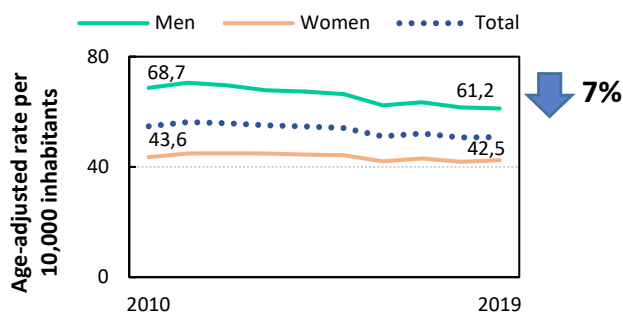
Most frequently occurring **Malignant neoplasms**



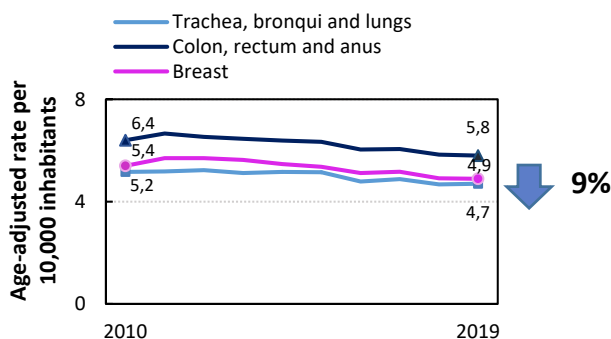
Most frequent **malignant neoplasms** in



Since 2010, hospitalizations due to malignant tumours have **decreased by 7%**



Hospitalizations due to the three most frequent malignant tumours have decreased:





MORTALITY

GENERAL MORTALITY

There have been (2019)

418,703 DEATHS:

212,683 in MEN and **206,020 in WOMEN.**

The **GROSS MORTALITY RATE** (2019) is

888.9 DEATHS per 100,000 inhabitants:

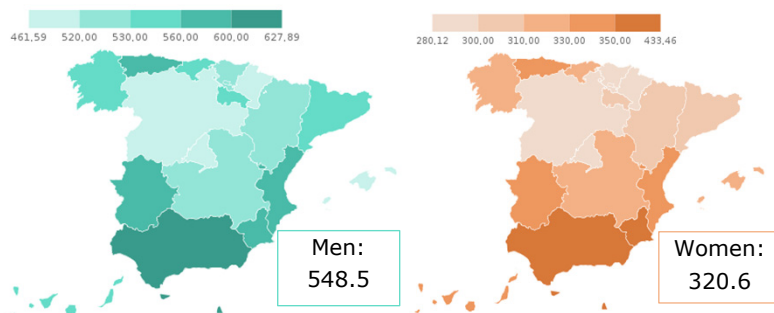
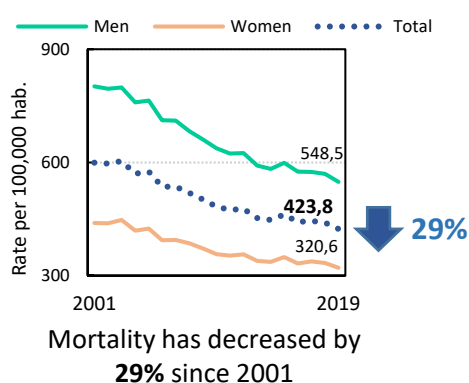
921.0 in MEN and **857.9 in WOMEN.**

* 2020: **493,776** deaths,
249,664 in men and
244,112 in women.

*2020 data: published after the closing date of this report. The data available during the preparation of the report were for 2019.

*2020: **1,039.9** deaths per 100,000 hab.,
1,071.7 in men and
1,009.3 in women.

AGE-ADJUSTED MORTALITY RATE per 100,000 inhabitants



CARDIOVASCULAR DISEASES and **CANCER** cause **more than 50%** of deaths.

MORTALITY DUE TO RESPIRATORY DISEASES

CHRONIC OBSTRUCTIVE PULMONARY DISEASE

There have been **13,808 DEATHS:**

9,907 in MEN and **3,901 in WOMEN,**

with a **GROSS MORTALITY RATE** of

29.3 DEATHS per 100,000 inhabitants

PNEUMONIA AND INFLUENZA

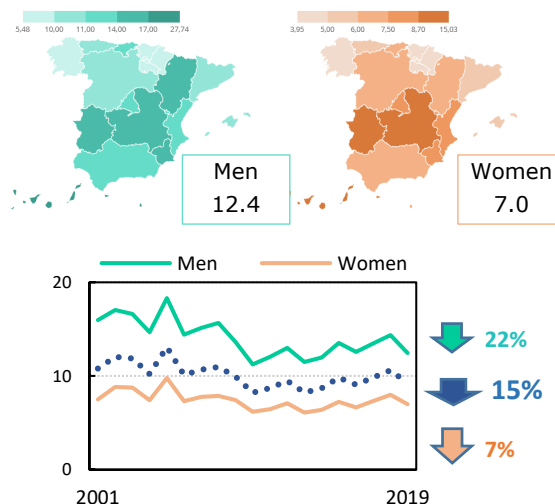
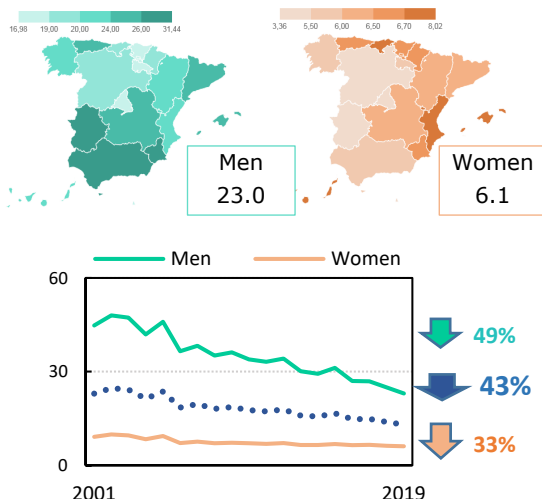
There have been **10,843 DEATHS:**

5,517 in MEN and **5,326 in WOMEN,**

with a **GROSS MORTALITY RATE** of

23.0 DEATHS per 100,000 inhabitants

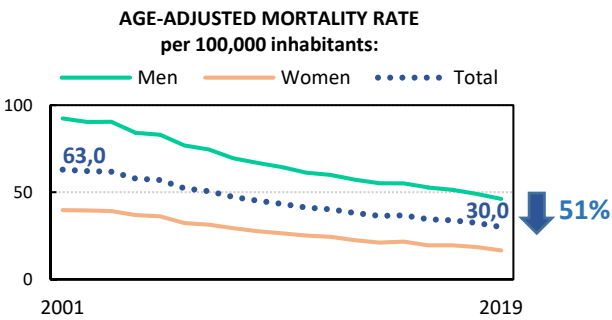
AGE-ADJUSTED MORTALITY RATE
per 100,000 inhabitants:



MORTALITY DUE TO CARDIOVASCULAR DISEASE

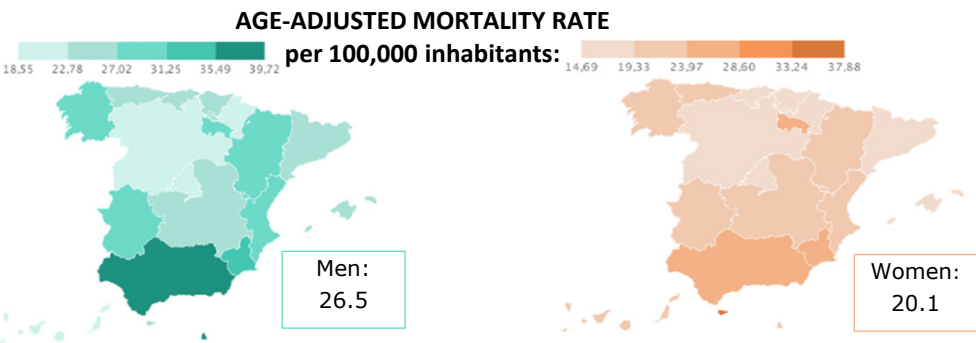
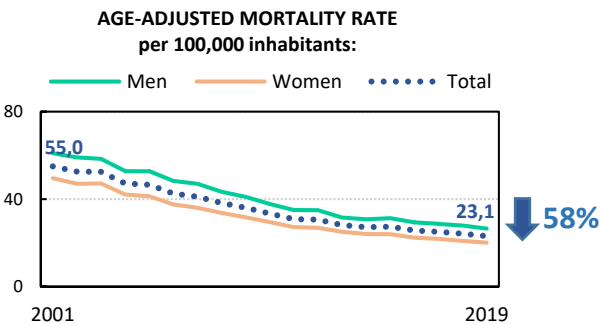
ISCHAEMIC HEART DISEASE

There have been **29,247 DEATHS**:
17,709 in MEN and **11,538 in WOMEN**,
with a **GROSS MORTALITY RATE** of
62.1 DEATHS per 100,000 inhabitants:
76.7 in MEN and **48.1 in WOMEN**.



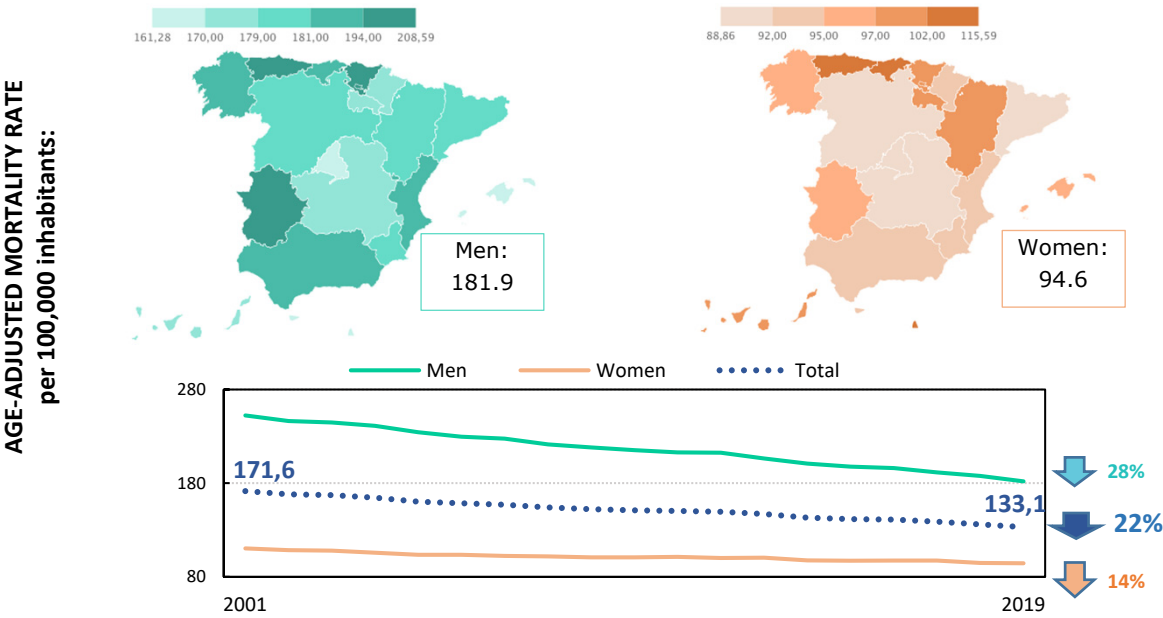
CEREBROVASCULAR DISEASE

There have been **25,712 DEATHS**:
11,086 in MEN and **14,626 in WOMEN**,
with a **GROSS MORTALITY RATE** of
54.6 DEATHS per 100,000 inhabitants:
48.0 in MEN and **60.9 in WOMEN**.

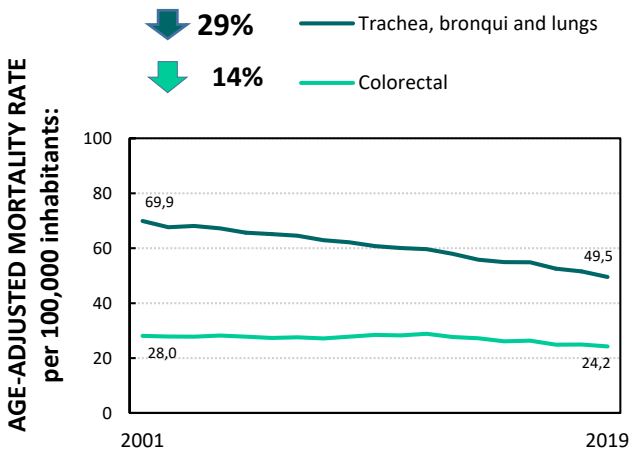


MORTALITY DUE TO MALIGNANT TUMOURS

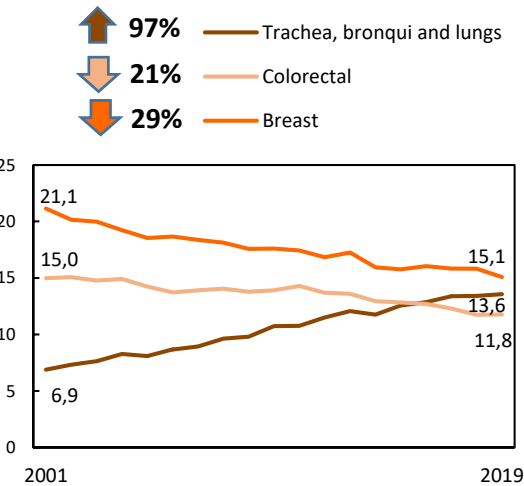
There have been **108,867 DEATHS: 65,730 in MEN** and **43,137 in WOMEN**,
with a **GROSS MORTALITY RATE** of **231.1 DEATHS per 100,000 inhabitants:**
284.7 in MEN and **179.6 in WOMEN.**



Age-adjusted mortality rate in **MEN**:



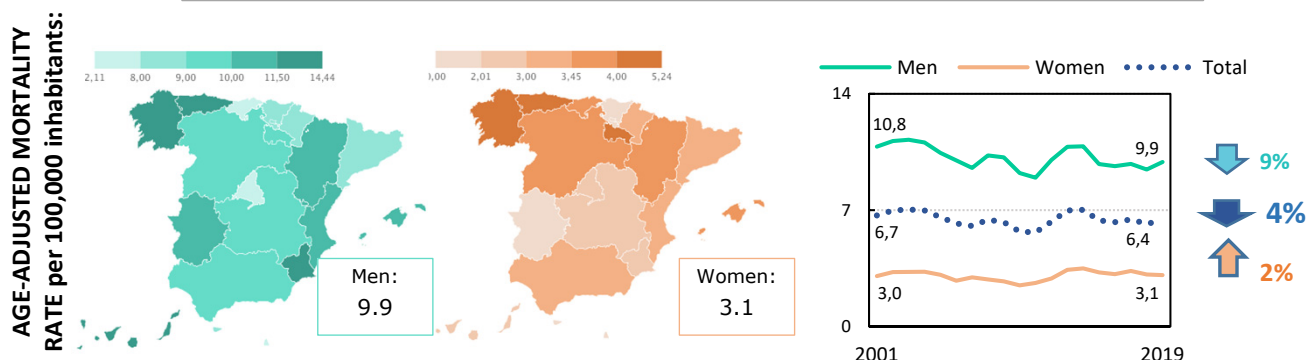
Age-adjusted mortality rate in **WOMEN**:



MORTALITY DUE TO SUICIDE

There have been registered (2019) **3,671 DEATHS**: **2,771 in MEN** and **900 in WOMEN**, with a **GROSS MORTALITY RATE** of **7.8 per 100,000 inhabitants**.

***2020: 3,941 DEATHS: 2,930 in MEN and 1,011 in WOMEN, GROSS MORTALITY RATE of 8.3 per 100,000 inhabitants.**



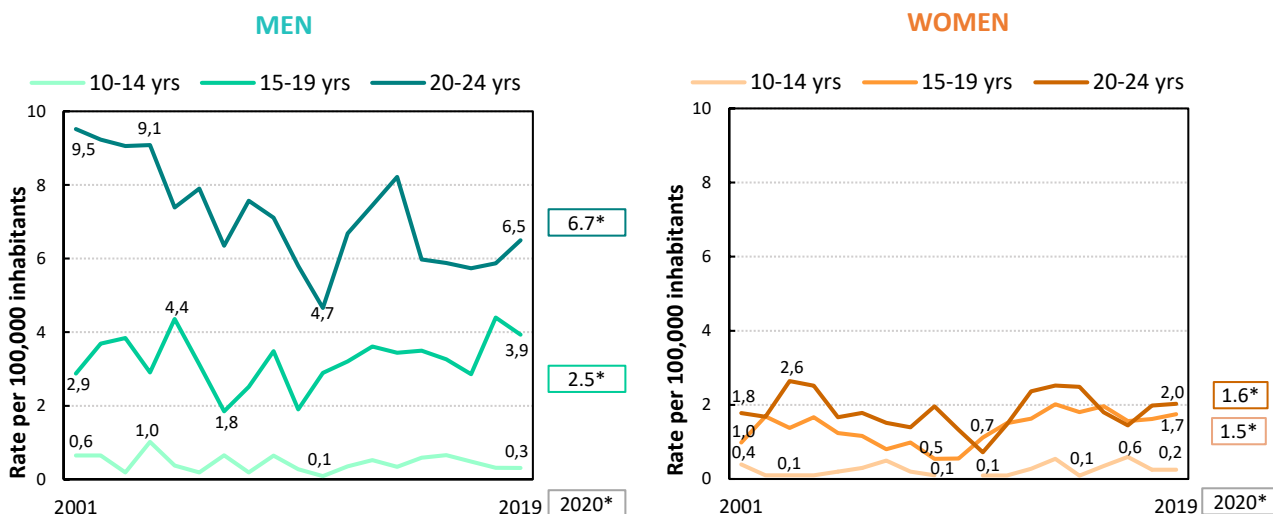
The highest age-adjusted rate occurred in **MEN AGED 75 AND OLDER: 15.1**, **5 times higher** than that for **WOMEN** of the same age.

The highest **GROSS MORTALITY RATE** due to suicide in **youths and teens** (2019) occurred in the age group of **20 - 24 years, 4.3 per 100,000 inhabitants**, **50% higher** than that for **15 - 19 years, 2.9 per 100,000**.

The rate is **3 times higher in MEN** aged 20 - 24 years, than that in **WOMEN**

*** The highest GROSS MORTALITY RATE** due to suicide in **youths and teens** (2020) occurred in the age group of **20 - 24 years, 4.2 per 100,000 inhabitants**, **50% higher** than that for **15 - 19 years, 2.0 per 100,000**.

The rate is **4 times higher in MEN** aged 20 - 24 years, than that in **WOMEN**



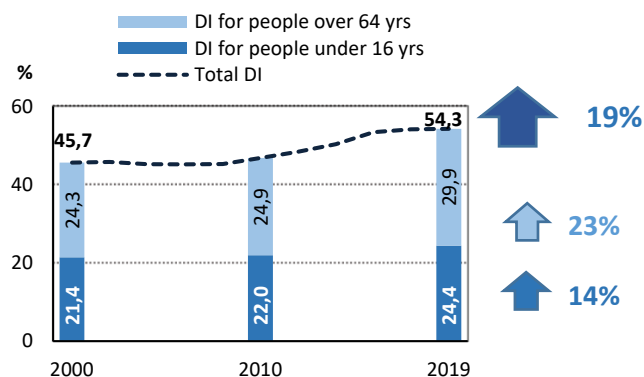
***2020 data:** published after the closing date of this report. The data available during the preparation of the report were for 2019.



SOCIO-ECONOMIC DETERMINANTS

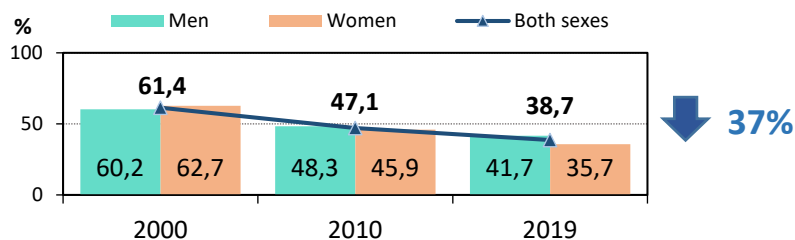
DEPENDENCY INDEX

The Dependency Index (DI) in Spain is **54.3%**, with a rising trend among older people (**29.9%**) and a stable trend for the young (**24.4%**).



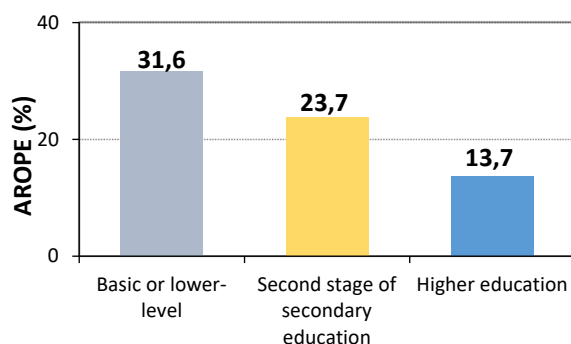
PEOPLE AGED 25 TO 64 WITH BASIC OR LOWER-LEVEL EDUCATION

In the past 18 years, the percentage of people with basic or lower-level education **has decreased in all Autonomous Communities and Autonomous Cities.**



AT-RISK-OF-POVERTY RATE (AROPE)

The at-risk-of-poverty or social exclusion rate for 2019 is **25.3%**



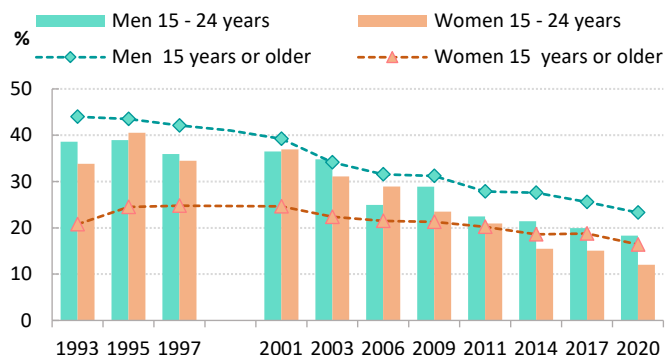
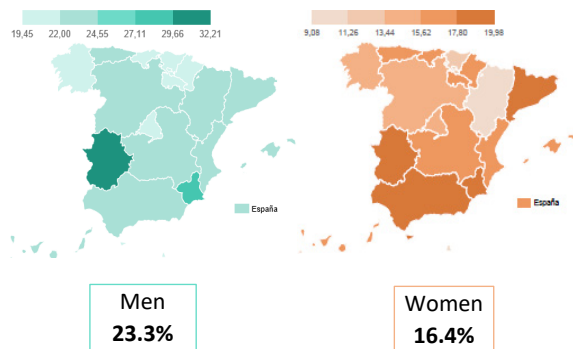


LIFESTYLE



TOBACCO CONSUMPTION

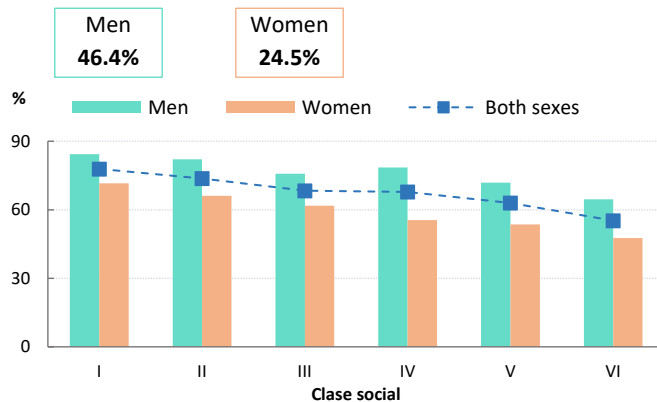
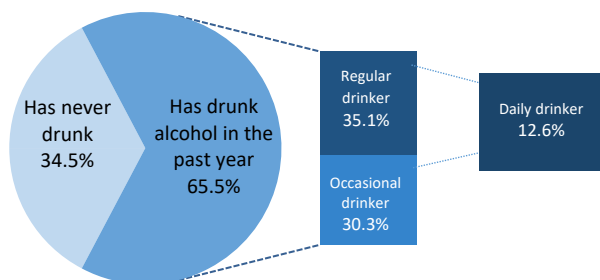
19.8% of the population aged 15 or older **smokes every day**



ALCOHOL CONSUMPTION

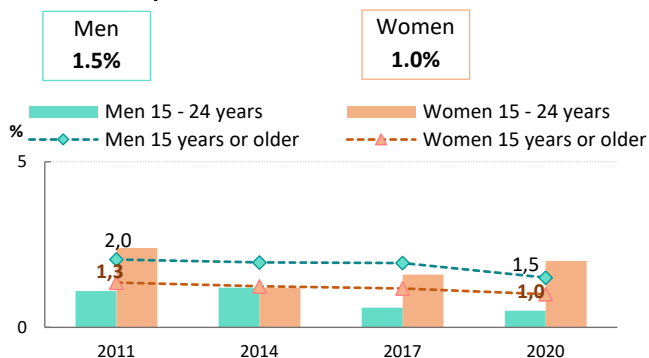
Regular alcohol consumption

35.1% of the population aged 15 or older **consumes alcohol regularly**



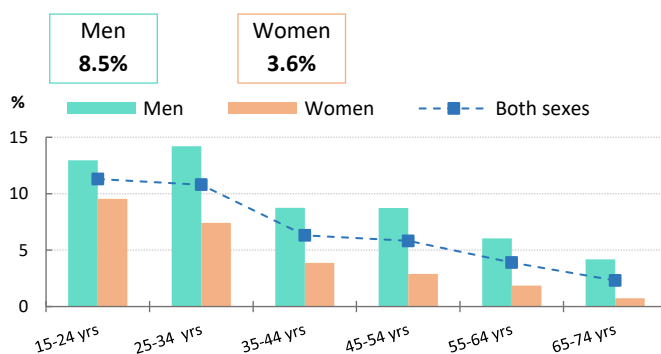
High-risk consumption of alcohol

1.3% of the population aged 15 or older has a **high-risk consumption of alcohol**.



Binge drinking of alcohol

6% of the population aged 15 or older **binge drinks alcohol** in the last 12 months.





OBEISITY

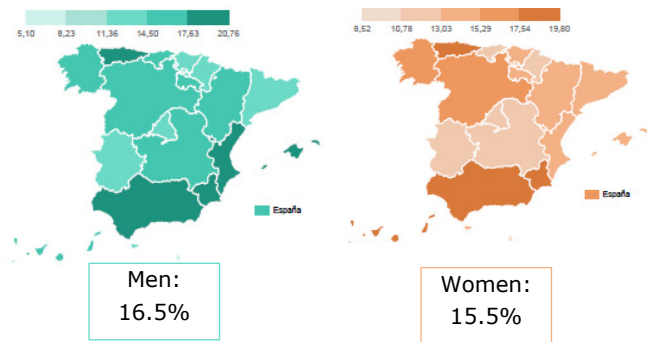
2 out of every 10 adults are obese.



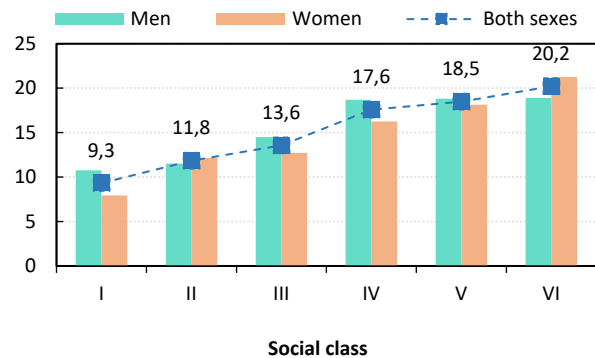
5 out of every 10 adults are overweight.



Obesity in population aged 18 and older

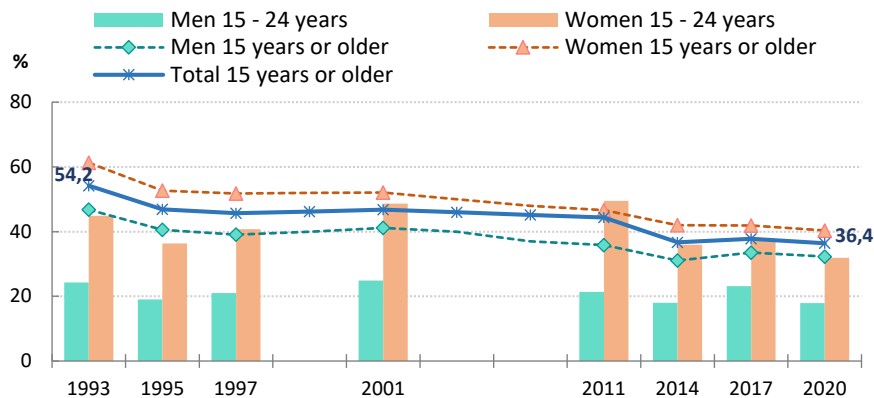
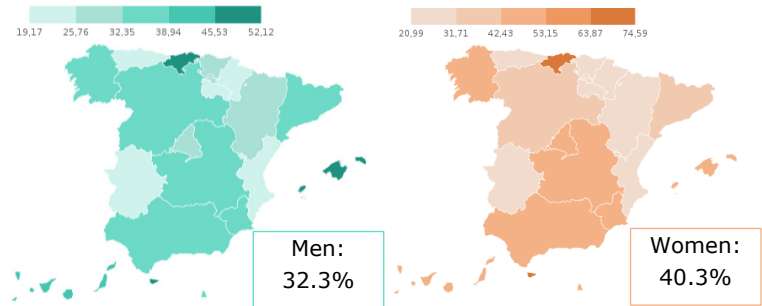


Obesity shows a clear social gradient, affecting more to less favoured classes (V and VI)



PHYSICAL ACTIVITY

36.4% of the population aged 15 and older claims to be sedentary on its free time





HEALTHCARE

PREVENTION

Vaccination

Population under 4 years of age



People aged 65 and older



Vaccination **COVERAGE**
against **INFLUENZA**

Primary vaccination **COVERAGE** against:

Poliomyelitis
DTaP
Hib
Hepatitis B
Pneumococcal disease

Measles
Rubella
Mumps
Chickenpox

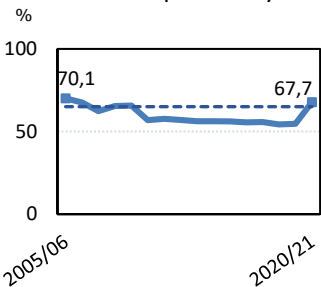
96%

98%



Spain:
67.7%

24% compared to
the previous year



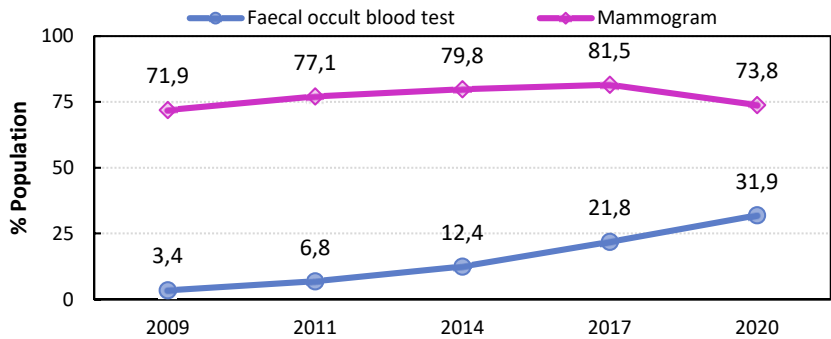
Cancer screening



7 out of every **10** women have undergone **breast cancer detection tests** within the recommended periods.



3 out of every **10** people have undergone **early colorectal cancer detection tests** within the recommended period.



The **evolution over time** since 2017 shows

8 percentage points

10 percentage points

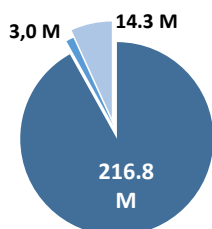


HEALTHCARE

PRIMARY CARE

***2020 data:** published after the closing date of this report. The data available during the preparation of the report were for 2019.

DOCTORS in **SNS PRIMARY HEALTHCARE** have (2019) **234.1 M consultations:** **98.7%** of them at **HEALTHCARE CENTRES** and **1.3%** of them at **PATIENTS' HOMES**.

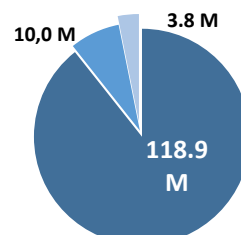


The **average frequency** with which the Spanish population **VISITS A DOCTOR** is

5.1

visits per person and year.

NURSES in **SNS PRIMARY HEALTHCARE** have (2019) **132.7 M consultations:** **92.5%** of them at **HEALTHCARE CENTRES** and **7.5%** of them at **PATIENTS' HOMES**.



The **average frequency** with which the Spanish population **VISITS A NURSE** is

2.9

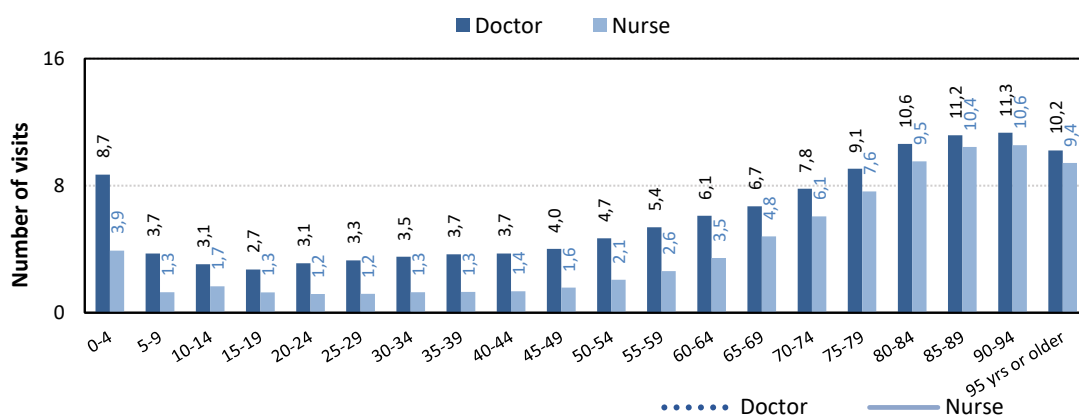
visits per person and year.

* **DOCTORS** in **SNS PRIMARY HEALTHCARE** have (2020) **243.5 M consultations:** **55.4%** at **CENTRES**, **43.4% TELECONSULTATIONS** and **1.2%** at **PATIENTS' HOMES**.

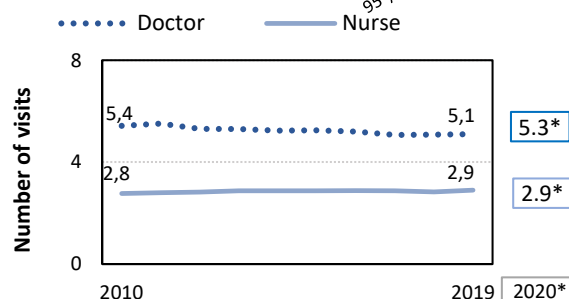
Average frequency: 5.3 visits per person and year.

* **NURSES** in **SNS PRIMARY HEALTHCARE** have (2020) **135.7 M consultations:** **76.5%** in **CENTRES**, **15.6% TELECONSULTATIONS** and **7.9%** at **PATIENTS' HOMES**.

Average frequency : 2.9 visits per person and year.



The **average number** of visits to see a **doctor** has fallen slightly, while the average number of visits to be seen by a nurse has remained stable over time.



HOSPITAL CARE

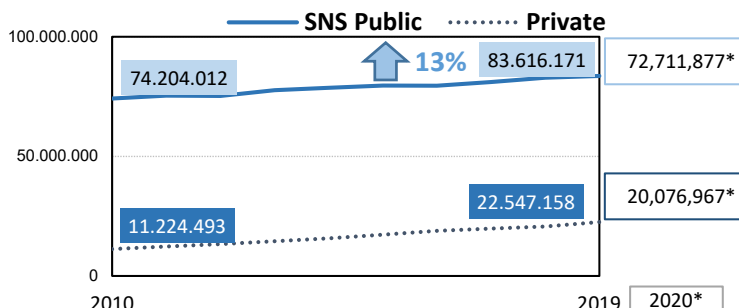
Hospital Care Consultations

***2020 data:** published after the closing date of this report. The data available during the preparation of the report were for 2019.

In **SNS HOSPITAL CARE** (2019):
83.6 M CONSULTATIONS.

* In **SNS HOSPITAL CARE** (2020): **72.7 M CONSULTATIONS.**

Nearly **80%** of specialized care consultations at acute care hospitals take place in the **SNS**.



SPECIALISTS consultations at **SNS HOSPITALS** (2019) amount to **1.7 consultations/inhab.**

* **SPECIALISTS** consultations at **SNS HOSPITALS** (2019) amount to **1.5 consultations/inhab.**

Hospital Admissions

In **SNS HOSPITALS** (2019) there are **4.2 million ADMISSIONS** per year:
4.1 M in **ACUTE CARE HOSPITALS**, representing **75.2%** of the Spanish hospital sector.
0.1 M in **LONG-TERM CARE HOSPITALS**, representing **82.7%** of the Spanish hospital sector.

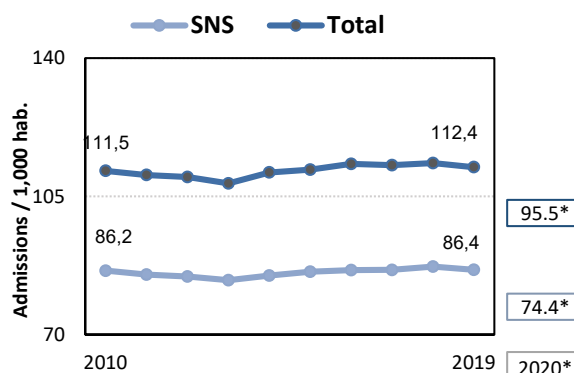
*In **SNS HOSPITALS** (2020) there are **3.6 million ADMISSIONS** per year :

3.5 M in **ACUTE CARE HOSPITALS**, el **77.9%** of the Spanish hospital sector.

0.1 M in **LONG-TERM CARE HOSPITALS**, el **81.6%** of the Spanish hospital sector.

86.4 ADMISSIONS
per 1,000 inhabitants and year, in **SNS ACUTE CARE HOSPITALS** (2019)

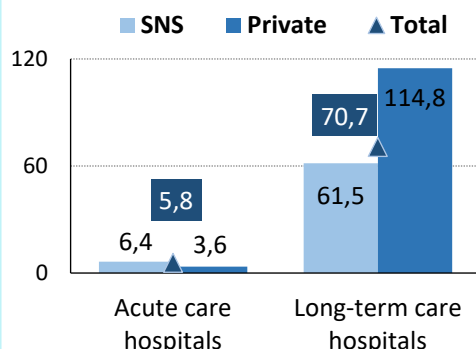
* **74.4 ADMISSIONS**
per 1,000 inhabitants and year, in **SNS ACUTE CARE HOSPITALS** (2020)



HOSPITAL CARE

Average stays at hospitals

***2020 data:** published after the closing date of this report. The data available during the preparation of the report were for 2019.



7.7 days of average stay (2019) of patients admitted to **SNS hospitals:**

- **Acute care hospitals 6.4 days**
- **Long-term care 61.5 days**

The **turnover rate (2019)** in SNS hospitals is **37.1** patients per bed.

***8.1 days of average stay (2020):**

- **Acute care hospitals: 6.8 days**
- **Long-term care: 58.8 days**

***Annual Turnover rate (2020)** in SNS hospitals: **31.9** patients per bed.

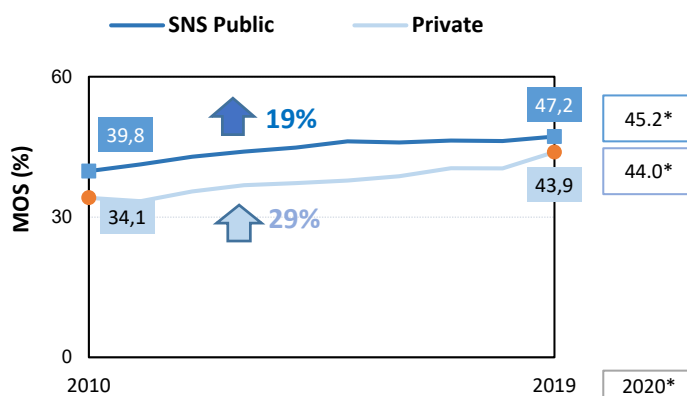
Outpatient surgery in the Sistema Nacional de Salud

Major outpatient surgery (2019):

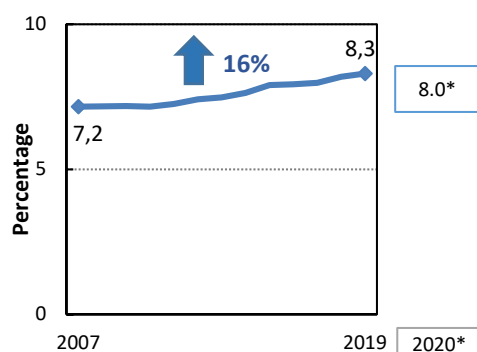
47.2% in SNS hospitals and
43.9% in private hospitals.

*** Major outpatient surgery (2020):**

45.2% in SNS hospitals and
44.0% in private hospitals.



Overall percentage of readmissions in acute care hospitals of the Sistema Nacional de Salud

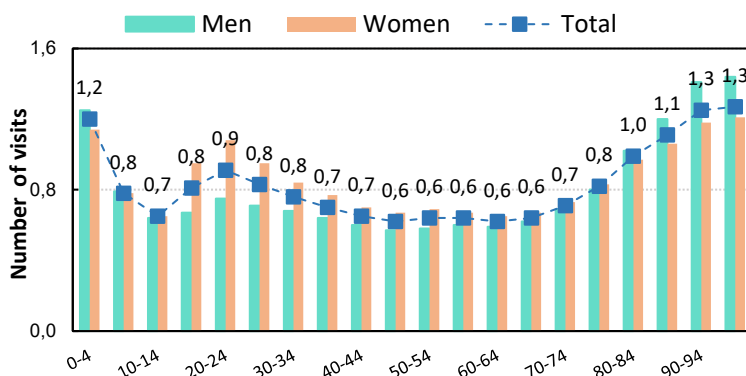


The overall percentage of **readmissions in SNS acute care hospitals (2019)** during the 30 days after discharge is **8.3%**, with a slightly upward trend.

*** The following year (2020) a slight decrease is observed : 8.0%.**

URGENT CARE

Primary Care



The data on urgent primary care consultations reflect **SIGNIFICANT DIFFERENCES BY SEX which ARE INVERTED** over the individual's lifespan.

***2020 data:** published after the closing date of this report. The data available during the preparation of the report were for 2019.

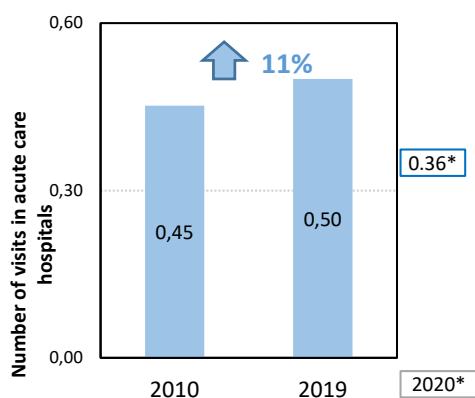
2019: **30.7 M** urgent consultations in **PRIMARY CARE**.

Urgent consultations:
0.66 consultations per inhabitant and year:
DOCTORS: 0.62
NURSES: 0.28

***2020: 24.5 million** urgent consultations in **PRIMARY CARE**.

Urgent consultations:
0.53 visits per inhabitant and year:
DOCTORS: 0.49
NURSES: 0.19

Hospital Care



2019: **23.5 M** urgent consultations in **SNS ACUTE CARE HOSPITALS**.

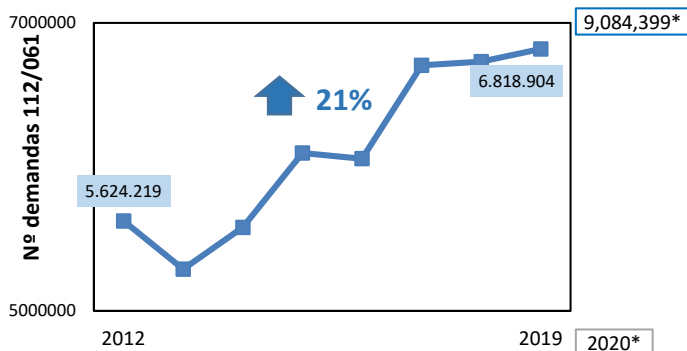
SNS HOSPITAL urgent consultations:
0.50 consultations per inhabitant and year.

Urgent hospital consultations show a clear upward trend since 2010.

***2020: 17.2 M** urgent consultations in **SNS ACUTE CARE HOSPITALS**.

SNS HOSPITAL urgent consultations:
0.36 consultations per inhabitant and year.

112/061 Urgent and Emergency Care Services



2019: **6.8 M** phone calls to **112/061**:
147.4 per 1,000 inhabitants

Irregular evolution, but with a clear **rise in numbers**.

***2020: 9.1 M** phone calls to **112/061** :
196.1 per 1,000 inhabitants.

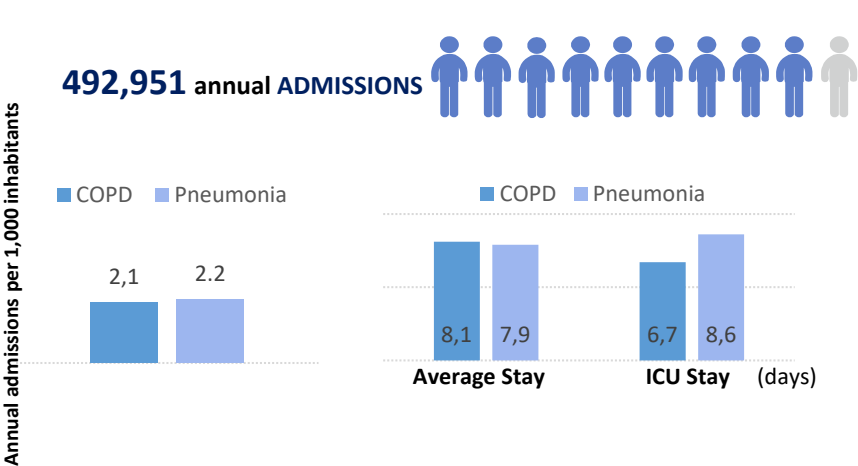
MORBIDITY



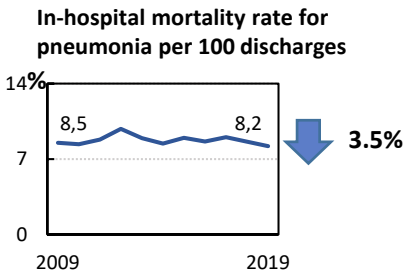
CARE FOR RESPIRATORY DISEASES

12.2 visits per year for people with **respiratory disease** at **PRIMARY CARE** centres, nearly **50%** more than the **general population**.

SNS Hospital **PNEUMOLOGY SERVICES** annually receive more than **220,000 first consultations** from **primary care**.



9 out of **10** people with **respiratory disease** are **admitted urgently** and spend an **average of 7 days** in hospital.

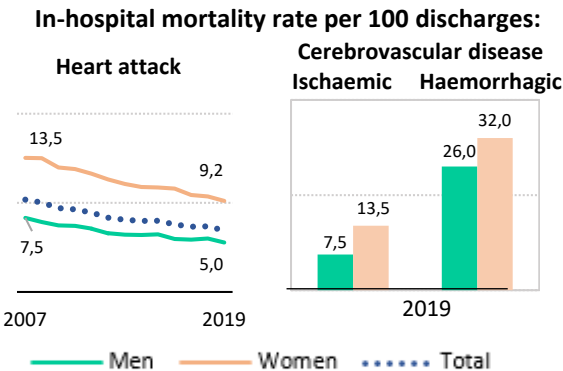
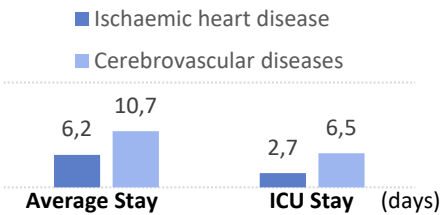
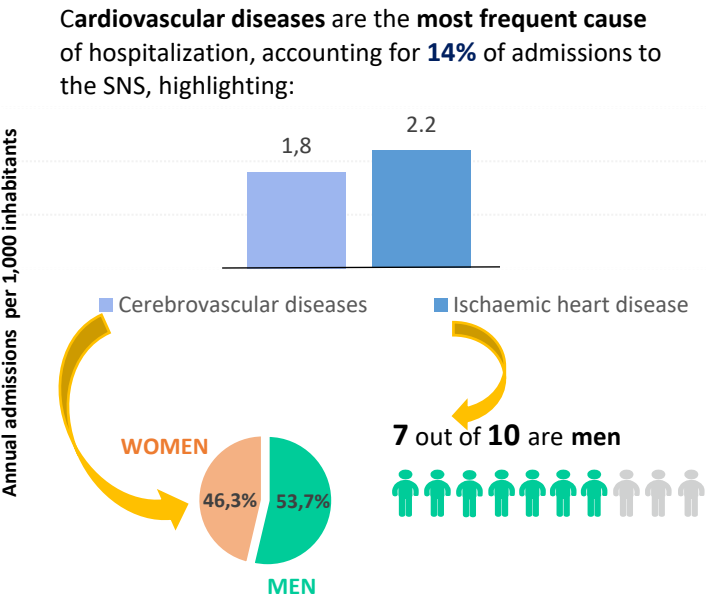


CARE FOR CARDIOVASCULAR DISEASE

15.4 visits per year for people with **cardiovascular disease** at **PRIMARY CARE** centres, almost **twice** than the **general population**.

SNS Hospital **CARDIOLOGY SERVICES** annually receive **853,350 first consultations** from **primary care**.

Cardiovascular diseases are the **most frequent cause** of hospitalization, accounting for **14%** of admissions to the SNS, highlighting:





CARE FOR MENTAL DISORDERS

Consultations and hospitalizations

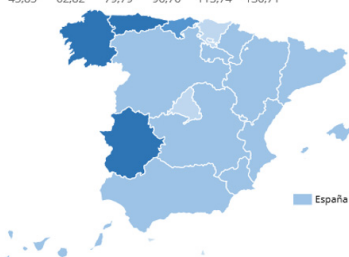
13.1 consultations per year for people with mental disorders at **PRIMARY CARE** centres, nearly **50%** more than the **general population**.

5,287,638 consultations per year of **specialized psychiatric care**, nearly **95%** of them in public centres.
1.6 hospitalizations per 1,000 inhabitants.

Drug consumption

CONSUMPTION OF ANTIDEPRESSANTS

45,85 62,82 79,79 96,76 113,74 130,71



Consumption of antidepressants in one year in Spain:

86.9 DHD

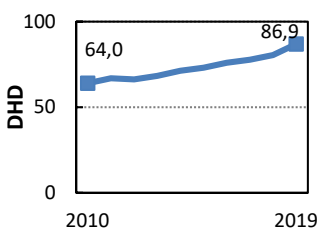
CONSUMPTION OF HYPNOTICS AND SEDATIVES

18,57 27,14 35,71 44,28 52,85 61,42



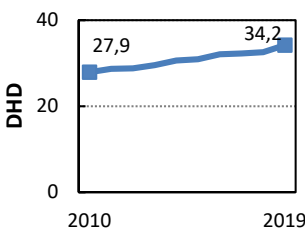
Consumption of **hypnotics and sedatives** in one year in Spain:

34.2 DHD



Consumption of antidepressants has increased by:

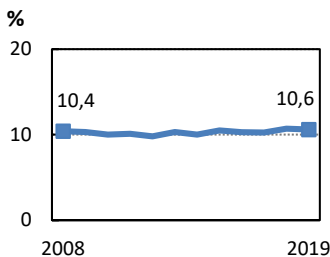
36%



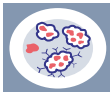
Consumption of **hypnotics and sedatives** has increased by:

23%

Emergency psychiatric readmissions



Emergency psychiatric readmissions have remained stable at approximately **10%**.

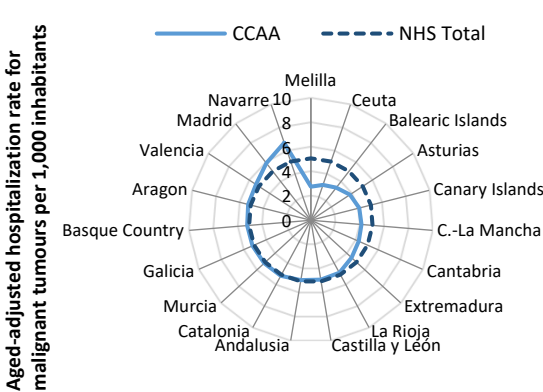


TREATMENT FOR MALIGNANT TUMOURS

Primary care consultations and hospitalizations

18.1 consultations per year for people diagnosed with a malignant tumour at **PRIMARY CARE** centres, more than twice the general population.

7.2 hospitalizations per 1,000 inhabitants.



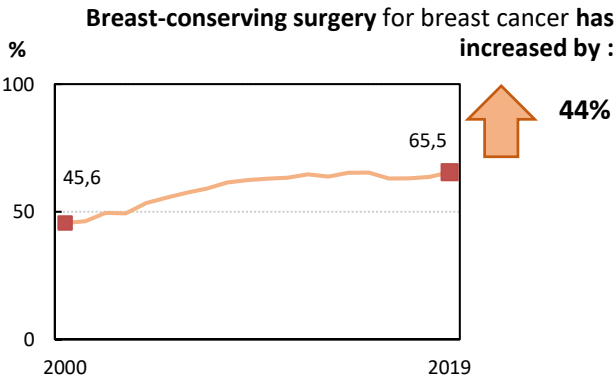
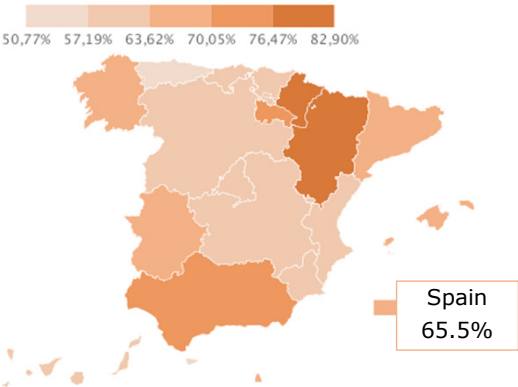
The **aged-adjusted rate** is **5.1 hospitalizations** per 1,000 inhabitants.

Breast-conserving surgery for breast cancer



Nearly **7** out of **10 breast cancer surgeries** are carried out with a **conservative approach**

The percentage of breast-conserving surgery for breast cancer is **65.5%**.

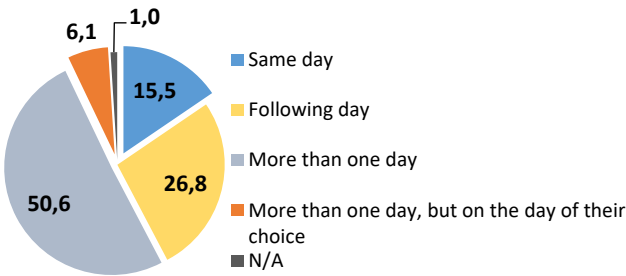




ACCESSIBILITY

WAITING TIMES IN PRIMARY CARE

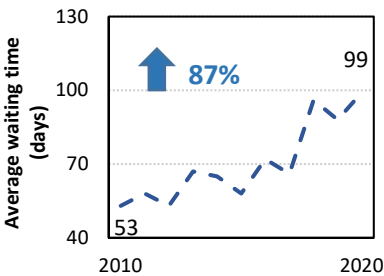
15.5% of the people surveyed were attended to on the **same day** that they asked for the appointment, el **26.8%** the **following day** and **50.6%** had to wait **more than one day**.
Average waiting time is **5.8 days**.



WAITING TIMES IN SPECIALIZED CARE

CONSULTATIONS

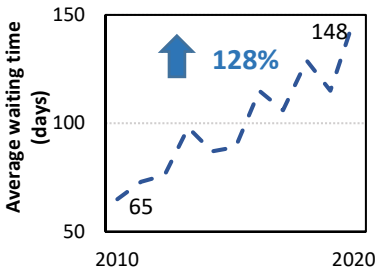
The average waiting time for a first consultation in specialized care is **99 days**



Waiting times for specialized care continue to **INCREASE**.

NON-URGENT SURGERY

The average waiting time for non-urgent surgery is **148 days**



The percentage of patients who have been **WAITING MORE THAN 6 MONTHS** is **26.9%**

SPECIALITIES WITH THE LONGEST WAITING TIMES

TRAUMATOLOGY: 118 days; 7.4 patients/1,000 inhab.
DERMATOLOGY:111 days; 4.7 patients/1,000 inhab.
OPHTHALMOLOGY: 104 days; 7.3 patients/1,000 inhab.

Longest WAITING TIMES:
PLASTIC SURGERY: 346 days; 0.5 patients/1,000 inhab.
NEUROSURGERY: 217 days; 0.5 patients/1,000 inhab.
TRAUMATOLOGY (173 days)
THORACIC SURGERY(168 days); 0.04 patients/1,000 inhab.

Highest no. of **PATIENTS** on waiting lists:
3.9 patients/1,000 inhab.



PATIENTS' EXPERIENCE



ASSESSMENT OF THE PUBLIC HEALTHCARE SYSTEM

72% of the population state that it **works well or very well**

Satisfaction with the public healthcare system

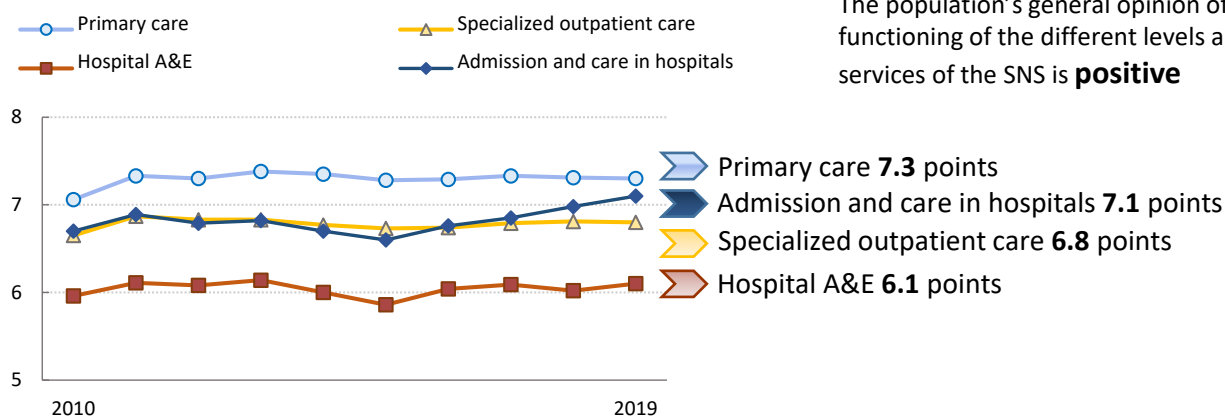
Satisfaction with the public healthcare system is

6.7 points

(very dissatisfied) **1**  **10** (very satisfied)

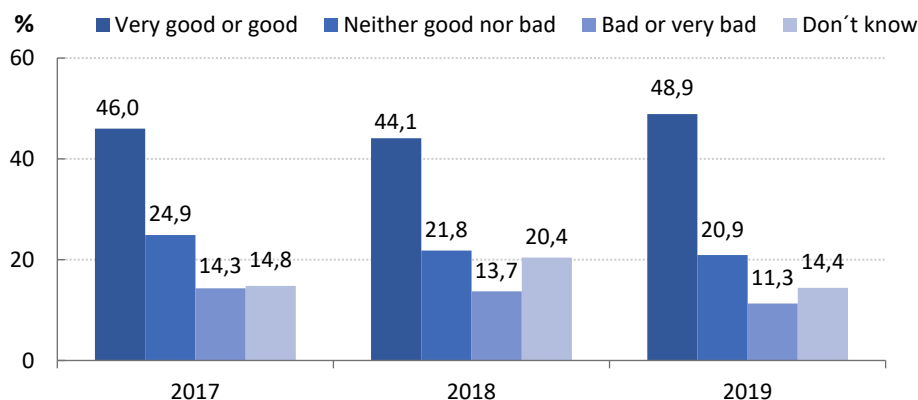
Assessment of healthcare levels

The population's general opinion of the functioning of the different levels and services of the SNS is **positive**



COORDINATION BETWEEN HEALTHCARE LEVELS

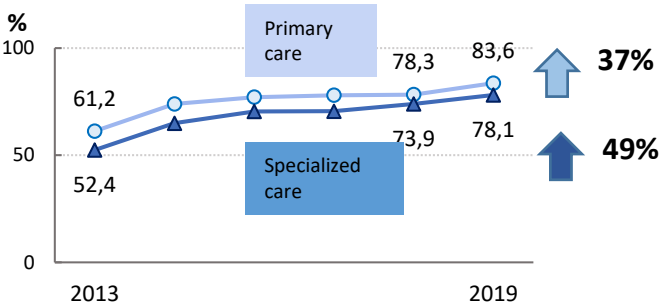
The perception of **good coordination** between healthcare levels is close to **50%**



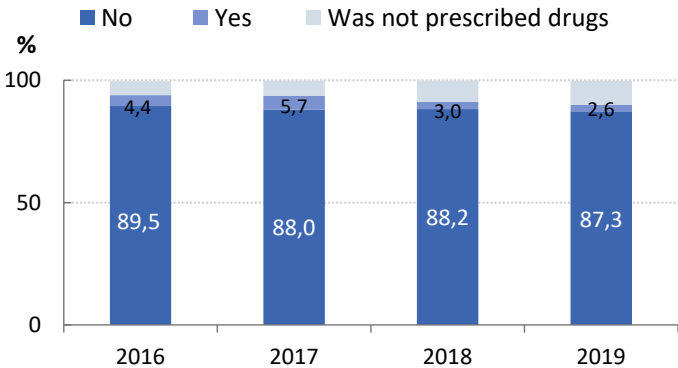


PARTICIPATION IN DECISION-MAKING REGARDING THEIR HEALTHCARE

83.6% state that they participate in decisión-making regarding their health condition and treatment in primary care, and 78.1% in specialized care



STATED LACK OF ACCESS TO PRESCRIPTION DRUGS FOR ECONOMIC REASONS

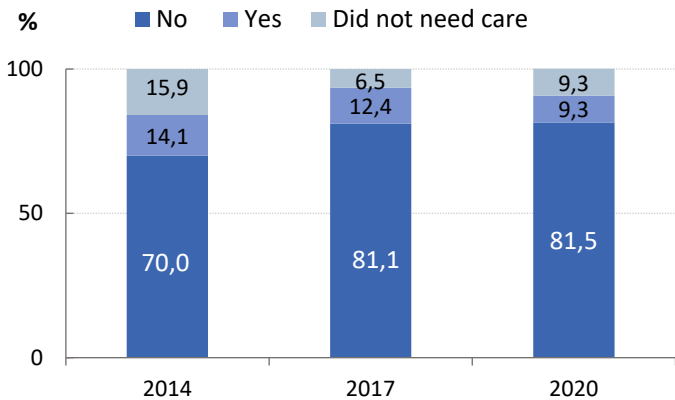


2.6% state that they have problems accessing prescription drugs for economic reasons

1.8 percentage points decrease (2016 to 2019)



STATED LACK OF ACCESS TO DENTAL CARE FOR ECONOMIC REASONS

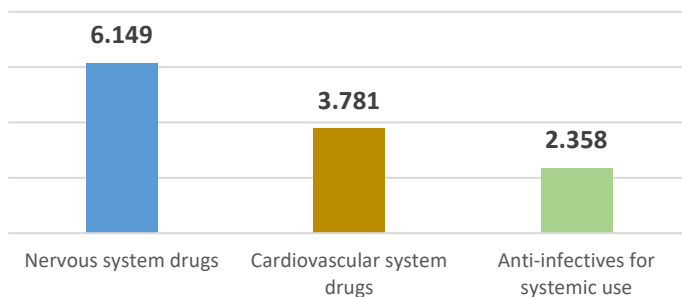
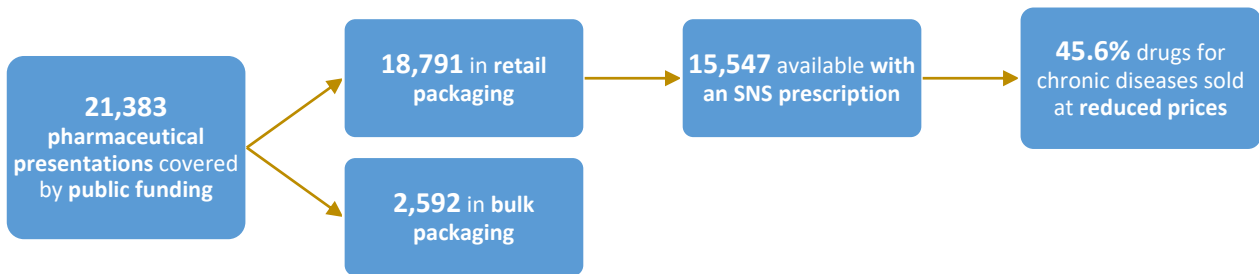


9.3% state that they have problems accessing dental care for economic reasons

2 percentage points increase (2014 to 2020)



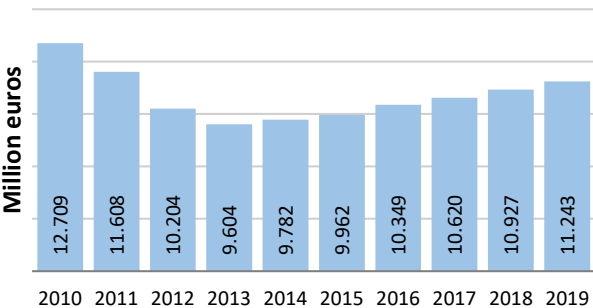
PHARMACEUTICAL BENEFITS



Main presentations covered by public funding (number)

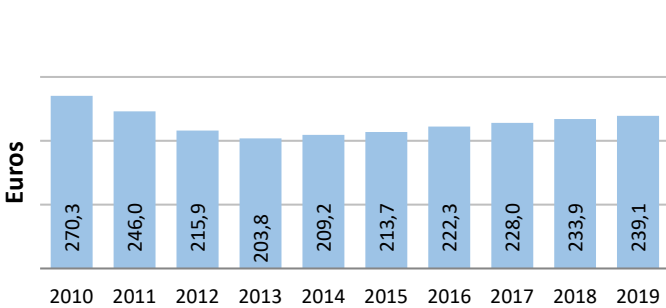
CONSUMPTION THROUGH SNS MEDICAL PRESCRIPTIONS AT PHARMACIES

Pharmaceutical expenditure through the invoicing of SNS drug prescriptions



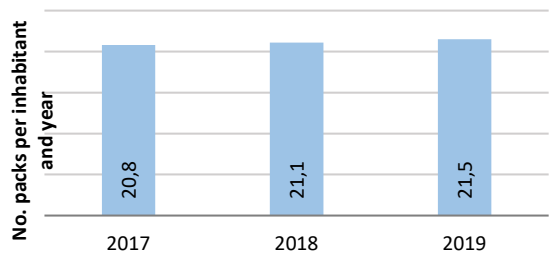
In 2019, the pharmaceutical expenditure charged to public funds totalled 11,243 million euros, up 2.9% compared with 2018.

SNS pharmaceutical expenditure per inhabitant and year



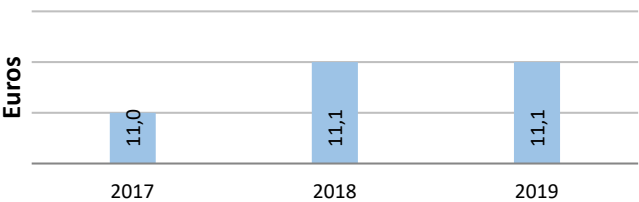
The expenditure per inhabitant and year in 2019 amounted to 239.1 euros, up to 2.2% compared with 2018. Since 2013 the expenditure per inhabitant has been increasing, although the figure for 2019 remains below 2010 values (270.3 euros).

SNS medicinal packages per inhabitant and year



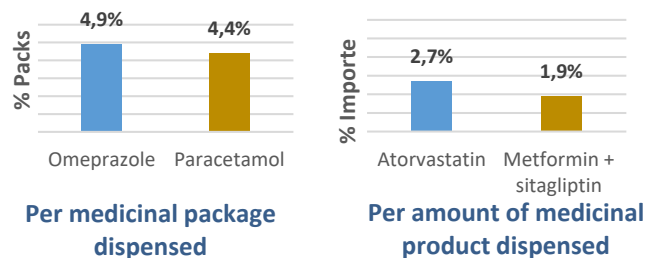
The consumption of medicinal packages per inhabitant in 2019 was 21.5, up 1.9% compared with 2018.

Average expenditure per medicinal package dispensed

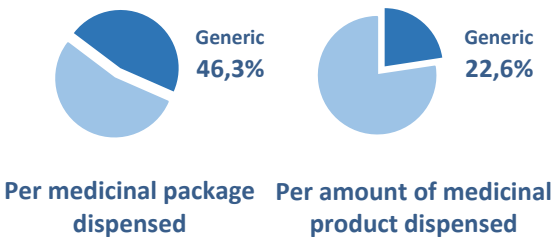


The average expenditure per medicinal package in 2019 was 11.1 euros, up by 0.1 euros compared with 2017.

Principal active ingredients consumed

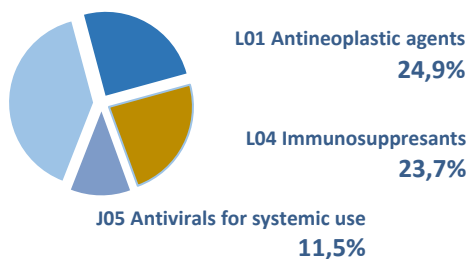


Consumption of generic drugs

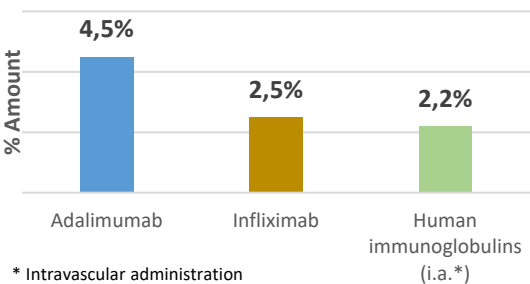


HOSPITAL PHARMACEUTICAL SERVICE

Principal therapeutic sub-groups consumed at manufacturers' prices



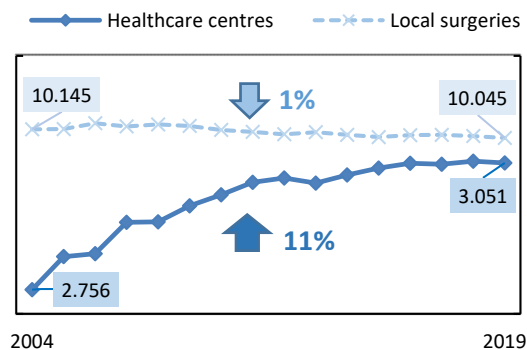
Principal active ingredients consumed at manufacturers' prices





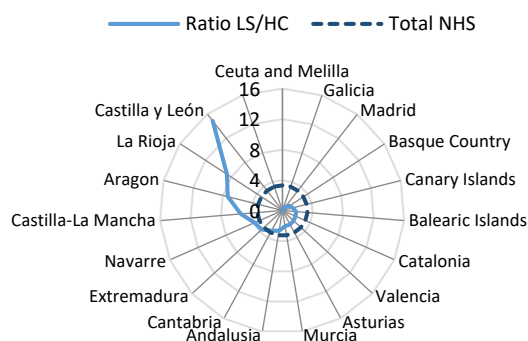
PHYSICAL RESOURCES

PRIMARY CARE



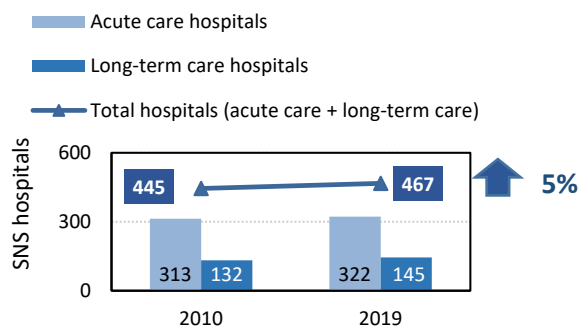
Since 2004 the number of **HEALTHCARE CENTRES** has been increasing to amount to **3,051** in 2019, a trend that has become stable over the past 4 years.

The average number of **local surgeries per healthcare centre** is **3.3**, with considerable variability between territories, which reflects the variable geographical dispersion of the population in Spain.

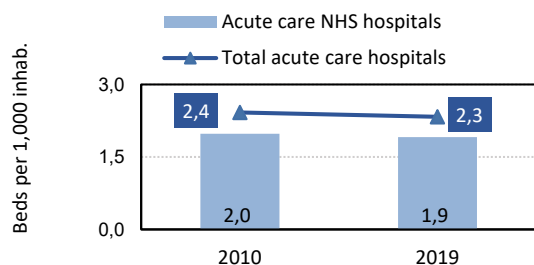


SPECIALIZED CARE

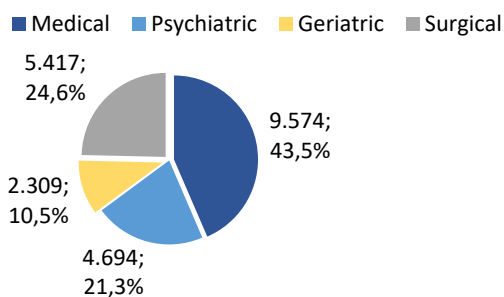
The **SNS** has **467 HOSPITALS**:
322 ACUTE CARE HOSPITALS and
145 LONG-TERM CARE HOSPITALS.



The **SNS** has **112,225 beds**



The **SNS** has **19,277 day hospital places**, representing **87.6%** of the total in the health system, and an **increase of 37.4%** since 2010.



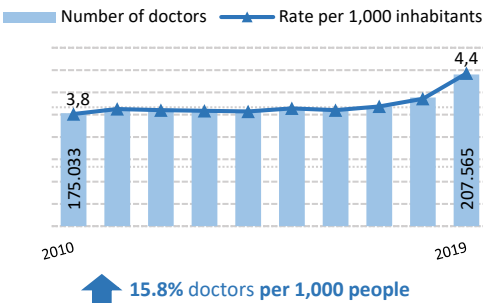
The network of SNS hospitals has **198 RADIOTHERAPY MACHINES**, representing **81.5%** of the 243 machines available in the Spanish health system.

In 2019 the SNS has **279 specialist centres, services and units**

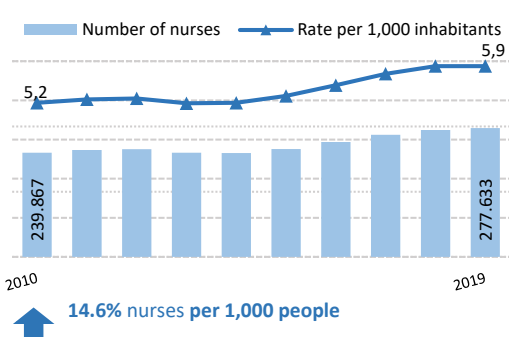


HUMAN RESOURCES

Practising doctors
(public and private sector)

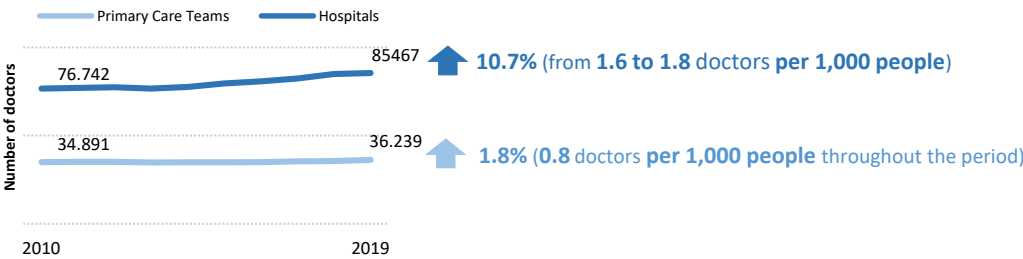
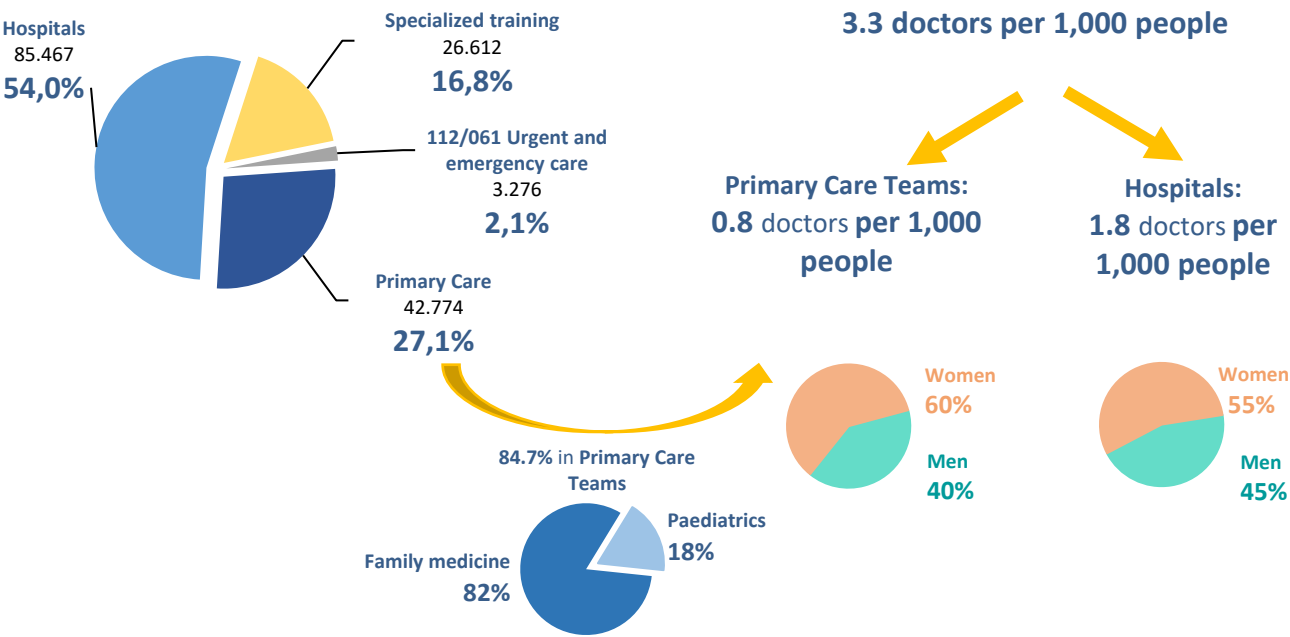


Practising nurses
(public and private sector)



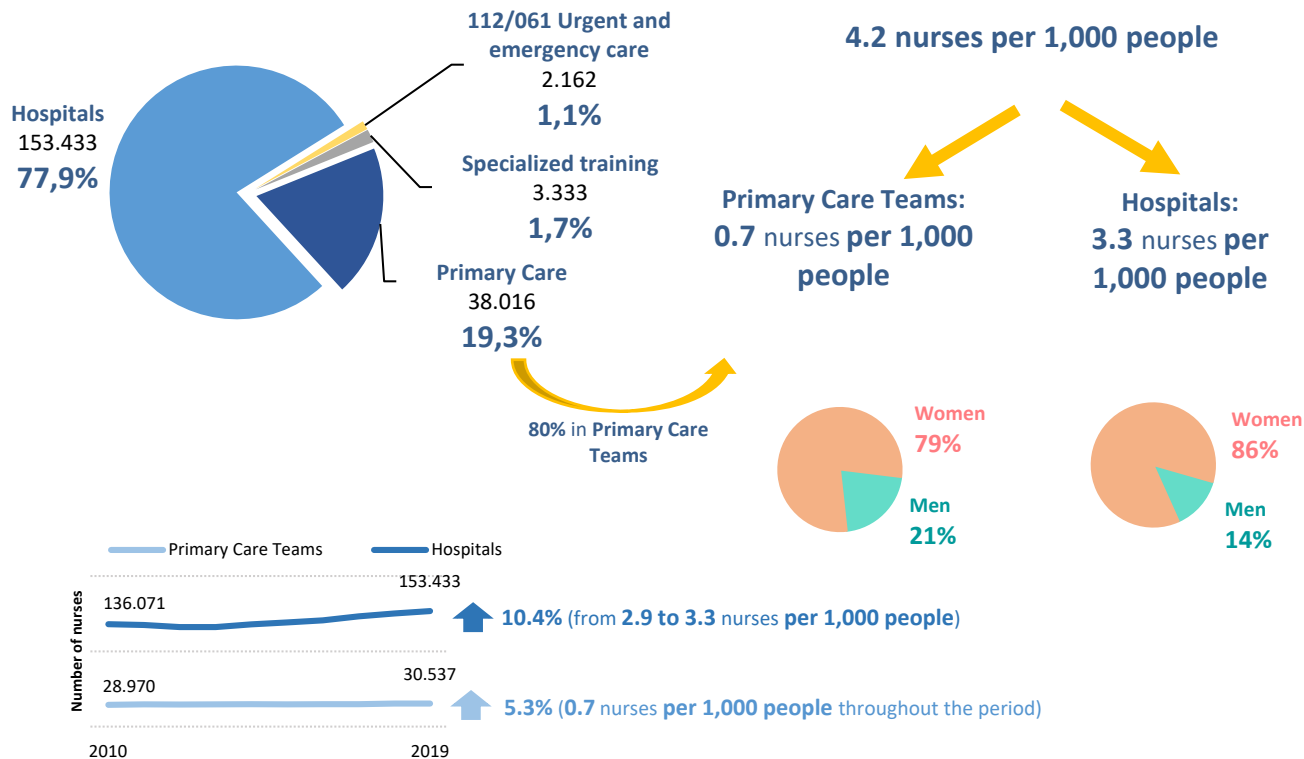
SNS DOCTORS

54.0% of SNS doctors work in hospitals, and 27.1% in primary care.

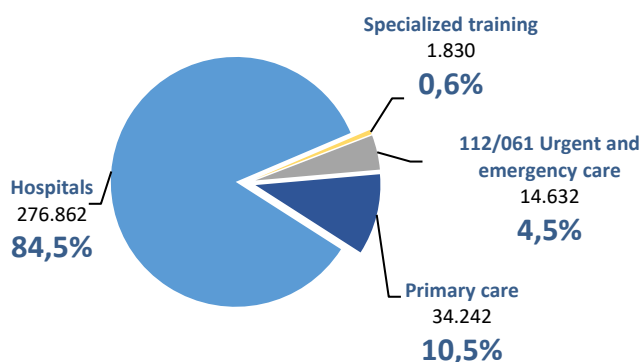


SNS NURSES

77.9% of SNS nurses work at hospitals, and 19.5% in primary care.



OTHER SNS PROFESSIONALS



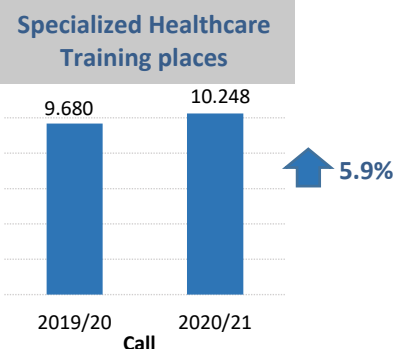
The SNS has an additional 327,566 professionals^(*), in addition to doctors and nurses, and **84.5%** of these **work in hospitals** and **10.5%** in primary care.

7.0 other professionals per 1,000 people

(*) Includes health and non-health professionals.

SPECIALIZED HEALTHCARE TRAINING

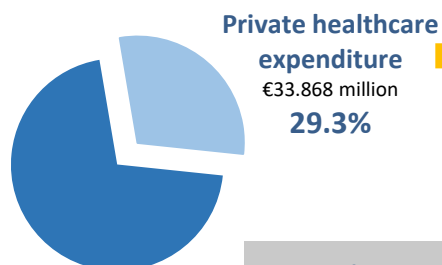
The **number of places** for Specialized Healthcare Training in the 2020/21 call for applications **has increased by 5.9%** compared with the previous call.





HEALTHCARE EXPENDITURE

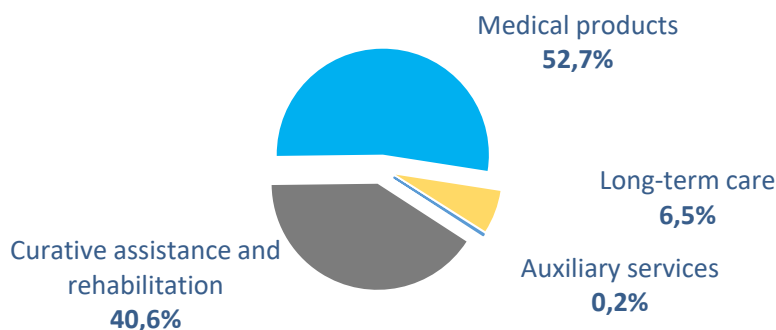
Public healthcare expenditure
€81.590 million
70.7%



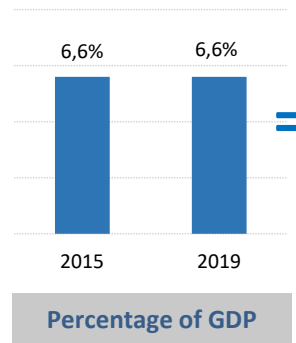
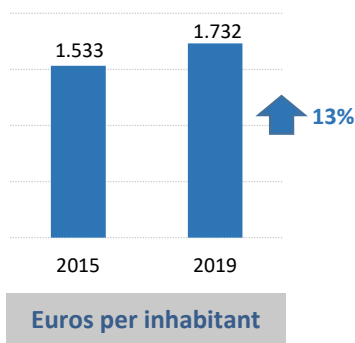
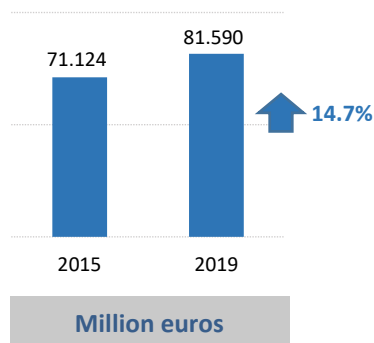
The **healthcare expenditure of the public administrations** accounts for **70.7%** of total healthcare expenditure.

73.2% Direct payments by households

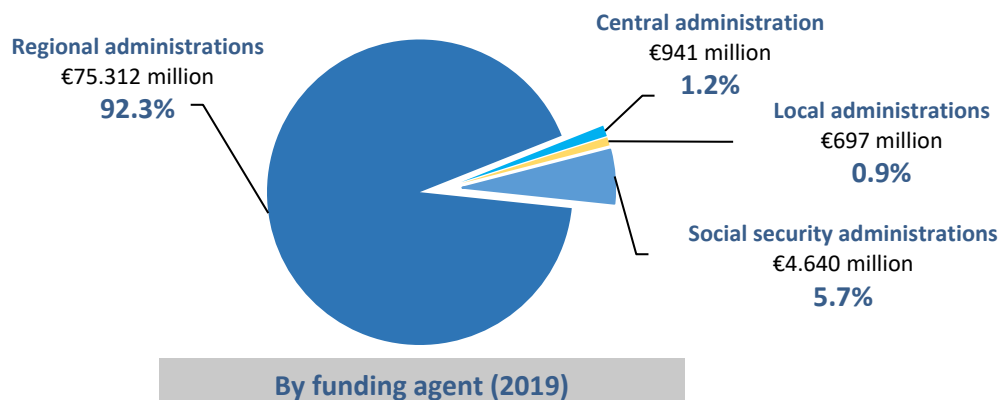
73.2% of the private healthcare expenditure is borne through **direct payments by households**.



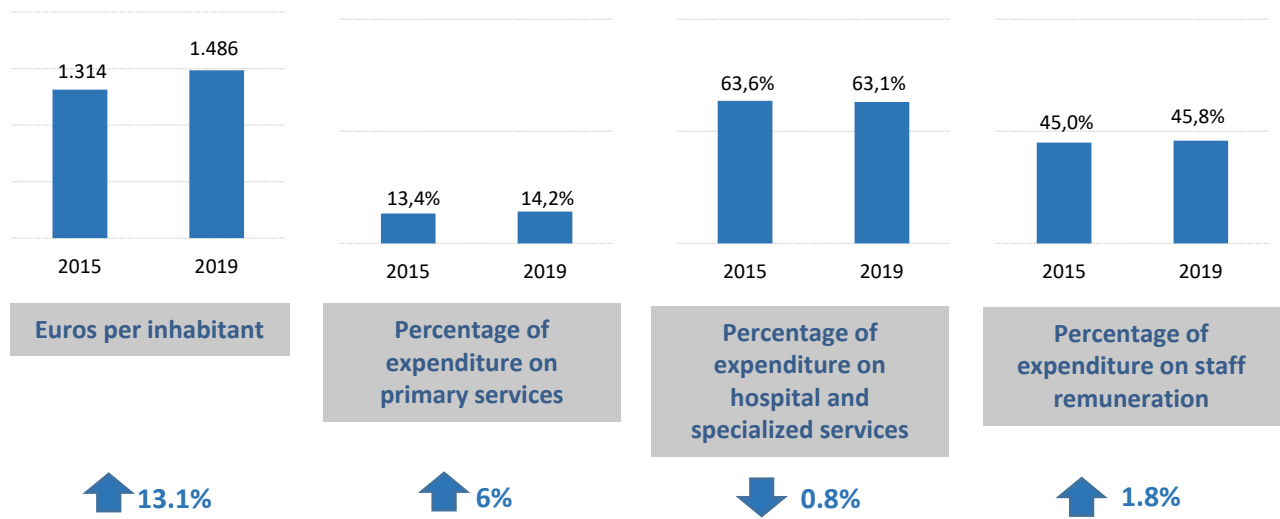
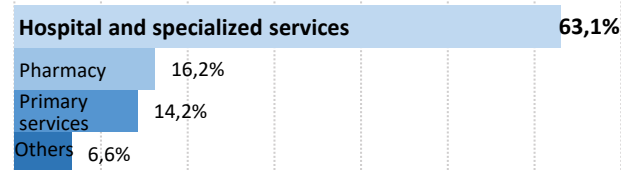
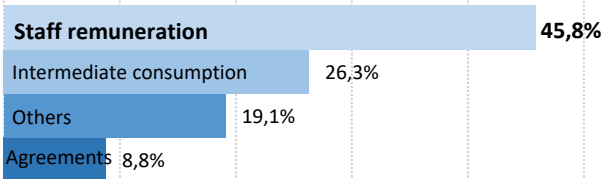
PUBLIC HEALTHCARE EXPENDITURE



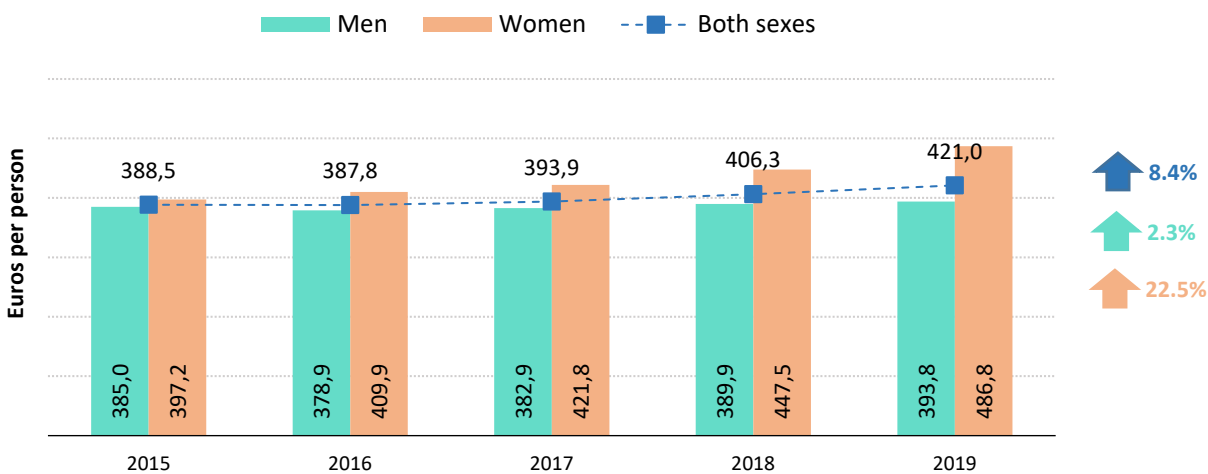
During the 2015-2019 period, **public healthcare expenditure** increased by **14.7%** and **public healthcare expenditure per inhabitant**, by **13%**.



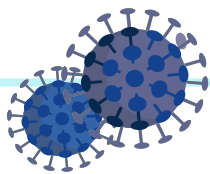
EXPENDITURE ON PUBLIC HEALTHCARE MANAGED BY THE AUTONOMOUS COMMUNITIES



AVERAGE ANNUAL EXPENSE PER PERSON ON HEALTHCARE GOODS AND SERVICES

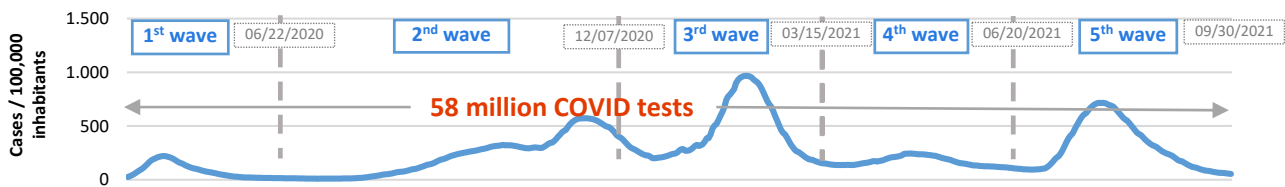


By sex, **out-of-pocket expenditure** has been higher for women throughout the five-year period, with the average expenditure being **12.0% greater for women than for men**.



HEALTHCARE SYSTEM’S RESPONSE TO COVID-19

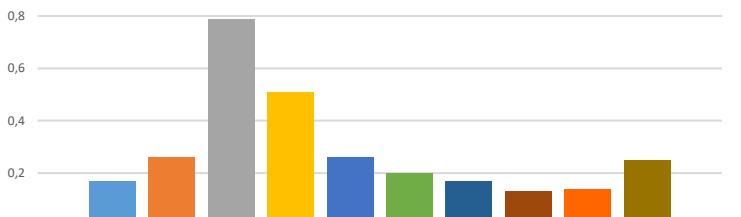
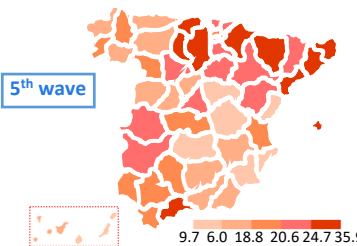
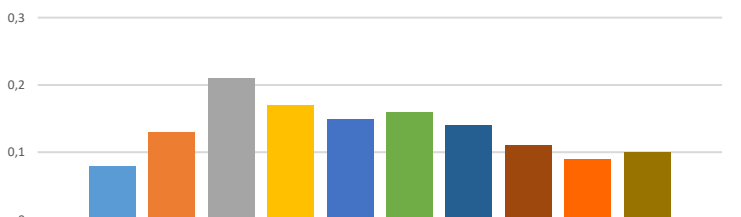
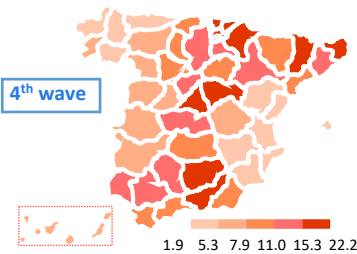
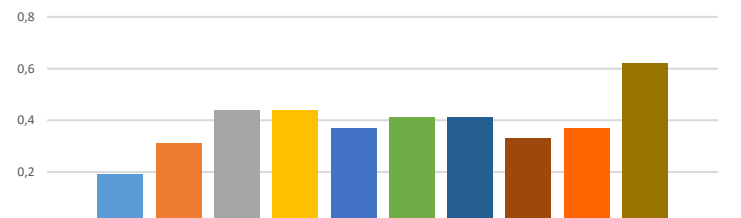
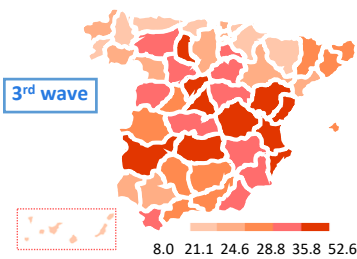
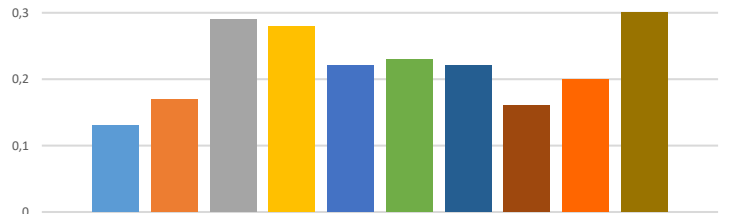
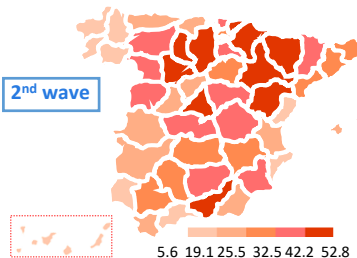
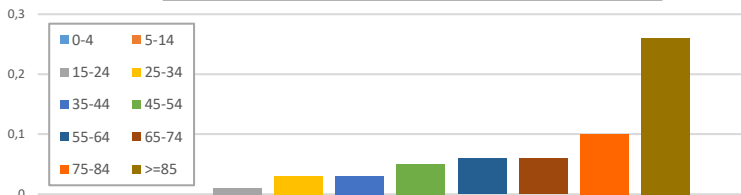
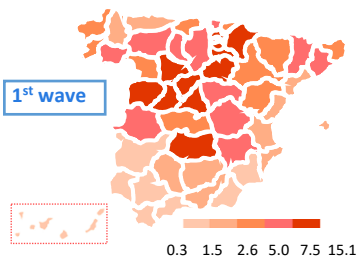
DIAGNOSTIC CAPACITY

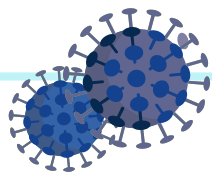


POSITIVITY BY PROVINCE

POSITIVITY BY AGE GROUP

No. Positive test results / 1,000 inhabitants / day

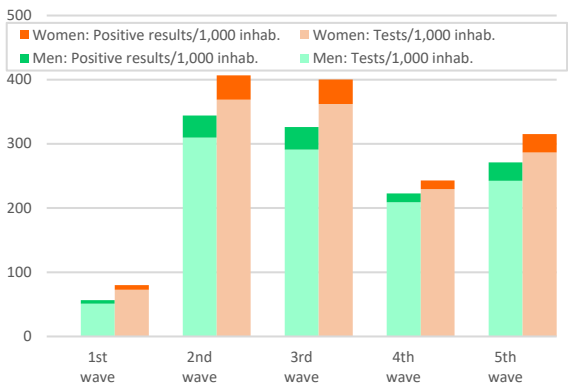




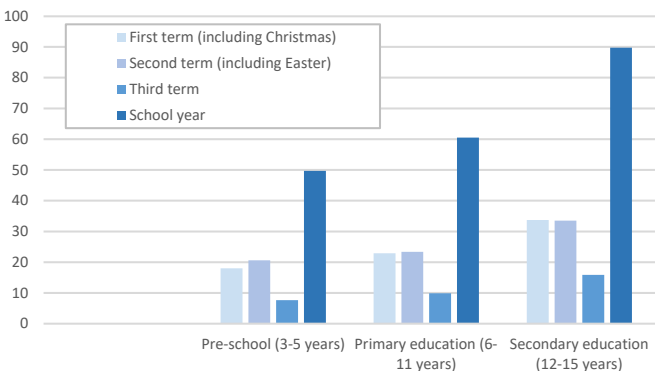
HEALTHCARE SYSTEM’S RESPONSE TO COVID-19

DIAGNOSTIC CAPACITY

POSITIVITY BY GENDER

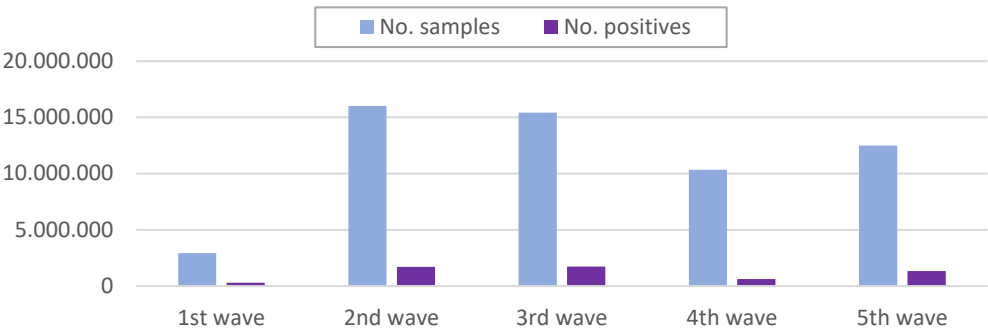


POSITIVITY BY IN SCHOOL AGED-CHILDREN



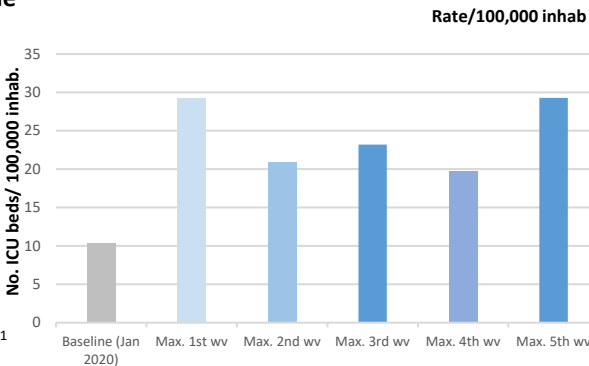
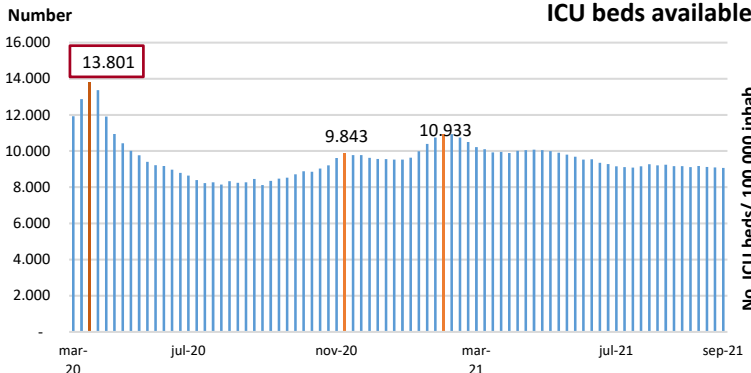
TESTS CARRIED ON

58 million
COVID tests



CARE CAPACITY

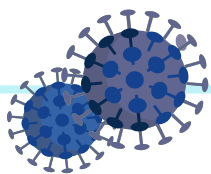
HOSPITALS



Care also began to be provided at **medicalized hotels** and **other types** of residential centre, in addition to **field hospitals** and **specialist hospitals**.

PRIMARY HEALTHCARE CENTRES

Healthcare centres began offering patients **teleconsultations**. **Health professionals** were seconded to field hospitals and medicalized hotels.



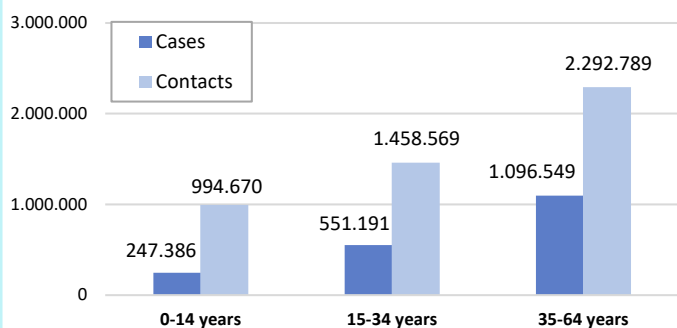
HEALTHCARE SYSTEM'S RESPONSE TO COVID-19

CARE ACTIVITY RELATED TO COVID-19

PRIMARY CARE

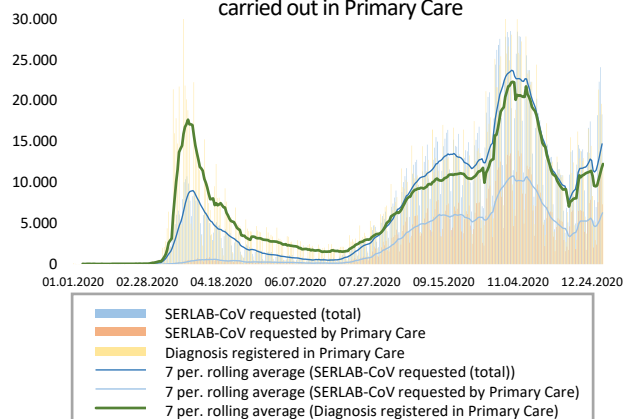
Covid-19 cases and contacts registered

2,248,180 cases registered in Primary Care
5,320,384 contacts registered in Primary Care



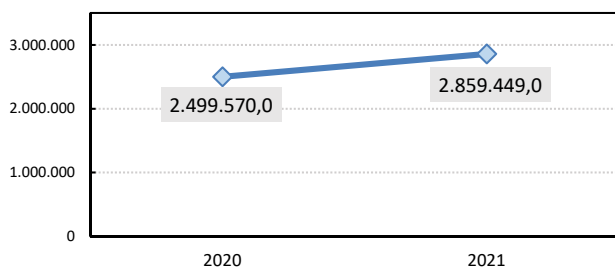
SERLAB-CoV tests and diagnoses registered

19,462,985 Covid-19 tests carried out in Primary Care

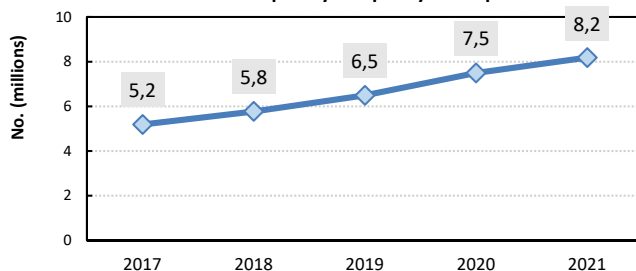


Temporary incapacity cases

Temporary incapacity cases related to Covid-19

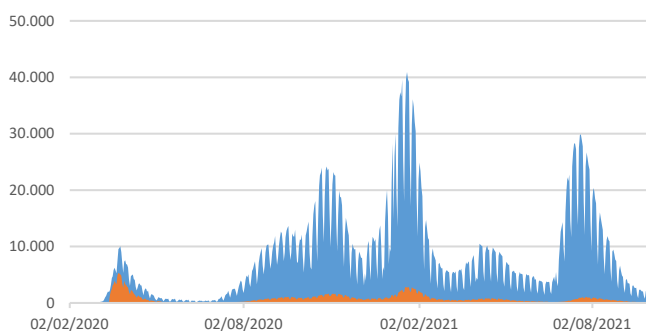


Total temporary incapacity cases processed

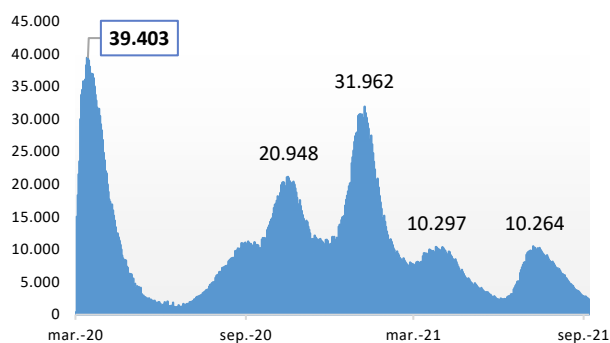


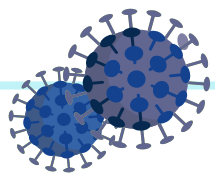
HOSPITAL CARE

■ Persons (+) at that date
 ■ Hospitalised



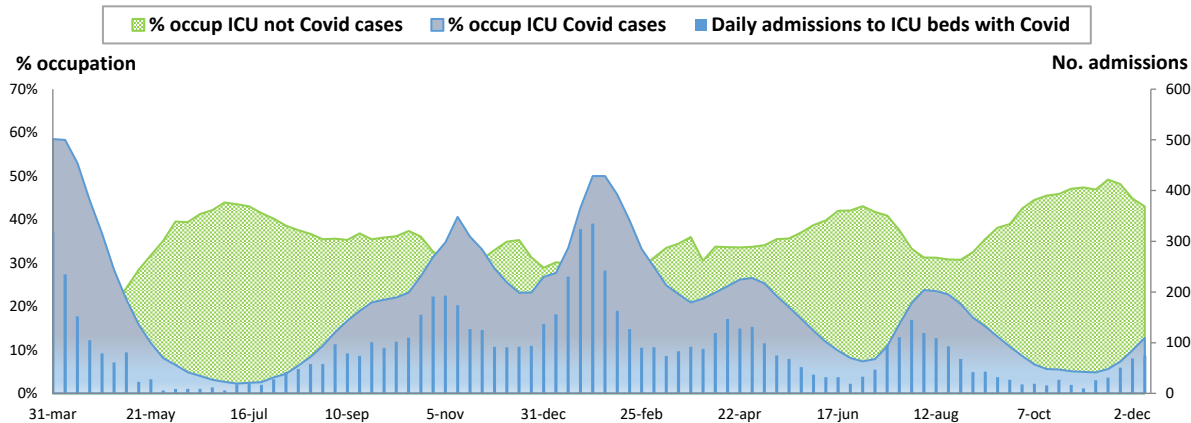
Total beds occupied COVID-19



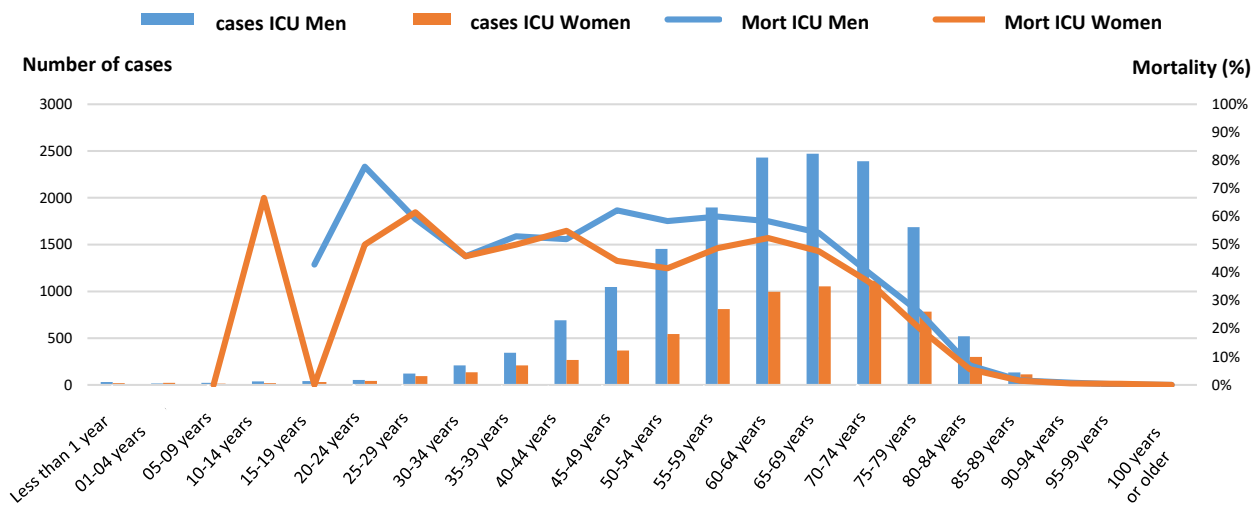
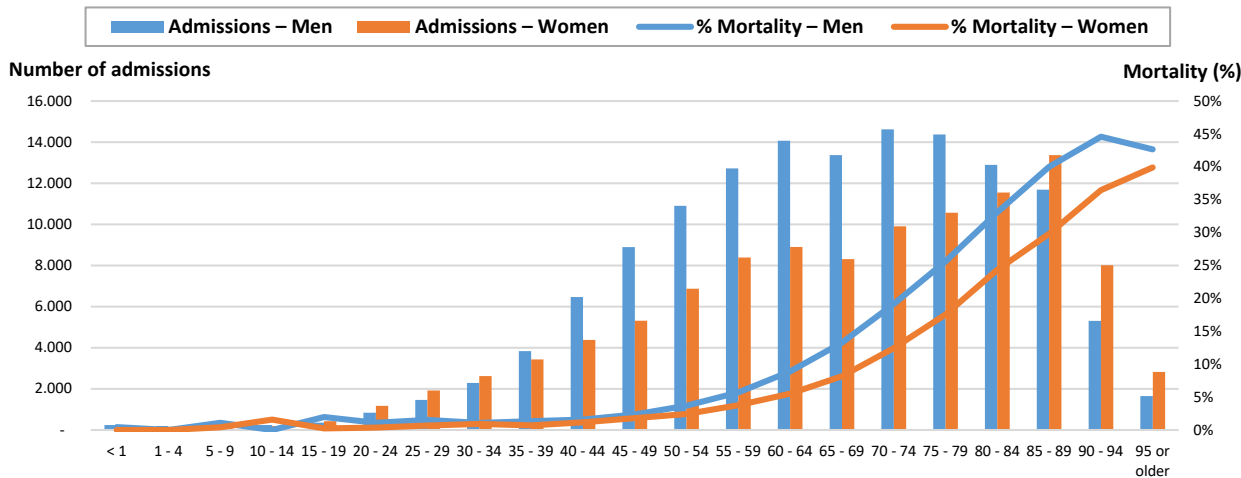


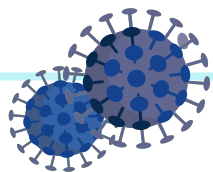
HEALTHCARE SYSTEM'S RESPONSE TO COVID-19

ICU ACTIVITY AND OCCUPANCY



CHARACTERISTICS OF COVID PATIENTS ADMITTED

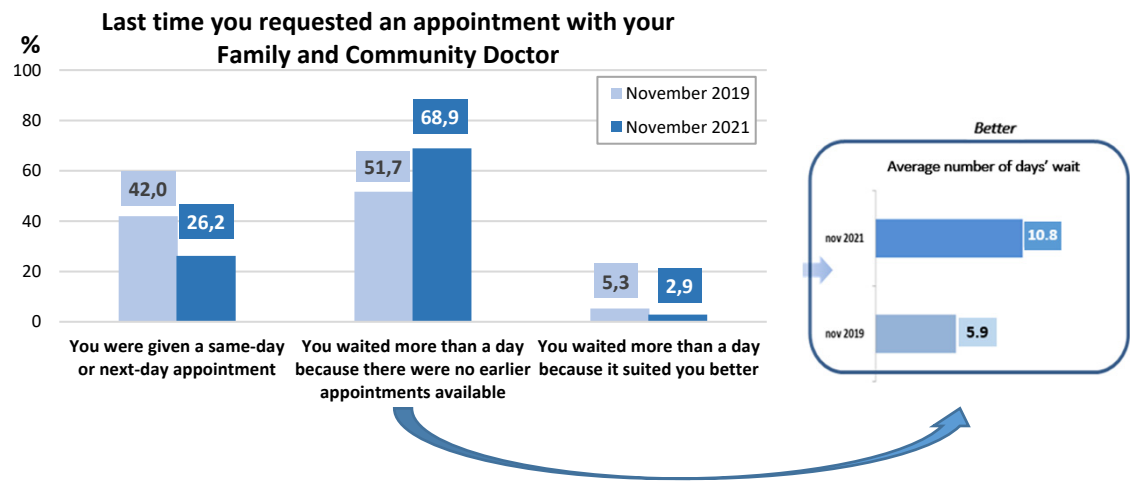




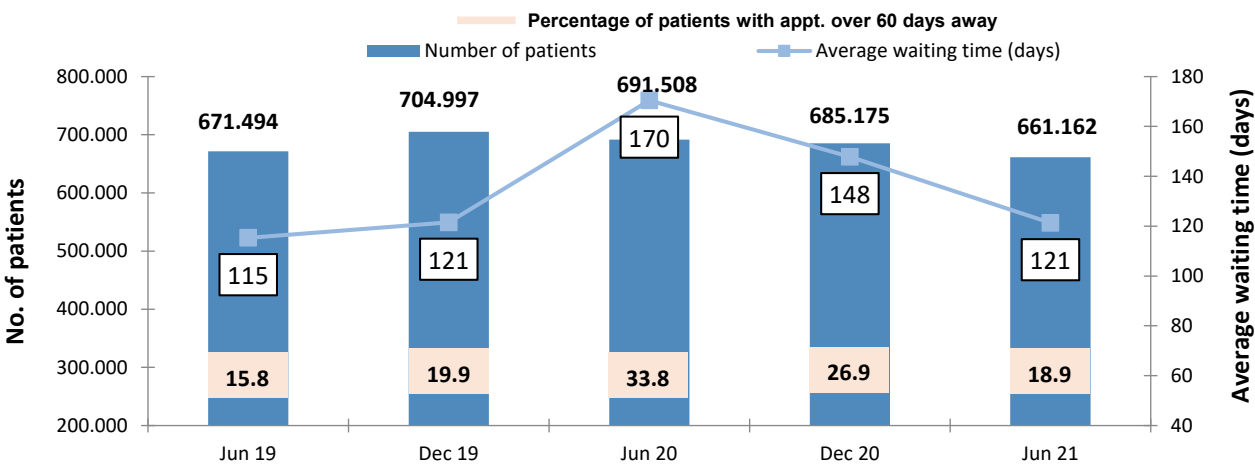
HEALTHCARE SYSTEM’S RESPONSE TO COVID-19

IMPACT ON ACCESS TO THE HEALTHCARE SYSTEM

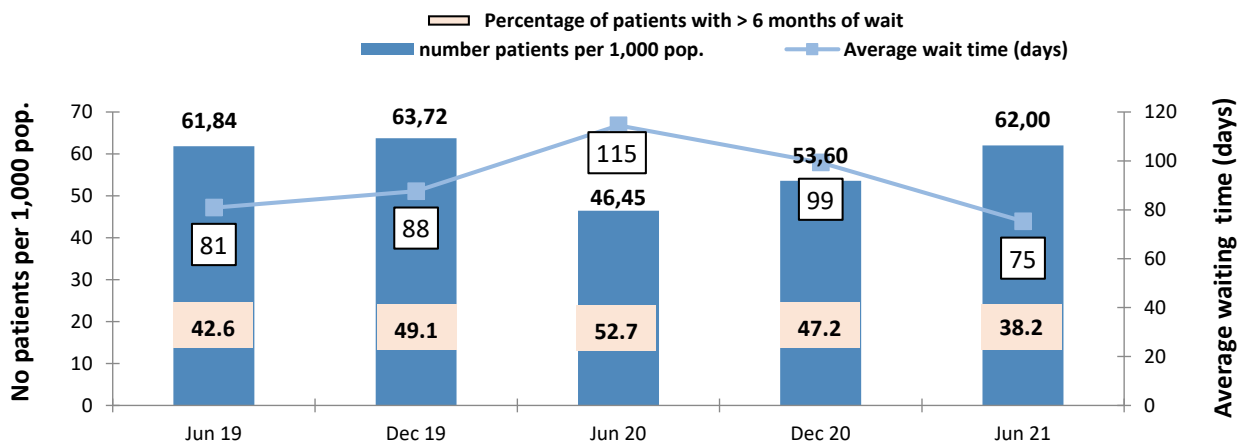
PRIMARY CARE

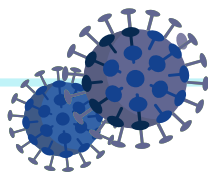


WAITING LIST FOR SURGERY



WAITING LIST FOR HOSPITAL OR SPECIALIST CENTRE CONSULTATIONS



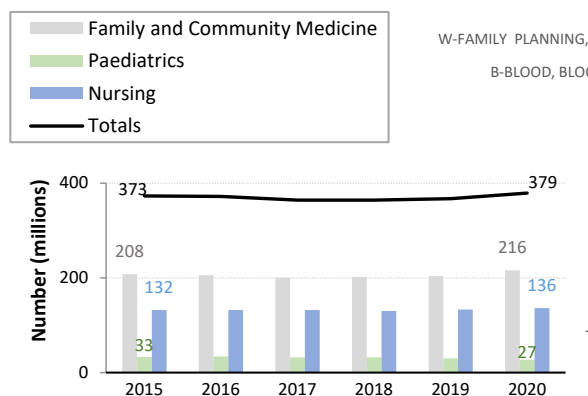


HEALTHCARE SYSTEM'S RESPONSE TO COVID-19

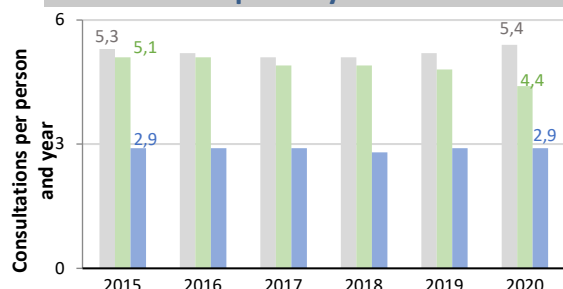
IMPACT ON ORDINARY CARE ACTIVITY

PRIMARY CARE

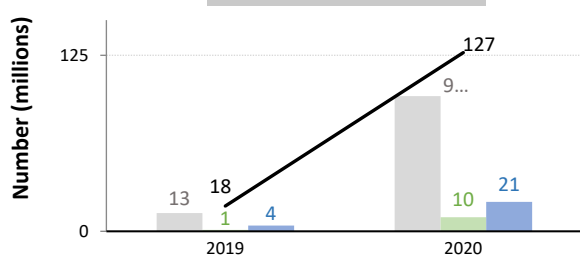
Consultations



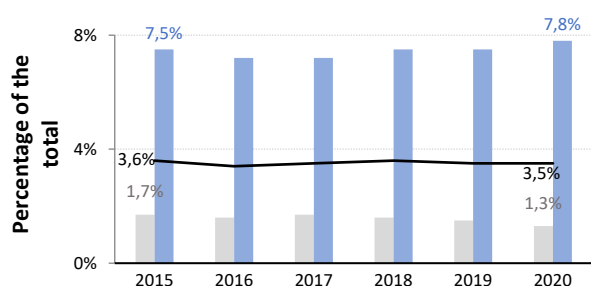
Consultations per population to SNS primary care



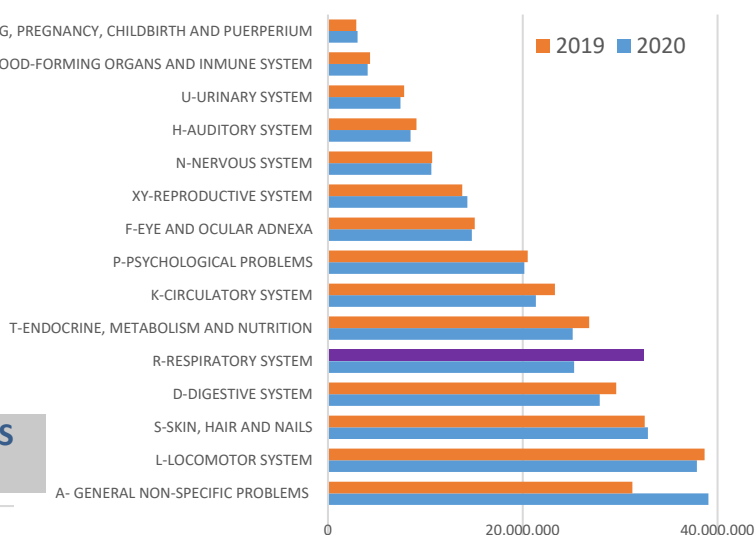
Teleconsultations



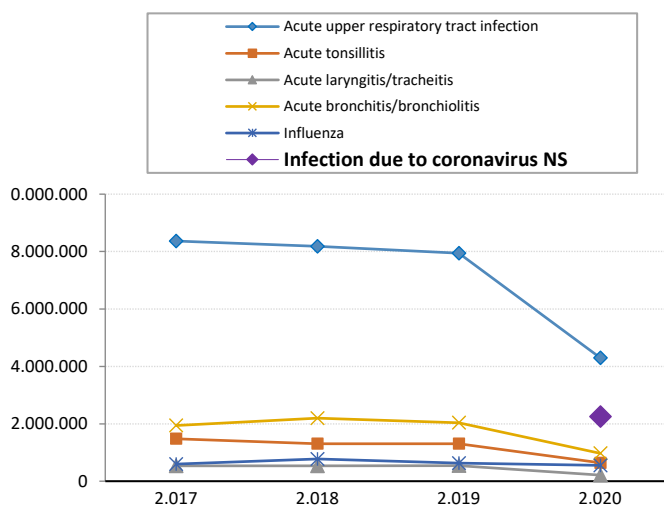
Home care visits



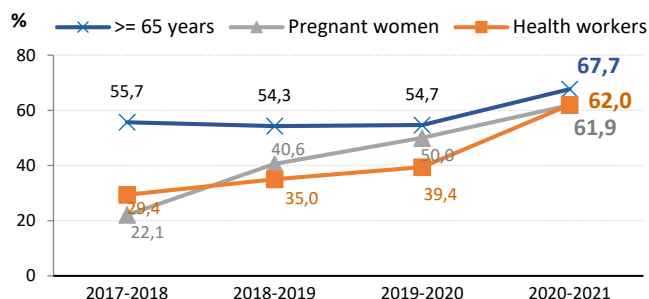
Morbidity pattern in hospitalisation

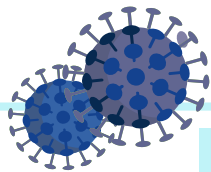


Most common respiratory infections



Influenza vaccination coverage

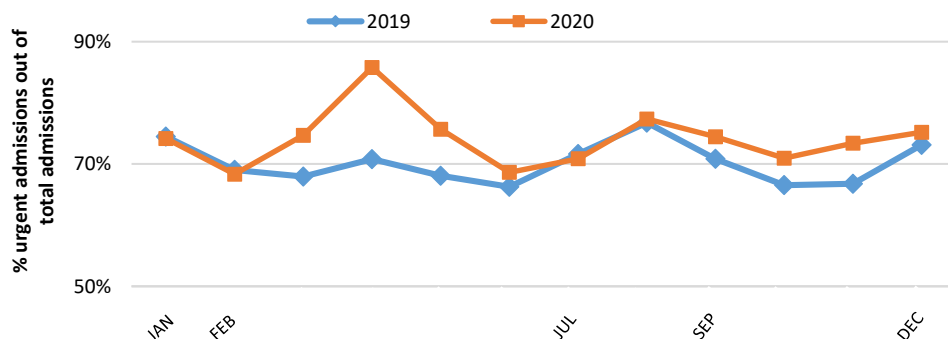




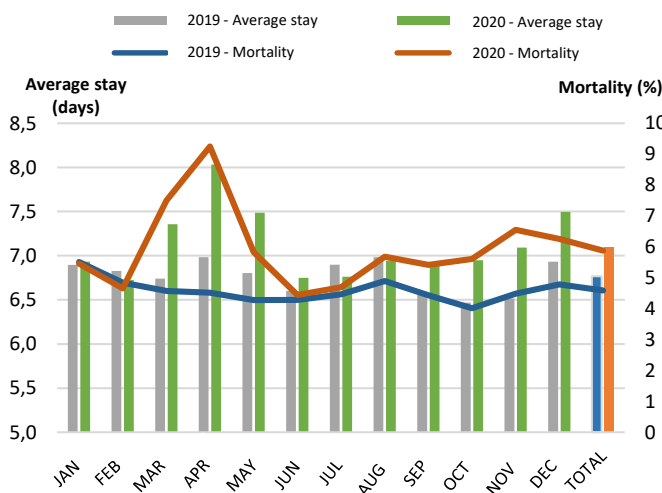
HEALTHCARE SYSTEM'S RESPONSE TO COVID-19

IMPACT ON ORDINARY CARE ACTIVITY

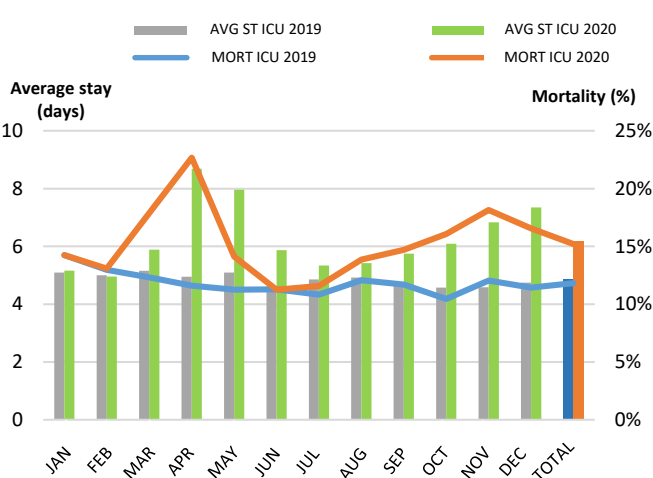
HOSPITALS



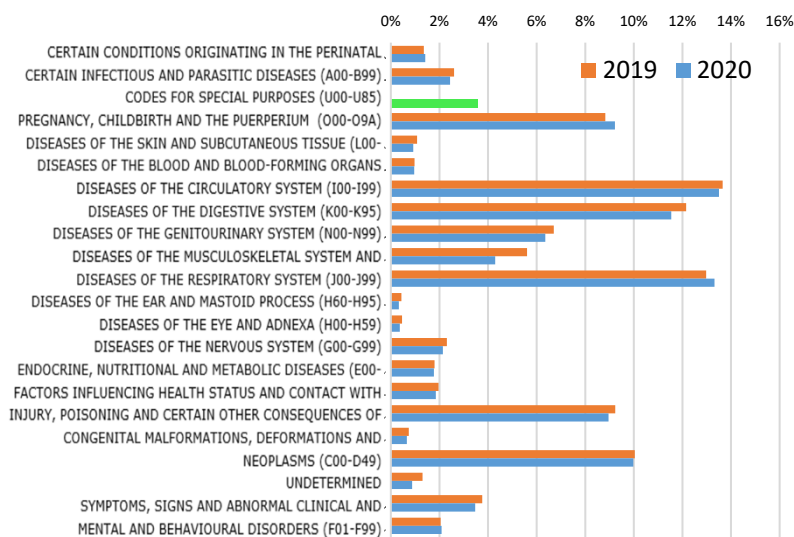
Hospitalised COVID cases



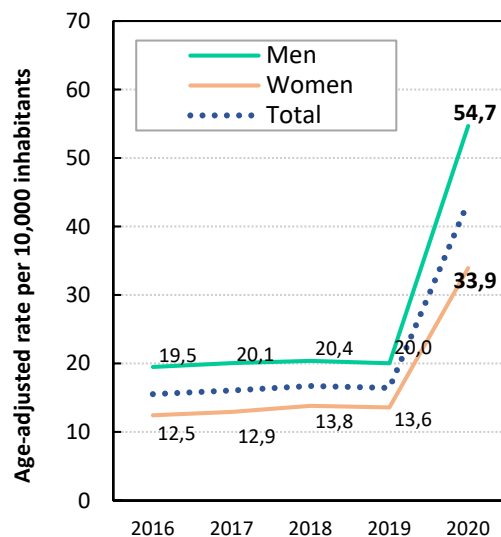
Covid cases with a stay in the ICU

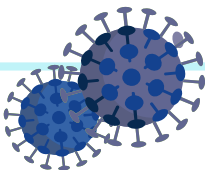


Morbidity pattern in hospitalisation



Hospitalisation due to pneumonia

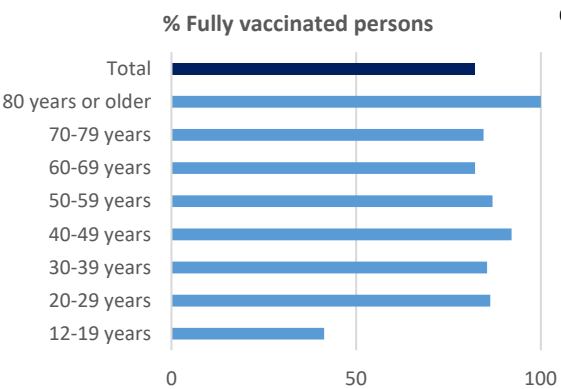




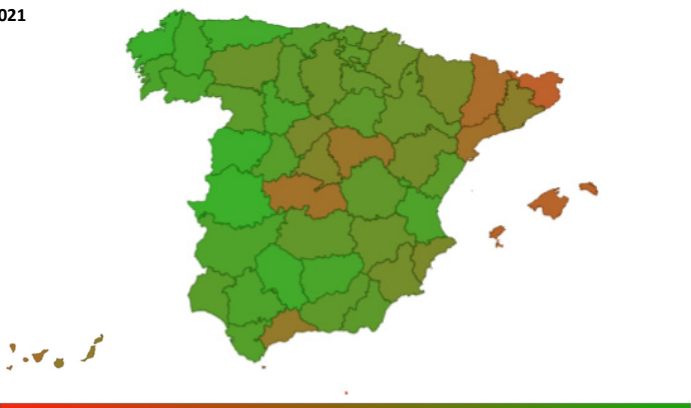
HEALTHCARE SYSTEM’S RESPONSE TO COVID-19

COVID VACCINATION

Fully vaccinated individuals by age



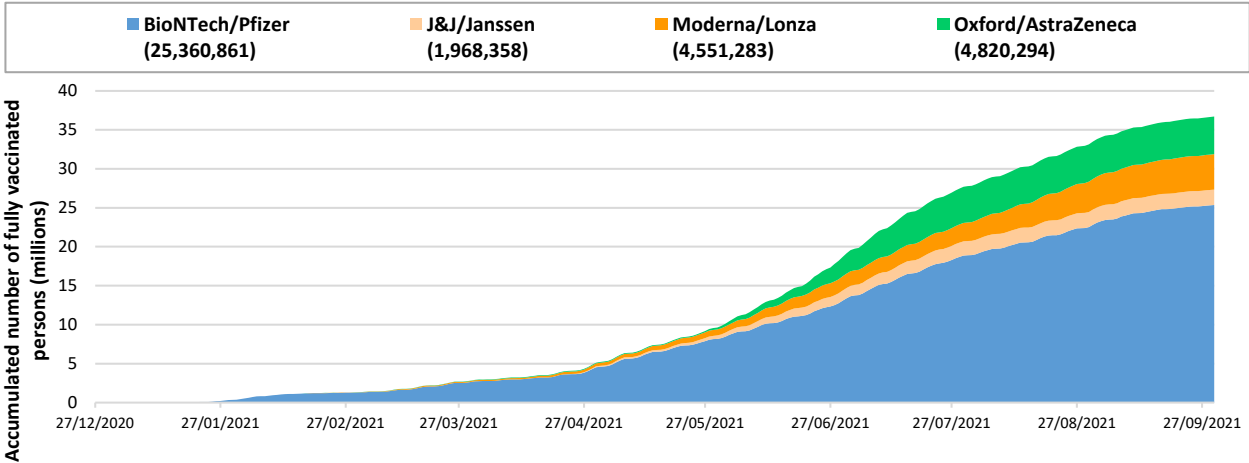
Covid-19 vaccination coverage by province



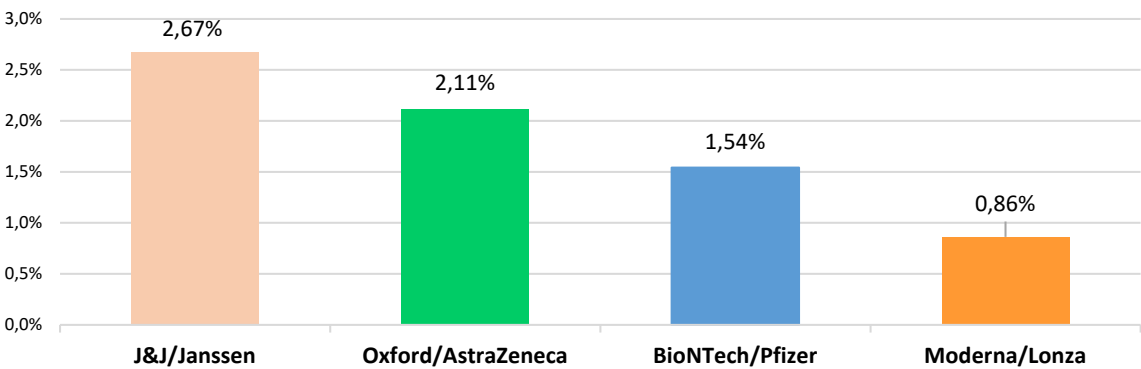
Success of the vaccination campaign:

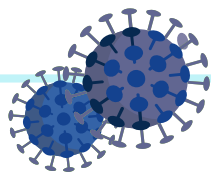
As at September 2021, **82.3%** of the population aged 12 years or older has been fully vaccinated

Fully vaccinated persons by manufacturer



Reinfection in fully vaccinated persons



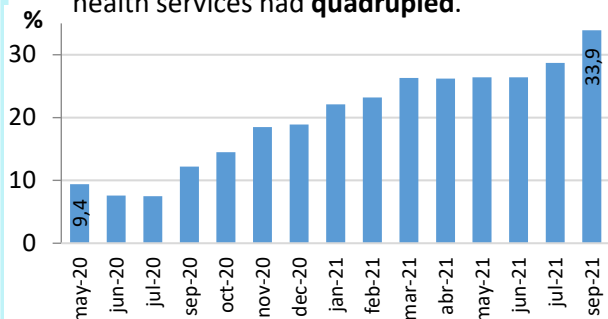


HEALTHCARE SYSTEM'S RESPONSE TO COVID-19

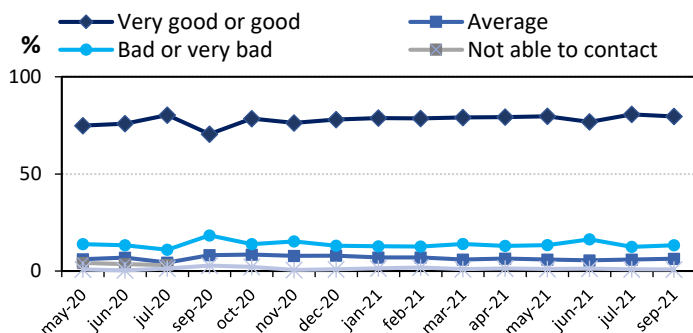
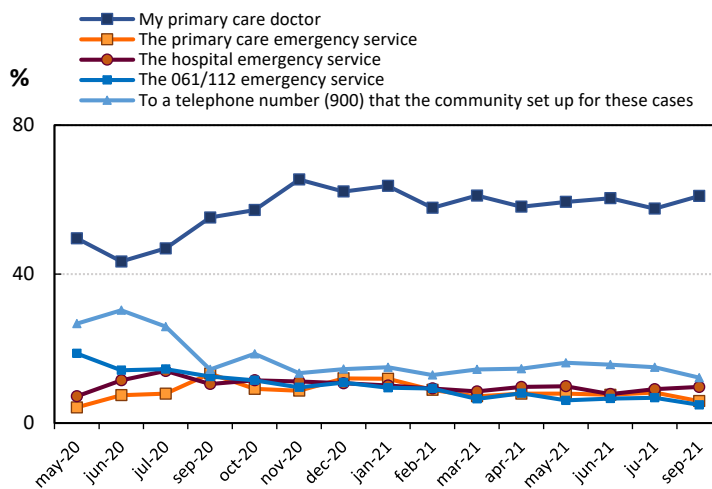
EXPERIENCE OF THE GENERAL PUBLIC

Use of health services

By **September 2021** the global use of health services had **quadrupled**.



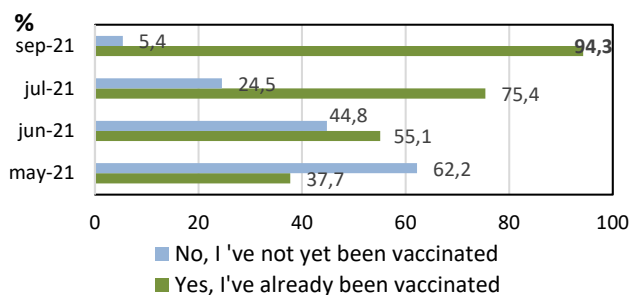
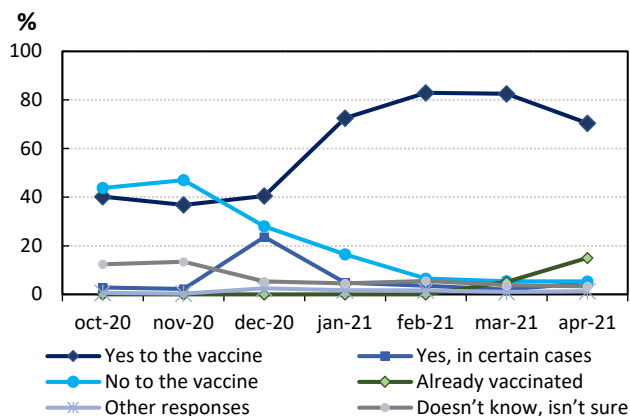
The **most used** health service was **PRIMARY CARE**



More than 70% of the population affirmed that the care they received was good or very good

Attitudes towards Covid-19 vaccination

DECREASE in **refusal** of the Covid-19 vaccine, which stood at **5.5%** in **April 2021**.



1 Introduction

The Annual Report on the National Health System of Spain seeks to provide an image of the state of health of the Spanish population and also of the country's public healthcare system (hereinafter referred to as the SNS, for Sistema Nacional de Salud). Understanding both is necessary for the design of policies and interventions and for guiding decision-making based on identified needs and the corresponding improvement strategies.

This report has been published periodically since 2003 and over the years it has reflected, with its evolving content and format, the changing dynamics of the SNS. The contents included in the present edition have been approved by the Subcommission of the SNS Information System.

Due to the pandemic situation, it was deemed appropriate that this edition should include the information available for both 2020 and 2021, so that future reports will correspond to the year in which they are published.

Continuing with the structure and format initiated in 2019, the report offers, on the one hand, an overall vision of the country's health status, social determinants and healthcare system, the elements comprising the historical data series. At the same time, it explores the situation of certain groups of diseases in all of its sections. Lastly, it presents aspects related to the situation of the care provision system conditioned by the COVID-19 pandemic.

The Report consists of five sections:

1. Population
2. Health status
3. Social determinants of health
4. Characteristics of SNS
5. Response by SNS to COVID-19

As in previous years, the information has been obtained from different sources and information systems, in compliance with Law 16/2003, of 28 May, on Cohesion and Quality in the SNS, primarily the SNS Information System, the information of which comes from the central government's health administration and from the autonomous communities, under the conditions agreed by the Interterritorial Council of the SNS (see Annex "Sources and information systems").

Also, as in past editions, this report was prepared with the participation of the general directorates and sub-directorates of the Ministry of Health that are responsible for the different areas covered.

Some data appearing in the report refer to 2019, either because they come from information systems of non-annual periodicity, or because due to their complexity their elaboration and validation takes more time, and in these cases the most recent available data is used. Data from 2020 and 2021 are used in subjects related to Population (National Statistics Institute, INE), the Protected Population (Individual Health Card), perceived Health and lifestyle habits (European Health Survey in Spain, EESE), waiting times (Waiting List Information System, SISLE) and Physical Resources (Information System for the monitoring of SNS Reference Centres, Services and Units, SISCSUR).

The data presented is disaggregated by year and territory (Spain has 17 autonomous communities and two autonomous cities, Ceuta and Melilla) and graphs and maps have been designed to facilitate visualization and analysis of historical series and trends, and to enable comparison between territories. If the information is available, health inequalities by sex and socioeconomic level (education, social class, income level) are also presented, to illustrate aspects related to equity. The data, as a whole, reflects the situation and context of the SNS in the period prior to the pandemic and can thus be used for reference in later studies.

In relation to the pandemic, the report offers a series of data concerning diagnostic and care activity obtained from the new information systems that have been developed for the organization and management of healthcare related to COVID-19. Also, it uses the guiding thread of the four groups of diseases –respiratory, cardiovascular, oncological and mental– which are analyzed throughout the report, in its different sections, to identify the repercussions of the pandemic, both the effects of COVID-19 itself and also the impact it has had on the healthcare system.

The data appearing in the section on COVID-19 refer to the period between 1 February 2020 and 30 September 2021, and its information sources are mainly diagnostic capacity (State System of Laboratory Results, SERLAB-CoV), patient care capacity (Centre of Management and Control, CMC), vaccination (Vaccination Registry, REGVACU) and the experience of the population during the pandemic (Opinion Barometer, Sociological Research Centre, CIS).

Epidemiological information concerning the COVID-19 pandemic, of exceptional depth and strategic value, is not covered in this report, due to its magnitude, specificity and differentiated dissemination. Such information, provided systematically by the Ministry of Health through COVID-19 situation updates, rapid risk evaluation reports and monitored indicators, among other means, produced by the Centre for the Coordination of Health Alerts and Emergencies of the General Directorate of Public Health, and also the epidemiological situation reports by the Carlos III Health Institute, can be consulted on the Ministry of Health website.¹

In addition, continuing a practice that began in the 2019 Report, two monographs ("Human resources, professional regulation and ongoing training" and "Pharmaceutical benefits in the SNS") have been prepared and are summarised in the 2020-2021 Report.

The Annual Report on the National Health System of Spain is prepared by the General Secretariat of Digital Health, Information and Innovation, through the Sub-Directorate General of Health Information, in accordance with Royal Decree 852/2021, of 5 October, which modifies the basic structure of the Ministry of Health established in Royal Decree 735/2020, of 4 August.

It is hoped that the publication of this Annual Report will be useful to health authorities, healthcare professionals, researchers and managers, by deepening its readers' knowledge of the SNS, helping identify areas in need of improvement and facilitating decision making. But it also seeks to help citizens interested in learning about the health of the Spanish population and the functioning of the country's health services.

¹ <https://www.sanidad.gob.es/profesionales/saludPublica/ccayes/alertasActual/nCov/home.htm>

2 Population



This section offers a general description of the structure of Spain's population and of how it has changed over time. It is provided as contextual information that will be helpful for interpreting subsequent sections of the report. Information about the population protected by the SNS is also included.

2.1 Population Figures

The official population figures permit the construction of numerous indicators that are expressed in terms of population.

As of 1 January 2021 the official population of Spain is 47,385,107 people. Andalusia (17.9%), Catalonia (16.4%), Madrid (14.2%) and Valencia (10.7%) account for almost 60% of the population residing in Spain. Ceuta and Melilla (0.2% each), La Rioja (0.7%), Cantabria (1.2%), Navarre (1.4%), Asturias (2.1%), Extremadura (2.2%) and Balearic Islands (2.5%) are the territories with the lowest population.

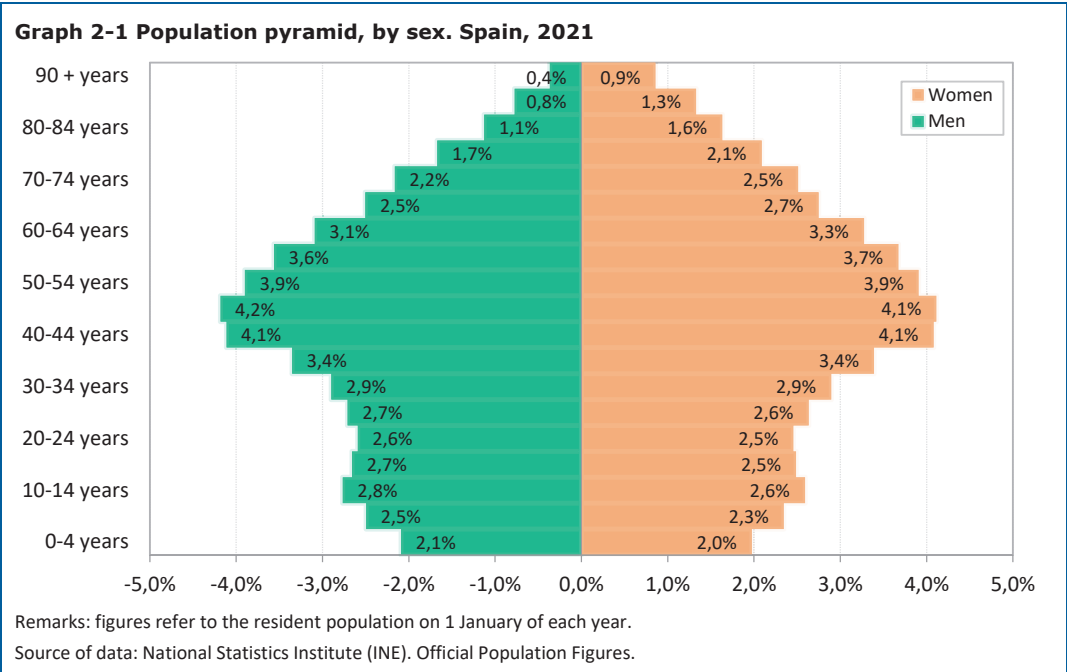
Table 2-1 Official population figures as of 1 January 2019, 2020 and 2021, by sex and autonomous community. Spain

	2019			2020			2021		
	Both sexes	Men	Women	Both sexes	Men	Women	Both sexes	Men	Women
Andalusia	8,414,240	4,147,167	4,267,073	8,464,411	4,170,605	4,293,806	8,472,407	4,173,339	4,299,068
Aragon	1,319,291	650,694	668,597	1,329,391	656,056	673,335	1,326,261	655,248	671,013
Asturias	1,022,800	488,137	534,663	1,018,784	486,066	532,718	1,011,792	482,665	529,127
Balearic Islands	1,149,460	572,757	576,703	1,171,543	584,298	587,245	1,173,008	584,853	588,155
Canary Islands	2,153,389	1,065,971	1,087,418	2,175,952	1,076,185	1,099,767	2,172,944	1,074,180	1,098,764
Cantabria	581,078	281,801	299,277	582,905	282,559	300,346	584,507	283,378	301,129
Castilla y León	2,399,548	1,181,401	1,218,147	2,394,918	1,178,846	1,216,072	2,383,139	1,173,114	1,210,025
Castilla-La Mancha	2,032,863	1,016,954	1,015,909	2,045,221	1,023,740	1,021,481	2,049,562	1,026,128	1,023,434
Catalonia	7,675,217	3,770,123	3,905,094	7,780,479	3,826,964	3,953,515	7,763,362	3,819,831	3,943,531
Valencia	5,003,769	2,465,342	2,538,427	5,057,353	2,492,121	2,565,232	5,058,138	2,491,394	2,566,744
Extremadura	1,067,710	528,500	539,210	1,063,987	526,288	537,699	1,059,501	523,976	535,525
Galicia	2,699,499	1,298,964	1,400,535	2,701,819	1,300,153	1,401,666	2,695,645	1,297,301	1,398,344
Madrid	6,663,394	3,187,312	3,476,082	6,779,888	3,243,793	3,536,095	6,751,251	3,229,700	3,521,551
Murcia	1,493,898	747,615	746,283	1,511,251	756,699	754,552	1,518,486	760,362	758,124
Navarre	654,214	323,631	330,583	661,197	327,226	333,971	661,537	327,465	334,072
Basque Country	2,207,776	1,073,074	1,134,702	2,220,504	1,079,452	1,141,052	2,213,993	1,076,385	1,137,608
La Rioja	316,798	156,179	160,619	319,914	157,835	162,079	319,796	157,823	161,973
Ceuta	84,777	42,912	41,865	84,202	42,542	41,660	83,517	42,208	41,309
Melilla	86,487	43,894	42,593	87,076	44,162	42,914	86,261	43,603	42,658
Spain	47,026,208	23,042,428	23,983,780	47,450,795	23,255,590	24,195,205	47,385,107	23,222,953	24,162,154

Remarks: the sum of the disaggregated data may differ from the total due to rounding.

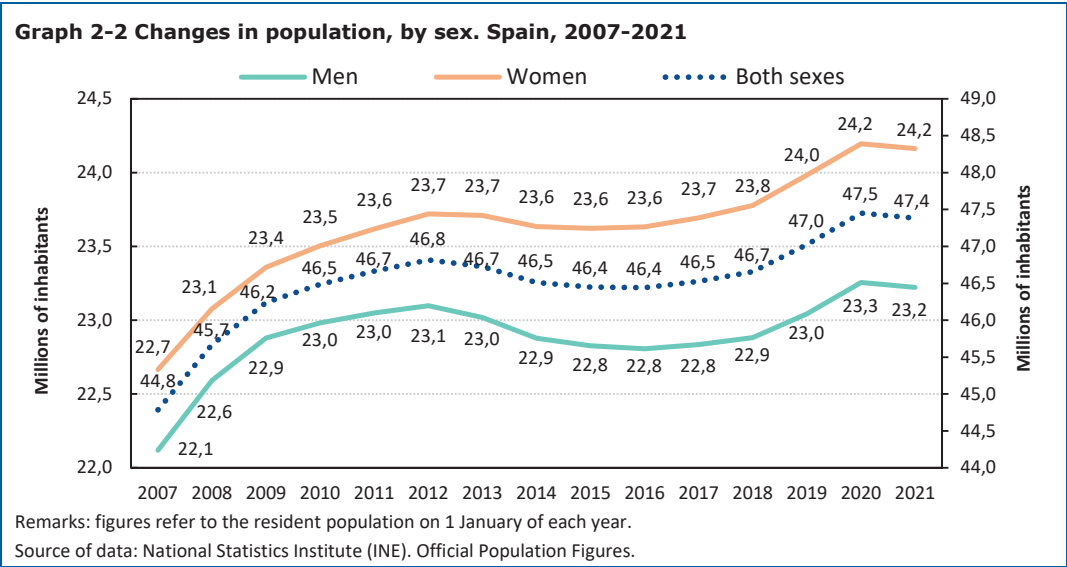
Source of data: National Statistics Institute (INE). Official population figures.

Spain has a clearly regressive population pyramid, with an increasingly broader apex as a consequence of the progressive ageing of the population.



The population grew by 424,587 people in absolute numbers between 2019 and 2020, an increase of 0.9% in relative terms. Between 2020 and 2021 the population fell by 65,688 people, which is a relative decrease of 0.1%. Between 2012 and 2016 there was a reduction in the population, with disparity between the two sexes, as a gentler and shorter decrease was observed in the number of women. Since 2016 the population of both sexes has grown at a similar rate and thus the disparity between the sexes has continued.

Between 2019 and 2020 Balearic Islands continued to be the autonomous community with the greatest relative demographic growth, followed by Madrid and Catalonia, while the following territories saw a reduction in their population: Asturias, Extremadura, Castilla y León and Ceuta. Between 2020 and 2021 the population increased in Murcia, Cantabria, Castilla-La Mancha, Balearic Islands, Andalusia, Navarre and Valencia, while it decreased in the rest of the territories, with Ceuta, Melilla, Asturias and Castilla y León showing the biggest drop.



2.2 Population protected by the SNS

Access to the SNS, in conditions of equality and universality, is considered to be a basic right of all people, and thus everyone with Spanish nationality and all foreigners who reside in Spanish territory are entitled to the health protection and healthcare services provided by the SNS.²

The SNS has a database containing the information of the persons with health coverage that is publicly funded (SNS Protected Population Database, BD-PP-SNS). The database is managed by the Ministry of Health with the participation of the autonomous communities and the insurance mutuals for civil servants (the special insurance scheme for State civil servants, members of the armed forces and employees of the judicial system) and it contains only the information necessary to correctly identify each citizen and keep their location and protection situation up to date.³

The Ministry of Health has assumed the responsibility of generating a unique and life-long Personal Identification Code (CIP-SNS) for each person. This code, which is associated with the Individual Health Card that each autonomous community or body issues to its populace, serves as a link to any other personal healthcare-related codes (CIP-AUT, CIP-MUT) that an individual may be assigned in different autonomous communities or by the insurance mutuals.^{4,5}

The BD-PP-SNS constitutes an information system of great strategic importance as regards both health protection and the planning, management and evaluation of healthcare services, in each autonomous community and insurance mutual, and for the healthcare system as a whole.

As of the 30th of June 2021 there are 46,815,994 persons registered in the BD-PP-SNS. All of them have a unique Personal Identification Code that allows them to be identified positively and uniformly.

Users of the insurance mutuals ISFAS (Social Institute of the Armed Forces) and MUGEJU (Mutual for Employees of the Judiciary) that have opted for private health coverage are in the process of being added to this database and represented a total of 602,138 persons in 2020.⁶

Therefore, taking these groups into account, the population in Spain with health services paid for by public funding is 47,418,132 persons, a figure which coincides (+0.07%) with the official total population figure.

Ninety-six point five percent (96.5%) of the population is covered by the SNS and 3.5% is covered by private entities contracted by the insurance mutuals.

² Royal Decree-Law 7/2018, of 27 July, on universal access to the SNS.

³ The SNS Protected Population Database contains the registers of the population with health protection by the SNS, including the insurance mutual users who have chosen this option. Members of MUFACE (Mutual for Civil Servants of the State) who have chosen private healthcare provision are also included, while members of ISFAS (Social Institute for the Armed Forces) and MUGEJU (Mutual for Employees of the Judiciary) who have opted for private care are in the process of being incorporated.

⁴ Law 16/2003, of 28 May, on Cohesion and Quality in the SNS and Royal Decree 183/2004, of 30 January, which regulates the Individual Health Card.

⁵ Royal Decree 183/2004, of 30 January, which regulates the Individual Health Card.

⁶ 2020 Reports (most recent data available) by ISFAS.

(https://www.defensa.gob.es/isfas/Galerias/ficheros/Memoria/Memoria_ISFAS_2020.pdf) and MUGEJU (<https://www.mugeju.es/sites/default/files/archivos/memoria/MEMORIA%202020.pdf>).

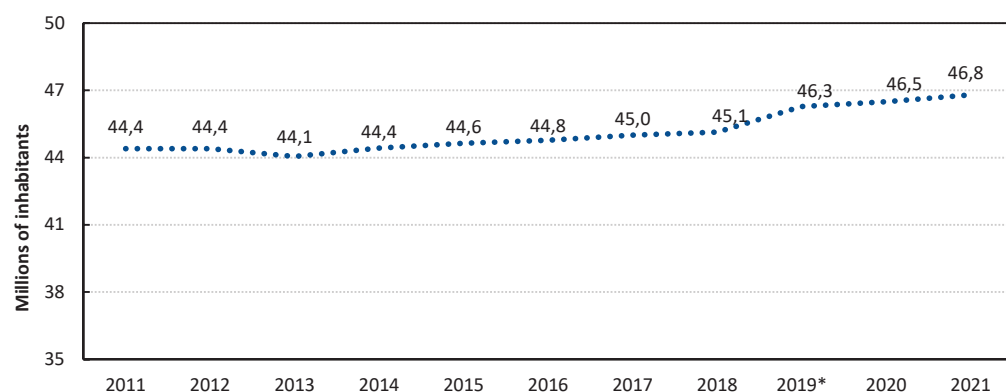
Table 2-2 Population registered in the SNS Protected Population Database. Spain, 2019-2021

	2019	2020	2021
Andalusia	8,067,641	8,124,796	8,163,625
Aragon	1,302,536	1,310,194	1,315,620
Asturias	1,009,405	1,004,391	999,470
Balearic Islands	1,124,434	1,141,422	1,152,999
Canary Islands	2,022,990	2,044,970	2,060,942
Cantabria	564,578	564,024	565,698
Castilla y León	2,310,326	2,300,210	2,297,343
Castilla-La Mancha	1,928,409	1,929,889	1,937,959
Catalonia	7,209,969	7,239,279	7,430,924
Valencia	4,683,417	4,718,530	4,734,552
Extremadura	1,030,348	1,027,133	1,023,303
Galicia	2,618,133	2,617,020	2,618,183
Madrid	6,572,538	6,621,717	6,644,536
Murcia	1,460,767	1,474,929	1,487,417
Navarre	635,999	639,333	642,273
Basque country	2,206,928	2,221,346	2,228,390
La Rioja	309,648	311,786	313,691
Ceuta	75,172	75,566	74,962
Melilla	73,958	74,132	74,034
MUFACE (private option)*	1,074,713	1,071,547	1,050,073
Spain	46,281,909	46,512,214	46,815,994

Remarks: data refer to the month of June in all cases. *These data refer to users of MUFACE (Mutual for Civil Servants of the State) that have opted for private health coverage. The users of ISFAS (Social Institute of the Armed Forces) and MUGEJU (Mutual for Employees of the Judiciary) that have opted for private health coverage are in the process of being incorporated.

Source of data: Ministry of Health. SNS Protected Population Database.

Graph 2-3 Changes in the population protected by the SNS with publicly-funded healthcare (2007-2021)



Remarks: data is from 30 June of each year. *2019: incorporation of users of MUFACE (Mutual for Civil Servants of the State) who have opted for private health coverage.

Source of data: Ministry of Health. SNS Protected Population Database.

3 Health status

Health is a state of physical, mental and social well-being, with functional capability, and not just the absence of afflictions or diseases. Health should be conceived as the possibility that a person has to experience biopsychosocial harmony, in dynamic interaction with the medium in which they live.

3.1 Well-being



Guaranteeing a healthy life and promoting well-being for everyone at all ages is essential for the construction of prosperous societies, and for this reason the United Nations Organization (UNO), in the framework of the 2030 Sustainable Development Agenda, dedicates Sustainable Development Goal Three to health and well-being.

This new edition of the annual report on the SNS offers a global vision of well-being among the population, providing indicators such as life expectancy, healthy life years, perceived health, perceived social support and quality of life for children. Also included is the risk of mental illness, as context for the information about mental health that is provided in other sections.

3.1.1 Life expectancy

Life expectancy is an indicator widely used in relation to the health status of the population, because one of the characteristics of developed societies is that people live longer and longer.

Life expectancy at birth

Life expectancy at birth (LEB) in Spain in 2019 is 83.6 years, 80.9 in men and 86.6 in women.⁷

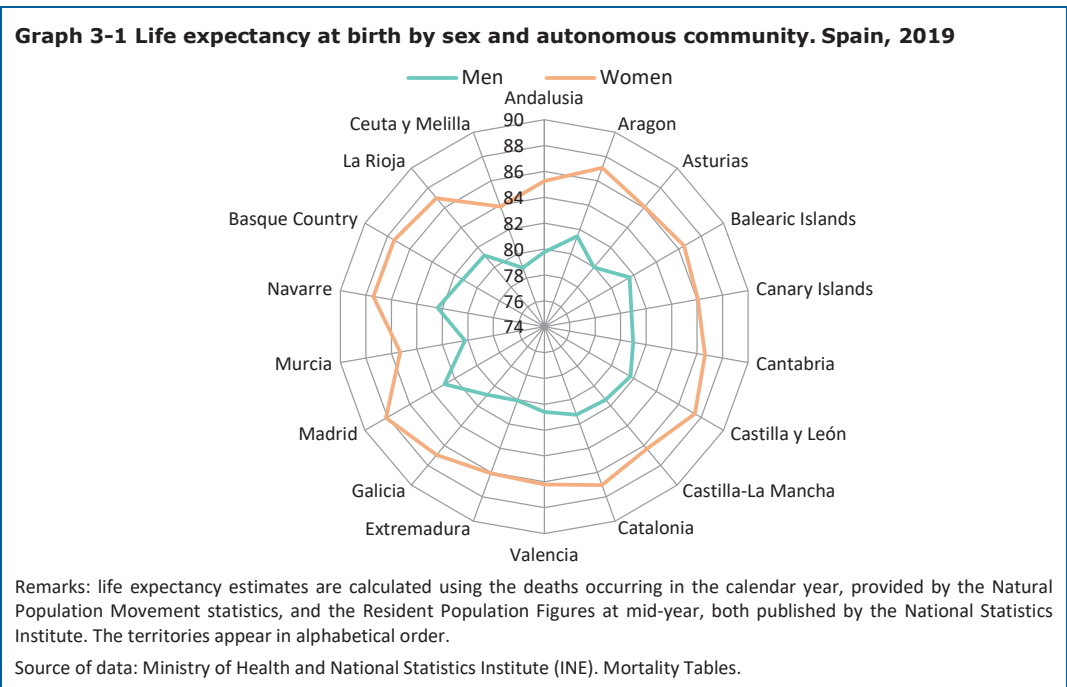
Madrid (85.7 years) is the community with the highest LEB, followed by Navarre (84.9 years), Castilla y León (84.5 years) and Basque Country (84.4 years). In contrast, Ceuta and Melilla (81.4 years) and Andalusia (82.5 years) are the autonomous cities and communities where the LEB is lowest.

⁷ After this report's closing date the LEB corresponding to 2020 was published (<https://www.ine.es/jaxiT3/Datos.htm?t=1414>): 82.3 years, 79.6 in men and 85.1 in women.

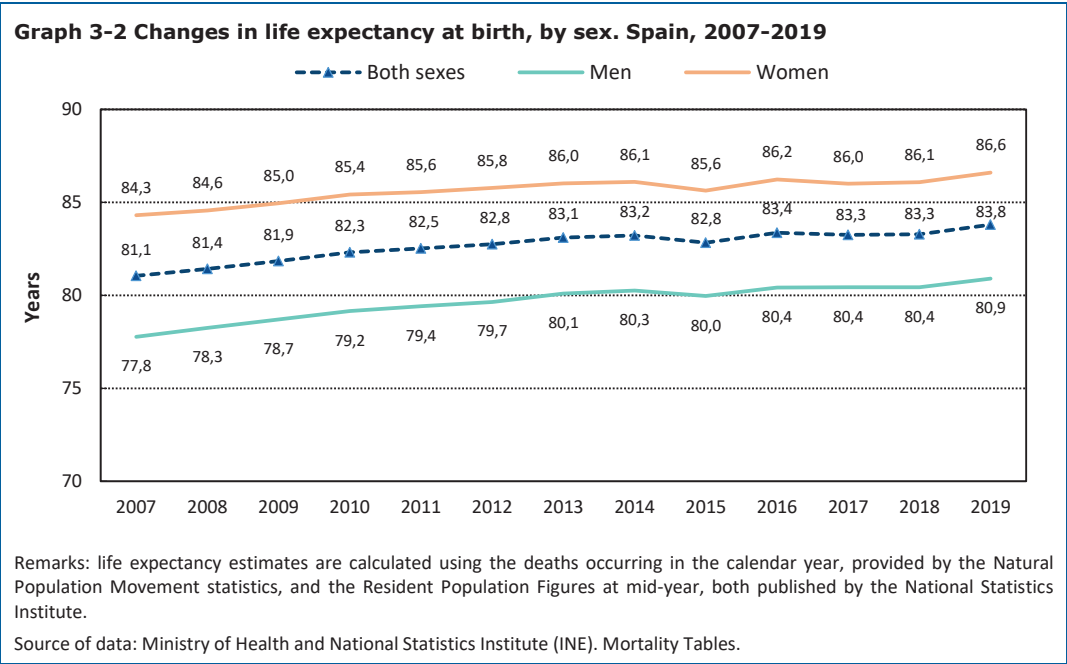
Table 3-1 Life expectancy at birth by sex and by autonomous community. Spain, 2019			
	Both sexes	Men	Women
Andalusia	82.5	79.8	85.3
Aragon	84.3	81.4	87.1
Asturias	83.1	80.0	86.1
Balearic Islands	84.1	81.6	86.5
Canary Islands	83.4	80.9	86.1
Cantabria	83.9	81.0	86.6
Castilla y León	84.5	81.7	87.5
Castilla-La Mancha	83.8	81.4	86.3
Catalonia	84.2	81.2	87.0
Valencia	83.4	80.6	86.2
Extremadura	83.0	80.1	86.1
Galicia	83.9	80.9	86.9
Madrid	85.7	82.9	88.1
Murcia	82.8	80.2	85.3
Navarre	84.9	82.4	87.4
Basque Country	84.4	81.3	87.4
La Rioja	84.1	81.2	87.0
Ceuta y Melilla	81.4	78.9	83.9
Spain	83.8	80.9	86.6

Remarks: life expectancy estimates are calculated using the deaths occurring in the calendar year, provided by the Natural Population Movement statistics, and the Resident Population Figures at mid-year, both published by the National Statistics Institute.

Source of data: Ministry of Health and National Statistics Institute (INE). Mortality Tables.



During the 2007-2019 period the LEB has increased by 2.7 years (3.1 in men and 2.3 in women). The LEB increased in all of the autonomous communities. Canary Islands (3.5), followed by Madrid, with an increase of 3.3 years and Ceuta and Melilla (2.6), were the territories showing the greatest increase, while Castilla-La Mancha, Murcia and La Rioja (2.3), experienced the smallest increase.



At birth, Spanish women have a life expectancy 5.9 years higher than that of men.

Life expectancy at age 65

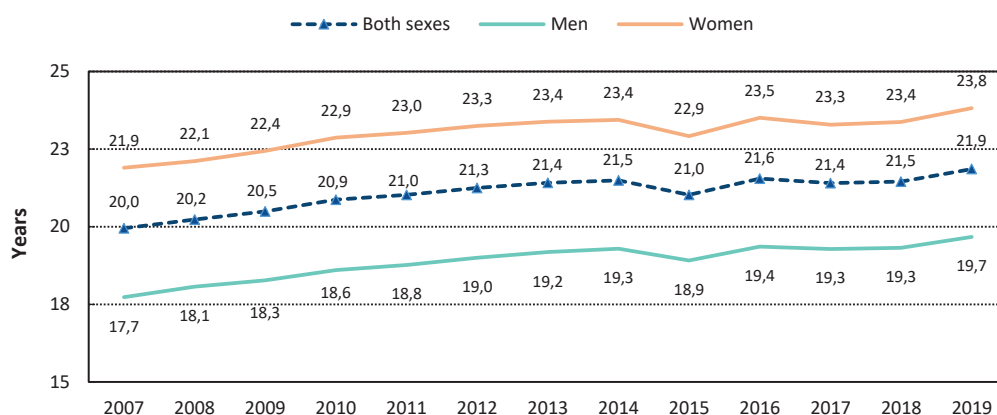
Life expectancy at age 65 (LE65) in Spain is 21.9 years, 23.8 years in women and 19.7 years in men.⁸

By autonomous community, Madrid (23.3 years), Navarre (22.6) and Castilla y León (22.5) are the communities with the highest LE65. It is Ceuta and Melilla (20.7 years) and Andalusia (20.8 years) that have the lowest LE65.

Between 2007 and 2019, the LE65 has shown an overall trend that is clearly positive. It has risen in all the autonomous communities and cities, especially in Ceuta and Melilla (2.6), Canary Islands (2.5) and Madrid (2.4), whereas Castilla y León (1.4) and Castilla-La Mancha (1.5) were the territories in which it has increased less.

⁸ After the report's closing date the LE65 corresponding to 2020 was published (<https://www.ine.es/jaxiT3/Datos.htm?t=1415>): 20.4 years, 18.4 in men and 22.3 in women.

Graph 3-3 Changes in life expectancy at 65, by sex. Spain, 2006-2019



Remarks: life expectancy estimates are calculated using the deaths occurring in the calendar year, provided by the Natural Population Movement statistics, and the resident Population Figures at mid-year, both published by the National Statistics Institute.

Source of data: Ministry of Health and National Statistics Institute (INE). Mortality Tables.

3.1.2 Healthy Life Years

The use of life expectancy as a general indicator of the level of health of the population does not provide information about the quality of life of individuals, of whether their lives are lived in good health or, to the contrary, with some kind of disability or dependency. However, estimates of healthy life expectancy (or healthy life years, HLY) do give an idea of the quality of life, in terms of good health, that can be expected in the years of life remaining for individuals. The absence of functional limitations and disability is considered a condition of good health.

Chronic diseases, mental health problems and physical disability become more prevalent with age and they reduce the quality of life of the individuals who suffer from these health conditions, as well as that of the people upon whom they depend. For this reason in this chapter priority is given to the older population, although the HLY at birth indicator is also frequently used.

Healthy life expectancy at birth is 79.9 years, 78.0 for men and 81.8 for women, which means that 95.4% of the years of life expectancy are lived without limitation.

The healthy life years estimate provides information about quality of life, in terms of good health, during the years of life remaining for individuals.

Persons aged 65 can expect to live 19.1 years in good health: 17.8 in men and 20.2 in women.

	Both sexes	Men	Women
Andalusia	18.2	17.4	18.8
Aragon	19.4	18.1	20.3
Asturias	18.6	16.8	20.1
Balearic Islands	19.4	19.5	19.6
Canary Islands	18.9	18.7	19.2
Cantabria	18.3	16.9	19.6
Castilla y León	20.1	18.1	22.1
Castilla-La Mancha	20.3	18.7	21.7
Catalonia	20.3	18.3	22.0
Valencia	18.5	17.8	19.1
Extremadura	19.5	17.6	21.0
Galicia	18.6	17.2	20.0
Madrid	19.5	18.2	20.6
Murcia	16.7	16.1	17.4
Navarre	19.6	17.6	21.5
Basque Country	19.5	18.3	20.6
La Rioja	19.6	18.7	20.2
Ceuta y Melilla	14.5	14.9	14.0
Spain	19.1	17.8	20.2

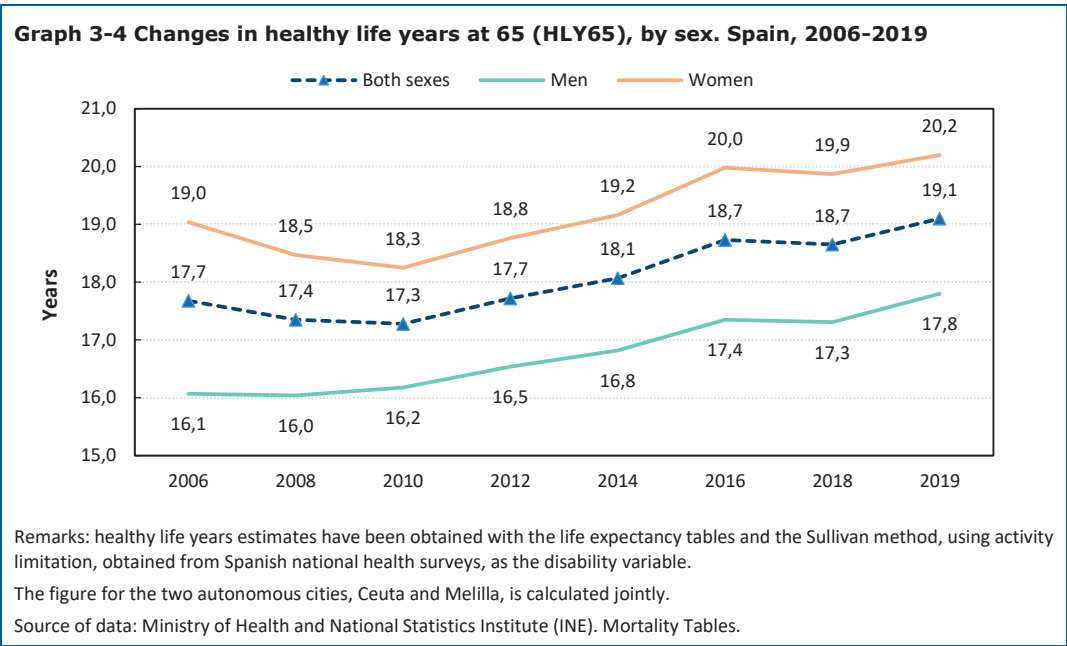
Remarks: healthy life years estimates have been obtained with the life expectancy tables and the Sullivan method, using activity limitation, obtained from Spanish national health surveys, as the disability variable.

The Ceuta and Melilla figure is calculated for the two autonomous cities together.

Source of data: Ministry of Health and National Statistics Institute (INE). Mortality Tables.

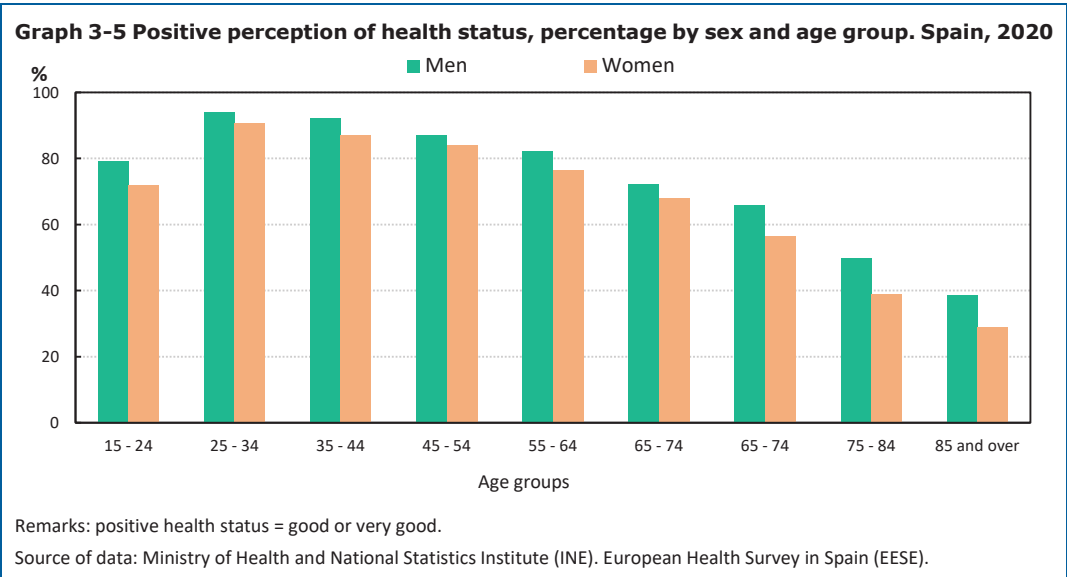
By territory, Catalonia (20.3 years), Castilla-La Mancha (20.3) Castilla y León (20.1), Navarre, and La Rioja (both 19.6) are the territories with the highest HLY65. In contrast, Murcia (16.7 years), Andalusia (18.2) and Cantabria (18.3) are the autonomous communities with the lowest HLY65.

Between 2006 and 2019, the number of HLY65 increased by 1.4 years in the population as a whole: 1.7 in men and 1.2 in women.

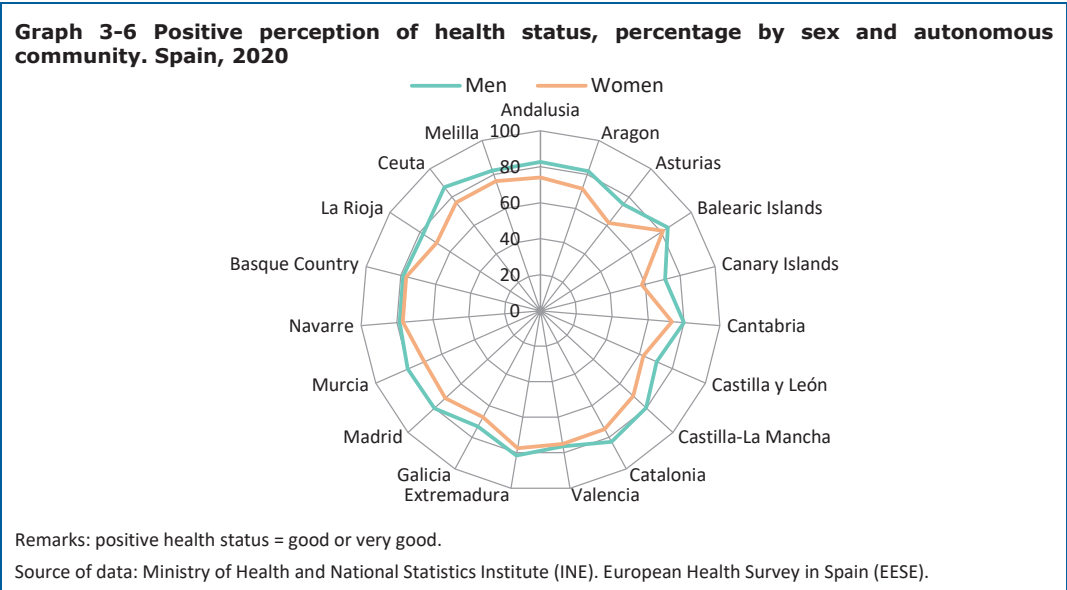


3.1.3 Perceived health

In Spain, 75.5% of the population deem their health status to be good or very good⁹, with men reporting a better health status than women do: 79.3% and 71.9% respectively, a pattern that is found in all age groups. The perception of a positive health status is at its highest in the 25-34 year age group (92.3%) and diminishes progressively as age increases, reaching the figure of 32.2% in persons aged 85 and higher.

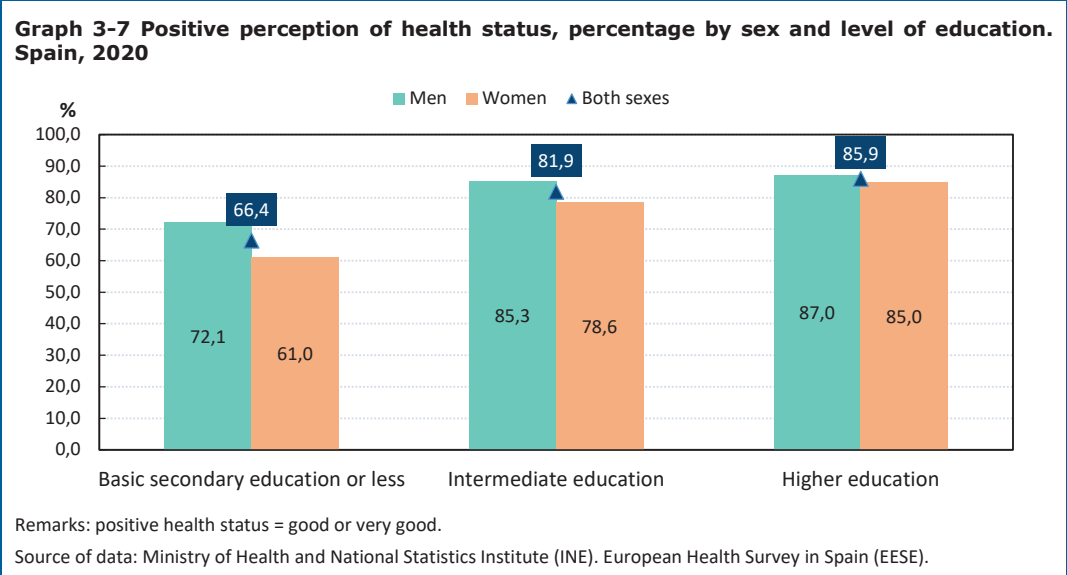


The number of people with a positive perception of their health varies among the different territories, ranging between the 64.6% of Canary Islands and the 82.9% of Balearic Islands.



⁹ Perceived health is a subjective health indicator that provides information about the physical and mental health of the individual and can be used as a predictor of mortality, morbidity and the use of healthcare services. Its simplicity and the WHO recommendation that it be included as a standard feature in health surveys have made it one of the most often used approaches to understanding the population's level of health.

Level of education also has a clear relationship with the positive perception of health status. There is a notable difference between persons with a low level of education (66.4%) who report a positive perception of health, and those with an intermediate level of education who do so (81.9%), while the difference between the intermediate and higher level of education (85.9%) is just 4 percentage points, with the positive perception of health being greater in men than in women at all levels of education.



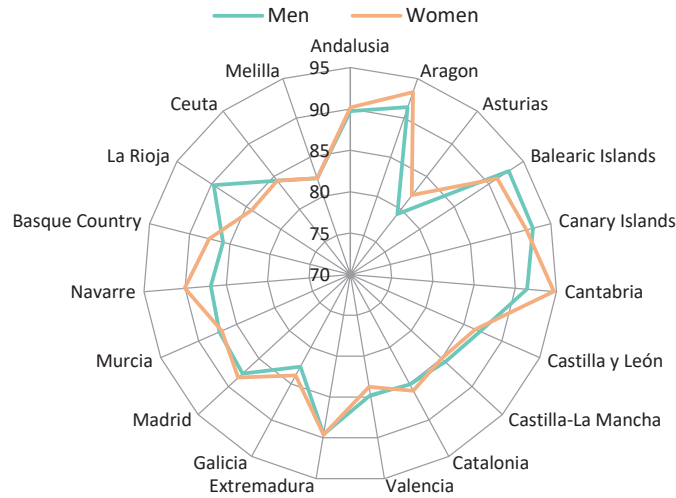
The population that perceives its health to be good or very good is clearly lower in persons with a low level of education, especially among women.

3.1.4 Quality of life for children

The average score of health-related quality of life for children¹⁰ is 87.4 out of 100, with the scores of both sexes being very similar. In the distribution by territory differences of more than 10 points are found, with the highest values in Cantabria (93.0), Canary Islands (92.4) and Aragon (92.3) and the lowest in Asturias (80.7), Melilla (82.3) and Galicia (83.3).

¹⁰ The Spanish National Health Survey (ENSE) uses the KIDSCREEN-10 Index to assess the health-related quality of life of children and adolescents, calculating the scores based upon the average obtained in European data. In the ENSE 2017 the KIDSCREEN-10 Index for the 8-14 age group was [also] used, without standardizing with the values obtained from the European population. The KIDSCREEN-10 questionnaire was developed transculturally as a standardized instrument with which to evaluate quality of life from the child's perspective in terms of his or her physical, mental and social well-being and which also helps to identify the population of children and youth at risk, in terms of their perceived health.

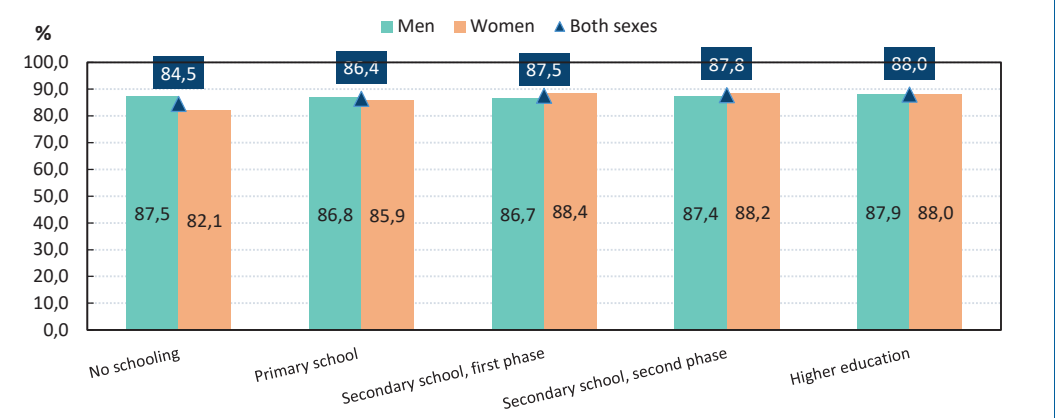
Graph 3-8 Assessment of health-related quality of life for children and adolescents, by sex and autonomous community. Spain, 2017



Remarks: KIDSCREEN-10 Index for 8-14 year olds without standardization with the values of the European population. The values range from 0 to 100, the higher the score the higher the health-related quality of life. The figures for Ceuta and Melilla refer to both sexes because sex-disaggregated data is not available in that territory.
Source of data: Ministry of Health and National Statistics Institute (INE). Spanish National Health Survey (ENSE).

In the case of girls a slight increase in health-related quality of life score is observed as the education level of the reference person in the child's household increases.

Graph 3-9 Assessment of health-related quality of life for children and adolescents, by sex and education level. Spain, 2017



Remarks: KIDSCREEN-10 Index for 8-14 year olds without standardization with the values of the European population. The values range from 0 to 100, the higher the score the higher the health-related quality of life. The education level refers to that of the household reference person.
Source of data: Ministry of Health and National Statistics Institute (INE). Spanish National Health Survey (ENSE).

The health-related quality of life of children and adolescents has received a score of 87.4 points out of 100, with scores for both sexes being very similar.

3.2 Morbidity

This section's information about the burden of disease on the population focuses on four large groups of pathologies: respiratory diseases, cardiovascular diseases, mental health disorders and malignant tumours.¹¹

3.2.1 Respiratory diseases

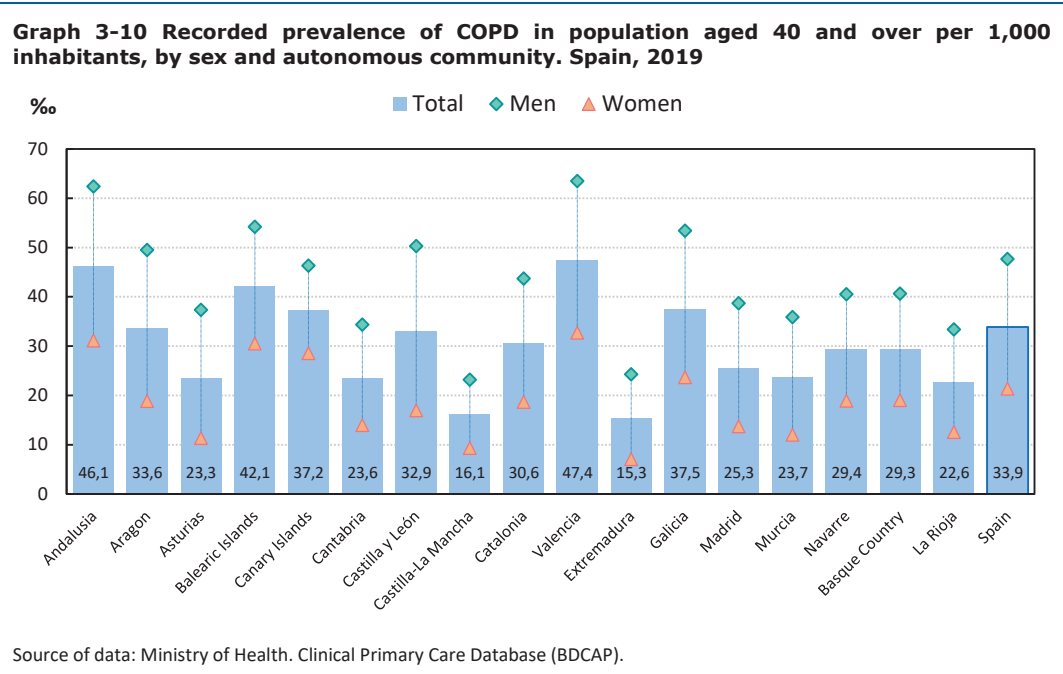


This section offers information about chronic obstructive pulmonary disease (COPD) and also pneumonia, which are two major causes of morbimortality in Spain.

Chronic Obstructive Pulmonary Disease

The prevalence of COPD in the population aged 40 and over is 33.9 cases per 1,000 inhabitants, and in men it is twice as high as in women (47.7 compared to 21.3).

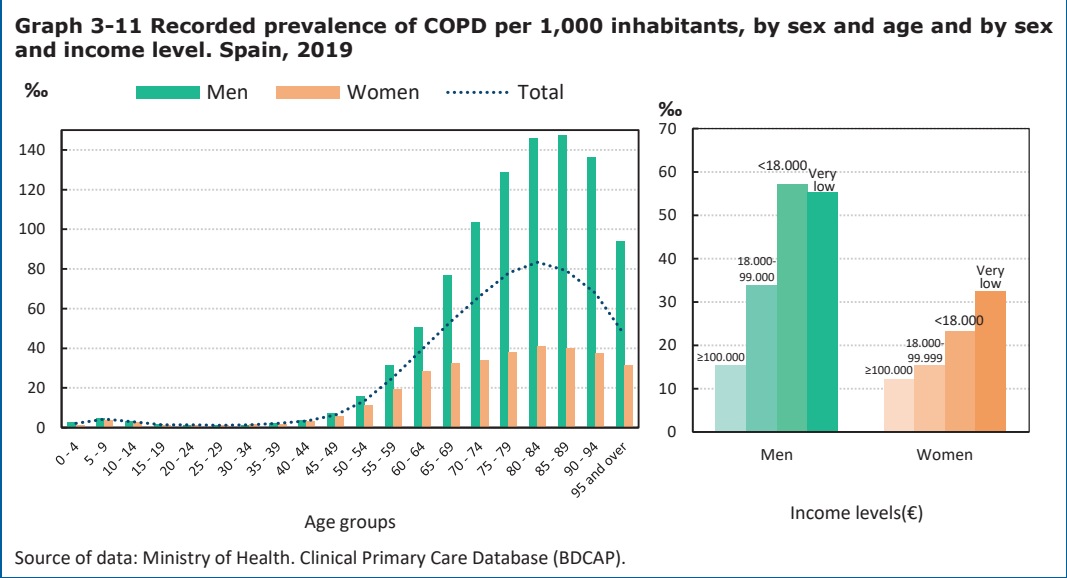
By territory, the autonomous communities with the highest prevalence of COPD in the population aged 40 and over are Valencia (47.4), Andalusia (46.1) and Balearic Islands (42.1), while those with the lowest are Extremadura (15.3) and Castilla-La Mancha (16.1).



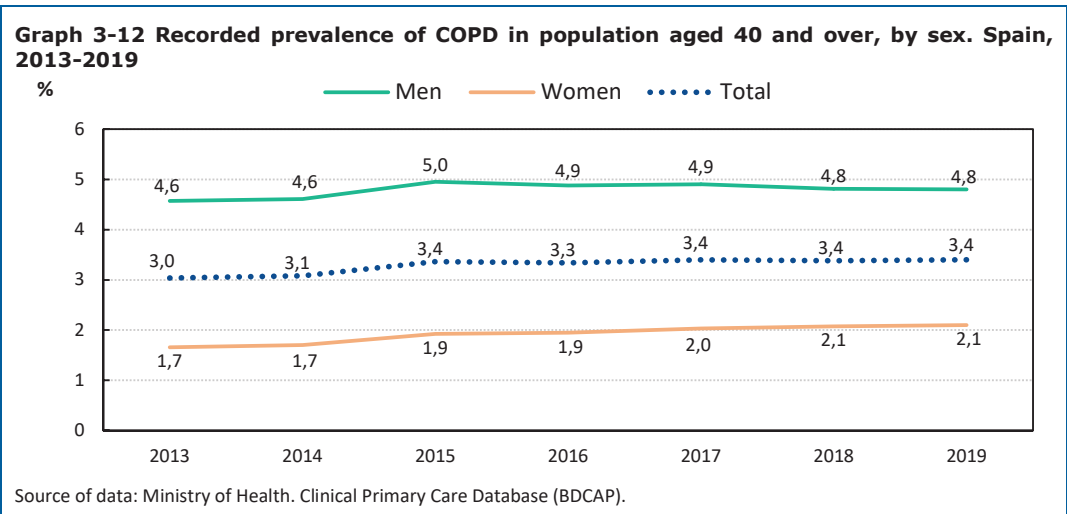
¹¹ It incorporates data from different information systems, so as to offer the most complete vision possible of the diseases described, including the recorded prevalence data of certain diseases drawn from the Clinical Primary Care Database (BDCAP) and information about admissions to hospital from the Register of Specialised Care Activity (RAE-CMBD).

Information from the healthcare system is of undeniable interest and is particularly valuable because it makes it possible to compare the different territories. However, it is important to take into account aspects like territorial variation in resource availability, among others, when interpreting trends or making geographical comparisons.

Prevalence increases progressively with age starting at age forty until reaching the highest frequency in the 80-84 age group (78.0). Prevalence also increases as income level decreases, it being over twice as high in the lower income groups than in the higher income groups. This social gradient pattern is observed in both sexes.



The prevalence of COPD has remained relatively stable around 3.4% in recent years.¹²

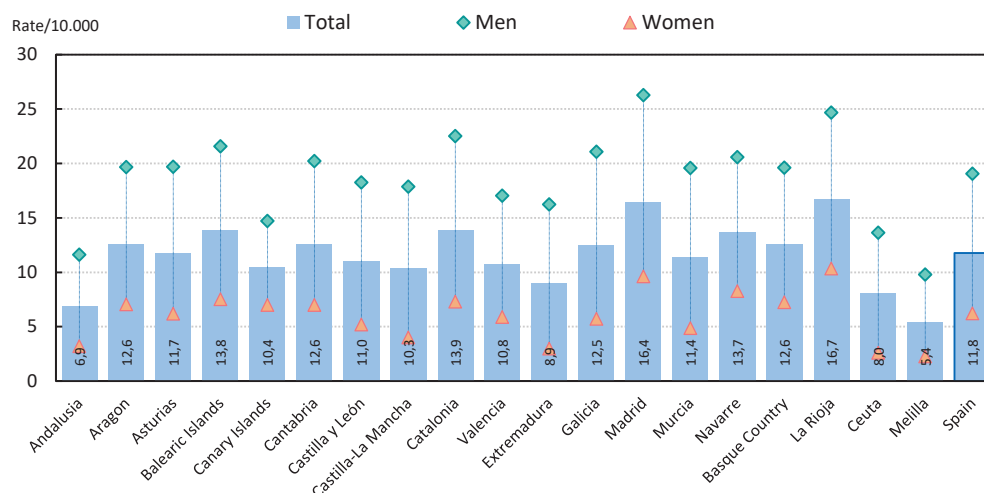


In 2019 there were 20.6 hospitalisations for COPD per 10,000 inhabitants, three times as many in men as in women (30.9 vs. 10.7).

The age-adjusted rate is 12 hospitalisations per 10,000 inhabitants, three times as many in men as in women (19.0 vs. 6.2). Rates higher than 16 per 10,000 have been found in La Rioja and Madrid. The lowest hospitalisation rates, below 8, have been found in Andalusia and Melilla.

¹² In 2016 a new data model and disease classification system (ICD-10-ES) was implemented. This change affects these two disease groups so this report provides the historical series from that year forward, to avoid a break in the series.

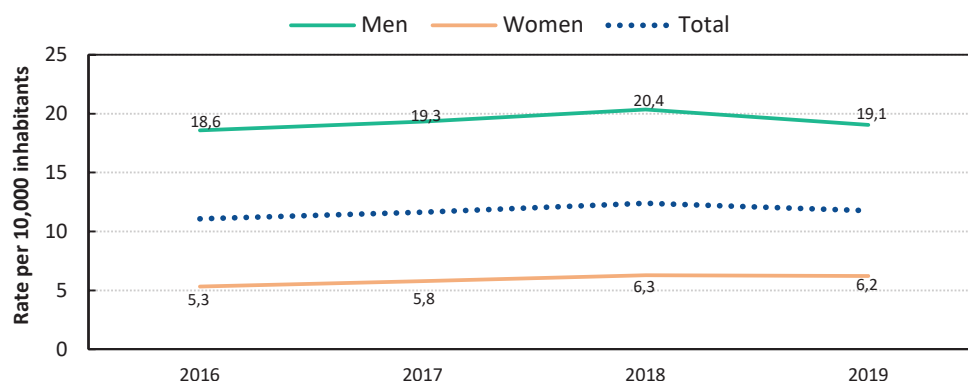
Graph 3-13 Age-adjusted rate of hospitalisation for COPD per 10,000 inhabitants. Spain, 2019



Source of data: Ministry of Health. Register of Specialised Care Activity (RAE-CMBD).

In the 2016-2019 period the age-adjusted rate of hospitalisations for COPD has displayed an upward trend, growing around 6%, the increase being more pronounced in women than in men (16.9% vs. 2.5%).

Graph 3-14 Age-adjusted rate of hospitalisation for COPD per 10,000 inhabitants. Spain, 2010-2019



Remarks: in 2016 a new data model and disease classification system was introduced (ICD-10-ES). Possible differences in the results of the indicator with respect to the historical series should be interpreted with this change in mind.

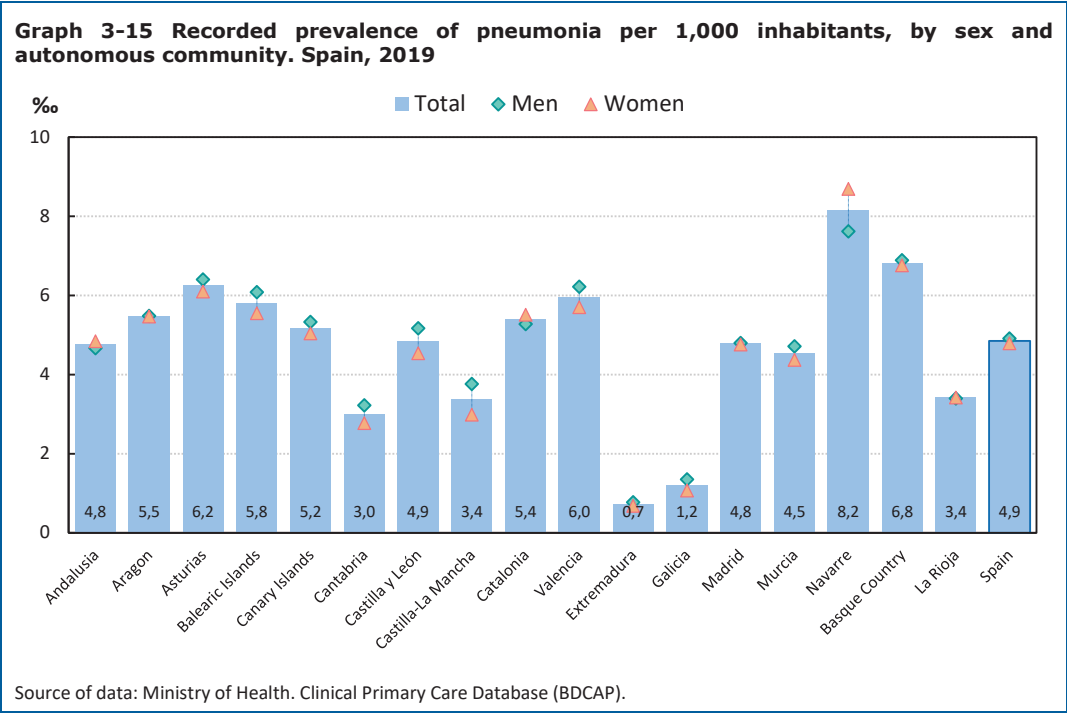
Source of data: Ministry of Health. Register of Specialised Care Activity (RAE-CMBD).

Five out of 100 men and 2 out of 100 women aged 40 and over have COPD.
These numbers increase as income level decreases, in both sexes.

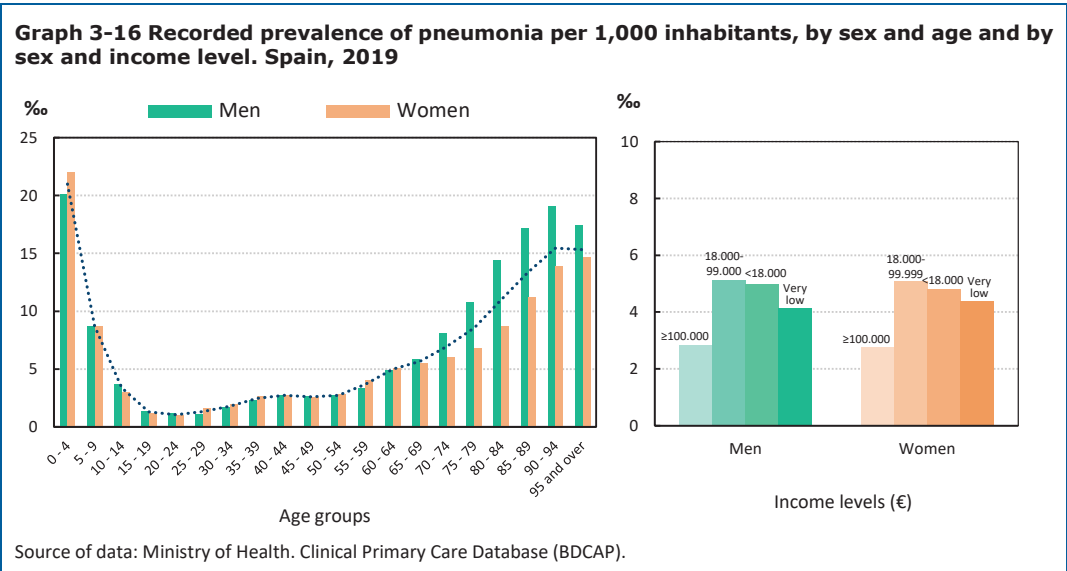
Pneumonia

There were 4.9 cases of pneumonia¹³ recorded in 2019 for every 1,000 inhabitants, with no differences between men and women.

By territory, the highest frequencies are found in Navarre (8.2), Basque Country (6.8) and Asturias (6.2), while the lowest are recorded in Extremadura (0.7), Galicia (1.2) and Cantabria (3.0).

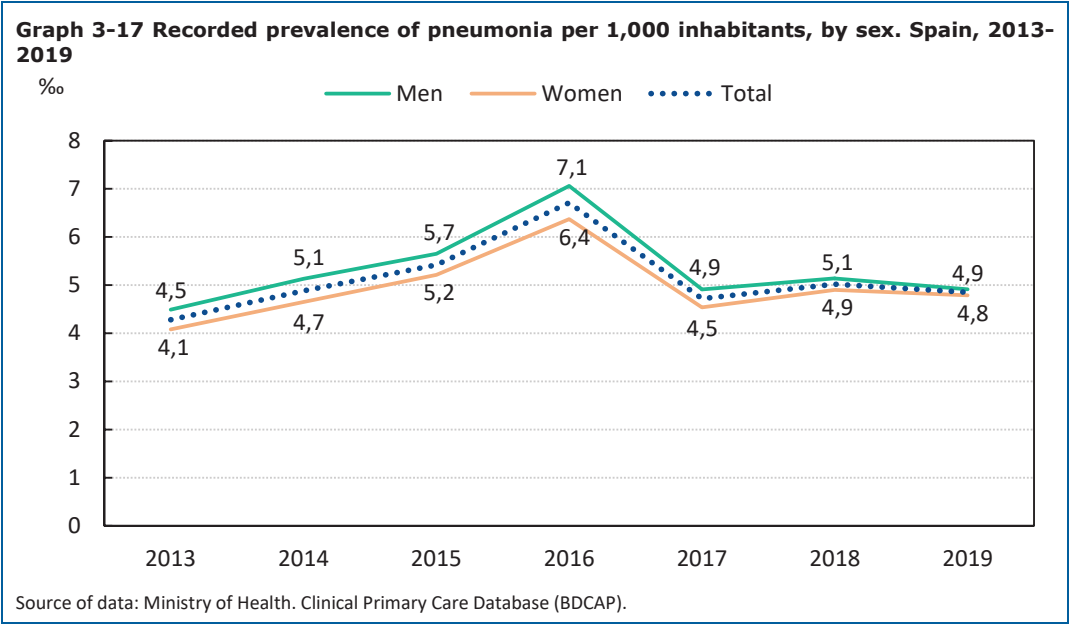


The age groups most frequently affected are children under the age of 10 (14.2) and people over the age of 65 (8.7). As regards the social gradient pattern, the prevalence drops to almost half in the higher income level compared to lower income levels.

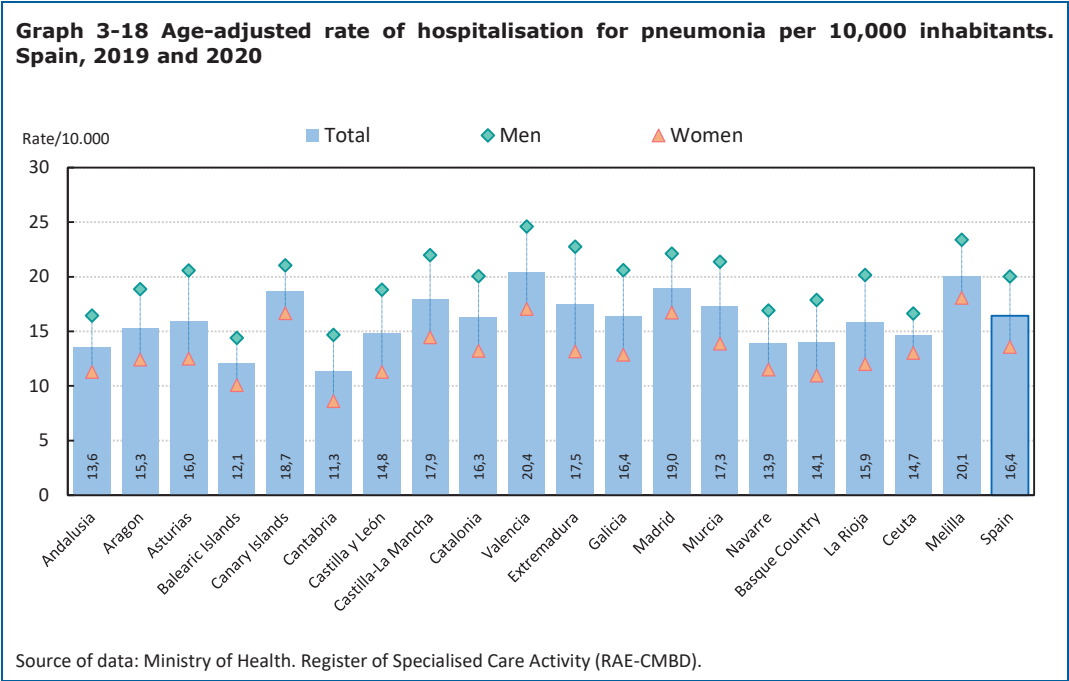


¹³ Data reflects pneumonia caused by different agents, bacteria and virus.

During the 2013-2019 period pneumonia reached a peak in 2016 (7.1) to then stabilize in the last three years at around 5 cases per 1,000 inhabitants.

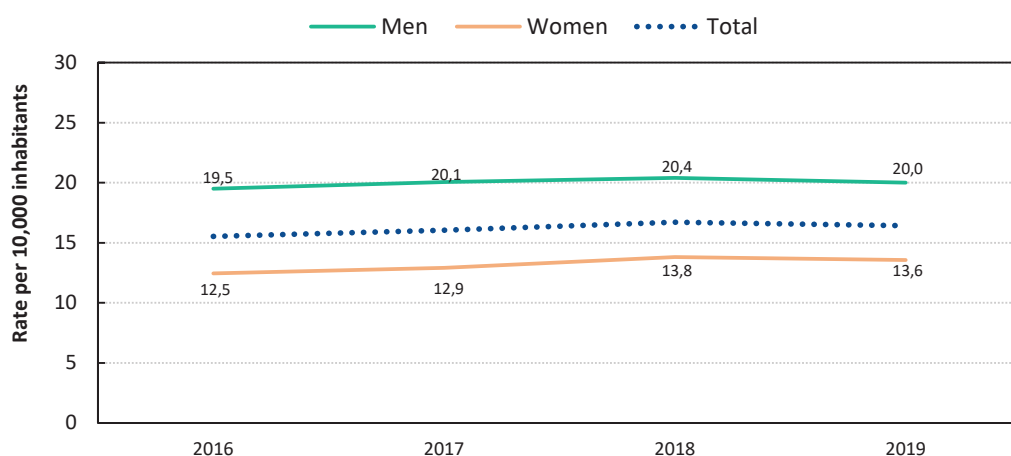


In 2019 there were 24.3 hospitalisations per 10,000 inhabitants, 27.2 in men and 21.4 in women. The age-adjusted hospitalisation rate is approximately 16 hospitalisations per 10,000 inhabitants, with almost twice as many in men as in women (20.0 vs. 13.6). Rates above 18 per 10,000 have been found in Valencia, Melilla, Madrid and Canary Islands. The lowest hospitalisation rates, below 13, have been found in Cantabria and Balearic Islands.



In the 2016-2019 period the age-adjusted rate of hospitalisation for pneumonia showed an increase of around 6%, higher in women (9.0%) than in men (2.6%).

Graph 3-19 Age-adjusted rate of hospitalisation for pneumonia per 10,000 inhabitants, by sex. Spain, 2010-2019



Remarks: in 2016 a new data model and disease classification system was introduced (ICD-10-ES). Possible differences in the results of the indicator with respect to the historical series should be interpreted with this change in mind.

Source of data: Ministry of Health. Register of Specialised Care Activity (RAE-CMBD).

Every year five out of 1,000 people have a case of pneumonia. The groups with the highest risk are children under 5 and adults aged 70 and over, where the risk quadruples and doubles, respectively.

3.2.2 Cardiovascular disease



This section provides information about ischaemic heart disease and cerebrovascular disease, because of the significant weight they have within cardiovascular diseases.¹⁴

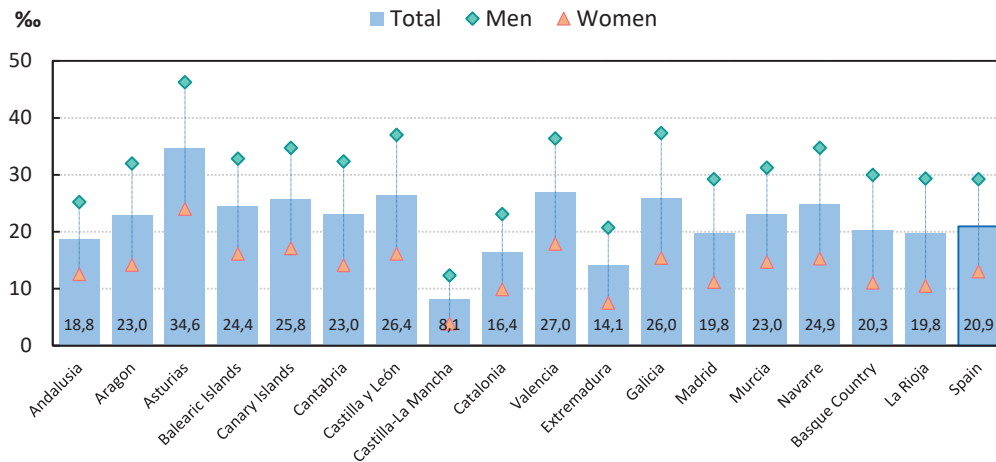
Ischaemic heart disease

The recorded prevalence of ischaemic heart disease is at 20.9 cases per 1,000 inhabitants, with more than twice the number in men than in women (29.2 compared to 13.0). Prevalence has been relatively stable since 2013. The crude hospitalisation rate for this cause was 24.5 hospitalisations per 10,000 inhabitants in 2019, being almost triple in men as in women.

The territorial patterns show the highest prevalence rate in Asturias and the lowest rate in Castilla-La Mancha.

¹⁴ The report "Clinical indicators in Primary Care 2016. BDCAP" contains detailed information about cardiovascular diseases and their risk factors.

Graph 3-20 Recorded prevalence of ischaemic heart disease per 1,000 inhabitants, by sex and autonomous community. Spain, 2019

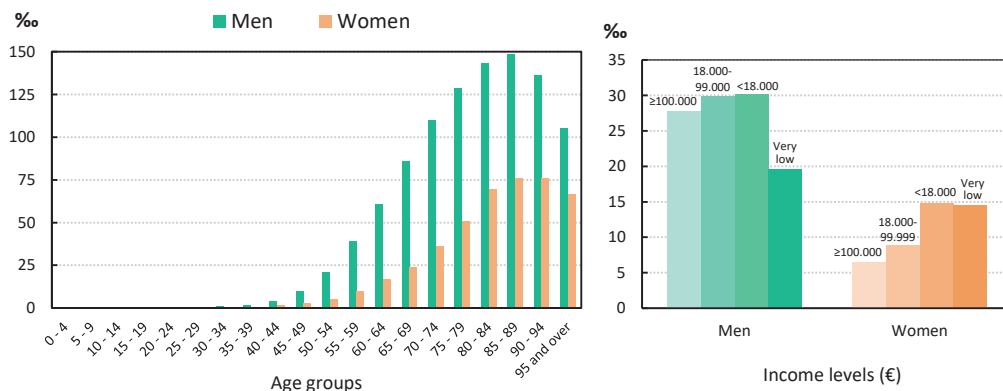


Source of data: Ministry of Health. Clinical Primary Care Database (BDCAP).

The prevalence of this disease clearly increases with age. It begins to rise starting at age 40 and reaches its highest numbers with the 85-89 age group. This tendency is similar for both sexes although the magnitude is much greater in men than in women in all age groups. The highest values are found in men from 85 to 89 years of age and in women between 90 and 95 (148.1 and 75.6 cases per 1,000 inhabitants, respectively).

Prevalence is also higher the lower the income level, in both sexes, although it is interesting to note that the lowest prevalence in men is found in the lowest income group. The proportional differences between the groups with income lower than 18,000 euros and the groups with income higher than 100,000 euros are greater in women (prevalence 2.3 times greater) than in men (1.1 times more prevalence).

Graph 3-21 Recorded prevalence of ischaemic heart disease per 1,000 inhabitants, by sex and age and by sex and income level. Spain, 2019

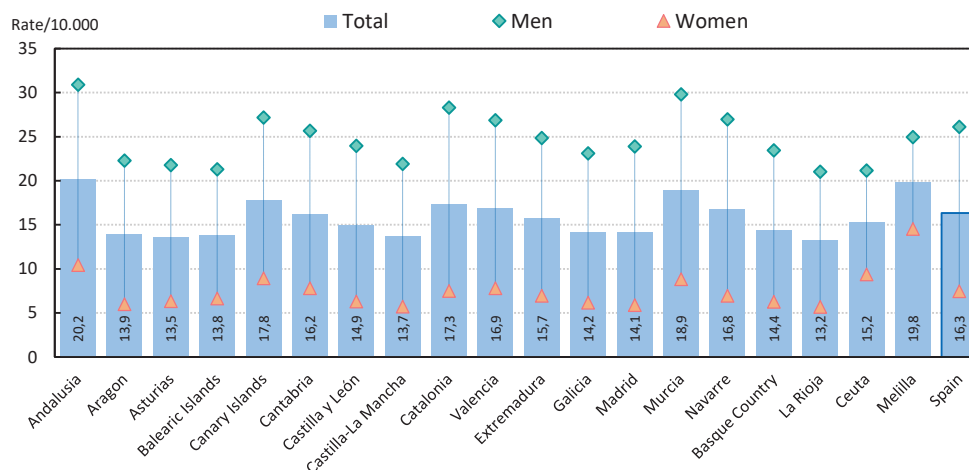


Source of data: Ministry of Health. Clinical Primary Care Database (BDCAP).

The age-adjusted rate of hospitalisation for this cause was 16.3 per 10,000 inhabitants in 2019, and approximately 3 times higher in men than in women.

The territorial pattern of hospitalisations for this cause shows the highest rates to be in Andalusia, Melilla and Murcia, and the lowest rates to be in La Rioja and Asturias.

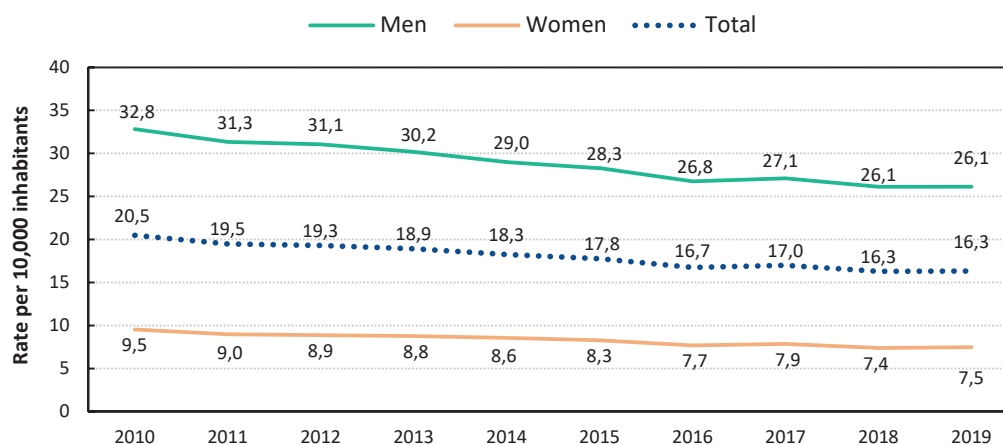
Graph 3-22 Age-adjusted rate of hospitalisation for ischaemic heart disease per 10,000 inhabitants. Spain, 2019



Source of data: Ministry of Health. Register of Specialised Care Activity (RAE-CMBD).

Hospitalisations for this cause fell by 20.2% from 2010 to 2019 (20.4% in men and 21.5% in women).

Graph 3-23 Age-adjusted rate of hospitalisation for ischaemic heart disease per 10,000 inhabitants, by sex. Spain, 2019



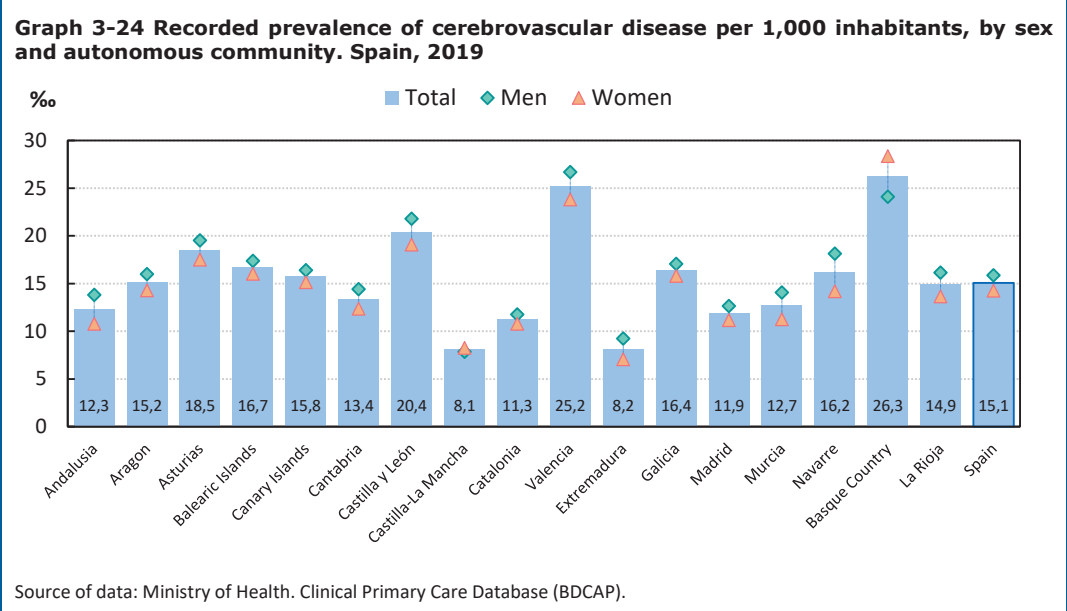
Source of data: Ministry of Health. Register of Specialised Care Activity (RAE-CMBD).

Three out of 100 men and one out of 100 women have ischaemic heart disease; starting at age 65 it affects 12 out of 100 men and 5 out of 100 women. These figures increase as income level decreases, with the difference being more pronounced in women.

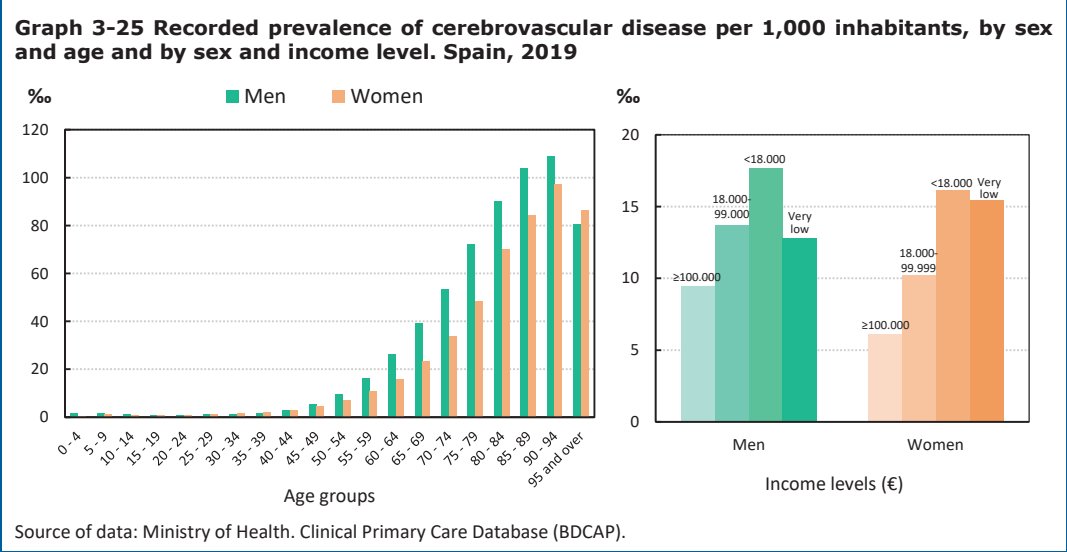
Cerebrovascular disease

The recorded prevalence of cerebrovascular disease is 15.1 cases for every 1,000 inhabitants, being very similar for men and women (15.9 compared to 14.3). The hospitalisation rate was 21.3 per 10,000 inhabitants in 2019 (23.5 in men and 19.2 in women).

The territorial pattern shows the highest prevalence rates in Basque Country, Valencia and Castilla y León, and the lowest rates in Castilla-La Mancha, Extremadura and Catalonia.

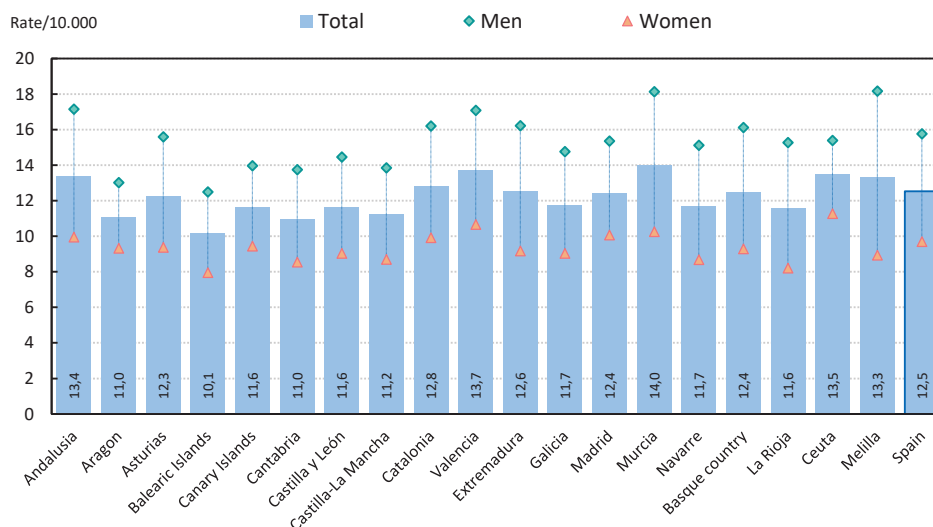


The prevalence increases progressively starting at age 40, reaching the highest values in the 85-94 age group, 109.0 in men and 97.4 in women. The highest values are observed in men in practically all age groups. Prevalence also increases as income level decreases. Men with income below 18,000 euros have twice as much cerebrovascular disease as those with greater income and in the case of women it is almost triple.



The age-adjusted rate of hospitalisation for this cause was 12 hospitalisations per 10,000 inhabitants, close to 16 in men and around 10 in women. The territorial pattern of hospitalisations reveals the highest rate is in Murcia and the lowest rate in Balearic Islands.

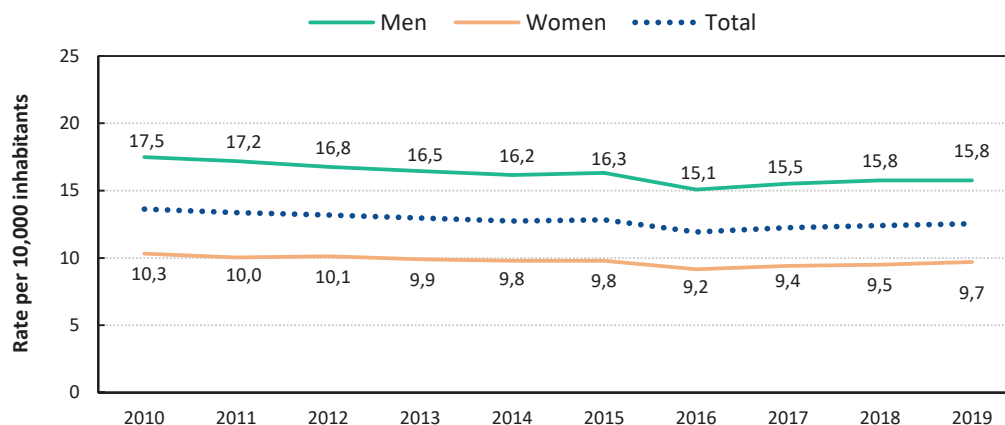
Graph 3-26 Age-adjusted rate of hospitalisation for cerebrovascular disease per 10,000 inhabitants. Spain, 2019



Source of data: Ministry of Health. Register of Specialised Care Activity (RAE-CMBD).

The prevalence of cerebrovascular disease has remained relatively stable since 2013 moving from 14.1 to 15.1 in 2019. Hospitalisations for this cause decreased by 8.1% from 2010 to 2019 (9.8% in men and 6.1% in women).

Graph 3-27 Age-adjusted rate of hospitalisation for cerebrovascular disease per 10,000 inhabitants, by sex. Spain, 2019



Source of data: Ministry of Health. Register of Specialised Care Activity (RAE-CMBD).

Cerebrovascular disease affects 1.5% of the population of Spain, although starting at age 65 it affects 6 out of 100 and starting at age 80 it affects 10 out of 100.

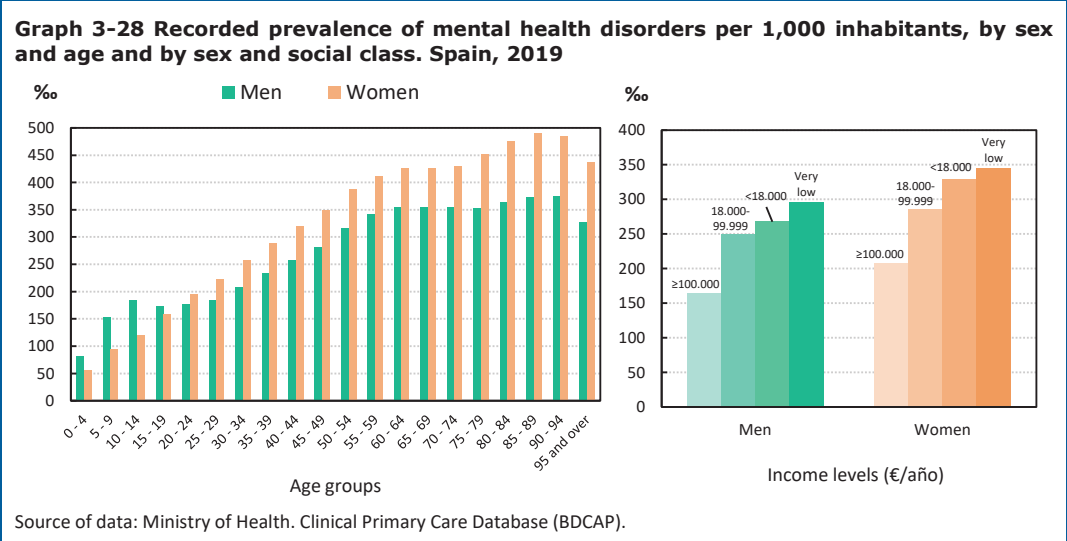
3.2.3 Mental health disorders



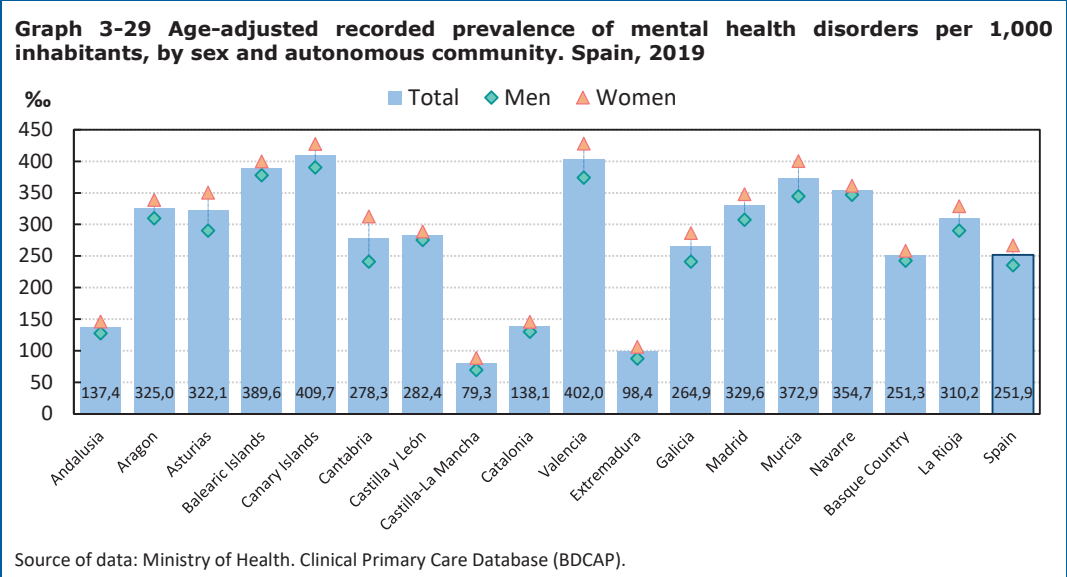
The recorded prevalence of mental health disorders is 286.7 cases per 1,000 inhabitants and is higher in women than in men (313.3 compared to 258.8). In 2019 there were 17.0 hospitalisations for mental health disorders per 10,000 inhabitants (18.1 in men and 15.9 in women). It is worth pointing out that while prevalence is higher in women the rate of hospitalisation is higher in men.

The prevalence increases with age and four out of 10 people aged 65 and over have from some mental health disorder. This pattern is similar in both sexes, although the prevalence is greater in women than in men starting at the age of 20.

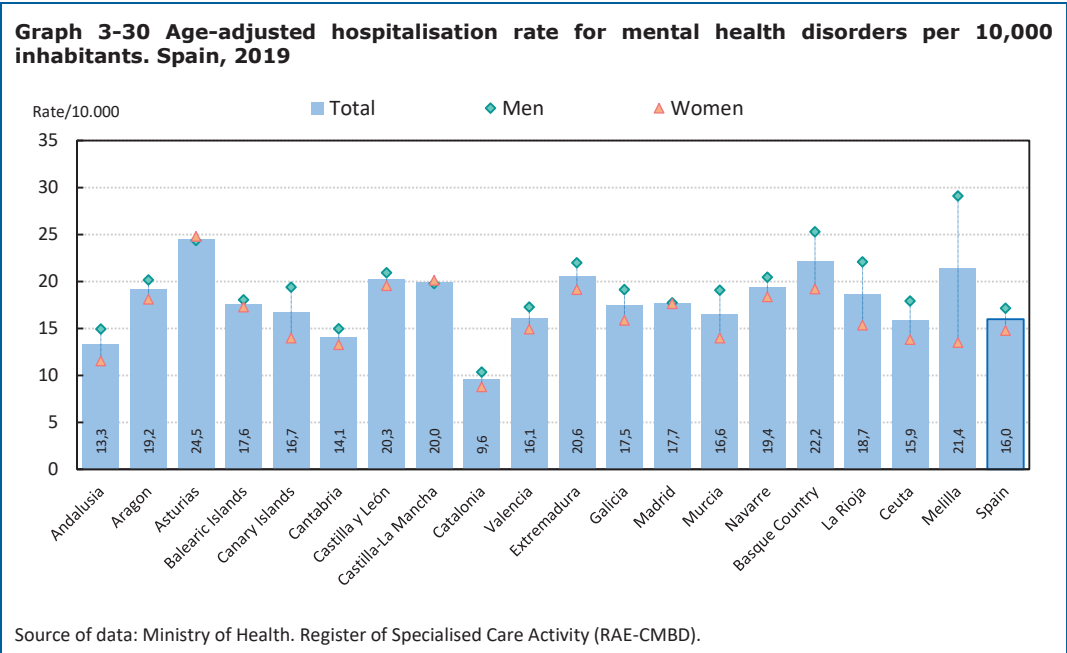
A clear social gradient is observed in both sexes; men and women with very low income levels have twice as many mental health disorders as persons with higher incomes.



The age-adjusted prevalence is 251.9 for every 1,000 inhabitants (235.5 in men and 266.7 in women). The highest prevalences are seen in Canary Islands, Valencia and Balearic Islands, while the lowest are in Castilla-La Mancha and Extremadura.

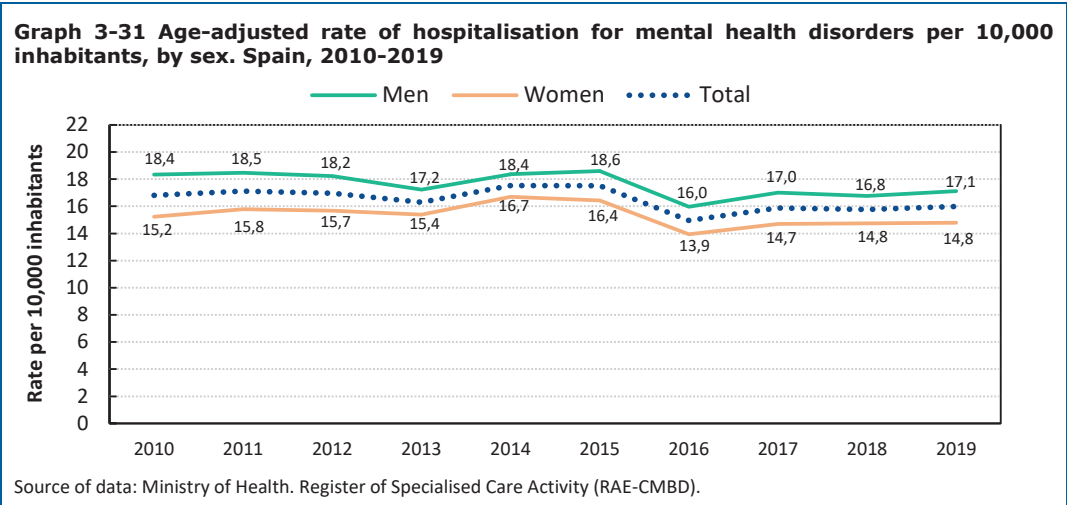


The age-adjusted hospitalisation rate is approximately 16 hospitalisations per 10,000 inhabitants, the number being somewhat higher in men than in women. Rates over 20 per 10,000 have been found in Asturias, Basque Country, Melilla, Extremadura and Castilla y León. The lowest hospitalisation rates have been found in Andalusia and Catalonia.



The recorded prevalence of mental health disorders grew by 19.0% in the 2013-2019 period, 23.1% in men and 15.8% in women.

The age-adjusted rate of hospitalisations for this cause has remained relatively stable from 2010 to 2019, with a reduction of 4.9% (6.6% in men and 3.0% in women).

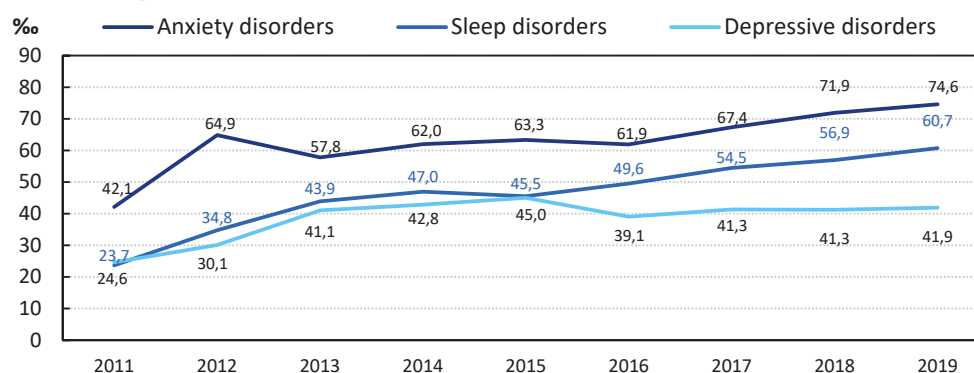


Three of every 10 Spaniards have some kind of mental health disorder. People with a very low level of income present twice as many mental health disorders as those with a higher level of income.

The most frequent mental health problems

The mental health problems most frequently registered in primary care health records are anxiety disorders (74.6 cases for every 1,000 inhabitants), followed by sleep disorders and depressive disorders (60.7 and 41.9 for every 1,000 inhabitants, respectively).

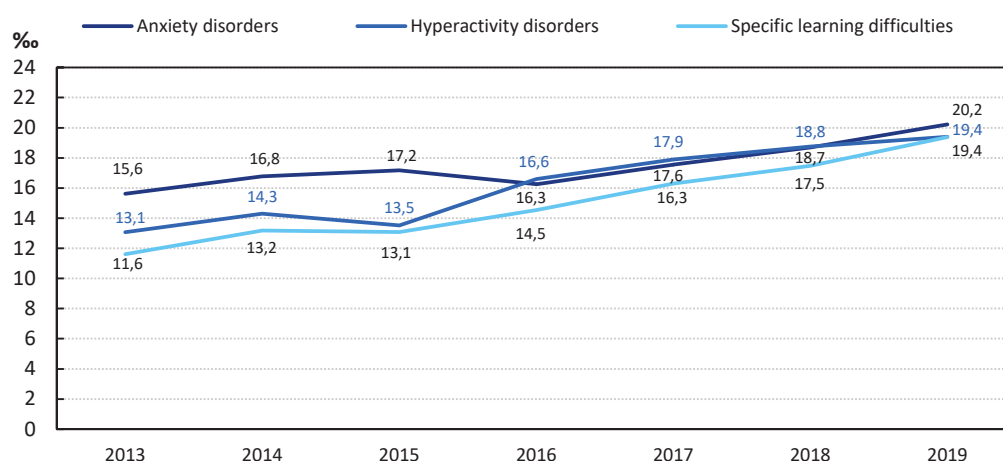
Graph 3-32 Recorded prevalence of the most frequent mental health problems per 1,000 inhabitants. Spain, 2013-2019



Source of data: Ministry of Health. Clinical Primary Care Database (BDCAP).

In childhood and adolescence (persons under the age of 25), the most frequent mental health problems registered are also anxiety disorders (20.2 cases per 1,000 inhabitants), followed by hyperkinetic disorders and specific learning disorders (19.4 per 1000 in both cases).

Graph 3-33 Recorded prevalence of the most frequent mental health problems in persons under the page of 25 per 1,000 inhabitants. Spain, 2013-2019

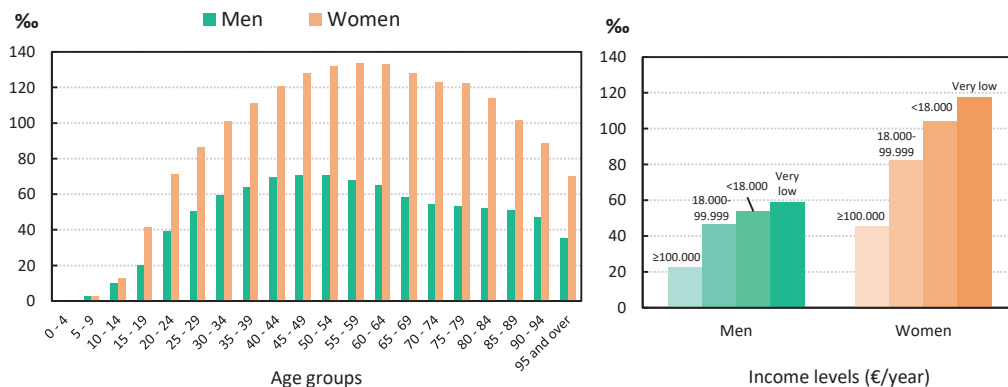


Source of data: Ministry of Health. Clinical Primary Care Database (BDCAP).

Anxiety disorders

Prevalence in women (97.5 cases per 1,000) is approximately twice that of men (50.7 per 1,000), except in the 5-9 age group, in which there is practically no difference by sex, and in the 10-14 age group in which the difference is small. A clear social gradient is observed in both sexes, with prevalence being 2.6 times higher in people with very low income as compared to those with higher incomes.

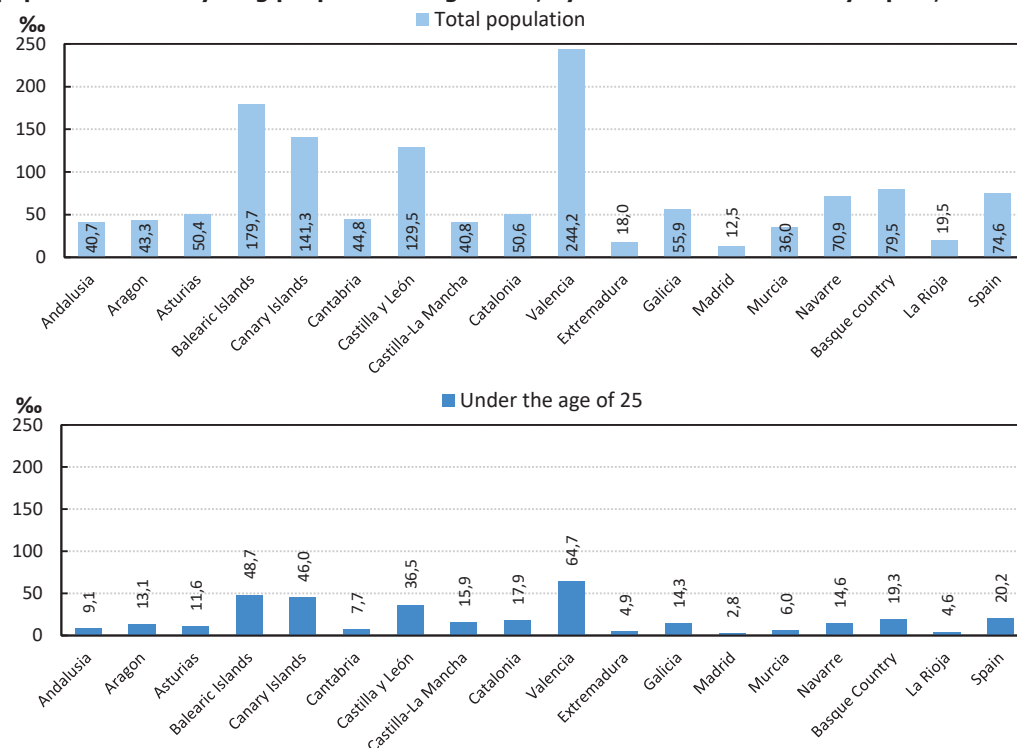
Graph 3-34 Recorded prevalence of anxiety disorders per 1,000 inhabitants, by sex and age and by sex and social class. Spain, 2019



Source of data: Ministry of Health. Clinical Primary Care Database (BDCAP).

The geographical distribution presents a similar pattern in the general population and in people under the age of 25. In both cases the highest prevalences are found Valencia, Balearic Islands and Canary Islands while the lowest are in Madrid, Extremadura and La Rioja.

Graph 3-35 Recorded prevalence of anxiety disorders per 1,000 inhabitants in general population and in young people under age of 25, by autonomous community. Spain, 2019

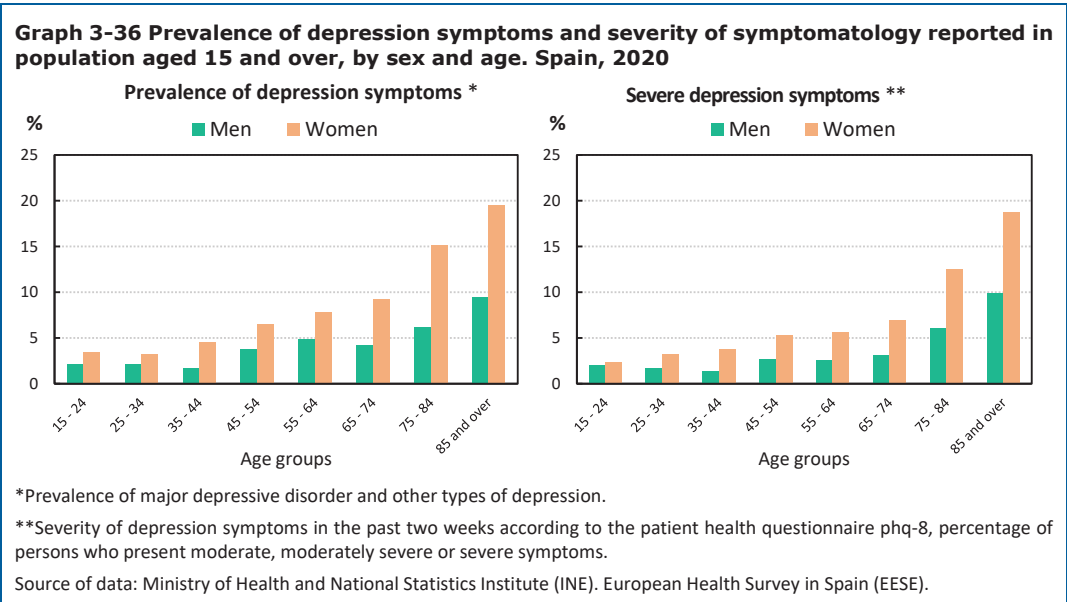


Source of data: Ministry of Health. Clinical Primary Care Database (BDCAP).

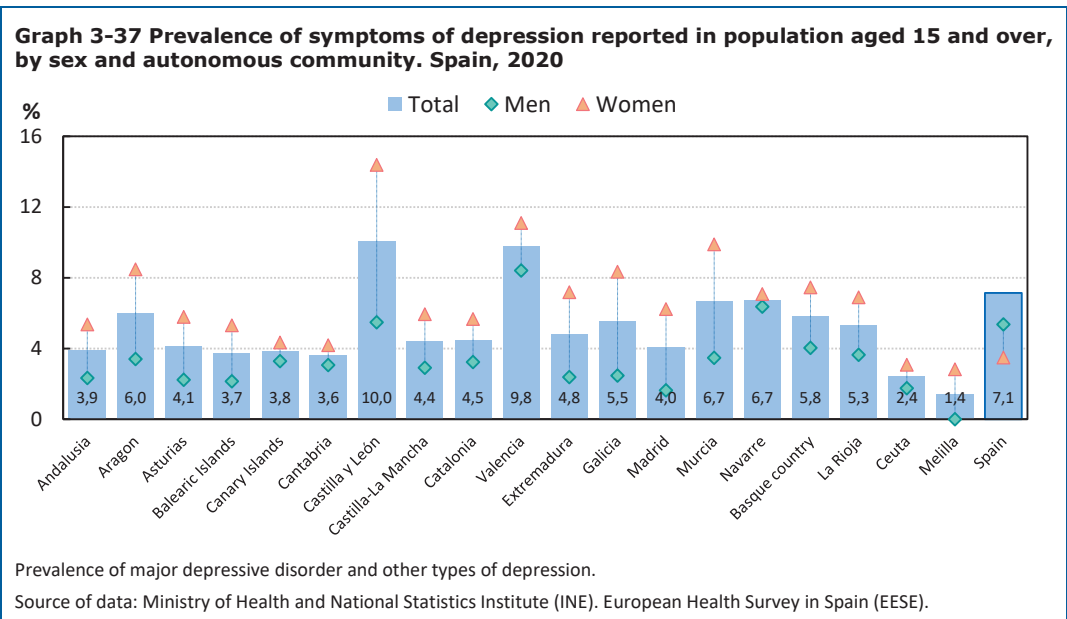
Ten out of 100 women and 5 out of 100 men have an anxiety disorder.
These disorders affect 2 out of 100 people under the age of 25.

Depressive disorders

Of the population aged 15 and older, 5.4% report in health surveys that they have a major depressive disorder or other type of depression, twice as many women (7.1%) as men (3.5%), and 4.3% report having severe depressive symptomatology (5.8% in women and 2.7% in men). Both their prevalence and their severity increase with age and over 10% of individuals over the age of 75 suffer some type of depression.

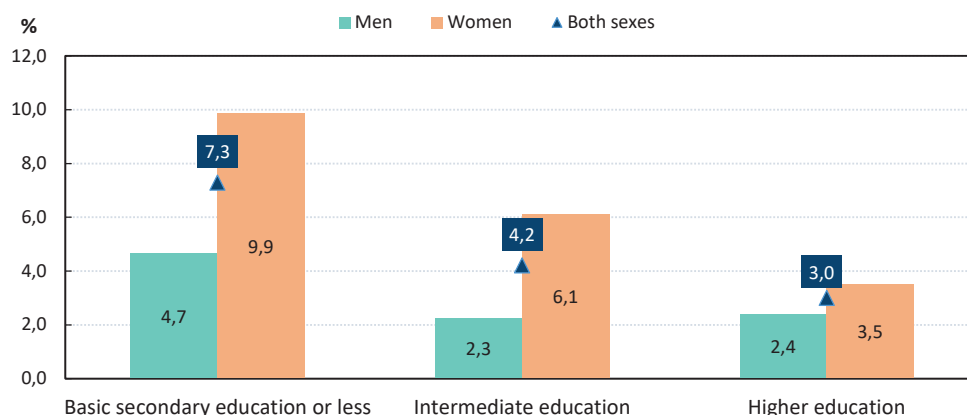


Prevalence varies among the territories, with the highest values being found in Castilla y León (10.0%) and Valencia (9.8%), while the lowest values are found in Cantabria (3.6%), Balearic Islands (3.7%), Canary Islands (3.8%) and Andalusia (3.9%), in addition to Ceuta and Melilla (2.4 and 1.4%).



The prevalence of symptoms of depression is 2.4 times higher in people with lower levels of education than in people with higher education levels. This difference is almost 3 times more in the case of women.

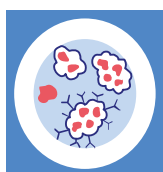
Graph 3-38 Prevalence of depression symptoms reported in population aged 15 and over, by sex and education level. Spain, 2020



Source of data: Ministry of Health and National Statistics Institute (INE). European Health Survey in Spain (ESEE).

One out of every 10 people over the age of 75 report having symptoms of depression. People with a lower level of education report having them almost 2.5 times more frequently than those with a higher level of education.

3.2.4 Malignant tumours



The recorded prevalence of malignant tumours is 40.2 cases per 1,000 inhabitants in 2019, with no significant differences between men and women (39. men and 41.3 women). Most neoplasias appear after age 40 and their frequency increases with age until the age group 79-84.¹⁵

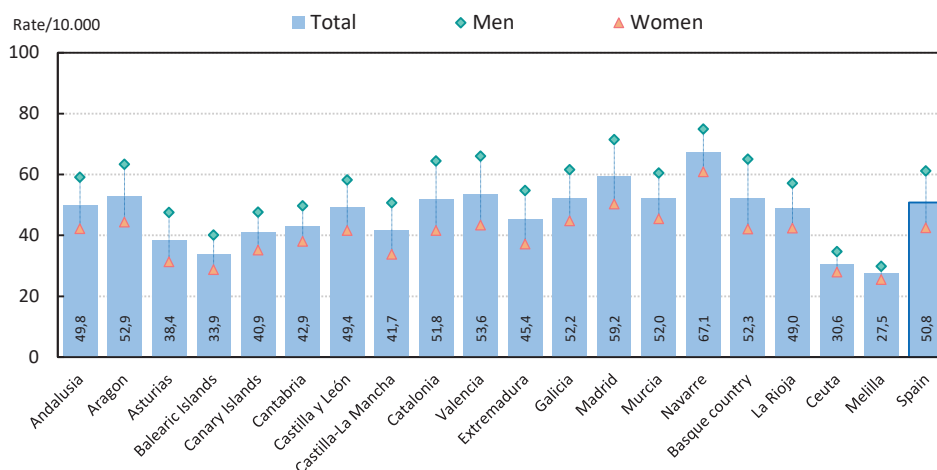
In 2019 there were 72.4 hospitalisations due to malignant tumours for every 10,000 inhabitants (84.9 in men and 60.5 in women).

The age-adjusted rate was 50.8 hospitalisations per 10,000 inhabitants, with the rate in men being about 20 points higher than in women.

Navarre, Madrid and Valencia are the communities with the highest rate, while Melilla, Ceuta, Balearic Islands and Asturias are the places with the lowest rates.

¹⁵ Prevalence of the main malignant neoplasias based on primary care clinical records. Madrid: Ministry of Health, 2021. Available at: <https://www.mscbs.gob.es/estadEstudios/estadisticas/estadisticas/estMinisterio/SIAP/home.htm>

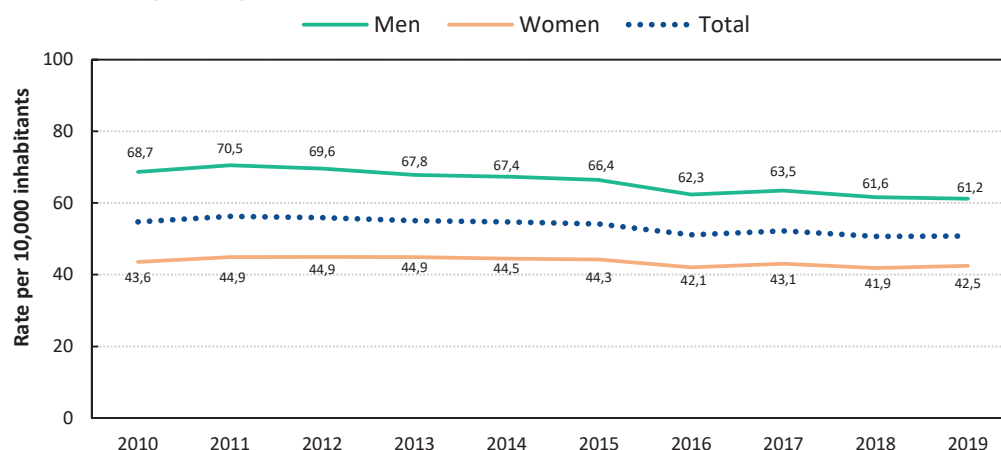
Graph 3-39 Age-adjusted hospitalisation rate for malignant tumours per 10,000 inhabitants. Spain, 2019



Source of data: Ministry of Health. Register of Specialised Care Activity (RAE-CMBD).

The changes in the age-adjusted rate of hospitalisation for malignant tumours has shown a slight drop and from 2010 to 2019 it decreased by 7.2% (10.9% in men and 2.5% in women).

Graph 3-40 Age-adjusted rate of hospitalisation for malignant tumours per 10,000 inhabitants, by sex. Spain, 2010-2019

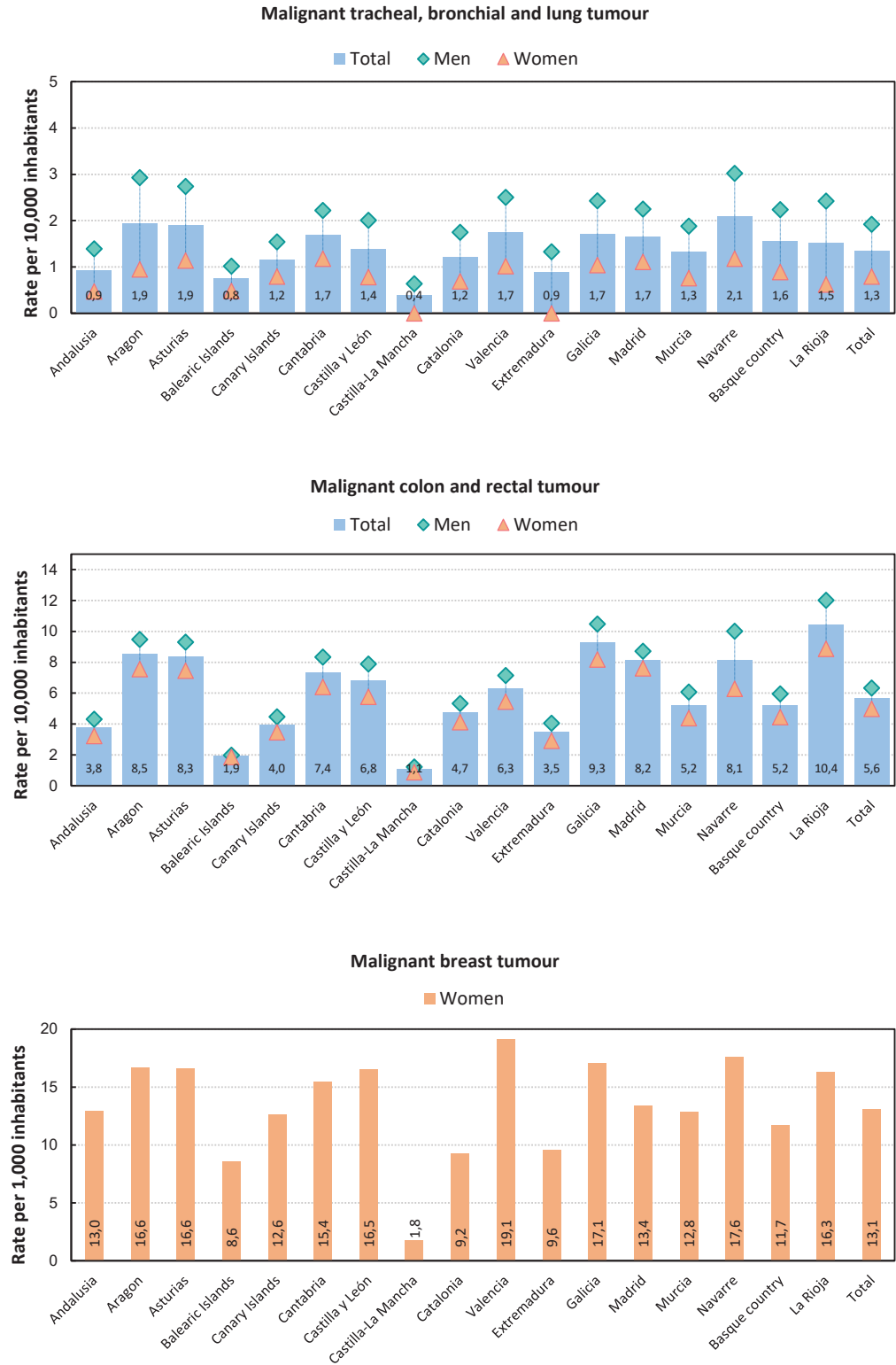


Source of data: Ministry of Health. Register of Specialised Care Activity (RAE-CMBD).

The most frequent malignant neoplasias are those of the skin (8.5 people per 1000), followed by breast (6.7), colon and rectum (5.6), prostate (5.0), lymphoma (2.4), bladder (2.3) and trachea and lung (1.3). Prostate tumours are the most frequent malignant neoplasia in men, affecting 10.2 of every 1000 men, and in women breast tumours are the most frequent, affecting 13.1 of every 1000 women.

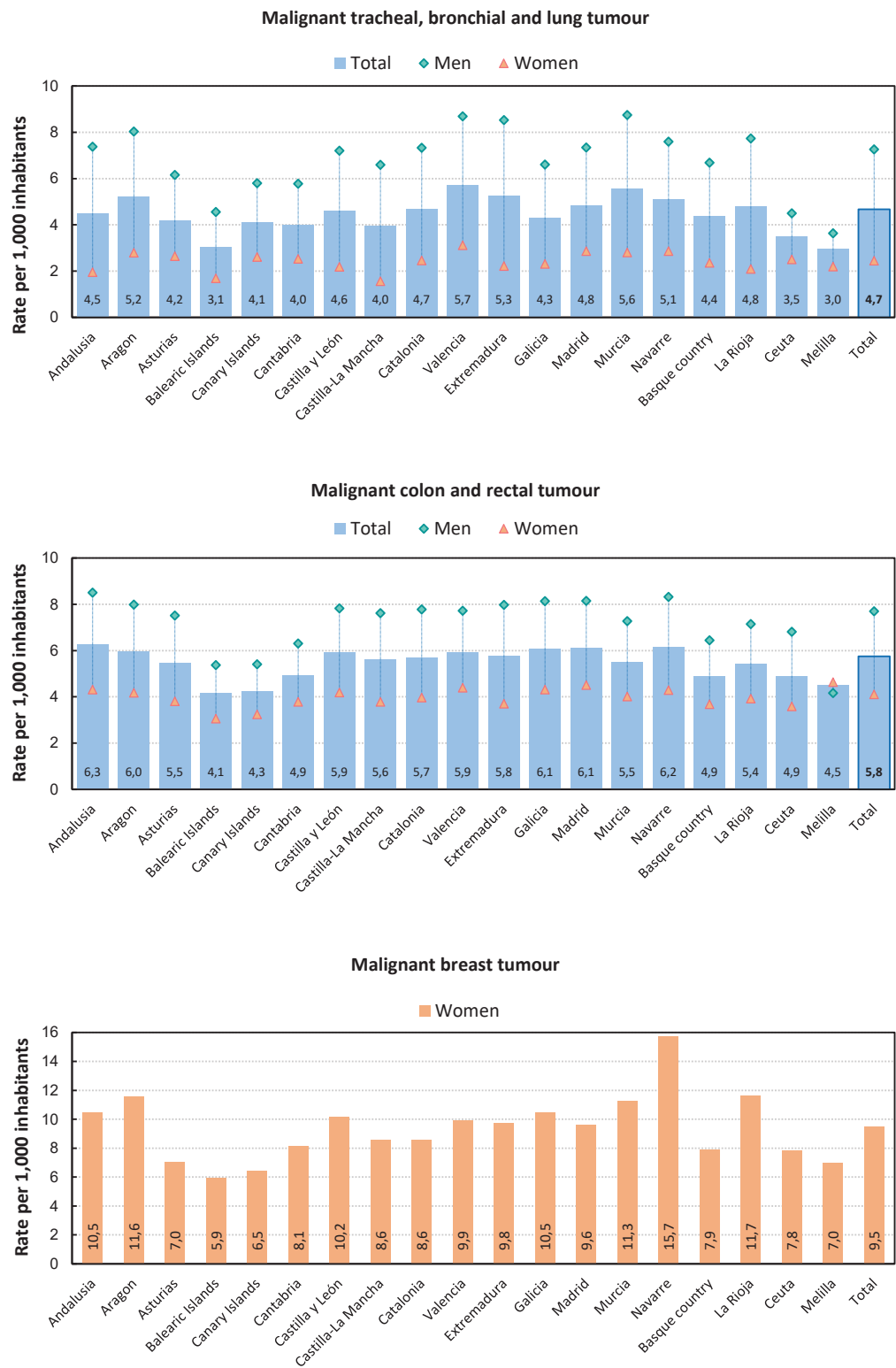
Among the most prevalent malignant neoplasias, those with the greatest impact in Spain, in terms of mortality, are tracheal, bronchial and lung cancer, with the prevalence in men being twice that of women (1.9 vs. 0.8), colon cancer, the prevalence of which does not reflect large variations by sex (6.3 vs. 5.0), and breast cancer in women (prevalence mentioned above: 13.1). The age-adjusted rate of hospitalisation is approximately 5 hospitalisations per 10,000 inhabitants for malignant neoplasias of the trachea, bronchia and lungs, 6 hospitalisations per 10,000 inhabitants for those of the colon and rectum, and 10 hospitalisations per 10,000 women for breast cancer.

Graph 3-41 Recorded prevalence of most frequent malignant tumours per 1,000 inhabitants, by sex and autonomous community. Spain, 2019



Source of data: Ministry of Health. Clinical Primary Care Database (BDCAP).

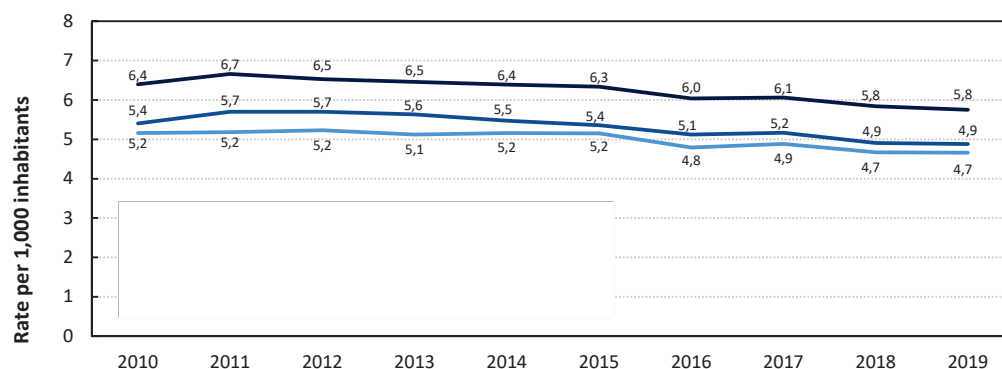
Graph 3-42 Age-adjusted rate of hospitalisation of different malignant tumours per 10,000 inhabitants, by sex and autonomous community. Spain, 2019



Source of data: Ministry of Health. Register of Specialised Care Activity (RAE-CMBD).

The number of hospitalisations for the three most frequent tumours fell between 2010 and 2019: 9.7% in the case of hospitalisations due to malignant tracheal, bronchial and lung tumours, 10.2% in those due to colon, rectal and anal cancer, and 9.6% in those due to breast cancer.

Graph 3-43 Age-adjusted hospitalisation rate for most frequent malignant tumours per 10,000 inhabitants. Spain, 2010-2019



Source of data: Ministry of Health. Register of Specialised Care Activity (RAE-CMBD).

Total hospitalisations due to malignant tumours decreased by 7% from 2010 to 2019; hospitalisations for malignant tracheal, bronchial and lung tumours, colon, rectal and anal cancer, and breast cancer, decreased by about 10%.

3.3 Mortality

Mortality data are frequently used to evaluate the health status of the population because of their great value in making comparisons over time and in different places. The exhaustive nature of mortality records and the objectivity of the event they describe make mortality indicators an appropriate instrument for monitoring health problems and setting healthcare priorities.

This section presents information about general mortality and also the mortality for four groups of diseases: respiratory disease, cardiovascular disease, mental health disorders and malignant tumours (2019).¹⁶

3.3.1 General mortality



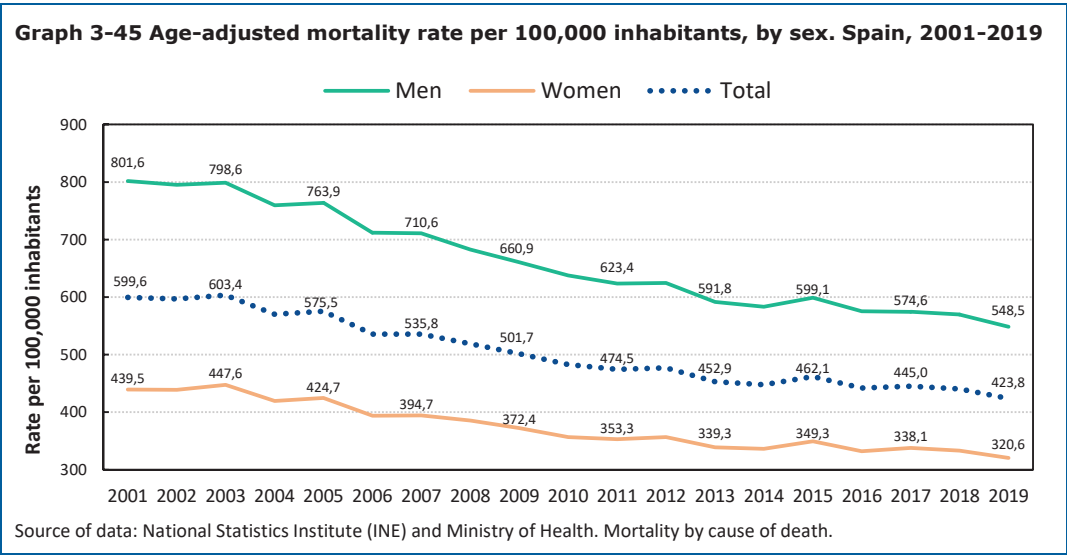
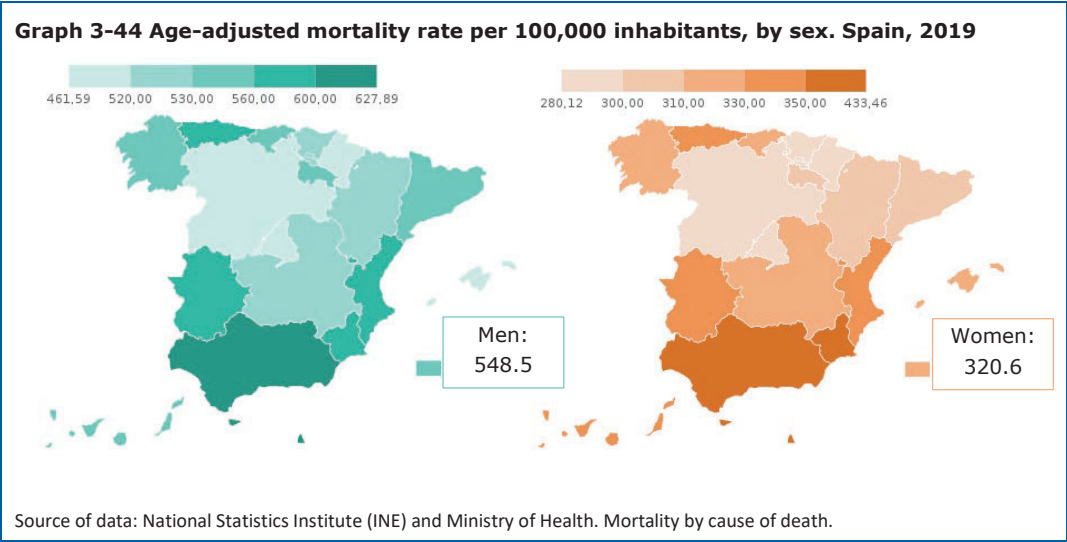
In 2019 in Spain there were 418,703 deaths, 212,683 men and 206,020 women, with a crude death rate of 888.9 deaths per 100,000 inhabitants (921.0 in men and 857.9 in women).¹⁷

¹⁶ Detailed information about mortality can be found in "Indicadores de Salud 2020. Evolución de los indicadores del estado de salud en España y su magnitud en el contexto de la Unión Europea" [Health Indicators 2020. Changes in health status indicators and their magnitude in the context of the European Union] and "Patrones de mortalidad en España, 2019" [Mortality patterns in Spain, 2019]. <https://www.sanidad.gob.es/estadEstudios/estadisticas/estadisticas/estMinisterio/mortalidad/mortalidad.htm>

¹⁷ After this report's closing date the mortality data corresponding to 2020 was published (<https://www.ine.es/jaxiT3/Datos.htm?t=6546>: 493,776 deaths, 249,664 in men and 244,112 in women) along with the crude death rate <https://www.ine.es/jaxiT3/Datos.htm?t=14816>: 1,039.9 deaths for every

The age-adjusted mortality rate in 2019 was 423.8 deaths per 100,000 inhabitants (548.5 in men and 320.6 in women), less than in 2018 (440.6 per 100,000). The highest rates in 2019 were registered in Melilla and Ceuta, followed by Andalusia, Murcia and Extremadura and the lowest rates were in Madrid, Navarre and Castilla y León.

Since 2001 in Spain there has been a downward trend in mortality, with a drop of 29.3% between that year and 2019, the reduction being 31.6% in men and 27.0% in women. The decrease was more than 33% in Canary Islands, Madrid and Balearic Islands, and less than 25% in Melilla, Ceuta, Castilla y León, La Rioja and Cantabria.



Mortality in Spain dropped by 29% from 2001 to 2019, a decrease that has been observed in both sexes and in all autonomous territories.



100,000 inhabitants, 1071.7 in men and 1009.3 in women).

Following the proposal put forward for this edition of the annual report, the analysis of mortality by cause focuses on respiratory diseases, cardiovascular diseases, malignant tumours and mental health disorders.

3.3.2 Respiratory diseases

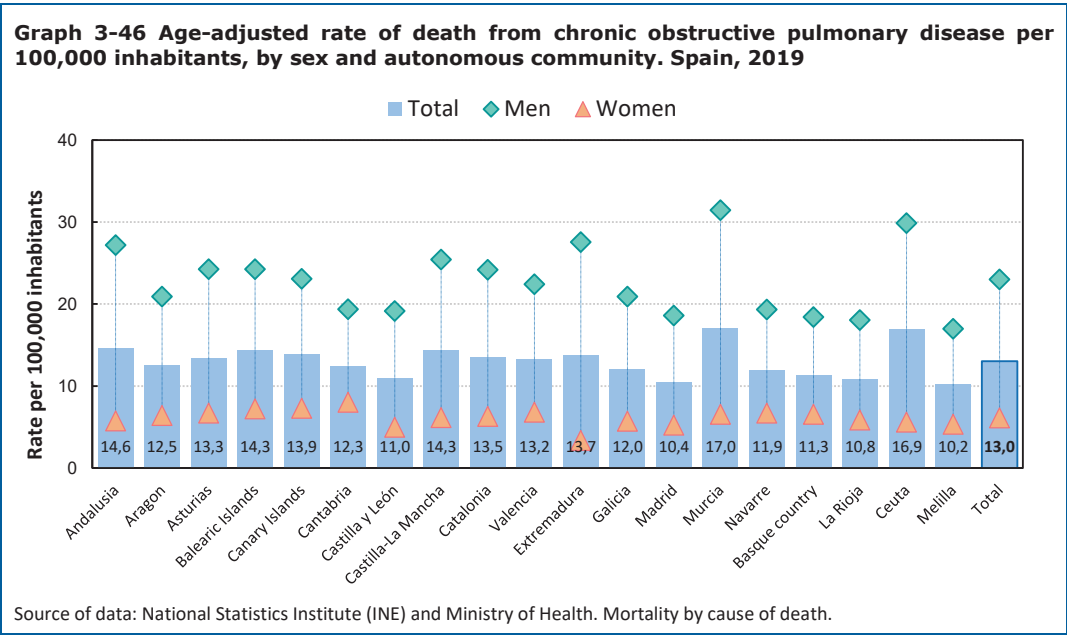


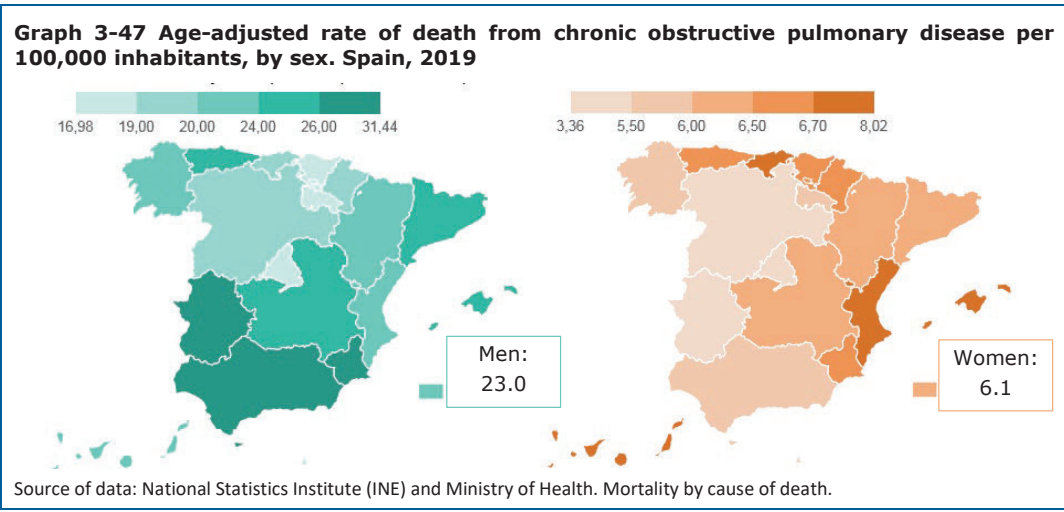
In 2019 respiratory diseases caused 47,681 deaths in Spain, 11.4% of the total number of deaths registered, which is a crude rate of 101.2 deaths per 100,000 inhabitants. These figures are lower than in 2018 (53,687 deaths and a crude death rate of 114.9 per 100,000). Approximately half of the deaths caused by respiratory diseases were due to chronic obstructive pulmonary disease and by pneumonia and influenza.

Chronic obstructive pulmonary disease

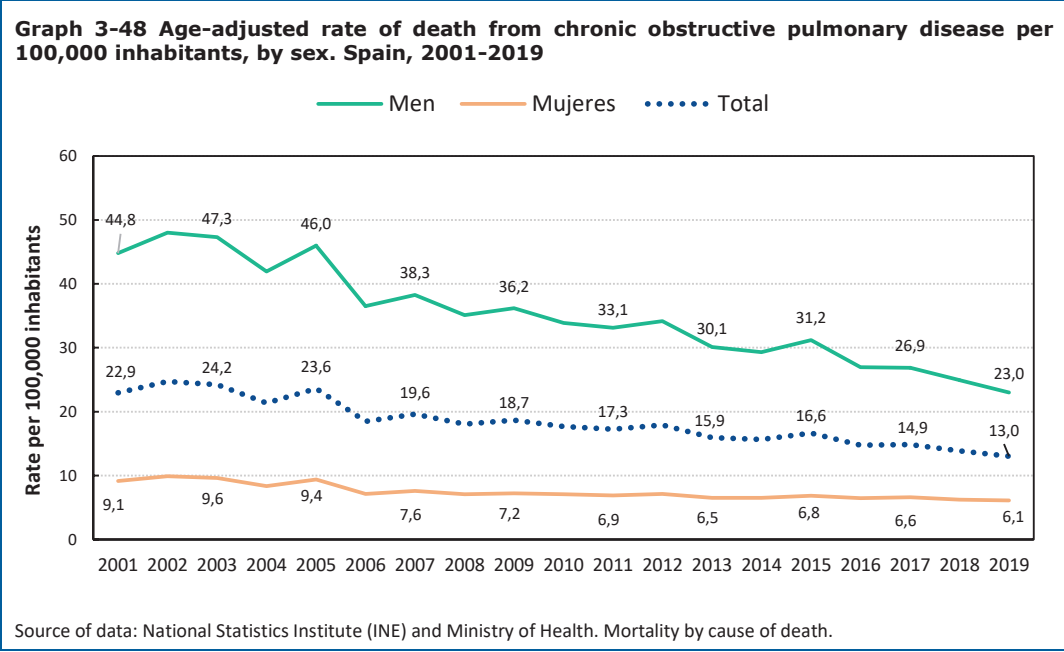
There were 13,808 deaths from chronic obstructive pulmonary disease (9,907 in men and 3,901 in women), with a crude death rate of 29.3 per 100,000 inhabitants (42.9 in men and 16.3 in women), figures which are a decrease with respect to 2018, when there were 14,607 deaths and a crude death rate of 31.3 per 100,000. It should be mentioned that chronic obstructive pulmonary disease causes 2.5 times more deaths in men than in women and that 37.7% of deaths due to respiratory diseases in men are from this cause, compared to 18.3% in women.

The age-adjusted rate of death by this cause was 13.0 per 100,000 (23.0 in men and 6.1 in women). As for geographical distribution, the highest rates of mortality were found in Murcia, Ceuta and Andalusia, and the lowest in Melilla, Madrid, La Rioja and Castilla y León.





The downward trend in mortality from chronic obstructive pulmonary disease has continued, both in men and in women, and between 2001 and 2019 it fell by approximately 43%; the age-adjusted rate of mortality dropped by 48.7% in men and 33.2% in women.



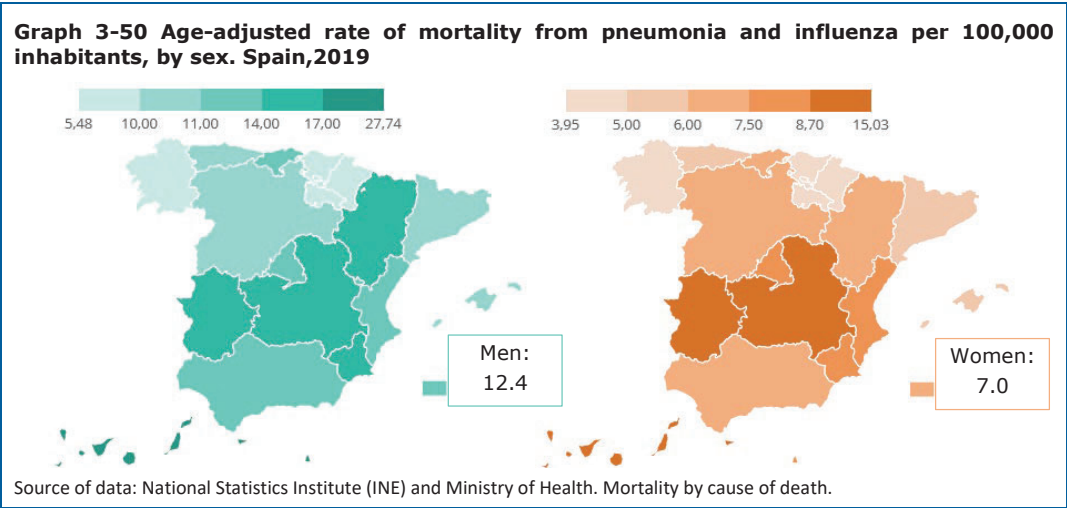
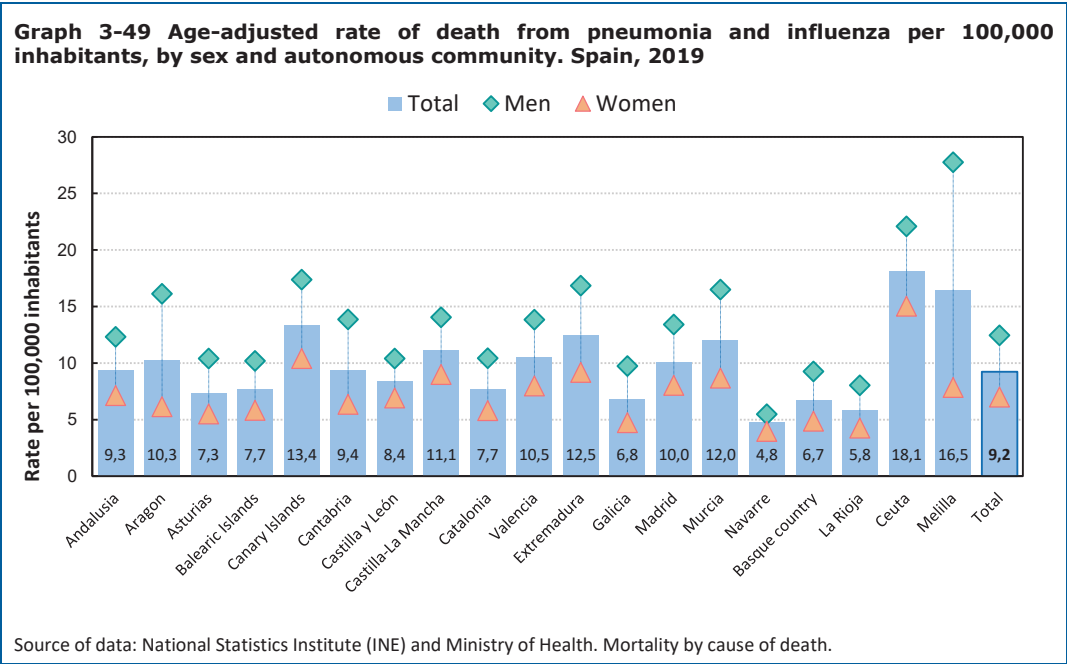
Mortality due to chronic obstructive pulmonary disease is 4 times greater in men than in women, and from 2001 to 2019 it dropped by almost 50% in men and approximately 33% in women.



Pneumonia and influenza

In 2019 there were 10,843 deaths from pneumonia and influenza (5,517 in men and 5,326 in women), with a crude death rate of 23.0 per 100,000 inhabitants (23.9 in men and 22.2 in women); these figures reveal a decrease with respect to 2018, when there were 12,267 deaths and a crude death rate of 26.3 per 100,000.

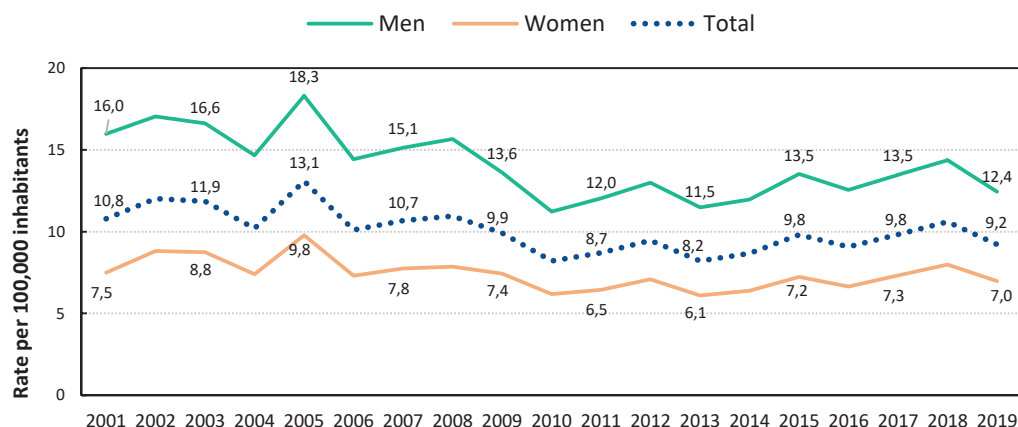
The age-adjusted rate of death by this cause was 9.2 per 100,000 (12.4 in men and 7.0 in women). In terms of geographical distribution, the highest mortality rates were in Canary Islands, Extremadura and Murcia, as well as Ceuta and Melilla, while the lowest were in Navarre, La Rioja and Basque country.



From 2001 to 2019 death by pneumonia¹⁸ and influenza has decreased by approximately 15%, although the reduction in men (22.2%) was 3 times greater than it was in women (6.8%).

¹⁸ This figure has been considerably affected, in an upward direction, by the pandemic.

Graph 3-51 Age-adjusted rate of mortality from pneumonia and influenza per 100,000 inhabitants, by sex. Spain, 2001-2019



Source of data: National Statistics Institute (INE) and Ministry of Health. Mortality by cause of death.

Mortality due to pneumonia and influenza is almost twice as high in men as in women. Since 2001 it has shown a slight downward trend, with a drop almost 3 times greater in men than in women.



3.3.3 Cardiovascular disease



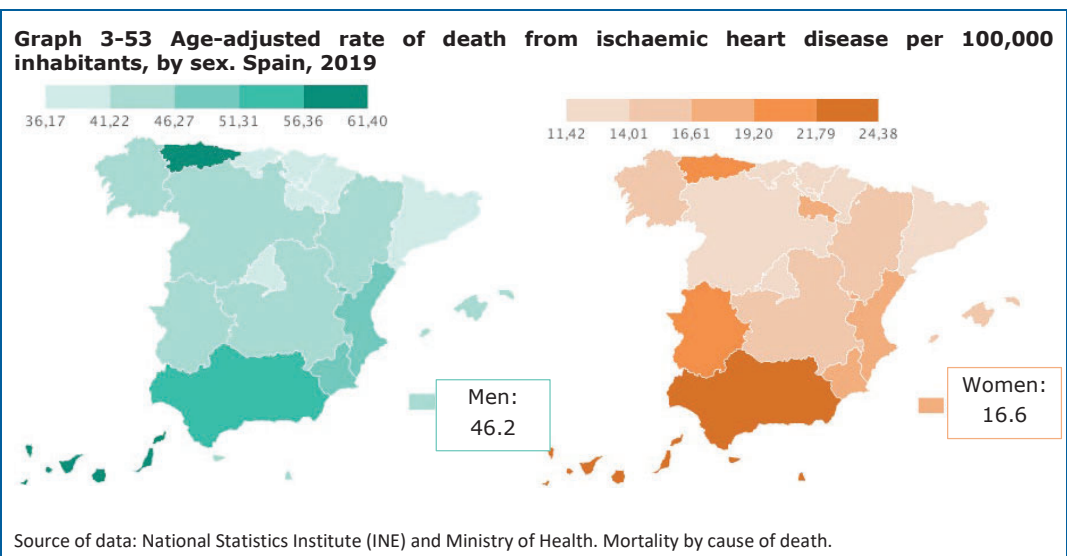
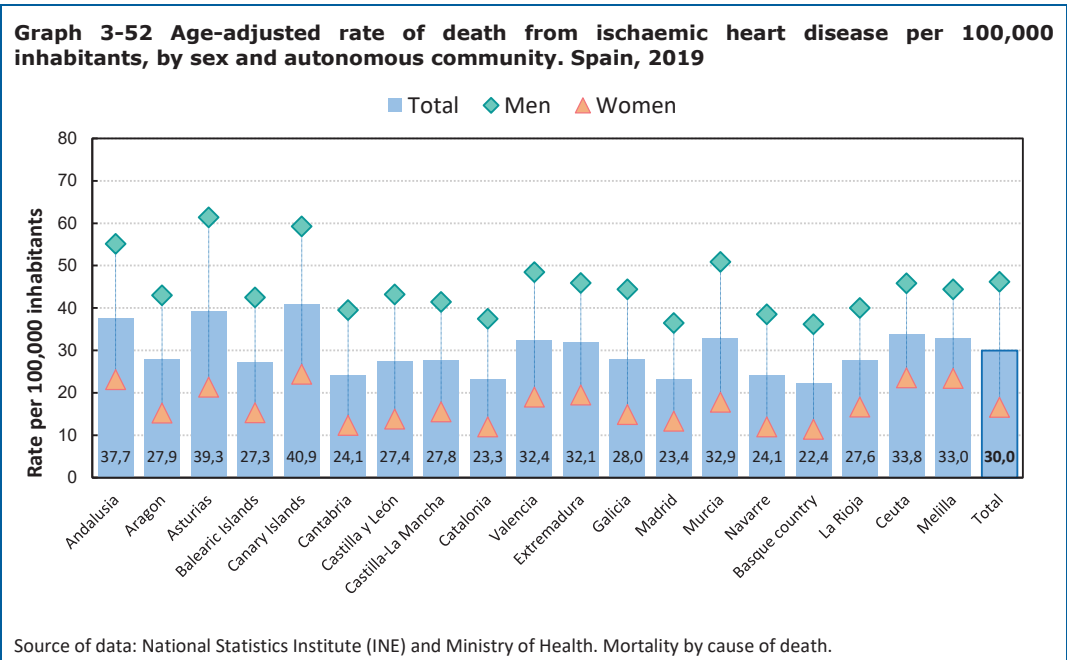
In 2019 cardiovascular diseases were the first cause of death in Spain, leading to 116,615 deaths, 27.9% of the total number of deaths registered, which is a crude rate of 247.6 deaths per 100,000 inhabitants. These figures are lower than those of 2018 (120,859 deaths and a crude death rate of 258.6 per 100,000).

Approximately half of the deaths from cardiovascular diseases were due to ischaemic heart disease and cerebrovascular disease.

Ischaemic heart disease

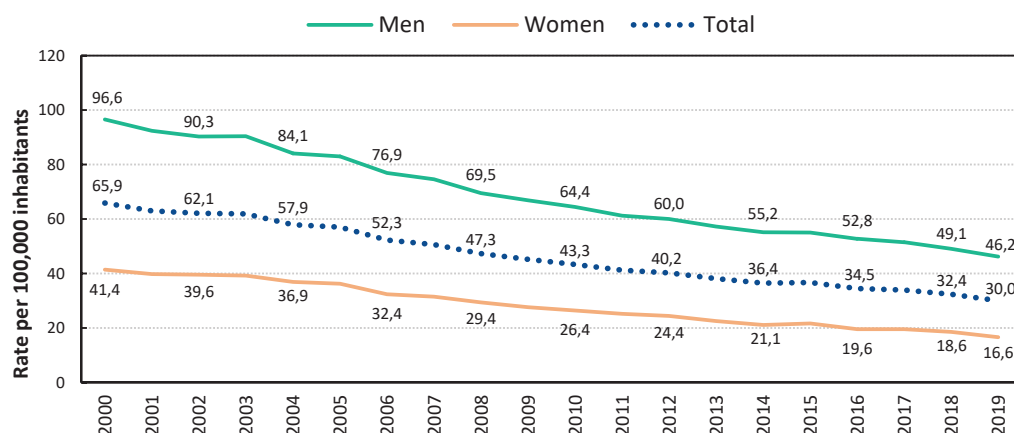
There were 29,247 deaths from chronic obstructive pulmonary disease (9,907 in men and 3,901 in women), with a crude death rate of 62.1 per 100,000 inhabitants (42.9 in men and 16.3 in women), figures which have fallen with respect to 2018, when there were 31,152 deaths and a crude death rate of 66.7 per 100,000. It is worth underlining that ischaemic heart disease causes more deaths in men than in women and that 32.5% of deaths due to cardiovascular disease in men are from this cause, compared to 18.6% in women.

The age-adjusted rate of death by this cause was 30.0 per 100,000 (46.2 in men and 16.6 in women). As for the geographic distribution, the highest mortality rates were in Canary Islands, Asturias and Andalusia and the lowest in Basque country, Catalonia and Madrid.



The downward trend in death from ischaemic heart disease, in both men and women, has continued, and from 2000 to 2019 it has decreased by approximately 50%.

Graph 3-54 Age-adjusted rate of death from ischaemic heart disease per 100,000 inhabitants, by sex. Spain, 2000-2019



Source of data: National Statistics Institute (INE) and Ministry of Health. Mortality by cause of death.

Mortality due to ischaemic heart disease is greater in men than in women and it has decreased by approximately 50% from 2000 to 2019 in both sexes.

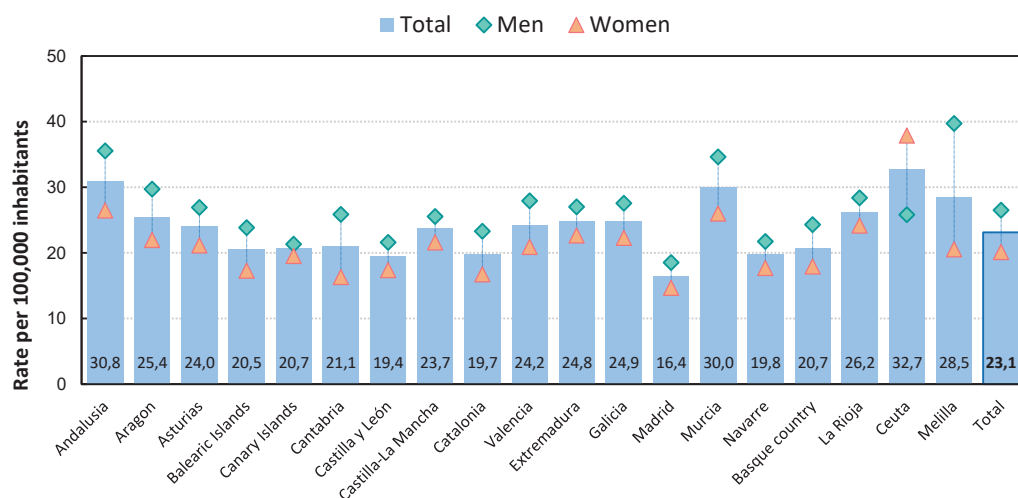


Cerebrovascular disease

In 2019 a total of 25,712 deaths from cerebrovascular disease were registered (11,086 men and 14,626 women), with a crude death rate of 54.6 per 100,000 inhabitants (48.0 in men and 60.9 in women). These figures were a slight decrease with respect to 2018, which saw 26,420 deaths and a crude death rate of 56.5.

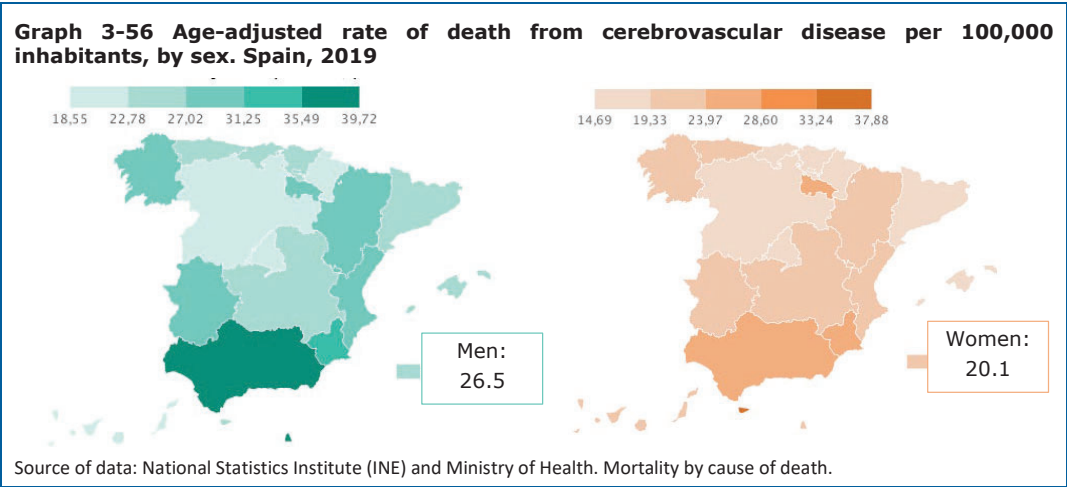
The age-adjusted rate of death from cerebrovascular disease was 23.1 (26.5 in men and 20.1 in women).

Graph 3-55 Age-adjusted rate of death from cerebrovascular disease per 100,000 inhabitants, by sex and autonomous community. Spain, 2019

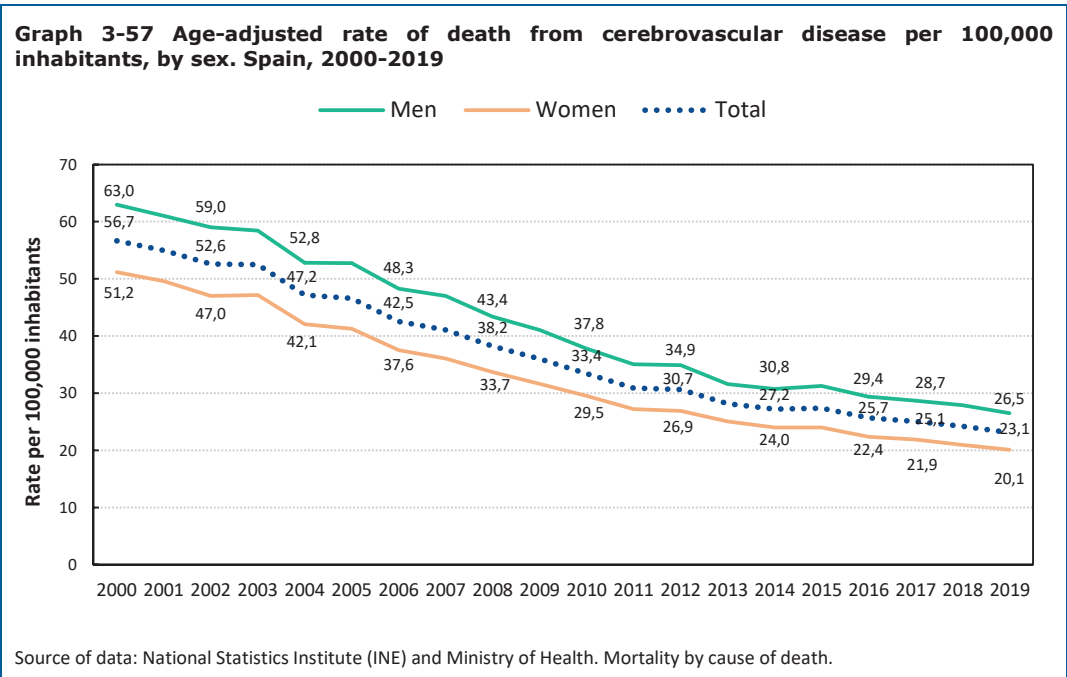


Source of data: National Statistics Institute (INE) and Ministry of Health. Mortality by cause of death.

As for geographical distribution, the highest mortality was in Ceuta, Andalusia and Murcia, and the lowest in Comunidad de Madrid and Castilla y León.



From 2000 to 2019, death from this cause decreased by approximately 59.2% (men 57.9% and women 60.7%).



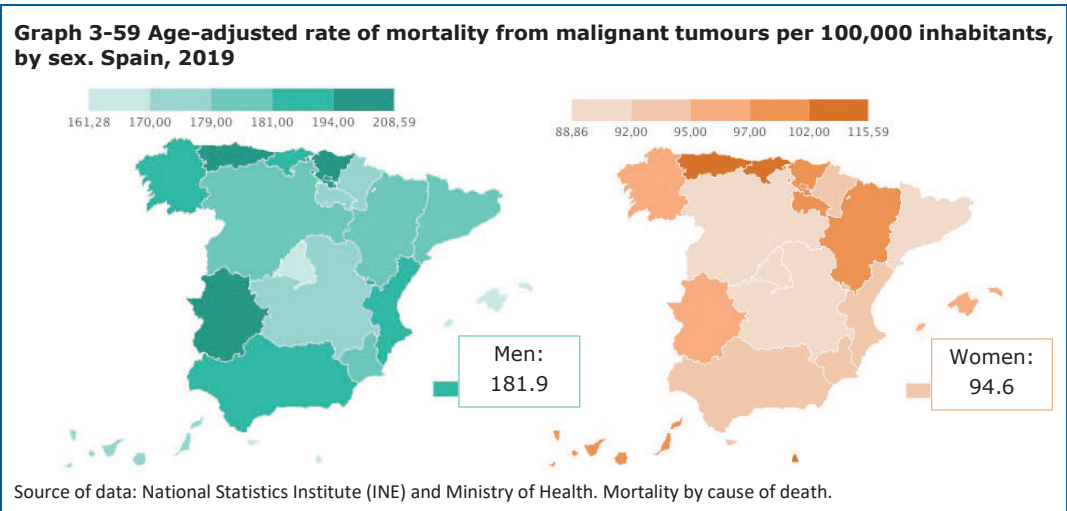
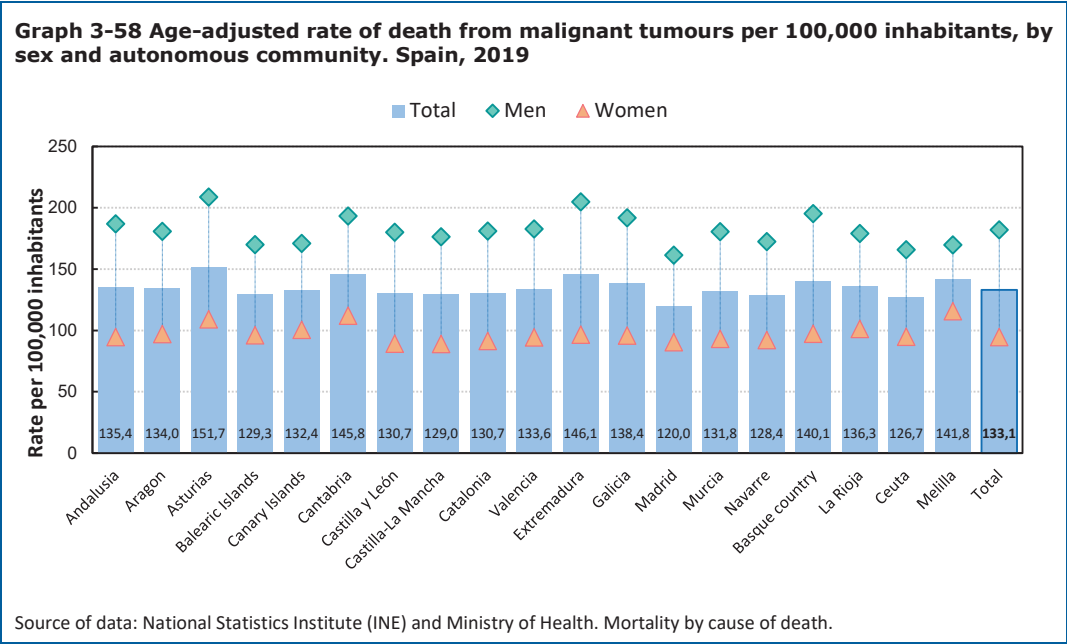
Death from cerebrovascular disease decreased by about 60% between 2000 and 2019, in both men and women. In absolute numbers more women than men die from this cause.



3.3.4 Malignant tumours

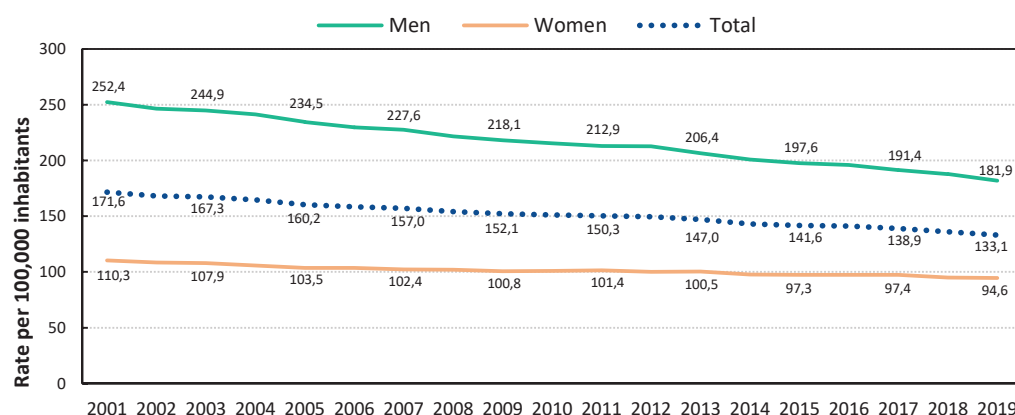
Malignant tumours represent the second cause of death in Spain after cardiovascular diseases. In 2019 a total of 108,867 deaths from malignant tumours were registered (65,730 men and 43,137 women), with a crude death rate of 231.1 per 100,000 inhabitants (284.7 in men and 179.6 in women). These numbers are higher than those of 2018, when there were 108,526 deaths and a crude death rate of 232.3 per 100,000 inhabitants.

The age-adjusted rate of death from malignant tumours was 133.1 per 100,000 inhabitants (181.9 in men and 94.6 in women). The highest mortality was in Cantabria, Extremadura and Asturias, while the lowest was in Madrid, Ceuta and Navarre.



Death from malignant tumours in Spain has dropped 22.4% between 2001 and 2019, and this decrease has been observed in all territories, ranging from 28.1% in Madrid to 9.1% in Melilla. It should be noted that the decrease in men has been almost twice the decrease in women (27.9% compared to 14.3%).

Graph 3-60 Age-adjusted rate of death from malignant tumours per 100,000 inhabitants, by sex. Spain, 2001-2019



Source of data: National Statistics Institute (INE) and Ministry of Health. Mortality by cause of death.

Death due to malignant tumours has decreased by 20% between 2001 and 2019 and the reduction in men has been double the reduction in women.



Malignant tracheal, bronchial and lung tumours

The malignant tumour of the trachea, bronchial tubes and lungs was the malignant neoplasia that caused the most deaths in 2019, a total of 22,007, practically 75% in men (16,935), with a death rate of 73.3 per 100,000 inhabitants, while in women it has caused 5,072 deaths, with a mortality rate of 21.1 per 100,000 inhabitants.

The age-adjusted death rate was 29.8 per 100,000 inhabitants, 49.5 in men and 13.6 in women. The highest figures were observed in Extremadura, Cantabria and Asturias, and the lowest in Ceuta, La Rioja, Madrid and Castilla-La Mancha.

Malignant colon and rectal tumours

Colon cancer represented 13.6% of the deaths from all malignant tumours (15,346), with a death rate of 32.6 per 100,000 inhabitants, 50% more in men (39.7 per 100,000) than in women (25.8 per 100,000). The age-adjusted death rate was 17.2 per 100,000 inhabitants, 24.2 in men and 11.8 in women.

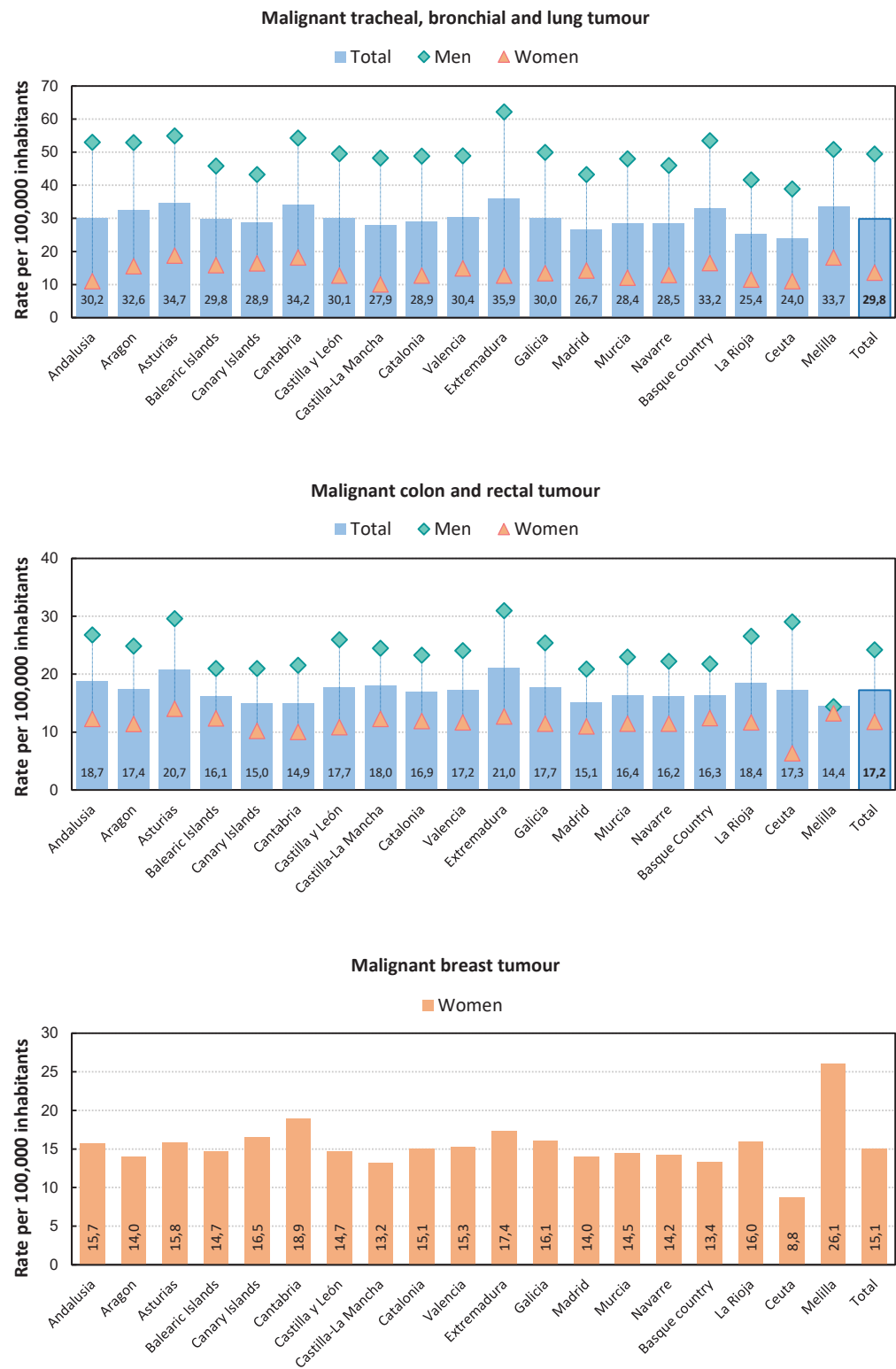
The highest numbers were observed in Extremadura and Asturias, and the lowest in Melilla, Cantabria, Canary Islands and Madrid.

Malignant breast tumours

In women the malignant neoplasia causing the most deaths in 2019 was the malignant breast tumour (6,373), with a death rate of 15.1 per 100,000 women.

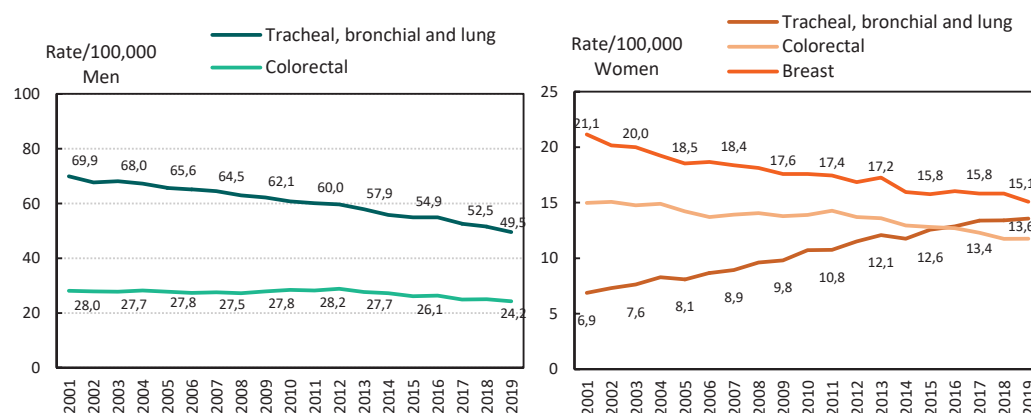
The highest numbers were observed in Melilla and Cantabria, with the lowest being observed in Ceuta, Castilla-La Mancha and Basque country.

Graph 3-61 Age-adjusted rate of death from the most frequent malignant tumours per 100,000 inhabitants, by sex and autonomous community. Spain, 2019



Source of data: National Statistics Institute (INE) and Ministry of Health. Mortality by cause of death.

Graph 3-62 Age-adjusted rate of death from the most frequent malignant tumours per 100,000 inhabitants, by sex. Spain, 2001-2019



Source of data: National Statistics Institute (INE) and Ministry of Health. Mortality by cause of death.

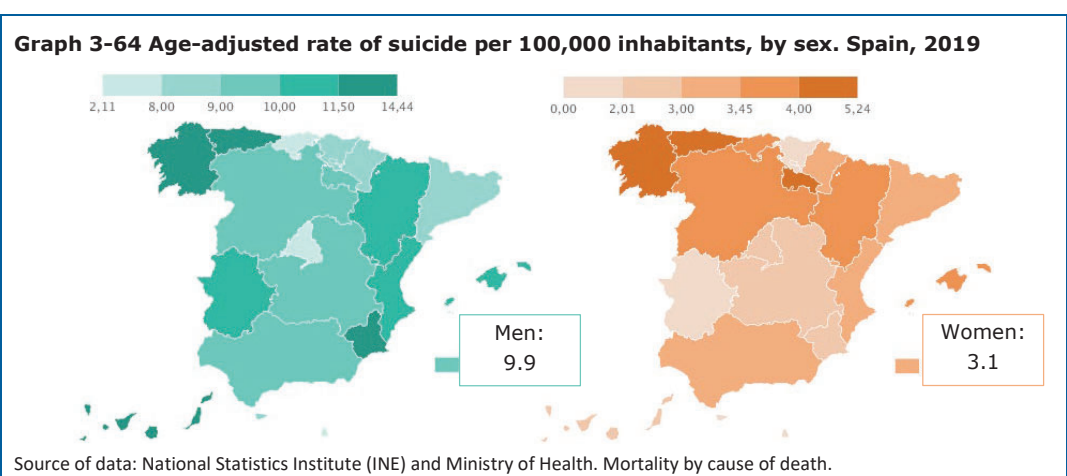
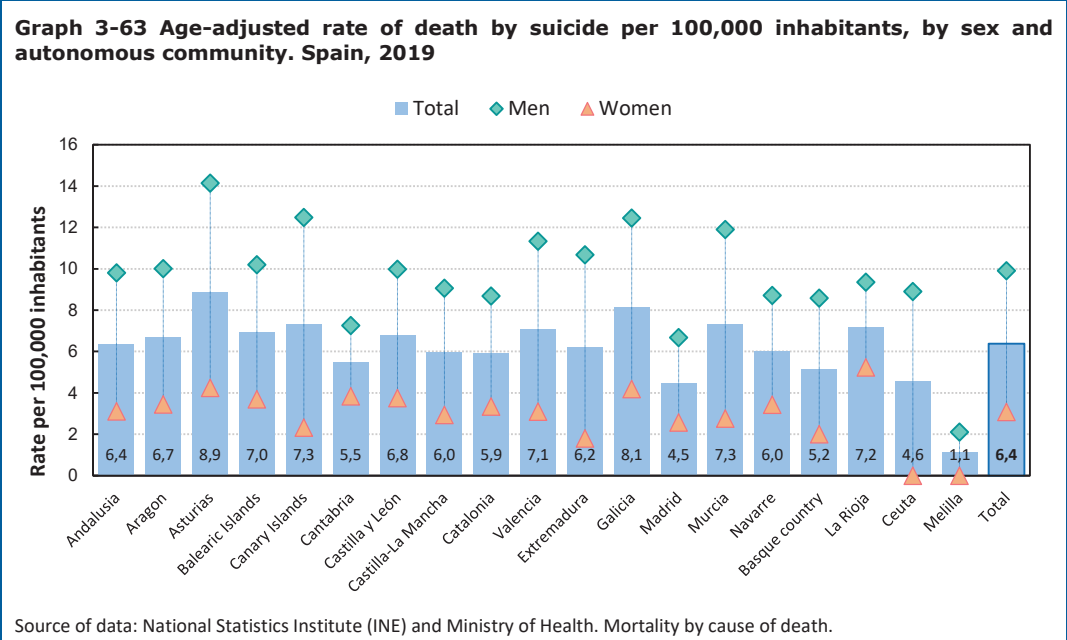
3.3.5 Death by suicide/mental health disorders

In 2019 in Spain there were 3,671 deaths by suicide, 2,771 men and 900 women, with a crude death rate of 7.8 per 100,000 inhabitants, figures slightly higher than those of 2018 (3,539 deaths with a rate of 7.6 per 100,000 inhabitants).¹⁹

The age-adjusted rate of death by suicide is 6.4 deaths per 100,000 inhabitants, 9.9 in men and 3.1 in women.

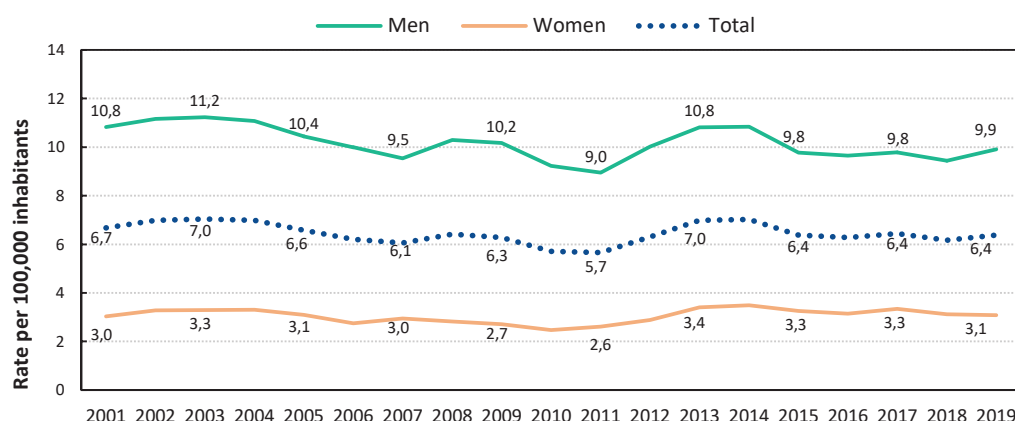
Asturias and Galicia present the highest mortality by suicide while the lowest is found in Madrid and Cantabria, and also Ceuta and Melilla.

¹⁹ After this report's closing date the death by suicide data for 2020 were published: 3,941 deaths, 2,930 in men and 1,011 in women (<https://www.ine.es/jaxi/Datos.htm?tpx=49948>); and crude death rate of 8.3 per 100,000 inhabitants (<https://www.ine.es/jaxi/Datos.htm?tpx=49955>).



Death by suicide has dropped 4.5% between 2001 and 2019. To interpret this time series data it is important to know that in 2013 methodological improvements were made in how this data was processed. That year the data of the Forensic Anatomical Institute of Madrid became accessible, which has allowed for more precise assignation of the cause of deaths in which there is judicial intervention, and thus deaths that were previously attributed to poorly defined causes have been re-attributed to specific external causes.

Graph 3-65 Age-adjusted rate of death by suicide per 100,000 inhabitants, by sex. Spain, 2000-2019



Source of data: National Statistics Institute (INE) and Ministry of Health. Mortality by cause of death.

The rate of death by suicide increases with age, with significant differences between the sexes, it being higher in men of all age groups. The highest rate appears in the age group of 75 and over (15.1), in which the rate of men is 5 times greater than it is in women (men 29.2 compared to women 5.8).

The crude rate of death by suicide in young people and adolescents²⁰ presents the highest number in the group aged 20-24 (4.3 deaths per 100,000), it being 50% higher than in the group aged 15-19 (2.9 per 100,000).²¹

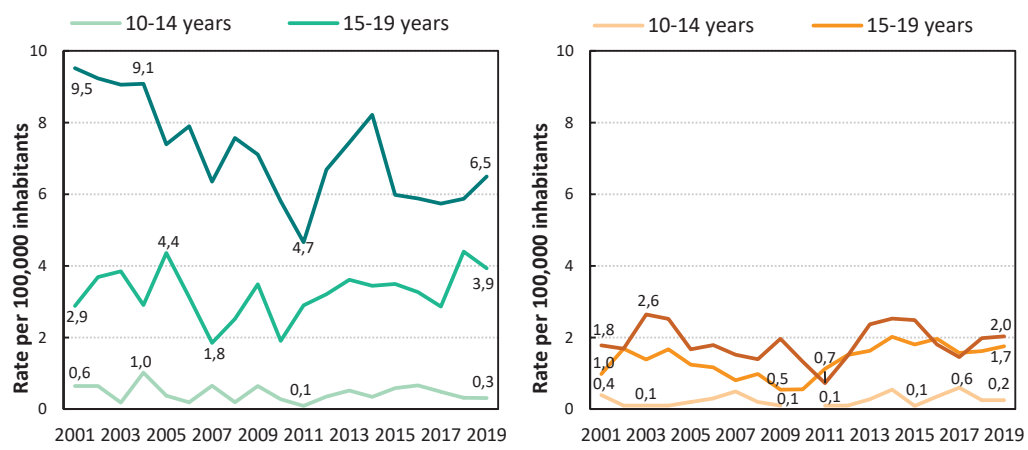
These rates have remained relatively stable since 2001, with the exception of men aged 20-24, in which a downward trend is observed.

As regards differences by sex, in men aged 15-19 mortality from this cause (1.7 per 100,000) is 2.3 times greater than in women, and the figure is as high as 3 times greater in the 20-24 age group. This general pattern has been in place since 2001.

²⁰ The pandemic has had a big impact on mental health, particularly affecting certain population groups, such as adolescents, so this section provides the detailed information concerning this age group in the aspects studied, whenever such information is available.

²¹ After this report's closing date the rates of death by suicide by age group corresponding to 2020 were published (<https://www.ine.es/jaxi/Datos.htm?tpx=49955>). Men: 2.5 deaths per 100,000 inhabitants in the 15-19 age group, 6.7 in the 20-24 age group. Women: 1.5 deaths per 100,000 inhabitants in the 15-19 age group, 1.6 in the 20-24 age group.

Graph 3-66 Crude rate of death by suicide per 100,000 inhabitants, changes in young people and adolescents, by sex. Spain, 2001-2019



Source of data: National Statistics Institute (INE) and Ministry of Health. Mortality by cause of death.

Mortality by suicide has remained relatively stable from 2001 to 2019. The highest rates are found in men aged 75 and over. Among young people and adolescents the highest rates are found in men of the 20-24 age group, in which the evolution takes the form of peaks and valleys, but in which a downward trend can be perceived.

4 Social determinants of health

These determinants are the circumstances in which people are born, grow, live, work and age. They have a direct relationship with the population's health status and are of fundamental importance when addressing health inequalities.

This section focuses on three categories of determinants: socio-economic, environmental and lifestyle.

4.1 Socio-economic determinants



The socio-economic context is described using indicators related to dependency, level of education and risk of poverty. The differences among territories are highlighted.

4.1.1 Dependency ratio

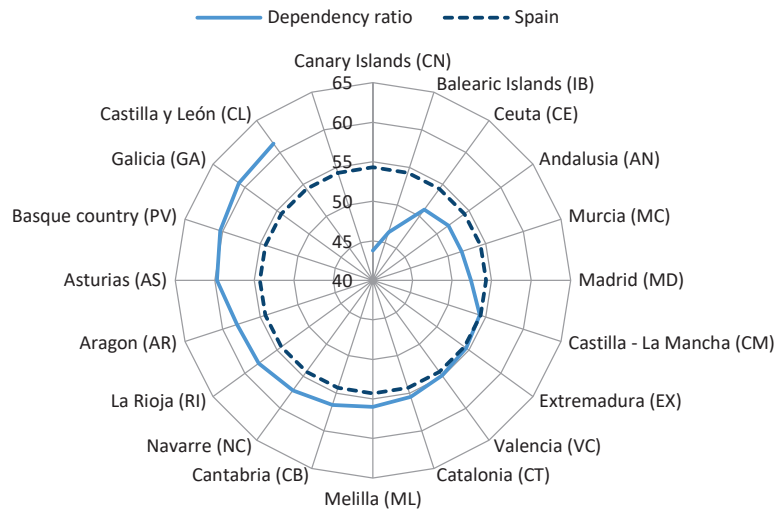
The dependency ratio²² in Spain is 54.3% (29.9% old people and 24.4% youth) and has presented an upward trend in old people and stability in young people since 2000. The ratio has increased in all the autonomous communities, except Castilla-La Mancha (where it has dropped 1.2 points) and Extremadura (where it has remained practically the same).

Among the autonomous communities, the highest ratios are in Castilla y León (61.4%), Galicia (60.9%) and Basque country (60.3%) while the lowest are in Canary Islands (43.8%) and Balearic Islands (46.4%).

The communities with the highest old-age dependency ratios are Asturias (41.0%), Castilla y León (40.7%) and Galicia (40.5%), while the highest youth dependency ratios are found in Murcia (27.9%), Navarre (26.1%), Catalonia (25.8%) and Andalusia (26.0%), in addition to the autonomous cities of Ceuta (32.9%) and Melilla (39.3%).

²² The dependency ratio expresses in percentage form the proportion of the dependent population (under the age of 16 and over the age of 64) to the active population (from 16 to 64) on which the former depends. The dependency ratio can be broken down into the youth dependency ratio (referring to those under the age of 16) and the old-age dependency ratio (referring to those over the age of 64).

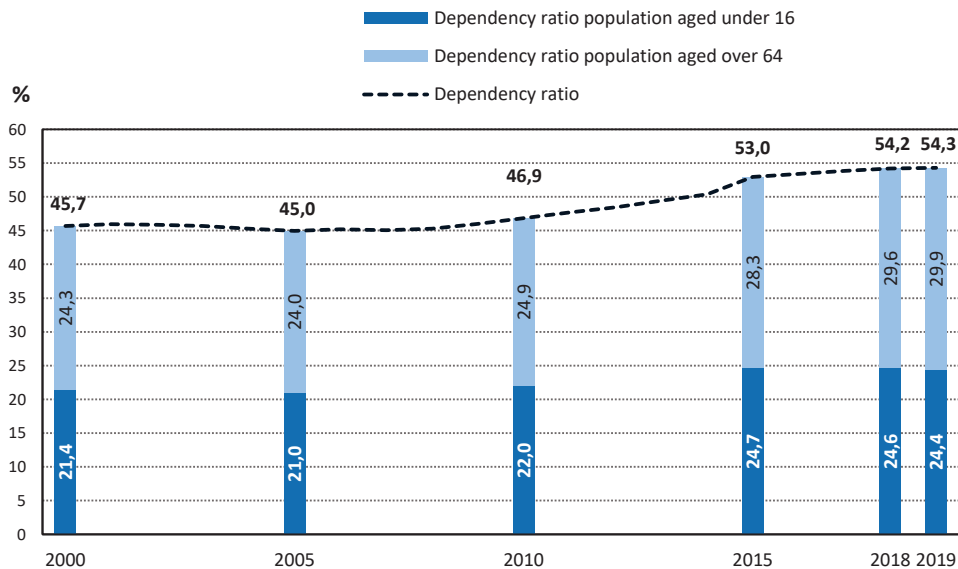
Graph 4-1 Dependency ratio by autonomous community. Spain, 2019



Remarks: territories arranged in order of their dependency ratio.

Source of data: Ministry of Health and National Statistics Institute (INE). Intercensal population estimates and Official Population Figures.

Graph 4-2 Changes in dependency ratio. Spain, 2000-2019



Source of data: Ministry of Health and National Statistics Institute (INE). Intercensal population estimates and Official Population Figures.

The continuing upward trend in the dependency ratio is due mainly to the over-65 population, with variability among autonomous communities ranging from 43.8% (Canary Islands) to 61.4% (Castilla y León).



4.1.2 Population with basic secondary education or less

The proportion of persons aged 25 to 64 who have completed, at most, the level of education²³ consisting of the first phase of Compulsory Secondary Education (ESO) or less²⁴ is 38.7%, with a difference of six percentage points between men (41.7%) and women (35.7%).

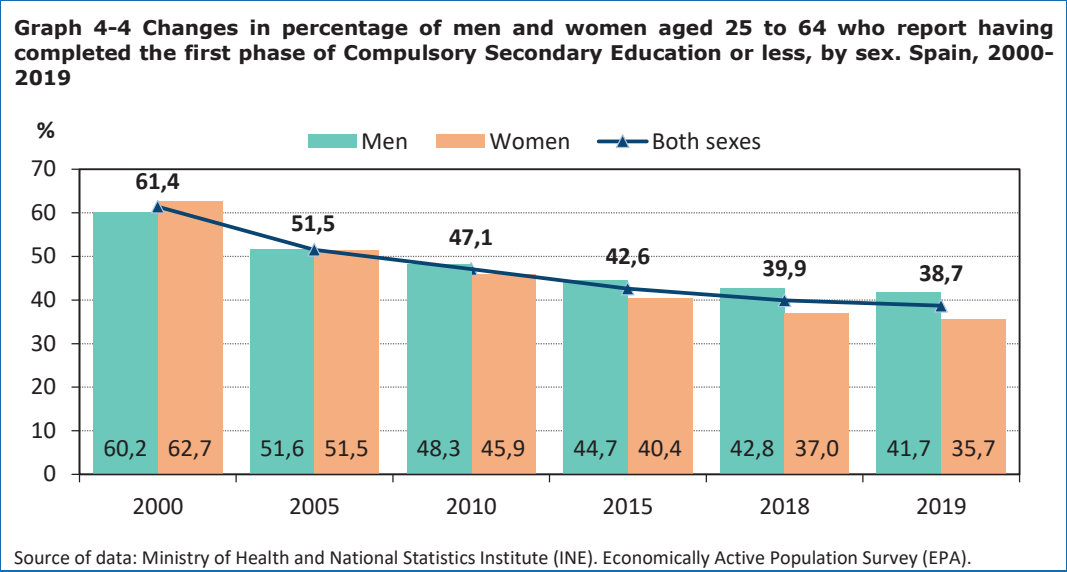
Extremadura is the autonomous community with the highest proportion of persons who have completed only this level of education (5.5 out of 10); Madrid and Basque country present the lowest, with 3 out of 10. By sex, the women of Ceuta (53.6%) and the men of Extremadura (57.7%) show the highest proportion of people who have completed, at most, the first phase of ESO or less.



²³ Economically Active Population Survey (EPA).
²⁴ Persons who have obtained a Compulsory Secondary Education certificate (*graduado en ESO*), or the historical equivalents known as *graduado escolar*, *bachiller elemental* and *certificado de escolaridad*.

Level of education is a very relevant indicator in the social determinants of health, especially with regard to health maintenance and quality of life. More education can provide the knowledge necessary to follow healthy lifestyles, to know that the use of tobacco and alcohol are harmful to one's health, or that physical exercise and a healthy diet are helpful for maintaining a high quality of life.

The evolution of this indicator is very favourable, having fallen 22.7 points (36.9%) in the 2000-2019 period. The decrease is seen all the autonomous communities and cities, with differences being more pronounced in Asturias, Galicia and Cantabria, and less pronounced in Melilla, Ceuta and Extremadura.



In the past 19 years there has been a very positive evolution of the percentage of population with only a low or very low level of education: it has dropped in all territories, albeit with variable decreases.



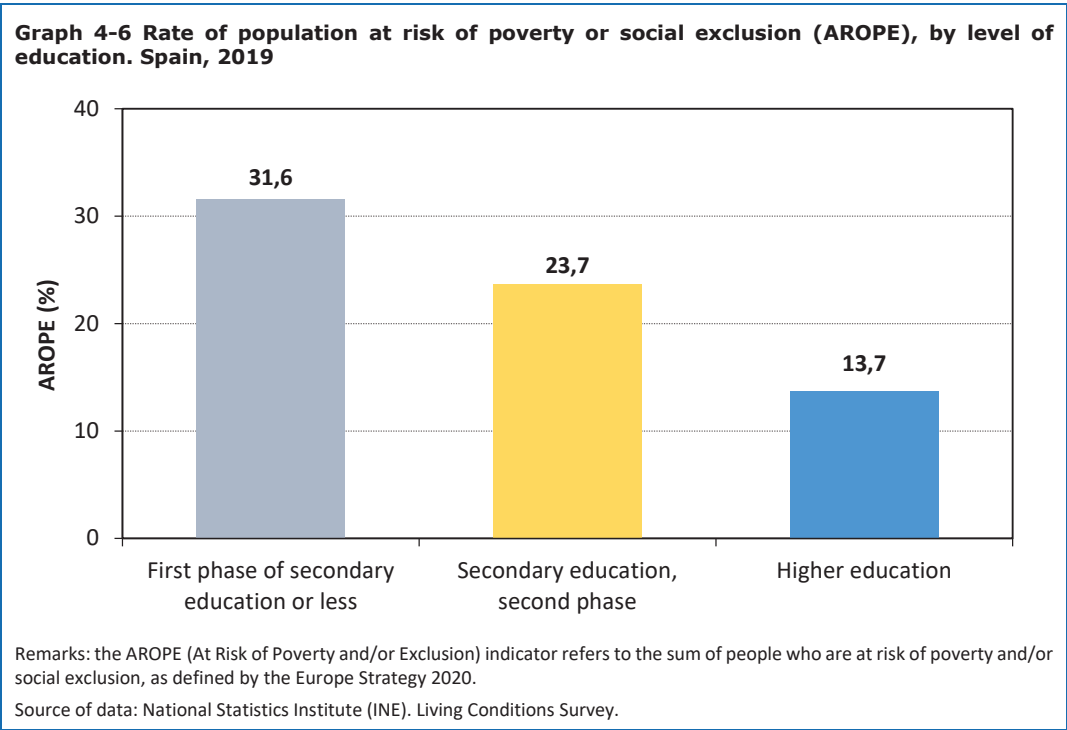
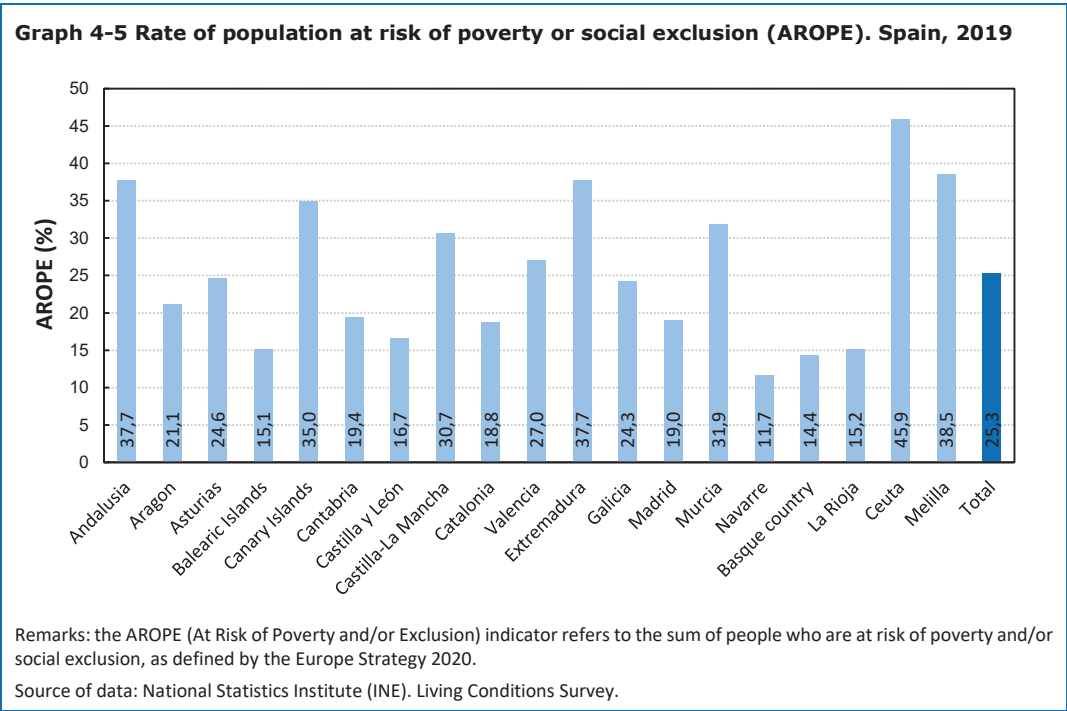
4.1.3 Population at risk of poverty and exclusion (AROPE)

The share of the population at risk of poverty or social exclusion²⁵ in Spain is 25.3%. By territory, the highest rates are found in Ceuta (45.9%), Melilla (38.5%), Andalusia (37.7%) and

²⁵ The indicator AROPE (At Risk of Poverty and/or Social Exclusion) refers to the sum of persons at risk of experiencing poverty and/or social exclusion, who, according to the Europe Strategy 2020, are those who find themselves in one of the three following situations. Persons who live with a low income (60% of the median equivalised disposable income or the median income per consumption unit in the year prior to the interview), and/or persons who suffer severe material deprivation (lacking 4 out of the 9 predefined items) and/or persons living in a household with very low work intensity (less than 20% of its total working-time potential in the year prior to the interview). In cases in which two or three of the aforementioned situations are applicable, people are counted only once. More information about the AROPE indicator at: https://www.ine.es/ss/Satellite?L=es_ES&c=INESeccion_C&cid=1259941637944&p=1254735110672&pagename=ProductosYServicios/PYSLayout#:~:text=Al%20grupo%20de%20personas%20en,Poverty%20and%20For%20Exclusi%C3%B3n

Extremadura (37.7%) and the lowest are in Basque country (14.4%) and Navarre (11.7%).

By education level, 31.6% of the population with basic secondary education or less, 23.7% with secondary education (second phase) and 13.7% with higher education are at risk of poverty or social exclusion.



4.2 Lifestyle habits



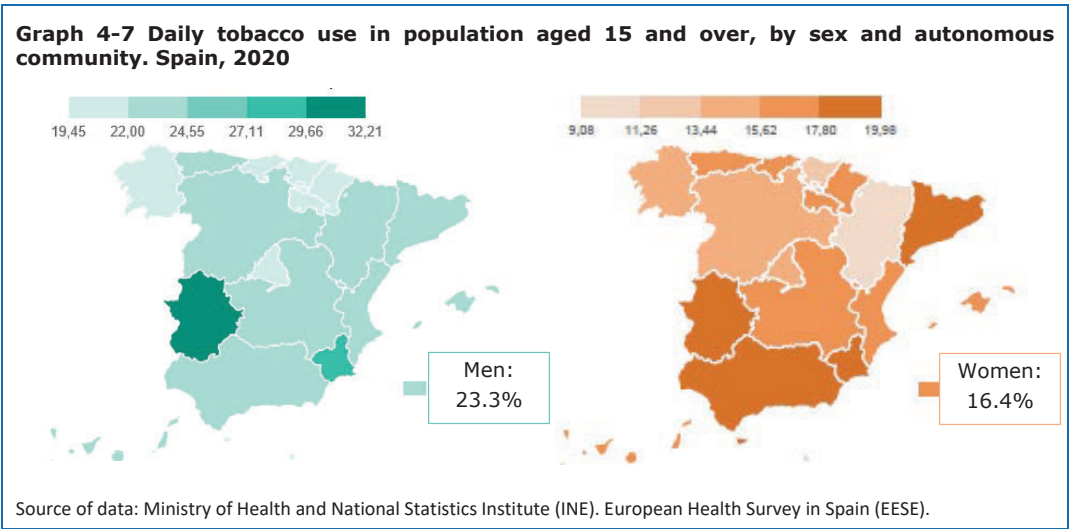
Unhealthy lifestyle habits, particularly smoking, harmful drinking, and obesity, are the leading cause of a variety of diseases, mainly chronic ones, causing early death and reduced quality of life. Unhealthy lifestyles can be modified with health promotion interventions²⁶ aimed at increasing health and wellbeing and at preventing disease.

4.2.1 Tobacco use



Tobacco is one of the main risk factors for cardiovascular and respiratory diseases and cancer, among others, and according to the WHO the use of tobacco is the leading cause of avoidable mortality and morbidity in developed countries. Smoking begins during adolescence, at a younger age than the consumption of alcohol and other psychoactive substances.

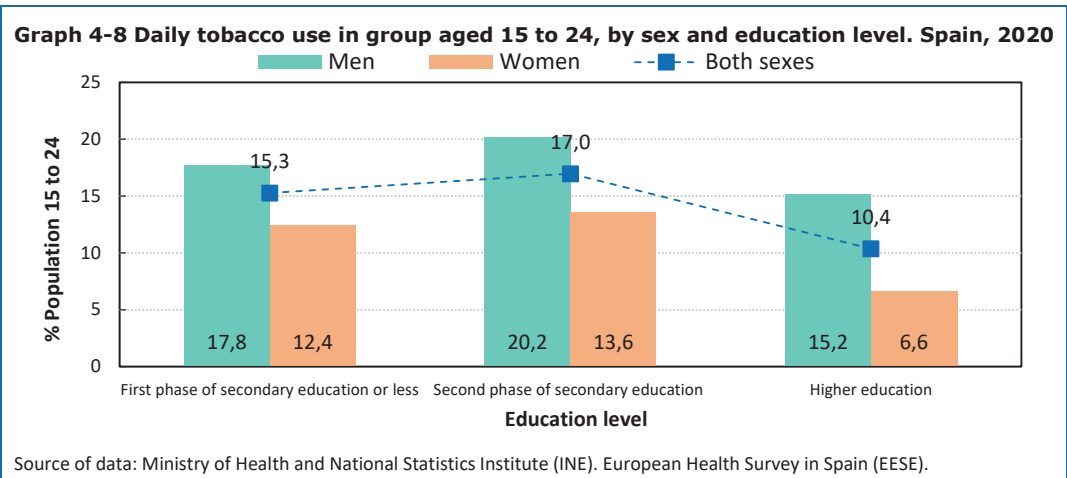
Of the population aged 15 and over, 19.8% smoke on a daily basis,²⁷ although the smoking pattern shows differences by sex and territory; the prevalence of daily smoking is greater in men (23.3%) than in women (16.4%) and by territory the highest prevalences are in Extremadura (25.3%) and Murcia (23.7%), while the lowest are in Basque country (16.1%) and Melilla (15.2%).



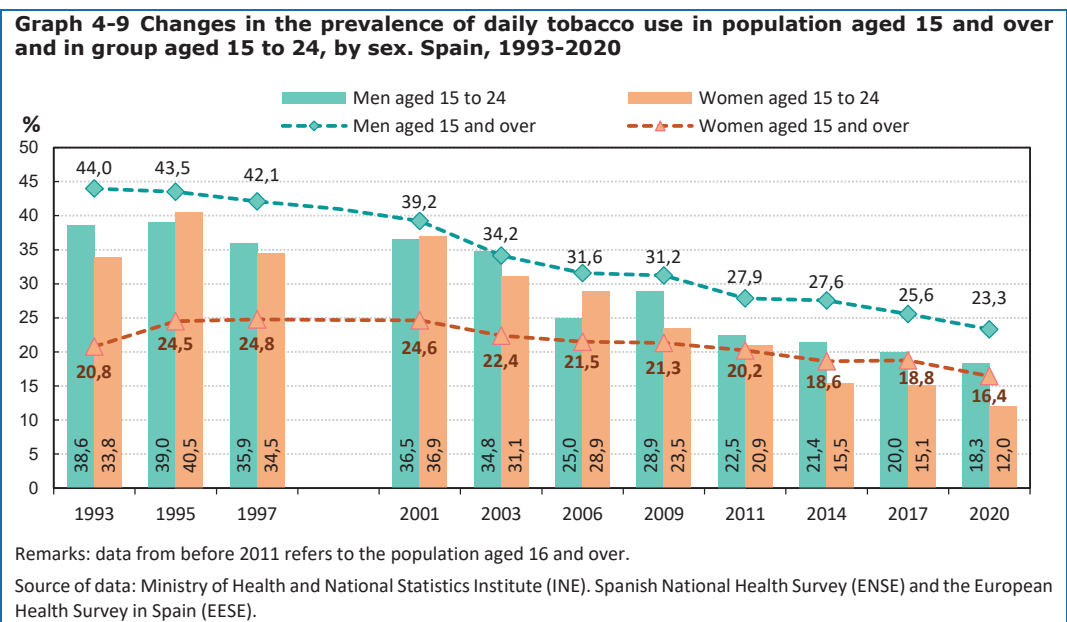
The prevalence of daily tobacco use in the population group aged 15 to 24 is 15.2% (men 18.3% and women 12.0%). As for the relationship between tobacco use and level of education, the pattern observed shows higher use in groups with low or very low levels of education and lower use in groups with higher levels of education. However, this data must be interpreted with caution, because in this age group the highest level of studies completed may not yet be known.

²⁶ Changes in lifestyle habits tend to be observed over the medium and long term, so a long data series, from the health surveys ENSE and EES, is presented, so as to provide a broader temporal perspective.

²⁷ In the European Health Survey in Spain (EES) any person who uses tobacco on a daily basis is considered a smoker, regardless of the type or amount used.



In the 1993-2020 period the prevalence of daily tobacco use in the population aged 15 and over has shown a downward trend that has become less pronounced in recent years, although the changes by sex differ: men have reduced their use of tobacco more drastically than women have. It is interesting to note that the prevalence of tobacco use in men in the subgroup aged 15 to 24 has always been lower than that of the group aged 15 and over. In contrast, tobacco use in women in the subgroup aged 15 to 24 has been higher than that of the group aged 15 and over, until the year 2014. Starting that year, tobacco use in the 15-24 year old subgroup has been lower.



The drop in daily tobacco use in the population aged 15 and over has been slowing since 2011, and the differences between men and women are becoming smaller, although prevalence continues to be higher in men, with 7 percentage points more than women.

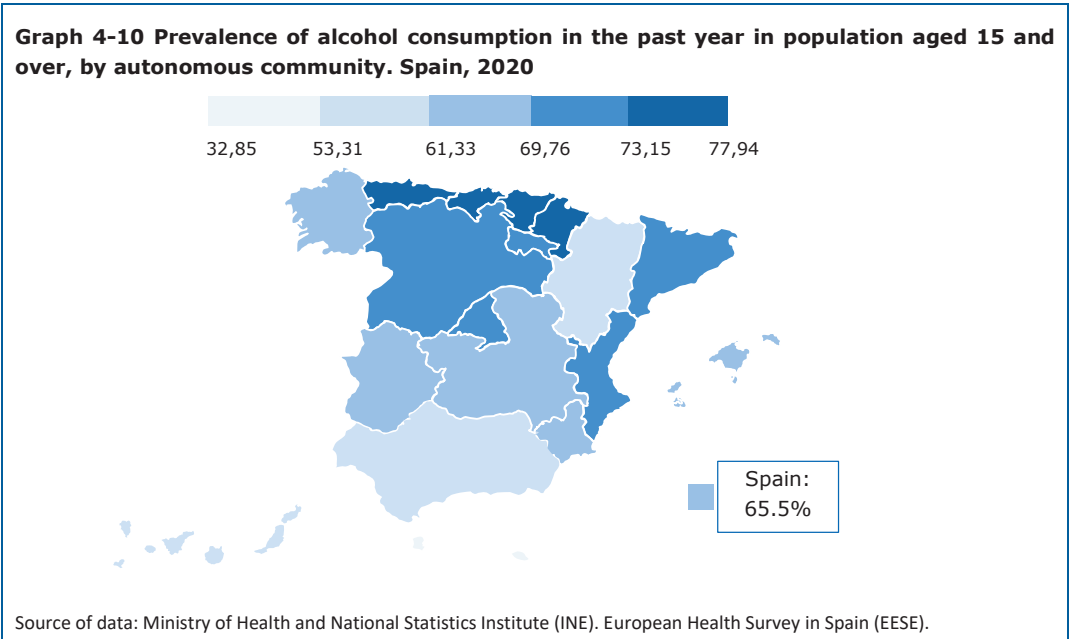
4.2.2 Alcohol use



Alcohol affects people and societies in different ways and its effects are determined by both the amount of alcohol consumed and by consumption patterns. High alcohol consumption is an important risk factor for cardiovascular diseases, liver pathologies and certain kinds of cancer, but even low and moderate consumption increases the long-term risk of suffering from these health problems. Alcohol also contributes to more accidents and injuries, violence, homicide, suicide and mental health disorders than any other psychoactive substance, especially among young people.

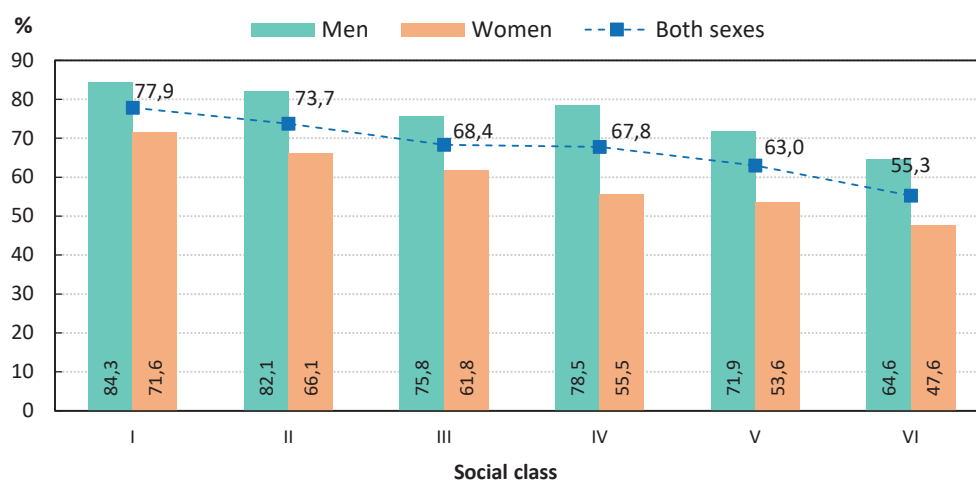
The reported prevalence of alcohol consumption in the past year in the population aged 15 and over is 65.5%, with important differences between men (74.6%) and women (56.8%). In the subgroup aged 15 to 24 it is 60.3%, but without such pronounced differences: men (62.3%) vs. women (58.0%).

Variability can also be seen when looking at the different territories; prevalence is highest in Basque country and Navarre (above 75.0%) and lowest in Ceuta and Melilla (under 50.0%) and Andalusia (53.3%).



The prevalence of alcohol consumption in the past year in the population aged 15 and over is higher in the more privileged social classes, 77.9% of the class I population compared to 55.3% of the class VI population. The social class gradient can be seen more clearly in women: 71.6% in class I vs. 47.6% in class VI.

Graph 4-11 Prevalence of alcohol consumption in the past year in population aged 15 and over, by sex and social class. Spain, 2020



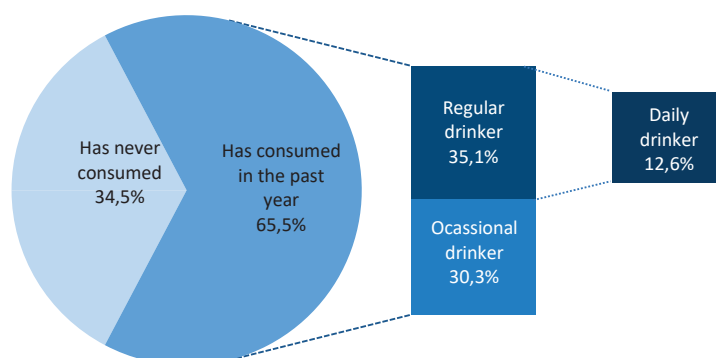
Remarks: the percentages for the category of population whose social class is "unknown" are not shown in the graph.

Source of data: Ministry of Health and National Statistics Institute (INE). European Health Survey in Spain (ESEE).

Frequency with which alcoholic beverages are consumed

The percentage of the population aged 15 and over that drinks alcoholic beverages on a regular basis²⁸ is 35.1%, with pronounced differences between men (46.4%) and women (24.5%); a third drinks occasionally and a third has never consumed alcohol. In the subgroup aged 15 to 24 the group that drinks on a regular basis is 23.1%, with a difference of 7.4 percentage points between men (26.7%) and women (19.3%).

Graph 4-12 Consumption of alcoholic beverages in population aged 15 and over. Percentage distribution. Spain, 2020



Source of data: Ministry of Health and National Statistics Institute (INE). European Health Survey in Spain (ESEE).

²⁸ Based on the frequency of consumption the following definitions have been established: occasional drinkers (consumption of alcoholic beverages with an approximate frequency of less than one day a week), regular drinkers (consumption of alcoholic beverages with a frequency of at least one day a week) and daily drinkers (consumption of alcoholic beverages on a daily or almost daily basis).

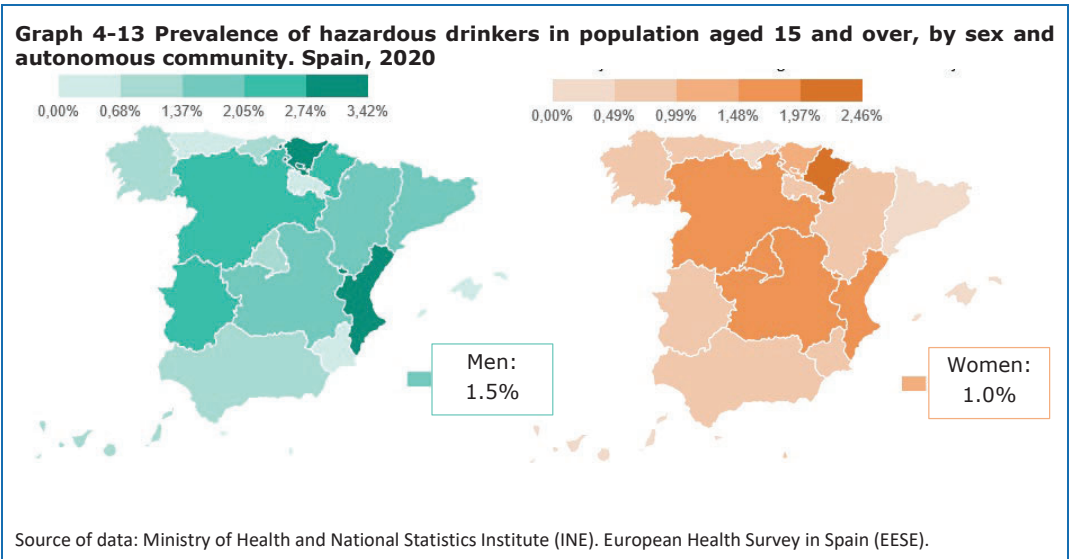
In the 2006-2020 period, the prevalence of regular drinkers of alcohol has shown a downward trend with a difference of 13 percentage points between 2006 (48.4%) and 2020 (35.1%). The decrease is observed in both sexes.

One third of the population aged 15 and over drink regularly (at least once a week). Regular drinkers are double the number in men as compared to women. In the 15-24 age group the prevalence is about 20%, with practically no differences between men and women.

Hazardous drinking

In Spain the prevalence of hazardous drinking²⁹ in the population aged 15 and over is 1.3%. Men present a higher prevalence of hazardous drinking than women (1.5 vs. 1.0).

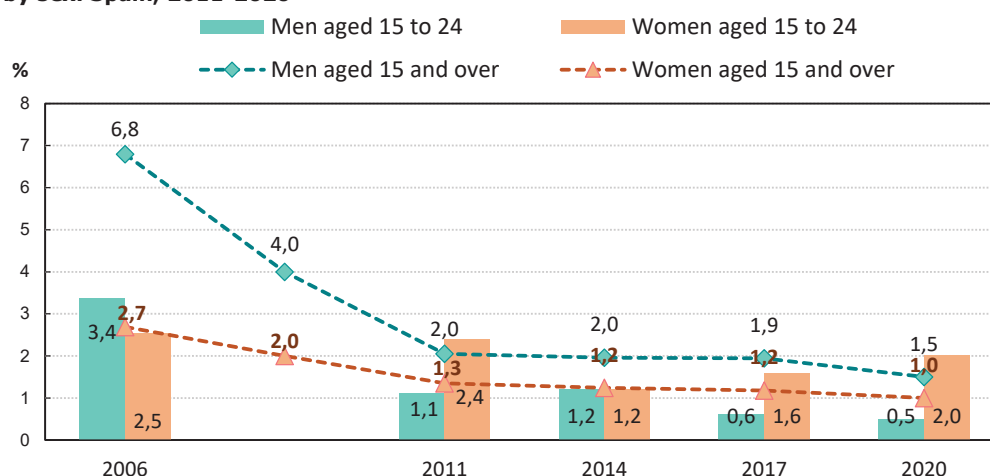
The territorial profile shows that the autonomous communities with the highest prevalence of hazardous drinkers and those with a similar pattern by sex are: Basque country, Navarre, Castilla y León and Valencia.



However, in the period from 2011 to 2020, the percentage of hazardous drinkers among men has dropped from 2.0% to 1.5% and among women it has dropped from 1.3% to 1.0%. This decrease is also observed in the group aged 15-24, where in men the share falls from 1.1% to 0.5% and in women from 2.4% to 2.0%. In this age group hazardous drinking among women quadruples that of men.

²⁹ Hazardous drinking is defined as a consumption pattern that increases the drinker’s risk of adverse health outcomes, when his/her daily intake of pure alcohol is greater than the equivalent of 40 g/day (4 standard drink units (SDUs) in men and 20-25 g/day (2-2.5 SDUs) in women (hazardous drinking as defined in the ENSE health survey). The equivalent in grams of alcohol is obtained from the amount consumed and the average alcohol content of each type of drink. Standard Drink Unit = SDU. In Spain 1 SDU equals 10 grams of pure alcohol.

Graph 4-14 Changes in hazardous drinking in population aged 15 and over and aged 15-24, by sex. Spain, 2011-2020



Remarks: data from before 2011 refers to the population aged 16 and over.

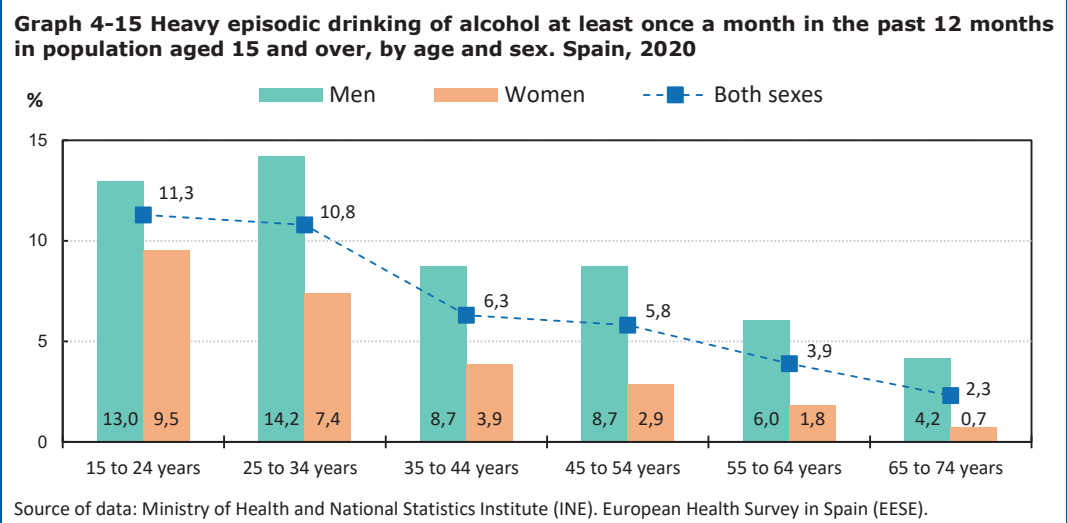
Source of data: Ministry of Health and National Statistics Institute (INE). Spanish National Health Survey (ENSE) and the European Health Survey in Spain (ESEE).

Hazardous drinking in the population aged 15 and over has shown a slight downward trend in both sexes since 2011; in 2020 in the general population it is 50% greater in men than in women while in the group aged 15 to 24 the pattern is inverted and it is four times greater in women.

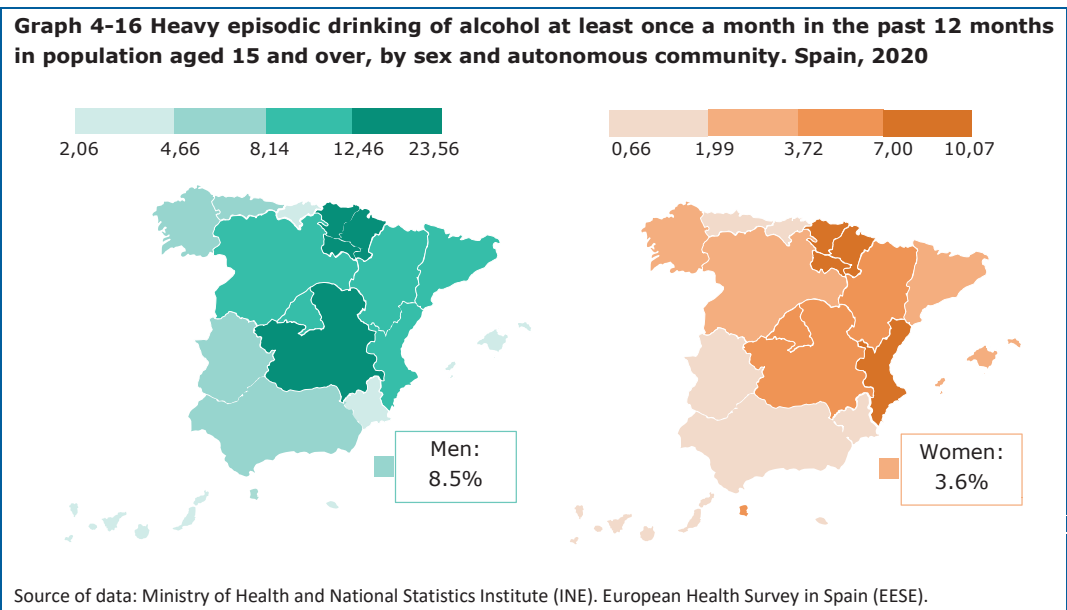
Heavy episodic drinking

With regard to heavy episodic drinking, or binge drinking, in the past 12 months, 6.0% of the population aged 15 and over reports having engaged in this kind of drinking at least once a month, with figures being twice as high in men (8.5%) as in women (3.6%).³⁰ By age group, heavy episodic drinking at least once a month is highest in the 15-24 age group (11.3%), with a pattern that decreases as age increases.

³⁰ Heavy episodic drinking is defined as the consumption of 60 or more grams (6 SDUs) in men and of 50 or more grams (5 SDUs) in women, concentrated in one drinking session (usually 4-6 hours), during which a certain level of intoxication is maintained (blood alcohol content no less than 0.8 g/l).



By territory, there is considerable variability in heavy episodic drinking, the autonomous communities with the highest consumption, both in men and in women, are Basque country, Navarre and La Rioja, and those with the lowest are Melilla, Canary Islands and Cantabria.



Among the younger population, the prevalence of binge drinking is high; one out of ten young people aged between 15 and 24 reports having engaged in this type of drinking at least once a month over the past year.

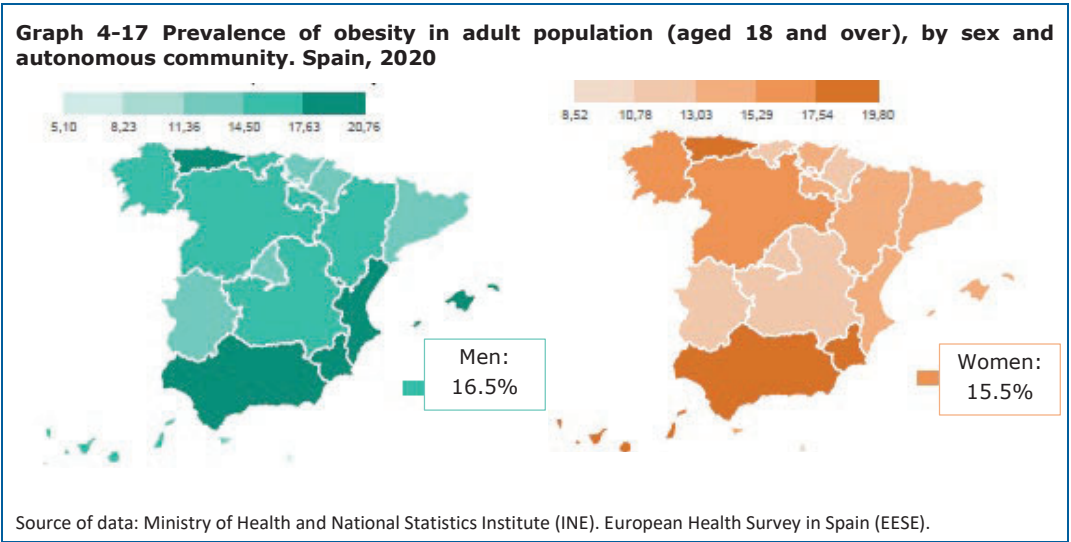
4.2.3 Obesity



Obesity is considered one of the leading risk factors for a considerable number of conditions and chronic health problems, including coronary and cerebrovascular disease, diabetes mellitus, high blood pressure and some types of cancer.

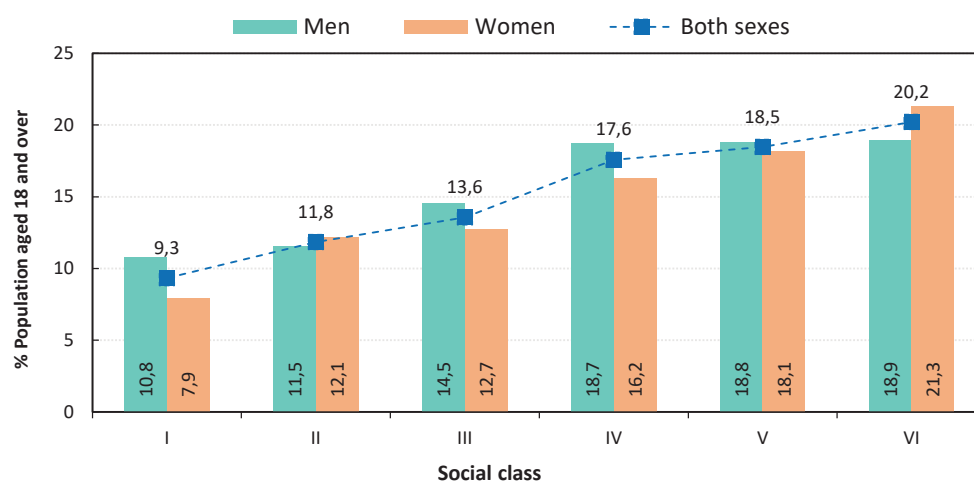
In Spain obesity affects 16.0% of the population aged 18 and over (16.5% of men and 15.5% of women). When considering obesity and overweight in adults jointly, over half (53.6%) of the population has excess weight.

The territories with the highest prevalence of obesity in the adult population are Andalusia (19.7%), Asturias (19.1%) and Murcia (19.1%), while those with the lowest are Melilla (6.8%) and Extremadura (12.8%).



Among the possible associated factors, obesity continues to be significantly related to eating habits and the lack of physical activity, and also to the social class of the household reference person. Obesity affects the less privileged classes (V and VI) more than the other classes, with almost double the figure in men and almost three times in women (with respect to class I).

Graph 4-18 Prevalence of obesity in adult population (aged 18 and over), by sex and social class. Spain, 2020

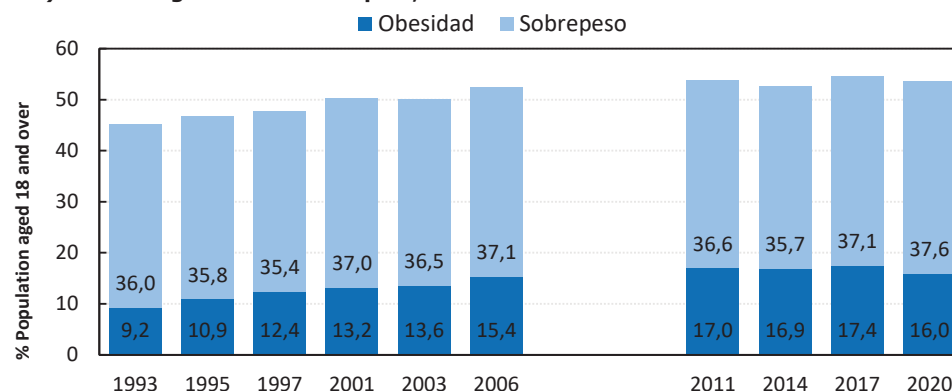


Remarks: the percentages for the category of population whose social class is "unknown" are not shown in the graph.

Source of data: Ministry of Health and National Statistics Institute (INE). European Health Survey in Spain (ESEE).

In the changes in obesity in the adult population from 1993 to 2020 an upward trend is seen from 1993 to 2011 and then a slight decrease with a difference of one percentage point between 2011 and 2020. As for excess weight, the variability has been more discreet, but in 2020 the highest levels in the data series were recorded (37.6%).

Graph 4-19 Changes in the prevalence of excess weight in adult population (aged 18 and over). Percentage distribution. Spain, 1993-2020



Remarks: the term excess weight refers to obesity and overweight considered together.

Source of data: Ministry of Health and National Statistics Institute (INE). Spanish National Health Survey (ENSE) and the European Health Survey in Spain (ESEE).

Excess weight affects more than half of the adult population and shows a very pronounced social gradient, as it affects the less well-off classes (V and VI).

4.2.4 Physical activity



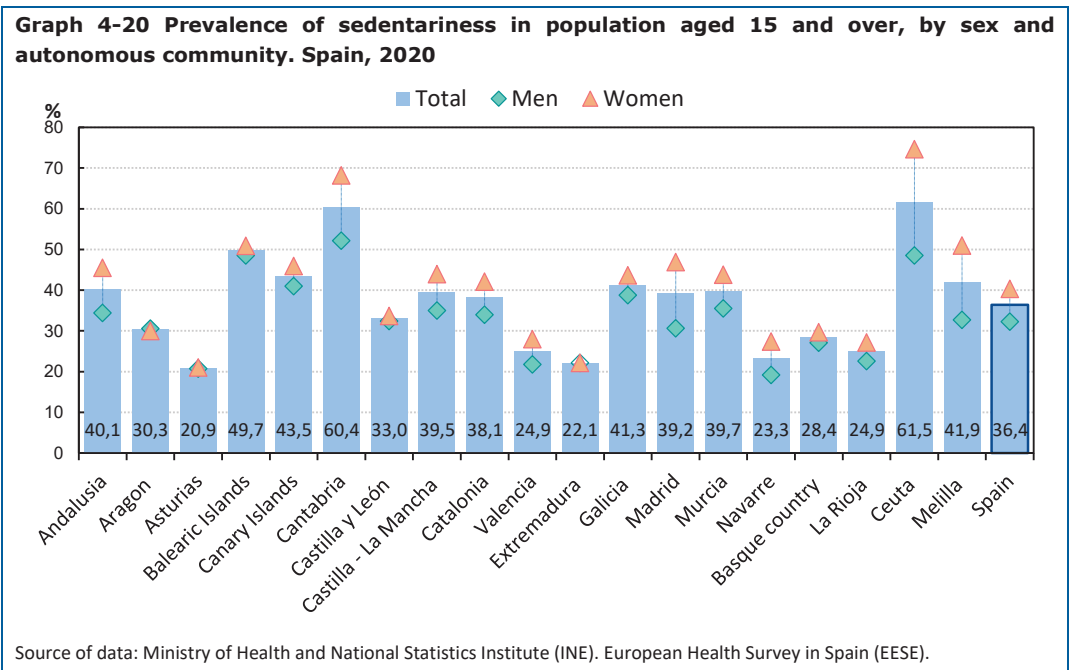
Physical activity reduces the risk of coronary cardiopathy and cerebrovascular accidents, diabetes, high blood pressure and different types of cancer, such as colon and breast, and also the risk of depression. Physical activity is also important in achieving caloric balance and weight control.

Sedentary activities during leisure time

In the population aged 15 and over, 36.4% of the population describe themselves as sedentary during their leisure time, that is, they report not doing exercise but rather filling their free time almost completely with sedentary activities (reading, watching television, going to the cinema, among others).

Sedentariness is more widespread among women (40.3%) than men (32.3%) and it is more present among the less privileged social classes, as shown by the 20.4% in class I and the 46.3% in class VI.

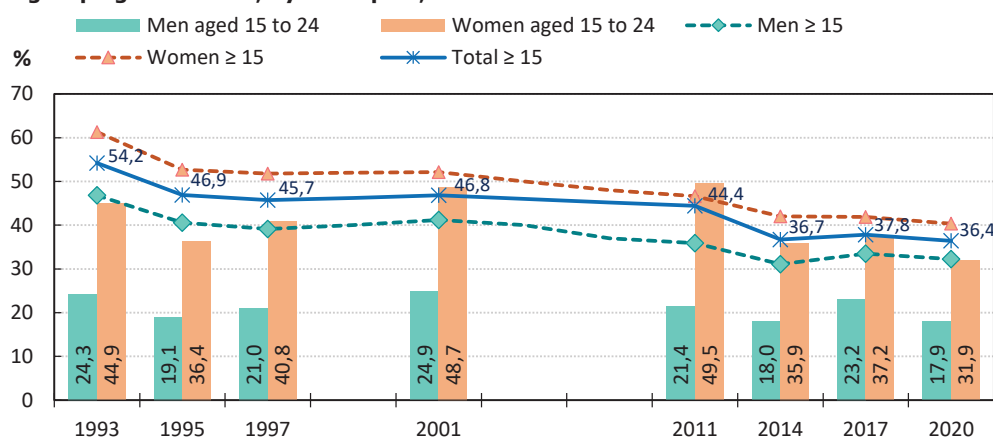
By territory, over half the population of Ceuta (61.5%) and Cantabria (60.4%) is sedentary during its leisure time. In contrast, the lowest percentages of sedentariness are found in Asturias (20.9%) and Extremadura (22.1%).



Over the 1993-2020 period, sedentariness in Spain has evolved in a downward direction, with a significant drop at the beginning of the period and also in 2014. It has remained stable since 2014. The entire time series shows that sedentariness during leisure time is more frequent in women than in men.

The evolution of sedentariness in the subgroup aged 15 to 24 is similar to that of the population aged 15 and over. It is interesting to note, however, that the differences between men and women in this subgroup are much more pronounced, about 14 percentage points in 2020.

Graph 4-21 Changes in the prevalence of sedentariness in population aged 15 and over and in group aged 15 to 24, by sex. Spain, 1993-2020



Remarks: break in the 1993-2017 series. Data from ENSE 2003 and 2006 are not included because the results are not comparable, due to the question being formulated differently. Data from before 2011 refers to population aged 16 and over.

Source of data: Ministry of Health and National Statistics Institute (INE). Spanish National Health Survey (ENSE) and the European Health Survey in Spain (ESES).

Sedentariness during leisure time is evolving slowly but favourably, falling significantly in 2014 and remaining stable thereafter.

5 The healthcare system



The organization of the National Health System of Spain responds to the need to comply with the system's founding principles: universality, solidarity and social justice. To do so, the system must ensure equitable access to its services for all citizens and at the same time optimize the use of available resources based on efficiency criteria.

The healthcare system is organized into two levels of care or care settings. Primary care is the level in which initial and basic care is provided. This level also guarantees harmonization and continuity in the care provided to patients over their lifetime, by serving as administrator and co-ordinator of cases and as case flow manager. The healthcare services within this first level have a high degree of accessibility and sufficient technical capacity for the resolution of frequently-appearing health problems.

Specialised care is the second level of care. It has the system's more complex and costly diagnostic and therapeutic resources and can be accessed, in the first instance, only upon referral by a primary care physician. This specialised care level ensures that complete care for the patient continues when the possibilities of primary care have been exhausted and until such time as the patient can return to the primary care level.

5.1 Healthcare activity

This section examines some of the indicators about the healthcare activity that takes place in the National Health System of Spain (hereinafter SNS), in terms of both care services and preventive actions. It also presents specific data on the healthcare provided in relation to the four large groups of diseases of high prevalence described in section 3.2 of this Report: respiratory diseases, cardiovascular diseases, malignant tumours and mental health disorders.

5.1.1 Preventive healthcare activity

5.1.1.1 Vaccination

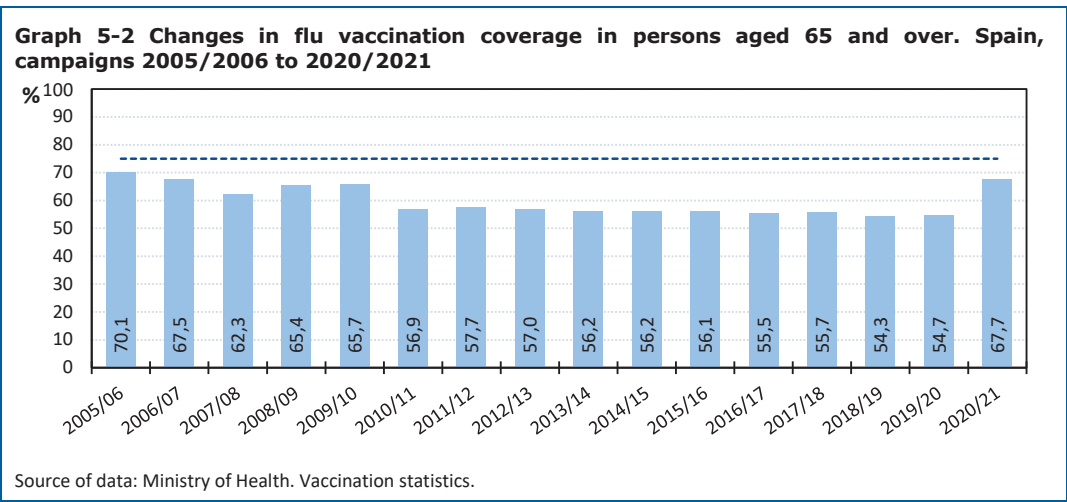
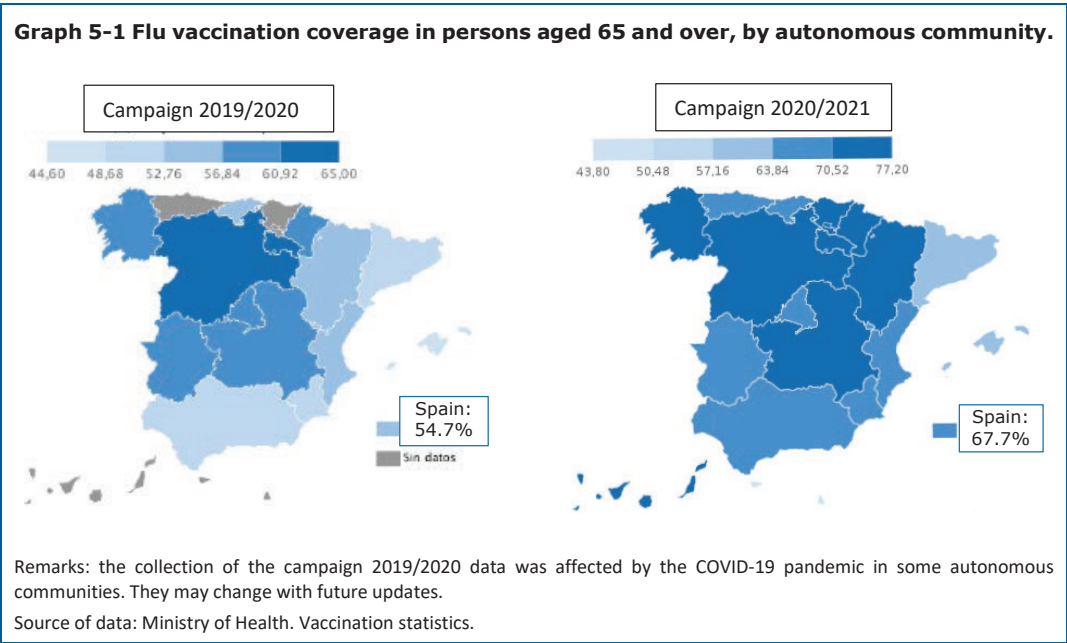
With regard to the recommendations of the standard vaccination calendar for children and adults, which is approved by the Public Health Commission of the CISNS (Interterritorial Council of the SNS), and, specifically, the vaccination calendar recommended for children under 4 years of age, 98% of the children included in the appropriate cohort receive primary vaccination against poliomyelitis, DTaP, Hib, hepatitis B, meningococcal C and pneumococcal disease. The percentage of vaccination coverage for the booster dose is also high, although it drops by about 4 percentage points with respect to the first dose.

As for vaccination coverage against MMR (measles, mumps and rubella) and varicella, the first dose is at about 96% coverage. For the second dose of MMR coverage drops by 2 percentage points and for varicella the drop is more pronounced, around 15 percentage points.

Table 5-1 Childhood vaccination coverage. Spain, 2017-2020				
	2017	2018	2019	2020
PRIMO-VACCINATION				
	Cohort 2016	Cohort 2017	Cohort 2018	Cohort 2019
Poliomyelitis	97.8	98.1	97.5	97.9
DTaP	97.8	98.1	97.5	97.9
Hib	97.8	98.1	97.5	97.9
Hepatitis B	97.8	98.2	97.8	97.9
Meningococcal C	97.8	98.1	97.9	97.8
Pneumococcal	95.0	97.7	97.5	97.8
	Cohort 2015	Cohort 2016	Cohort 2017	Cohort 2018
MMR	97.7	97.9	97.5	96.3
	Cohort 2015	Cohort 2016	Cohort 2016*	Cohort 2017
Varicella	86.1	94.2	95.3	95.4
FIRST BOOSTER DOSE				
	Cohort 2016	Cohort 2017	Cohort 2018	Cohort 2019
Poliomyelitis	94.8	95.5	94.7	94.3
DTaP	94.8	95.5	94.7	94.3
Hib	94.8	95.5	94.7	94.3
Hepatitis B	94.5	95.5	94.7	94.3
Meningococcal C	92.8	94.3	94.6	92.0
Pneumococcal	88.5	94.8	94.2	93.7
	Cohort 2010	Cohort 2011	Cohort 2012	Cohort 2013
Tdap	79.4	89.7	94.2	90.4
	Cohort 2012	Cohort 2013	Cohort 2014	Cohort 2015
MMR	93.1	94.5	94.2	93.9
	Cohort 2013	Cohort 2014	Cohort 2014*	Cohort 2015
Varicella	32.0	43.5	46.7	81.5
Remarks: DTaP: Diphtheria Tetanus acellular Pertussis vaccine (high concentration). Tdap: Tetanus diphtheria acellular pertussis vaccine (low concentration). Hib: Haemophilus influenzae type b Td: tetanus and diphtheria vaccine. MMR: measles, mumps and rubella vaccine. *Varicella: in 2019, in order to show more consolidated data, the cohorts evaluated with respect to 2018 are repeated. In the following years successive cohorts are analyzed.				
Source of data: Ministry of Health. Vaccination statistics.				

5.1.1.2 Vaccination against the flu

In the 2019/2020 campaign, vaccination against seasonal flu in persons aged 65 and over reached a coverage of 54.7%³¹ (ranging from 65.0% in La Rioja to 44.6% in Balearic Islands). In the following campaign, 2020/2021, coverage increased to 67.7%. The increase is observed in all territories, especially Aragon, Castilla-La Mancha and Andalusia (which increased by 20, 19 and 16 percentage points respectively).



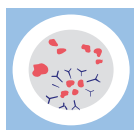
Flu vaccination coverage in 2020/21 in the 65+ group increased by 24% with respect to previous year, breaking the downward trend observed since the 2006/07 campaign and approaching the goal set in Spain of achieving at least 75% coverage.³²



³¹ Doses administered are as reported by the autonomous communities.

³² Interterritorial Council of the SNS Recommendations on vaccination against the flu. Season 2020-2021.

5.1.1.3 Cancer screening



Breast cancer screening began in the 1990s with population screening programmes in all the autonomous communities, which has enabled very broad coverage to be achieved in the population, thanks to high participation and adherence to these programmes. On the other hand, population screening for colorectal cancer began to be introduced mainly in the past decade and in a more gradual way by the autonomous communities, so participation and adherence to the programmes remain low.

Currently, breast and colorectal cancer screening tests are part of the basic service basket of the SNS. Both primary care and specialised care are involved in the screening programmes with the objective of strengthening both types of population screening.

Early detection of colorectal cancer

Almost 32% percent (31.9%) of the population aged 50-69³³ report having had a faecal occult blood (FOB) test in the past two years, without differences by sex. However, the social class gradient shows that the lower socioeconomic classes have fewer FOB tests: 27.6% in social class VI, as opposed to 36.3% in social class I.

By autonomous community, Navarre with 68.7% has the highest coverage, followed by Basque Country (65.4%), Castilla y León (46.6%) and Galicia (45.7%). The lowest coverage, less than 9%, is found in Ceuta (4.1%), Melilla (7.6%) and Balearic Islands (8.1%).

Looking at this indicator over time, a steady increase is observed in the coverage of early testing for colorectal cancer, from 3.4% in 2009 to 31.9% in 2020.

Early detection of breast cancer

Among women of 50 to 69 years of age³⁴ 73.8% report having had a mammogram in the past two years and another 13.5% report having had a mammogram more than two, but less than three, years ago. By territory, Murcia, Basque Country, Navarre and Community of Valencia stand out for having the highest coverage, with participation of over 80%.

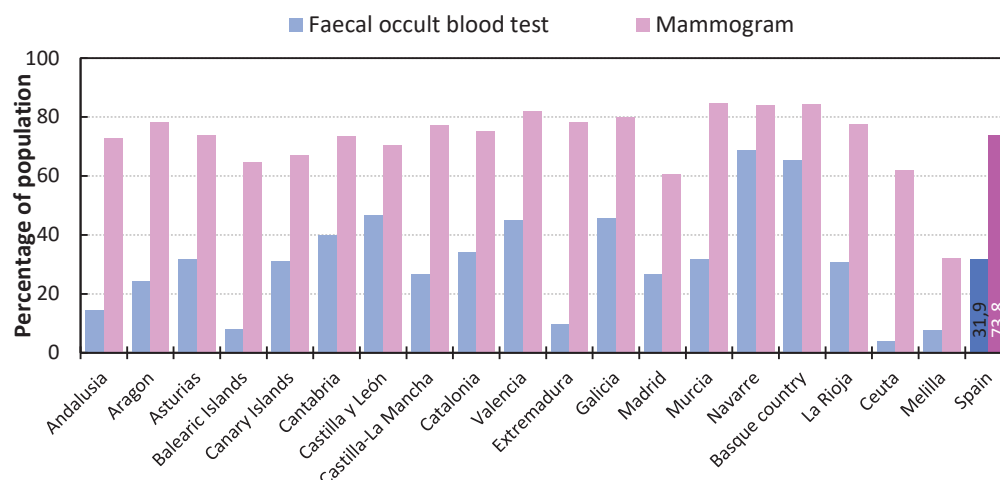
A social class gradient is observed in mammogram coverage, which is lower in the more disadvantaged classes: 70.9% in women of social class VI, compared to 78.2% in social class II.

As for the evolution of this indicator, the upward trend (2009-2017) was broken in 2020 with a drop of 8 percentage points that year with respect to 2017.

³³ Spanish National Health Survey 2019. It measures progress in the recommendation of the SNS Cancer Strategy 2010 that the population aged 50 to 69 should undergo a faecal occult blood (FOB) test every two years. The aim is to attain full coverage ten years following introduction of this screening to the SNS basic service basket (2015), understanding full coverage to mean the target group is invited to take part in the screening without the appearance of a problem, symptom or disease as a motive for having the test.

³⁴ The SNS Cancer Strategy 2010 recommends that women of this age group be screened for breast cancer by having a mammogram every two years. The goal is to reach at least 70% participation.

Graph 5-3 Coverage of programmes for early detection of breast and colorectal cancer, by autonomous community. Spain, 2020



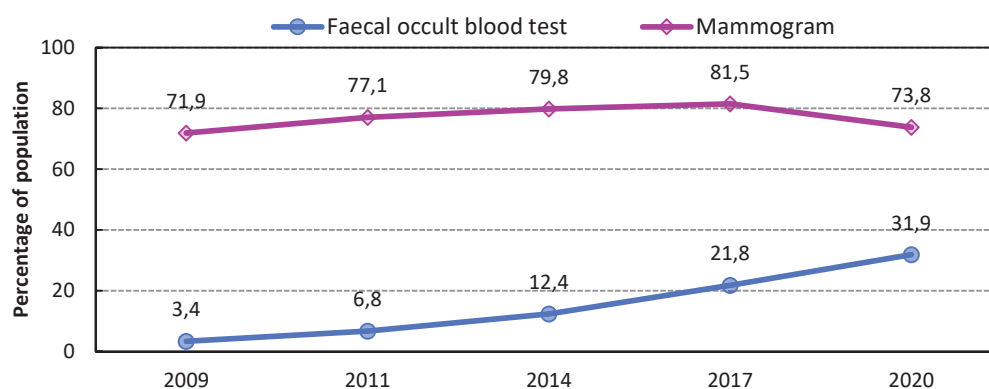
Remarks:

Early detection of colorectal cancer: percentage of persons aged 50 to 69 with faecal occult blood (FOB) test performed at the recommended frequency (every 2 years).

Early detection of breast cancer: percentage of women aged 50 to 69 with mammograms performed at the recommended frequency (every 2 years).

Source of data: Ministry of Health and National Statistics Institute (INE). European Health Survey in Spain (ESEE).

Graph 5-4 Changes in coverage of programmes for early detection of breast and colorectal cancer. Spain, 2009-2020



Remarks:

Early detection of breast cancer: percentage of women aged 50 to 69 with mammograms performed at the recommended frequency (every 2 years).

Early detection of colorectal cancer: percentage of persons aged 50 to 69 with faecal occult blood (FOB) tests performed at the recommended frequency (every 2 years).

Source of data: Ministry of Health and National Statistics Institute (INE). Spanish National Health Survey (ENSE) and the European Health Survey in Spain (ESEE).

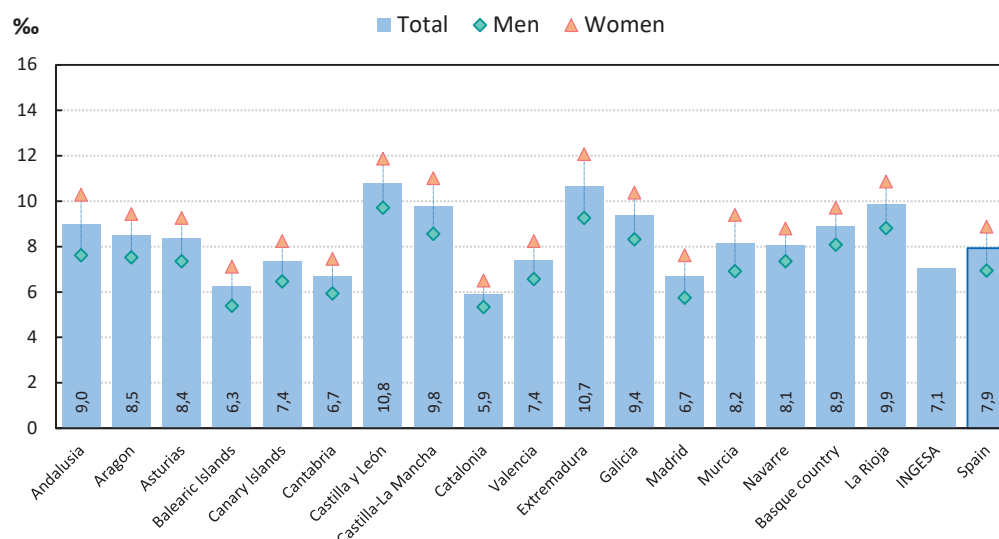
Seven out of 10 women have been tested for breast cancer in the recommended period and three out of 10 people have had the test for the early detection of colorectal cancer in the recommended period.

5.1.2 Primary care activity

In 2019 there was an average number of 7.9 visits per person per year to the physicians and nurses working in primary care settings: 6.9 in the case of men and 8.9 in the case of women.

Castilla y León and Extremadura are where the highest number of visits took place, more than 10 per person per year. Catalonia and Balearic Islands are the communities with the lowest number of visits, with around 6 per person per year.

Graph 5-5 Average number of visits to primary care health centres, by sex and autonomous community, Spain, 2019



Source: Ministry of Health. Primary Care Information System (SIAP).

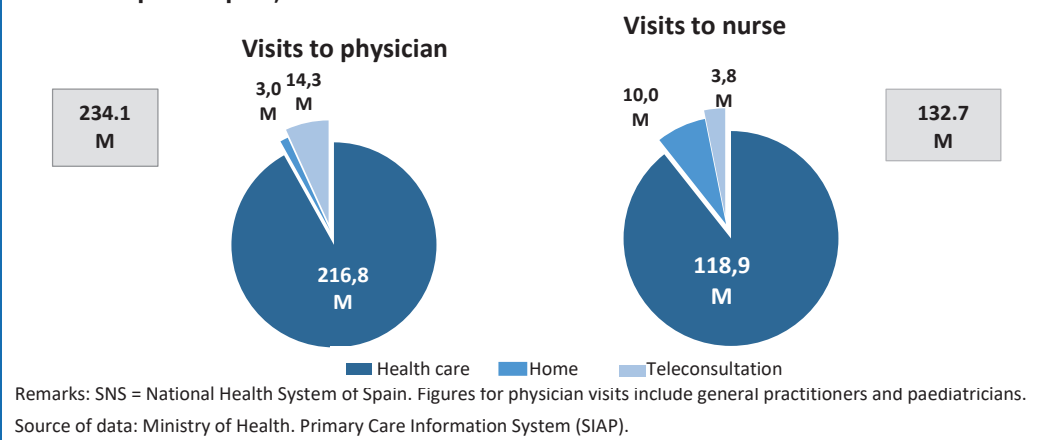
As for where the visit takes place, 96.5% of doctor and nurse visits take place at a health centre (91.5% are in person and 4.9% are teleconsultations) and the remaining 3.5% take place in the patient's home.

Physicians as a group attend 234.1 million visits per year, of which 98.7% take place in a primary care centre or local primary care centre (92.6% in person and 6.1% teleconsultation) and 1.3% in the patient's home.

Nurses as a group attend 132.7 million visits per year. They have a higher percentage of home visits (7.5%) than physicians, with the other 92.5% of the visits taking place at a health care facility (89.6% in person and 2.9% teleconsultation).³⁵

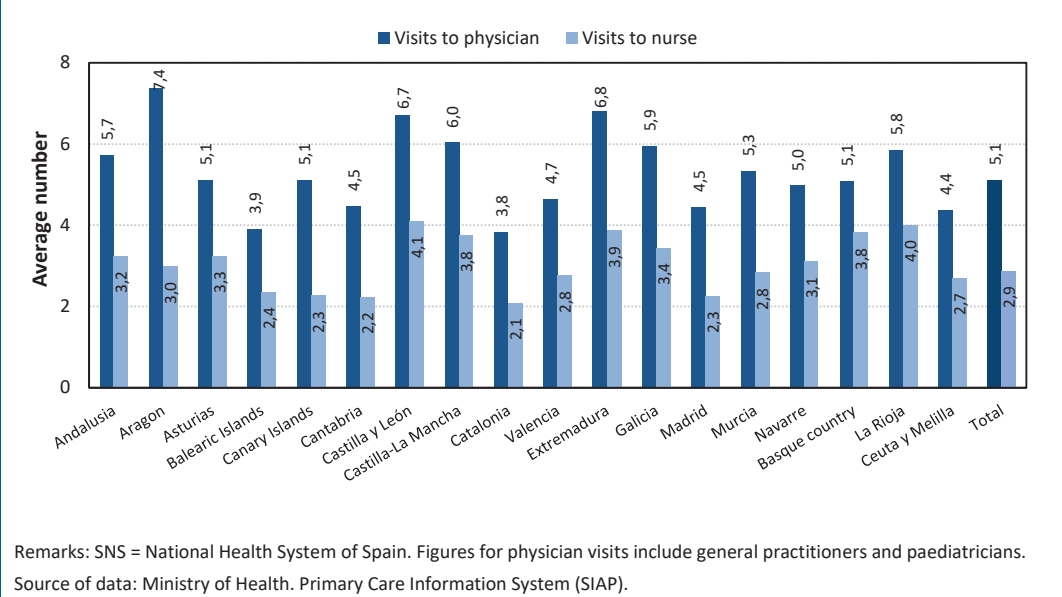
³⁵ After this report's closing date more recent data on primary care were published. SNS primary care doctors attended 243.5 million visits in 2020: of them 55.4% took place in person in health centres, 43.4% were teleconsultations and only 1.2% in the patient's home; the average number of physician visits is 5.3 per person per year. SNS primary care nurses attended 135.7 million visits in 2020: of them 76.5% took place in person in health centres, 15.6% were teleconsultations and 7.9% were in the patient's home; the average number of nurse visits is 2.9 per person per year.

Graph 5-6 Number of visits (millions) in SNS primary care, by type of professional and where visit takes place. Spain, 2019



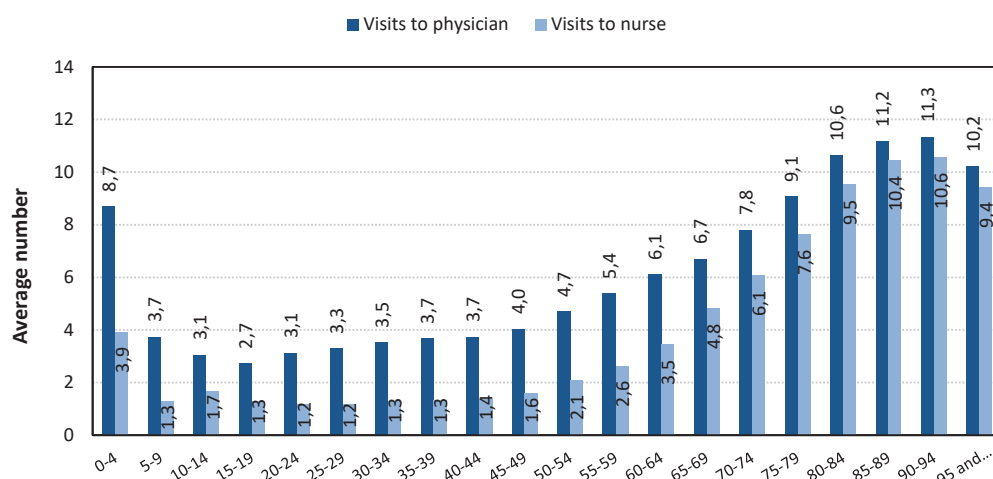
The average number of **visits to a primary care physician** is 5.1 visits per person per year. Aragon (7.4), Extremadura (6.8) and Castilla y León (6.7) are the territories with the highest attendance, while Catalonia (3.8) and Balearic Islands (3.9) have the lowest numbers. The average number of **visits to a primary care nurse** is 2.9 visits per person per year, with Castilla y León (4.0), La Rioja (4.0) and Extremadura (3.9) standing out with the highest numbers, while Catalonia (2.1) and Cantabria (2.2) register the lowest numbers.

Graph 5-7 Average number of visits in SNS primary care, by autonomous community. Spain, 2019



In the group aged 0 to 4 the **average number of visits to physicians and nurses** is 8.7 and 3.9 respectively, with a significant drop in the subsequent age groups; after that the figure remains stable until the 45-49 age group, when it begins to increase progressively until peaking in the 90-94 age group which has on average 11.3 physician visits and 10.6 nurse visits per person per year.

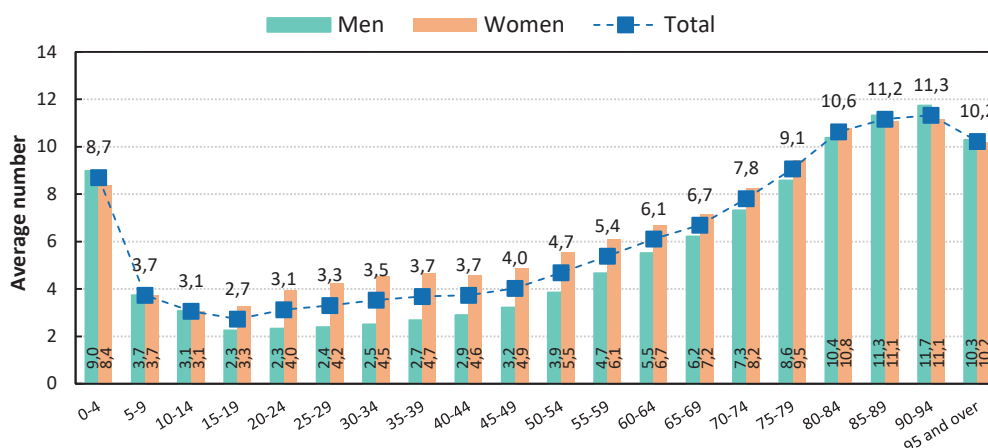
Graph 5-8 Average number of visits in SNS primary care, by age group. Spain, 2019



Remarks: SNS = National Health System of Spain. Figures for physician visits include general practitioners and paediatricians.
Source of data: Ministry of Health. Primary Care Information System (SIAP).

The **average number of visits to primary care physicians** varies by sex. From birth to 4 years of age attendance is slightly higher in the male population, then it evens out during childhood and subsequently, in adolescents, young adults and adults, women go to the doctor much more frequently. The differences smooth out in the following age groups, up to 85-89 years, when men go to the doctor slightly more often.

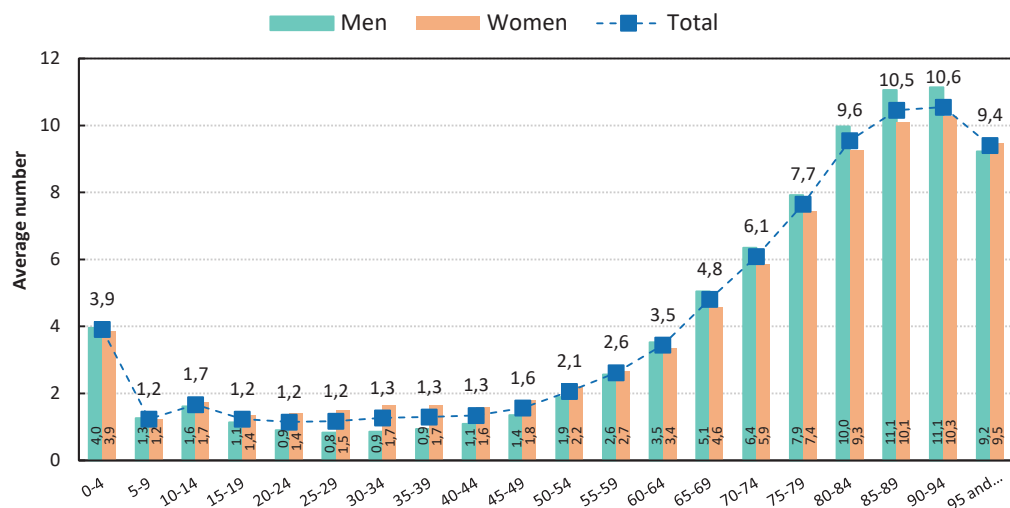
Graph 5-9 Average number of visits to primary care physician in the SNS, by age group and sex. Spain, 2019



Remarks: SNS = National Health System of Spain. Figures for physician visits include general practitioners and paediatricians.
Source of data: Ministry of Health. Primary Care Information System (SIAP).

The **average number of visits to primary care nurses** also varies by sex. From birth to age 9 no differences are found but starting at age 10 greater attendance is observed in women. This continues until age 59, when the trend flips and men start going to the nurse more frequently than women. This difference increases progressively until the 90-94 age group, at which point visits to the nurse drop and the numbers are very similar for both sexes.

Graph 5-10 Average number of primary care nurse visits in the SNS, by age group and sex. Spain, 2019

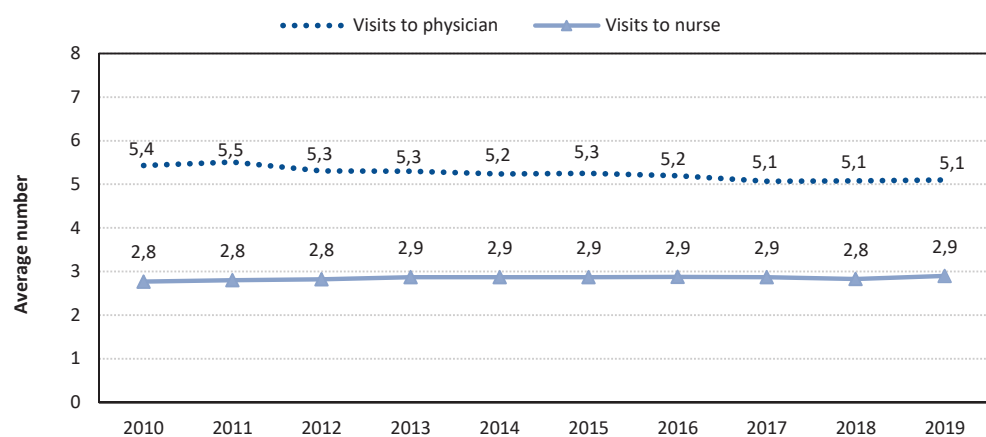


Remarks: SNS = National Health System of Spain.

Source of data: Ministry of Health. Primary Care Information System (SIAP).

In recent years the average number of physician visits has presented a slight downward trend, whereas in nurse visits the numbers have remained very stable over time.

Graph 5-11 Average number of SNS primary care visits, by autonomous community. Spain, 2010-2019



Remarks: SNS = National Health System of Spain. Figures for physician visits include general practitioners and paediatricians.

Source of data: Ministry of Health. Primary Care Information System (SIAP).

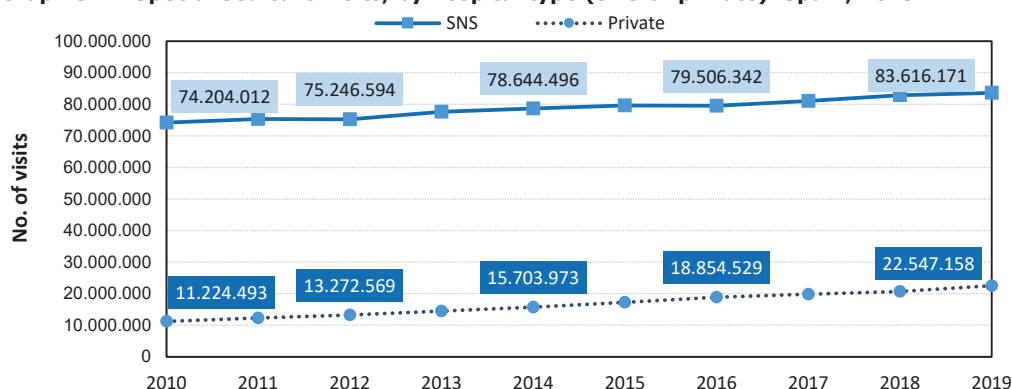
Individuals see a primary care physician an average of 5.1 times per year and a primary care nurse an average of 2.9 times per year.

5.1.3 Hospital care activity

5.1.3.1 Ambulatory visits

In Spain this year 83.6 million **specialised care visits took place at SNS hospitals**, which represents 78.8% of the total in Spain and an increase of 12.7% since 2010.³⁶

Graph 5-12 Specialised care visits, by hospital type (SNS or private). Spain, 2019

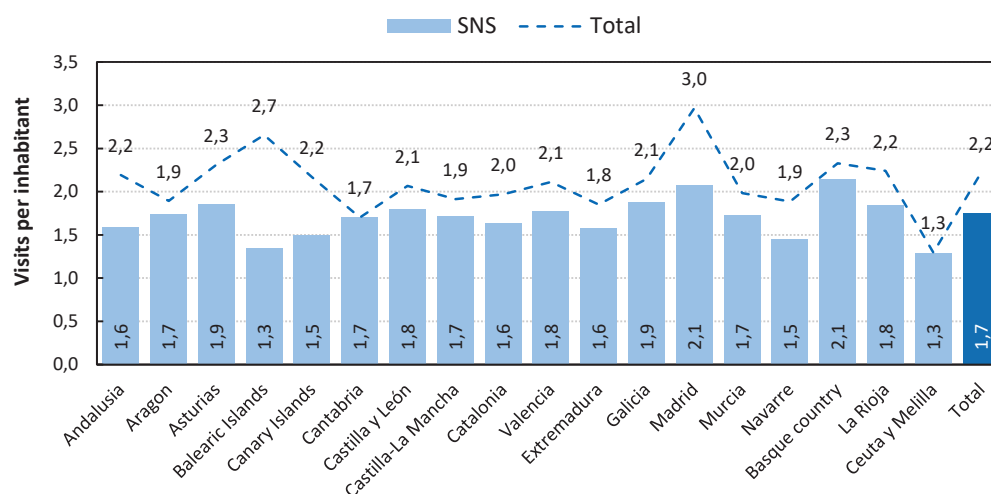


Remarks: SNS = National Health System of Spain. Hospitals considered part of the SNS include: public hospitals + private hospitals with a substitution agreement + hospitals belonging to the Public Use Hospital Network + mutuals that collaborate with the Social Security system. Ceuta and Melilla have only SNS hospitals.

Source of data: Ministry of Health. Specialised Care Information System (SIAE).

The **average number of visits to all specialties at SNS acute care hospitals** is 1.7 visits per person per year. Looking at the average number of visits by territory, the highest figures are found in Madrid (2.1) and Basque Country (2.1). In contrast, Ceuta and Melilla along with Balearic Islands (1.3 in both cases), present the lowest values.

Graph 5-13 Number of specialised care visits at acute care hospitals, SNS and total, by autonomous community. Spain, 2019



Remarks: SNS = National Health System of Spain.

Source of data: Ministry of Health. Specialised Care Information System (SIAE).

³⁶ After this report's closing date the data regarding hospital care services for 2020 was published. In SNS hospital care a total of 72.7 million ambulatory visits with specialists took place, which means 1.5 per person per year.

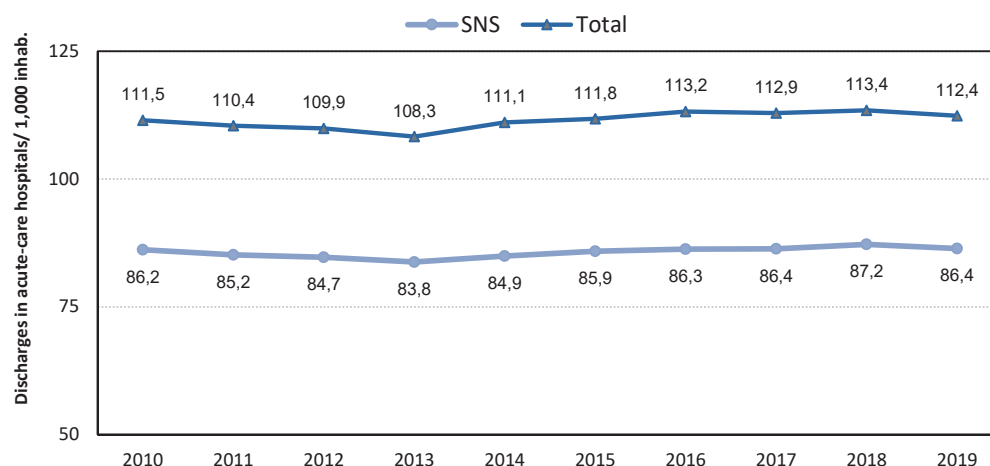
Almost 80% of the ambulatory specialised care visits at acute care hospitals take place within the SNS.

5.1.3.2 Hospitalisations

In SNS hospitals about 4.2 million **discharges** were registered this year: 4.1 million in acute care hospitals of the SNS (75.2% of the total of 5.4 million discharges taking place in the Spanish hospital sector) and 97,212 in long-stay hospitals of the SNS (82.7% of the total of 117,491 discharges in all long-stay hospitals).³⁷

In Spain 7.4% of the population is hospitalised annually. The average number of admissions is 0.1 per person per year. SNS acute care hospitals attend 86.4 hospitalisations for every 1,000 inhabitants and in the total number of acute care hospitals in Spain the figure is 112.4/1,000 inhabitants. The rate of hospitalisations per 1,000 inhabitants has remained stable from 2010 to 2019, both in the SNS and overall.

Graph 5-14 Discharges in acute care hospitals per 1,000 inhab./year, by type of entity (SNS or total). Spain, 2010-2019



Remarks: SNS = National Health System of Spain.

Source of data: Ministry of Health. Specialised Care Information System (SIAE).

The highest rates within the SNS are found in Basque Country (125.6), Asturias (108.0), Castilla y León (101.7) and Aragon (99.5), while Canary Islands (59.7), Andalusia (63.4), Balearic Islands (73.7) and Madrid (80.7) have much lower figures.

5.1.3.3 Average length of stay in hospitals

The average length of stay of patients in SNS hospitals is 7.7 days and declining (it was 8.3 days in 2010).³⁸

³⁷ After this report's closing date healthcare data corresponding to hospital care in 2020 was published. In SNS hospitals around 3.6 million discharges occurred in 2020: 3.5 million in acute care hospitals, 77.9% of the Spanish hospital sector, and 0.1 million in long-stay hospitals, which is 81.6% of the total of long-stay hospitals. In SNS acute care hospitals there are 74.4 discharges per 1,000 inhabitants per year.

³⁸ After this report's closing date the figures for hospital care in 2020 were published. The average stay is 8.1 days: 6.8 in acute care hospitals and 58.8 in long-term care hospitals. The rotation index in SNS hospitals is 31.9 patients per bed.

The average stay depends a great deal on the pathology and type of patient attended and it is also influenced by the considerable proportion of treatments that no longer require admission and instead are provided in ambulatory mode. SNS acute care hospitals present an average stay of 6.4 days and in the case of long-stay hospitals it is 61.5 days.

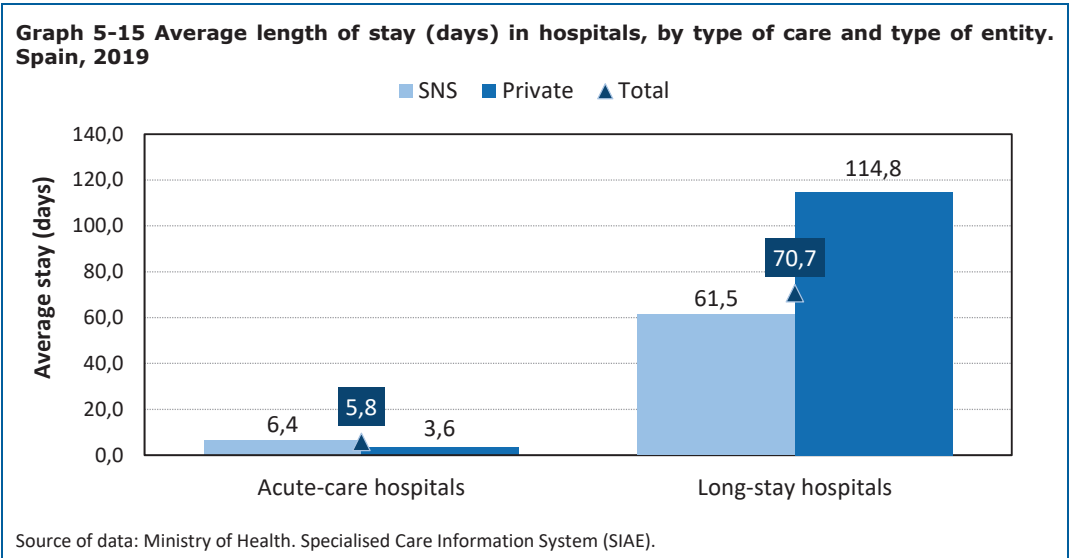
Table 5-2 Average length of stay (days) in hospitals, by type of care and type of entity. Spain, 2010 y 2019

		2010	2019	Diference 2019-2010
Acute-care hospitals	SNS	6.9	6.4	-0.5
	Private	4.0	3.6	-0.4
	Total	6.3	5.8	-0.5
Long-stay hospitals	SNS	91.6	61.5	-30.1
	Private	116.0	114.8	-1.2
	Total	98.5	70.7	-27.9
Total (acute + long-stay)	SNS	8.3	7.7	-0.6
	Private	6.5	5.4	-1.0
	Total	7.9	7.2	-0.7

Remarks: SNS = National Health System of Spain. Total includes data from public sector (SNS) and private sector. Hospitals considered part of the SNS include: public hospitals + private hospitals with a substitution agreement + hospitals belonging to the Public Use Hospital Network + mutuals that collaborate with the Social Security system.

Average stay (days) = Admission generated / discharge.

Source of data: Ministry of Health. Specialised Care Information System (SIAE).



The bed turnover rate, or rotation index,³⁹ in SNS hospitals is 37.1 patients per bed per year, having increased by 2.1 percentage points since 2010.

5.1.3.4 Outpatient surgery in the SNS

The surgical activity at SNS hospitals translates into 3,729,414 surgical procedures per year,

³⁹ Rotation index = Patients discharged/number of available beds.

including both inpatient and outpatient mode.

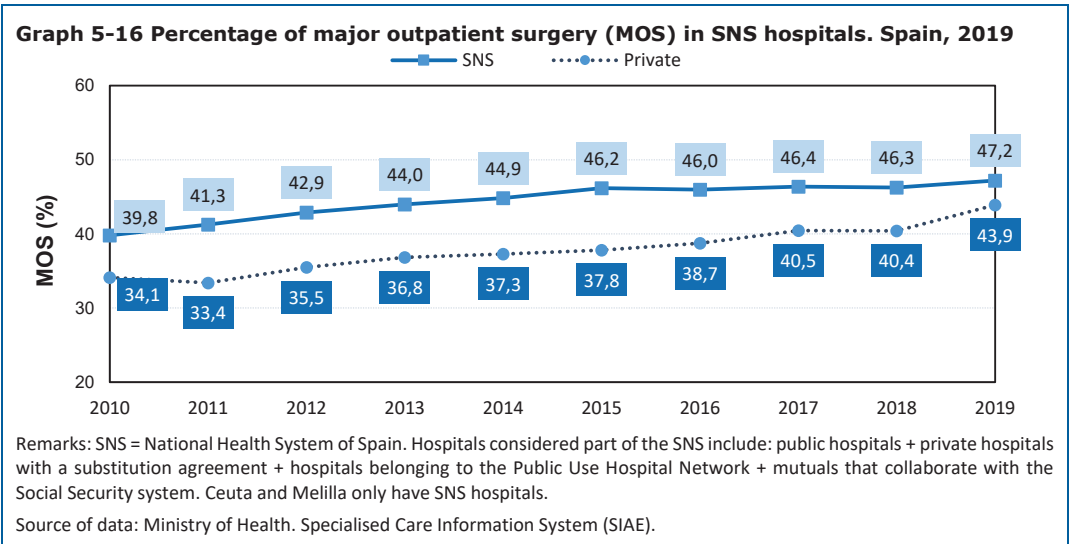
In Spain of the total number of surgical procedures taking place in SNS hospitals, 47.2% of them are major outpatient surgery (MOS).⁴⁰

By autonomous community, Catalonia (52.4%), La Rioja (52.1%) and Madrid (51.2%) have the highest percentage of MOS in SNS hospitals, while Ceuta and Melilla (INGESA; 29.6%), Aragon (35.3%) and Canary Islands (36.0%) present the lowest percentages.

Table 5-3 Percentage of major outpatient surgery in SNS hospitals, by autonomous community and type of entity. Spain, 2019	
	SNS hospitals
Andalusia	49.2
Aragon	35.3
Asturias	43.2
Balearic Islands	45.0
Canary Islands	36.0
Cantabria	41.3
Castilla y León	41.3
Castilla-La Mancha	47.7
Catalonia	52.4
Valencia	47.2
Extremadura	40.2
Galicia	44.7
Madrid	51.2
Murcia	43.3
Navarre	38.0
Basque country	44.2
La Rioja	52.1
Ceuta y Melilla	29.6
Spain	47.2

Remarks: SNS = National Health System of Spain. Hospitals considered part of the SNS include: public hospitals + private hospitals with a substitution agreement + hospitals belonging to the Public Use Hospital Network + mutuels that collaborate with the Social Security system. Ceuta and Melilla have only SNS hospitals.
Source of data: Specialised Care Information System (SIAE).

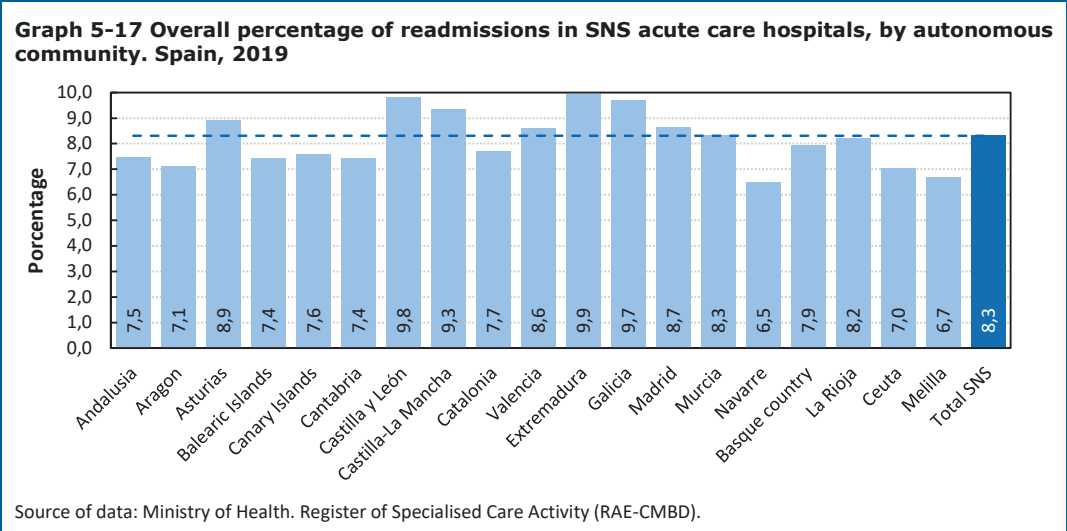
A sustained increase in MOS has been observed over the past 10 years, in both the private and the public sectors.



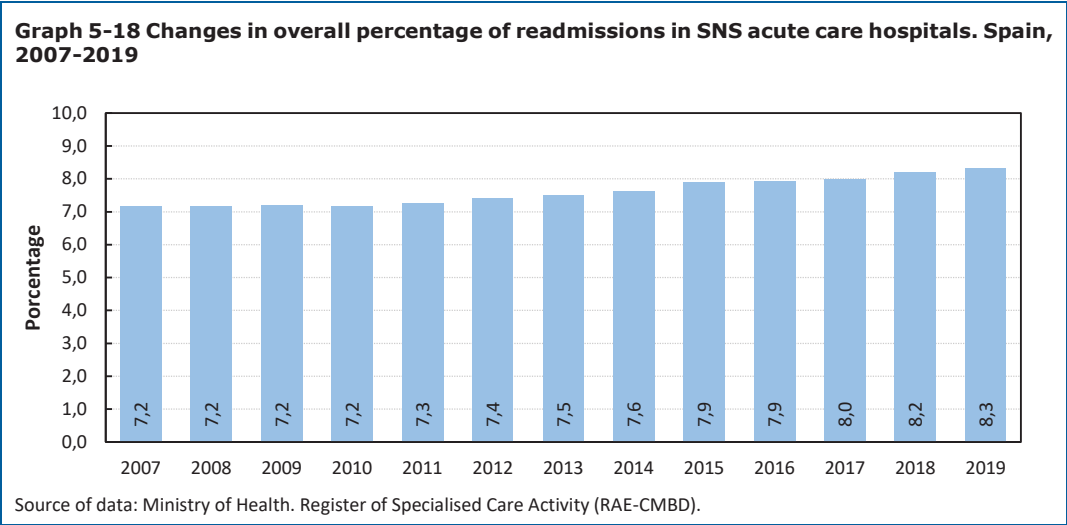
⁴⁰ After this report’s close, the healthcare data corresponding to hospital care in 2020 was published. Major outpatient surgery in SNS hospitals was 45.2% of the total, while in private hospitals it was 44.0%.

5.1.3.5 Readmissions in SNS acute care hospitals

Readmission refers to any unplanned (emergency) admission of a patient, after a previous discharge from the same hospital, in the 30 days following the discharge for the previous episode (index episode).⁴¹ The overall percentage of readmissions in SNS acute care hospitals is 8.3%. The autonomous communities with the highest overall percentages of readmissions are Extremadura (9.9%), Castilla y León (9.8%), Galicia (9.7%) and Castilla-La Mancha (9.3%).⁴²



During the 2007-2019 period, the overall rate of readmissions has shown a slightly upward tendency, moving from 7.2% in 2007 to 8.3% in 2019.



⁴¹ Not including readmissions in which the DRG (Diagnosis Related Groups) of the new admission belongs to one of the following MDC (Major Diagnostic Categories): MDC 21: Injuries, poisonings and toxic effects of drugs. MDC 22: Burns. MDC 25: Multiple significant trauma. For a series corresponding to an entire year, the calculation considers index cases to be those occurring in the first 11 months of the year, except those that were discharges for deceased patients. Calculation is only for SNS hospitals (public hospitals, those belonging to the Public Use Hospital Network, and private hospitals with a substitution agreement). It does not include psychiatric hospitals or long-stay hospitals.

⁴² After this report's closing date the healthcare data corresponding to hospital care in 2020 was published. The overall percentage of readmissions to SNS acute care hospitals in the 30 days following a previous discharge was 8.0%.

5.1.4 Emergency and urgent care

The SNS has three organizational spheres to respond to the population's emergency and urgent care needs: the primary care level, the emergency departments at hospitals and the co-ordination and the Urgent Care and Emergency Services linked to the telephone hotlines 112 and 061.

5.1.4.1 Urgent care at primary care level

Annualmente During the year a total of 30,672,653 urgent care visits are attended at the primary care level (2019), of which 1.6 million take place at the patient's home. The average is thus 0.66 urgent care visits per person per year, with urgent visits to the doctor twice as high (0.62) as urgent visits to the nurse (0.28).^{43, 44}

By age, in the 0-4 group the number of urgent visits in primary care is 1.2 times per year, with a notable reduction in the next two age groups, which have 0.7 visits per year, to subsequently climb again in the group of young people aged 20-24, and then remaining stable at around 0.6 during the rest of adulthood. Starting at age 70 the number begins to increase progressively until it reaches 1.3 visits per person per year in the highest age group (95 and over).

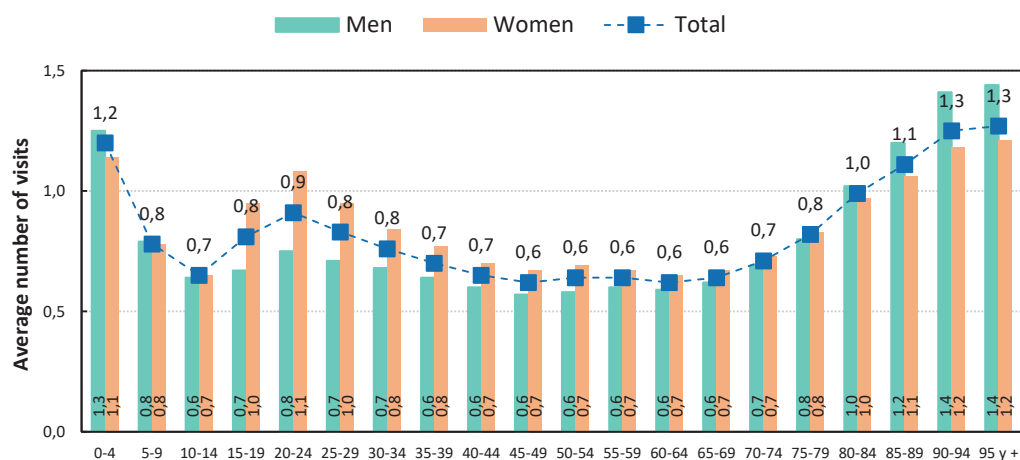
In urgent care services provided at the primary care level the average number of visits is high (one or more visits per year) in children under 5 and in persons aged 80 and over.

Up to age 4 the urgent attendance rate of boys is slightly higher than that of girls, although later in childhood that trend is inverted. During adolescence and youth, women seek urgent primary care more often than men although the differences between the sexes progressively subside in subsequent age groups, up to age 80-84, when the trend is reversed and it is men who seek this kind of care more frequently.

⁴³ The primary care setting plays a relevant role in the care and resolution of a large volume of urgent healthcare needs. At the primary care level, during the normal operating hours of the primary care centres, all persons who go directly to these centres to receive care, or who request urgent care at their homes, or are sent to the primary care centre after calling the 112/061 Urgent Care and Emergency Services, are attended every day. When the primary care centres are closed, or during the same operating hours in some cases, urgent care is provided by primary care centres with special urgent care hours and also by non-hospital urgent care centres and services.

⁴⁴ After this report's closing date the healthcare data corresponding to urgent care provided at the primary care level in 2020 were published. There were 24.5 million urgent visits in primary care, which means an average of 0.53 visits per person per year: 0.49 for a visit with a doctor and 0.19 for a visit with a nurse.

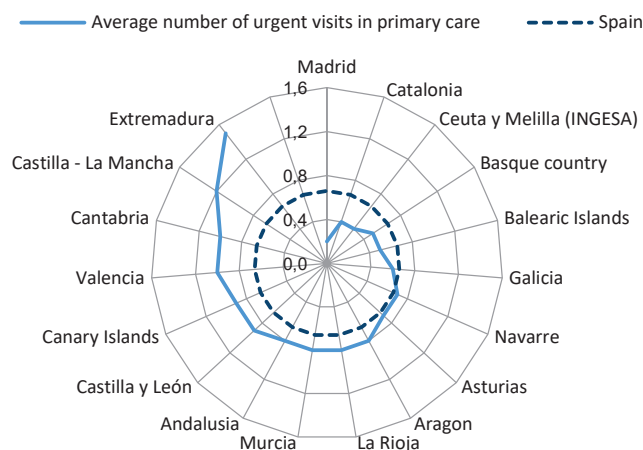
Graph 5-19 Number of urgent visits in primary care, by age and sex. Spain, 2019



Source of data: Ministry of Health. Primary Care Information System (SIAP).

By autonomous community, urgent primary care attendance is lower than the national average in Madrid (0.2), Catalonia (0.4) and Ceuta and Melilla (INGESA) (0.4), and it is higher in Extremadura (1.5), Castilla-La Mancha (1.2), Cantabria and Valencia (1.0).

Graph 5-20 Number of urgent visits in primary care, by autonomous community. Spain, 2019

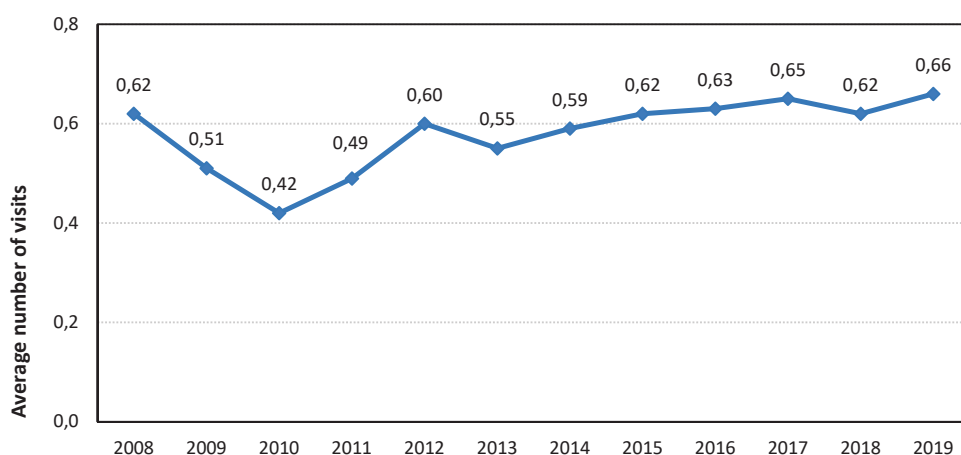


Remarks: territories arranged in order of attendance, from lowest to highest.

Source of data: Ministry of Health. Primary Care Information System (SIAP).

Averages have remained practically unchanged in the past ten years with a discreet upward trend, except in the 2009-2011 period, when they dropped by about 0.2 points (2010).

Graph 5-21 Number of urgent visits in primary care. Spain, 2010-2019



Source of data: Ministry of Health. Primary Care Information System (SIAP).

With regard to urgent care provided at the primary care level, boys aged 0 to 4 go more often than girls, but during adolescence, youth and adulthood, the average number of visits by women is much higher. However, starting at age 84, the pattern is inverted once again and the average is considerably higher in men.

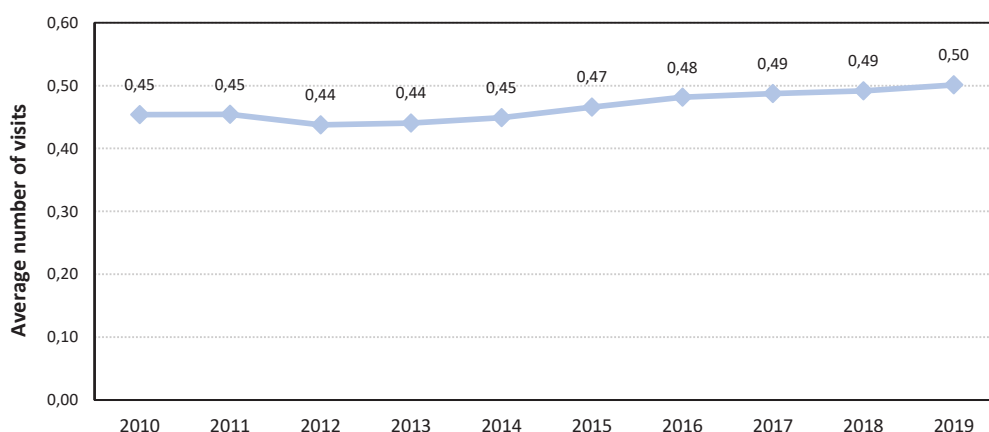
5.1.4.2 Emergency care at hospitals

The average number of visits to emergency care services located in SNS hospitals (both acute care and long-stay) is 0.50 times per person per year, which is a total of 23,602,940 urgent cases attended annually (2019).⁴⁵

Urgent visits to the specialised care level have clearly risen since 2012, and between 2010 and 2019 it has increased in all territories except Navarre.

⁴⁵ After this report's closing date the healthcare data corresponding to emergency care provided at hospitals in 2020 were published. About 17.2 million emergency visits to SNS acute care hospitals took place, which represents 75% of all the emergency visits to hospitals. For SNS hospitals the average number is 0.36 visits per person per year.

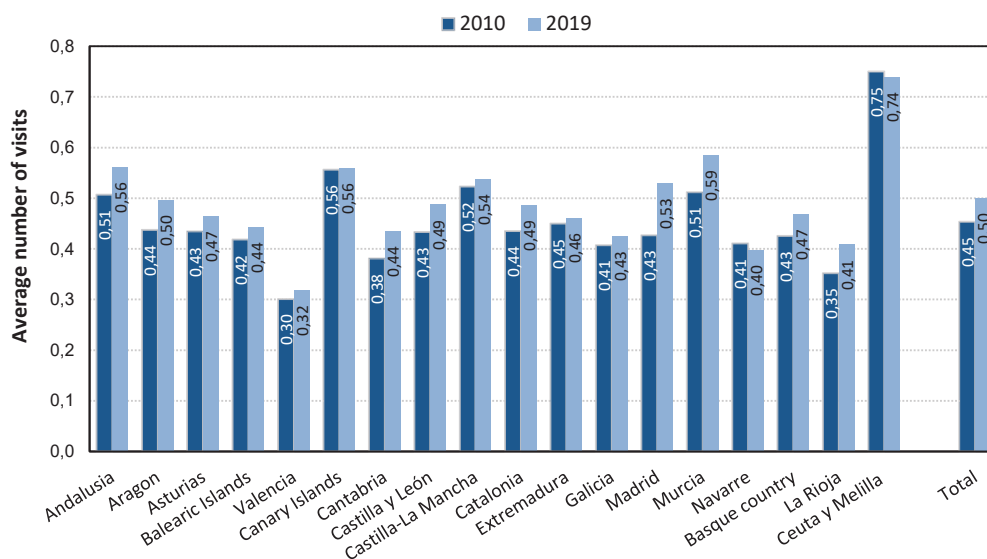
Graph 5-22 Average number of visits to SNS emergency departments. Spain, 2010-2019



Source of data: Ministry of Health. Specialised Care Information System (SIAE).

By autonomous community, the lowest average number of visits to the emergency departments of SNS hospitals is found in Valencia (0.32), Navarre (0.40) and La Rioja (0.41), and the highest is found in Ceuta and Melilla (0.74), Murcia (0.59), Andalusia and Canary Islands (0.56 in both).

Graph 5-23 Average number of visits to SNS emergency departments, by autonomous community. Spain, 2019



Source of data: Ministry of Health. Specialised Care Information System (SIAE).

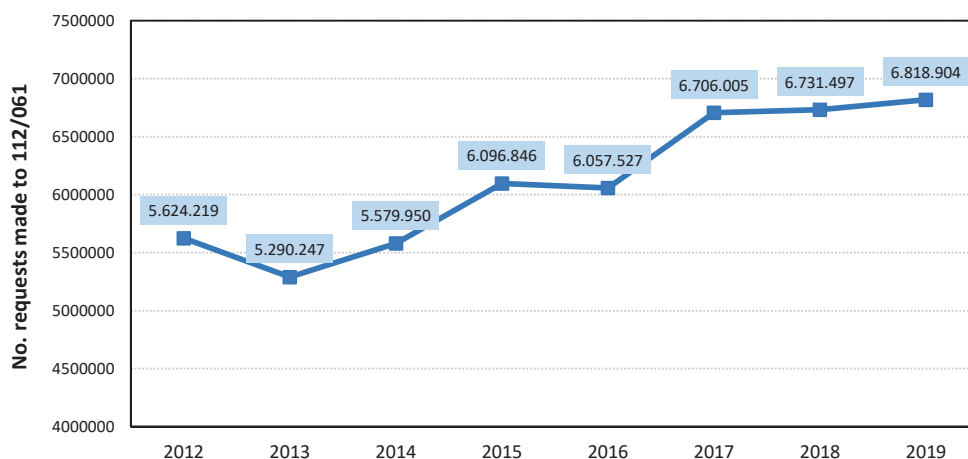
The number of visits to the emergency departments of hospitals has shown a clear upward trend since 2012.

5.1.4.3 The 112/061 Urgent Care and Emergency Services

The number of care requests made by telephone to the 112/061 Urgent Care and Emergency Services is calculated to be 6.8 million (2019). The figures have been variable in recent years but show a clear upward trend.⁴⁶

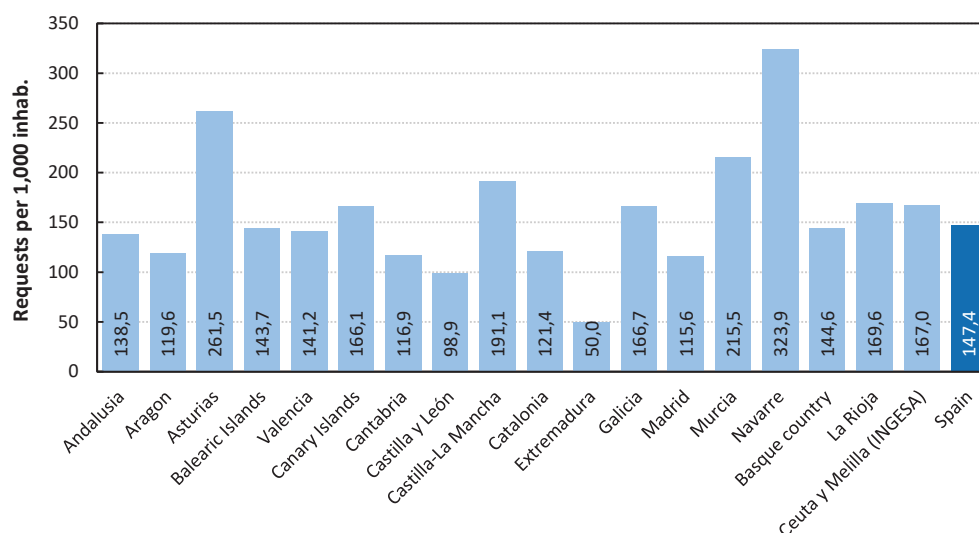
The average number of requests of this type is 147.4 per 1,000 inhabitants, but much lower in Extremadura (50.0), Castilla-La Mancha (98.9) and Madrid (115.6), while the numbers in Navarre (323.9), Asturias (261.5), Murcia (215.5) and Catalonia (191.1) stand out for being much higher than the national average.

Graph 5-24 Care requests made to 112/061 Urgent Care and Emergency Services. Spain, 2012-2019



Source of data: Ministry of Health. Primary Care Information System (SIAP).

Graph 5-25 Care requests made to 112/061 Urgent Care and Emergency Services, by autonomous community. Spain, 2019



Source of data: Ministry of Health Primary Care Information System (SIAP).

⁴⁶ After this report's closing date the 2020 data on the 112/061 Urgent Care and Emergency Services was published: 9.1 million requests, 196.1 per 1,000 inhabitants.

5.1.5 Morbidity attended

This section looks at certain characteristics of the healthcare provided specifically in relation to the four large groups of high prevalence diseases described in section 3.2 of this report: respiratory diseases, cardiovascular diseases, malignant tumours and mental health disorders. The following aspects of care in these processes are described: visits generated in primary care, visits generated in hospital care, care provided at emergency services, admissions and certain indicators about care provided during the hospitalisation, such as in-hospital mortality for these causes and breast-conserving surgery in the case of breast cancer.⁴⁷

5.1.5.1 Care provided to patients with respiratory diseases



This year there are 12.2 **visits to primary care health centres by each person with respiratory disease**, approximately 50% more than in the general population.

The **pneumology services** at SNS hospitals receive over 220,000 **initial consultations by patients referred by primary care**. In addition, these diseases are the fourth most frequent cause of **care at emergency services**, with 2 million annual emergencies due to this cause, approximately 40 per 1,000 inhabitants.

To these cases it is necessary to add the 492,951 annual **admissions** (10.3 per 1,000 inhabitants in 2019) in which the main cause of hospitalisation is a respiratory problem. Practically 9 out of 10 patients are admitted using the emergency protocol and they stay at the hospital an average of 7 days. In addition, in 24% of the discharges occurring in the SNS some kind of disease or disorder of the respiratory system appears as a secondary diagnosis, COPD being the most frequent (32%).

As regards **in-hospital mortality**, for patients admitted for a respiratory disease, the rate is 6.9%, which is 50% higher than the overall rate for all causes.

There are 21.9 **visits to primary care health centres** per year per person with **COPD**, about 2.7 times higher than the general population.

COPD is the cause of around 2.1 **admissions** per year per 1,000 inhabitants, 97,969 in 2019. Added to these figures are the 7,710 cases that are attended in ambulatory mode. Of the persons admitted, 74% are men, although the average stay (8.1 days) and the average stay in the ICU (6.7 days) do not present large variations by sex.

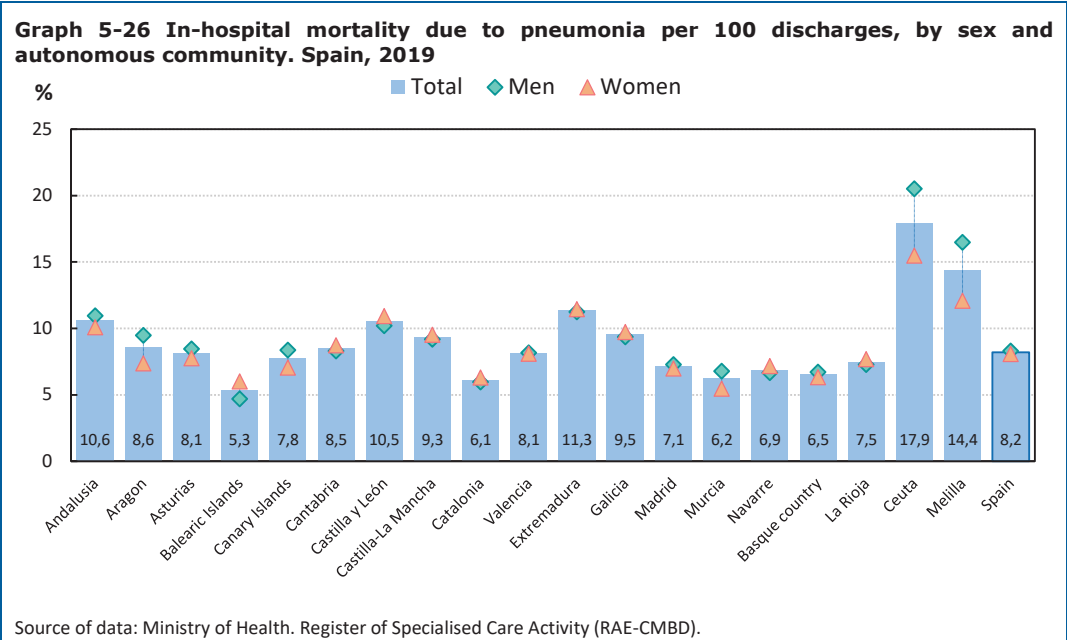
People with **pneumonia** go to primary care health centres every year 2.5 times more than the general population.

Pneumonia causes around 2.2 **admissions** per year per 1,000 inhabitants, 101,799 in 2019. In addition to these figures there are the 1,393 cases attended in ambulatory mode. Of the admissions, 55% are men, although the average stay (7.9 days) and the average stay in the ICU (8.6 days) do not show large variations by sex.

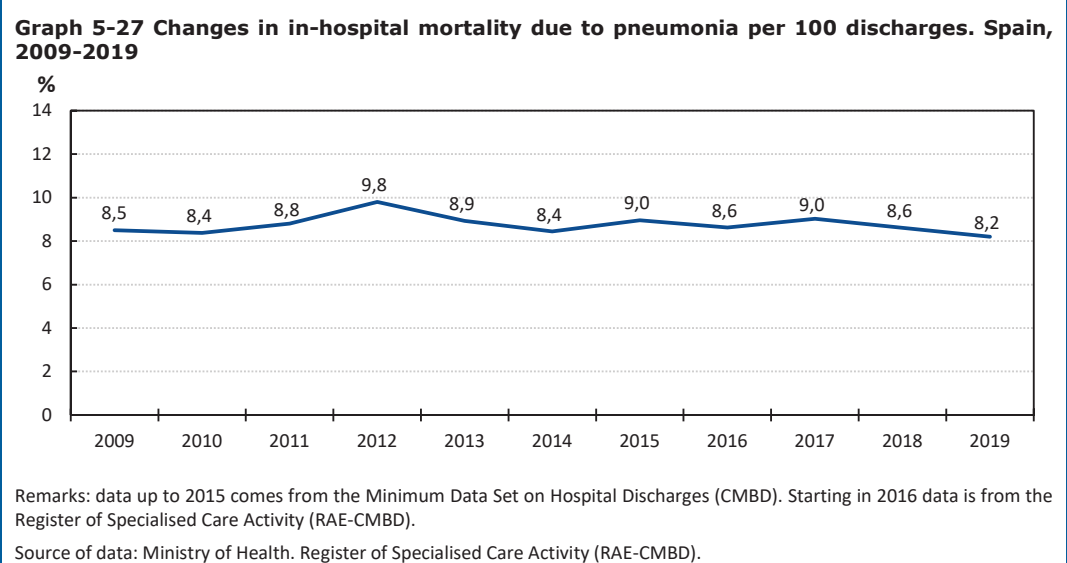
In Spain, **in-hospital mortality due to pneumonia** for every 100 discharges with this diagnosis is 8.2%, with no difference between men (8.3%) and women (8.1%).

Looking at the different territories, the lowest mortality is in Balearic Islands, Catalonia and Murcia, and the highest is in Ceuta and Melilla, Extremadura and Andalusia.

⁴⁷ The healthcare data provided in this section refers to facilities belonging to the SNS (facilities that are publicly owned and funded and also private facilities that receive public funding).



In the 2009-2019 period in-hospital mortality due to pneumonia has been stable, both in men and women, with an average of 8.8%.



Almost 500,000 admissions annually have respiratory problems as the main cause of hospitalisation.

5.1.5.2 Care provided to patients with cardiovascular diseases



There is an annual average of 15.4 **visits to primary care health centres by each person with cardiovascular disease**, practically twice that of the general population.

The **cardiology services** attend 853,350 **initial consultations** every year and almost two million **follow-up appointments**. Additionally, it is estimated that almost 500,000 of the emergencies attended every year for these diseases do not require admission.

Cardiovascular diseases are the most frequent cause of **hospitalisation**. They represent 14% of the admissions to SNS hospitals and 11.9 admissions per year for every 1,000 inhabitants. Furthermore, they are the most frequent cause of comorbidity in cases of hospitalisation, with hypertension (36%) and cardiac arrhythmias (13%) being the most common, along with diabetes, lipid alterations and smoking.

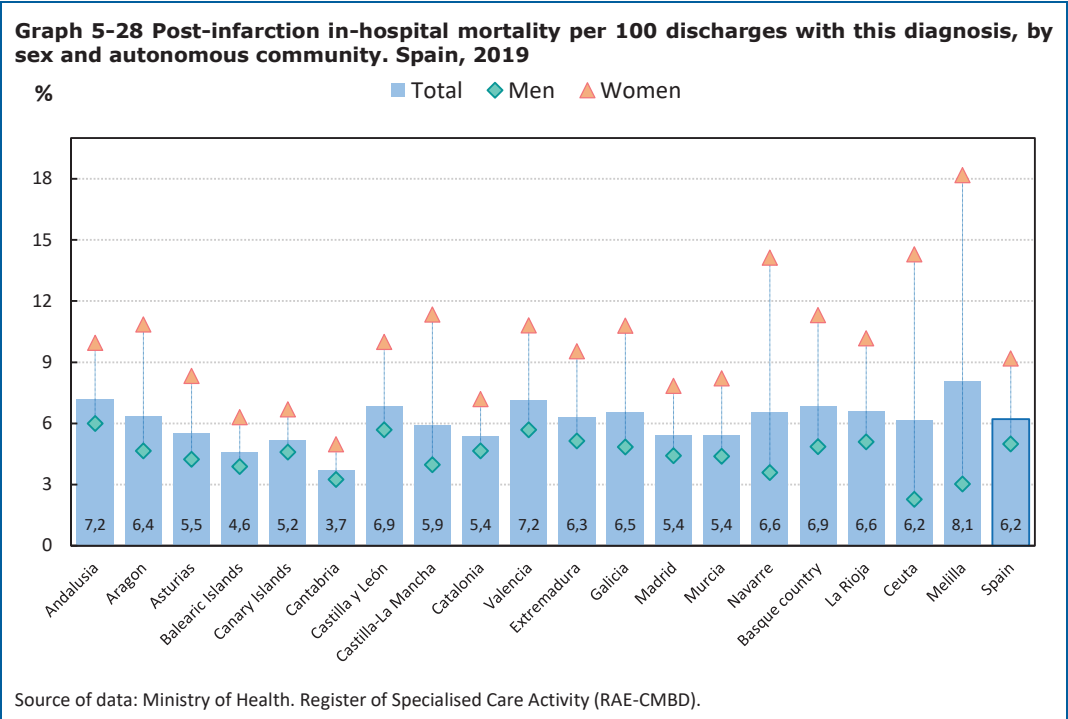
Among the cardiovascular diseases ischaemic heart disease is the most frequent cause of hospitalisation, along with acute cerebrovascular diseases (stroke), hypertension, congestive heart failure and cardiac arrhythmias.

People with **ischaemic heart disease** generate 22.1 **visits to primary care health centres** per person per year, 2.6 times more than the general population.

A total of 103,661 **admissions** took place this year (2019) for this cause, 2.2 for every 1,000 inhabitants, in addition to the almost 22,000 cases of patients who undergo outpatient surgery. By sex, 7 out of 10 patients are men and no notable differences by sex are observed in average stay (6.2 days) and the average stay in the ICU (2.7 days).

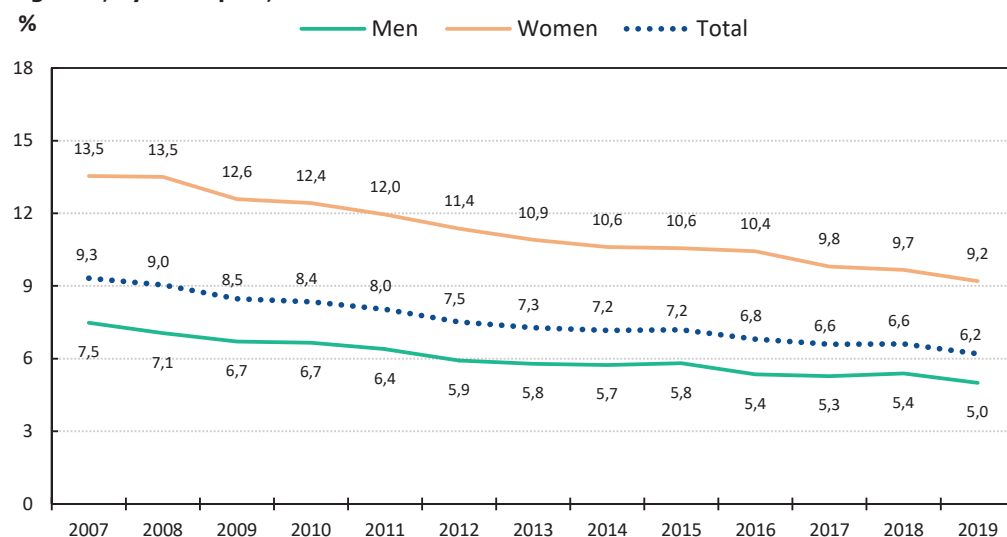
Post infarction in-hospital mortality is 6.2 for every 100 discharges with this diagnosis, twice as many in women (around 10%) as in men (5%).

By territory, the lowest mortality is found in Cantabria (3.7%) and Balearic Islands (4.6%) and the highest in Melilla (8.1%), Andalusia (7.2%) and Valencia (7.2%).



In the 2007-2019 period post-infarction in-hospital mortality has shown a downward trend, in both men and women, dropping about 3 and 4 percentage points respectively in 2019.

Graph 5-29 Changes in post-infarction in-hospital mortality per 100 discharges with this diagnosis, by sex. Spain, 2007-2019



Remarks: data up to 2015 comes from the Minimum Data Set on Hospital Discharges (CMBD). Starting in 2016 data is from the Register of Specialised Care Activity (RAE-CMBD).

Source of data: Ministry of Health. Register of Specialised Care Activity (RAE-CMBD).

Cardiovascular diseases are the most frequent cause of hospitalisation, representing 14% of total admissions in the SNS.

There is an average of 22.8 **visits to primary care health centres per person per year** in the population with **cerebrovascular disease**, 3 times more than in the general population.

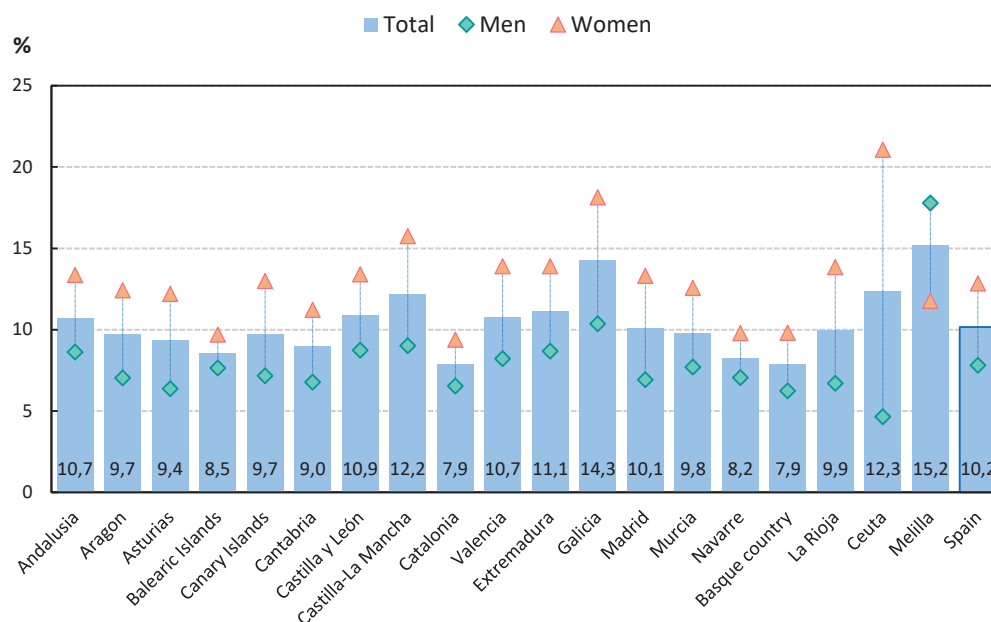
For this cause 83,802 **admissions** take place this year (2019), 1.8 for every 1,000 inhabitants, to which the almost 2,600 cases of patients who are treated as outpatients must be added. Of the patients admitted, 53.7% are men and there are no sex differences as regards average stay (10.7 days) and average stay in the ICU (6.5 days).

In-hospital mortality due to ischaemic stroke affects 10.2% of the discharges for this cause, with a marked difference between the sexes: men (7.8%) vs. women (12.8%).

In the 2010-2019 period the figure has fallen from 11.9% to 10.2%. The drop can be seen in both men and women, although in men the reduction has been greater, around 3 percentage points.

The highest percentages, above 12.0%, are found in Melilla, Galicia, Ceuta and Castilla-La Mancha, and the lowest percentages, below 9.0%, are in Catalonia, Basque Country, Navarre and Balearic Islands. The differences between the sexes are also visible in the territories, with mortality higher in women than in men, except for Melilla where in men it is 6 percent higher.

Graph 5-30 In-hospital mortality due to ischaemic stroke, by sex and autonomous community. Spain, 2019

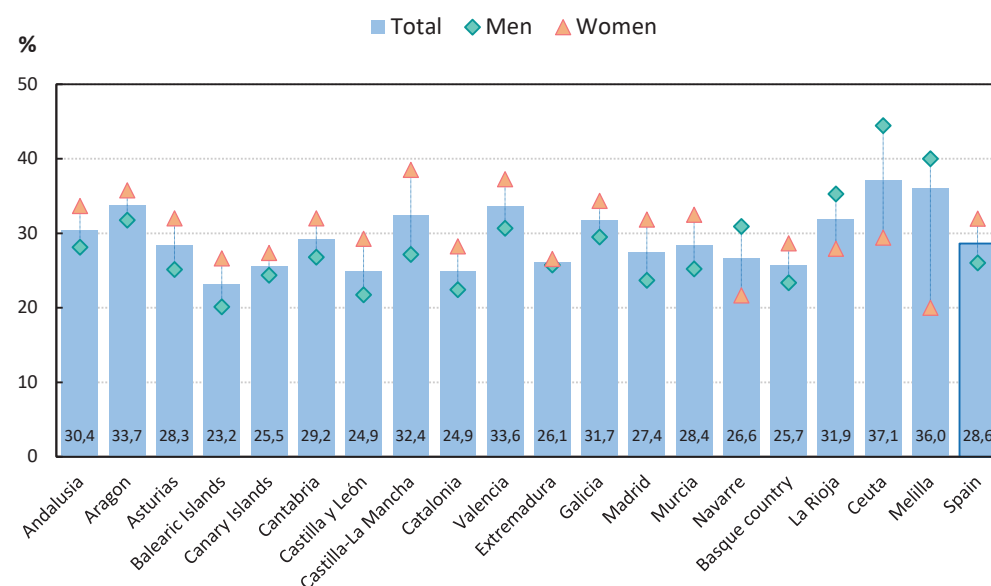


Source of data: Ministry of Health. Register of Specialised Care Activity (RAE-CMBD).

As for **hemorrhagic stroke**, in-hospital mortality is 28.6%, more than twice that of ischaemic stroke, and it is also higher in women than in men.

The highest percentages, above 32.0%, are found in Ceuta, Melilla, Aragon and Valencia, and the lowest percentages, below 25.0%, are in Balearic Islands, Castilla y León and Catalonia. Looking at territories, mortality in general is higher in women than in men, and Castilla-La Mancha stands out with a difference of 11 percentage points. Melilla, however, stands out for having 20% more mortality in men than in women.

Graph 5-31 In-hospital mortality due to hemorrhagic stroke, by sex and autonomous community. Spain, 2019



Source of data: Ministry of Health. Register of Specialised Care Activity (RAE-CMBD).

During the period from 2010 to 2019, in-hospital mortality due to hemorrhagic stroke has been stable, both in men and women, and with hardly any variability between territories.

Cerebrovascular diseases cause 83,802 hospitals admissions during the year and nearly 2,600 more patients are attended in outpatient mode.

5.1.5.3 Care provided to patients with mental health disorders



This section describes primary care visits, psychiatric hospitalisations and emergency readmissions. It also looks at the use of antidepressants, hypnotics and sedatives by studying their defined daily doses per 1,000 inhabitants per day (DDI).⁴⁸ This information is obtained from the data on the invoicing of SNS medical prescriptions dispensed at dispensing pharmacies and financed by the public funds of the autonomous communities and INGESA, and it includes the medicines prescribed by the insurance mutuels for civil servants (MUFACE, MUGEJU and ISFAS). Since 2016 it also includes the use of medicines in the hospitals of the SNS public network. The consumption indicators selected are widely recognized in international working groups, taking into account the most common mental illnesses, and therefore are well known internationally.

Visits and hospitalisations

People with mental health disorders made 13.1 **visits to primary care health centres** during the year, about 50% more than the general population.

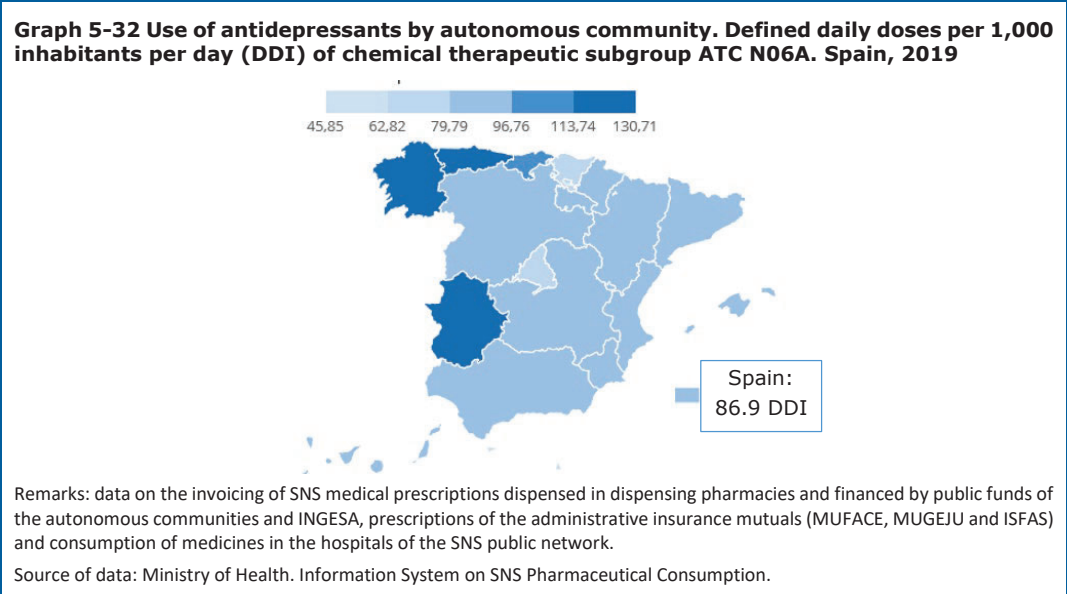
As for **specialised care** in the area of psychiatry, 5,287,638 visits took place in 2019, which represents 5.0% of the total number of specialised visits. Approximately 94.4% of the visits in psychiatric specialised care were in public centres.

As regards **hospitalisations** for mental health disorders, the figure is 1.6 per 1,000 inhabitants. As mentioned above, more detailed information on this topic can be found in the section on morbidity.

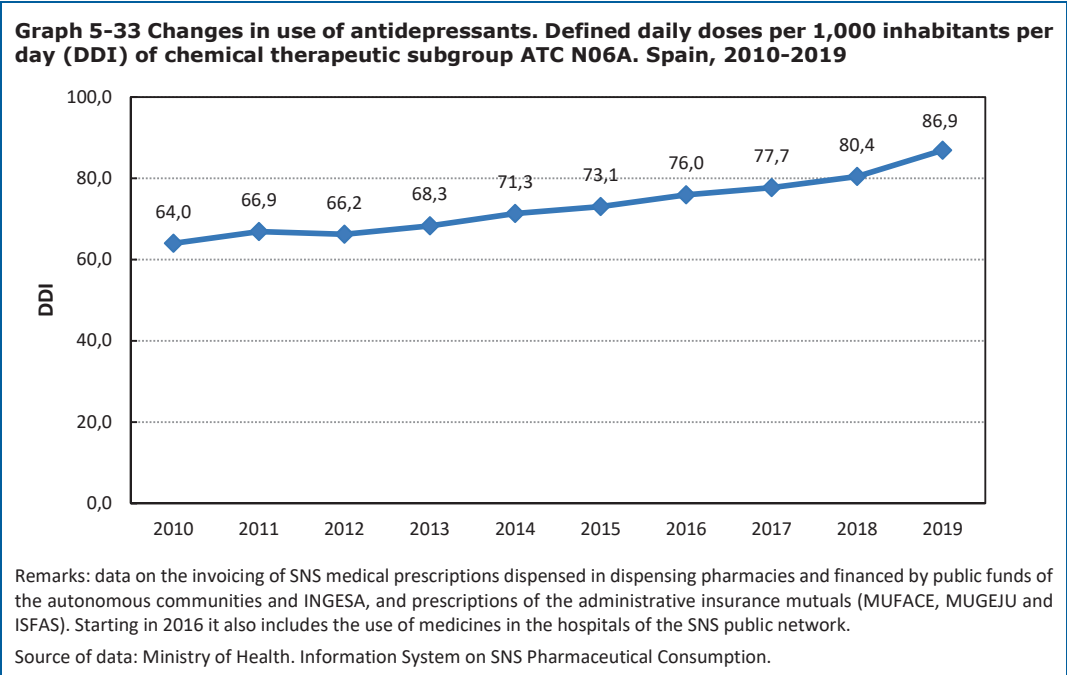
⁴⁸ Following international recommendations, the consumption of medicines is expressed in defined daily doses (DDD) per 1,000 inhabitants per day, shortened to DDI, for daily dose per inhabitant. The DDD is a technical unit of measurement that refers to the daily maintenance dose for a drug used in its main indication with a given route of administration in adults. The DDD of active ingredients are established by the WHO and published on the WHO Collaborating Centre for Drug Statistics Methodology website (<https://www.whocc.no/>). In addition, the Anatomical Therapeutic Chemical (ATC) classification system divides drugs into different groups according to the organ system they act on and/or their therapeutic, pharmacological and chemical characteristics. The ATC/DDD system is the most widely used tool for exchanging and comparing data on the consumption of pharmaceuticals at the international, national and local level.

Use of antidepressants

The medicines included are those belonging to the chemical therapeutic subgroup ATC N06A (antidepressants). In 2019, in Spain 86.9 DDI of antidepressants were consumed, with the highest figures being found in Galicia (130.7 DDI), Asturias (129.8 DDI) and Extremadura (123.3 DDI). Melilla (45.9 DDI), Ceuta (58.2 DDI), Basque Country (69.7 DDI) and Community of Madrid (69.8 DDI) were the territories with the lowest figures.



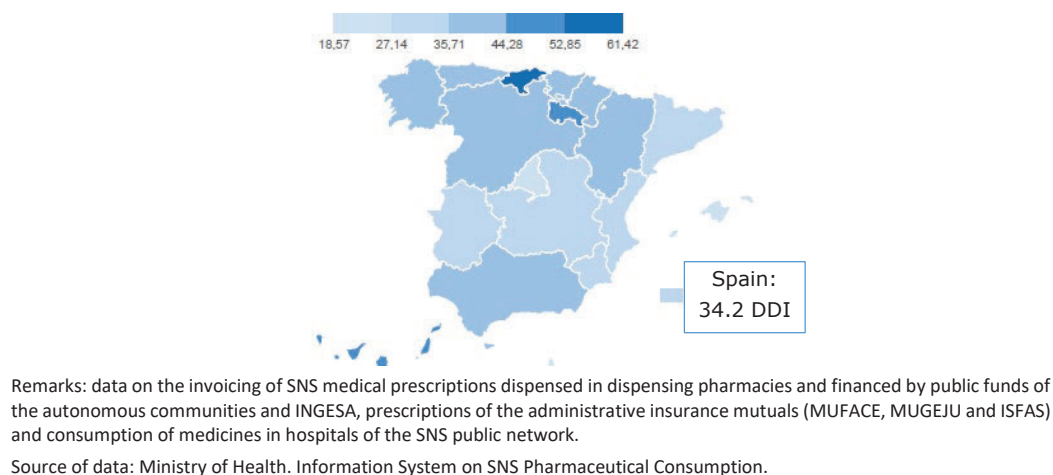
In the period from 2010 to 2019, continuous growth has been observed at the national level in the use of antidepressants, which increased from 64.0 DDI to 86.9 DDI, although it should be noted that in 2016 the consumption of medicines in the SNS hospitals was included for the first time.



Use of hypnotic and sedative substances

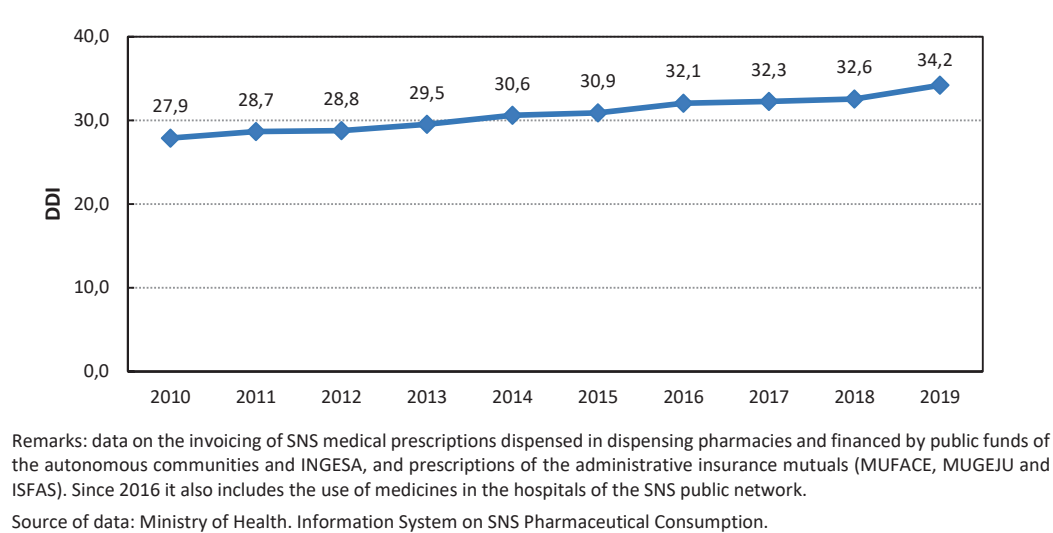
The medicines included here are the ones belonging to the chemical therapeutic subgroup ATC N05C (hypnotics and sedatives). At the national level 34.2 DDI were consumed in 2019. In Cantabria (61.4 DDI), La Rioja (48.0 DDI) and Canary Islands (44.6 DDI) registered the highest levels of consumption while in Melilla (18.6 DDI), Community of Madrid (23.5 DDI) and Balearic Islands (24.7 DDI) registered the lowest levels.

Graph 5-34 Use of hypnotics and sedatives by autonomous community. Defined daily doses per 1,000 inhabitants per day (DDI) of chemical therapeutic subgroup ATC N05C. Spain, 2019



There has been a discreet rise in the use of hypnotics and sedatives over the 2010-2019 period, from 27.9 DDI to 34.2 DDI, even despite the fact that starting in 2016 the indicator includes the consumption of medicines in the hospitals of the SNS public network.

Graph 5-35 Changes in the use of hypnotics and sedatives. Defined daily doses per 1,000 inhabitants per day (DDI) of chemical therapeutic subgroup ATC N05C. Spain, 2010-2019

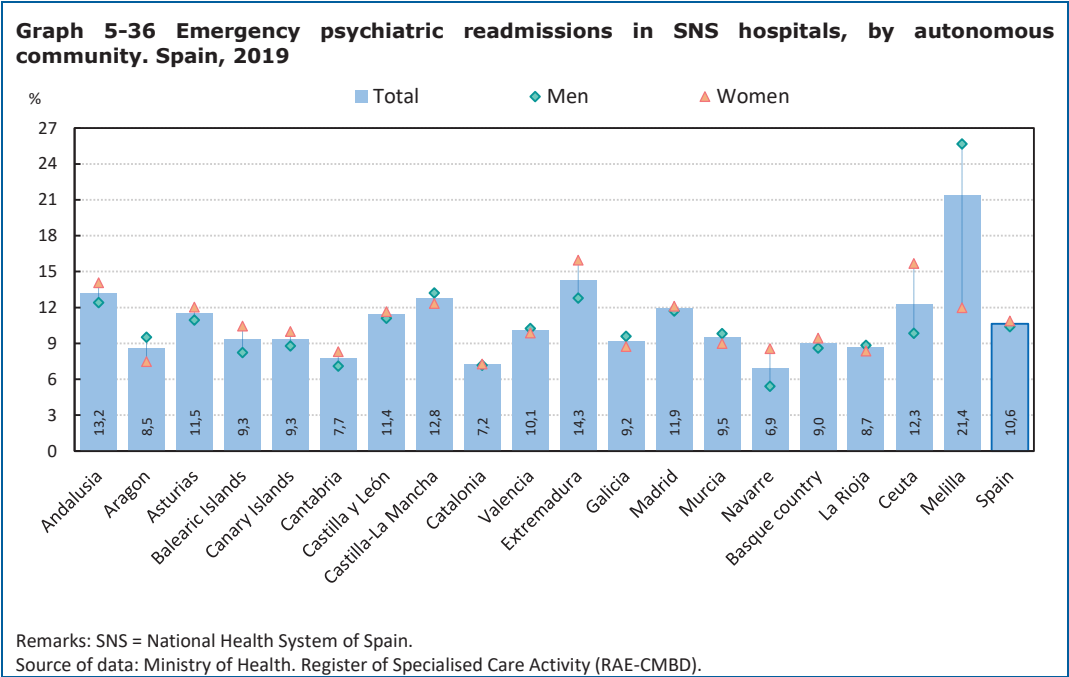


Emergency psychiatric readmissions

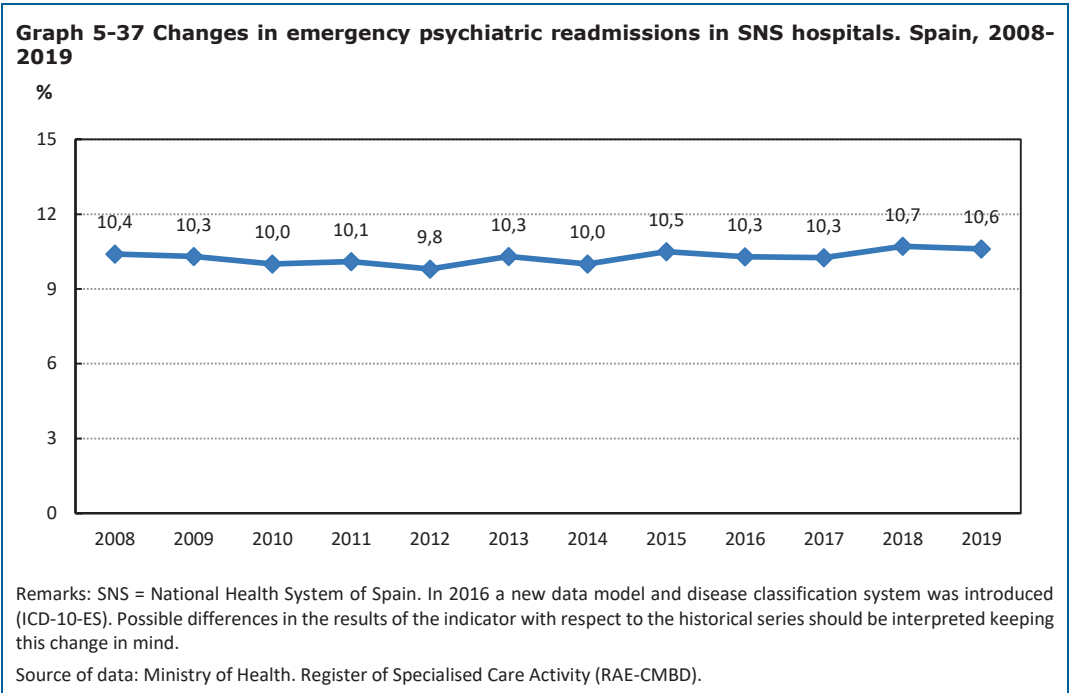
This indicator measures the proportion of cases in which the patient is admitted again to the same hospital within the thirty days following the discharge of the previous episode (index episode, admission due to mental illness, meaning the discharges with a main diagnosis that appears in the ICD chapter corresponding to Mental Illnesses).

In 2019, the overall percentage of emergency psychiatric readmissions in SNS hospitals was 10.6%, very similar to the preceding year, and showed practically no differences between men and women.

By territories, in 2019 the autonomous communities with the highest overall percentage of this type of readmission are Melilla (21.9%), Extremadura (14.3%) and Andalusia (13.2%), and those with the lowest are Navarre (6.9%) and Catalonia (7.2%). The differences between the sexes are mostly discreet, although Ceuta and Melilla do stand out, with a 6 and a 14 percentage point difference between men and women, respectively.



In the 2008-2019 period emergency psychiatric readmissions show a stable percentage of around 10%.



5.1.5.4 Care provided to patients with malignant tumours

In this section information is presented about care activity related to these processes in primary care and about the hospitalisations they cause. Malignant tumours can be present in a wide variety of diseases that are attended by different specialists: there is information about specialised care visits in different services but not about the visits that take place for these specific processes. However, information about breast-conserving surgery is shown, as an example of the healthcare provided to these processes.

Primary care visits and hospitalisations

Patients with malignant tumours made 18.1 **visits to primary care health centres** during the year, more than double the number in the general population.

As for **hospitalisation** due to malignant tumours, in 2019 there were 7.2 hospitalisations per 1,000 inhabitants. In this report’s section on morbidity more information can be found on this topic.

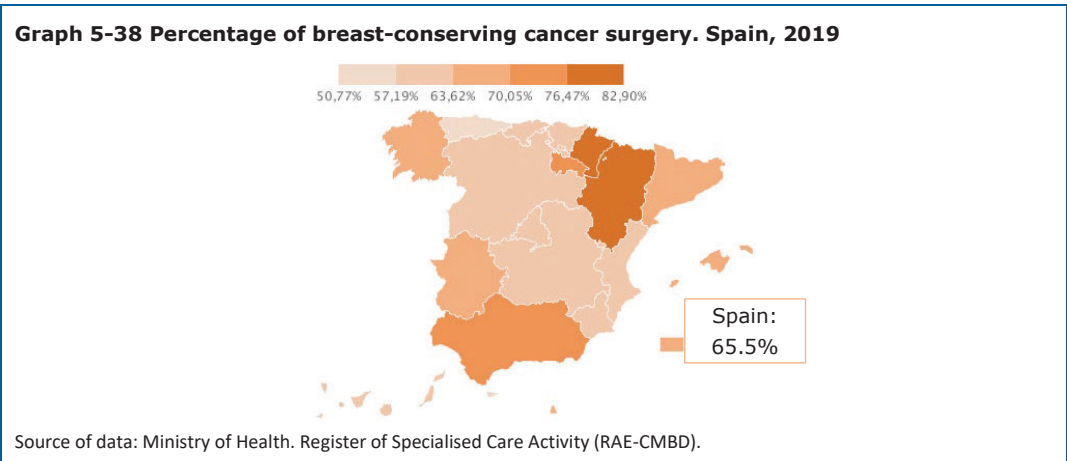
Breast-conserving surgery for breast cancer patients

The treatment of operable breast cancer has changed in recent decades, moving towards less aggressive procedures, such as breast-conserving surgery.

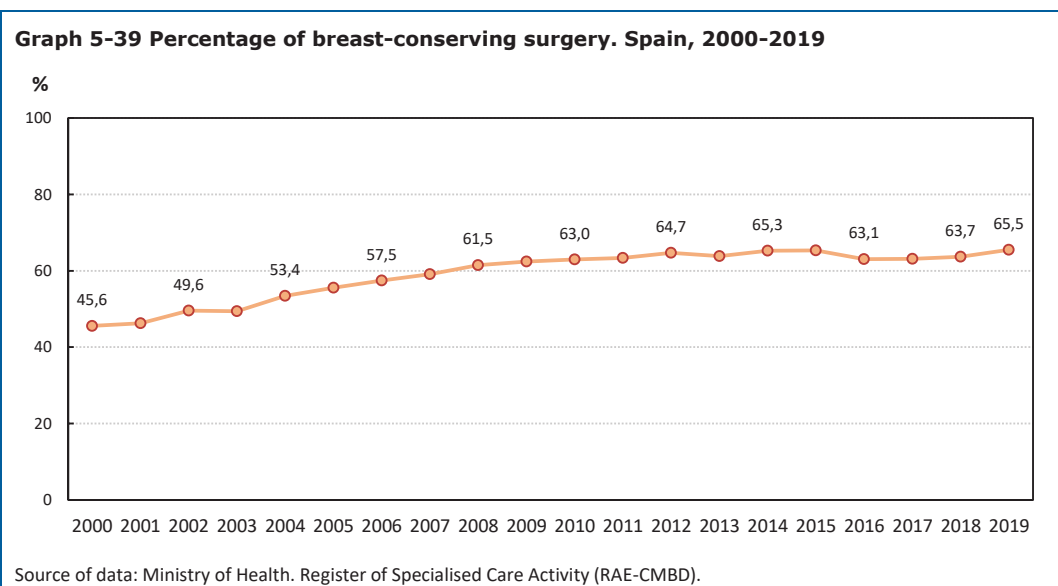
Breast-conserving surgery is defined as the complete resection of the tumour with a concentric margin of healthy tissue also removed, done in a cosmetically acceptable way. Depending on how much tissue is excised it can be called lumpectomy, quadrantectomy, partial mastectomy and segmental mastectomy.

The percentage of breast-conserving surgery in patients with breast cancer, considering this type of surgery to be any surgical treatment that is not a radical or modified mastectomy, was 65.5% in 2019.

Navarre, Aragon and Andalusia have been the territories with the highest percentages of this kind of surgery. The lowest values of this indicator have been found in Asturias, Ceuta and Valencia.



This indicator increased by 43.7% between 2000 and 2019, although the trend has stabilized in recent years and increased only 4.0% from 2010 to 2019.



Almost seven out of ten breast cancer operations are performed using a conservation approach. This proportion has increased by 44% between 2000 and 2019.



5.2 Accesibility



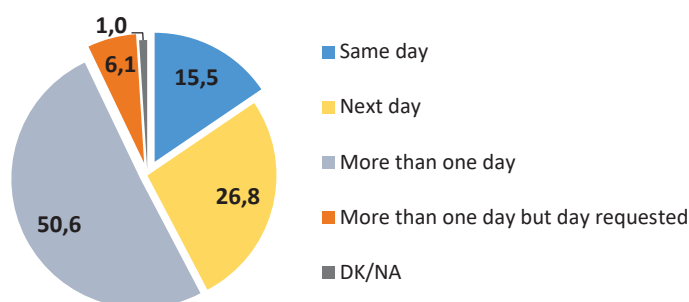
Accessibility means the appropriate and timely use of healthcare services to achieve the best health outcomes. Thus, an outstanding healthcare system offers the population different ways to access the system, which is able to provide excellent care within a reasonable period of time. The basic criterion is always the health-related need, and there must be no physical, communication, cultural, linguistic, geographical or opportunity barriers. All of the foregoing means that accessibility is a critical component of quality.

5.2.1 Waiting times in primary care

Although at the primary care level there is no specific information system about waiting lists, like there is in specialised care, the Healthcare Barometer does provide some data about the situation, as reported by the patients themselves.

Of the persons who asked for an appointment with their primary care physician, 15.5% were able to schedule an appointment for that same day, while 26.8% were given an appointment for the next day and 50.6% had to wait more than one day, with an average waiting time of 5.8 days. Interestingly, 6.1% were given an appointment more than one day later because that was their preference.

Graph 5-40 Waiting time for appointment with primary care physician. Spain, 2019



Remarks: DK/NA: don't know/no answer. Waiting time means the time that passes between asking for an appointment and seeing the primary care physician.

Source of data: Ministry of Health. Healthcare Barometer.

5.2.2 Waiting times in specialised care

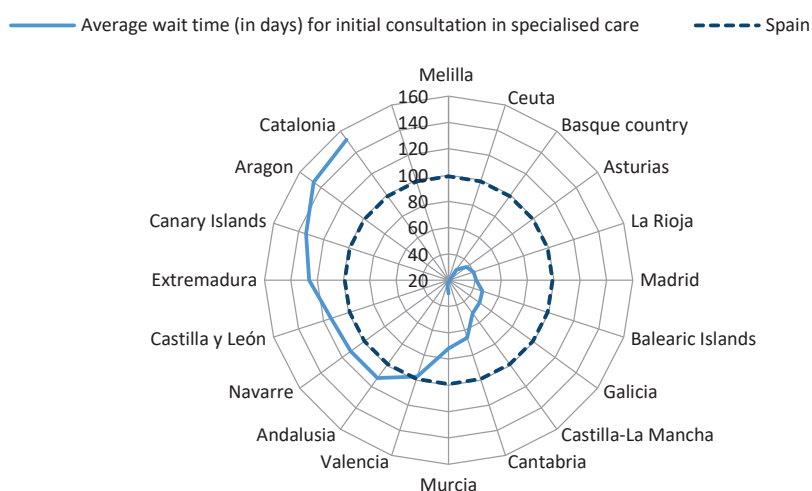
The SNS Waiting List Information System (SISLE-SNS) contains information about how long patients must wait for a visit with a specialist and for non-urgent surgical procedures, including both average waiting times and the percentage of patients waiting.

5.2.2.1 Waiting time in specialised care consultations

For an initial consultation in SNS specialised care, patients had to wait an average of 99 days in 2020.

By autonomous communities and cities, Melilla (10 days), Ceuta (17 days) and Basque Country (30 days) are the territories with the lowest waiting time, while Catalonia (134 days), Aragon (147 days) and Canary Islands (134 days) have a waiting time much higher than the national average.

Graph 5-41 Average waiting time (days) for an initial consultation in specialised care. Spain, 2020

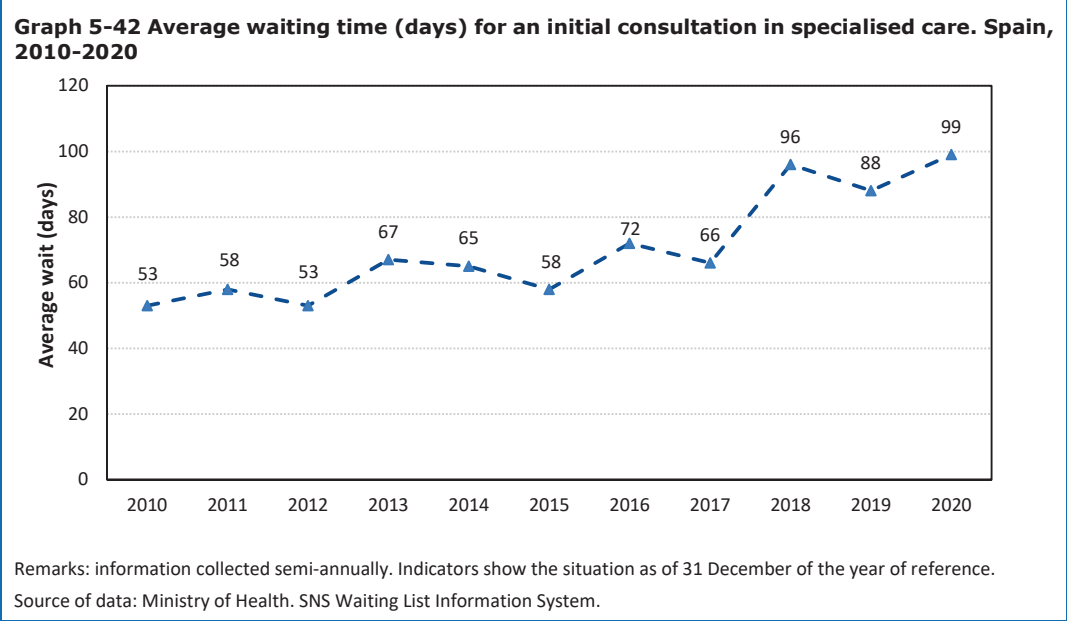


Remarks: territories arranged in order of their waiting time. Information collected semi-annually.

Source of data: Ministry of Health. SNS Waiting List Information System.

Among the basic specialties, trauma (118 days; 7.4 patients/1,000 inhab.), dermatology (111 days; 4.7 patients/1,000 inhab.) and ophthalmology (104 days; 7.3 patients/1,000 inhab.) show a waiting time and a number of patients waiting per 1,000 population that are much higher than for other specialties, such as gynaecology (55 days; 2.5 patients/1,000 inhab.) or cardiology (74 days; 1.5 patients/1,000 inhab.). As for the percentage of patients with over 60 days of waiting time, the figures in trauma (56.1%) and ophthalmology (59.2%) are much higher than average (47.2%).

The series has climbed over the years, with one peak in 2018 (96 days) as a consequence of the computing system update that took place in Andalusia during that year, and another peak in 2020, a reflection of the situation caused by the COVID pandemic.



5.2.2.2 Waiting time for non-urgent surgery

The waiting time for non-urgent surgery is 148 days, with large differences between territories. Thus, Melilla (40 days), Asturias (60 days) and Basque Country (68 days) have waiting times much lower than the national average, while Castilla-La Mancha (286 days), Andalusia (188 days), Aragon (180 days) and Extremadura (175 days) stand out with much higher figures.

By specialty, the waiting time is very high in plastic surgery (346 days; 0.5 patients/1,000 inhab.), neurosurgery (217 days; 0.3 patients/1,000 inhab.), trauma surgery (173 days; 3.9 patients/1,000 inhab.) and thoracic surgery (168 days; 0.04 patients/1,000 inhab.). Trauma surgery also stands out as the specialty with the highest number of patients on the structural waiting list per 1,000 population. At the other extreme are heart surgery (93 days) and ophthalmology (96 days).

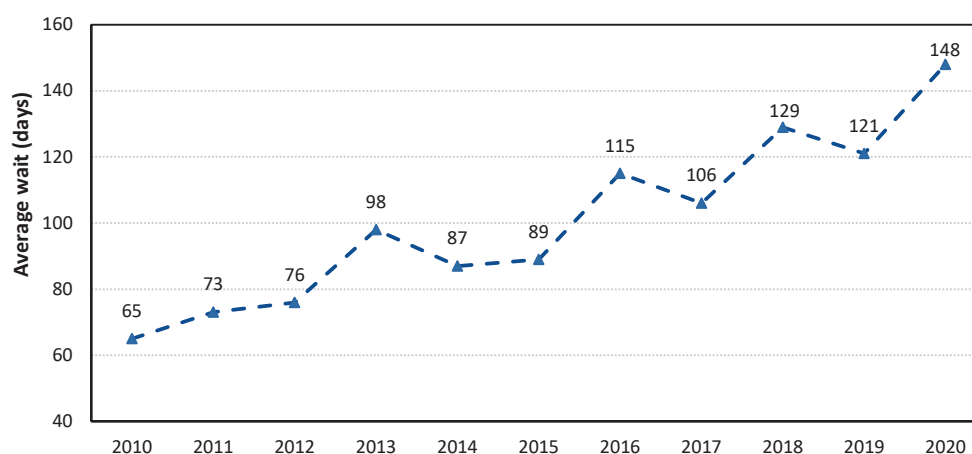
Table 5-4 Situation of SNS surgical waiting list. Spain, 2020

	Total of patients waiting	Rate per 1,000 inhab.	Percentage of patients with wait over 6 months	Average waiting time (days)
Andalusia	126,172	15.5	28.9	188
Aragon	23,380	17.8	33	180
Asturias	20,153	20.1	6.2	60
Balearic Islands	11,421	10.0	26.4	135
Canary Islands	24,495	12.0	26.6	151
Cantabria	11,399	20.2	28.6	145
Castilla y León	30,322	13.2	29.2	152
Castilla-La Mancha	38,956	20.2	56.1	286
Catalonia	173,694	24.0	32.6	155
Valencia	49,308	10.5	23.2	125
Extremadura	24,665	24.1	40.2	175
Galicia	35,817	13.7	6.1	73
Madrid	64,558	9.7	14.2	80
Murcia	21,877	14.8	16	98
Navarre	7,034	10.9	15.1	93
Basque Country	16,127	7.3	5.5	68
La Rioja	4,744	15.2	9.2	75
Ceuta	865	11.5	23.2	126
Melilla	188	2.5	0	40
Spain	685,175	15.1	26.9	148

Remarks: SNS = National Health System of Spain. Information collected semi-annually.

Source of data: Ministry of Health. SNS Waiting List Information System.

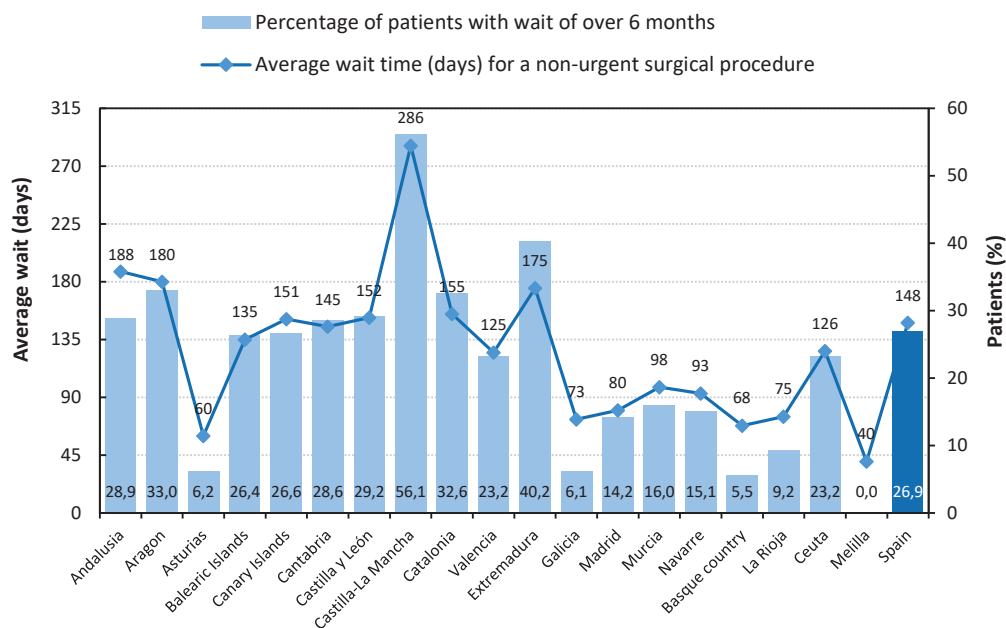
The changes in surgical waiting times from one year to the next are irregular, but a clear upward trend is visible.

Graph 5-43 Average waiting time (days) for non-urgent surgical procedure. Spain, 2010-2020

Remarks: information collected semi-annually. Indicators show the situation as of 31 December of the year of reference.

Source of data: Ministry of Health. SNS Waiting List Information System.

Graph 5-44 Average waiting time (days) and percentage of patients with wait of over 6 months for non-urgent surgical procedure. Spain, 2020



Source of data: Ministry of Health. SNS Waiting List Information System.

The percentage of patients waiting for over 6 months for a non-urgent surgical procedure is 26.9%, with much lower figures in Melilla (0.0%), Basque Country (5.5%), Galicia (6.1%) and Asturias (6.2%), while figures considerably above the national average are seen in Castilla-La Mancha (56.1%) and Extremadura (40.2%).

5.3 Patient experience



Asking patients about their healthcare experience makes it possible to learn what they go through and experience during their different contacts with the healthcare system. The purpose of this is to find out how to improve interactions with the healthcare system and at the same time ensure proper alignment between patient needs and the care provided by the healthcare services.

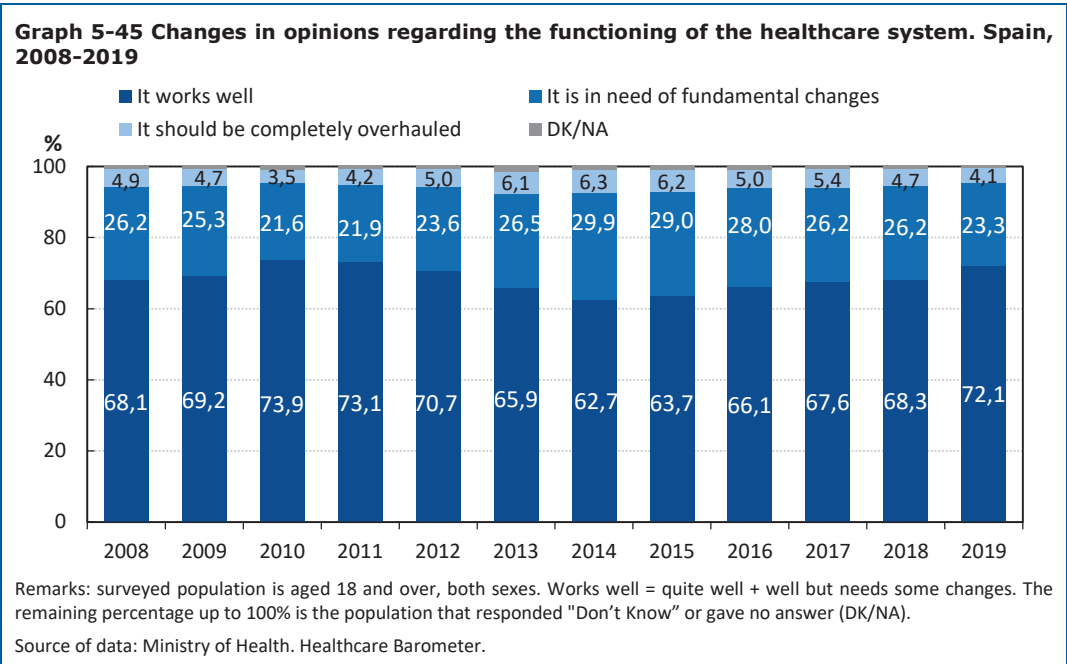
This section discusses, based on the findings of opinion (Healthcare Barometer) and health surveys (Spanish National Health Survey and the European Health Survey in Spain), the level of satisfaction expressed by the population in general, and more specifically its users, with regard to the public healthcare services and the care they provide, as well as the expectations people have of them and their real life experiences with them.

Assessment of the functioning of the public healthcare system

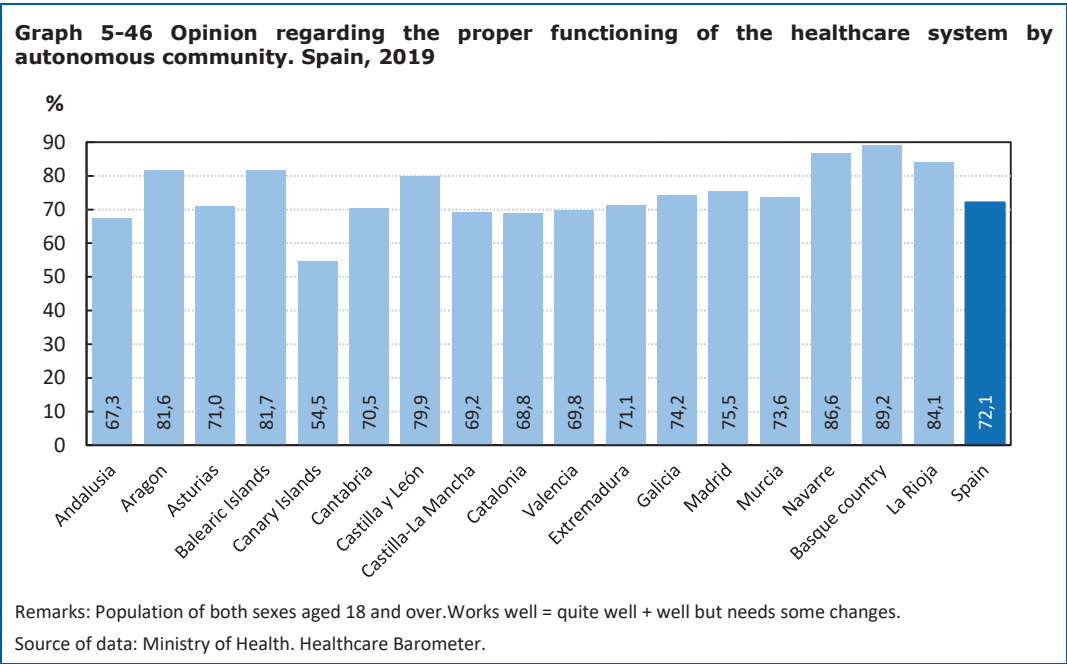


Just over 72% (72.1%) of the population aged 18 and over state that the healthcare system in Spain works “well” or “quite well, although it is in need of some changes.” This figure is an illustration of the upward trend in people’s opinion of the healthcare system, which began in 2015 following several years of decline. At the time of this report 23.3% of the population believe the healthcare system

is in need of fundamental changes and 4.1% think it should be completely overhauled (the latter has been about 5% in recent years).



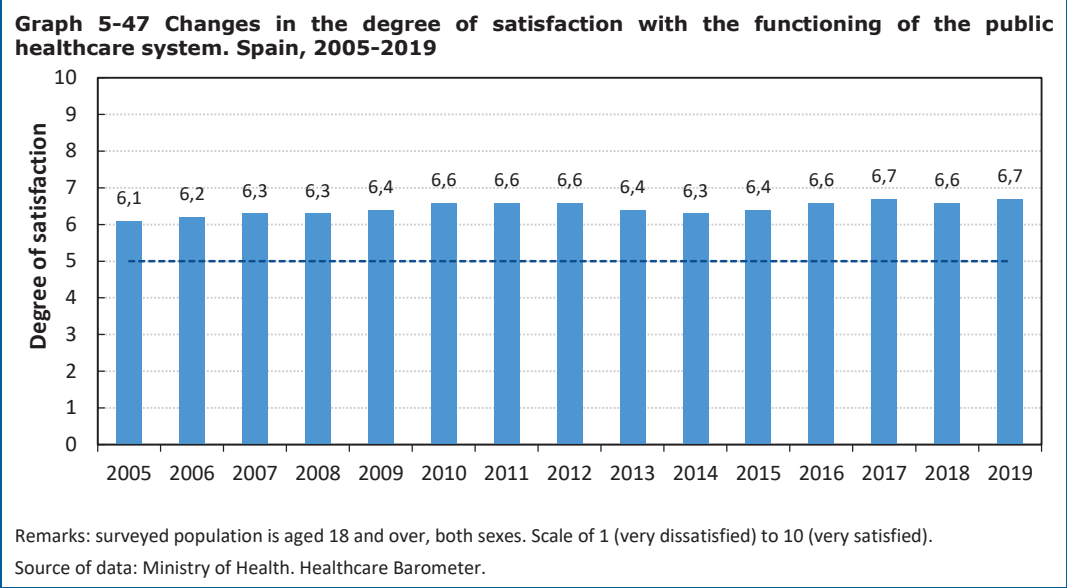
The autonomous communities with the highest proportion of the population that states that the healthcare system works well are Navarre, Basque country and La Rioja. The autonomous communities with the lowest proportion of the population that states that the healthcare system works well are Canary Islands and Andalusia.



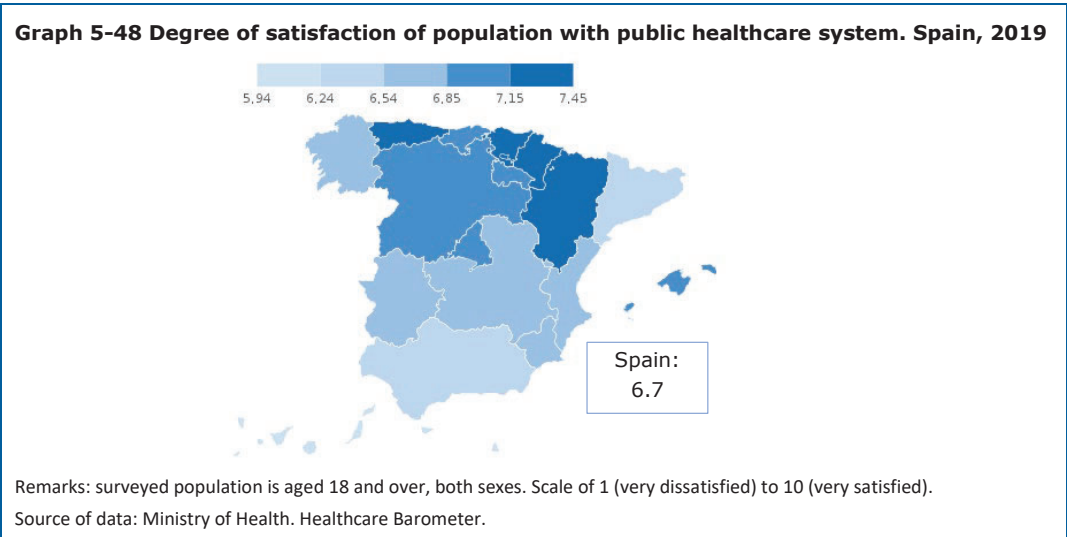
Satisfaction with the public healthcare system



Satisfaction with the public healthcare system is 6.7 points on a scale of 1 (very dissatisfied) to 10 (very satisfied), with hardly any differences between men and women. During the 2005-2019 period opinions have remained stable, at around 6.6, since 2010.



By territories, there are differences of around one point in the degree of satisfaction with the functioning of the healthcare system, with the communities of Aragon, Navarre and Basque Country expressing the most satisfaction (over 7.2 points). Satisfaction with the healthcare system is lower, at around 6, in Melilla, Ceuta and Canary Islands.



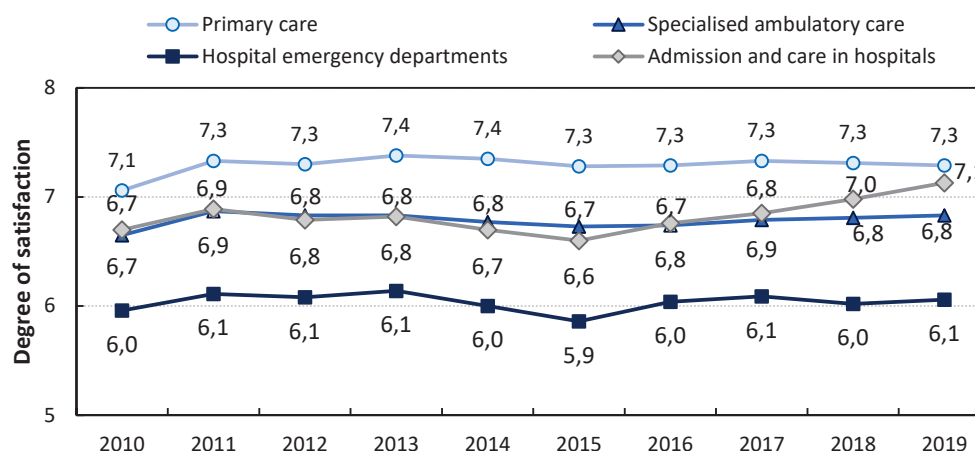
Assessment of the care levels of the public healthcare system



The population's assessment of care levels is examined by the Healthcare Barometer, which asks about the degree of satisfaction with certain public healthcare services, regardless of whether the respondents have used them.

People have a high opinion of the different care levels and types of care provision into which the SNS is organized, with very little change over the past 9 years.

Graph 5-49 Changes in the degree of satisfaction with the different care levels and types of care provision into which the SNS is organized. Spain, 2010-2019

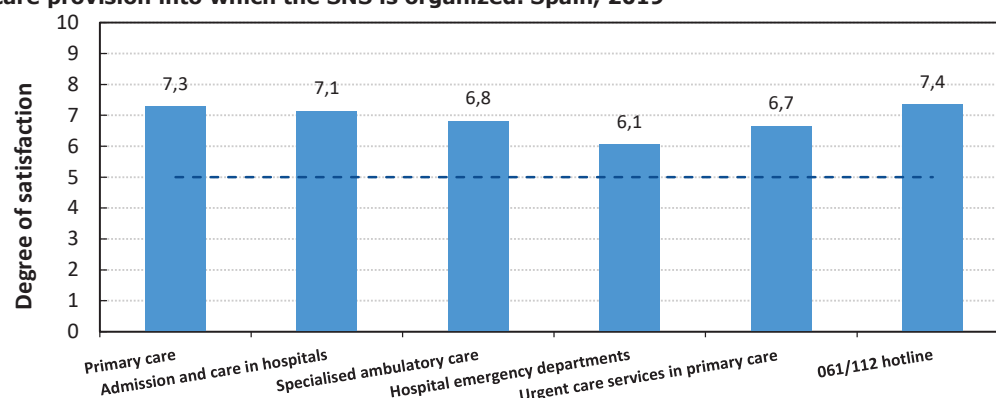


Remarks: SNS = National Health System of Spain. Surveyed population is aged 18 and over, both sexes. Scale of 1 (very dissatisfied) to 10 (very satisfied). Primary care refers to visits with general practitioners and paediatricians in primary care centres of the SNS. Specialised ambulatory care refers to visits with specialists at SNS facilities.

Source of data: Ministry of Health. Healthcare Barometer.

Primary care is the level most highly regarded by the persons surveyed, with a score of 7.3 points out of 10, followed by admission and care in public hospitals, with 7.1 points, and specialised ambulatory care, with 6.8. Opinions on the functioning of the different urgent care and emergency services range from 6.1 (hospital emergency departments) to 7.4 (112/061 Urgent and Emergency Care), with the urgent care services linked to primary care right between the two, with a score of 6.7.

Graph 5-50 Changes in the degree of satisfaction with the different care levels and types of care provision into which the SNS is organized. Spain, 2019



Remarks: SNS = National Health System of Spain. Surveyed population is aged 18 and over, both sexes. Scale of 1 (very dissatisfied) to 10 (very satisfied). Primary care includes visits with general practitioners and paediatricians in primary care centres. Specialised ambulatory care refers to visits with specialists at SNS facilities.

Source of data: Ministry of Health. Healthcare Barometer.

The population's general opinion about the functioning of the different care levels and types of care provision into which the SNS is organized is positive and similar to that of previous years.

Co-ordination between care levels

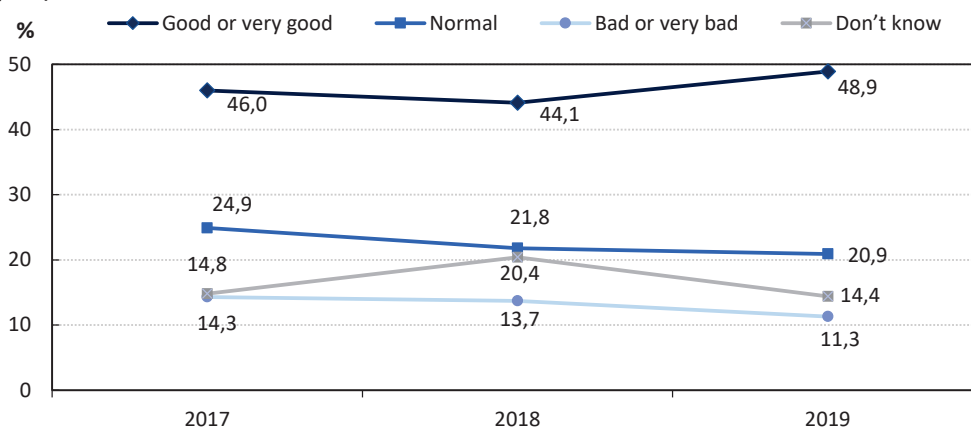


This section looks at how the general population perceives the co-ordination between care levels within the public healthcare system, between physician visits in primary care and visits with specialists and/or admission to hospital.

In 2019 about 50% think there is good or very good co-ordination and communication between care levels, a slight increase from 2017. The opinion that the co-ordination is bad or very bad has also dropped, albeit very slightly, in 2019, and is now at 11.3%.

The difference between men and women is around 7 percentage points in the group that deems co-ordination to be good or very good (men 52.8,7% vs women 45.8%).

Graph 5-51 Changes in the perception of co-ordination between care levels of the SNS. Spain, 2017-2019

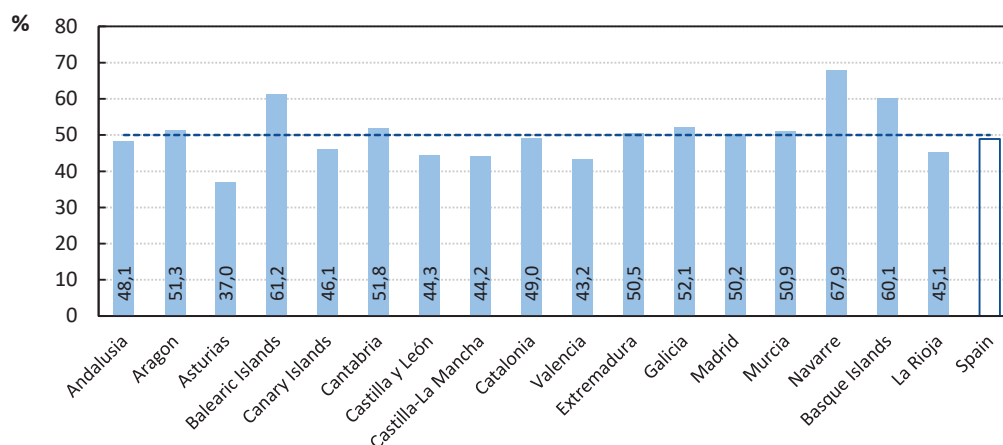


Remarks: SNS = National Health System of Spain. Surveyed population is aged 18 and over, both sexes.

Source of data: Ministry of Health. Healthcare Barometer.

With regard to territorial distribution, there are communities in which over 60% of the population think that there is good or very good co-ordination between care levels, such as Navarre, Balearic Islands and Basque Country.

Graph 5-52 Opinion on the co-ordination between care levels, by sex and autonomous community. Spain, 2019



Remarks: surveyed population is aged 18 and over, both sexes.

Source of data: Ministry of Health. Health Barometer.

Nearly 50% of respondents report having the perception that there is good coordination between care levels.

Patient participation in the decisions concerning their health problem

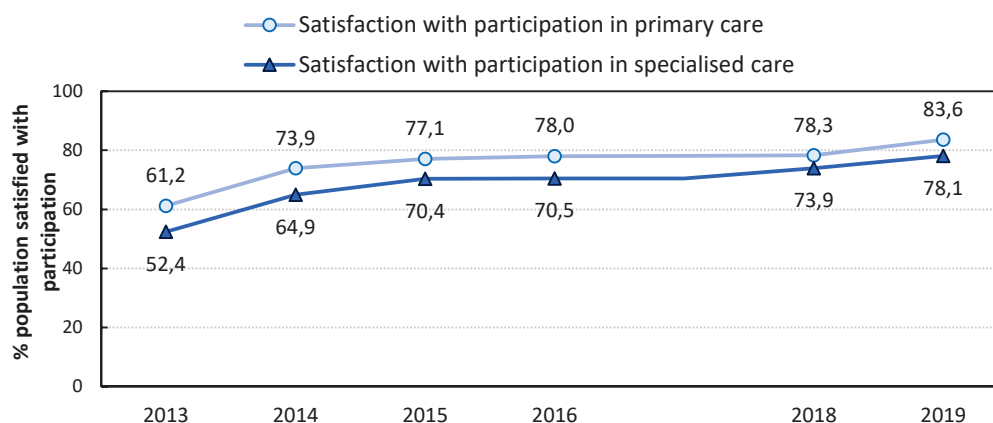


The participation of patients in the decision-making regarding their health contributes to better health maintenance and can reduce unnecessary visits, increase confidence in the medical act, and improve the relationship between professionals and patients.

A high percentage (83.6%) of the population express satisfaction with their participation in the decisions concerning their health and treatment in primary care, and the figure has been on the rise since 2013. Satisfaction with their participation in specialised care is also high (78.1%) but lower than in primary care, with a difference of almost 5 percentage points. However, satisfaction with participation in specialised care has increased considerably since 2013 (49.0%), with an upward trend visible since that time.⁴⁹

⁴⁹ Opinions are gathered through the Healthcare Barometer, by asking respondents about their participation in the decisions relating to their health problem and its treatment, in their visits with the primary care doctor and with specialists, both of the public health system, over the past 12 months.

Graph 5-53 Satisfaction of citizens with their participation in decisions concerning their health problems and treatment, in primary care and specialised care. Spain, 2013-2019



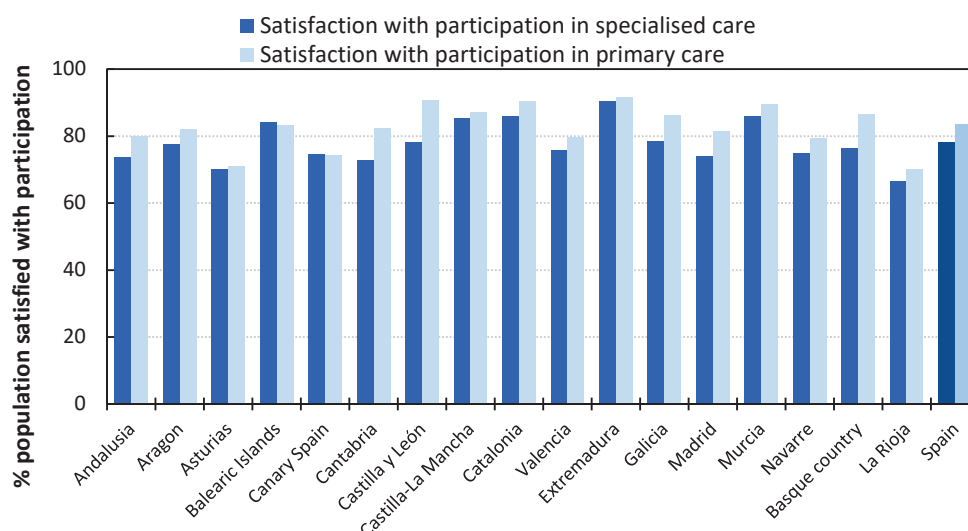
Remarks: surveyed population is aged 18 and over, both sexes. Primary care refers to visits with general practitioners in the SNS. Specialised care refers to visits with specialists in SNS facilities. This question was not asked in 2017.

Source of data: Ministry of Health. Health Barometer.

As for territorial distribution, variability is detected in patient assessment of their participation, both in primary care and specialised care. The territories that report greater participation are Extremadura, Catalonia and Murcia, and those that report less participation are La Rioja and Asturias.

The involvement of patients contributes to improved self-care, better treatment adherence and a higher quality of life, and it may result in cost reductions for the healthcare system.

Graph 5-54 Satisfaction of citizens with their participation in decisions concerning their health problems and treatment in primary care and specialised care, by autonomous community. Spain, 2019



Remarks: surveyed population is aged 18 and over, both sexes. Primary care refers to visits with general practitioners in public primary care centres. Specialised care refers to visits with specialists in SNS facilities.

Source of data: Ministry of Health. Health Barometer.

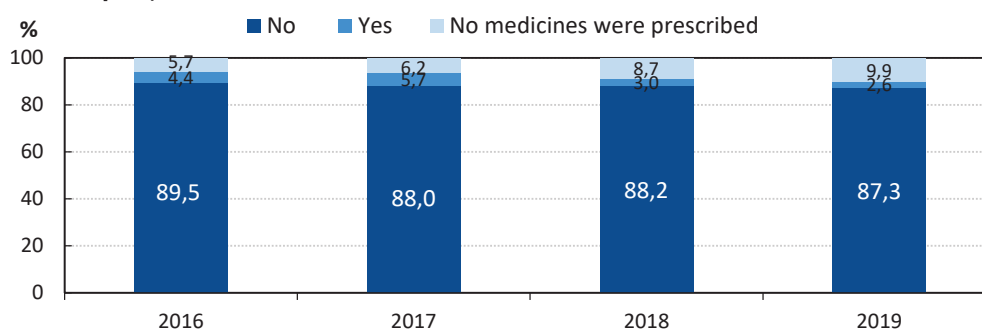
Reported lack of access to prescribed medicines for economic reasons



One of the indicators proposed by the OECD⁵⁰ to explore the quality of health systems from the “patient experience” perspective is access to the medicines prescribed, to find out whether such access is conditioned by economic factors.

The vast majority of people (87.3%) state that the price of medicines has not been a cause to stop taking the medicines prescribed to them in the year 2019, with no notable differences between men and women. This figure is very similar to the preceding 3 years. However, 2.6% did state that they stopped taking a medicine because it was too expensive for them, showing a slight downward trend in the 2016-2019 series. In addition, 9.9% indicate that they had not been prescribed any medicines in the last twelve months.

Graph 5-55 Changes in the reported lack of access to prescribed medicines for economic reasons. Spain, 2016-2019

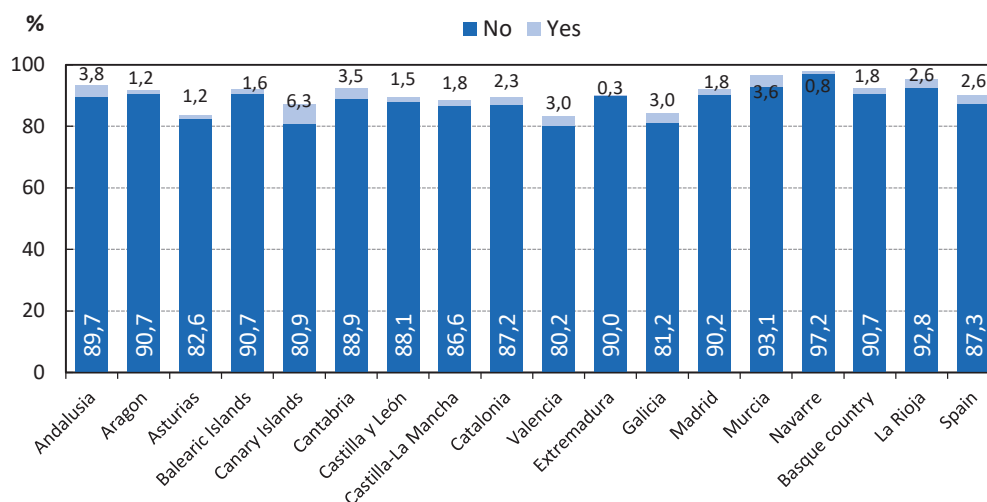


Remarks: surveyed population is aged 18 and over, both sexes.

Source of data: Ministry of Health. Health Barometer.

Looking at the data by territory does not reveal any large differences. The communities that least report lack of access to medicines for economic reasons are Navarre, Murcia and La Rioja.

Graph 5-56 Reported lack of access to prescribed medicines for economic reasons, by autonomous community. Spain, 2019



Remarks: surveyed population is aged 18 and over, both sexes. A small but not inconsiderable percentage of respondents state they were NOT prescribed any medicines in the past year.

Source of data: Ministry of Health. Health Barometer.

⁵⁰ OECD. Health Care Quality Indicators-Responsiveness and Patient Experiences.

A very significant majority of respondents (87.3%) say they have not been in a situation in which they cannot access prescribed medicines for economic reasons.

Reported lack of access to dental care for economic reasons



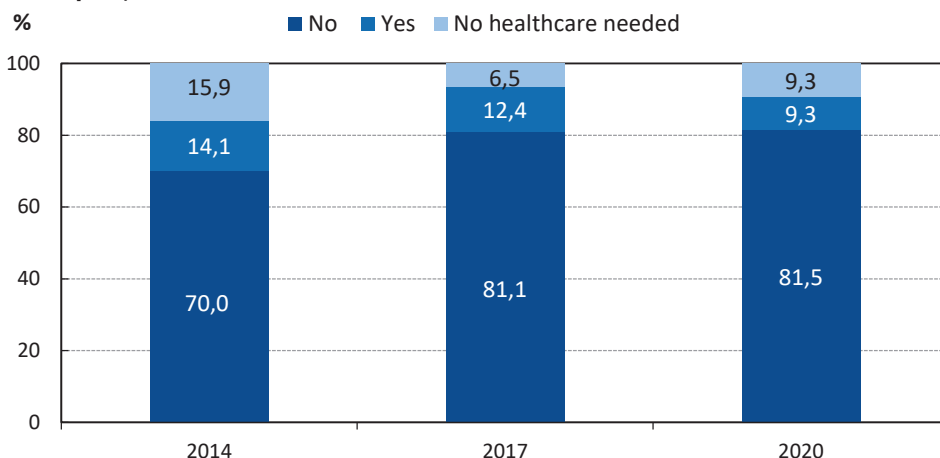
Oral diseases are a common health problem, according to information obtained by the Spanish National Health Survey.⁵¹ They can affect people at any point in their lives, from childhood to old age, causing pain and discomfort, morbidity and disability. Oral health can thus be considered a key indicator of health, well-being and quality of life in general. Oral healthcare is among the benefits provided in the basic service basket at the primary care level.

The provision of dental services in Spain is mainly private; 85.5% of the population see a private dentist, 10.6% use a public dentistry service and 3.4% see a dentist through a company.⁵¹

According to the most recent European Health Survey in Spain (ESEE), 9.3% of the population perceive that they lack access to dental care for economic reasons. This result is the highest of all types of inaccessibility of healthcare for economic reasons studied, with over 7 to 8 percentage points more than the other types (medical care, mental health care and prescribed medicines).

In the 2014-2020 period a decrease is observed in the percentage of the population with difficulty accessing dental care for economic reasons, from 14.1% in 2014 to 9.3% in 2020.

Graph 5-57 Changes in the reported lack of access to prescribed medicines for economic reasons. Spain, 2014-2020



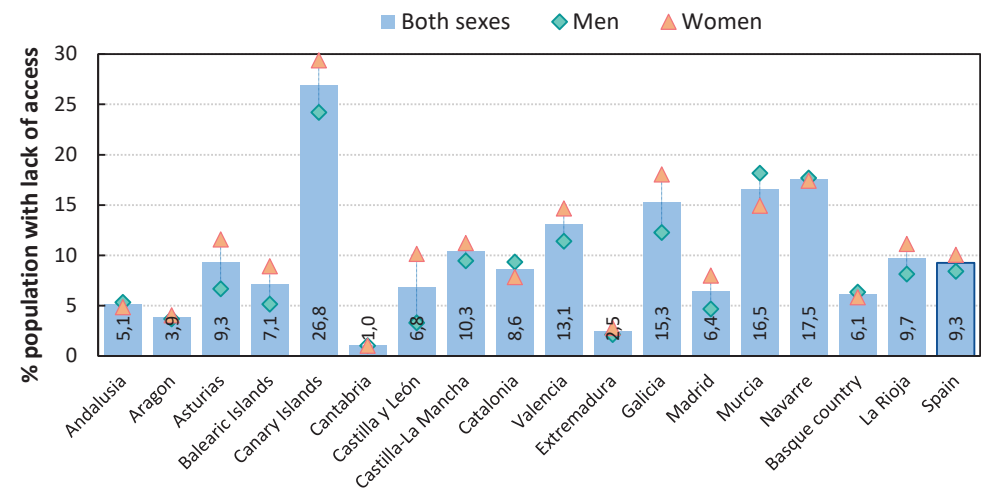
Remarks: surveyed population is aged 15 and over, both sexes.

Source of data: Ministry of Health and National Statistics Institute (INE). Spanish National Health Survey (ENSE) and the European Health Survey in Spain (ESEE).

As for territorial distribution, the autonomous communities show marked differences in terms of perception of lack of access to dental care for economic reasons. The highest perception of lack of access is found in Canary Islands, Navarre and Murcia, the lowest in Cantabria, Extremadura and Aragon. Women report more of a lack of access for economic reasons (women 10.0% vs. men 8.4%).

⁵¹ Spanish National Health Survey (ENSE), 2017. Monographic report series. 5-Oral health. https://www.mscbs.gob.es/estadEstudios/estadisticas/encuestaNacional/encuestaNac2017/ENSE_Salud_bucodental.pdf.

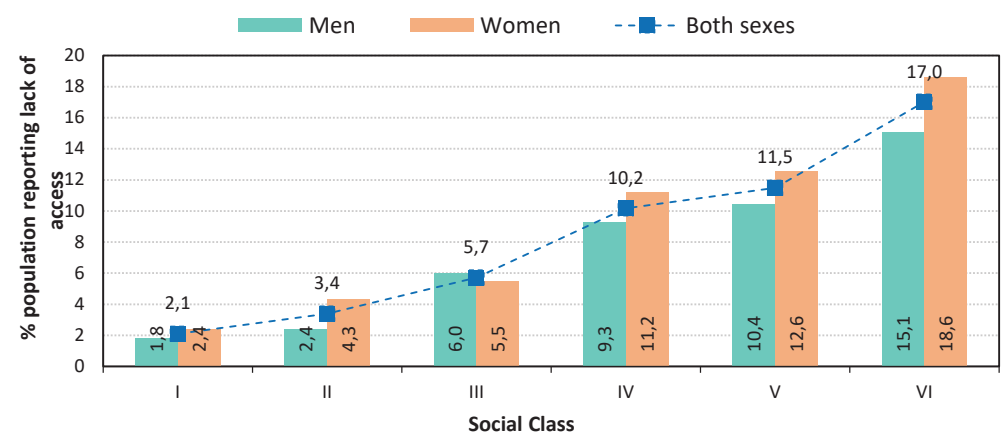
Graph 5-58 Reported lack of access to dental care for economic reasons. Percentage distribution by sex and autonomous community. Spain, 2020



Source of data: Ministry of Health and National Statistics Institute (INE). European Health Survey in Spain (ESEE).

Taking into account socioeconomic level, a pronounced social gradient can be seen, as the perception rises from 2.1% in social class I to 17.0% in social class VI. The gradient is observed in both men and women.

Graph 5-59 Reported lack of access to dental care for economic reasons. Percentage distribution by sex and social class. Spain, 2020



Remarks: the percentages for the category of population whose social class is "unknown" are not shown in the graph.

Source of data: Ministry of Health and National Statistics Institute (INE). European Health Survey in Spain (ESEE).

9.3% of the population has the perception of lacking access to dental care for economic reasons. This is the highest rate among the different types of inaccessibility to health care analysed.

5.4 Pharmaceutical benefits

5.4.1 Medicines and health products included in the SNS pharmaceutical benefits package



SNS pharmaceutical benefits encompass medicines and health products and also the set of actions intended to ensure that patients receive them according to their clinical needs, with the dosage precisely suited to their individual requirements, for the appropriate period of time and at the lowest possible cost to them and the community. The benefits package is governed by the provisions of the consolidated text of the Spanish Law on guarantees and the rational use of medicines and health products, approved by Royal Legislative Decree 1/2015, of July 24 (*Ley de garantías y uso racional de los medicamentos y productos sanitarios, aprobado por el Real Decreto Legislativo 1/2015, de 24 de julio*).⁵²

Medicines and health products must be included in the SNS public financing system in order to be part of the pharmaceutical benefits package. The procedure used for this is laid down in the Spanish Law on guarantees and the rational use of medicines and health products. To be considered for inclusion in the public financing system, a medicine must be duly authorised and it is the task of the Ministry of Health, through the Directorate General of the Basic Basket of SNS Services and Pharmacy, to decide whether it will be included in SNS pharmaceutical benefits and, if so, what its financing conditions will be. Inclusion is selective, depending on the therapeutic utility of the medicines and how necessary they are for improving the health of citizens.

As an additional mechanism that complements the decision on public financing and plays a vital role in the healthcare system's sustainability, the prices of medicinal and health products are subject to control measures. The Interministerial Commission on Medicine Prices, of the Ministry of Health, has the duty of setting the maximum ex-factory price of the medicines and health products that are to be included in the SNS pharmaceutical benefits package.

In 2019 a total of 1,391 medicine presentations were added to the SNS public financing system. Of these presentations, 1,330 are normal packs (95.6%) and 61 are clinical packs (for use in hospitals). Of the normal pack presentations, 1,026 correspond to medicines that can be dispensed in pharmacies and 304 correspond to medicines for hospital use and dispensation (they are not invoiced through dispensing pharmacies and can only be used in hospital settings or authorised care centres). Of the medicines added this year, 67.7% are generics. With regard to biosimilars, this year saw the addition of 3 biosimilar presentations of Pegfilgrastim, a granulocyte colony stimulating factor that is administered after chemotherapy, so there are now 14 biosimilar active ingredients included in the SNS pharmaceutical benefits package.

⁵² <http://boe.es/boe/dias/2015/07/25/pdfs/BOE-A-2015-8343.pdf>

Table 5-5 Number of medicine presentations added to SNS pharmaceutical benefits, regardless of when their commercialization begins. Spain, 2019

ATC1 group	Normal pack		Clinical pack	Total
	Dispensable in pharmacies	For use and dispensations in hospitals		
A- Alimentary tract and metabolism	125	13	2	140
B- Blood and blood-forming organs	54	42	16	112
C- Cardiovascular system	171	4	2	177
D- Dermatological agents	12	-	-	12
G- Genito-urinary system and sex hormones	91	2	-	93
H- Systemic hormonal preparations, excluding sex hormones and insulins	11	19	-	30
J- Anti-infectives for systemic use	54	73	31	158
L- Antineoplastic agents and immunomodulating agents	22	122	-	144
M- Musculoskeletal system	80	6	-	86
N- Nervous system	358	16	6	380
P- Antiparasitic products, insecticides and repellents	2	-	-	2
R- Respiratory system	26	4	-	30
S- Sensory organs	15	-	-	15
V- Various	5	3	4	12
Subtotal	1.026	304		
Total	1.330		61	1.391

Remarks: SNS = National Health System of Spain. ATC1-Anatomical, Therapeutic and Chemical Classification Level 1 = organ or system upon which the pharmaceutical acts. This level consists of 14 main groups identified by a letter of the alphabet.

Source of data: Ministry of Health. Official Nomenclator of SNS Pharmaceutical Benefits.

In 2019 a total of 36 new active ingredients were included in the financing system for the first time, with considerable pharmacological relevance. Most of these active ingredients correspond to group L (Antineoplastic agents and immunomodulating agents). Of the new active ingredients, 13 are biological medicines. In addition, of the new active ingredients 9 have been designated orphan medicines, which means that 25% of the new active ingredients included in SNS pharmaceutical benefits package are for the treatment or diagnosis of rare diseases.

Table 5-6 Active ingredients added to SNS pharmaceutical benefits, regardless of when their commercialization begins, by ATC1 and ATC5 classification. Spain, 2019

ATC1 group	ATC5	Active ingredients and associations	Number of presentations	Conditions applicable to medicine and type of dispensation
A- Alimentary tract and metabolism	A10BD23	METFORMINA ERTUGLIFLOZINA	2	Medical prescription
	A10BJ06	SEMAGLUTIDA	3	Medical prescription-Authorisation
	A10BK04	ERTUGLIFLOZINA	2	Medical prescription
B- Blood and blood-forming organs	B01AC21	TREPROSTINILO	4	Hospital Use
	B01AC25	CANGRELOR	1	Hospital Use
	B02BX06	EMICIZUMAB	4	Hospital Diagnosis-SCP Hospital Dispensation-Biological
	B05	CS MESENQ TRONCALES ADULTAS AUTOLOGAS DE MEDULA OSEA EXPAND	1	Hospital Use
C- Cardiovascular system	C09BX01	PERINDOPRIL AMLODIPINO INDAPAMIDA	1	Medical prescription
G- Genito-urinary system and sex	G02BB01	ETONOGESTREL ETINILESTRADIOL	1	Medical prescription
J- Anti-infectives for systemic use	J05AR20	BICTEGRAVIR EMTRICITABINA TENOFOVIR ALAFENAMIDA	1	Hospital Use
	J05AR21	DOLUTEGRAVIR RILPIVIRINA	1	Hospital Use
L- Antineoplastic agents and immunomodulating agents	L01EC03	ENCORAFENIB	2	Hospital Diagnosis-SCP Hospital Dispensation
	L01EE03	BINIMETINIB	1	Hospital Diagnosis-SCP Hospital Dispensation
	L01EF03	ABEMACICLIB	3	Hospital Diagnosis-SCP Hospital Dispensation
	L01EK03	TIVOZANIB	2	Hospital Diagnosis-SCP Hospital Dispensation
	L01EX10	MIDOSTAURINA	1	Hospital Diagnosis-SCP Hospital Dispensation-Orphan
	L01XC05	GEMTUZUMAB OZOGAMICINA	1	Hospital Use-Orphan-Biological
	L01XC26	INOTUZUMAB OZOGAMICINA	1	Hospital Use-Orphan-Biological
	L01XJ02	SONIDEGIB	1	Hospital Diagnosis-SCP Hospital Dispensation
	L01XK02	NIRAPARIB	2	Hospital Diagnosis-SCP Hospital Dispensation-Orphan
	L01XX70	AXICABTAGEN CILOLEUCEL	1	Hospital Use-Orphan-Biological
	L01XX71	TISAGENLECLEUCEL	1	Hospital Use-Orphan-Biological
	L04AA36	OCRELIZUMAB	1	Hospital Use-Biological
	L04AC16	GUSELKUMAB	2	Hospital Diagnosis-SCP Hospital Dispensation-Biological
	L04AC17	TILDRAKIZUMAB	2	Hospital Diagnosis-SCP Hospital Dispensation- Biological
	L04AX08	DARVADSTROCEL	1	Hospital Use-Orphan-Biological

N- Nervous system	N02CD01	ERENUMAB	2	Hospital Diagnosis-SCP Hospital Dispensation-Biological
	N02CD02	GALCANEZUMAB	2	Hospital Diagnosis-SCP Hospital Dispensation-Biological
	N05AE05	LURASIDONA	3	Medical prescription-Age authorisation
	N05AX15	CARIPRAZINA	6	Medical prescription-Age authorisation
R- Respiratory system	R03AL08	VILANTEROL UMECLIDINIO FLUTICASONA	1	Medical prescription-Authorisation
	R03DX10	BENRALIZUMAB	1	Hospital Diagnosis-SCP Hospital Dispensation-Biological
	R07AX30	IVACAFTOR LUMACAFTOR	1	Hospital Use
	R07AX31	IVACAFTOR TEZACAFTOR	1	Hospital Use-Orphan
V- Various	V03AE09	PATIROMERO	2	Medical prescription-Authorisation
	V10XX04	[177LU]-DOTA0-TYR3-OCTREOTATO	1	Hospital Use-Orphan
Total	36		63	

Remarks: SNS = National Health System of Spain. ATC1-Anatomical, Therapeutic and Chemical Classification Level 1 = organ or system upon which the pharmaceutical acts. ATC5-Anatomical, Therapeutic and Chemical Classification Level 5 = specific active ingredient or pharmacological association. SCP = packaged without tamper-evident label and dispensed through hospital pharmaceutical services.

Source: Ministry of Health. Official Nomenclator of SNS Pharmaceutical Benefits.

The number of medicine presentations included in the public financing system as of 2019 is 21,383, although some of them may not yet be available on the market. Of them 18,791 are normal packs and 2,592 are clinical packs. Of the normal pack presentations, 15,547 are dispensed through SNS medical prescriptions in pharmacies, and 45.6% correspond to groups of medicines with a reduced user contribution, for the treatment of chronic diseases.

Most of the presentations in the public financing system correspond to medicines acting on the nervous system (6,149), followed by medicines for the cardiovascular system (3,781) and anti-infectives for systemic use (2,358). Of all the presentations publicly financed, 12,809 are generics (59.9%). There are 254 presentations of biosimilars corresponding to 14 active ingredients and 91 presentations of orphan medicines.

The average Manufacturer's Selling Price (MSP) of the presentations included in the financing system is 137.5 Euros. The medicines that can be dispensed at pharmacies have an average MSP of 20.1 Euros while medicines for hospital dispensation have an average MSP of 450.3 Euros.

The total number of health products financed by the SNS through official medical prescriptions is 4,710. The majority of these products belong to the group of elastic fabrics used for internal injuries and malformations (1,496), followed by urinary incontinence pads (457) and colostomy bags (392).

More information is available in the monographic report about SNS pharmaceutical benefits:

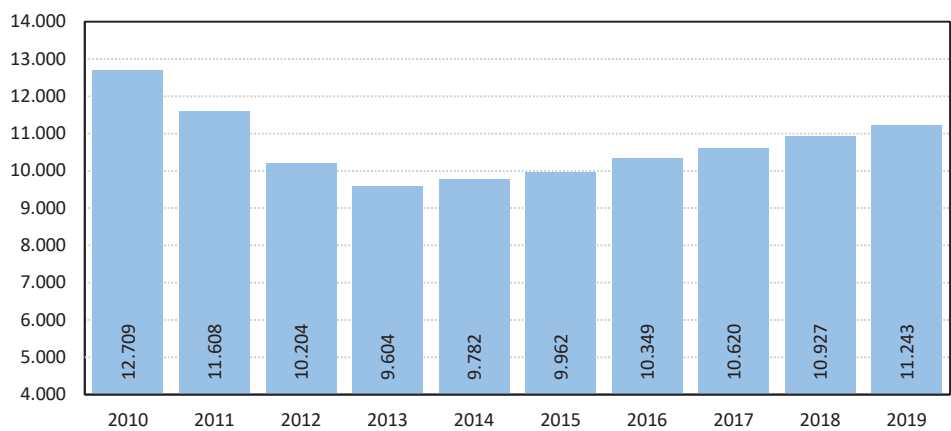
<https://www.sanidad.gob.es/estadEstudios/estadisticas/sisInfSanSNS/medProdSanit.htm>

5.4.2 Consumption of pharmaceutical benefits through SNS medical prescriptions dispensed in pharmacies

This section examines the consumption of pharmaceutical benefits by looking at the invoicing data of SNS medical prescriptions dispensed in pharmacies and paid for by the public funds of the autonomous communities, the National Institute of Health Management (INGESA) and insurance mutuels for civil servants (MUFACE, MUGEJU and ISFAS). The prescriptions invoiced by the insurance mutuels represent 3.93% of the total number of prescriptions and 3.99% of the pharmaceutical expenditure in the SNS as a whole.

In 2019 a total of 1,011 million packs of SNS medical prescriptions were invoiced through dispensing pharmacies, which amounts to a publicly-funded pharmaceutical expenditure of 11,243 million Euros. This expenditure is 2.9% higher than that of 2018, although between 2010 and 2019 pharmaceutical expenditure decreased by 11.5%.

Graph 5-60 Pharmaceutical expenditure (in millions of Euros) through SNS medical prescriptions (autonomous communities, INGESA and mutuels). Spain, 2010-2019

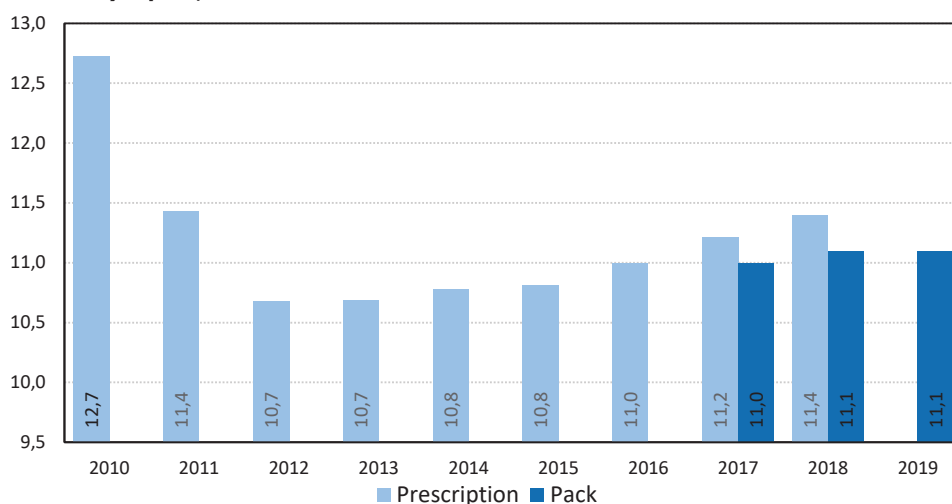


Remarks: SNS = National Health System of Spain. Pharmaceutical expenditure = total amount spent on pharmacy dispensation based on retail value, VAT included, minus contributions made by users and by dispensing pharmacies and minus deductions applicable by virtue of Royal Decree-Law 8/2010.

Source of data: Ministry of Health. Alcántara Information System: statistics on expenditure generated by the cost of medical prescriptions.

The average expenditure per pack in 2019 was 11.1 Euros, the same as in 2018 and 0.1 Euros more than in 2017.

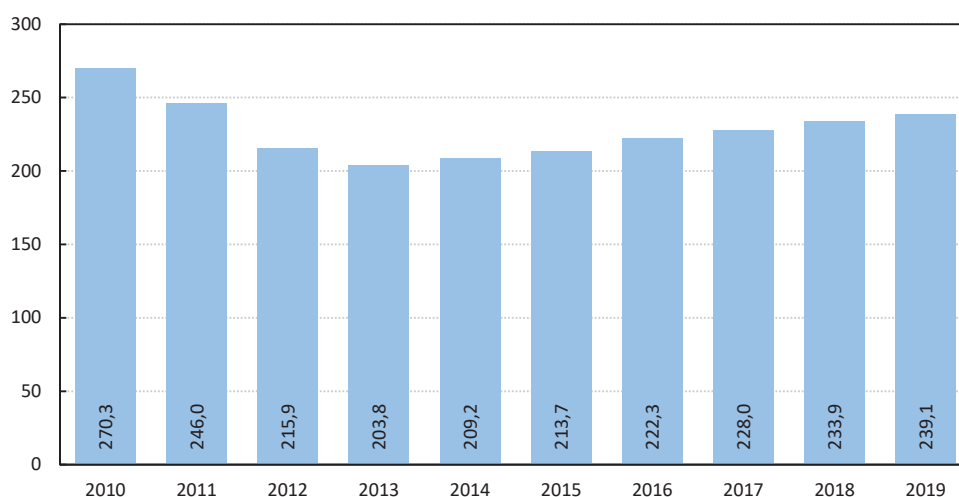
Graph 5-61 Average expenditure per prescription/pack (autonomous communities, INGESA and mutuels). Spain, 2010-2019



Source of data: Ministry of Health. Alcántara Information System: statistics on expenditure generated by the cost of medical prescriptions.

The expenditure per person per year in 2019 is 239.1 Euros, 2.2% more than in 2018. Since 2013 the expenditure per person has been on the rise, although the 2019 figure remains below those of 2010 and 2011 (270.3 and 246 Euros, respectively).

Graph 5-62 SNS pharmaceutical expenditure per person per year (autonomous communities, INGESA and mutuels). Spain, 2010-2019

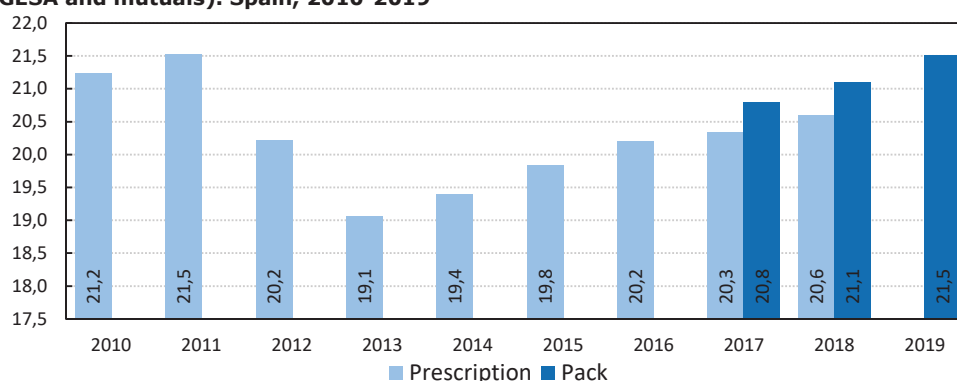


Remarks: population data according to municipal records as of 1 January of each year (National Statistics Institute).

Source of data: Ministry of Health. Alcántara Information System: statistics on expenditure generated by the cost of medical prescriptions.

The number of packs consumed per person is 21.5 in 2019, 1.9% more than in 2018.

Graph 5-63 Number of prescriptions/packs per person per year (autonomous communities, INGESA and mutuals). Spain, 2010-2019



Remarks: population data according to municipal records as of 1 January of each year (National Statistics Institute).

Source of data: Ministry of Health. Alcántara Information System: statistics on expenditure generated by the cost of medical prescriptions.

Of all the official SNS medical prescriptions invoiced in pharmacies, medicines are the pharmaceutical benefit group with the highest consumption: they represent 97.4% of the packs invoiced and 94% of the total amount invoiced, based on Retail Price (RP). Health products constitute 2.5% of the packs and 5% of the amount invoiced. The rest (0.1% of packs and 1% of the amount invoiced) correspond to extemporaneous compounds, official preparations and individualised anti-allergy and anti-bacterial vaccines.

Table 5-7 First ten therapeutic subgroups with highest consumption in packs, by ATC2 classification. Spain, 2019

	Therapeutic Subgroup ATC2	No. packs (thousands)	% packs of total	% packs 2019/2018	Retail Value-Value Added Tax (thousands of euros)
N02	Analgesics	104,441.6	10.6	4.7	742,569.0
N05	Psycholeptics	85,924.9	8.7	1.2	711,284.9
C09	Agents acting on the renin-angiotensin system	83,697.1	8.5	2.1	850,973.1
C10	Lipid modifying agents	71,682.9	7.3	1.3	849,075.9
A02	Drugs for acid-related disorders	70,515.1	7.2	-0.1	443,066.8
N06	Psychoanaleptics	50,317.1	5.1	3.9	883,951.6
A10	Pharmaceuticals used in diabetes	47,094.0	4.8	3.3	1,705,327.5
B01	Anti-thrombotic agents	46,008.5	4.7	2.8	897,272.8
M01	Anti-inflammatory and anti-rheumatic products	41,009.4	4.2	7.8	223,392.6
R03	Drugs for obstructive airway diseases	34,163.4	3.5	0.7	999,395.4
% of total			64.5		

Remarks: ATC2-Anatomical, Therapeutic and Chemical Classification Level 2 = therapeutic subgroup.

Retail value of all products invoiced calculated at Retail Price plus Value Added Tax.

Source of data: Ministry of Health. Alcántara Information System: medical prescriptions records.

The therapeutic subgroup with the highest consumption in number of packs is Analgesics (N02), 104.4 millions, 10.6% of the total. The group of drugs used to treat diabetes (A10) is the group with the highest consumption in terms of retail value; 1,705.3 million Euros, which is 13.5% of the total.

Anti-ulcer medicines: proton pump inhibitors (A02BC) is the chemical subgroup with highest consumption in terms of packs, 66.1 million, which represent 6.7% of the total. Combinations of oral blood glucose lowering drugs (A10BD) are the most consumed in terms of amount invoiced, with a retail value of 583.5 million Euros and a growth of 4.7% with respect to 2018. In second position is the subgroup of hypolipidemic agents: HMG CoA reductase inhibitors, with 6% of the total number of packs and a retail value of 532.5 millions of Euros.

Omeprazole, the preferred proton pump inhibitor, is the active ingredient with the highest consumption in number of packs, with 48.5 million packs consumed (4.9% of the total number of medicine packs). Its daily dose per inhabitant is 95.4 and its daily treatment cost is 0.1 Euros. The hypolipidemic Atorvastatin is the active ingredient with the highest consumption in terms of amount invoiced: 337.7 million Euros, 2.7% of all medicines. Paracetamol occupies second position in consumption of packs, with 4.4% of the total. Second position in amount invoiced is the association Metformin and Sitagliptin, with 1.9% of the total.

Generic medicines represent 46.3% of the total number of medicine packs invoiced and 22.6% of the retail value of all medicines invoiced.

Omeprazole is the active ingredient with highest consumption in packs of generic presentations and Atorvastatin the active ingredient with the highest amount invoiced in generics. The anti-depressant Escitalopram is the active ingredient most consumed in generic form, with 98.9% of its packs and 99.3% of its total retail value being generics.

The consumption of health products reached a volume of 22.8 million packs and a retail value of 632.2 million Euros in dispensing pharmacies. Urinary incontinence pads are the most consumed in terms of packs (9.9 million) and also in terms of retail value (377.2 million Euros). Next are sterile dressings and ostomy products.

More information is available in the monographic report about SNS pharmaceutical benefits:

<https://www.sanidad.gob.es/estadEstudios/estadisticas/sisInfSanSNS/medProdSanit.htm>

5.4.3 Pharmaceutical benefits provided in hospitals

Antineoplastic agents (L01) are the therapeutic subgroup with highest consumption in the hospitals of the SNS, in terms of Manufacturer's Selling Price (MSP). They account for 24.9% of total medicine consumption. Among them, monoclonal antibodies (L01XC) are the chemical subgroup with highest consumption in MSP (11.7% of the total consumption of medicines, with 21.3% growth with respect to 2018).

Antineoplastic agents (L01) are followed by immunosuppressants (L04), which account for 23.7% of the total consumption of medicines, and antivirals for systemic use (J05), with 11.5%.

With regard to immunosuppressants (L04), tumour necrosis factor alpha inhibitors (L04AB), used primarily in rheumatoid arthritis, occupy second position, with 10.1% of total consumption.

Antineoplastic agents (L01) are the therapeutic subgroup with the highest consumption in SNS hospitals, followed by immunosuppressants (L04) and antivirals for systemic use (J05). These 3 subgroups represent 60% of hospital consumption.

Table 5-8 First ten therapeutic subgroups with highest hospital consumption based on MSP. Spain, 2019

ATC2		Consumption MSP* (thousands of euros)	Percentage of total	Percentage 2018/2017	No. packs (thousands)
L01	Antineoplastic agents	2,044,430.7	24.9	16.9	4,364
L04	Immunosuppressant	1,950,271.7	23.7	23.5	2,607
J05	Antivirals for systemic use	947,752.4	11.5	-6.5	2,748
B02	Antihemorrhagics	348,343.0	4.2	12.5	853
J01	Antibacterials for systemic use	263,516.8	3.2	7.5	4,306
J06	Immune sera and immunoglobulins	220,033.3	2.7	13.9	614
L03	Immunostimulants	189,619.8	2.3	-3.3	653
A16	Other alimentary tract and metabolism products	187,354.8	2.3	11.2	168
B03	Antianemic preparations	181,205.1	2.2	-18.5	1,560
R03	Drugs for obstructive airway diseases	177,477.0	2.2	25.0	2,039
% of total			79.2		

Remarks: ATC2-Anatomical, Therapeutic and Chemical Classification Level 2 = therapeutic subgroup.

MSP*= Manufacturer's Selling Price minus deductions applicable by virtue of Royal Decree Law 8/2010.

Source of data: Ministry of Health. Hospital consumption information system.

The immunosuppressant Adalimumab is the active ingredient with highest consumption in MSP and it represents 4.5% of the total of all medicines. The immunosuppressant Infliximab occupies second position (2.5%), while in third place is human normal immunoglobulin for intravascular administration, with 2.2% of the total. The immunosuppressants Ustekinumab, Lenalidomide and Etanercept occupy fourth, fifth and sixth positions.

More information is available in the monographic report about SNS pharmaceutical benefits, published on:

<https://www.sanidad.gob.es/estadEstudios/estadisticas/sisInfSanSNS/medProdSanit.htm>

5.4.4 Consumption of biosimilar medicines

A biosimilar is a biological medicine highly similar to an existing one (reference product) that is no longer under patent. They are molecules synthesized from living cells. Biosimilars offer an attractive therapeutic alternative to the biological product, because they cost less than the reference product, and also, since they are included in the reference price system, using them promotes the reduction of the price of medicines with that active ingredient.

In SNS hospitals, consumption of biosimilars, calculated at MSP, is 445 million Euros, which is 5.4% of the total hospital expenditure in medicines.

The immunosuppressant TNF alpha inhibitor, Infliximab, is the biosimilar that has shown the highest consumption in terms of MSP, followed by the monoclonal antibody Rituximab.

Most of the consumption of the immunostimulant Filgrastim is in biosimilars, in terms of both MSP and packs, with 96.2% and 95.4% respectively.

With regard to consumption through SNS medical prescriptions, biosimilar medicines invoice 37.5 million Euros, calculated at MSP. Enoxaparin is the biosimilar with the highest consumption in amount invoiced and packs, with 17.4% of the total value in MSP and 20.8% of the total number of packs for this active ingredient. In second place are the biosimilars of insulin glargine.

More information is available in the monographic report about SNS pharmaceutical benefits:

<https://www.sanidad.gob.es/estadEstudios/estadisticas/sisInfSanSNS/medProdSanit.htm>

5.4.5 Consumption of orphan medicines

Orphan medicines are specially designated medicines developed to treat rare or uncommon diseases. The consumption in 2019 of these medicines in the hospitals of the SNS public network has increased by 19% with respect to the preceding year. Consumption of orphan medicines, calculated at MSP, came to a total of 907.3 million Euros, which represents 11% of the total hospital expenditure on medicines.

The orphan medicines most frequently used in the hospital setting correspond to active ingredients in the group of antineoplastic agents (L01) and immunosuppressants (L04). Lenalidomide, for the treatment of multiple myeloma and myelodysplastic syndrome, is the active ingredient with highest consumption in MSP, representing 18.7% of the total of all orphan drugs. The antineoplastic Ibrutinib occupies second position. Daratumumab, human monoclonal antibody for multiple myeloma, shows a large increment (60.1%) in expenditure calculated at MSP in 2019 with respect to 2018, and it is also the orphan medicine with highest consumption in number of packs.

With respect to orphan medicines invoiced through SNS medical prescriptions dispensed in pharmacies in 2019, such medicines correspond exclusively to two active ingredients in the hospital diagnosis category and they represent 4.2 thousand packs and 4.7 million Euros. Pasireotide, a somatostatin analogue used to treat patients with acromegaly and Cushing's disease, has seen significant growth in consumption, 26.6% in number of packs and 27.7% in amount invoiced. The antiepileptic Rufinamide is no longer designated an orphan medicine, as of March 2019.

More information is available in the monographic report on SNS pharmaceutical benefits:

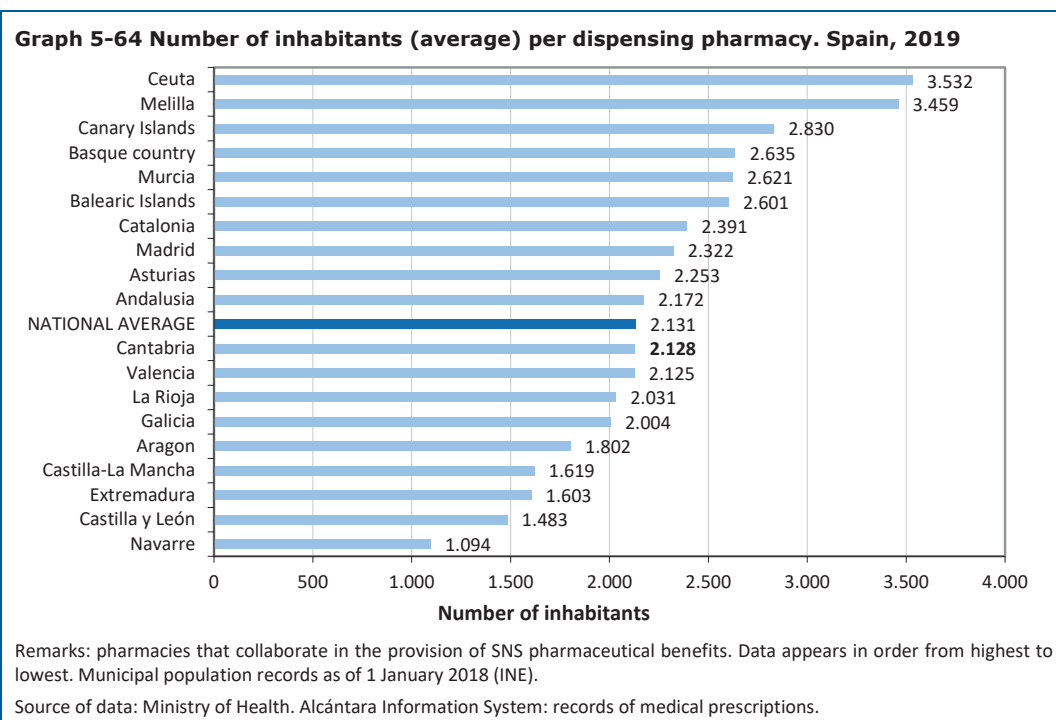
<https://www.sanidad.gob.es/estadEstudios/estadisticas/sisInfSanSNS/medProdSanit.htm>

5.4.6 Dispensing pharmacies

The health authorities of the autonomous communities and the professional associations of pharmacists have signed collaboration agreements on the provision of SNS pharmaceutical benefits through the country's legally established pharmacies, which are privately owned.

A total of 22,069 dispensing pharmacies thus collaborate in the provision of SNS pharmaceutical benefits and they invoice a monthly average of 84.25 million packs which, through SNS medical prescriptions, are paid for by public funds.

In Spain there is an average of one pharmacy for every 2,131 inhabitants. Ceuta and Melilla are the communities with the highest number of inhabitants per pharmacy (3,532 and 3,459 respectively), while in Navarre and Castilla y León the population per pharmacy is lower (1,094 and 1,483).



Dispensing pharmacies have an average monthly sales, of medicines and other items invoiced to public funds, of 50,577 Euros. Ceuta has the highest monthly sales per dispensing pharmacy, with 83,365 Euros, while in the pharmacies of Navarre sales are as low as 23,282 Euros.

More information is available in the monographic report on SNS pharmaceutical benefits:

<https://www.sanidad.gob.es/estadEstudios/estadisticas/sisInfSanSNS/medProdSanit.htm>

5.4.7 Pharmaceutical manufacturers supplying medicines and health products to the SNS

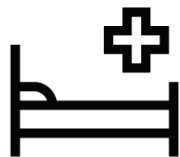
In 2019 a total of 456 medicine manufacturer-suppliers sold medicines consumed through SNS medical prescriptions dispensed by pharmacies and in the hospitals of the SNS public network. Of all the medicines thus consumed, 5 manufacturers supplied 26.6% of the packs and 23.3% of the total value in MSP. Fifty manufacturers invoiced 82.1% of the packs and the MSP.

A total of 114 supplying companies sold health products consumed through SNS medical prescriptions dispensed in pharmacies. Just 5 of these supplying companies account for 55.1% of the packs and 69.8% of the amount invoiced.

More information is available in the monographic report on SNS pharmaceutical benefits:

<https://www.sanidad.gob.es/estadEstudios/estadisticas/sisInfSanSNS/medProdSanit.htm>

5.5 Physical resources



This section examines the healthcare system’s capacity in relation to physical resources such as infrastructure and equipment (primary care centres, local primary care centres, hospitals, total beds and available beds, day hospital beds), different types of health technologies and the SNS Reference Centres, Services and Units (CSUR).

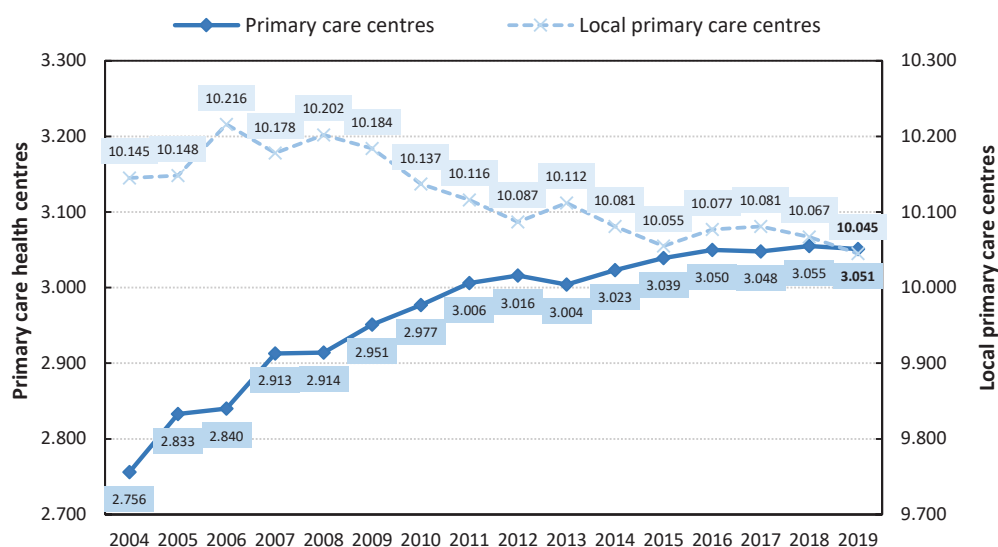
The SNS has 3,051 primary care centres (*centros de salud*) and 10,045 local primary care centres (*consultorios locales*), smaller facilities where healthcare professionals from the nearest primary care centre go regularly to see patients who live in that area, in an effort to bring basic services closer to the population.

5.5.1 Primary care centres and local primary care centres

Table 5-9 Number of SNS primary care centres and local primary care centres, ratio LPCC/PCC and ratio PCC+LPCC per 100,000 inhabitants by autonomous community. Spain, 2019					
	Primary Care Centres (PCC)	Local Primary Care Centres (LPCC)	Total	Ratio LPCC/PCC	Rate of PCC+LPCC per 100,000 inhab.
Andalusia	407	1.110	1.517	2.7	18
Aragon	118	871	989	7.4	75
Asturias	69	144	213	2.1	21
Balearic Islands	58	104	162	1.8	14
Canary Islands	107	155	262	1.4	12
Cantabria	42	124	166	3.0	29
Castilla y León	247	3.669	3.916	14.9	163
Castilla-La Mancha	203	1.110	1.313	5.5	64
Catalonia	418	789	1.207	1.9	16
Valencia	285	567	852	2.0	17
Extremadura	111	415	526	3.7	50
Galicia	398	67	465	0.2	17
Madrid	262	162	424	0.6	6
Murcia	85	180	265	2.1	18
Navarre	59	237	296	4.0	45
Basque country	155	167	322	1.1	15
La Rioja	20	174	194	8.7	62
Ceuta y Melilla	7	0	7	0.0	4
Total SNS	3,051	10,045	13,096	3.3	28
Remarks: SNS = National Health System of Spain. Resident population figures as of 1 January 2019.					
Source of data: Ministry of Health. Primary Care Information System (SIAP).					

Since 2004 the number of primary care centres has been growing while that of local primary care centres has been falling, although this trend has become less pronounced in the past five years.

Graph 5-65 Changes in the number of PCC and LPCC in the SNS. Spain, 2004-2019



Remarks: SNS = National Health System of Spain; PCC = primary care centre; LPCC = local primary care centre.
Source of data: Ministry of Health. Primary Care Information System (SIAP).

The number of primary care centres for every 100,000 inhabitants and the number of local primary care centres for every primary care centre show great variability among territories, a reflection of the diversity existing in the geographic dispersion of Spain's population.

The average number of local primary care centres that depend on a primary care centre is 3.3, with figures that range from 14.9 in Castilla y León to 0 in Ceuta and Melilla (INGESA).

Looking at both types of centres together, the SNS has 28 centres providing primary care for every 100,000 inhabitants, with figures ranging from 163 in Castilla y León to 4 in Ceuta and Melilla (INGESA).

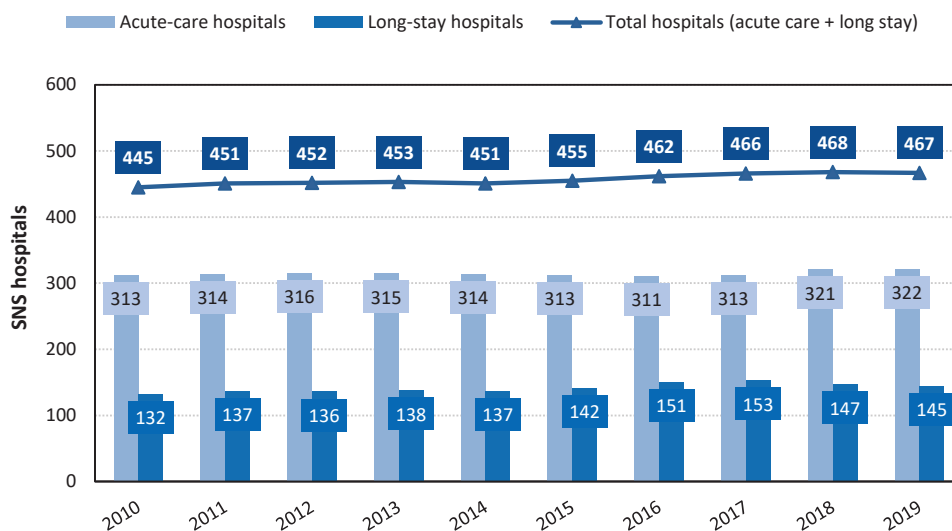
5.5.2 Hospitals

The SNS has a care provision network that includes 467 hospitals with a total of 112,225 beds. The number of hospitals in the SNS has risen from 445 in 2010 to 467 in 2019, of which 322 are acute-care hospitals and 145 are long-stay hospitals.

Catalonia, with 157 hospitals, is the autonomous community with the highest number of hospitals belonging to the SNS. It is followed by Andalusia, which has 51.⁵³

⁵³ It should be noted that the figures for Catalonia include hospitals of the Public Use Hospital Network (*Xarxa Hospitalaria d'Utilització Pública*, or XHUP) and, in addition, that the Integrated Healthcare System for Public Use of Catalonia (*Sistema Sanitario Integral de Utilización Pública de Cataluña*, or SISCAT) considers many social-health facilities and other specially authorised health facilities to be hospitals. This multiplies the number of hospitals in Catalonia and significantly raises the indicator of the number of beds in that autonomous community.

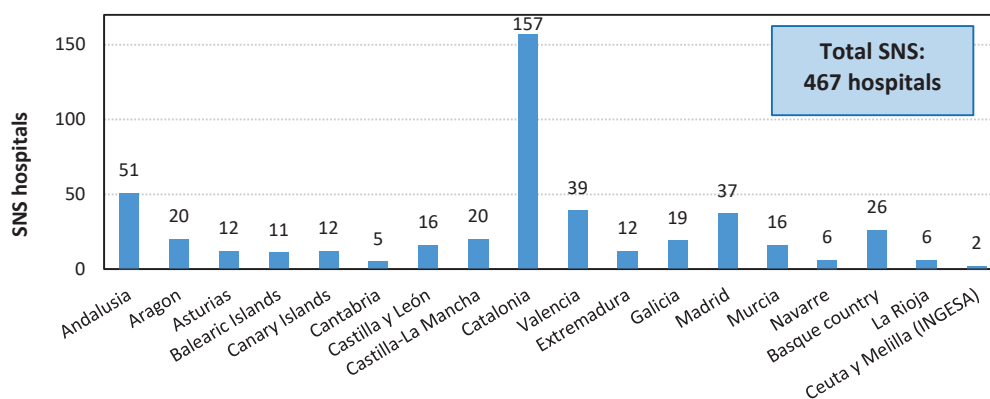
Graph 5-66 Number of hospitals in the SNS, by type of care provided. Spain, 2019



Remarks: SNS = National Health System of Spain.

Source of data: Ministry of Health. Specialised Care Information System (SIAE).

Graph 5-67 Number of hospitals in the SNS, by autonomous community. Spain, 2019



Remarks: SNS = National Health System of Spain.

Source of data: Ministry of Health. Specialised Care Information System (SIAE).

The Spanish healthcare sector as a whole (public and private) has 777 hospitals;⁵⁴ looking at their **size based on total beds**, 560 have fewer than 200 beds, 147 have between 200 and 500 beds, 55 between 501 and 1000 and 15 have over 1000 beds. The autonomous community with the most hospitals is Catalonia. Most of the large hospitals (over 500 beds) are concentrated in the autonomous communities of Andalusia (11), Catalonia (8) and Madrid (10), while the autonomous cities of Ceuta and Melilla do not have any hospitals of this size.

⁵⁴ Specialised Care Information System (SIAE). This figure includes public and private hospitals in use as of 31 December 2019. The term "total beds" means all the beds installed and able to be used, although some of them may, for different reasons, not be in service at a given time.

Table 5-10 Hospitals according to size (total number of beds) by autonomous community. Spain, 2019

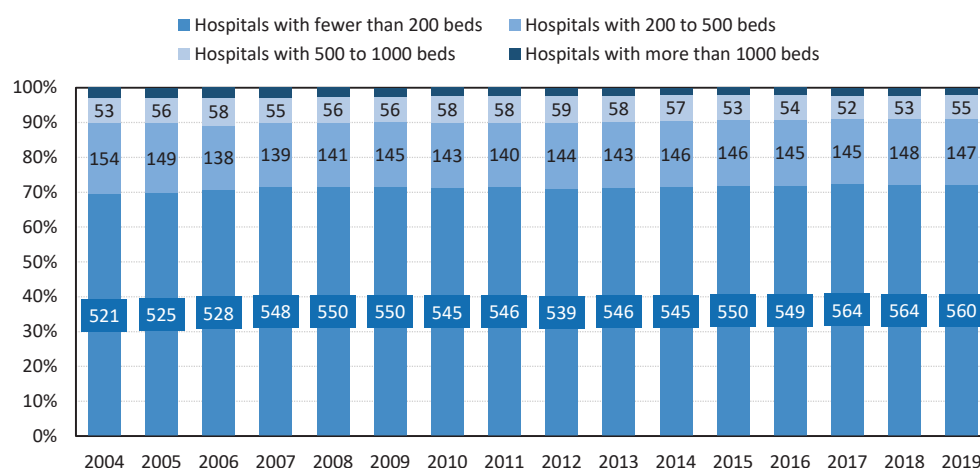
	Hospitals with fewer than 200 beds	Hospitals with 200-500 beds	Hospitals with 501-1,000 beds	Hospitals with over 1,000 beds	Total of hospitals
Andalusia	81	16	8	3	108
Aragon	22	5	1	1	29
Asturias	19	5	1	0	25
Balearic Islands	18	5	1	0	24
Canary Islands	26	4	4	0	34
Cantabria	4	2	1	0	7
Castilla y León	22	8	5	1	36
Castilla-La Mancha	20	5	3	0	28
Catalonia	158	36	7	1	202
Valencia	33	20	5	1	59
Extremadura	11	6	2	0	19
Galicia	27	1	4	3	35
Madrid	56	19	7	3	85
Murcia	18	6	2	0	26
Navarre	7	3	0	1	11
Basque country	30	5	3	1	39
La Rioja	7	0	1	0	8
Ceuta	0	1	0	0	1
Melilla	1	0	0	0	1
Total	560	147	55	15	777

Remarks: hospital complexes count as a single hospital.

Source of data: Ministry of Health. Specialised Care Information System (SIAE).

The distribution of the number of hospitals according to size has remained relatively constant since 2004. The number of hospitals has varied between 750 in 2004 and 777 in 2019, an increment of 4%. The largest variations are found in the hospitals with fewer than 200 beds.

Graph 5-68 Changes in number of hospitals by size (total number of beds). Spain, 2004-2019



Remarks: hospital complexes count as a single hospital.

Source of data: Ministry of Health. Specialised Care Information System (SIAE).

The hospitals have a **total of 153,265 hospital beds**,⁵⁵ distributed as follows: 32.0% in small hospitals (fewer than 200 beds), 30.1% in medium-sized hospitals (between 200 and 500 beds) and the lower percentages, 26.2%, in large hospitals (between 501 and 1,000 beds) and 11.8% in the largest hospitals (with over 1,000 beds).

Table 5-11 Total beds according to size of hospital, by autonomous community. Spain, 2019

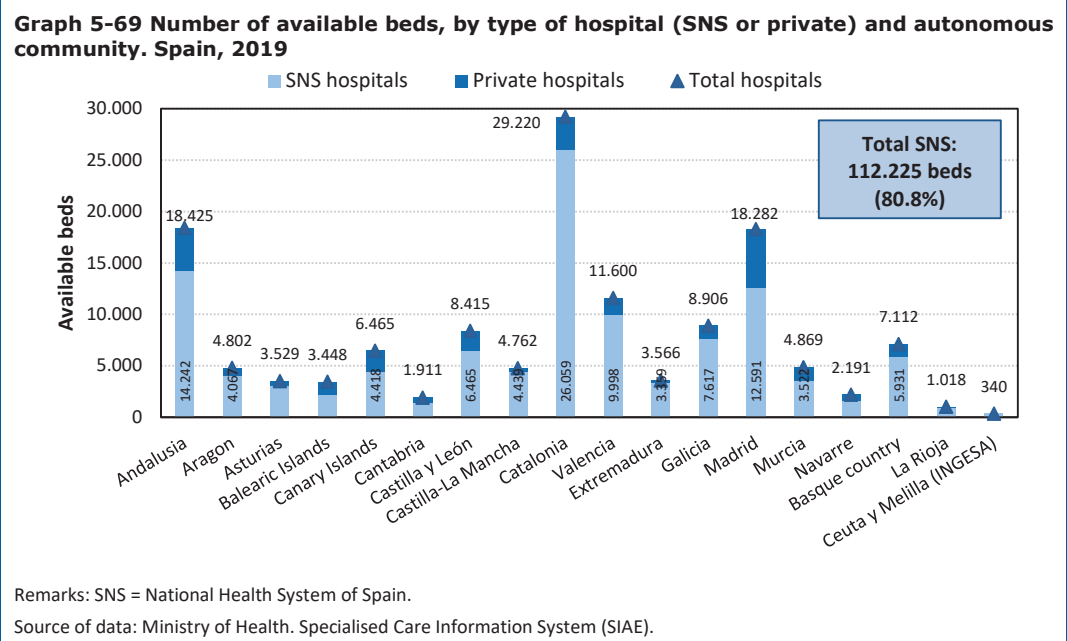
	Hospitals with fewer than 200 beds	Hospitals with 200-500 beds	Hospitals with 501 or more beds	Hospitals with over 1000 beds	Total
Andalusia	5,943	5,005	5,802	3,596	20,346
Aragon	1,990	1,243	800	1,213	5,246
Asturias	1,269	1,553	991	0	3,813
Balearic Islands	1,648	1,454	839	0	3,941
Canary Islands	2,587	1,004	3,586	0	7,177
Cantabria	393	725	906	0	2,024
Castilla y León	1,760	2,772	3,702	1,056	9,290
Castilla-La Mancha	1,672	1,704	2,206	0	5,582
Catalonia	13,554	11,756	4,651	1,152	31,113
Valencia	3,206	5,985	2,922	1,004	13,117
Extremadura	641	1,791	1,554	0	3,986
Galicia	2,303	457	3,027	4,071	9,858
Madrid	6,454	6,107	4,581	3,691	20,833
Murcia	1,612	1,832	1,632	0	5,076
Navarre	625	694	0	1,077	2,396
Basque country	2,697	1,771	2,356	1,171	7,995
La Rioja	462	0	590	0	1,052
Ceuta	0	252	0	0	252
Melilla	168	0	0	0	168
Total	48,984	46,105	40,145	18,031	153,265

Remarks: hospital complexes count as a single hospital.

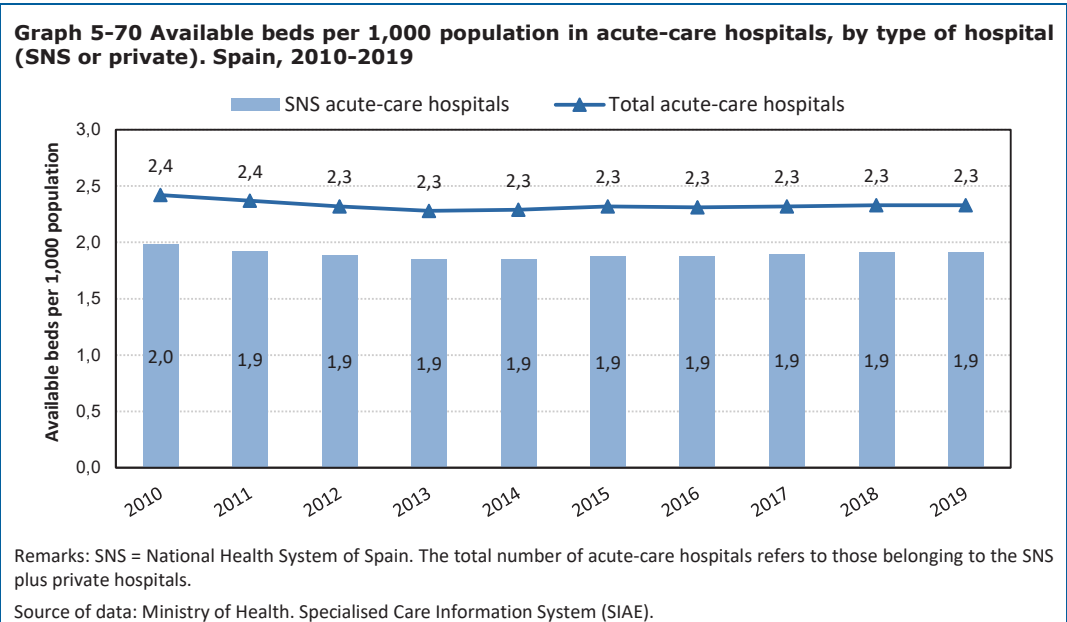
Source of data: Ministry of Health. Specialised Care Information System (SIAE).

The hospitals of the SNS have **112,225 available beds** (80.8% of the 138,861 beds available in the country) and the autonomous communities that have the most available beds are Catalonia (26,059), Andalusia (14,242) and Madrid (12,591).

⁵⁵ Specialised Care Information System (SIAE). These figures include private and public hospitals active as of 31 December 2019. The term "available beds" refers to those that have been in service during the year, regardless of their degree of use or the occupation they have had.

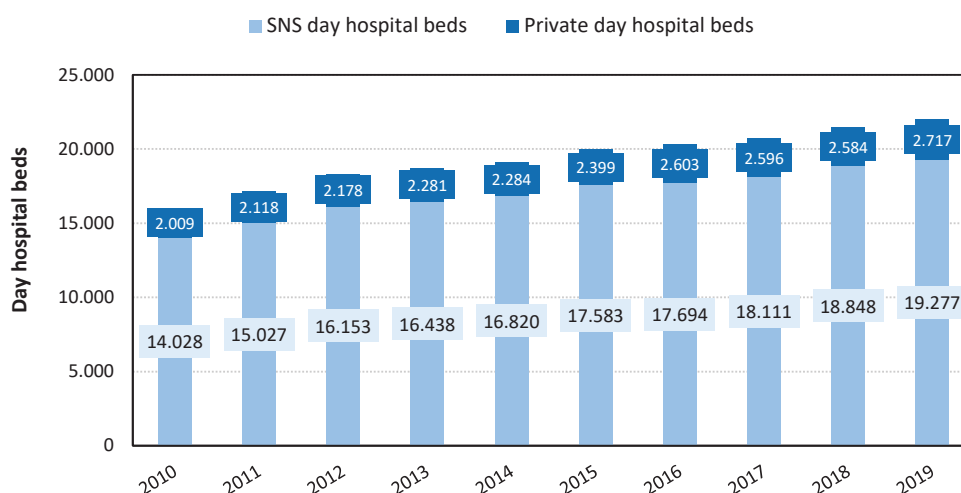


The ratio of available beds in acute-care hospitals of the SNS is 1.9 per 1,000 population (2.3 for all acute-care hospitals, both public and private). This figure has remained constant in recent years.



The SNS has 19,277 **day hospital beds**, which represents 87.6% of the 21,994 existing in the Spanish healthcare sector as a whole. The number of public day hospital beds has grown by 37.4% since 2010.

Graph 5-71 Day hospital beds, by type of hospital (SNS or private). Spain, 2010-2019

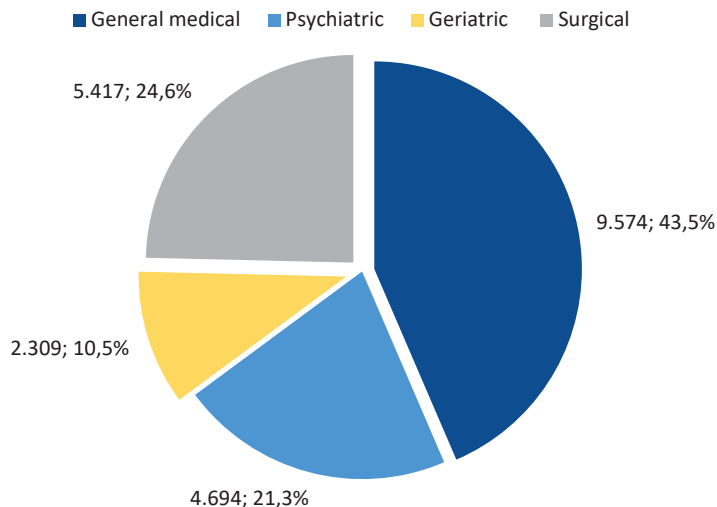


Remarks: SNS = National Health System of Spain.

Source of data: Ministry of Health. Specialised Care Information System (SIAE).

Day hospital beds are an alternative to hospitalisation when attending a certain type of patient who requires several hours of care in the hospital but does not need to spend the night there. Of the 21,994 day hospital beds, 43.5% are for general medical care, 24.6% are for surgical care, 21.3% are for psychiatric care and 10.5% are geriatric care.

Graph 5-72 Day hospital beds, by type of care provided. Spain, 2019



Source of data: Ministry of Health. Specialised Care Information System (SIAE).

5.5.3 Medical technologies

The SNS has 603 Computerised Axial Tomography (CAT) machines, 72.2% of the total number of CAT machines in use in Spain. The ratio of SNS CAT machines per million population is 12.8.

The SNS also has 369 Magnetic Resonance Imaging (MRI) machines, accounting for 54.7% of the total in Spain and making for a ratio of 7.8 MRI per million population in Spain.

The number of mammography machines in the SNS is 443 (66.0% of the total number) and the ratio is therefore 9.4 machines per million population.

Table 5-12 Available medical technologies by type of ownership (SNS or private). Number of machines in use, percentage of total and ratio per million population. Spain, 2019

	Machines in SNS			Machines in private sector			Total	
	N	%	Ratio p.m.p	N	%	Ratio p.m.p	N	Ratio p.m.p
Computerized Axial Tomography	603	72.2	12.8	232	27.8	4.9	835	17.7
Magnetic Resonance Imaging	369	54.7	7.8	306	45.3	6.5	675	14.3
Mammography	443	66.0	9.4	228	34.0	4.8	671	14.3
Linear accelerators + cobalt therapy	198	81.5	4.2	45	18.5	1.0	243	5.2

Remarks: SNS = National Health System of Spain; p.m.p. = per million population.
Source of data: Ministry of Health. Specialised Care Information System (SIAE).

As for radiotherapy equipment (linear accelerators and cobalt therapy), the SNS hospital network has 198 machines (81.5% of total in Spain), a ratio of 4.2 machines per million population.

5.5.4 Reference Centres, Services and Units (CSUR) of the SNS

The SNS now has 279 Reference Centres, Services and Units (CSUR) for the treatment of certain pathologies at the national level. Catalonia, with 88, Madrid, with 84, and Andalusia, with 37, are the communities with the highest numbers.

Table 5-13 Distribution of Reference Centres, Services and Units (CSUR) of the SNS, by autonomous community. Spain, 2019

	CSUR of the SNS
Andalusia	37
Aragon	1
Asturias	4
Balearic Islands	-
Canary Islands	1
Cantabria	7
Castilla y León	5
Castilla-La Mancha	2
Catalonia	88
Valencia	25
Extremadura	-
Galicia	12
Madrid	84
Murcia	6
Navarre	-
Basque country	7
La Rioja	-
INGESA	-
Total SNS	279

Remarks: SNS = National Health System of Spain. Data refer to September 2019.
Source of data: Ministry of Health. Information System for the monitoring of the SNS Reference Centres, Services and Units.

There are 279 Reference Centres, Services and Units in the SNS. In 2019 seven new CSUR were designated for the care of congenital coagulopathies in Madrid, Catalonia and Andalusia, and for the care of complex hypothalamus-pituitary pathologies in Catalonia and Andalusia.

Table 5-14 List of new Reference Centres, Services and Units (CSUR) of the SNS, designated in 2019

Unit	Hospital	Autonomous Community
Congenital coagulopathies	Hospital U. La Paz	Madrid
	Hospital U. Vall D'Hebrón	Catalonia
	Hospital U. Virgen del Rocío	Andalusia
Complex hypothalamus-pituitary pathologies (children and adults)	H. de la Santa Creu i Sant Pau	Catalonia
	Hospital U. Vall D'Hebrón	Catalonia
	Hospital U. Virgen del Rocío	Andalusia
	Hospital U. Virgen de las Nieves y H.U. San Cecilio	Andalusia

Remarks: SNS = National Health System of Spain.

Source of data: Ministry of Health.

5.6 Human resources



The SNS employs a total of 683,639 workers,⁵⁶ which is a ratio of 14.5 SNS employees per 1,000 population. Of these employees, 75.6% work in hospitals, 16.9% work in centres that provide primary care and 3.1% work in the 112/061 Urgent Care and Emergency Services. Fifty-two percent (52.0%) of all SNS workers are physicians or nurses, and 4.5% are residents completing their specialised training.

Table 5-15 Number and ratio per 1,000 population of professionals working in the SNS, total and distribution by care level. Sapin, 2019

	Number	Rate per 1,000 inhab.	Primary Care Teams	Others in Primary Care	Hospital Care	112/061 Urgent Care and Emergency Services	Residents in training
Physicians	158,129	3.4	36,239	6,535	85,467	3,276	26,612
Nurses	196,944	4.2	30,537	7,479	153,433	3,333	2,162
Other professionals	327,566	7.0	21,314	12,928	276,806	14,632	1,830
Total	682,639	14.5	88,090	26,942	515,706	21,241	30,604

Remarks: SNS = National Health System of Spain. The number of physicians in Primary Care Teams (EAP) is the sum of general practitioners and paediatricians. The number of professionals in the hospitals refers to those having an employment contract.

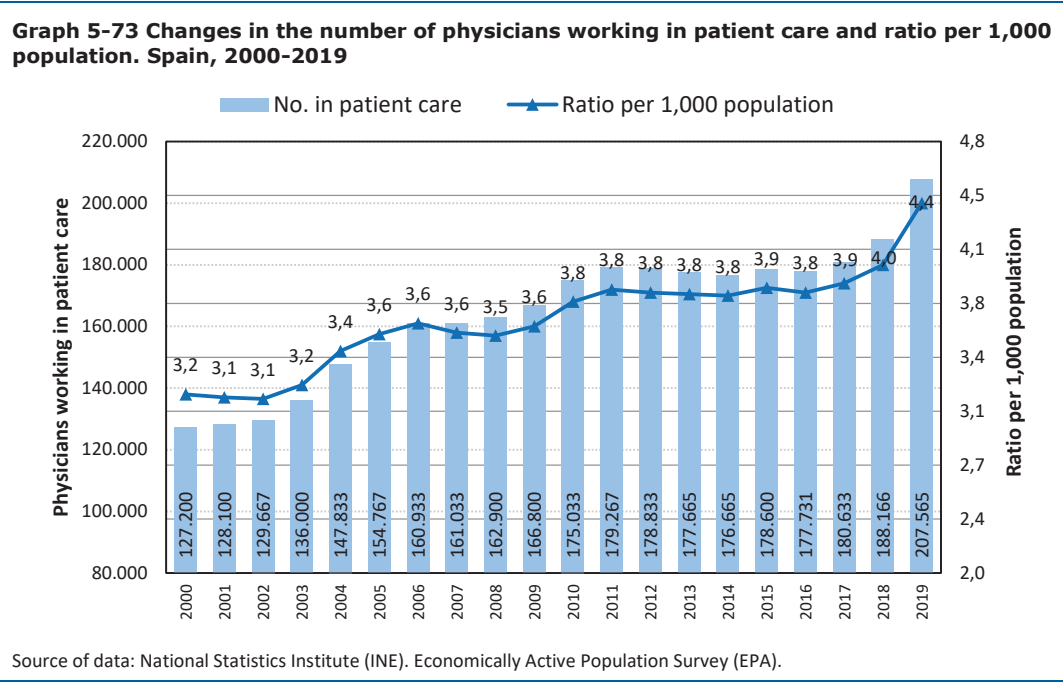
Source of data: Ministry of Health. Primary Care Information System (SIAP), Specialised Care Information System (SIAE), statistics on the 112/061 Urgent Care and Emergency Services by SIAP and the Subdirectorate General of Professional Regulation.

⁵⁶ In most cases, the data presented is the information made available by the different information systems on or before 31 December 2020, with the most recent data and the consolidated time series being selected for publication.

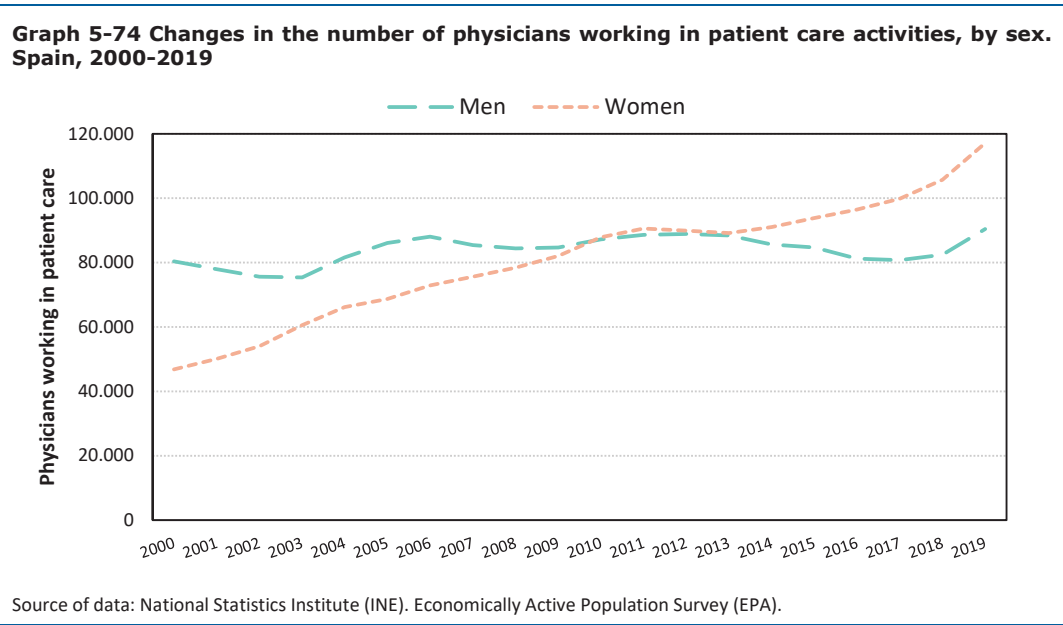
5.6.1 Medical practitioners

Practicing physicians in Spain

The number of physicians working in patient care, whether in the public or private sector, is 207,565⁵⁷, which means there is a ratio of 4.4 physicians per 1,000 population. Since 2000, the ratio has increased by 1.2 points, from 3.2 to 4.4 in 2019.

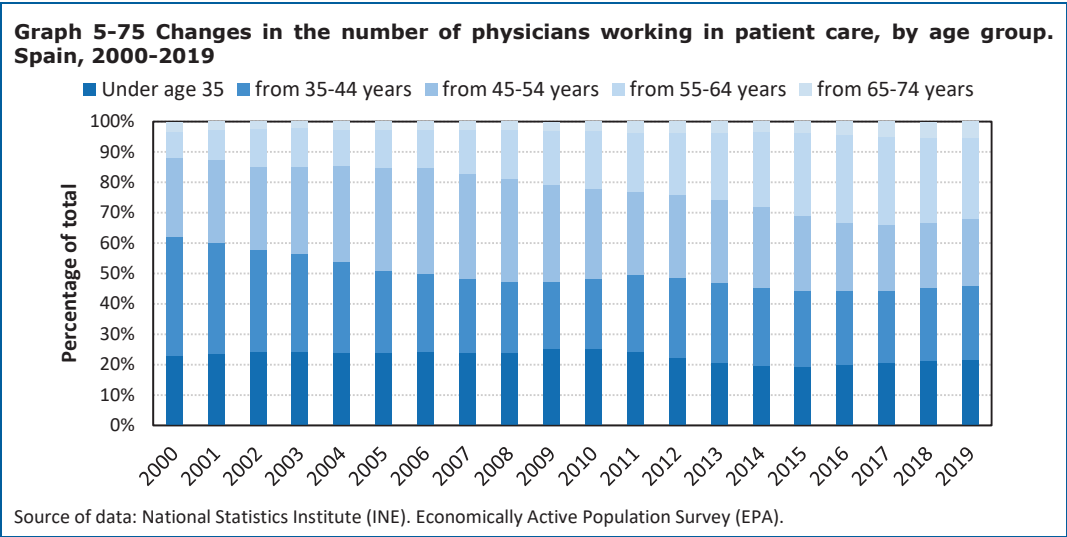


The proportion of women has risen from 36.8% in the year 2000 to 56.4% in 2019, which represents an increase of 19.6 points over this period.



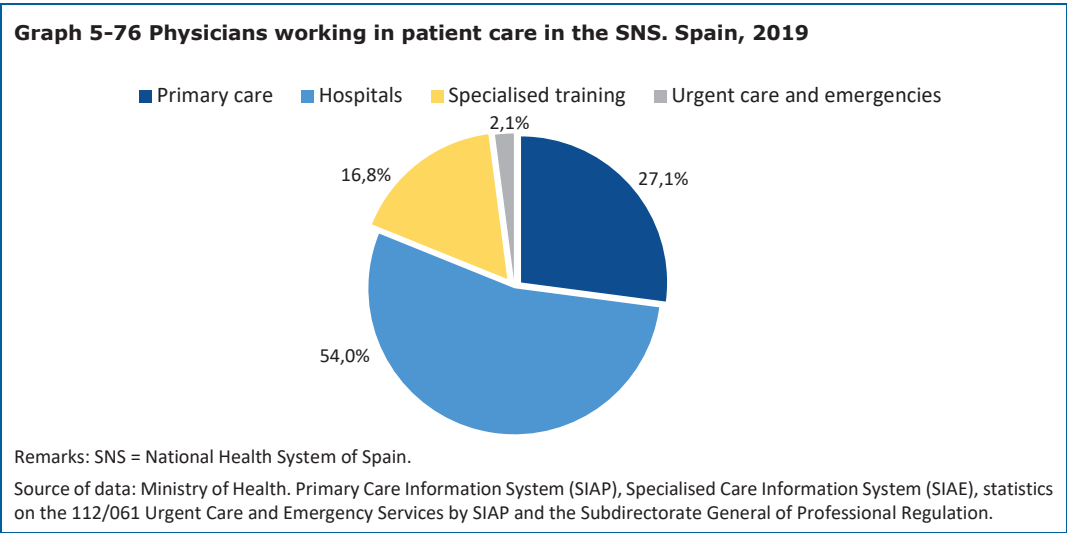
⁵⁷ National Statistics Institute (INE). Economically Active Population Survey (EPA) 2019.

By age, since 2000 the proportion of physicians under age 45 has gone from 6 out of 10 to a slightly lower 5 out of 10 professionals.



Physicians in the SNS

The SNS employs 158,129⁵⁸ physicians, of whom 42,774 (27.1%) work in primary care, 85,467 (54.0%) in hospital care, 3,276 (2.1%) in the 112/061 Urgent Care and Emergency Services, in addition to 26,612 medical specialists in training (16.8%). The overall ratio of physicians per 1,000 population is therefore 3.4.



Not including physicians in training and those working in Urgent Care and Emergency Services, the ratio of physicians working in primary care to those working in hospital care is 1 to 2.

⁵⁸ Ministry of Health. Primary Care Information System (SIAP), Specialised Care Information System (SIAE), statistics on the 112/061 Urgent Care and Emergency Services by SIAP, Subdirectorate General of Professional Regulation (2018). In hospitals, only professionals who have contracts with the hospital are included, i.e. those who work for the hospital, as government personnel, statutory personnel or with a regular employment contract, either full or part time.

Physicians in SNS primary care

Of the 42,774 physicians working in patient care in SNS primary care services, 36,239 (84.7%) work in a Primary Care Team (EAP) and 6,535 (15.3%) have a position in patient care other than an EAP. This last category includes physicians hired specifically for urgent care centres or services, whether they are at specific centres providing urgent primary care services (SUAP or equivalent), Primary Care Centres with extended hours for urgent care services (PAC or equivalent), or for urgent care services only in patient homes (this excludes the professionals who work in a Primary Care Team and provide urgent care outside of normal hours in rotating on-duty shifts).

Table 5-16 Number of physicians working in SNS primary care, total, and distribution by type of care. Spain, 2019

Number	Primary Care Team (EAP)	Consulting paediatrician	Urgent care	Home care team
42,774	36,239	72	6,306	157

Remarks: SNS = National Health System of Spain. The number of physicians in Primary Care Teams (EAP) is the sum of both general practitioners and paediatricians.

Source of data: Ministry of Health. Primary Care Information System (SIAP).

Of the 36,239 physicians working in SNS Primary Care Teams, 29,737 are general practitioners and 6,502 are paediatricians. Looking at both groups together, there are 0.8 physicians per 1,000 population.

Table 5-17 Number of general practitioners and paediatricians in Primary Care Teams of the SNS, total, and ratio per 1,000 population, by autonomous community. Spain, 2019

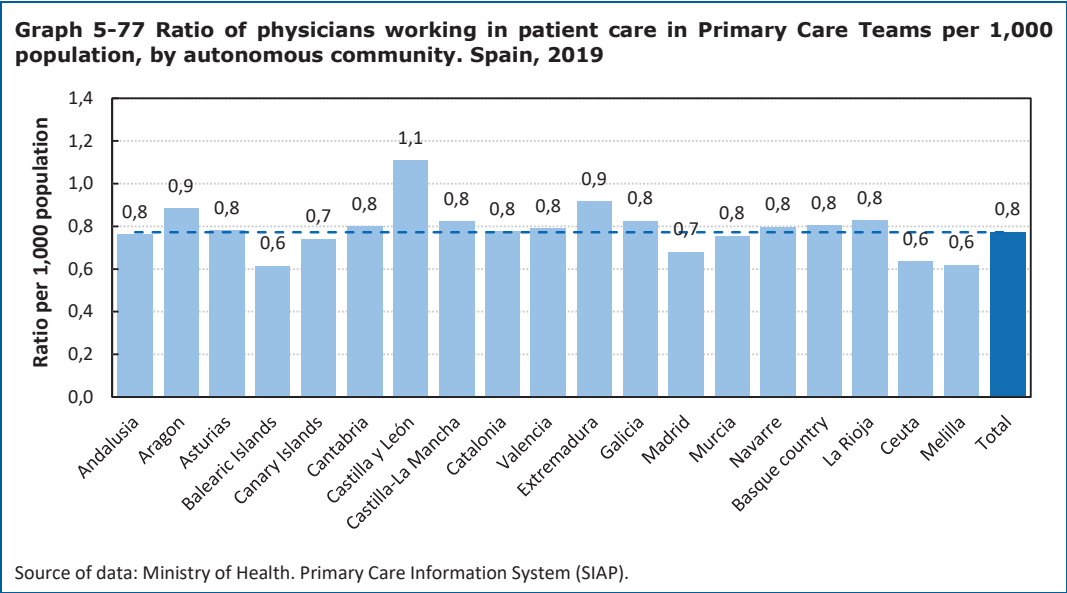
	General Practitioners	Paediatricians	Total	Ratio per 1,000 population
Andalusia	5,081	1,171	6,252	0.8
Aragon	973	184	1,157	0.9
Asturias	667	124	791	0.8
Balearic Islands	559	142	701	0.6
Canary Islands	1,194	320	1,514	0.7
Cantabria	367	84	451	0.8
Castilla y León	2,316	255	2,571	1.1
Castilla-La Mancha	1,354	240	1,594	0.8
Catalonia	4,931	995	5,926	0.8
Valencia	2,913	850	3,763	0.8
Extremadura	816	127	943	0.9
Galicia	1,858	315	2,173	0.8
Madrid	3,670	937	4,607	0.7
Murcia	863	248	1,111	0.8
Navarre	406	107	513	0.8
Basque Country	1,484	336	1,820	0.8
La Rioja	215	43	258	0.8
Ceuta	36	12	48	0.6
Melilla	34	12	46	0.6
Total	29,737	6,502	36,239	0.8

Remarks: SNS = National Health System of Spain.

Source of data: Ministry of Health. Primary Care Information System (SIAP).

Of all the physicians working in patient care in EAP, 60.1% are women.

The ratio of physicians working in patient care in EAP is below the national average (0.8 physicians per 1,000 population) in Ceuta, Melilla, Balearic Islands, Canary Islands, Madrid and Murcia.



Physicians in SNS hospitals

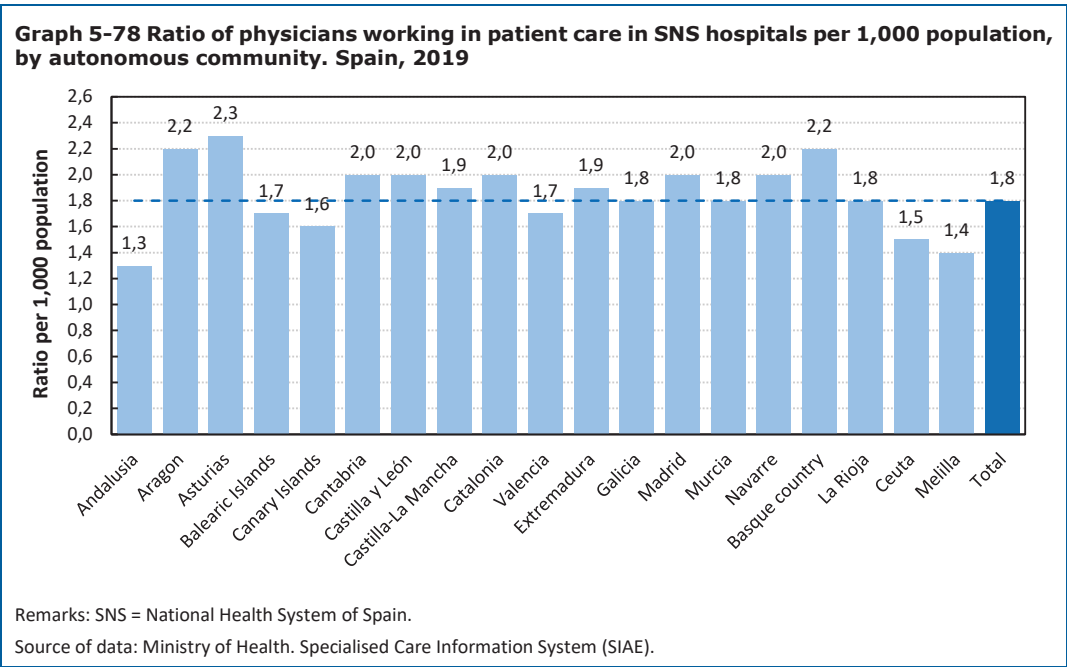
Table 5-18 Number and ratio per 1,000 population of physicians working in patient care in SNS hospitals, by autonomous community. Spain, 2019		
	Medical practitioners	Ratio per 1,000 population
Andalusia	10,990	1.3
Aragon	2,970	2.2
Asturias	2,367	2.3
Balearic Islands	2,035	1.7
Canary Islands	3,478	1.6
Cantabria	1,191	2.0
Castilla y León	4,805	2.0
Castilla-La Mancha	3,860	1.9
Catalonia	15,003	2.0
Valencia	8,656	1.7
Extremadura	1,968	1.9
Galicia	4,937	1.8
Madrid	13,558	2.0
Murcia	2,688	1.8
Navarre	1,319	2.0
Basque Country	4,825	2.2
La Rioja	572	1.8
Ceuta	125	1.5
Melilla	120	1.4
Total	85,467	1.8

Remarks: SNS = National Health System of Spain.
Source of data: Ministry of Health. Specialised Care Information System (SIAE).

SNS hospitals have 85,467 physicians working in patient care activities, which works out to a ratio of 1.8 physicians for every 1,000 inhabitants.

Looking at specialty groups, of every 10 physicians working in SNS hospitals, approximately 5 correspond to Internal Medicine and medical specialties, 2 to General Surgery and the digestive apparatus, Gynaecology and Obstetrics, and Trauma and Orthopaedics, and 3 to the other specialties, including Central Services (specialised medical services supporting clinical activities) and the Emergency Department. Women account for 55.2% of the physicians who work in SNS hospitals.

The ratio of physicians working in SNS hospitals is lower than the national average in Andalusia, Balearic Islands, Canary Islands, Valencia, Ceuta and Melilla.



Physicians in the 112/061 Urgent Care and Emergency Services of the SNS

The 112/061 Urgent Care and Emergency Services have 3,276 physicians, of which 461 work in patient care at the 112/061 coordinating centre and 2,815 work in the network of emergency care units.

Overall, 48.4% of the medical professionals working in the Urgent Care and Emergency Services are women.

Table 5-19 Number of physicians in the 112/061 Urgent Care and Emergency Services according to work site, by autonomous community. Spain, 2019

	Coordinating centre	Emergency care units	Total
Andalusia	78	634	712
Aragon	9	109	118
Asturias	15	38	53
Balearic Islands	24	75	99
Canary Islands	36	159	195
Cantabria	6	26	32
Castilla y León	21	182	203
Castilla-La Mancha	11	180	191
Catalonia	63	297	360
Valencia	28	268	296
Extremadura	9	90	99
Galicia	51	80	131
Madrid	36	218	254
Murcia	17	339	356
Navarre	18	33	51
Basque country	22	59	81
La Rioja	7	18	25
Ceuta y Melilla	10	10	20
Total	461	2,815	3,276

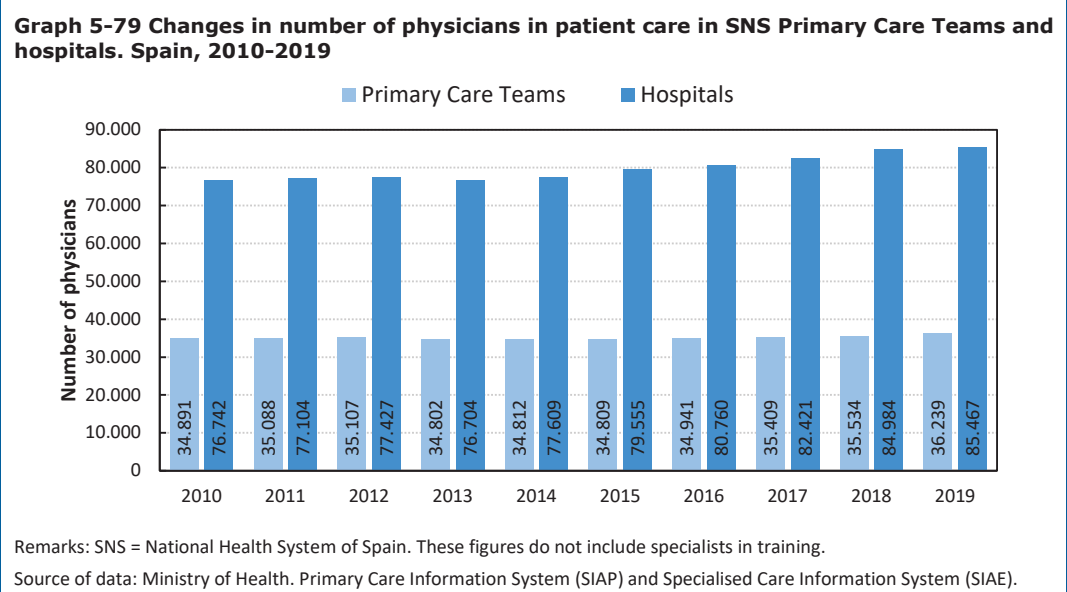
Source of data: Ministry of Health. Statistics on the 112/061 Urgent Care and Emergency Services from the Primary Care Information System (SIAP).

Changes in number of physicians working in patient care in the SNS

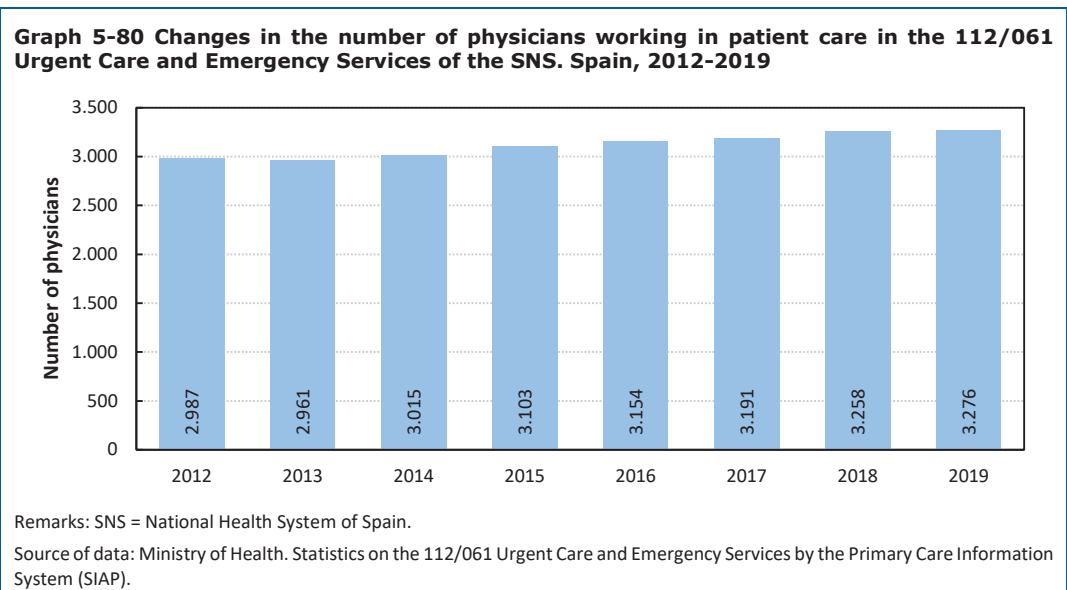
Over the 2010-2019 period, the number of physicians who are directly involved in patient care in the SNS has shown uneven growth depending on the level of care.

The number of physicians working in patient care in Primary Care Teams grew by 3.9% during this period (1,348 physicians), although the ratio of physicians has remained relatively stable, at approximately 0.8 per 1,000 population in this period.

With regard to the number of physicians who work in SNS hospitals, it has grown by 11.4% (8,725 physicians) between 2010 and 2019. The ratio of physicians per 1,000 population has gone from 1.6 to 1.8 in the same period of time.



The number of physicians working in the 112/061 Urgent Care and Emergency Services of the SNS has grown 9.7% during the 2012-2019 period (289 physicians), although the ratio of physicians per 1,000 population has remained stable throughout this time (0.1).

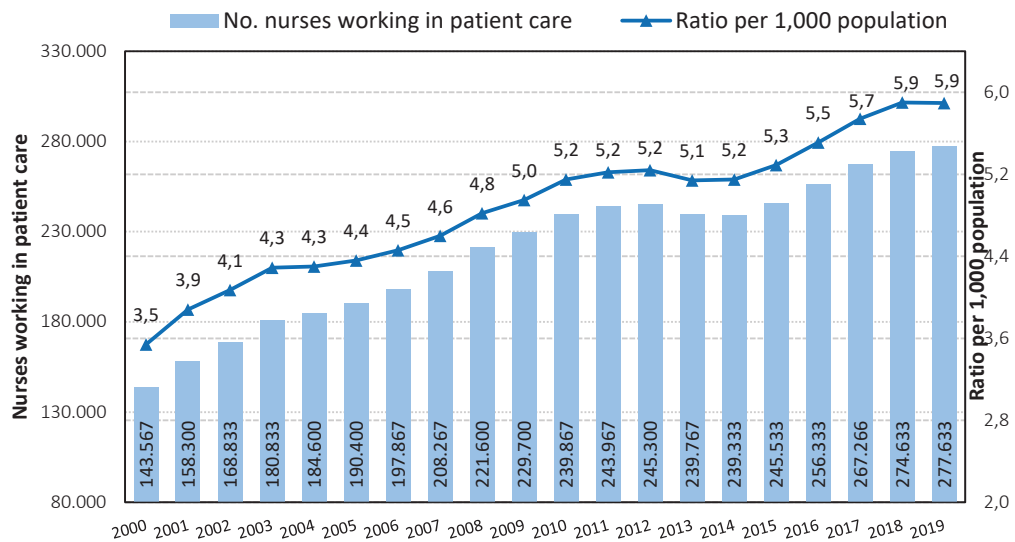


5.6.2 Nursing professionals

Practicing nurses in Spain

According to the Economically Active Population Survey (EPA) performed by the INE, Spain has 277,633 nursing professionals working in patient care, in the private and public sectors, which means a ratio of 5.9 per 1,000 population. The ratio has increased 2.4 points since 2000.

Graph 5-81 Changes in the number of nurses working in patient care and ratio per 1,000 population. Spain, 2000-2019

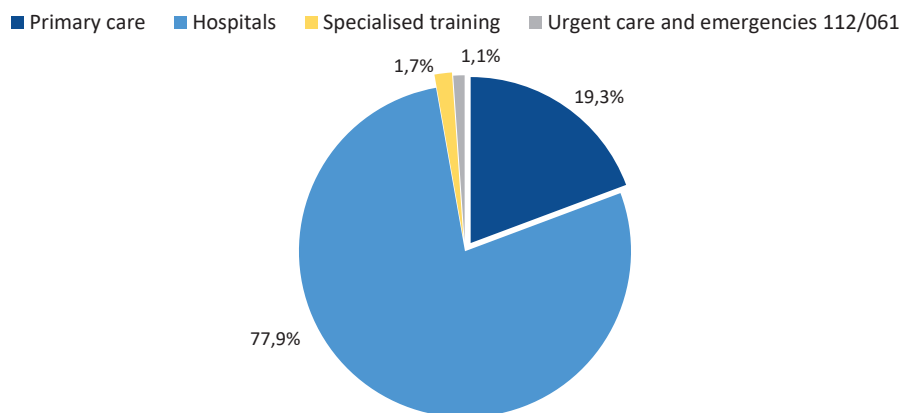


Source of data: National Statistics Institute (INE). Economically Active Population Survey (EPA).

Nurses in the SNS

The SNS has 196,944 nurses working in patient care of whom 38,016 (19.3%) work in primary care, 153,433 (77.9%) work in hospitals, and 3,333 (1.7%) work in the 112/061 Urgent Care and Emergency Services. In addition, there are 2,162 nurses who are completing specialised post-graduate training (1.1%). The overall ratio for the SNS as a whole is thus 4.2 nursing professionals per 1,000 inhabitants.

Graph 5-82 Nurses working in patient care in the SNS. Spain, 2019



Remarks: SNS = National Health System of Spain.

Source of data: Ministry of Health. Primary Care Information System (SIAP), Specialised Care Information System (SIAE), statistics on the 112/061 Urgent Care and Emergency Services and the Subdirectorate General of Professional Regulation.

Nurses in Primary Care Teams of the SNS

Of the 38,016 nursing professionals working in patient care in a primary care setting of the SNS, 30,537 (80.3%) work in a Primary Care Team (EAP) and 7,479 have a patient care position other

than the EAP. The latter include 1,945 midwife nurses and also the 5,228 nurses hired specifically for urgent care centres or services, whether in specific urgent care centres or services such as SUAP (or equivalent), in primary care centres with urgent care hours (PAC or equivalent), or for urgent care services only in patient homes (this excludes the professionals who work in an EAP and provide urgent care outside of their normal hours in rotating on-duty shifts).

Table 5-20 Number of nurses working in SNS primary care, total, and distribution by type of care. Spain, 2019

Number	Primary Care Team (EAP)	Midwife nurses	Urgent Care	Home care team	Mental health
38,016	30,537	1,945	5,258	123	183

Remarks: SNS = National Health System of Spain.

Source of data: Ministry of Health. Primary Care Information System (SIAP).

The SNS Primary Care Teams have a total of 30,537 nurses, which makes for a ratio of 0.7 nursing professionals for every 1,000 inhabitants.

Table 5-21 Number and ratio per 1,000 population of nurses working in patient care in SNS hospitals, by autonomous community. Spain, 2019

	Nurses	Ratio per 1,000 population
Andalusia	4,970	0.6
Aragon	1,006	0.8
Asturias	725	0.7
Balearic Islands	579	0.5
Canary Islands	1,214	0.9
Cantabria	362	0.6
Castilla y León	2,061	0.9
Castilla-La Mancha	1,466	0.8
Catalonia	5,767	0.8
Valencia	2,985	0.6
Extremadura	906	0.9
Galicia	1,839	0.7
Madrid	3,360	0.5
Murcia	846	0.6
Navarre	510	0.8
Basque Country	1,569	0.7
La Rioja	290	0.9
Ceuta	39	0.5
Melilla	43	0.6
Total	30,537	0.7

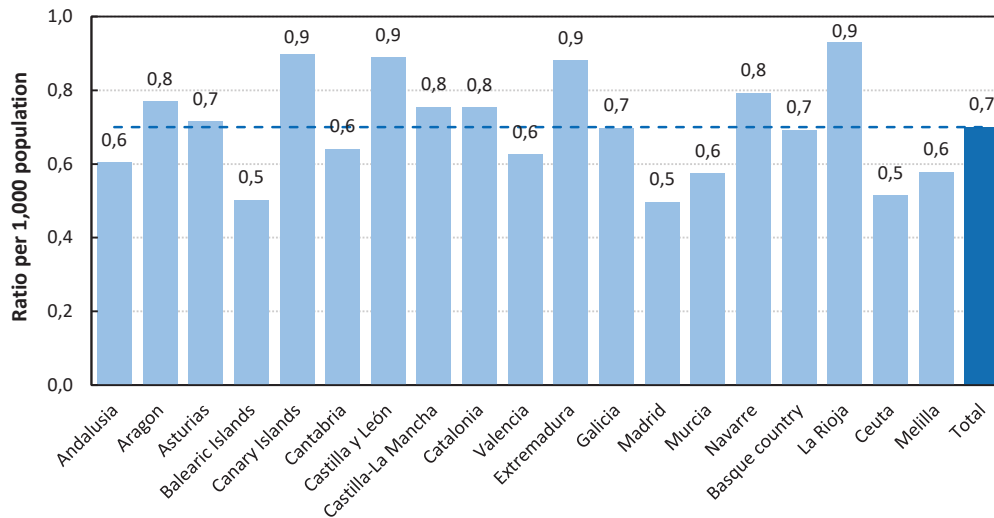
Remarks: SNS = National Health System of Spain.

Source of data: Ministry of Health. Primary Care Information System (SIAP).

Just over 79% (79.1%) of the nurses working in the EAP are women.

Andalusia, Balearic Islands, Cantabria, Valencia, Madrid, Murcia, Ceuta and Melilla all have a ratio of nursing professionals below the national average of 0.7 per 1,000 population.

Graph 5-83 Ratio of nurses who work in patient care in Primary Care Teams per 1,000 population, by autonomous community. Spain, 2019



Source of data: Ministry of Health. Primary Care Information System (SIAP).

Nurses in SNS hospitals

Table 5-22 Number and ratio per 1,000 population of specialised care nurses working in patient care in SNS hospitals, by autonomous community. Spain, 2019

	Nurses	Ratio per 1,000 population
Andalusia	22,035	2.6
Aragon	6,546	4.9
Asturias	4,295	4.2
Balearic Islands	3,977	3.3
Canary Islands	7,259	3.3
Cantabria	2,499	4.3
Castilla y León	8,295	3.5
Castilla-La Mancha	6,758	3.3
Catalonia	25,201	3.3
Valencia	13,705	2.7
Extremadura	3,788	3.6
Galicia	9,363	3.5
Madrid	21,506	3.2
Murcia	4,362	2.9
Navarre	2,719	4.2
Basque Country	9,551	4.4
La Rioja	1,036	3.3
Ceuta and Melilla	538	3.2
Total	153,433	3.3

Remarks: SNS = National Health System of Spain. These figures include nurse midwives and other specialised nurses. The data refers to nurses with employment contracts. It does not include nurses who are completing their specialised training.

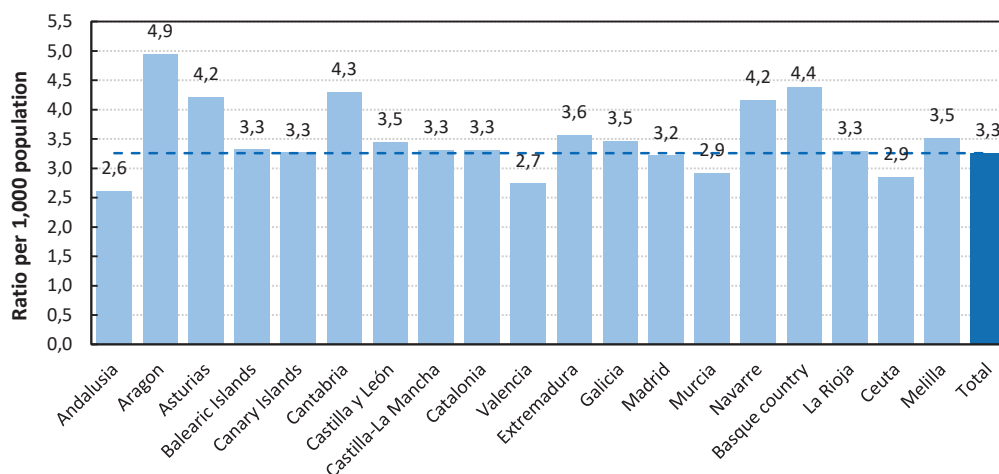
Source of data: Ministry of Health. Specialised Care Information System (SIAE).

SNS hospitals have a total of 153,433 nurses and therefore a ratio of 3.3 nurses per 1,000 population.

Of the nurses working in patient care in SNS hospitals 86.0% are women.

The hospitals of the SNS have 3.3 nurses per 1,000 inhabitants. The ratios in Andalusia, Valencia, Murcia, Ceuta and Madrid are below the national average.

Graph 5-84 Rate of nurses working in patient care in SNS hospitals per 1,000 inhabitants, by autonomous community. Spain, 2019



Remarks: SNS = National Health System of Spain.

Source of data: Ministry of Health. Specialised Care Information System (SIAE).

Nurses in the 112/061 Urgent Care and Emergency Services of the SNS

The 112/061 Urgent Care and Emergency Services of the SNS have 3,333 nurses, of whom 60.4% are women. Two hundred and sixty-two work in patient care in the coordinating centre and 3,071 in the network of emergency care units.

Table 5-23 Number of nurses in the 112/061 Urgent Care and Emergency Services according to work site, by autonomous community. Spain, 2019

	Coordinating centre	Emergency care units	Total
Andalusia	3	634	637
Aragon	33	111	144
Asturias	0	39	39
Balearic Islands	15	81	96
Canary Islands	8	239	247
Cantabria	3	20	23
Castilla y León	10	197	207
Castilla-La Mancha	19	198	217
Catalonia	72	374	446
Valencia	8	282	290
Extremadura	5	91	96
Galicia	15	96	111

Madrid	41	224	265
Murcia	6	317	323
Navarre	0	33	33
Basque Country	24	108	132
La Rioja	0	17	17
Ceuta and Melilla	0	10	10
Total	262	3,071	3,333

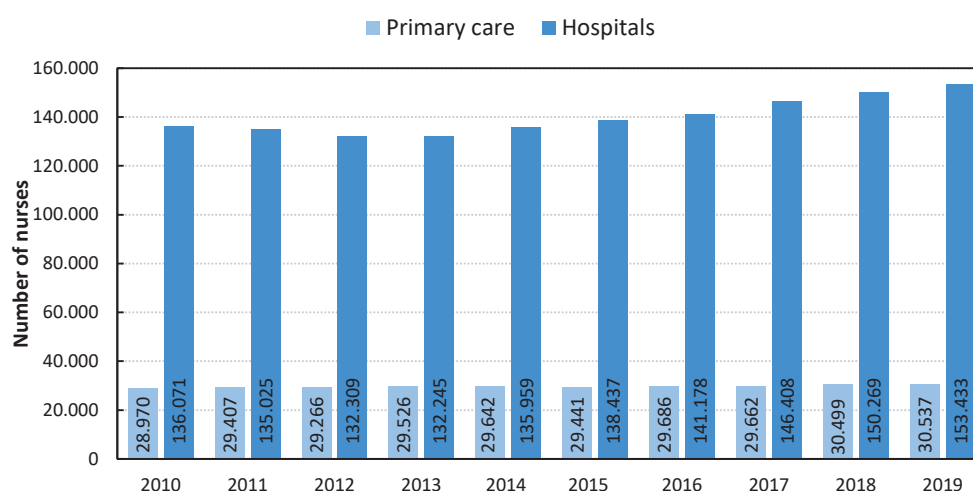
Source of data: Ministry of Health. Statistics on the 112/061 Urgent Care and Emergency Services by the Primary Care Information System (SIAP).

Changes in number of nurses working in patient care in the SNS

The number of nurses working in patient care in a Primary Care Team grew by 5.4% during the 2010-2019 period (1,567 professionals), although their ratio per 1,000 population has been 0.7 throughout this time.

As for the number of nurses who work in SNS hospitals, it has increased by 12.8% (17,362 professionals) during the 2010-2019 period. The ratio of SNS hospital nurses per 1,000 population has grown from 2.9 a 3.3 during this same period of time.

Graph 5-85 Changes in number of nurses working in patient care in SNS Primary Care Teams and SNS hospitals. Spain, 2010-2019

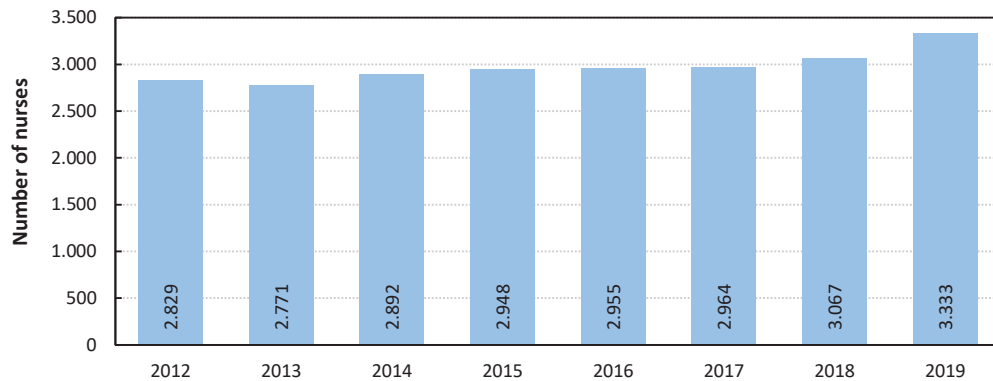


Remarks: SNS = National Health System of Spain.

Source of data: Ministry of Health. Primary Care Information System (SIAP) and Specialised Care Information System (SIAE).

The number of nurses in the 112/061 Urgent Care and Emergency Services has grown by 17.8% during the 2012-2019 period (504 professionals).

Graph 5-86 Changes in the number of nurses working in patient care in the 112/061 Urgent Care and Emergency Services of the SNS. Spain, 2010-2019



Remarks: SNS = National Health System of Spain.

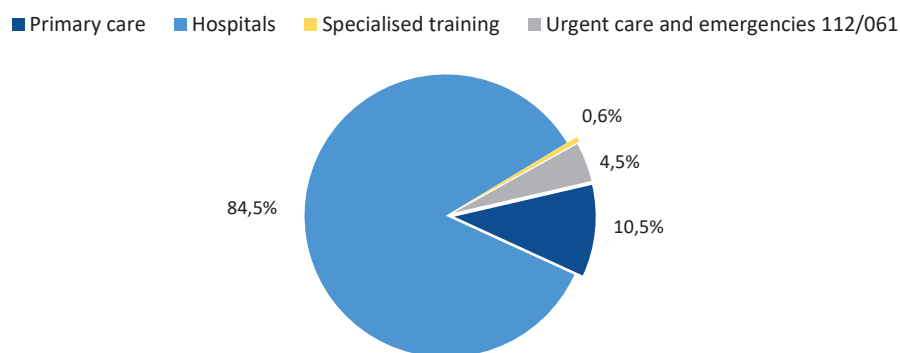
Source of data: Ministry of Health. Statistics on the 112/061 Urgent Care and Emergency Services by the Primary Care Information System (SIAP).

The ratio of nurses per 1,000 population has remained quite steady for the entire 2012-2019 period in Primary Care Teams, while it has increased somewhat in SNS hospitals and in the 112/061 Urgent Care and Emergency Services.

5.6.3 Other professionals

Also working in the SNS are 327,566 persons of different professional profiles. Of them, 84.5% work in hospitals and 10.5% in primary care.

Graph 5-87 Other professionals who work in the SNS. Spain, 2019



Remarks: SNS = National Health System of Spain.

Source of data: Ministry of Health. Primary Care Information System (SIAP), Specialised Care Information System (SIAE), statistics on the 112/061 Urgent Care and Emergency Services by SIAP and the Subdirectorate General of Professional Regulation.

Table 5-24 Number of other professionals who work in the SNS, by autonomous community. Spain, 2019

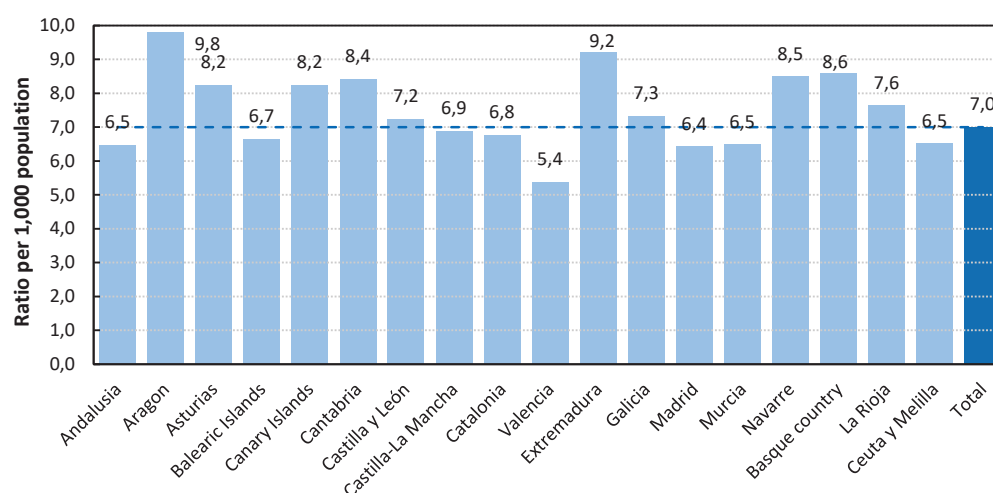
	Total	Primary Care	Hospitals	112/061 Urgent Care and Emergency Services	Specialised training
Andalusia	54,790	7,203	45,149	2,170	268
Aragon	12,987	704	11,634	595	54
Asturias	8,433	576	7,700	100	57
Balearic Islands	7,927	705	6,810	377	35
Canary Islands	18,289	2,249	14,913	1,063	64
Cantabria	4,922	497	4,120	280	25
Castilla y León	17,417	1,414	14,774	1,158	71
Castilla-La Mancha	14,055	1,211	11,786	968	90
Catalonia	51,580	6,319	43,470	1,532	259
Valencia	26,945	4,107	21,177	1,457	204
Extremadura	9,803	935	7,833	1,005	30
Galicia	19,847	1,749	16,958	1,056	84
Madrid	43,017	3,669	37,635	1,316	397
Murcia	9,699	1,022	8,281	335	61
Navarre	5,578	432	4,858	232	56
Basque Country	18,773	1,164	16,760	786	63
La Rioja	2,405	201	2,039	153	12
Ceuta and Melilla	1,099	85	965	49	0
Total	327,566	34,242	276,862	14,632	1,830

Remarks: SNS = National Health System of Spain.

Source of data: Source of data: Primary Care Information System (SIAP), Specialised Care Information System (SIAE), statistics on the 112/061 Urgent Care and Emergency Services by SIAP and the Subdirectorato General of Professional Regulation.

Considering the SNS as a whole, there are 7.0 of these professionals per 1,000 population.

Graph 5-88 Ratio of other professionals working in SNS per 1,000 population, by autonomous community. Spain, 2019



Remarks: SNS = National Health System of Spain.

Source of data: Ministry of Health. Primary Care Information System (SIAP). Specialised Care Information System (SIAE). Statistics on 112/061 Urgent Care and Emergency Services by SIAP. Sub-Directorate General of Professional Regulation.

In primary care, the group of “other professionals” includes both healthcare personnel and non-healthcare personnel. The former includes the professionals trained in odontology/dentistry (1,320), psychology (337), physical therapy (1,714), speech therapy (16), radio diagnostics (486), occupational therapy (34), dental hygiene (678) and auxiliary nursing (4,664). In the latter are auxiliary administrative staff (16,650), social workers (1,562), orderlies, telephone operators and call-centre staff, multi-function personnel or similar, and others (6,702).

Table 5-25 Number of other healthcare professionals working in SNS primary care, total, and distribution by type of professional. Spain, 2019

Number	Odontology/ dentistry	Psychology	Physical therapy	Speech therapy	Radio diagnostics	Occupacional therapy	Dental hygiene	Auxiliary nursing
9,249	1,320	337	1,714	16	486	34	678	4,664

Remarks: SNS = National Health System of Spain.

Source of data: Ministry of Health. Primary Care Information System (SIAP).

Table 5-26 Number of other professionals working in SNS primary care, total, and distribution by type of professional. Spain, 2019

Number	Auxiliarr administrative staff	Social workers	Other non-healthcare personnel
24,914	16,650	1,562	6,702

Remarks: SNS = National Health System of Spain.

Source of data: Ministry of Health. Primary Care Information System (SIAP).

In hospitals, the group of other professionals comprises pharmacists working in hospital pharmaceutical services, professionals with advanced studies and a healthcare function (psychology, physics, chemistry, biology), healthcare personnel other than physicians (physical therapy, occupational therapy, speech therapy, healthcare technicians and others) and non-healthcare personnel (management and direction, social work, miscellaneous tradespeople, auxiliary administrative staff, orderlies and others).

Table 5-27 Number of other professionals working in SNS hospitals, total, and distribution by type of professional. Spain, 2019

Number	Pharmacists	Other professionals with advanced studies	Healthcare personnel other than physicians	Non-healthcare personnel
276,862	2,534	4,085	147,173	123,070

Remarks: SNS = National Health System of Spain.

Source of data: Ministry of Health. Specialised Care Information System (SIAE).

Table 5-28 Number of healthcare professionals other than physicians working in SNS hospitals, total, and distribution by type of professional. Spain, 2019

Number	Physical therapy	Speech therapy	Healthcare technicians	Occupacional therapy	Other healthcare personnel
147,173	5,882	385	138,355	1,112	1,439

Remarks: SNS = National Health System of Spain.

Source of data: Ministry of Health. Specialised Care Information System (SIAE).

In the 112/061 Urgent Care and Emergency Services, the group of other professionals includes medical emergency technicians/drivers (13,527) and the non-healthcare personnel who manage the service requests (1,105 telephone operators, response coordination technicians and auxiliary administrative staff).

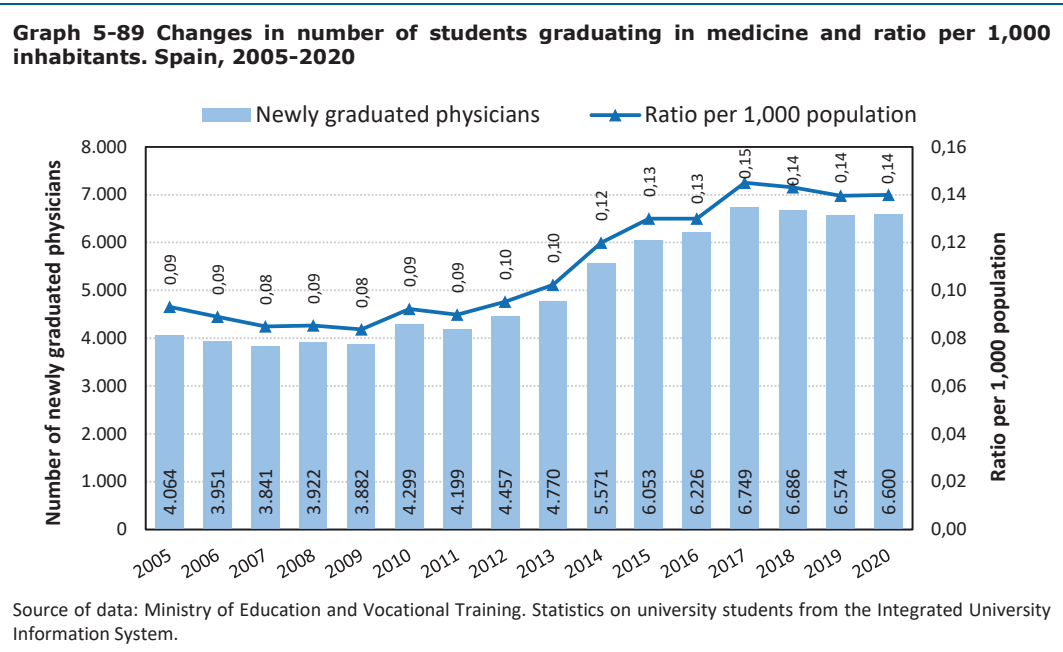
Table 5-29 Number of other professionals working in the 112/061 Urgent Care and Emergency Services, total, and distribution by type of professional. Spain, 2019

Number	Medical emergency technicians / drivers	Telephone operators, response coordination technicians and auxiliary admin staff
14,632	13,527	1,105

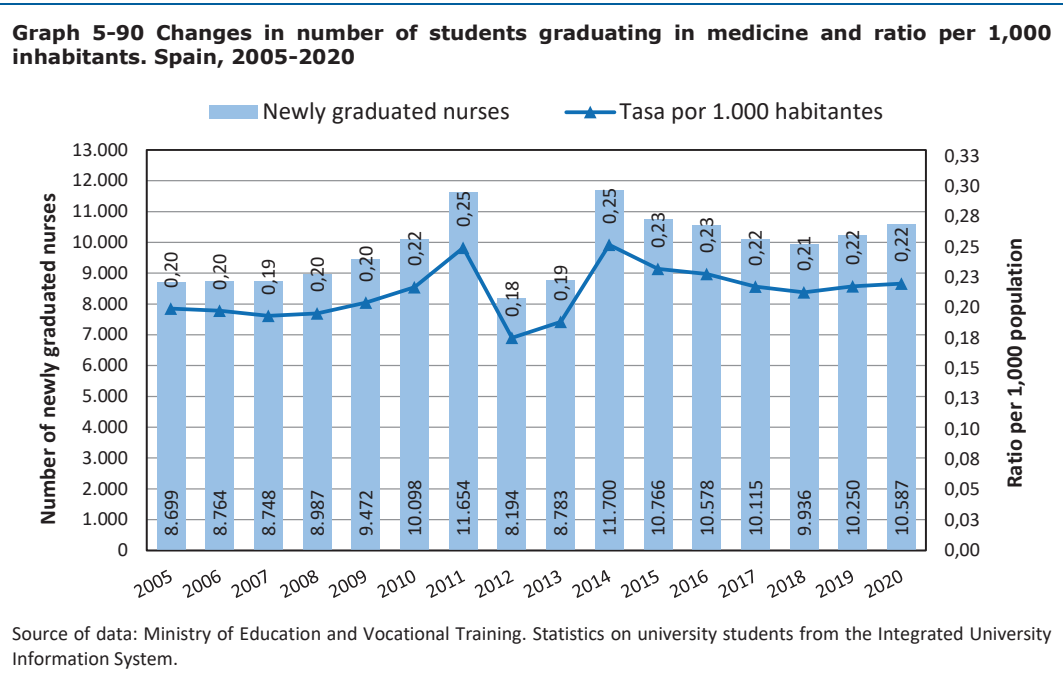
Source of data: Ministry of Health. Statistics on the 112/061 Urgent Care and Emergency Services by the Primary Care Information System (SIAP).

5.6.4 Newly graduated physicians and nurses

During the 2019-2020 academic year 6,600 students completed undergraduate studies in medicine (2,147 men and 4,453 women), maintaining the proportion of two women for every man. The ratio is 0.14 graduates per 1,000 population.



The number of students completing an undergraduate degree in nursing in the academic year 2019-2020 was 10,587 (1,985 men and 8,602 women), with a proportion of 4.5 women for every man, which is an increase of half a point with respect to previous years. The ratio of new graduates in nursing is 0.22 per 1,000 population, the same as in recent years.



5.6.5 Specialised healthcare training

Access to specialised healthcare training

A total of 9,680 openings were available to graduates seeking acceptance in the Specialised Healthcare Training (FSE) system in the 2019/2020 application period,⁵⁹ which is 15.2% more than in the previous period, while in the 2020/2021 application period⁶⁰ the number increased to 10,248 openings, 5.9% more than the preceding period.

In 2020, the SNS has 32,571 specialists-in-training in 54 health science specialties (6.4% more than in 2019). The training is residency-based and takes place in 3,591 accredited teaching units. In 2021 the number of specialists in training rose to 35,040 (7.6% more than in 2020) and that of accredited teaching units rose to 3,694. In both years the specialty with the most residents in training was Family and Community Medicine (around 27%), followed by Paediatrics and its Specific Areas and Internal Medicine. The number of residents per 100,000 population is 68.6 in 2020 and 73.9 in 2021, with Navarre and Madrid standing out as the territories with the highest numbers (96.5 and 88.6 in 2020, and 103.2 and 93.0 in 2021).

In 2020 specialised training was completed by a total of 7,230 new specialists (15.2 per 100,000 population, 3.1% more than in 2019). The figure is 7,423 in 2021 (15.6 for every 100,000 population, 2.7% more than in 2019). Among the new specialists, physicians account for 5,782 in 2019 and 5,932 in 2020. In both years the autonomous community with the highest number of students completing the training is Madrid (around 20 per 100,000 population), followed by Catalonia (around 14) and Andalusia (about 13 per 100,000 population).

More information is available in the monographic report on SNS human resources, soon to be published on: <https://www.sanidad.gob.es/estadEstudios/portada/home.htm>

5.6.6 Other aspects of healthcare training

In 2020 the qualifications (both basic and specialised degrees) of 1,060 healthcare professionals from other countries of the European Union were recognised and in 2021 the figure was 1,113. As for specialist qualifications obtained in non-EU countries, 80 credentials were issued in 2020 and 119 in 2021.

During the year 2020, the situation of crisis caused by the COVID-19 pandemic, along with the declaration of the state of alarm, resulted in the suspension of training visits at the end of February 2020, with the suspension continuing in 2021. The data presented here is from before the state of alarm: in the early months of 2020 a total of 764 training visits were granted, 59.9% less than in 2019.

In 2019, 91.9% of the 61,025 activities seeking recognition as ongoing training were approved by the Accreditation System. The following year, the percentage of approval was 86.7% (of the 41,616 activities seeking recognition). More than 5 out of 10 of the accredited activities are intended for new graduates.

⁵⁹ Ministerial Order SCB/925/2019, of 30 August, ratifying the number of openings available and the call to participate in selective exams in 2019 for access in 2020 to openings in the specialised healthcare training system for doctors, pharmacists, nurses and other university graduates in the areas of psychology, chemistry, biology and physics. <https://www.boe.es/boe/dias/2020/05/15/pdfs/BOE-A-2020-5064.pdf> and Ministerial Order SND/411/2020, of 13 May, modifying Order SCB/925/2019, of 30 August, which ratifies the number of openings available and the call to participate in selective exams in 2019 for access in 2020 to openings in the specialised healthcare training system for the university degrees of medicine, pharmacy, nursing and the fields of psychology, chemistry, biology and physics: https://www.boe.es/diario_boe/txt.php?id=BOE-A-2020-5064

⁶⁰ Ministerial Order SND/1158/2020, of 2 December, which ratifies the number of openings available and the call to participate in selective exams in 2020 for access in 2021 to specialised healthcare training for the university degrees of medicine, pharmacy, nursing and the fields of psychology, chemistry, biology and physics. https://www.boe.es/diario_boe/txt.php?id=BOE-A-2020-15628.

More information is available in the monographic report on SNS human resources, soon to be published on: <https://www.sanidad.gob.es/estadEstudios/portada/home.htm>

The number of openings in Specialised Healthcare Training (FSE) increased by 5.9% in the 2020/2021 application period with respect to the 2019/2020 period and by 15.2% in the 2019/2020 period with respect to the preceding year.

5.7 Expenditure



This section brings together the information available about the total health expenditure, both public and private, the distribution of the public health expenditure managed by the autonomous communities, and data on the consumption of pharmaceutical benefits through SNS medical prescriptions dispensed in pharmacies. In most cases, the data presented is the most recent information made available by the different information systems and the consolidated time series from the five-year period 2015-2019.

According to the data offered by the Sistema de Cuentas de Salud, the Spanish language version of A System of Health Accounts (SHA),⁶¹ the total expenditure of the Spanish healthcare system, understood as the sum of both public and private care resources, stood at 115,458 million Euros in 2019 (81,590 million financed by the public sector and 33,868 million by the private sector).

During the five-year period 2015-2019, the total expenditure on health has increased by 15.8% (15,748 million Euros in absolute terms). The public expenditure on health has increased by 14.7% (10,466 million Euros), while the private expenditure on health has grown 18.5% (5,283 million Euros).

In 2019 the total health expenditure represents 9.3% of the gross domestic product (GDP); 6.6% is financed with public resources and 2.7% with private resources.

In relation to the population, the total health expenditure has risen from 2,148 Euros per capita in 2015 to 2,451 Euros per capita in 2019, which is an average annual increase of 3.3% over the five-year period.

Table 5-30 Total health expenditure, public and private. Millions of Euros, percentage of gross domestic product (GDP) and Euros per capita. Spain, 2015-2019

	2015	2016	2017	2018	2019
Millions of Euros					
Total health expenditure	99,710	101,075	105,514	110,010	115,458
Public health expenditure	71,124	72,249	74,476	77,373	81,590
Private health expenditure	28,585	28,825	31,038	32,637	33,868
Percentage of GDP					
Total health expenditure	9.3	9.1	9.1	9.1	9.3
Public health expenditure	6.6	6.5	6.4	6.4	6.6
Private health expenditure	2.7	2.6	2.7	2.7	2.7
Euros per capita					

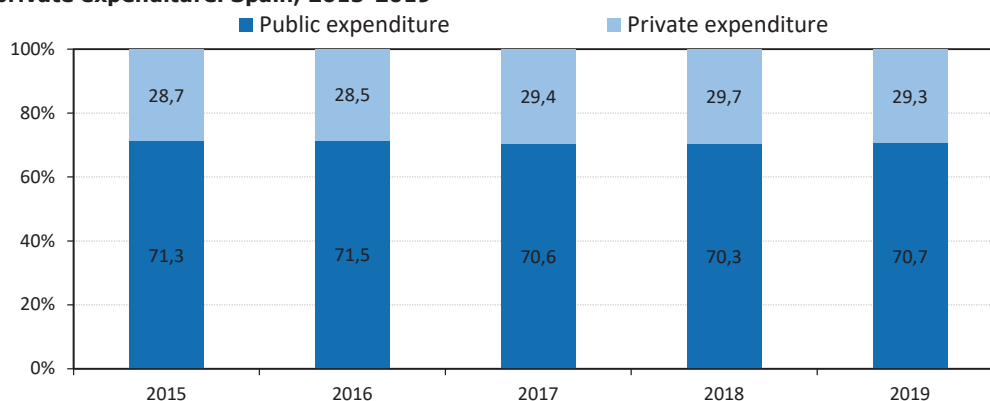
⁶¹ The SCS is a set of statistical operations that has been performed in Spain by the Ministry of Health since 2005 in accordance with the manual A System of Health Accounts published by the OECD (published in Spanish under the name Sistema de Cuentas de Salud, by the Inter-American Development Bank. 2002). This System of Health Accounts is based on a triaxial framework from which a structure of accounts and classifications is developed (functions, providers and funding sources), and it provides a uniform set of basic accounting rules that allow for international comparison of national health accounts. More information at: <https://www.msccbs.gob.es/estadEstudios/estadisticas/sisInfSanSNS/finGastoSanit.htm>.

Total health expenditure	2,148	2,176	2,268	2,354	2,451
Public health expenditure	1,533	1,555	1,601	1,656	1,732
Private health expenditure	616	621	667	698	719

Remarks: population figures correspond to 1 July of each year. National Statistics Institute (INE). GDP = gross domestic product.
Source of data: Ministry of Health. System of Health Accounts (SHA).

In the 2015-2019 period, the share of the public expenditure in the total health expenditure fell by 0.6 percentage points, dropping from 71.3% in 2015 to 70.7% in 2019.

Graph 5-91 Total health expenditure. Percentage contribution of public expenditure and private expenditure. Spain, 2015-2019

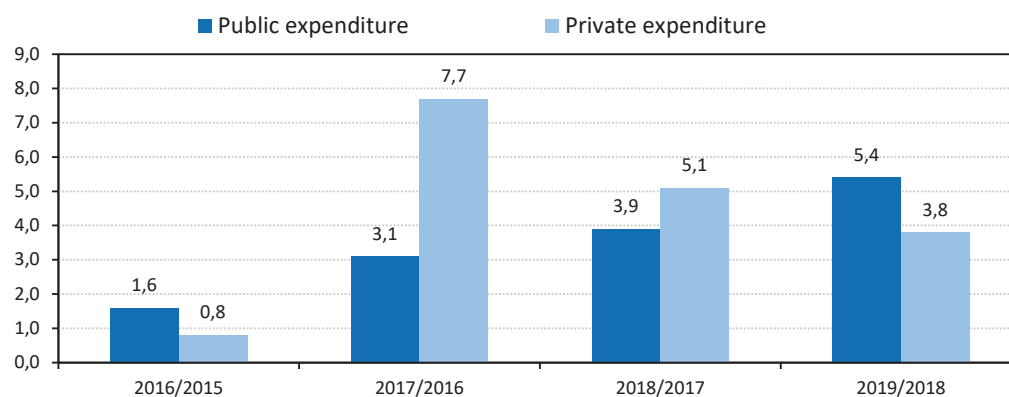


Source of data: Ministry of Health. System of Health Accounts (SHA).

In the 2015-2019 period, the average annual growth of the total health expenditure was 3.7%. In the public sector the average growth rate was 3.5%, while in the private sector it was 4.3%.

In the last year, public health expenditure increased by 5.4% and private health expenditure by 3.8%.

Graph 5-92 Public health expenditure and private health expenditure. Interannual variation rate (expressed as percentage). Spain, 2015-2019



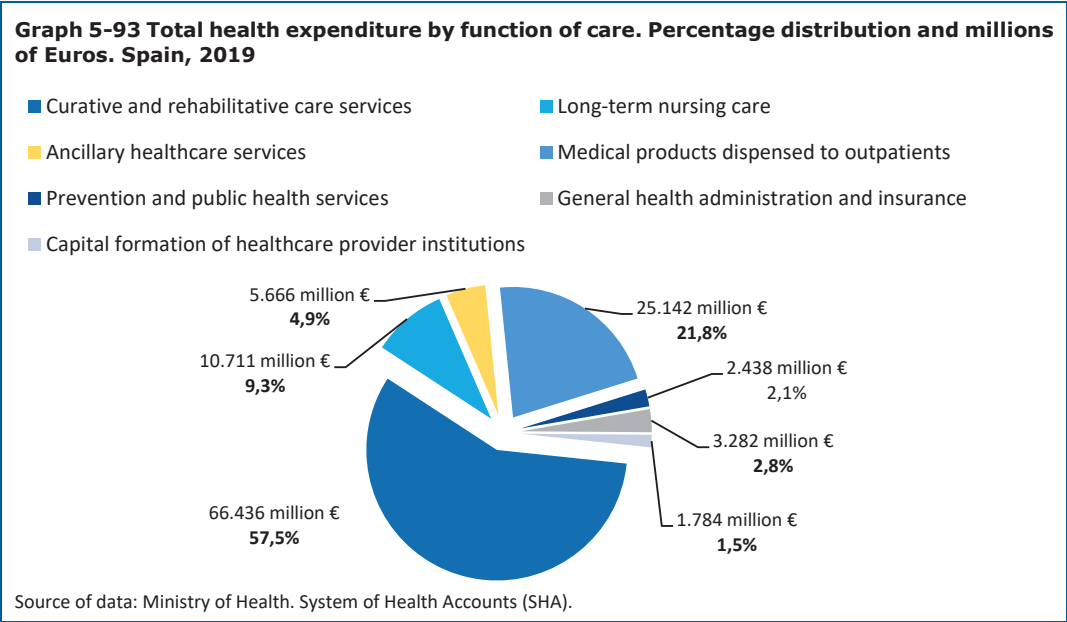
Source of data: Ministry of Health. System of Health Accounts (SHA).

During the 2015-2019 period, the public health expenditure has increased by 14.7%, with an average annual growth rate of about 3.5%. The per capita public health expenditure has increased by 13.0%.



Health expenditure by function of care

Disaggregating the total health expenditure according to the classification of care functions shows that expenditure on curative and rehabilitative care in 2019 amounts to 66,436 million Euros, 57.5% of the total health expenditure. Next in importance are the expenditures on medical products dispensed to outpatients, with 21.8% of the total health expenditure, on long-term nursing care, with 9.3%, and on ancillary healthcare services, which represents 4.9% of total health expenditure.

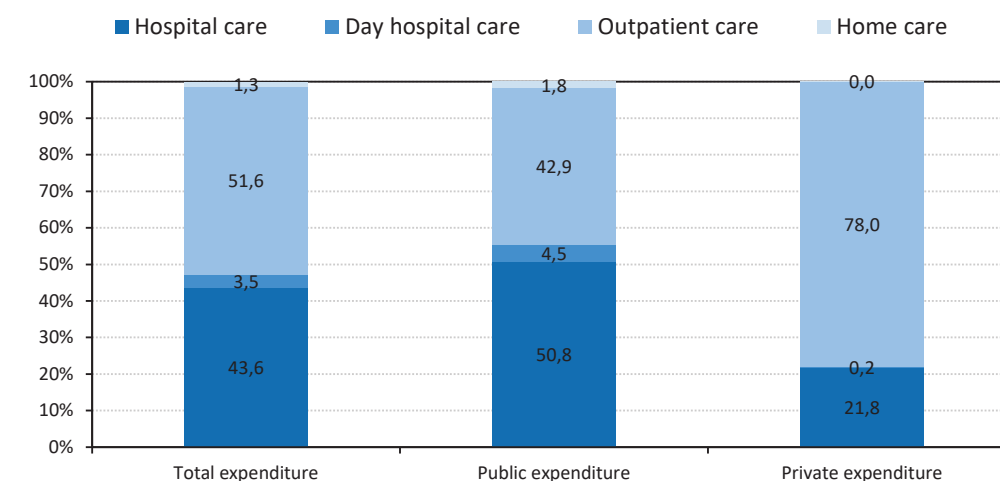


The expenditure has increased with respect to the preceding year in all care functions. The main increases are found in the expenditure on prevention and public health services (6.4%), on curative and rehabilitative care (6.0%) and on ancillary healthcare services (5.8%).

As for the expenditure on capital formation of healthcare provider institutions, it increased by 2.3% in 2019, with respect to the preceding year.

Three quarters of the expenditure on curative and rehabilitative care were financed with public resources in 2019. Hospital care absorbed 50.8% of public expenditure on this type of care. In contrast, outpatient care represents 78.0% of the private expenditure.

Graph 5-94 Total health expenditure, public and private, in curative and rehabilitative care services. Percentage distribution by mode of production. Spain, 2019



Source of data: Ministry of Health. System of Health Accounts (SHA).

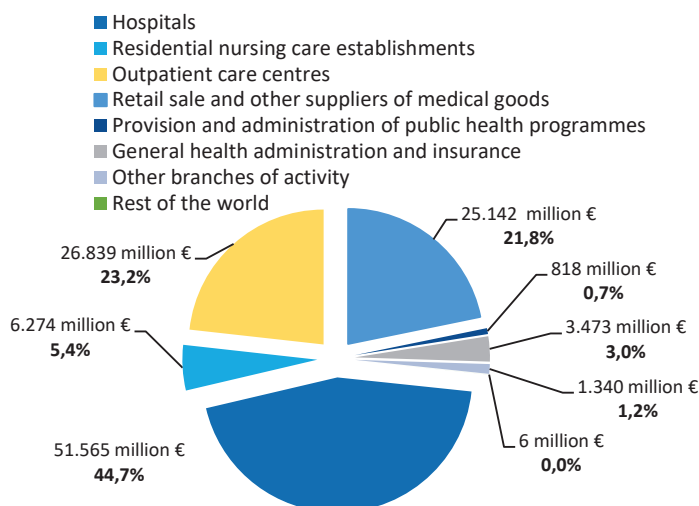
With respect to expenditure on curative and rehabilitative care services, three quarters were financed with public resources (49,991 million Euros), of which hospital care absorbed 50.8% (25,401 million Euros). Outpatient care absorbed 78.0% of private spending (12,826 million Euros).

As regards expenditure on medical products dispensed to outpatients, in 2019 private resources financed 29.8% (5,013 million Euros) of the expenditure on medicines and other non-durable medical products and 97.5% (8,133 million Euros) of the expenditure on therapeutic devices and other durable health products.

Health expenditure by care provider

Disaggregating the total health expenditure according to the classification of care providers, the largest share (44.7%) corresponds to the expenditure of hospitals, which is a total of 51,565 million Euros (45,756 million Euros public expenditure and the remaining 5,809 million private). The expenditure of providers of ambulatory care was 23.2%, that of retailers and other providers of medical products 21.8%, and that of residential nursing care establishments 5.4%.

Graph 5-95 Total health expenditure by provider. Percentage distribution and millions of Euros. Spain, 2019



Source of data: Ministry of Health. System of Health Accounts (SHA).

In 2019 the expenditure of all healthcare providers increased. The main increases were in hospitals (6.8%), other branches of activity (5.4%), residential nursing care establishments (4.7%) and general health administration and insurance (4.5%).

General hospitals generated 93.1% of the total expenditure of hospitals (48,013 million Euros), compared to the 5.1% (2,628 million Euros) originating in specialised hospitals and 1.8% (924 million Euros) originating in mental health and substance abuse hospitals.

With respect to the expenditure of ambulatory care providers,⁶² 56.1% was funded with public resources (15,067 million Euros). Outpatient care centres absorbed 65.5% (9,870 million Euros) of the expenditure of ambulatory care providers financed by different levels of government. In the private sector, offices of physicians represented 51.5% (6,059 million Euros) of the expenditure, while offices of dentists represented 32.8% (3,867 million Euros).

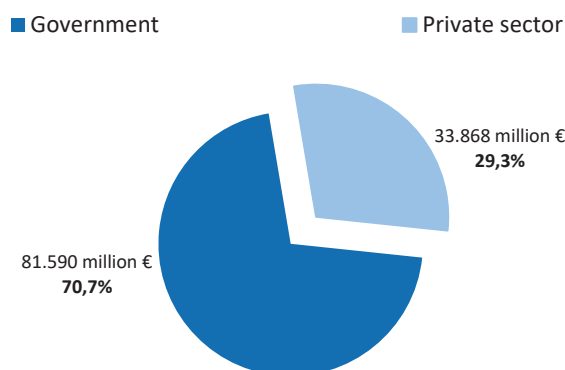
Health expenditure by source of funding

The health expenditure by the different levels of government amounted to 81,590 million Euros, which represents 70.7% of the total health expenditure, while the private sector accounted for the remaining 29.3% (33,868 million Euros). Regional governments, with a participation of 92.3% (75,312 million Euros), are the funding source that bears the greatest burden in public healthcare funding. Social insurance administrations (which in this classification are the mutuels that collaborate with Social Security and the insurance mutuels for civil servants) accounted for 5.7% of the public healthcare funding. The smallest burden fell on local governments (0.9%).

Since 2013, the year that saw the end of the decline in public spending on health due to the country's recent economic crisis, the expenditure by the different levels of government has increased by 22.7%, from 66,474 million Euros in 2013 to 81,590 million Euros in 2019.

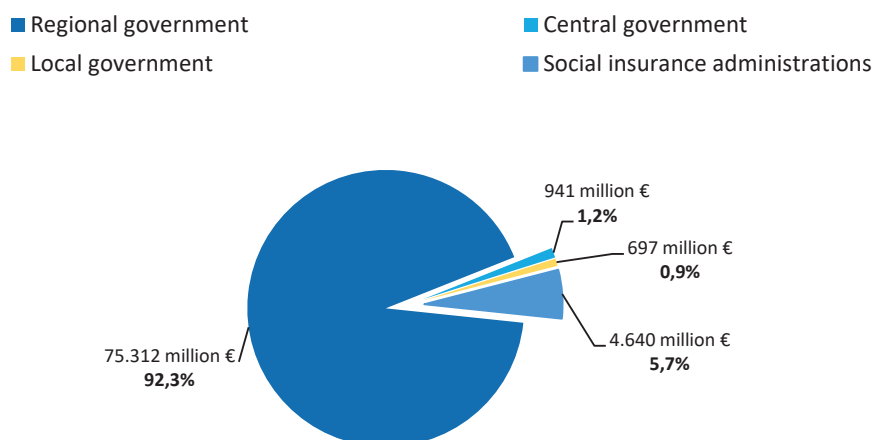
⁶² According to their mode of production, the providers of ambulatory care are classified as follows: offices of physicians, offices of dentists, offices of other health practitioners, outpatient care centres, medical and diagnostic laboratories, providers of home healthcare services and other providers of ambulatory healthcare.

Graph 5-96 Total health expenditure by source of funding. Percentage distribution and millions of Euros. Spain, 2019



Source of data: Ministry of Health. System of Health Accounts (SHA).

Graph 5-97 Health expenditure by the government, by source of funding. Percentage distribution and millions of Euros. Spain, 2019



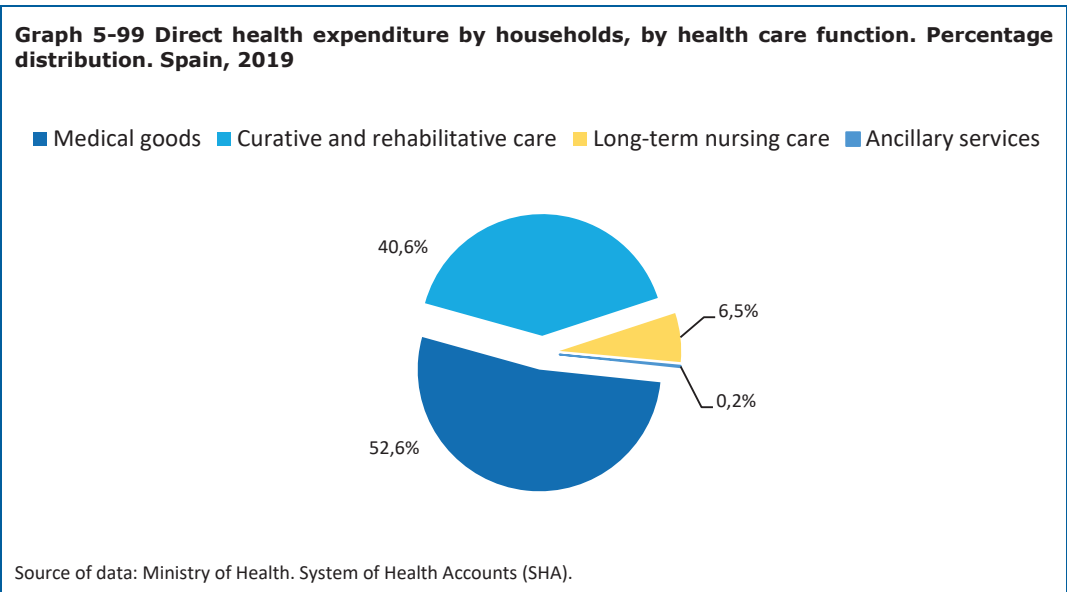
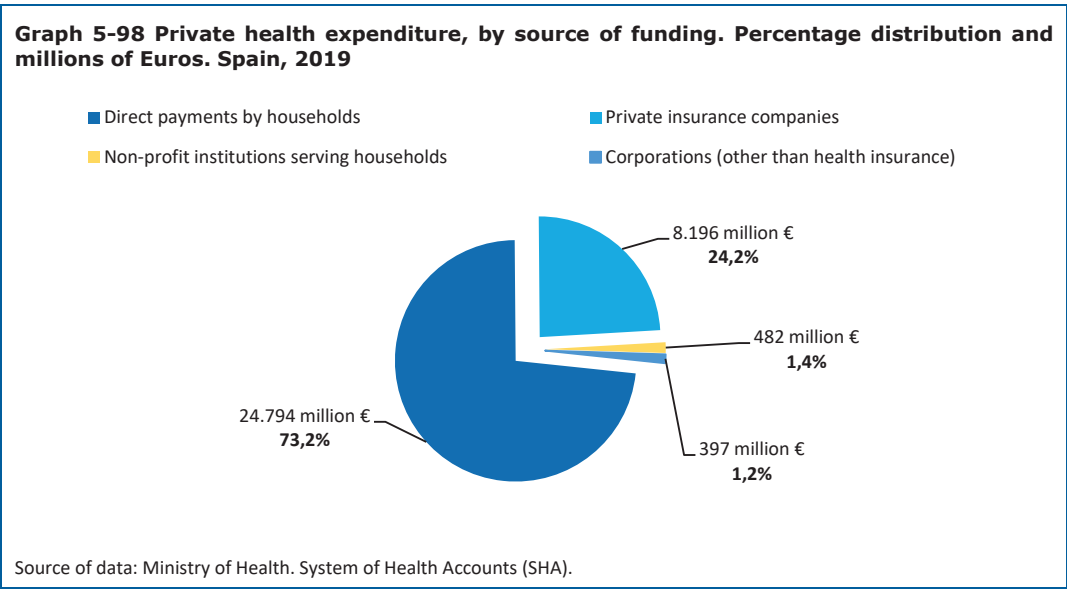
Source of data: Ministry of Health. System of Health Accounts (SHA).

Direct payments by households carried the greatest weight in private healthcare funding, with a participation of 73.2% (24,794 million Euros). In absolute values, private expenditure has increased by an average of 4.3% annually during the 2015-2019 period.



The percentage structure of the direct expenditure by households (including co-payments) shows that 52.6% went to medical products dispensed to ambulatory patients, 40.6% went to curative and rehabilitative care services, 6.5% to long-term nursing care services and 0.2% to ancillary healthcare services.

Nearly 38% (37.9%) of the curative and rehabilitative care expenditure was devoted to outpatient dental care. The expenditure on medical products dispensed to ambulatory patients is divided between 38.4% that goes to the purchase of medicines and other non-durable medical products and 61.6% that goes to the purchase of therapeutic devices and other durable medical products such as eyeglasses, contact lenses and hearing aids.



5.7.1 Public health expenditure managed by the autonomous communities

According to the Public Healthcare Expenditure Statistics (EGSP),⁶³ in 2019 the consolidated public health expenditure of the Autonomous Communities sector was 69,744 million Euros, 93.0% of the total public expenditure. This amount is 5.6% of the GDP and means an average per capita expenditure of 1,486 Euros. When interpreting these data it is important to keep in mind that for 7.4% of Spain's public healthcare expenditure territorial disaggregation data is not available.

Table 5-31 Consolidated public health expenditure, by sector. Millions of Euros. Spain, 2015-2019

	2015	2016	2017	2018	2019
Central Government	627	623	667	630	640
Social Security System	1,532	1,581	1,612	1,680	1,714
Mutuals for Civil Servants	2,136	2,165	2,094	2,251	2,231
Autonomous Communities	60,745	61,643	63,540	65,886	69,744
Local governments	688	672	677	666	697
Total consolidated expenditure	65,728	66,683	68,590	71,114	75,025

Source of data: Ministry of Health. Public Healthcare Expenditure Statistics (EGSP).

Table 5-32 Consolidated public health expenditure, by autonomous community. Millions of Euros, percentage of GDP and Euros per capita. Autonomous Communities sector. Spain, 2019

	Millions of Euros	Percentage of GDP	Euros por capita
Andalusia	10,658	6.4	1,262
Aragon	2,221	5.8	1,677
Asturias	1,798	7.6	1,763
Balearic Islands	1,767	5.2	1,475
Canary Islands	3,280	7.0	1,477
Cantabria	943	6.6	1,621
Castilla y León	3,991	6.7	1,661
Castilla-La Mancha	3,061	7.1	1,501
Catalonia	11,532	4.9	1,515
Valencia	7,386	6.4	1,477
Extremadura	1,788	8.6	1,682
Galicia	4,231	6.6	1,568
Madrid	8,962	3.7	1,340
Murcia	2,449	7.6	1,638
Navarre	1,106	5.3	1,694
Basque country	4,087	5.5	1,873
La Rioja	483	5.4	1,535
Total sector expenditure	69,744	5.6	1,486

Remarks: note that for 7.4% of the public healthcare expenditure territorial disaggregation data is not available.

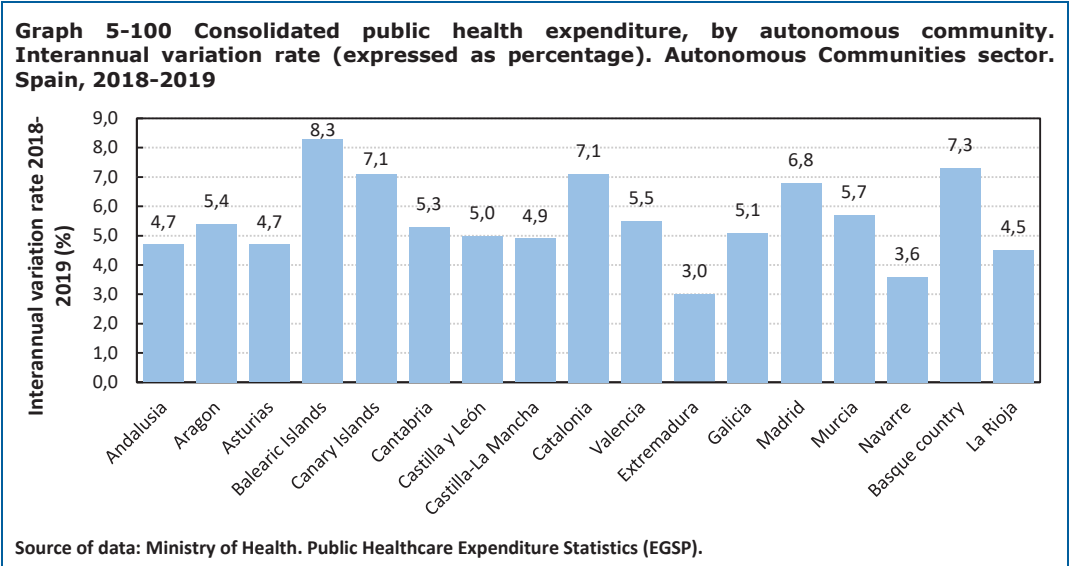
Source of data: Ministry of Health. Public Healthcare Expenditure Statistics (EGSP).

⁶³ The Public Healthcare Expenditure Statistics (EGSP) is a set of statistical operations included in the National Statistics Plan under the name Satellite Accounts of the Public Health Expenditure. It has been performed in Spain since 1988 by the Ministry of Health in collaboration with the autonomous communities and other entities involved in managing the public health expenditure. The EGSP makes it possible to monitor the SNS health expenditure. More information at:

<https://www.mscbs.gob.es/estadEstudios/estadisticas/sisInfSanSNS/finGastoSanit.htm>

To understand the distribution of the public health expenditure among the autonomous communities and the weight of this expenditure within each of the regional economies, it is useful to look at the health expenditure as a percentage of the GDP. However, it is important to note that the data obtained at the regional level cannot only be explained (as occurs between countries) by differences in income levels, but also by solidarity among territories, since the allocation of resources among the autonomous communities by the central government contains levelling mechanisms intended to guarantee the system's equity. In this regard, Extremadura (with 8.6%), Murcia (with 7.6%) and Asturias (with 7.6%) are the communities that in 2019 had the highest figures of health expenditure as a percentage of the GDP. In contrast, Madrid (with 3.7%), Catalonia (with 4.9%) and Balearic Islands (with 5.2%) had the lowest figures.

Compared to the preceding year, the communities that most increased their expenditure were Balearic Islands (8.3%) and Basque Country (7.3%). The communities that least increased their expenditure were Extremadura (3.0%), Navarre (3.6%) and La Rioja (4.5%).



In addition to classification by sector, the EGSP establishes criteria for the economic classification of expenditures based on budget areas and also for functional classification based on the Classification of the Functions of Government (COFOG).

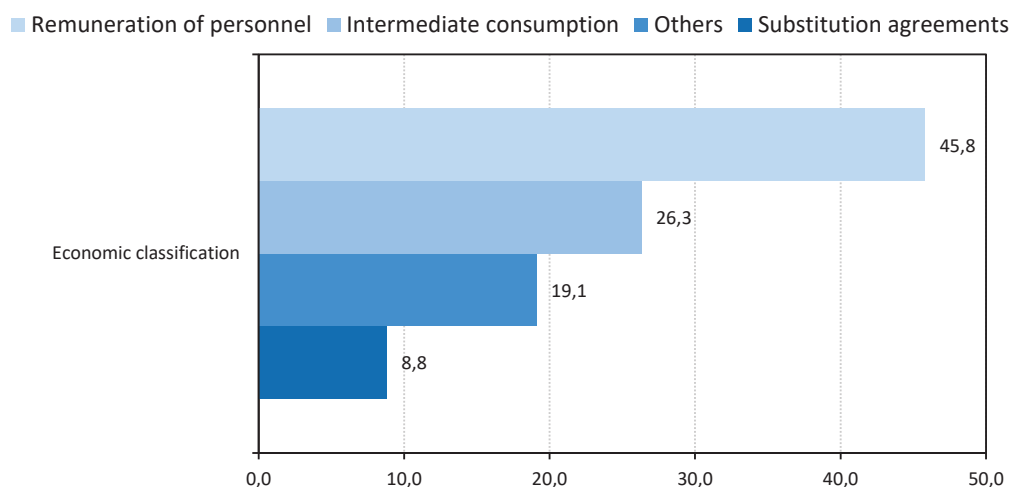
From the economic perspective, the largest component of the health expenditure managed by the autonomous communities is the remuneration of personnel. In 2019 the overall expenditure on personnel remuneration stood at 31,958 million Euros in the Autonomous Communities sector; this figure represents 45.8% of the consolidated expenditure in this sector. It experienced an increase of 7.5% with respect to the preceding year.



From the functional perspective, the expenditure on hospital and specialised services has the greatest weight in the Autonomous Communities sector, at 44,001 million Euros, representing 63.1% of this sector's consolidated expenditure in 2019. This budget item has seen an increase of 6.3% over the preceding year.

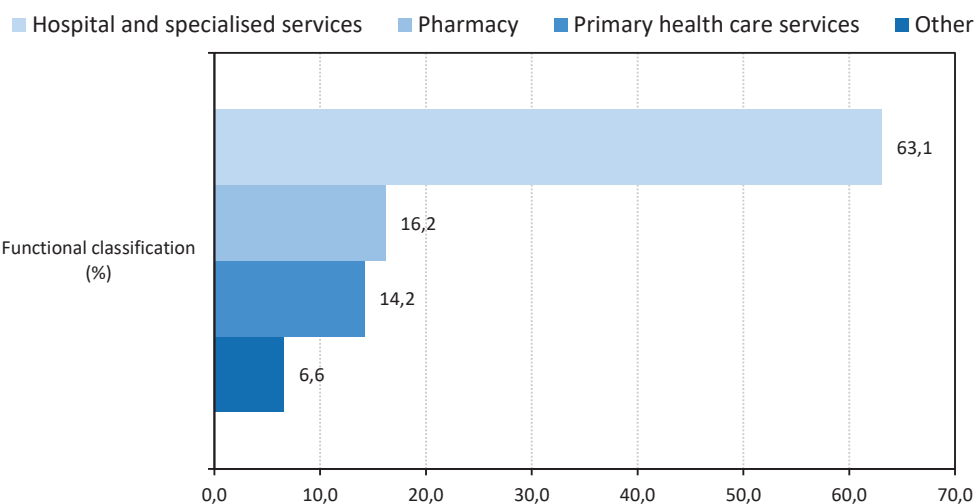


Graph 5-101 Public health expenditure managed by the autonomous communities, percentage structure by main elements of economic classification. Spain, 2019



Source of data: Ministry of Health. Public Healthcare Expenditure Statistics (EGSP).

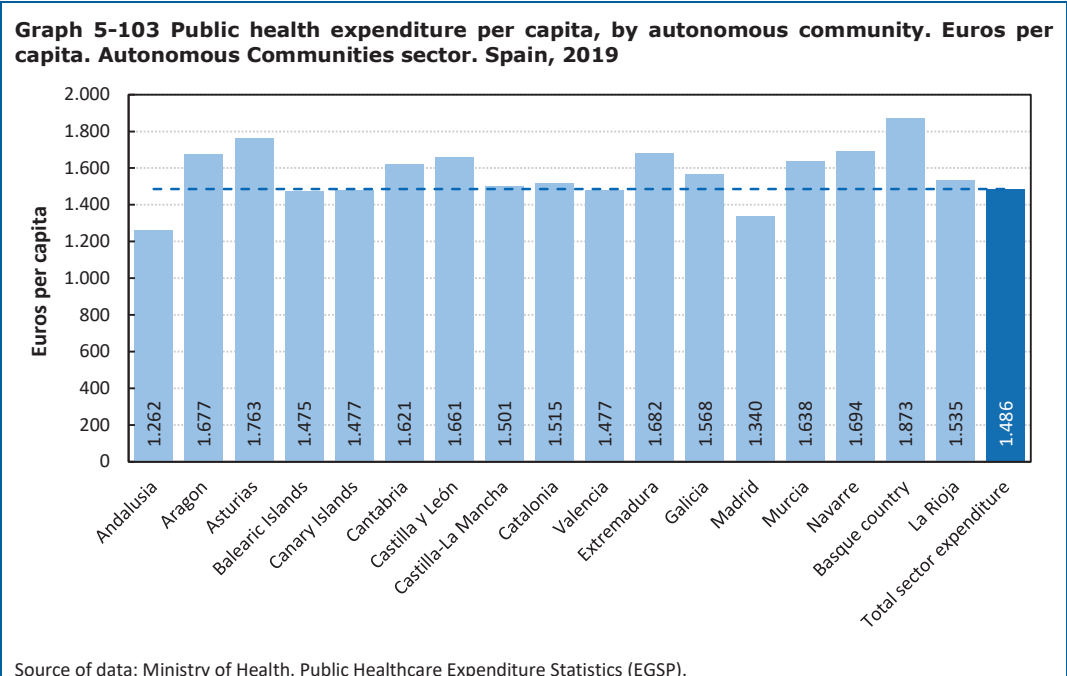
Graph 5-102 Public health expenditure managed by the autonomous communities, percentage structure by main elements of functional classification. Spain, 2019



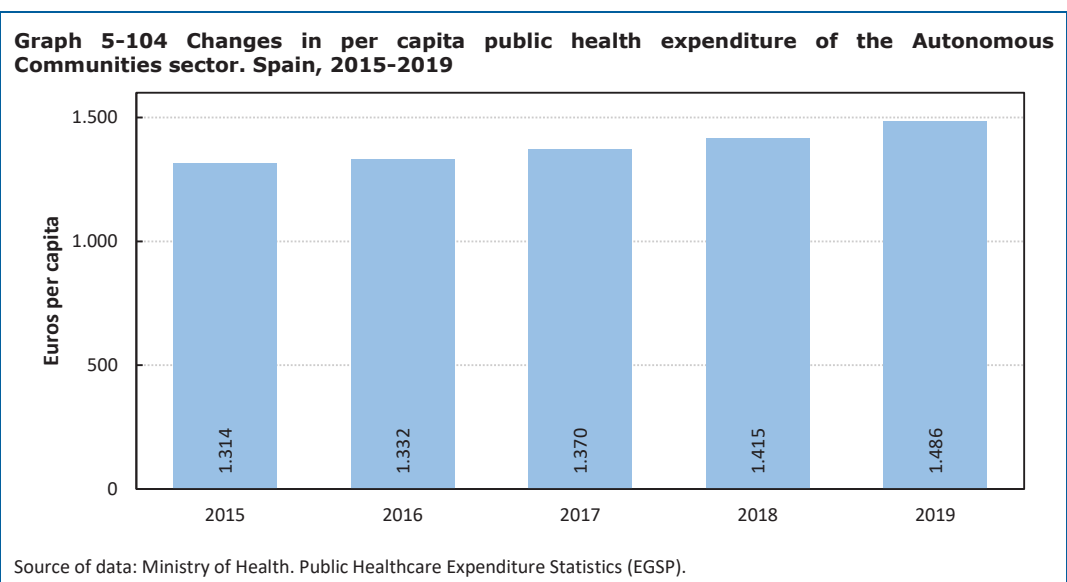
Source of data: Ministry of Health. Public Healthcare Expenditure Statistics (EGSP).

Public health expenditure managed by the autonomous communities-per capita expenditure

The per capita public health expenditure by the Autonomous Communities sector stood at 1,486 Euros in 2019. The autonomous communities with the highest public health expenditure per capita were Basque Country (1,873 Euros per capita), Asturias (1,763 Euros per capita) and Navarre (1,694 Euros per capita). The lowest per capita public health expenditures were found in Andalusia (1,262 Euros per capita), Madrid (1,340 Euros per capita) and Balearic Islands (1,475 Euros per capita).



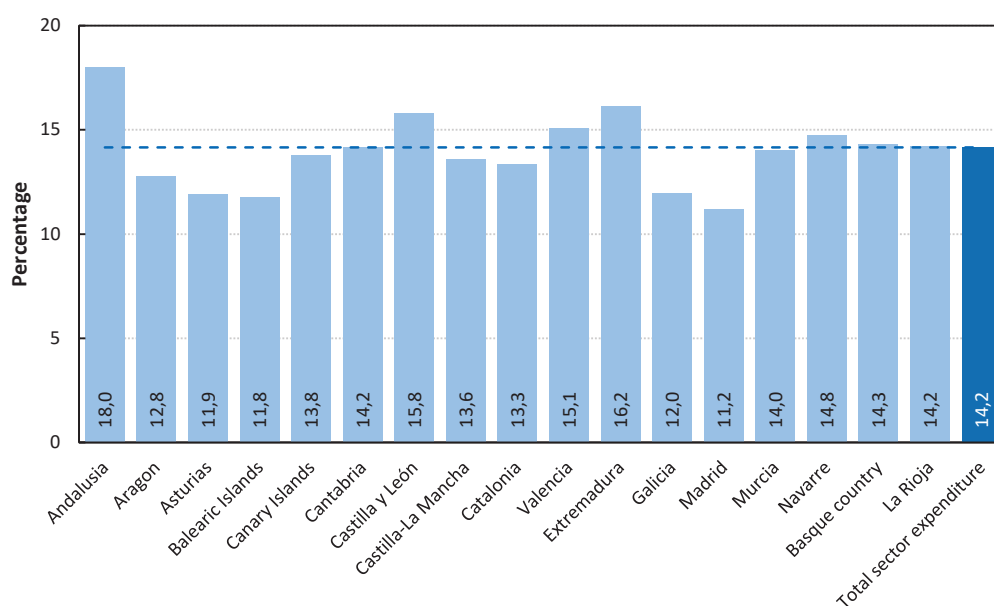
In the 2015-2019 period, the per capita public health expenditure of the Autonomous Communities sector has increased from 1,314 to 1,486 Euros, an increase of 13.1%.



Public health expenditure managed by the autonomous communities-primary health care services

In the Autonomous Communities expenditure sector spending on primary health care services⁶⁴ came to 9,874 million Euros in 2019, which represents 14.2% of the sector's consolidated expenditure. It increased by 7.6% with respect to the preceding year. The contribution of expenditure on primary health care services to the total consolidated public health expenditure by each autonomous community ranged from 11.2% in Madrid to 18.0% in Andalusia.

Graph 5-105 Public health expenditure managed by autonomous communities, primary health care services (percentage). Autonomous Communities sector. Spain, 2019



Source of data: Ministry of Health. Public Healthcare Expenditure Statistics (EGSP).

The contribution of the expenditure on primary health care services to the total public health expenditure of the Autonomous Communities sector grew by 0.8 percentage points between 2015 and 2019.

⁶⁴ Primary health care services: these include care activities provided by general practitioners, paediatricians, nurses and other healthcare and non-healthcare personnel intended to achieve health maintenance and improvement at the first level of healthcare, whether it be in primary care centres or any other type of urban or rural healthcare facilities or in the homes of patients. Therefore, included in this category are expenditures made in:

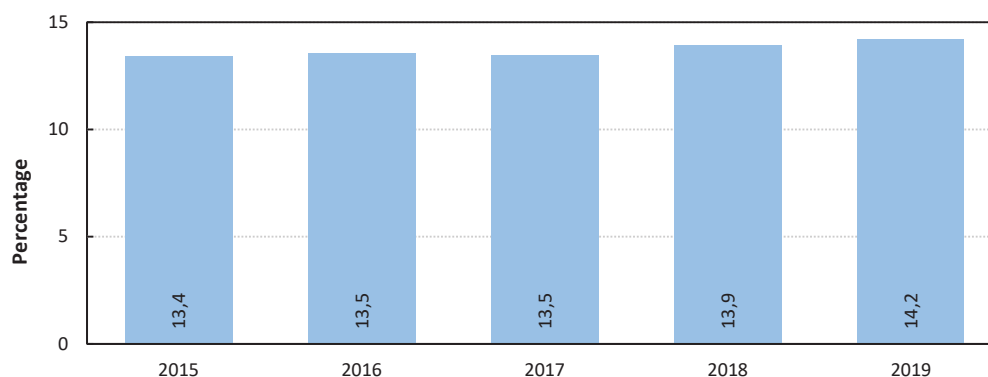
non-hospital emergency or urgent care or long-term care services, activities related to the extraction of clinical samples and their transport to laboratories, basic resources for dental diagnosis and care when performed with funding assigned to this level of care. Activities related to family planning, mental health, physiotherapy or rehabilitation, social health care and preventive activities, whether general or specific to age and sex (vaccinations, health exams, healthcare information/education) when performed at the primary care level.

Administration of treatments, dressing of wounds and minor surgery.

This function also encompasses the expenditures of the management structures necessary for the delivery of the care activity (such as directorial and management personnel of the health areas and the primary care management bodies that depend on them, whether they form part of or are external to the SNS).

Also included are expenditures made on Primary Care activities provided with resources not belonging to the entity that funds the healthcare (that is, in the case of substitution agreements). These substitution agreements can be signed with professionals, institutions or publicly or privately owned companies.

Graph 5-106 Changes in the public healthcare expenditure on primary health care services of the Autonomous Communities sector (percentage). Spain, 2015-2019

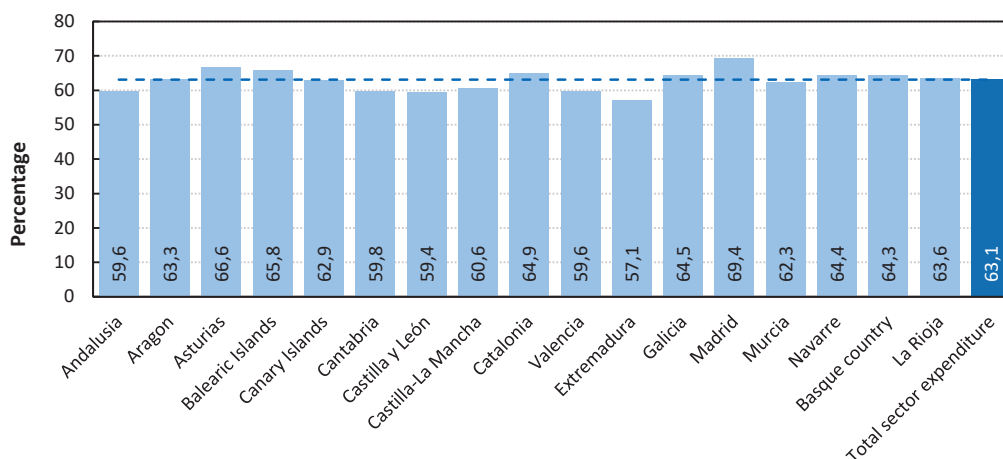


Source of data: Ministry of Health. Public Healthcare Expenditure Statistics (EGSP).

Public health expenditure managed by the autonomous communities-hospital and specialised care services

In the Autonomous Communities expenditure sector spending on hospital and specialised care⁶⁵ came to 44,001 million Euros, which represents 63.1% of the consolidated expenditure of this sector, and it experienced an increase of 6.3% with respect to the preceding year. The contribution of the expenditure on hospital and specialised care services to the total consolidated public health expenditure by each autonomous community ranged from 57.1% in Extremadura to 69.4% in Madrid.

Graph 5-107 Public health expenditure managed by autonomous communities on hospital and specialised care services (percentage). Autonomous Communities sector. Spain, 2019

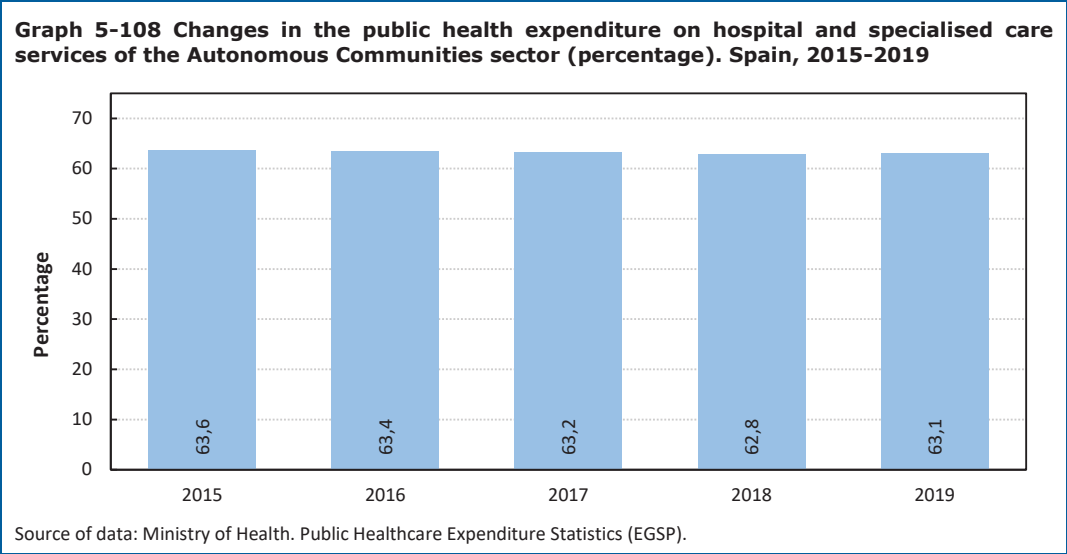


Source of data: Ministry of Health. Public Healthcare Expenditure Statistics (EGSP).

⁶⁵ Hospital services: this category includes healthcare provided by medical specialists, nurses and other healthcare and non-healthcare personnel intended to achieve the maintenance and improvement of health through care activity performed in hospitals or specialty centres. Included are both hospitalisation and the diagnosis, treatment, surgery without hospitalisation (whether major or minor), ambulatory visits and emergency care. Also included are the expenditures corresponding to the management structures necessary to perform the activity (directorial and management teams of the institutions and the administrative personnel that depend on them, whether employed or acquired externally).

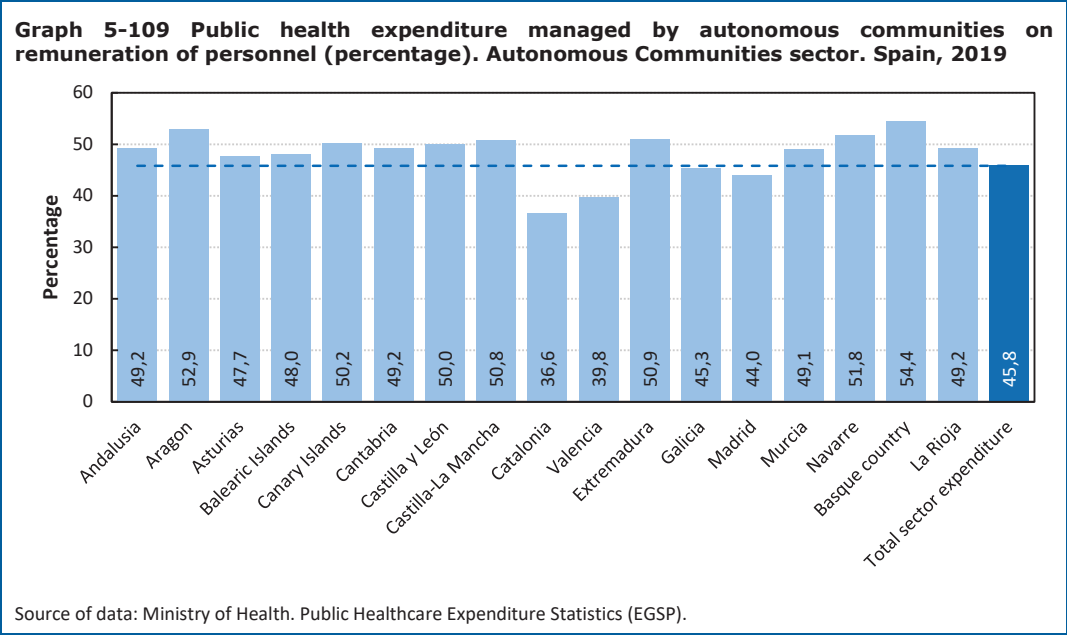
Specialised services: includes specialised healthcare services offered through substitution agreements for the delivery of activities specific to this care level with resources not belonging to the entity that funds the healthcare. These substitution agreements can be entered into with professionals, institutions and publicly or privately owned companies.

The contribution of the expenditure on hospital and specialised care services to the total public healthcare expenditure of the Autonomous Communities sector fell by 0.5 percentage points between 2015 and 2019.



Public healthcare expenditure managed by the autonomous communities-remuneration of personnel

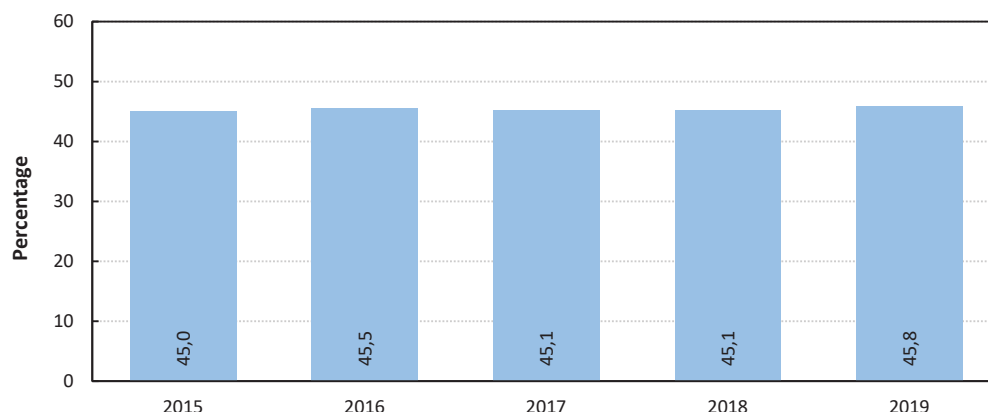
In the Autonomous Communities sector, the expenditure on personnel remuneration⁶⁶ was 31,958 million Euros (45.8% of the consolidated expenditure in the sector), which represents an increase of 7.5% over the year before. The percentage of the public healthcare expenditure that the autonomous communities dedicate to the remuneration of their personnel varies from 36.6% in Catalonia to 54.4% in Castilla y León.



⁶⁶ Personnel remuneration: includes the remunerations paid in money or in kind to all directors and staff, whether they be government employees, statutory employees or have a regular employment contract, either permanent or temporary, and also remunerations given to workers as a form of social action. Also included are the contributions that the employer is required to make to Social Security.

The contribution of the expenditure on remuneration of personnel to the total public health expenditure of the Autonomous Communities sector grew by 0.8 percentage points between 2015 and 2019.

Graph 5-110 Changes in the public health expenditure on remuneration of personnel. Autonomous Communities sector (percentage). Spain, 2015-2019



Source of data: Ministry of Health. Public Healthcare Expenditure Statistics (EGSP).

In the Autonomous Communities expenditure sector spending on primary health care services accounted for 14.2% of the sector's consolidated expenditure, while spending on hospital and specialised services accounted for 63.1%. Personnel remuneration represented 45.8% of the sector's consolidated expenditure.

5.7.2 Out-of-pocket expenditure on healthcare goods and services

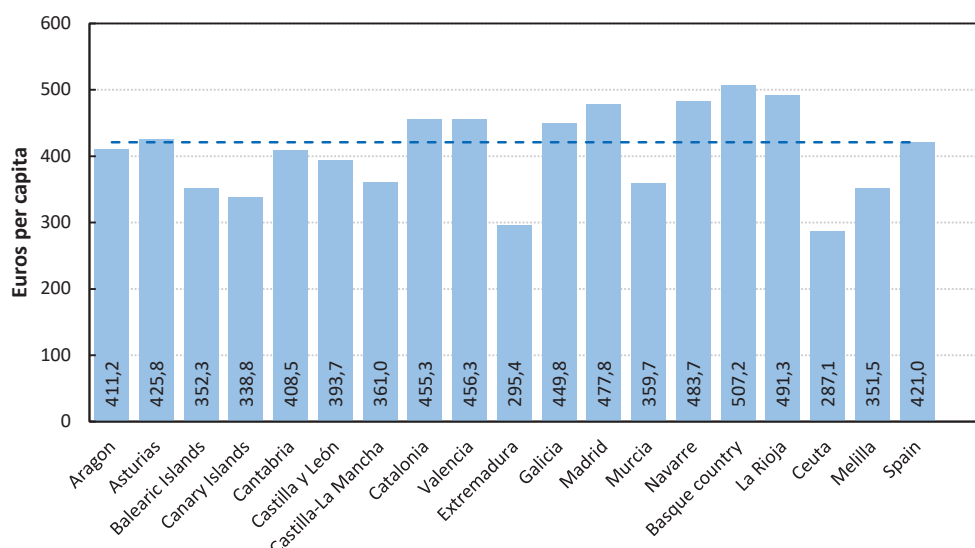
With the Survey of Family Budgets⁶⁷ (EPF) conducted by the National Statistics Institute (INE) it is possible to estimate the average annual expenditure per household and per person on healthcare goods and services, which include medical products, appliances and equipment (pharmaceutical products, prescription eyeglasses, contact lenses, hearing aids and other therapeutic devices and materials) and doctor, outpatient and hospital services (physician visits, hospital services, dental services and ancillary medical services such as diagnostic tests and rehabilitation).

In 2019 the reported average annual per person expenditure on healthcare good and services in Spain was 421.0 Euros. Basque Country (507.2 Euros), La Rioja (491.3 Euros) and Navarre (483.7 Euros) were the autonomous communities with the highest average annual per person expenditure on healthcare goods and services, while Ceuta (287.1 Euros), Extremadura (295.4 Euros) and Canary Islands (338.8 Euros) were where the least was spent.

⁶⁷ The *Encuesta de Presupuestos Familiares* (EPF) provides yearly information about the nature and destination of consumer spending on goods and services in monetary terms, and also about different characteristics of the living conditions found in households. It reflects the expenditure of all private residential households in Spain and uses the ECOICOP/HBS classification of good and services, which has different levels of disaggregation, from 12 large expenditure groups to a maximum disaggregation of 5 digits. Group 06 is the one that pertains to healthcare. It is an adaptation of the Classification of Goods and Services used by Eurostat for Household Budget Surveys (COICOP/HBS). A detailed description can be found at:

https://www.ine.es/dynqs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736176806&menu=ultiDatos&idp=1254735976608

Graph 5-111 Average annual per person expenditure on healthcare good and services, by autonomous community. Spain, 2019

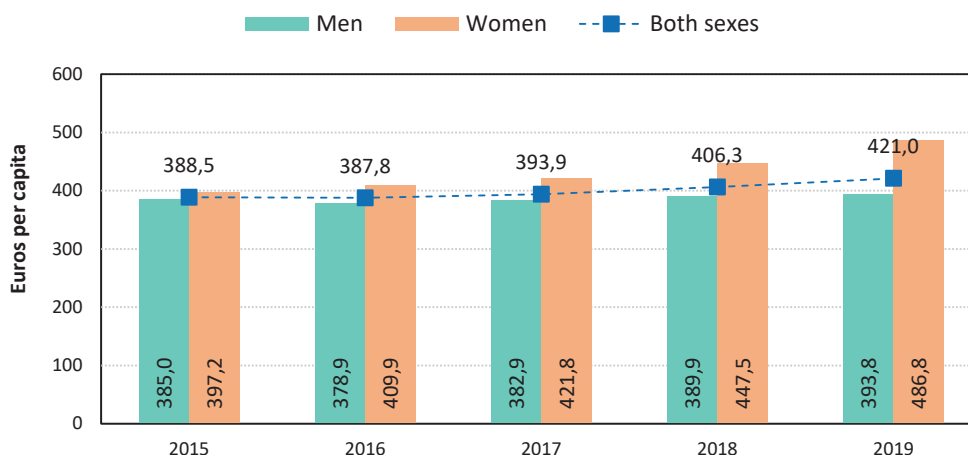


Source of data: National Statistics Institute (INE). Survey of Family Budgets (EPF).

During the 2015-2019 period out-of-pocket payment for healthcare goods and services has increased by 8.4%, with an internal variation rate of 3.6% between the years 2018 and 2019.

By sex (of the household's main provider), the average annual per person expenditure on healthcare goods and services was higher in women than in men throughout the entire five-year period, with the average expenditure being 12.0% higher in women and reaching a figure as high as 23.6% in 2019.

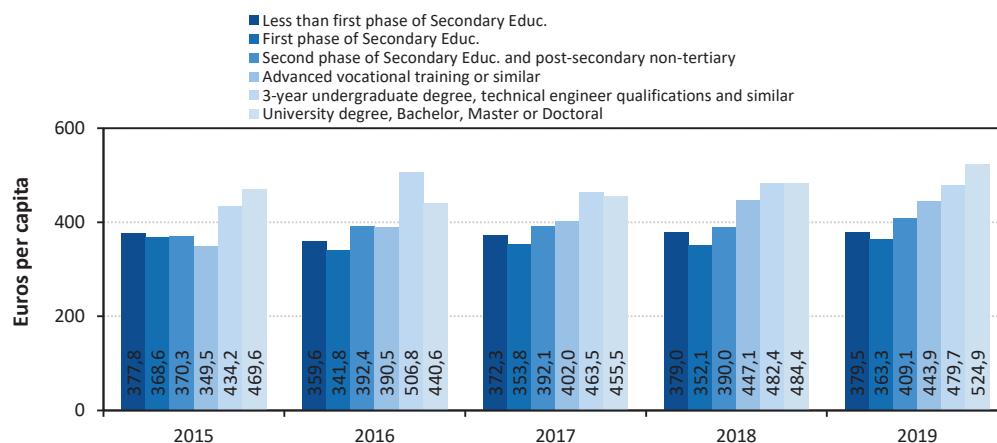
Graph 5-112 Changes in the average annual per person expenditure on healthcare goods and services, by sex. Spain, 2015-2019



Source of data: National Statistics Institute (INE). Survey of Family Budgets (EPF).

Regarding education level (of the household's main provider), the out-of-pocket expenditure on healthcare goods and services was higher among the population with higher levels of education throughout the 2015-2019 period. The out-of-pocket expenditure of the two highest education levels was around 38.3% of the total out-of-pocket expenditure of this period. Persons with the highest level of education spend about 27% more than persons with the lowest level of education (the average difference being 101.4 Euros).

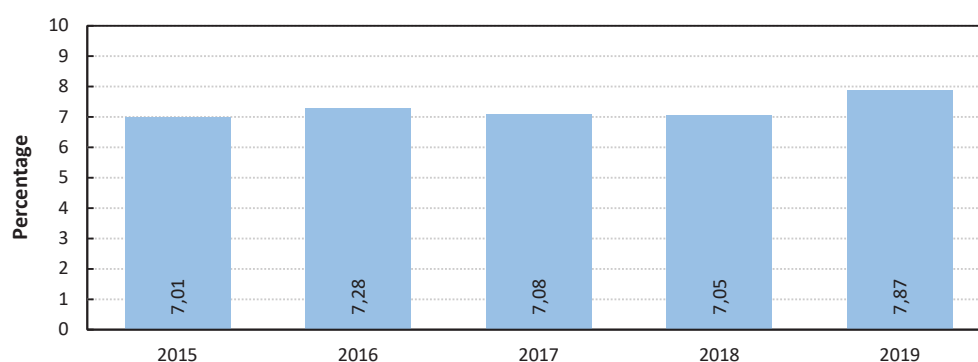
Graph 5-113 Average annual per person expenditure on healthcare good and services, by level of education. Spain, 2015-2019



Source of data: National Statistics Institute (INE). Survey of Family Budgets (EPF).

The EPF is also the source of Indicator 3.8.2. of the Agenda 2030 Sustainable Development Goals,⁶⁸ which analyses the share of the population that has high household healthcare costs (higher than 10%) as a percentage of the total household expenses, or of its income. In 2019 this situation affects 7.87% of the population, a share that is 0.82 percentage points higher than the preceding year and 0.86 percentage points higher than 2015.

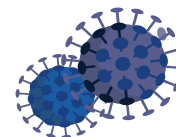
Graph 5-114 Changes in the proportion of population with large household expenditure health (> 10%) as a share of total household expenditure. Spain, 2015-2019



Source of data: National Statistics Institute (INE). Indicator 3.8.2. of the 2030 Agenda Sustainable Development Goals, with data provided by the Survey of Family Budgets (EPF).

⁶⁸ The UN General Assembly, in its *Resolution 70/1 Transforming our world: the 2030 Agenda for Sustainable Development (September 2015)*, laid down 17 goals and 169 targets that seek to enhance equality among people, protect the planet and ensure prosperity as part of a new sustainable development agenda. Currently, the framework of global indicators of the 2030 Agenda is comprised of 231 indicators. The 2017-2020 National Statistics Plan states that the National Statistics Institute (INE) is tasked with the general coordination of the services of the Central Government or any other bodies that depend on it and are responsible for the elaboration of the Indicators of the 2030 Agenda for Sustainable Development. More information at: <https://www.ine.es/dynt3/ODS/es/index.htm>

6 The healthcare system's response to COVID-19



6.1 Context

The impact that the SARS-CoV-2 pandemic has had on the National Health System of Spain (SNS) makes it necessary to include in the 2020 Report a section that describes, in general terms, the organizational and tactical adaptation that had to occur in the face of an unprecedented situation. To do so, this section uses information about the system's capacity to handle both the diagnosis of the disease and the intense demand derived from it, which has had tremendous repercussions on the system's usual care activity. The section also includes data regarding the perception that citizens have of the behaviour of the healthcare system during the pandemic. Finally, although vaccination did not begin until the last week of 2020, it has been deemed worthwhile to include in this section some of the figures about it, which will appear in more complete form in the SNS report of 2022. It is important to point out that great efforts have been made to obtain the most relevant, detailed and up-to-date information about the pandemic situation and the resources mobilized to respond to it in all of the SNS –information which has been provided by the autonomous communities and integrated by the Ministry of Health– and that such efforts have been absolutely instrumental in the decision-making of the health authorities and in ensuring that reliable information has been available to the population in each period of the pandemic.

Epidemiological information relative to the COVID-19 pandemic, of great depth and strategic value, has been provided systematically by the Ministry of Health for the country as a whole, through reports produced by the Centre for the Coordination of Health Alerts and Emergencies of the General Directorate of Public Health and the Carlos III Health Institute, based on the information provided by the autonomous communities. The substance and specificity of such data can be appreciated in the COVID-19 situation updates, the rapid risk evaluation reports and the Monitoring Indicators, among others, which are available on the Ministry of Health website.⁶⁹

The epidemiological data conveyed by the autonomous communities, via the National Epidemiological Surveillance Network (RENAVE), constitute the main base for decision-making during the pandemic. Other types of information have been added to this base, such as that included in new information systems that complement this surveillance and, furthermore, make it possible to examine the behaviour and activity of the SNS care network in response to the situation generated by COVID-19.

The development of these new information systems specific to COVID-19 is based upon the regulatory framework that has been established progressively during the pandemic, the provisions of which appear mainly in the following regulations:

- Royal Decree 463/2020, of 14 March, by which the state of alarm is declared in order to manage the situation of healthcare crisis caused by COVID-19.
- Ministerial Order SND/234/2020, of 15 March, on the adoption of provisions and contention measures and the transmission of information to the Ministry of Health due to the healthcare crisis caused by COVID-19.
- Ministerial Order SND/267/2020, of 20 March, which modifies Ministerial Order SND/234/2020, of 15 March, on the adoption of provisions and contention measures and the transmission of information to the Ministry of Health due to the healthcare crisis caused by COVID-19.
- Ministerial Order SND/344/2020, of 13 April, by which exceptional measures are put in

⁶⁹ <https://www.sanidad.gob.es/profesionales/saludPublica/ccayes/alertasActual/nCov/home.htm>

place to reinforce the National Health System of Spain and the contention of the healthcare crisis caused by COVID-19.

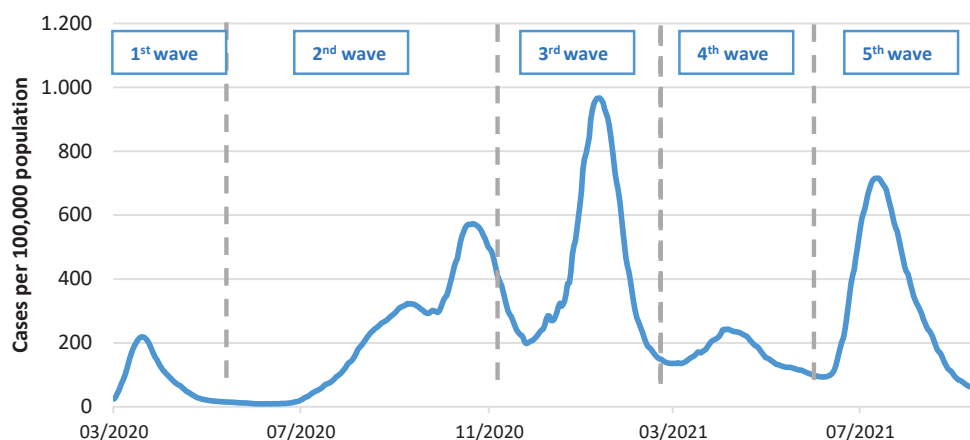
- Ministerial Order SND/352/2020, of 16 April, which modifies Ministerial Order SND/234/2020, of 15 March, on the adoption of provisions and contention measures and the transmission of information to the Ministry of Health due to the healthcare crisis caused by COVID-19.
- Ministerial Order SND/404/2020, of 11 May, on measures for the epidemiological surveillance of SARS-CoV-2 infection during the transition to a new normality.
- Royal Decree-Law 21/2020, of 9 June, on urgent prevention, contention and coordination measures with which to confront the healthcare crisis caused by COVID-19.
- Resolution of 19 June 2020, which specifies the information concerning care capacity and material needs of the healthcare system that is necessary for the monitoring of the pandemic, as referred to in Royal Decree-Law 21/2020 of 9 June.
- Resolution of 19 June 2020, which establishes the Information System to be used to transmit the information on diagnostic lab tests that is necessary for the monitoring of the pandemic, as referred to in Art. 25 of Royal Decree-Law 21/2020, of 9 June.
- Law 2/2021, of 29 March, on urgent prevention, contention and coordination measures with which to confront the healthcare crisis caused by COVID-19.
- Resolution of 20 July 2021, of the General Directorate of Public Health, which establishes the Information System to be used to transmit the information on diagnostic lab tests that is needed to monitor the pandemic caused by COVID-19, as mentioned in Art. 25 of 2/2021, of 29 March, on urgent measures for the prevention, contention and coordination needed to confront the healthcare crisis caused by COVID-19.

As mentioned in the Introduction, the information presented herein refers to the period between 1 February 2020 and 30 September 2021 and, to situate the data in time, the periods used are those established within the pandemic by the National Epidemiological Centre⁷⁰:

- First period: from the beginning of the pandemic to 21 June 2020, when the state of alarm ended in Spain, after the end of the first epidemic wave of COVID-19.
- Second period: from 22 June to 6 December 2020, the date of the inflection point in 14-day cumulative incidence (CI) of COVID-19 cases, between the second and third epidemic period.
- Third period: from 7 December 2020 to 14 March 2021, the inflection point in 14-day CI of COVID-19 cases, between the third and fourth epidemic period.
- Fourth period: from 15 March 2021 to 19 June, the inflection point in 14-day CI of COVID-19 cases, between the fourth and fifth epidemic period.
- Fifth period: from 20 June 2021 until present (this report includes information through 30 September).

⁷⁰ COVID-19 situation in Spain as of 6 October 2021. COVID-19 Task Force. National Epidemiology Centre, Carlos III Health Institute. National Network of Epidemiological Surveillance (RENAVE). The fifth period had not yet concluded at this report's closing date.

Graph 6-1 Cumulative incidence at 14 days: cases per 100,000 population. Spain, March 2020-September 2021



Source of data: National Epidemiology Centre, Carlos III Health Institute. National Epidemiological Surveillance Network (RENAVE). Report no. 99 – COVID-19 situation in Spain as of 6 October 2021. COVID-19 Task Force.

6.2 Diagnostic capacity for COVID-19



Clinical laboratories have had to adapt in order to meet the needs arising as a result of the SARS-CoV-2 pandemic. Certain analytical tests became essential, both for the diagnosis of cases and for understanding how the pandemic was evolving.

In parallel, a state-wide system was developed to allow for the collection of laboratory tests for the diagnosis of SARS-CoV-2 (SERLAB-CoV), with the objective of informing, as quickly as possible, of the appearance of new COVID-19 positives which, along with their geographic location, would give the surveillance system and the pandemic authorities early data regarding the magnitude of cases and of their territorial dynamics, so as to enable a speedy and effective coordination of actions at the supra- and inter-autonomic level.

The information is of great use to the health authorities and the different professionals in the health administrations, who must have that information at their disposal in order to do their work.

SERLAB-CoV was established in May 2020 and it incorporated, retrospectively, information from March 2020 forward. It receives diagnostic test information that is provided daily by the regional ministries of health, autonomous cities and INGESA, who previously receive the data from the laboratories and healthcare facilities that perform the tests, both public and private. The system also receives data from the Carlos III Health Institute, the Ministry of Defence and the Border Health Control Services of the Ministry of Health.

Initially the system gathered information only about diagnoses made with PCR (polymerase chain reaction) tests and other molecular tests performed by laboratories in Spain. Starting on 1 September 2020 antigen-based diagnostic tests were also included.

SERLAB-CoV makes it possible to analyse the information as a whole or it can be disaggregated by territory, by autonomous community, province, municipality and zip code. The geographical representation of the data can be viewed on maps.

SERLAB-CoV has undergone changes to adapt to the information needs of the different periods of the pandemic, attempting to respond to the necessities of the units involved in pandemic management, those of the Ministry and also those of the autonomous communities.

If at the beginning one of the most pressing needs was the territorial localisation and

georeferencing of the cases of infection with daily indicators of the changing situation, expressed in absolute values, rates and variations, in reference to different periods of time, the behaviour of the pandemic and the necessity of minimizing its effects, in certain collectives, have led to some new specific developments. Thus, to the initial population data of age group and sex others have been added, such as school-aged population and reinfected population. The introduction of indicators such as R_t , the effective reproduction number or speed of propagation, which indicates the number of new cases that a single diagnosed case produces (greater than 1, the number of cases is increasing and less than 1, the number of cases is decreasing) and the EPG (effective potential growth) are very useful for making predictions about the pandemic.

SERLAB-CoV has proven itself to be a tool of great utility as it contributes to the important task of making accurate information available quickly, thus supporting the management of the pandemic.

Some examples of the information provided by this system are discussed below.

6.2.1 PCR and antigen tests

This section covers the population rates of tests performed and positive results, and also of positivity in each of the defined periods, total and by autonomous community. Positivity is defined as the percentage of people who test positive for the infection among all the people who have been tested (PCR or antigen) during a given period of time. The World Health Organization (WHO) indicates that positivity below 5%⁷¹ is one of the epidemiological criteria that should be present for the pandemic to be considered under control. As of 30 September 2021 around 58 million COVID-19 tests have been performed in Spain, that is, 1.2 tests per inhabitant. The autonomous communities with the highest testing rates in the first period were La Rioja, Asturias, Navarre and Basque Country. In relation to positivity, the autonomous communities with the lowest percentages were Asturias, Canary Islands, Murcia and Balearic Islands.

Table 6-1 Diagnostic tests during the first period: from start of pandemic to 21 June 2020^(*). España					
Autonomous Community	No. samples	No. positives	Tests per 1,000 pop	Positives per 1,000 pop	Positivity (%)
Andalusia	262,355	14,065	31.06	1.67	5.36
Aragon	79,517	8,132	60.04	6.14	10.23
Asturias	121,833	2,955	119.44	2.90	2.43
Balearic Islands	96,819	4,489	80.78	3.75	4.64
Canary Islands	135,201	3,831	60.89	1.73	2.83
Cantabria	56,763	3,443	97.54	5.92	6.07
Castilla y León	192,407	24,638	80.07	10.25	12.81
Castilla-La Mancha	96,043	15,250	47.12	7.48	15.88
Catalonia	536,135	69,928	70.46	9.19	13.04
Valencia	254,676	18,301	50.95	3.66	7.19
Extremadura	42,791	3,956	40.26	3.72	9.24
Galicia	163,098	12,330	60.43	4.57	7.56
Madrid	467,718	84,632	69.96	12.66	18.09
Murcia	53,681	2,414	35.92	1.62	4.50
Navarre	74,945	7,816	114.85	11.98	10.43
Basque Country	248,433	17,107	113.86	7.84	6.89
La Rioja	40,533	5,658	128.89	17.99	13.96

⁷¹ World Health Organisation. Annex to Considerations in adjusting public health and social measures in the context of COVID-19: Public health criteria to adjust public health and social measures in the context of COVID-19. WHO, 12 May 2020.

Ceuta	2,172	167	25.72	1.98	7.69
Melilla	2,725	197	32.33	2.34	7.23
Total	2,927,845	299,309	62.16	6.35	10.22

(*) In this period all the diagnostic tests were PCR and other molecular tests.

Source of data: Ministry of Health. State system for the collection of SARS-CoV-2 diagnostic laboratory test results (SERLAB-CoV).

In the second period, the highest figures for tests performed were in the autonomous communities of Navarre, Basque Country, La Rioja, Asturias, Madrid and Catalonia. In this second period, antigen-based testing had begun and 86.5% of the tests are performed with PCR techniques and 14.5% with techniques for rapid antigen detection. In any case it should be noted that there was a significant increase in diagnostic activity with these tests, which, at the national level, jumps from an average of 62 tests per 1,000 population in the first period to 340 tests per 1,000 population in the second period.

All of the autonomous communities and cities are above 5% positivity, although in the case of Asturias and Canary Islands the figures are just above that threshold.

Table 6-2 Diagnostic tests during the second period: from 22 June to 6 December 2020. Spain

Autonomous Community	No. samples	No. positives	Tests per 1,000 pop	Positives per 1,000 pop	Positivity (%)
Andalusia	1,905,391	241,594	225.58	28.60	12.68
Aragon	482,868	81,689	364.59	61.68	16.92
Asturias	509,722	26,423	499.73	25.91	5.18
Balearic Islands	468,710	36,223	391.06	30.22	7.73
Canary Islands	461,181	24,286	207.71	10.94	5.27
Cantabria	217,299	18,330	373.40	31.50	8.44
Castilla y León	910,611	119,383	378.97	49.68	13.11
Castilla-La Mancha	511,783	69,814	251.07	34.25	13.64
Catalonia	3,078,775	285,167	404.60	37.48	9.26
Valencia	1,266,209	149,322	253.31	29.87	11.79
Extremadura	330,448	36,693	310.92	34.52	11.10
Galicia	770,400	49,437	285.46	18.32	6.42
Madrid	2,790,700	354,636	417.43	53.05	12.71
Murcia	443,756	60,899	296.94	40.75	13.72
Navarre	412,378	40,508	631.97	62.08	9.82
Basque Country	1,237,427	89,502	567.13	41.02	7.23
La Rioja	175,339	16,191	557.54	51.48	9.23
Ceuta	14,819	2,321	175.51	27.49	15.66
Melilla	20,307	3,393	240.93	40.26	16.71
Total	16,008,123	1,705,811	339.84	36.21	10.66

Source of data: Ministry of Health. State system for the collection of SARS-CoV-2 diagnostic laboratory test results (SERLAB-CoV).

As for the third period, the autonomous communities with the highest rate of tests performed are Catalonia, Galicia and Castilla y León. Of the total number of tests performed in this period 64.3% use PCR techniques and 35.7% use rapid antigen detection techniques. Only Canary Islands is close to the threshold of positivity established by the WHO.

Table 6-3 Diagnostic tests during the third period: from 7 December 2020 to 14 March 2021. Spain

Autonomous Community	No. samples	No. positives	Tests per 1,000 pop	Positives per 1,000 pop	Positivity (%)
Andalusia	1,884,404	267,729	223.10	31.70	14.21
Aragon	254,749	37,294	192.35	28.16	14.64
Asturias	389,647	26,841	382.01	26.31	6.89
Balearic Islands	436,518	38,254	364.20	31.92	8.76
Canary Islands	424,703	25,216	191.28	11.36	5.94
Cantabria	176,683	12,692	303.61	21.81	7.18
Castilla y León	963,660	95,140	401.04	39.59	9.87
Castilla-La Mancha	392,721	77,583	192.66	38.06	19.76
Catalonia	3,431,163	248,168	450.91	32.61	7.23
Valencia	1,506,783	337,365	301.43	67.49	22.39
Extremadura	355,656	45,207	334.64	42.54	12.71
Galicia	1,163,666	70,236	431.18	26.03	6.04
Madrid	2,438,971	304,859	364.82	45.60	12.50
Murcia	388,808	56,251	260.17	37.64	14.47
Navarre	230,339	14,718	353.00	22.56	6.39
Basque Country	813,347	57,173	372.77	26.20	7.03
La Rioja	116,960	13,118	371.91	41.71	11.22
Ceuta	24,989	2,305	295.96	27.30	9.22
Melilla	17,835	2,423	211.60	28.75	13.59
Total	15,411,602	1,732,572	327.17	36.78	11.24

Source of data: Ministry of Health. State system for the collection of SARS-CoV-2 diagnostic laboratory test results (SERLAB-CoV).

In the fourth period the testing rates drop, generally-speaking, in all autonomous communities. As for test types, 62.5% of the tests use PCR methods and 37.5% are antigen-based. Positivity is below 5% in several autonomous communities, such as Balearic Islands, Galicia, Extremadura, Valencia, Murcia, Canary Islands and Asturias.

Table 6-4 Diagnostic tests during the fourth period: from 15 March to 19 June 2021. Spain

Autonomous Community	No. samples	No. positives	Tests per 1,000 pop	Positives per 1,000 pop	Positivity (%)
Andalusia	1,357,782	123,997	160.75	14.68	9.13
Aragon	211,943	19,653	160.03	14.84	9.27
Asturias	262,572	10,973	257.43	10.76	4.18
Balearic Islands	361,638	6,806	301.72	5.68	1.88
Canary Islands	428,992	17,221	193.22	7.76	4.01
Cantabria	138,114	7,088	237.33	12.18	5.13
Castilla y León	444,456	29,303	184.97	12.19	6.59
Castilla-La Mancha	263,119	20,606	129.08	10.11	7.83
Catalonia	2,074,093	130,538	272.57	17.15	6.29
Valencia	591,729	19,484	118.38	3.90	3.29
Extremadura	283,343	8,818	266.60	8.30	3.11
Galicia	735,603	16,720	272.57	6.20	2.27
Madrid	1,971,290	151,376	294.86	22.64	7.68
Murcia	189,899	7,163	127.07	4.79	3.77
Navarre	223,997	14,051	343.28	21.53	6.27
Basque Country	674,616	45,224	309.18	20.73	6.70
La Rioja	88,952	5,005	282.85	15.91	5.63
Ceuta	21,626	1,412	256.13	16.72	6.53
Melilla	18,320	1,477	217.36	17.52	8.06
Total	10,342,084	636,915	219.55	13.52	6.16

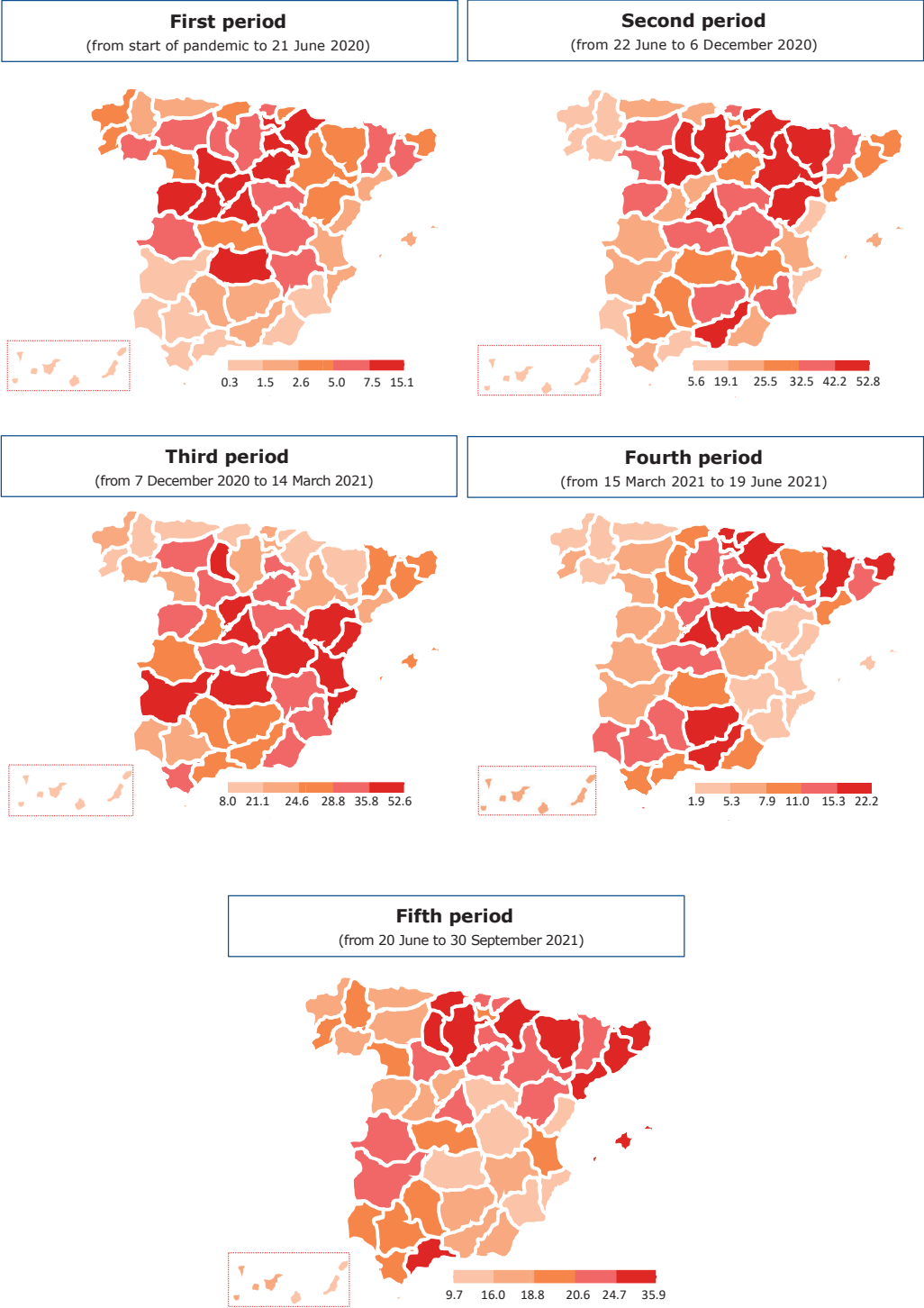
Source of data: Ministry of Health. State system for the collection of SARS-CoV-2 diagnostic laboratory test results (SERLAB-CoV).

In the fifth period, two autonomous communities stand out from the rest for their testing rates, Balearic Islands (694.59 per 1,000 pop.) and Navarre (424.49 per 1,000 pop.). Of the tests performed, 60.4% are PCR tests and 39.6% are antigen tests. Not a single autonomous community is below 5% positivity.

Table 6-5 Diagnostic tests during the fifth period: from 20 June 2021 to the present (this report includes information up to 30 September). Spain					
Autonomous Community	No. samples	No. positives	Tests per 1,000 pop	Positives per 1,000 pop	Positivity (%)
Andalusia	1.498.414	202.516	177,40	23,98	13,52
Aragon	262.975	36.660	198,56	27,68	13,94
Asturias	253.606	21.724	248,64	21,30	8,57
Balearic Islands	832.517	76.517	694,59	63,84	9,19
Canary Islands	523.907	38.003	235,97	17,12	7,25
Cantabria	157.700	17.105	270.99	29.39	10.85
Castilla y León	550.590	69.661	229.14	28.99	12.65
Castilla-La Mancha	295.249	36.274	144.84	17.79	12.29
Catalonia	2,632,045	304,069	345.89	39.96	11.55
Valencia	1,009,329	129,229	201.92	25.85	12.80
Extremadura	376.838	29.136	354.57	27.41	7.73
Galicia	753.528	59.828	279.21	22.17	7.94
Madrid	2,094,287	199,359	313.26	29.82	9.52
Murcia	278.488	26.471	186.35	17.71	9.51
Navarre	276.993	34.896	424.49	53.48	12.60
Basque Country	549.198	54.434	251.70	24.95	9.91
La Rioja	98.403	8.611	312.90	27.38	8.75
Ceuta	24.184	2.113	286.42	25.03	8.74
Melilla	17.678	1.198	209.74	14.21	6.78
Total	12,485,929	1,347,804	265.06	28.61	10.79
Source of data: Ministry of Health. State system for the collection of SARS-CoV-2 diagnostic laboratory test results (SERLAB-CoV).					

The evolution of positivity by province in each period can be tracked in the following graph.

Graph 6-2 Changes in rate of positives per 1,000 population, by province. Spain, March 2020-September 2021



Source of data: Ministry of Health. State system for the collection of SARS-CoV-2 diagnostic laboratory test results (SERLAB-CoV).

6.2.2 Diagnostic tests by age and sex

In relation to gender, a slight difference is observed in both testing rates and positive rates, in the first three periods, it being higher in women in both cases. However, in the last two periods, although testing continues to be higher in women, positive rates are similar in men and women.

Table 6-6 Diagnostic tests by sex. Spain, March 2020-September 2021

Period	Men		Women	
	Tests per 1,000 pop	Positives per 1,000 pop	Tests per 1,000 pop	Positives per 1,000 pop
First period (start to 06-21-2020)	51.13	5.46	72.74	7.22
Second period (06-22-2020 to 12-06-2020)	309.66	34.44	368.80	37.90
Third period (12-07-2020 to 03-14-2021)	290.89	35.35	362.00	38.15
Fourth period (03-15-2021 to 06-19-2021)	208.98	13.71	229.48	13.34
Fifth period (06-26-2021 to 09-30-2021)	242.51	28.57	286.45	28.65

Source of data: Ministry of Health. State system for the collection of SARS-CoV-2 diagnostic laboratory test results (SERLAB-CoV).

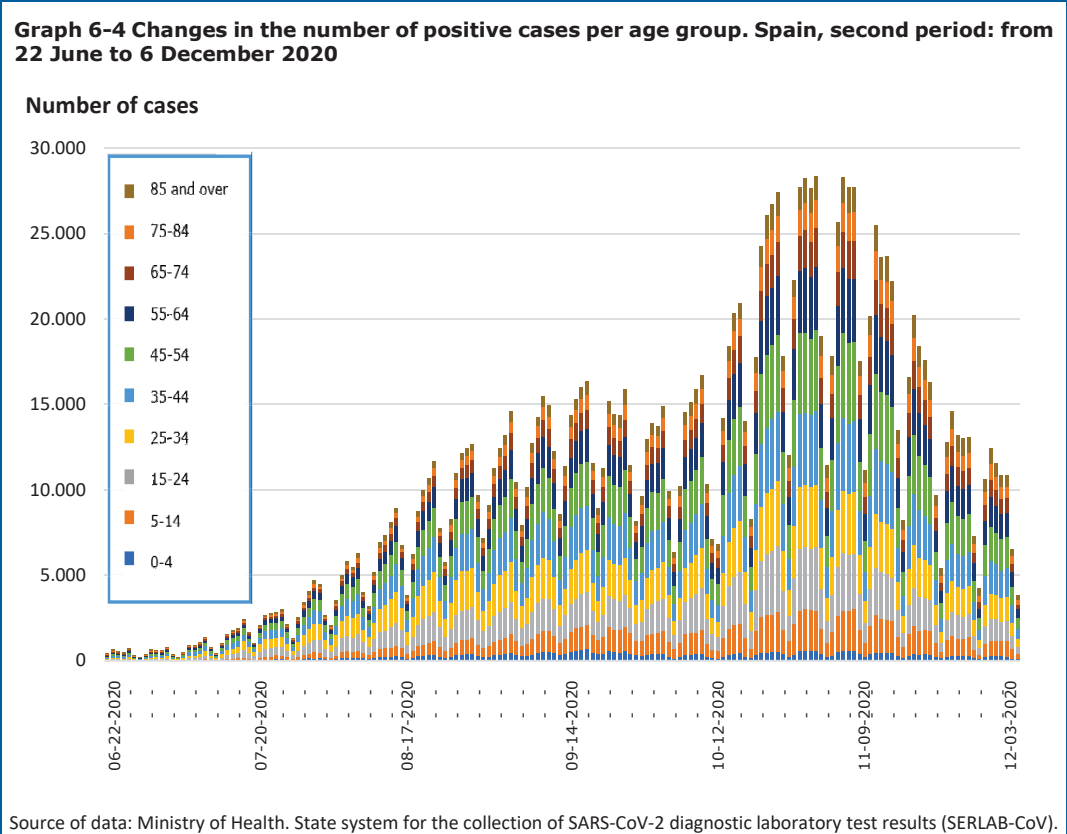
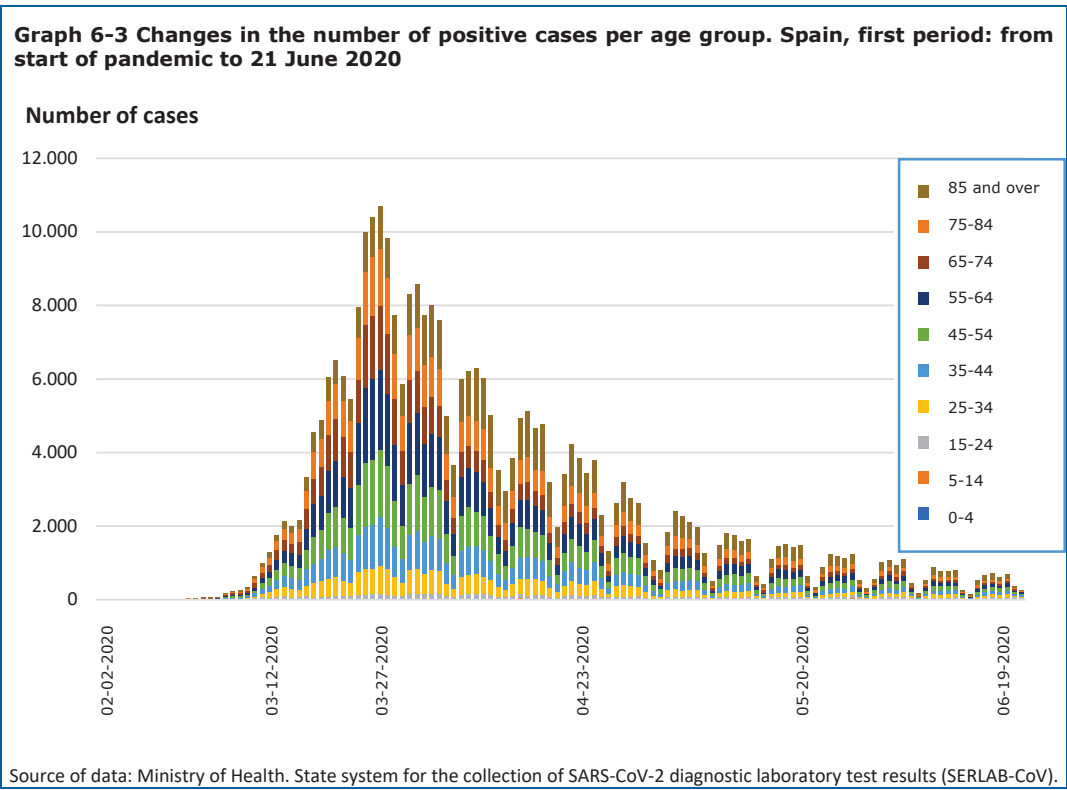
With respect to the most affected age groups, there have been important differences among the five periods. In the first period, the groups with the highest positivity rate are persons over the age of 85 and those 75 to 84 years of age. In the second and third periods, although the older age groups continue to show the highest rates, the other groups also have high rates. However, in the fourth period, the rates are very similar in the groups of young people and adults, with a notable drop in the older population. In the fifth period, the younger age groups are those that have the highest rates, although an increase in the rest of the age groups is also observed.

Table 6-7 Positive diagnostic tests per age group. Spain, March 2020-September 2021

	Positive tests per 1,000 population per day									
	0-4	5-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	>=85
First period (141 d)	0.00	0.00	0.01	0.03	0.03	0.05	0.06	0.06	0.10	0.26
Second period (168 d)	0.13	0.17	0.29	0.28	0.22	0.23	0.22	0.16	0.20	0.35
Third period (98 d)	0.19	0.31	0.44	0.44	0.37	0.41	0.41	0.33	0.37	0.62
Fourth period (97 d)	0.08	0.13	0.21	0.17	0.15	0.16	0.14	0.11	0.09	0.10
Fifth period (103 d)	0.17	0.26	0.79	0.51	0.26	0.20	0.17	0.13	0.14	0.25

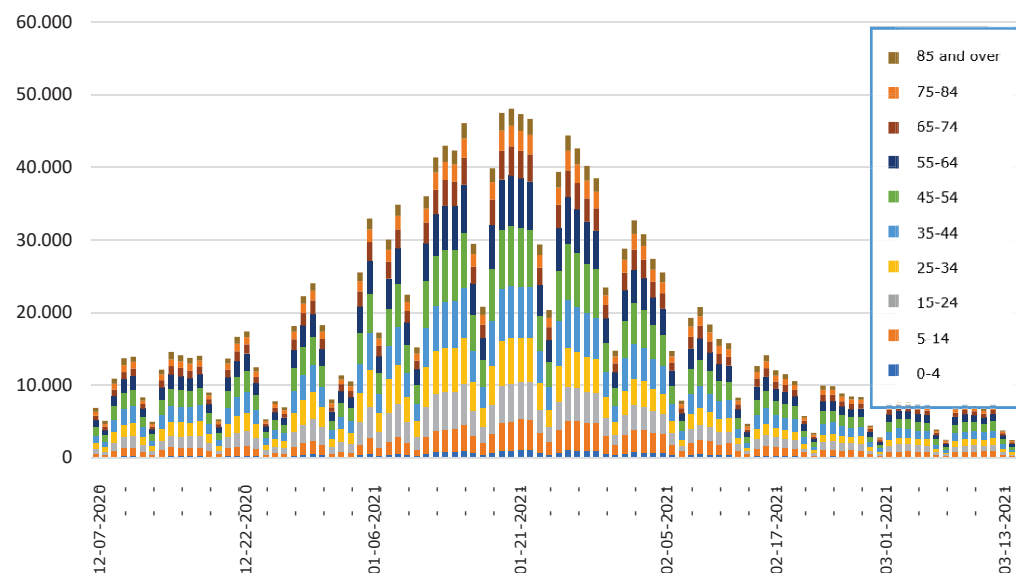
Source of data: Ministry of Health. State system for the collection of SARS-CoV-2 diagnostic laboratory test results (SERLAB-CoV).

These differences between the periods can be seen in the following graphs:



Graph 6-5 Changes in the number of positive cases per age group. Spain, third period: from 7 December 2020 to 14 March 2021

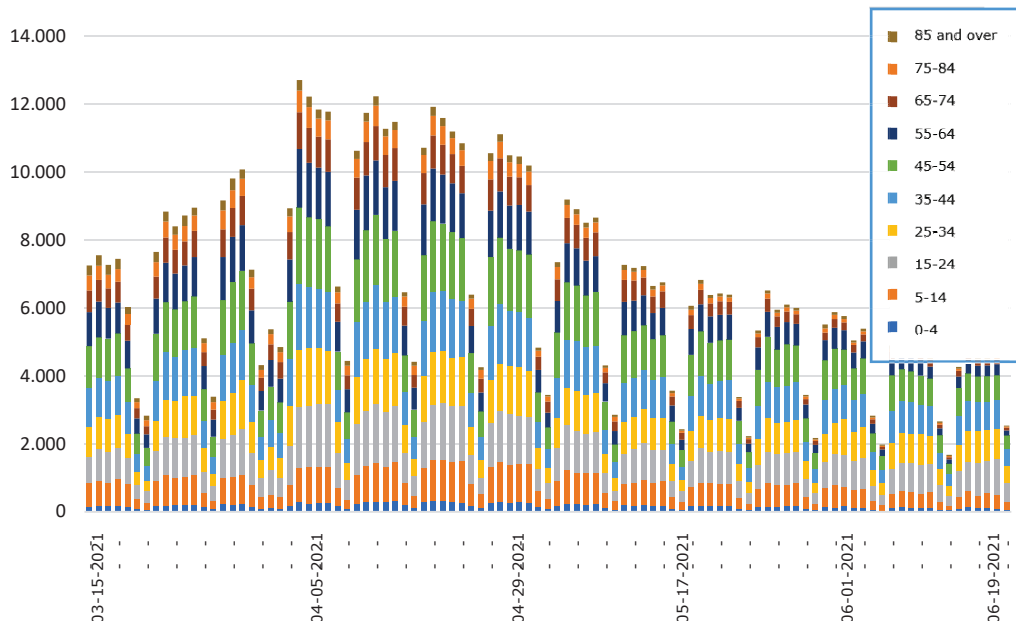
Number of cases



Source of data: Ministry of Health. State system for the collection of SARS-CoV-2 diagnostic laboratory test results (SERLAB-CoV).

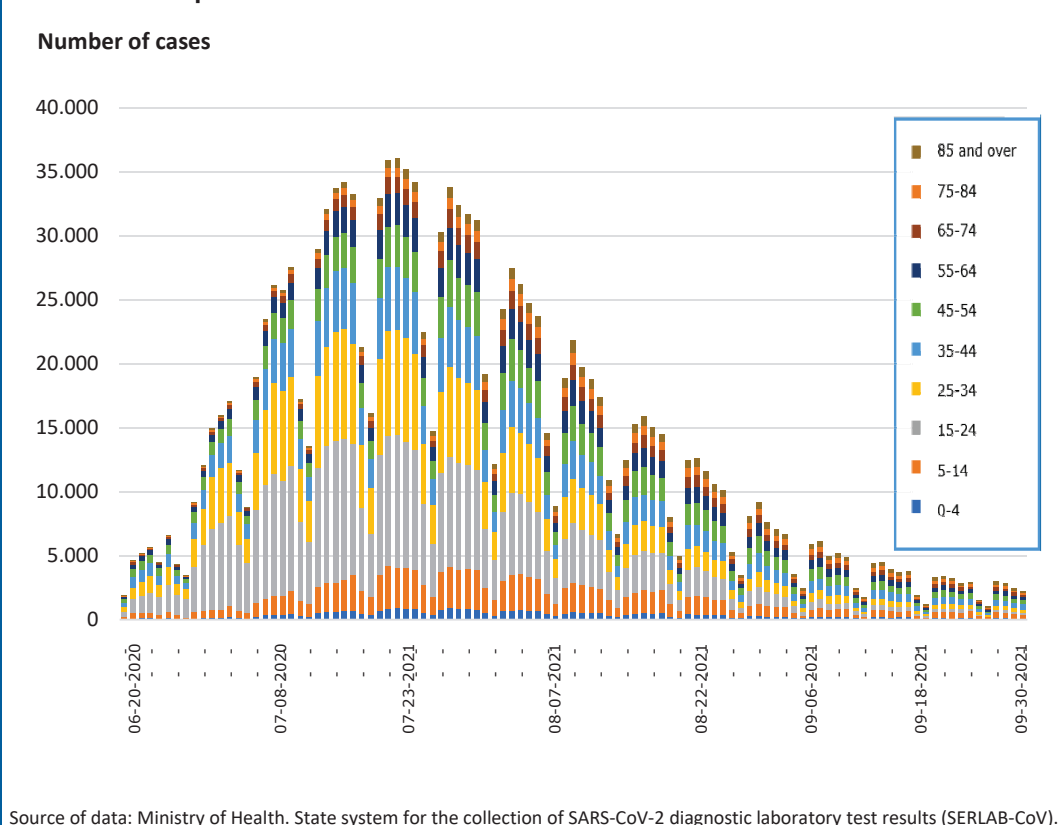
Graph 6-6 Changes in the number of positive cases per age group. Spain, fourth period: from 15 March to 19 June 2021

Number of cases



Source of data: Ministry of Health. State system for the collection of SARS-CoV-2 diagnostic laboratory test results (SERLAB-CoV).

Graph 6-7 Changes in the number of positive cases per age group. Spain, fifth period: from 20 June to 30 September 2021



6.2.3 Positivity in school children (2020-2021 school year)

The rate of positive tests in the school-aged population during the 2020-2021 school year has been 68.10 per 1,000 school children. The table below shows the rates in the different schooling periods for the different stages of compulsory education, including the periods corresponding to winter and spring holidays. The rates tend to be higher the older the students. It is important to note that the rates refer to the population of school children but not to where they were infected.

Table 6-8 Rate of positives per 1,000 school children. Spain, September 2020 to June 2021 (including holiday periods during school year)

Educational stage	First quarter (includes winter holiday)	Second quarter (includes spring holiday)	Third quarter	School year (Sept. 2020-June 2021)
Pre-school (3-5 years)	18.02	20.64	7.68	49.70
Primary education (6-11 years)	22.90	23.36	9.91	60.51
Secondary education (12-15 years)	33.74	33.50	15.91	89.77

For more information about the school-aged population and the stages of education in Spain.⁷²

Source of data: Ministry of Health. State system for the collection of SARS-CoV-2 diagnostic laboratory test results (SERLAB-CoV).

⁷² <https://www.educacionyfp.gob.es/dam/jcr:b9311a59-9e97-45e6-b912-7efe9f3b1f16/datos-y-cifras-2021-2022-espanol.pdf>

6.2.4 Reinfection rate

The reinfection rate is defined as the number of people who have had two separate positive results at least 90 days apart from each other.⁷³

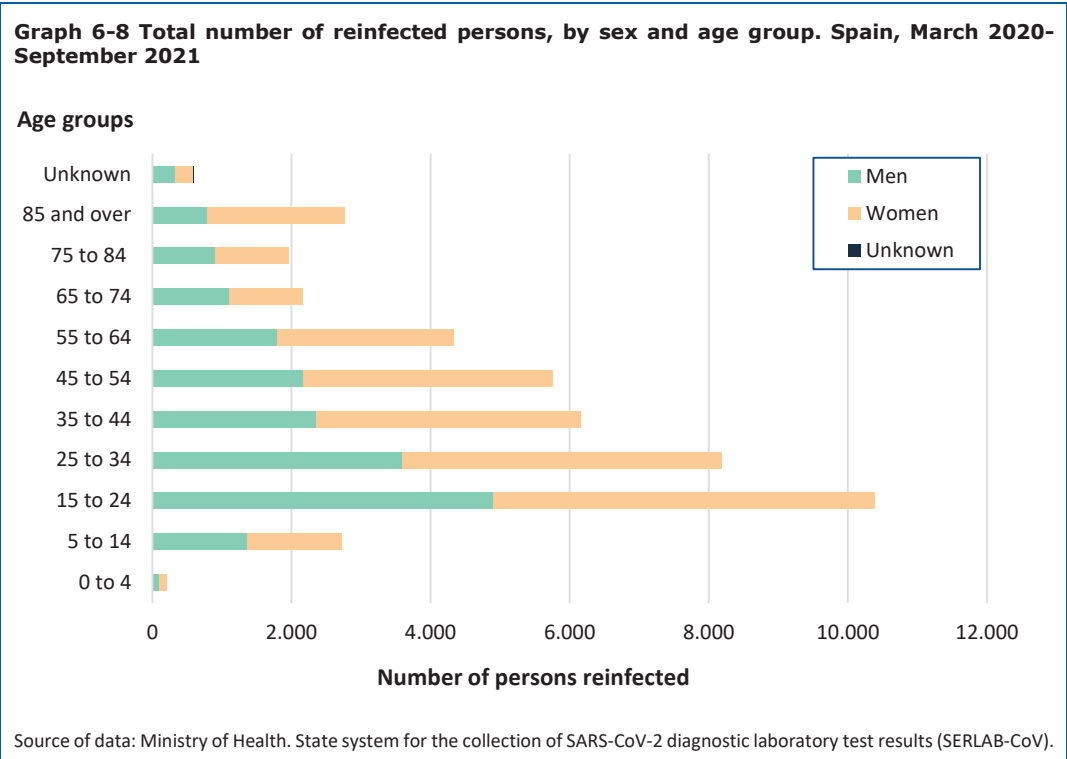
Table 6-9 Reinfection rate per 1,000 population. Spain, March 2020-September 2021

	Persons reinfected	Rate of reinfection per 1,000
First period	29	0.001
Second period	4,209	0.089
Third period	9,259	0.197
Fourth period	7,777	0.165
Fifth period	23,986	0.509
Total	45,260	0.961

Source of data: Ministry of Health. State system for the collection of SARS-CoV-2 diagnostic laboratory test results (SERLAB-CoV).

With regard to age groups, reinfection rates have been highest in the 15 to 24 age group (2.22 per 1,000 population), the 85 and over group (1.78 per 1,000 population) and the 25 to 34 age group (1.54 per 1,000 population).

By sex, the reinfection rate has been higher in women (1.07 per 1,000 women) while in men it has been 0.84.



⁷³https://www.sanidad.gob.es/profesionales/saludPublica/ccayes/alertasActual/nCov/documentos/COVID19_Estrategia_vigilancia_y_control_e_indicadores.pdf

6.3 Care capacity



The pandemic has posed an unprecedented challenge to the healthcare system as a whole and particularly to the SNS, at the levels of both primary care and hospital care. In the early weeks of the pandemic hospitals assumed a very large part of the care activity derived from COVID-19, in laboratories and diagnostic imaging services as well as in emergency services and hospitalisation. A significant proportion of COVID-19 cases required critical care and it was the Intensive Care Units that had to adapt most urgently to the new situation.

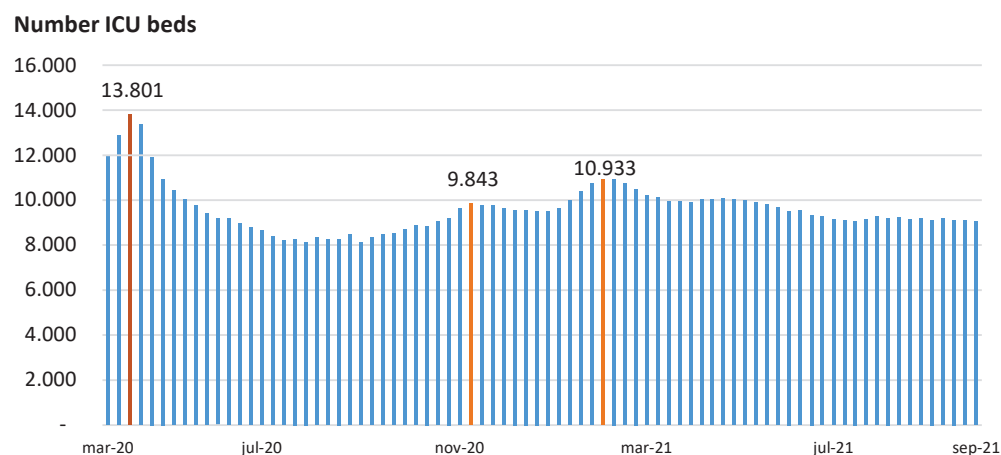
In many hospitals whole new units for conventional hospitalisation had to be set up to care for patients infected with the SARS-CoV-2 virus and new intensive care services also had to be prepared, adding them to the usual Intensive Care Units. During this time it was also necessary to acquire large quantities of certain material resources needed for the aforementioned care activity, primarily mechanical ventilation equipment and special protection suits. Special "Critical COVID-19 Units" were set up in many healthcare facilities using other available resources that had to be adapted for the care of these critical patients, all in record time.

The foregoing made it possible for hospitals in most territories to have an additional contingent of resources at their disposal. Although for the first few weeks figures regarding equipment and activity are not very precise, since yet another necessity during that time was the development of special information systems for country-wide monitoring of the pandemic (once the regulatory framework that permitted such monitoring had been established), evidence indicates that starting in the early weeks as many as 125,000 beds were made available for use with patients in need of hospital care, along with additional ICU resources; finally, as the saturation of hospital beds became more intense, beds for the care of these patients were set up in buildings not normally used for medical purposes.

6.3.1 Intensive Care Units

The maximum number of temporary ICU beds was reached during the first wave, when over 13,000 beds were set up. The number of beds in some autonomous communities quadrupled and even quintupled the bed capacity prior to the pandemic; overall a number 2.8 times greater than the usual capacity was reached. The number of ICU beds has remained higher than baseline during the entire period analyzed, with increments coinciding with the successive epidemic waves, although in later waves the highest values did not reach the peak of the first wave.

Graph 6-9 Daily evolution of the number of temporary ICU beds. Spain, March 2020-September 2021



Source of data: Ministry of Health. Centre of Management and Control COVID - Information System for the monitoring of the pandemic (CMC).

The following graph details the per capita, baseline and maximum number of beds in the successive pandemic waves, by autonomous community.

Table 6-10 Baseline* and maximum numbers of ICU beds per 100,000 population, by autonomous community. Spain, January 2020-September 2021

	Baseline* (Jan 2020)	Max. 1 st wave	Max. 2 nd wave	Max. 3 rd wave	Max. 4 th wave	Max. 5 th wave
Andalusia	9.1	21.0	20.1	22.9	22.3	22.9
Aragon	12.2	24.3	20.2	18.0	16.9	24.3
Asturias	9.5	25.9	33.4	33.3	29.9	33.4
Balearic Islands	10.9	26.4	24.1	25.9	29.9	29.9
Canary Islands	11.5	27.0	26.1	21.3	22.4	27.0
Cantabria	10.0	30.2	23.7	22.3	20.3	30.2
Castilla y León	9.2	29.9	23.4	25.2	18.4	29.9
Castilla-La Mancha	8.2	27.5	19.4	24.2	18.1	27.5
Catalonia	10.5	46.0	18.8	20.9	17.8	46.0
Valencia	11.9	23.4	21.3	25.1	16.9	25.1
Extremadura	10.4	24.5	23.7	21.1	17.7	24.5
Galicia	11.2	28.8	27.8	29.4	27.8	29.4
Madrid	12.2	32.4	19.2	21.4	17.0	32.4
Murcia	8.9	29.9	31.7	32.8	31.8	32.8
Navarre	10.4	30.8	25.3	20.5	18.7	30.8
Basque Country	9.0	16.5	18.6	20.9	18.3	21.1
La Rioja	7.0	33.4	19.1	27.7	16.9	33.4
Ceuta	8.3	20.1	20.1	20.1	20.1	20.1
Melilla	7.1	14.2	16.6	20.2	20.2	20.2
Spain	10.4	29.3	20.9	23.2	19.7	29.3

(*) Baseline is the number of ICU beds available as of 1 January 2020 (does not include neonate ICUs or post-anaesthesia Recovery Units).

Source of data: Ministry of Health. Specialised Care Information System (SIAE) (January-20). Centre of Management and Control COVID-19-Information System for the monitoring of the pandemic (CMC).

6.3.2 Field hospitals and non-medical buildings

During the first wave of the pandemic it also became necessary, in some autonomous communities, to set up additional resources with which to attend patients in need of hospital care. This was done in two ways. On the one hand, beds were prepared, especially in the Madrid, in what were called “medicalized hotels” and additional care capacity was also created in repurposed residential buildings. In the first wave, these non-medical buildings contributed up to 5% more beds to the total number of temporary beds in the hospital network, according to the data sent on a daily basis to the Spanish Ministry of Health by the regional health ministries. The maximum number of temporary beds set up in non-medical buildings was reached on 13 April 2020, with 5,117. Additionally, in some autonomous communities, field hospitals were set up. This was the case in Andalusia, Asturias, Castilla y León, Catalonia, Valencia and Madrid; in this last community, in addition to the field hospital set up at Madrid’s trade fair venue (IFEMA), which was used for COVID patients during the first wave, the month of December 2020 brought the inauguration of the newly-built Enfermera Isabel Zendal Emergency Hospital; as a hospital dedicated primarily to emergency situations, this facility has been the Spanish healthcare centre with the highest number of patients hospitalised due to COVID-19 for much of the rest of the pandemic. In Andalusia COVID field hospitals were set up at the Hospital Infanta Elena of Huelva and at the former Hospital de la Defensa of Seville; Castilla y León made the former Hospital Río Hortega of Valladolid available to COVID-19 patients from that autonomous community and, finally, Valencia authorized the provisional “Ernest Lluch Centre”.

6.3.3 Primary Care health centres

According to the data contained in the SNS Information System, in the early stages of the pandemic (2020) activity in Primary Care made a radical shift towards appointments by telephone, known as teleconsultations. The number of in-person appointments offered was drastically reduced and in some cases the opening hours of primary care establishments were modified and/or people seeking appointments were referred to specific Primary Care Centres that had been designated reference centres. During the first few months of the pandemic (March-June 2020), in some urban areas primary care professionals were called upon to cover other care positions, mainly in field hospitals and medicalized hotels. In the case of Local Primary Care Centres (which are usually located in rural areas) some were temporarily closed for in-person activity, with a tendency towards the centralization of care in the area’s main Primary Care Centre.⁷⁴

With respect to specific urgent care services that depend functionally on the Primary Care level, in most autonomous communities they have maintained their usual activity throughout the pandemic, although in some cases temporary closures took place. However, some facilities of this type closed in March 2020 and remain closed at the time of this report. they are located in Madrid, where 33 Urgent Primary Care Services (SUAP) remain closed, in Basque Country, where nine Ongoing Care Centres (PAC) remain closed, and Castilla y León, with five Urgent Care Centres (CG) that remain closed.

All data presented below regarding COVID-19 care capacity, activity and occupation take into account the entire period up to 30 September 2021, while some aspects, such as those concerning the pandemic’s impact on access to certain services (waiting lists) and the rest of patient care activity at the Specialised Care level, including the description of episodes attended in hospitals, refer to the specific data collection intervals used by their respective sources. Most of them are the year 2020 and in some cases, such as waiting lists, June 2021, the time of the last data cut.

⁷⁴ There is no precise quantification of these situations. Data has been collected mainly through public announcements made by the regional health authorities.

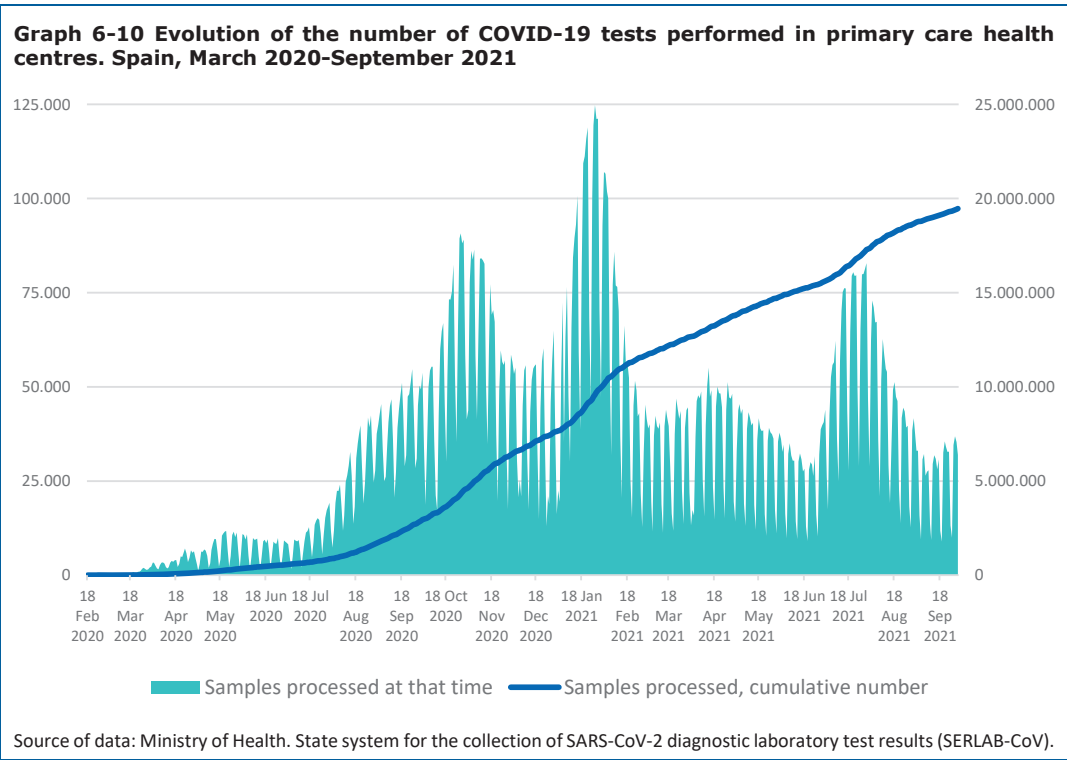
The data concerning the Primary Care level correspond mainly to the year 2020 and are from the usual sources of the SNS Information System, which is annual. Data on wait time for appointments with physicians correspond to 2021 and data regarding COVID-19 testing cover through September of that year. Data about Temporary Incapacity status correspond to 2020 and 2021.

6.4 Primary Care activity related to COVID-19



Between the beginning of the pandemic and 30 September 2021, 24 million diagnostic tests were performed (Ag) or samples taken and prepared (PCR) in primary care health centres. This figure represents 40% of the total number of COVID-19 tests carried out in healthcare facilities in Spain.⁷⁵

The graph below shows the daily evolution of the tests performed at the Primary Care level from the start of the pandemic through 30 September 2021; the maximum number was on 27 January 2021, with 124,387 COVID-19 tests.⁷⁶



In 2020 around 2.3 million people diagnosed with COVID-19 were attended in visits with primary care professionals and 5.3 million contacts were tracked. Their distribution by age and sex appears in the following table.

⁷⁵ Tests reported to SERLAB-CoV. To be able to include Catalonia in the total, estimates had to be used because Catalonia does not keep track of where the tests were performed. Behaviour similar to the averages found in the rest of the system was assumed.

⁷⁶ In this case no data from Catalonia is included because that autonomous community does not differentiate between care levels.

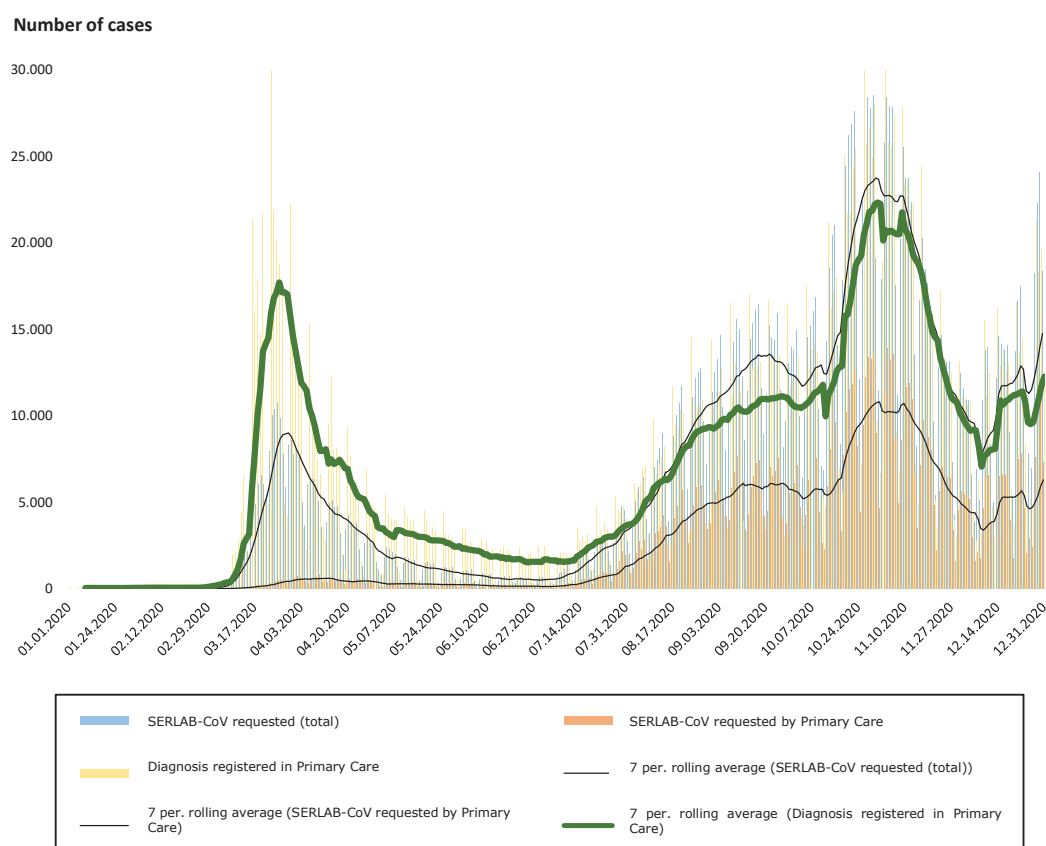
Table 6-11 Cases of COVID-19 infection and close contacts registered in clinical primary care records, by sex and large age groups. Spain, March to December 2020

	Cases of COVID-19 infection			Cases of close contact/exposure to COVID-19		
	Men	Women	Both sexes	Men	Women	Both sexes
aged 0-14	127,609	119,777	247,386	516,388	478,282	994,670
aged 15-34	260,793	290,398	551,191	708,381	750,189	1,458,569
aged 35-64	505,112	591,437	1,096,549	1,038,504	1,254,285	2,292,789
65 and over	152,480	200,573	353,054	232,097	342,258	574,356
Total	1,045,994	1,202,186	2,248,180	2,495,370	2,825,014	5,320,384

Source of data: Ministry of Health. Clinical Primary Care Database (BDCAP).

As shown in the following graph, the number of COVID-19 diagnoses registered by the Primary Care services during the first weeks of the pandemic was higher than that of cases confirmed by laboratory (see below) while, starting in July, the two curves overlap. It is important to note that the cases registered, and therefore attended, at the primary care level exceed the cases for which laboratory diagnosis was requested, which is indicative of the care capacity of primary care during the entire pandemic.

Graph 6-11 Changes in the number of COVID-19 tests registered in SERLAB-CoV and diagnoses registered in Primary Care centres. Spain, March to December 2020



Source of data: Ministry of Health. State system for the collection of SARS-CoV-2 diagnostic laboratory test results (SERLAB-CoV) and Clinical Primary Care Database (BDCAP).

For primary care physicians the pandemic has meant a significant increase in their workload because of the paperwork required in cases of Temporary Incapacity (TI). Article 5 of the Royal Decree-Law 6/2020, of 10 March, which puts in place certain urgent measures in the economic sphere and for the protection of public health, provided that the periods of isolation or contagion

workers had to observe as a result of the COVID-19 virus would be treated like the situation resulting from a workplace accident. Therefore, workers were to be given TI status during the periods of isolation or contagion in which they could not go to work. All situations of Temporary Incapacity require that documentation be completed by the worker's primary care physician at the start of the worker's absence from the job and again at the end of the absence, when he/she is able to return to work (with a status confirmation document issued between these dates when necessary). These forms are processed by the Health and Public Services Department –SPS– that corresponds to the worker based on his/her place of residence.⁷⁷

The number of Temporary Incapacity processes generated by COVID-19 was 2.4 million in 2020 and 2.8 million in 2021.

Table 6-12 Number of Temporary Incapacity processes related to COVID-19 by autonomous community, initiated in 2020-2021 period. Spain

	2020	2021	Total
Andalusia	267,895	403,827	671,722
Aragon	97,635	85,301	182,936
Asturias	37,204	43,085	80,289
Balearic Islands	59,361	56,853	116,214
Canary Islands	59,873	93,062	152,935
Cantabria	27,110	31,257	58,367
Castilla y León	115,778	130,207	245,985
Castilla-La Mancha	118,338	112,342	230,680
Catalonia	556,599	622,035	1,178,634
Valencia	229,184	284,250	513,434
Extremadura	33,266	44,964	78,230
Galicia	75,990	114,066	190,056
Madrid	461,502	474,808	936,310
Murcia	94,150	78,231	172,381
Navarre	56,508	52,677	109,185
Basque Country	179,103	200,760	379,863
La Rioja	23,017	25,229	48,246
Ceuta	3,462	3,070	6,532
Melilla	3,595	3,425	7,020
Spain	2,499,570	2,859,449	5,359,019

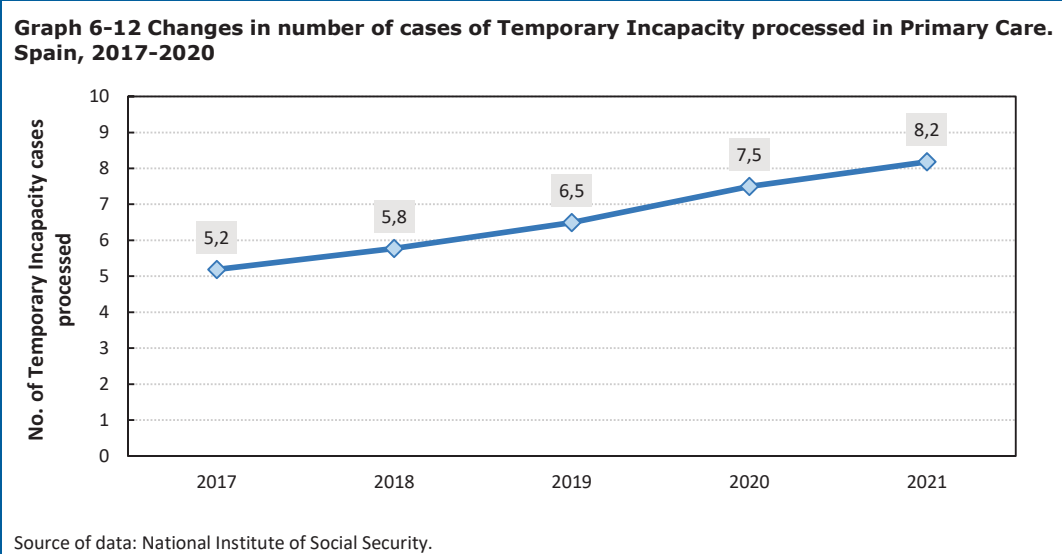
Source of data: Ministry of Inclusion, Social Security and Migrations (<https://www.seg-social.es/wps/portal/wss/internet/EstadisticasPresupuestosEstudios/Estadisticas/EST45/EST46>).

The overall volume of Temporary Incapacity (TI) processes has been growing in recent years⁷⁸ at an average interannual rate of 11.5%. In 2020, despite the effect of confinement and the exceptional employment situations of many workers (numerous companies filed Temporary Suspensions of Employment, for which TI paperwork is not required), family physicians handled 7.5 million TI processes, one million more (+15%) than in 2019. This increment is related to situations derived from COVID-19.

Similarly, in the year 2021 about 8.2 million TI processes were handled by family physicians, that is, 1.7 million more (+26%) than the year before the pandemic.

⁷⁷ <https://www.seg-social.es/wps/wcm/connect/wss/3a2b2c93-c74e-44c6-bfe4-90692c0f7795/BNR+3-2020.pdf?MOD=AJPERES&CVID=>

⁷⁸ The gross number of TI processes is logically related to the number of persons affiliated with the Social Security system in each period, among other aspects.



The processing of TI paperwork is generally done using digital means, which have had to be reinforced and reoriented during the pandemic due to the significant increase in the bureaucratic burden that COVID-19 has caused for family physicians.

6.5 Hospital activity and occupation related to COVID-19

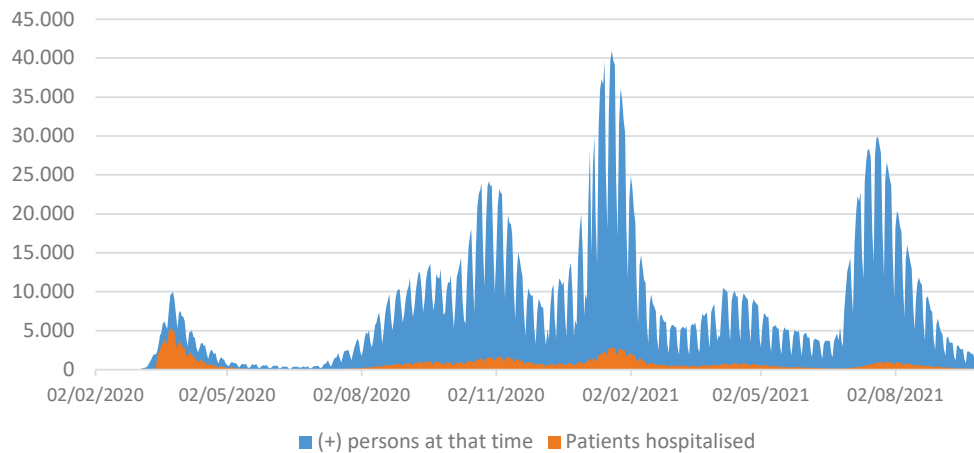


Information about hospital activity related to the care of COVID-19 patients during the first wave comes from different sources. Data on hospitalisations up to 31 March was obtained from the SIVIES application; after that it was gathered through the hospital care capacity monitoring system, which in early weeks was sent in aggregated form by the regional health ministries and later substituted by an application introduced for this purpose. About 570 hospitals, from both the public and private sectors, send their data to this application every day. Most of them are acute-care hospitals. At times mental health hospitals and long-stay hospitals have attended COVID-19 cases.

6.5.1 Activity-Hospitalisations due to COVID-19

The highest number of hospital admissions was on 24 March 2020, with over 5000 admissions. In this first wave of the pandemic hospital activity was the dominant curve and it coincided with the dates of infection peaks. In subsequent waves the high points in admissions occurred a few days after the peaks in infection and in a much smaller proportion to the number of infected people.

Graph 6-13 Changes in the number of positive tests and hospitalisations due to COVID-19. Spain, March 2020-September 2021



Source of data: Ministry of Health. State system for the collection of SARS-CoV-2 diagnostic laboratory test results (SERLAB-CoV). Carlos III Health Institute, National Epidemiology Centre, National Epidemiological Surveillance Network (RENAVE).

If the reference used is the number of persons who tested positive, based on the date of diagnosis, before 21 June 2020, then 42% of the total of people with a positive test ended up being hospitalised. The proportion is 8% in the following three waves in which the number of diagnoses was much higher and it is in the fifth wave, with vaccination coverage at 60%, when the proportion of hospitalised patients drops to half, 4%.

Table 6-13 Distribution of people with (+) test and people hospitalised, by pandemic periods. Spain, January 2020-September 2021

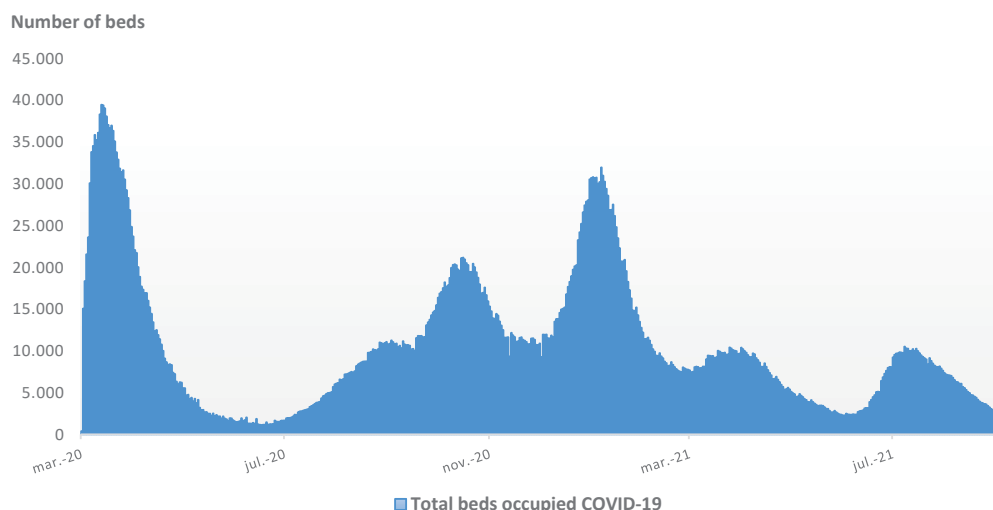
	Total no. of persons with (+) test ⁽¹⁾	Total no. of COVID-19 patients hospitalised ⁽²⁾	Percentage
First wave	238,141	101,117	42%
Second wave	1,440,779	116,626	8%
Third wave	1,430,251	113,138	8%
Fourth wave	534,322	45,044	8%
Fifth wave (up to 30 Sept)	1,168,343	46,041	4%
Total	4,573,695	320,849	7%

Source of data: Ministry of Health. State system for the collection of SARS-CoV-2 diagnostic laboratory test results (SERLAB-CoV). Carlos III Health Institute, National Epidemiology Centre, National Epidemiological Surveillance Network (RENAVE).

The COVID-19 patient care process has, at certain times, led to the almost exclusive dedication of numerous hospital facilities, not just because of the case volume, which is significant in some periods, but because of the necessity of enforcing strict conditions of isolation and protection with respect to the rest of the patients attended in the healthcare facilities.

The highest number of COVID-19 patients hospitalised in Spain during the pandemic was recorded during the first wave, on 7 April. On that date almost 40,000 hospital beds were occupied by COVID-19 patients.

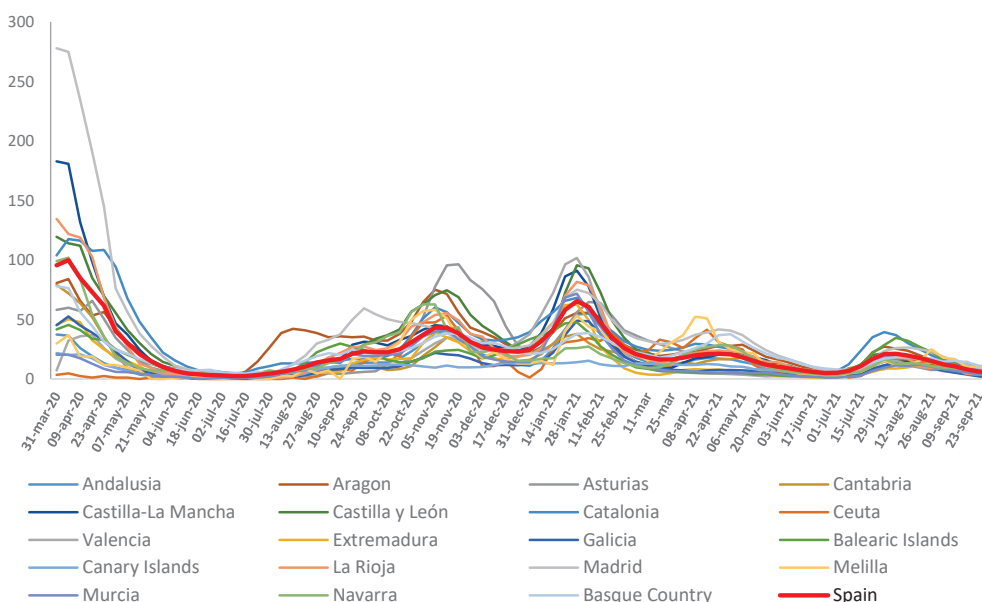
Graph 6-14 Changes in number of hospitalised COVID-19 patients. Spain, March 2020-September 2021



Source of data: Ministry of Health, Centre of Management and Control COVID – Information System for the monitoring of the pandemic (CMC).

In subsequent waves the number of hospitalised patients has been lower, along with the percentages of occupation for the system as a whole. Both the activity and the occupation due to COVID-19 show relevant differences between autonomous communities. The graph below depicts the curves of the per inhabitant hospitalisation rates that were recorded by each autonomous community on a weekly basis.

Graph 6-15 Changes in the COVID-19 hospitalisation rates, by autonomous community. Spain, March 2020-September 2021



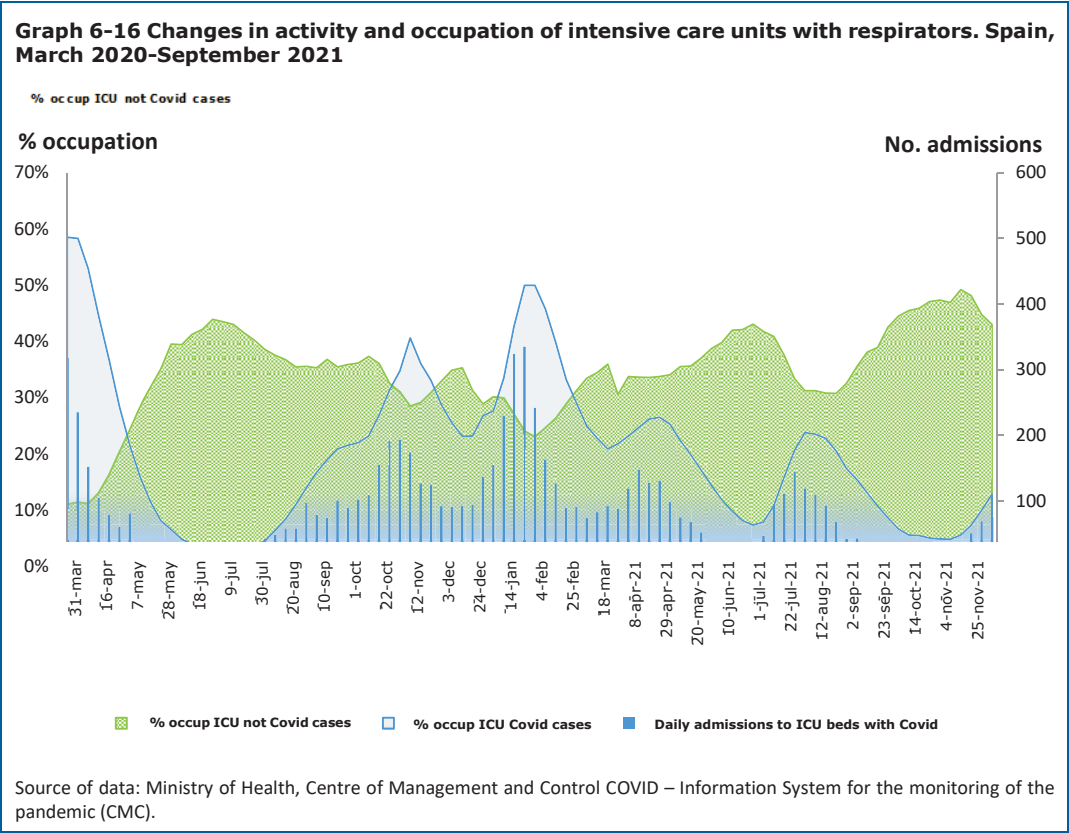
Source of data: Ministry of Health, Centre of Management and Control COVID – Information System for the monitoring of the pandemic (CMC).

As shown, while Madrid and Castilla-La Mancha are the communities with the highest rates in the first wave, Asturias and Castilla y León have the highest in the second wave. The latter is, after Valencia, the community with the highest rates in the third wave; in the fourth Madrid and Catalonia are in top position and these communities are joined, in the fifth wave, by Aragon, last August.

6.5.2 Activity and occupation-Intensive Care

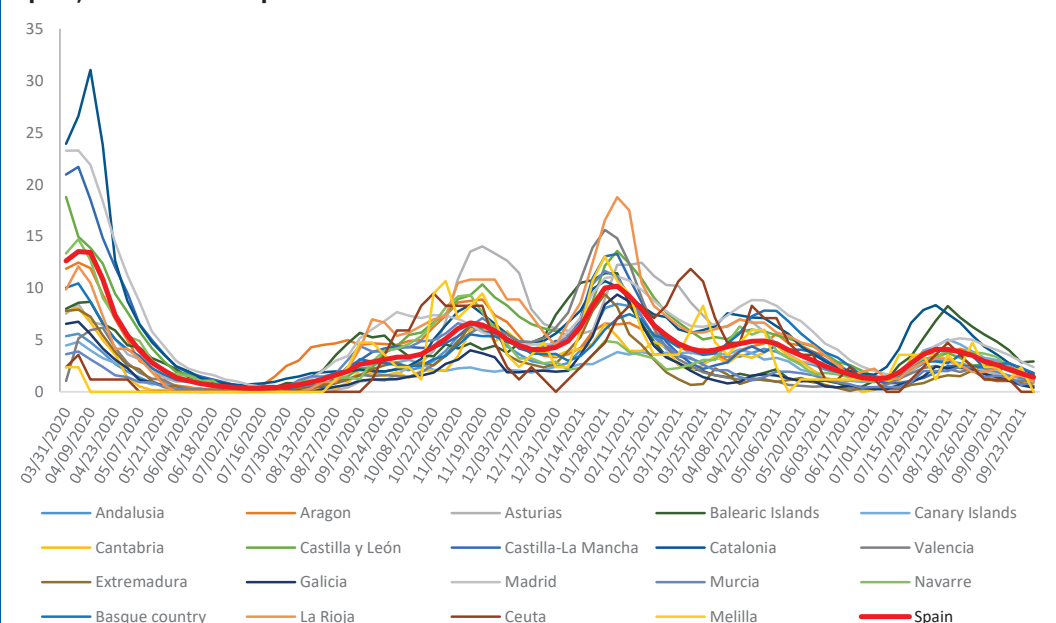
Of all COVID-19 patients hospitalised, 10% were attended in intensive care units during their stay at the hospital. The proportion of patients in the ICU with respect to the total number of hospitalised patients has been variable, according to the different waves. Thus, according to the data reported in SIVIES, 8% of the hospitalised cases during the first wave spent time in the ICU while the figure is 12% during the third wave and 10% during the other three waves.

The activity and occupation level, much higher in the first wave, have subsequently evolved in parallel to the other indicators of infection and hospitalisation. In the following graph these indicators are shown for the intensive care units with respirators, especially pertinent in the care of these patients.



The activity and level of occupation of these units have evolved in parallel to other hospitalisation indicators, with their peak in the first wave. This is especially visible in the intense activity registered during that wave in Madrid, Castilla y León, Castilla-La Mancha and Catalonia, as presented in the following graph. In the second wave, Asturias was the community with the highest level of ICU activity and occupation, while La Rioja has been the autonomous community with the highest rate of ICU hospitalisations in the third wave, with Madrid and Catalonia again being the communities with greatest activity and saturation in the fourth and fifth waves, although they were accompanied –in the fifth wave– by Balearic Islands.

Graph 6-17 Changes in the COVID-19 hospitalisation rates, by autonomous community. Spain, March 2020-September 2021



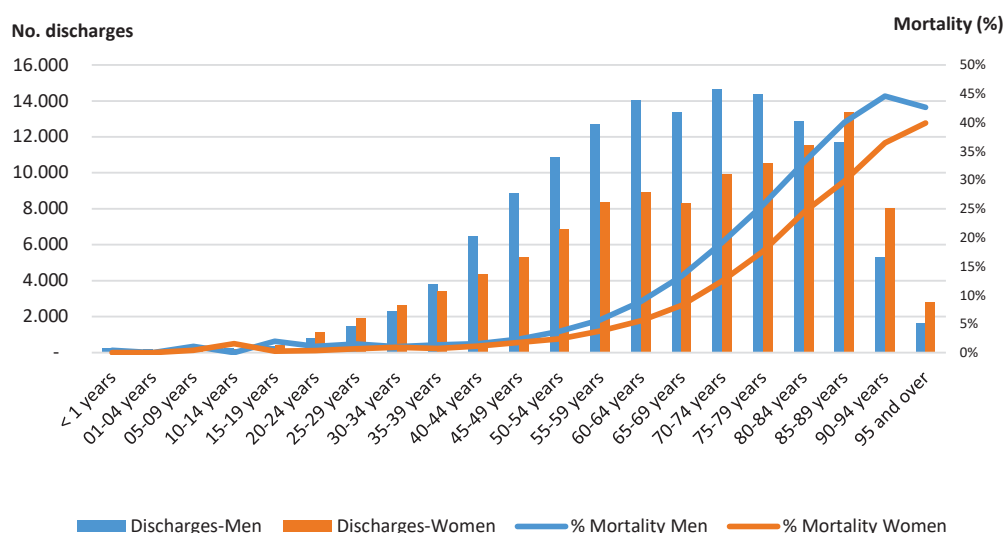
Source of data: Ministry of Health, Centre of Management and Control COVID – Information System for the monitoring of the pandemic (CMC).

6.5.3 Characteristics of hospitalised COVID-19 patients

Finally, with regard to patients admitted for conditions related to COVID-19, a total of 232,420 people were hospitalised in the network of SNS acute-care hospitals for this reason in 2020. Six percent of them were admitted more than once so the total number of discharges due to COVID-19 was 245,215.

As shown in the figure below, the highest number of hospitalised cases is in men (56% vs. 44%) and the male sex predominates in all age groups except persons aged 85 and over. Likewise, in-hospital mortality, which overall stands at 16%, is slightly higher in men (17% vs. 15%) and the figures for men are higher in all age groups.

Graph 6-18 Distribution of cases and mortality in hospitalised COVID-19 cases, by age group and sex. Acute-care hospitals in the SNS. Spain, 2019-2020



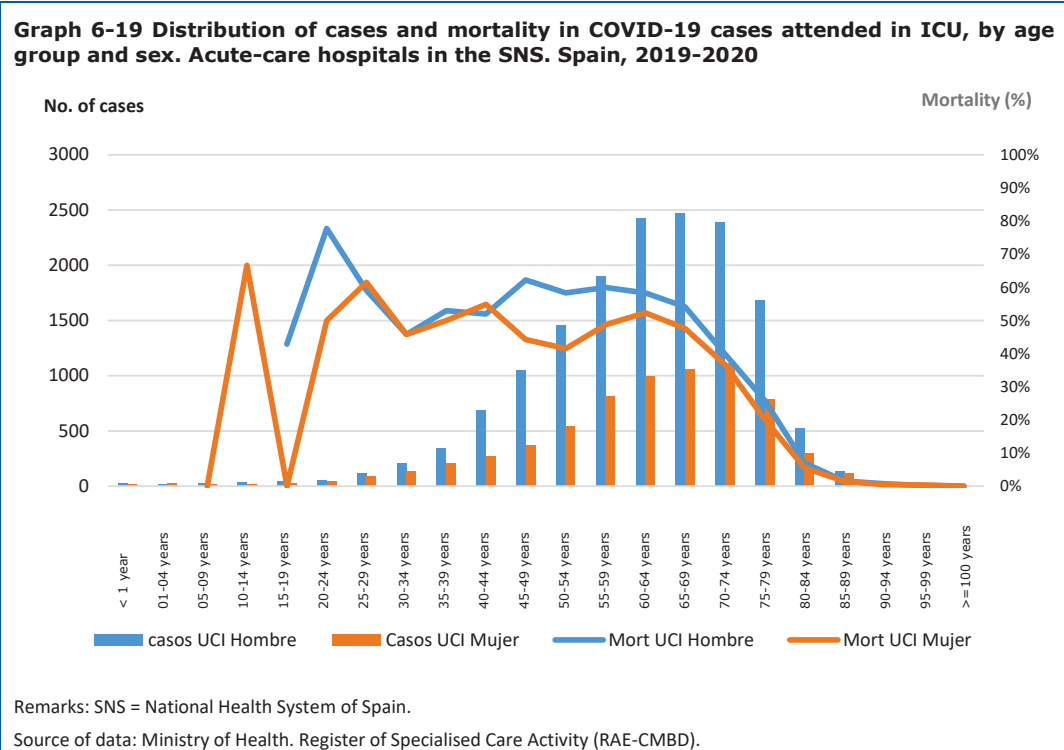
Remarks: SNS = National Health System of Spain.

Source of data: Ministry of Health. Register of Specialised Care Activity (RAE-CMBD).

The number of cases increases as patient age increases, with the highest number of patients being found in the group of men aged 70 to 74, which concentrates almost 11% of the total of this sex, and in women, the highest number is found in the 85 to 89 age group, with 13,367 and 12% of the discharges in this sex. As for mortality, it also increases as age increases and is as high as 40% in the 90 to 95 age group for both sexes.

With regard to the care process, COVID-19 patients remain in the hospital an average of 11 days. The average stay in cases of conventional hospitalisation is 9 days and for ICU cases it is 15 days.

Just over 9 percent (9.2%) of hospitalised patients spend part of their time in the ICU. Of them, 69% are men; this proportion remains practically the same in all age groups. The number of patients attended in ICUs increases with age, with the highest proportion of cases in the group aged 65 to 69; mortality presents a similar profile, although it shows greater variability in the age groups with lower numbers of cases and is also discreetly higher in men.



As **final considerations** regarding the data presented, it is worth pointing out that the 2020 figures of the Statistics on Specialised Care Establishments-SIAE and the Register of Specialised Care Activity reflect the results of these information systems as of 22 December 2021. They should be considered provisional while validation processes are finalized and they may change as a result of revisions or updates made in the autonomous communities.

6.6 Impact of COVID-19 on access to the healthcare system

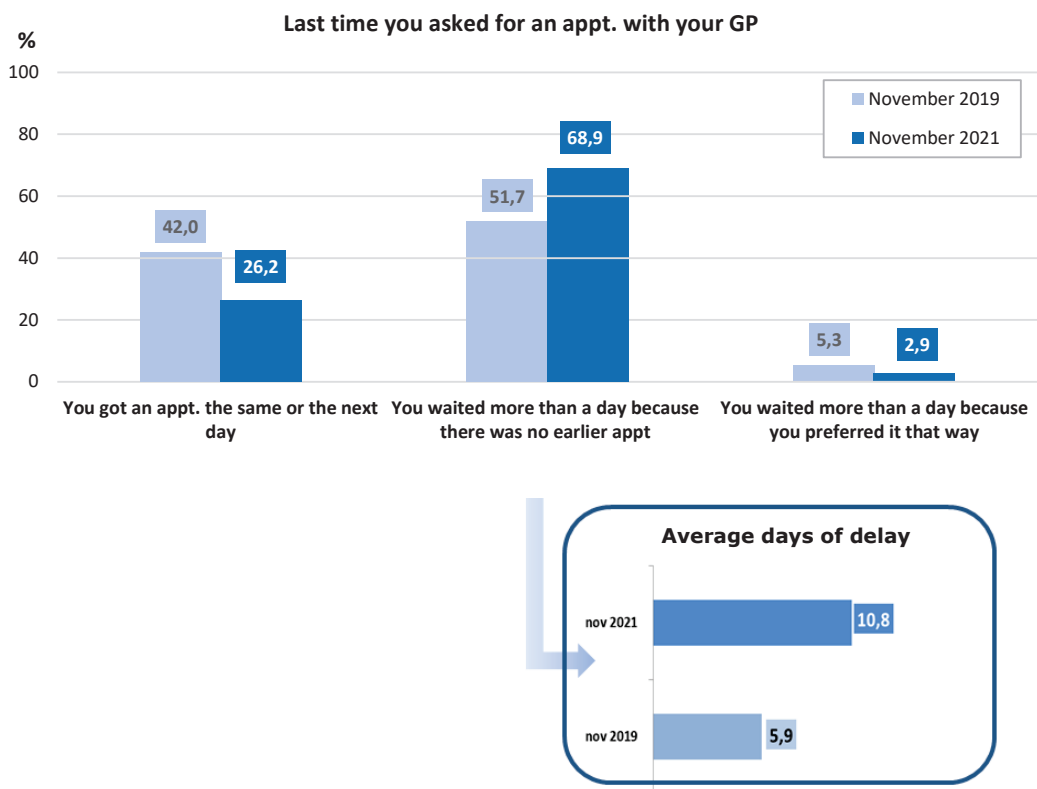
One aspect in which the impact of the pandemic can be seen with great clarity is the accessibility of healthcare services. An example is how many days people have to wait for an appointment at the primary care level. Another indication of the impact the pandemic has had on patients with health problems unrelated to COVID-19 are the waiting lists, for surgery and also consultations and diagnostic procedures, both of which have been clearly affected since the first state of alarm was declared.

6.6.1 Access to primary care physicians

In primary care, the year before the pandemic, 42% of people who wanted to see their general practitioner were able to schedule an appointment for that same day or the next day, while the rest had to wait an average of 5.9 days. In 2021 only 26% were able to get an appointment for that same day or the next day and the rest had to wait an average of 10.8 days.⁷⁹

⁷⁹ Sources: Healthcare Barometer (Ministry of Health and CIS) and the monthly Barometer (CIS).

Graph 6-20 Wait time for visits with Family and Community Medicine physicians in SNS Primary Care. Spain, 2019-2021



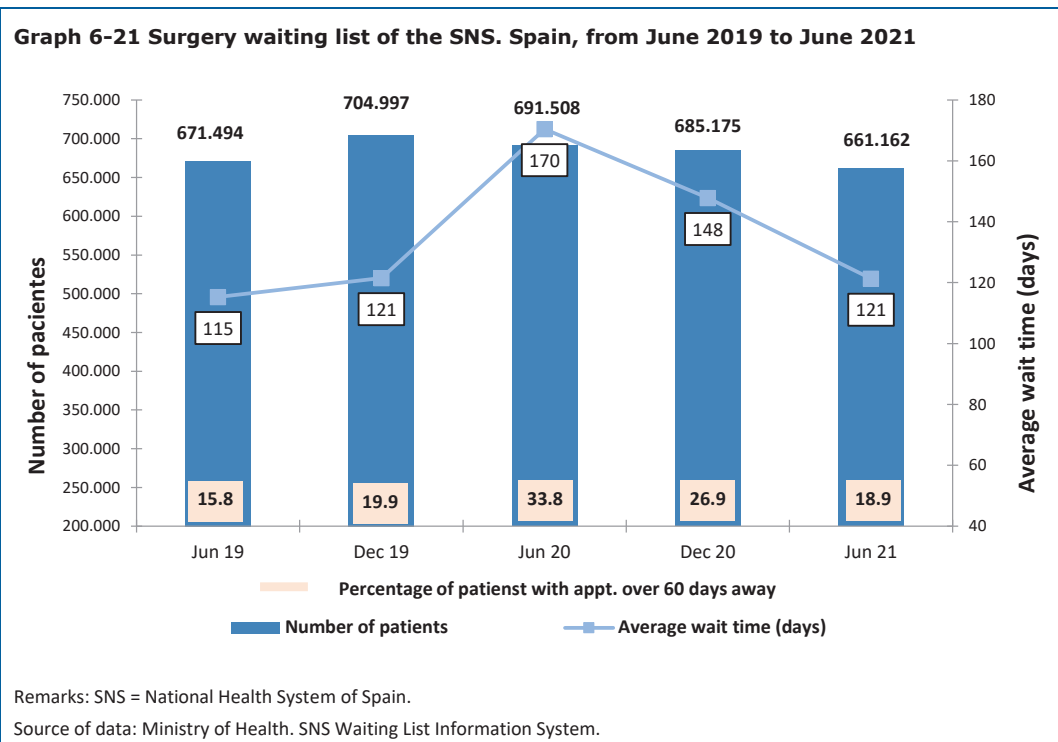
Remarks: SNS = National Health System of Spain.

Source of data: 2019: Ministry of Health, Healthcare Barometer. 2020: Sociological Research Centre (CIS), Opinion Barometer.

6.6.2 Waiting list for surgery

In the following graph, which shows the evolution of the three most recent data cuts of the Surgery Waiting List (LEQ), the impact of COVID-19 is evident. The pandemic situation, especially in 2020 when the state of alarm was in place, led to the suspension of some programmed activity and as a result an increase in wait time for patients in line to have surgery. In June of 2020 the average wait time of patients awaiting surgery increased to 170 days. At the end of the year, although this indicator had improved, it was still 30 days higher than the preceding year.

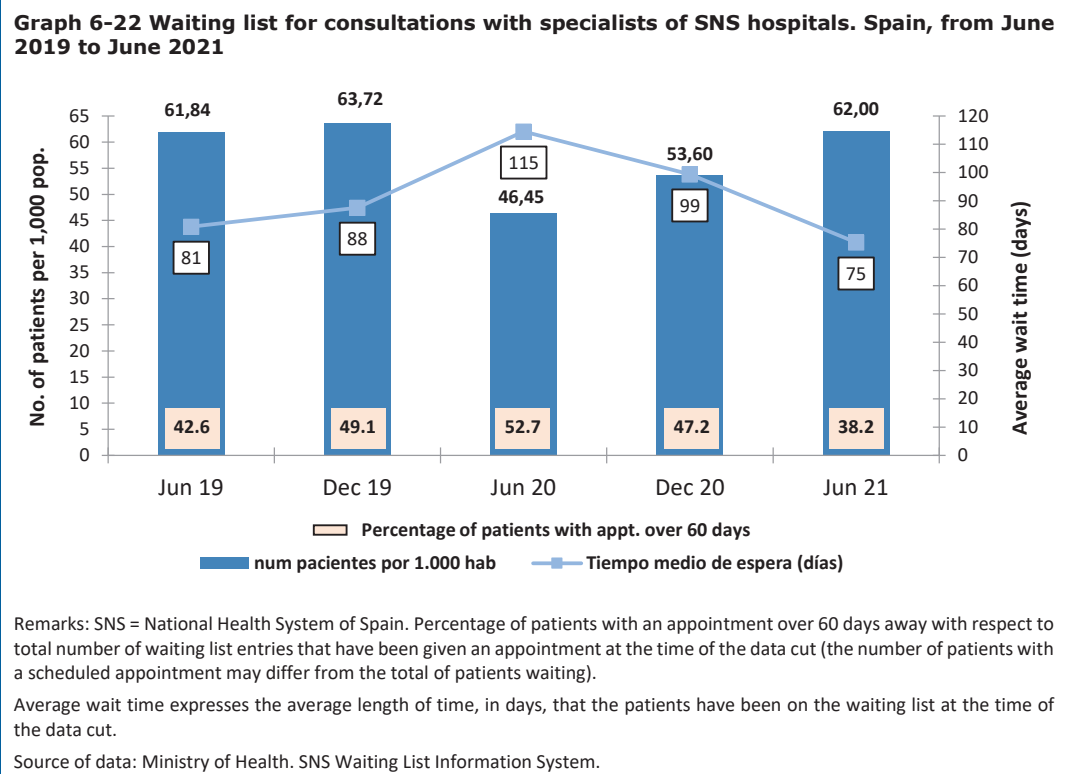
The total number of patients on the surgery waiting list of the last period for which data is available, corresponding to **June 2021**, is **661,162 patients**. The average wait is 121 days, the same as the last data cut prior to the pandemic. The proportion of patients who have been on the waiting list six months or longer is 18.9%, almost one point lower than in the last data cut before the pandemic.



Nonetheless, it is important to point out that although by June 2021 all waiting time indicators have improved, normal activity has not yet fully returned, as shown in Table 6.12. In the first semester of 2021 the number of new entries on the surgery waiting list is 40% higher than in the first semester of 2020 but are still 8% lower than the same period in 2019. In the case of waiting list operations performed in the first half of 2021, they are 36% higher than the year of the pandemic, although this figure represents a decrease in activity of 13% compared to the first half of 2019.

6.6.3 Waiting list for outpatient consultations with specialists

As regards the waiting list for consultations with specialists, in June 2021 out of every 1,000 people 62 are waiting to have an initial visit with a specialist at the hospital or specialty centre. The ratio is still somewhat lower than the last one registered before the pandemic, during which, as the number of patients dropped the average wait times for these patients increased –as in the case of the surgery waiting list– with wait times as high as 4 months (115 days) after the first wave. In June of 2021 it is still over two months (75 days).



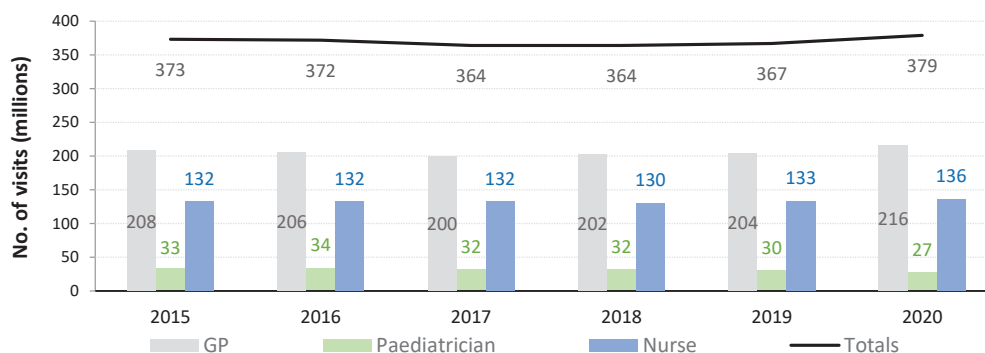
6.7 Impact of COVID-19 on ordinary care activity

6.7.1 Primary care activity and indicators

The pandemic has brought substantial changes to the care activity taking place at the primary care level, both in total number of visits and in the type of visit, in-person or remote.

In 2020 **379 million visits** took place in SNS primary care. This figure indicates, in general, a change in the downward trend observed in previous years, with an increase in activity of **12.3 million visits** compared to 2019 (+3%).

Graph 6-23 Number of ordinary visits (in millions) in SNS primary care. Spain, 2015-2020

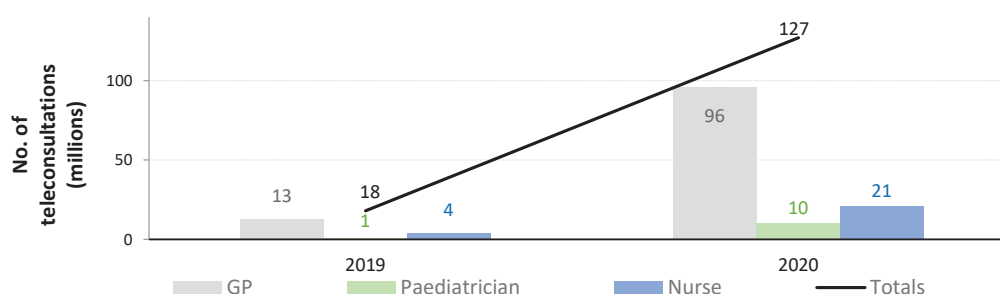


Remarks: SNS = National Health System of Spain.

Source of data: Ministry of Health. Primary Care Information System (SIAP).

What stands out most is the **600% increase** over the previous year in the teleconsultations **between professionals and patients (127 million in 2020)** caused by the restriction in movement and social contact during the pandemic and which has been accompanied by a significant drop in the number of in-person visits.

Graph 6-24 Number of ordinary visits in the form of teleconsultations (millions) in SNS primary care. Spain, 2015-2020

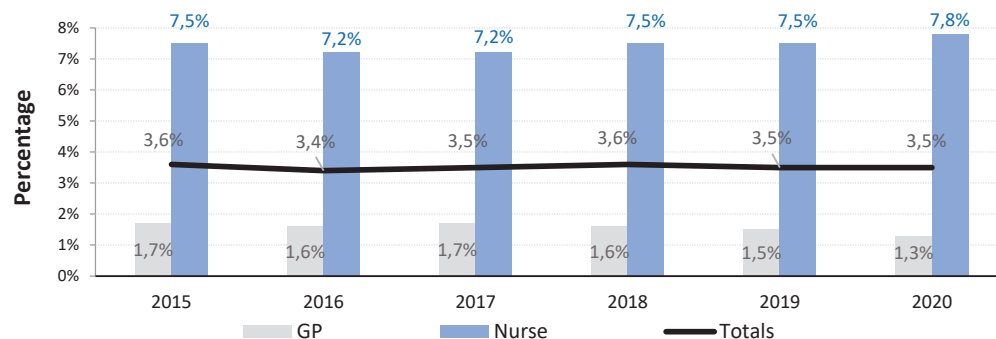


Remarks: SNS = National Health System of Spain.

Source of data: Ministry of Health. Primary Care Information System (SIAP).

Home care activity increased by almost 4% with respect to the previous year and stood at 13.5 million visits in 2020 (compared to 12.9 million in 2019). The percentage of home care visits out of the total has decreased in the case of doctor visits and increased in the case of nurse visits.

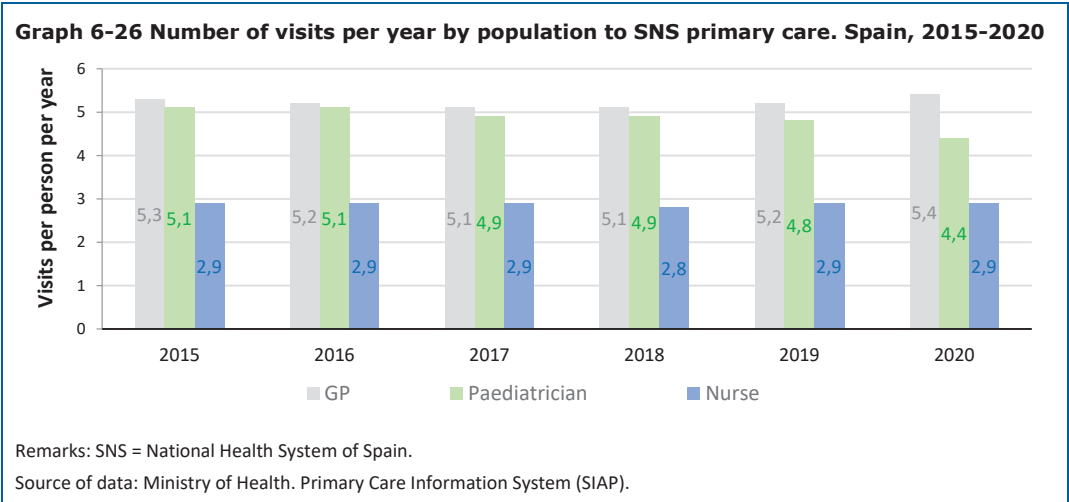
Graph 6-25 Percentage of home care visits out of the total number of SNS primary care visits. Spain, 2015-2020



Remarks: SNS = National Health System of Spain.

Source of data: Ministry of Health. Primary Care Information System (SIAP).

There has been an increase in the general attendance of the population to the general practitioner in 2020, with 5.4 visits/year/person (5.2 in 2019); in the case of visits to the paediatrician general attendance has been 4.4 visits/year (4.8 in 2019), and in the case of nurse visits it has remained stable at 2.9 visits/year.



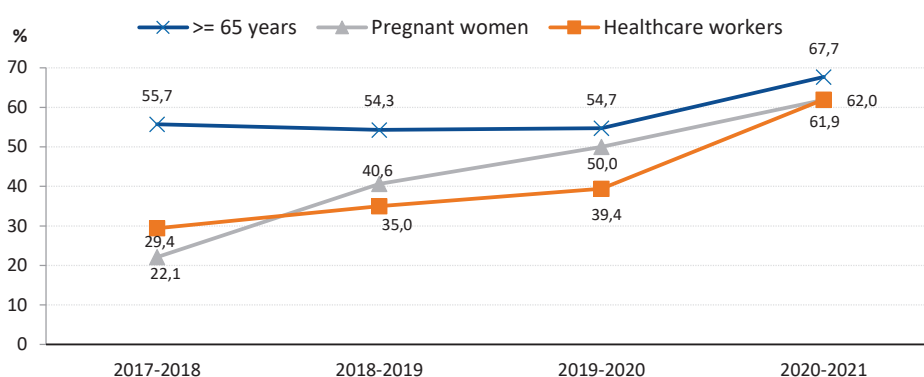
Another way to see the impact of COVID-19 on primary care is to focus on the changes in various relevant indicators of primary care activity, which are shown in table 6-14. This focus reveals that requests for procedures (such as imaging or laboratory tests) and interprofessional consultations with other specialists, and also the procedures carried out by primary care professionals themselves (for example, spirometry and prevention in children) have experienced an overall reduction of between 20% and 30% with respect to preceding years (the table shows only the year before). In contrast, no variations are seen in the pharmaceuticals dispensed, indicating that the electronic prescribing system has allowed the treatment of chronic conditions to continue. Finally, other procedures, such as flu and pneumococcal vaccinations, have shown a considerable increase (of 48% and 21% respectively).

Table 6-14 Some indicators of SNS primary care activity. Spain, 2019 y 2020

	2019	2020	% increment	No. of auton. comm reporting
Health problems (new cases)	101,862,904	87,138,432	-14.5	17
Interprofessional consultations requested	11,623,371	8,808,608	-24.2	14
Pharmaceuticals dispensed (packs)	595,453,032	599,755,567	0.7	14
Imaging procedures requested	3,062,096	2,299,788	-24.9	8
Laboratory tests requested	122,440,443	90,904,745	-25.8	6
Other diagnostic procedures	6,650,591	4,529,273	-31.9	9
Spirometry	170,005	48,470	-71.5	7
Pap smear	392,593	214,662	-45.3	7
Brief advice for quitting smoking	1,077,927	601,435	-44.2	5
Minor surgery	74,303	41,705	-43.9	5
Oral health	195,210	111,494	-42.9	5
Mantoux test	17,746	10,235	-42.3	6
Electrocardiogram	986,262	645,896	-34.5	6
Vision testing (children)	294,659	226,360	-23.2	4
INR	2,678,939	2,257,721	-15.7	8
Vaccination MMR	402,717	324,528	-19.4	5
Vaccination Hepatitis B	539,658	480,601	-10.9	6
Vaccination Tetanus	1,109,375	1,013,784	-8.6	5
Vaccination Diphtheria	1,108,428	1,013,126	-8.6	5
Vaccination Varicella	441,132	407,134	-7.7	5
Vaccination Poliomyelitis	414,935	390,727	-5.8	5
Vaccination Pertussis	723,767	686,338	-5.2	5
Vaccination HPV	236,968	235,838	-0.5	5
Vaccination Flu	3,294,767	4,894,453	48.6	6
Vaccination Pneumococco	891,849	1,082,106	21.3	5

Remarks: SNS = National Health System of Spain.

Source of data: Ministry of Health. Clinical Primary Care Database (BDCAP).

Graph 6-27 Changes in flu vaccination coverage in persons aged 65 and over, pregnant women and healthcare personnel. Spain, campaigns 2017/2018 to 2020/2021

Source of data: Ministry of Health. Vaccination statistics.

6.7.1.1 Morbidity patterns in primary care

The table below reflects the frequency of health problems attended by primary care practitioners, by ICPC2 chapter (body system). There are fewer cases in all chapters except W-Pregnancy, XY-Male and female genital system and Z-Social problems. The problems of chapter A-General show an increase due to COVID-19 cases and contacts, which are classified in this chapter. Acute respiratory diseases, which tend to have a stable frequency over time, experienced a significant reduction in 2020, even though 2.3 million COVID-19 cases are taken into account: except for the flu (the epidemic wave of which is from December to February, before the pandemic began) acute respiratory infections dropped by about 50%.

Table 6-15 Cases registered in SNS primary care, by body system. Spain, 2019 and 2020

Chapter ICPC2	2019	2020	Difference	Dif %
A- GENERAL AND UNSPECIFIED	31,261,264	39,070,223	7,808,959	25.0
B-BLOOD, BLOOD-FORMING ORGANS, IMMUNE MECHANISM	4,316,837	4,065,057	-251,780	-5.8
D-DIGESTIVE	29,598,220	27,911,779	-1,686,441	-5.7
F-EYE	15,076,386	14,773,860	-302,526	-2.0
H-EAR	9,095,307	8,482,170	-613,137	-6.7
K-CARDIOVASCULAR	23,313,554	21,351,726	-1,961,828	-8.4
L-MUSCULOSKELETAL	38,690,235	37,900,724	-789,511	-2.0
N-NEUROLOGICAL	10,712,697	10,631,199	-81,498	-0.8
P-PSYCHOLOGICAL	20,506,149	20,172,416	-333,733	-1.6
R-RESPIRATORY	32,390,729	25,274,591	-7,116,138	-22.0
S-SKIN	32,516,330	32,857,927	341,597	1.1
T-ENDOCRINE, METABOLIC AND NUTRITIONAL	26,818,023	25,136,726	-1,681,297	-6.3
U-UROLOGY	7,824,249	7,442,523	-381,726	-4.9
W-PREGNANCY, CHILDBEARING, FAMILY PLANNING	2,898,250	3,032,105	133,855	4.6
XY-GENITAL	13,787,821	14,314,109	526,288	3.8
Z-SOCIAL PROBLEMS	2,422,763	2,512,084	89,321	3.7
Total	301,228,814	294,929,218	-6,299,596	-2.1

Remarks: SNS = National Health System of Spain.

Source of data: Ministry of Health. Clinical Primary Care Database (BDCAP).

Table 6-16 Most frequent acute respiratory infections: cases registered in SNS primary care. Spain, 2017 and 2020

	2017	2018	2019	2020	Reduction 2019-20	% reduction
R74 Acute upper respiratory infection	8,364,862	8,180,572	7,939,242	4,295,526	-3,643,715	-45.9
R76 Acute tonsillitis	1,478,764	1,306,725	1,308,649	641,392	-667,258	-51.0
R77 Acute laryngitis/tracheitis	533,059	533,588	543,420	211,444	-331,976	-61.1
R78 Acute bronchitis/bronchiolitis	1,943,901	2,197,230	2,039,850	972,351	-1,067,499	-52.3
R80 Influenza	594,860	774,260	629,800	552,176	-77,624	-12.3
A77.01 Infection due to coronavirus NS				2,248,180		
	12,915,447	12,992,375	12,460,961	8,921,069	-3,539,892	-28.4

Remarks: SNS = National Health System of Spain.

Source of data: Ministry of Health. Clinical Primary Care Database (BDCAP).

6.7.2 Hospital indicators and activity

Considering SNS acute-care hospitals only, the quantification of the pandemic's impact on care activity finds its first expression in the volume of said activity, which diminishes in most modes of care. The following table reflects this activity and some indicators used in different hospital areas, comparing it with the preceding year.

	2019	2020	% incr.
Number of discharges	4,041,391	3,534,485	-12.5%
Total number of hospital stays	26,207,088	24,196,661	-7.8%
Average stay (days)	6.5	6.8	5.6%
Mortality	4.4%	5.6%	+1.2 pp
Total outpatient visits with specialist	82,419,438	71,754,543	-12.9%
Initial outpatient visits with specialist	25,986,826	20,358,373	-27.6%
Total no. of surgical interventions	3,721,651	2,798,878	-33%
Major Outpatient Surgery interventions	1,281,483	947,174	-35.3%
Total Magnetic Resonance Imaging tests	2,305,575	1,980,357	-14.1%
Total no. of colonoscopies	916,801	674,214	-26.5%
Total number of births	292,284	276,102	-5.5%

Remarks: SNS = National Health System of Spain.
Source of data: Ministry of Health. Specialised Care Information System (SIAE).

In 2020 SNS acute-care hospitals have had half a million fewer admissions than the preceding year. This represents a reduction of 12.5% in this area of activity, even taking into account that the number of hospitalisations for clinical presentation of COVID-19 this year, according to the data registered in the information system on care capacity for the monitoring of the pandemic, was 226,742 cases for SNS acute-care hospitals, 6.5% of total admissions that year.

The impact on the rest of activity areas not related to COVID-19 has been even greater. In fact, with respect to 2019, public hospitals have carried out 10.6 million fewer specialist visits (this figure includes 5.7 million initial visits). In other words, 27% fewer than the year before. As mentioned in the section about waiting lists, in 2020 a total of 922,773 fewer surgical interventions were performed than in the year before, which represents a 33% decrease. Major Outpatient Surgery is the mode that felt the greatest impact (-35%) as these wards were among those that set up temporary facilities for the care of critical patients. The lower number of initial visits and admissions has brought with it another reduction, that of the number of diagnostic tests performed, with reductions of 9% in CAT, 14% in MRI, and 26% in colonoscopies. The number of childbirths, however, has not changed much, as it shows a drop of about 5%, in line with the downward trend that has been observed for over a decade.

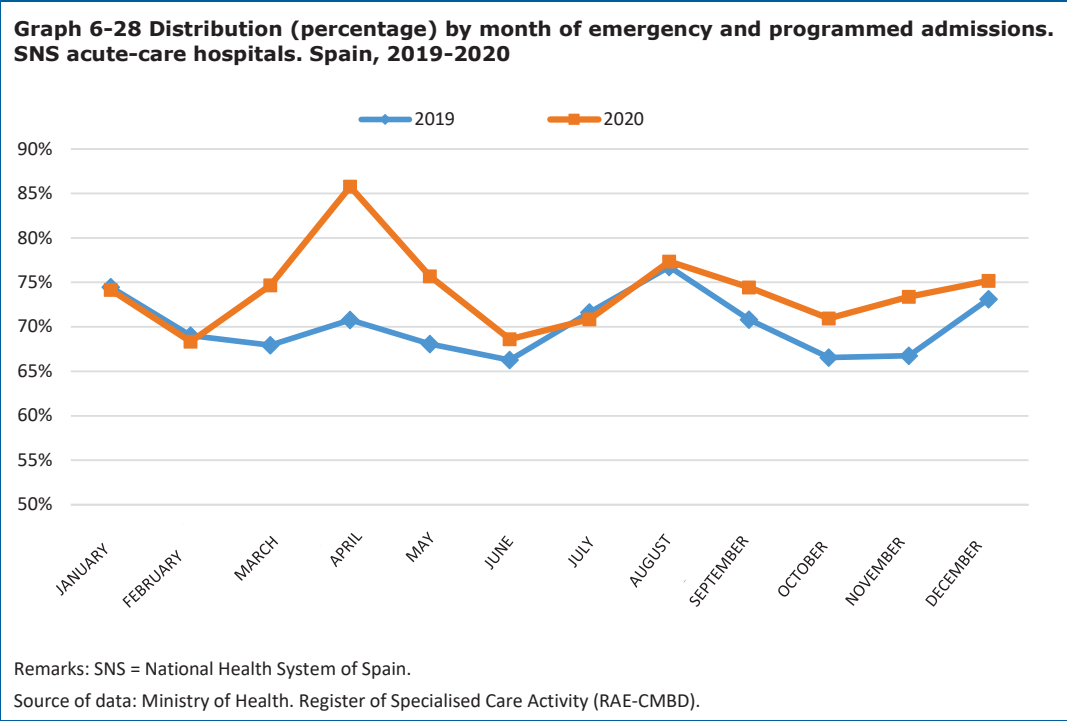
With regard to hospitalisation indicators, the average stay, which has shown a downward trend in recent decades, has increased by 0.3%. A small increase has also been observed in in-hospital mortality, which, with 21,119 deaths more than in 2019, rose by 1.2 percentage points, from 4.4% to 5.6%.

6.7.2.1 Cases attended-results RAE-CMBD

Complementing the activity figures found in the Statistics on Specialised Care Establishments-SIAE, there is another source, the Register of Specialised Care Activity (RAE-CMBD), that makes it possible to describe that activity, because it compiles data about each individual episode, including sociodemographic, temporal, clinical and care process information. The RAE-CMBD thus incorporates multiple elements of analysis, with various potential perspectives, to the dimensions

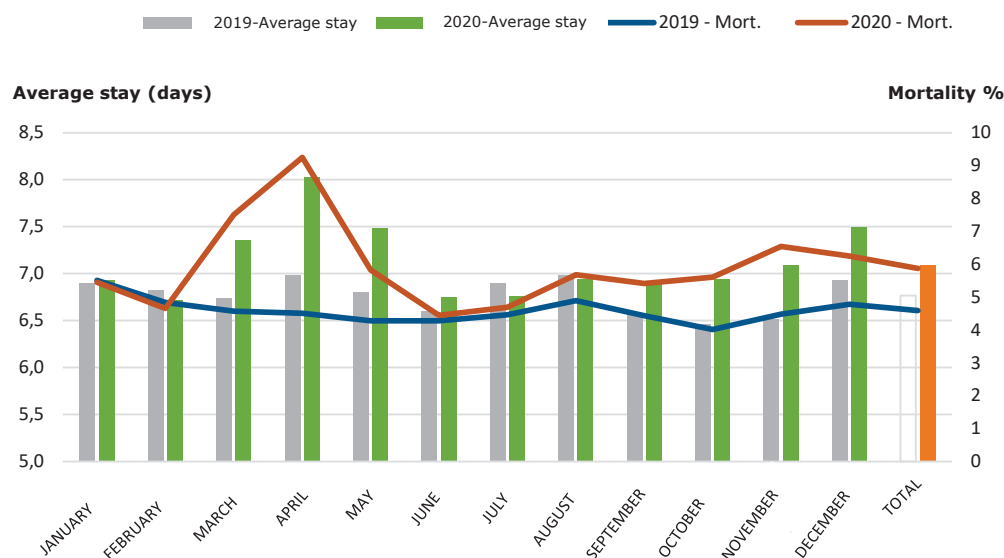
discussed above.

For the year 2020, the RAE-CMBD shows, for SNS acute-care hospitals, a total of 3,181,725 hospitalisation contacts (contact is the term used in this register; in the case of hospitalisation it is equivalent to discharge). This figure is lower than the one appearing in the Statistics, because this register does not include discharges of stays lasting less than one day, except in cases of death or voluntary discharge on the same day as admission. In any case, compared to the preceding year, 573,831 fewer discharges are registered, which is a 15% reduction in this mode of care. This reduction occurs especially in surgical cases, which –with 258,782 discharges– show a decrease of 20%, while non-surgical cases climb from 64% to 67% of discharges. It also affects programmed cases, which overall drop from 30% to 26% due to the rise in emergency admissions, which in turn increase by four percentage points, from 70% to 74% of total admissions. In addition, as shown in the following graph, this proportion is associated seasonally with the care provided to COVID-19 cases, with emergency admissions reaching over 85% in the month of April, coinciding with the first wave of the pandemic.



The impact of COVID-19-related care activity is also observed in several global hospitalisation indicators that show significant differences with respect to the preceding year. This is the case of the average length of stay, which overall moves from 6.8 days in 2019 to 7.1 days in 2020; this increase is mainly associated with the cases attended during the months with the highest numbers of COVID-19 patients, as shown in the following graph. The same is true of in-hospital mortality, which registers an increase of 1.3 percentage points and closes 2020 at 5.9%.

Graph 6-29 Average length of stay (days) and percentage of deaths among hospitalised cases. SNS acute-care hospitals. Spain, 2019-2020

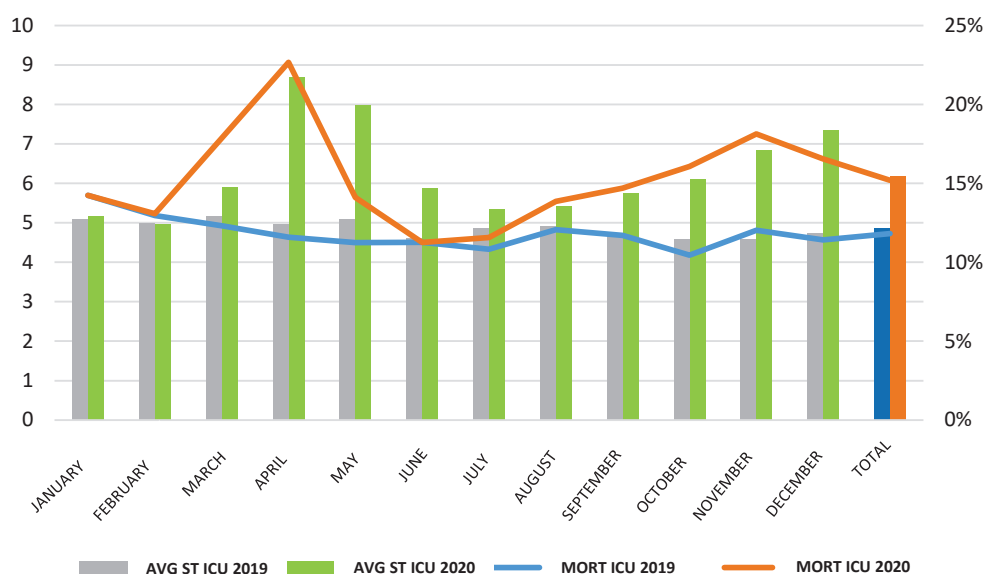


Remarks: SNS = National Health System of Spain.

Source of data: Ministry of Health. Register of Specialised Care Activity (RAE-CMBD).

Likewise, among the cases attended in 2020 there is a higher proportion of cases requiring a stay in the ICU, a longer average stay for the cases attended in such units and finally higher mortality in said cases. All these indicators follow a pattern similar to that of average length of stay and overall mortality, associated with the months of higher demands due to COVID-19 cases.

Graph 6-30 Average length of stay (days) and mortality (percentage) in ICU, by month. SNS Hospitals. Spain, 2019-2020

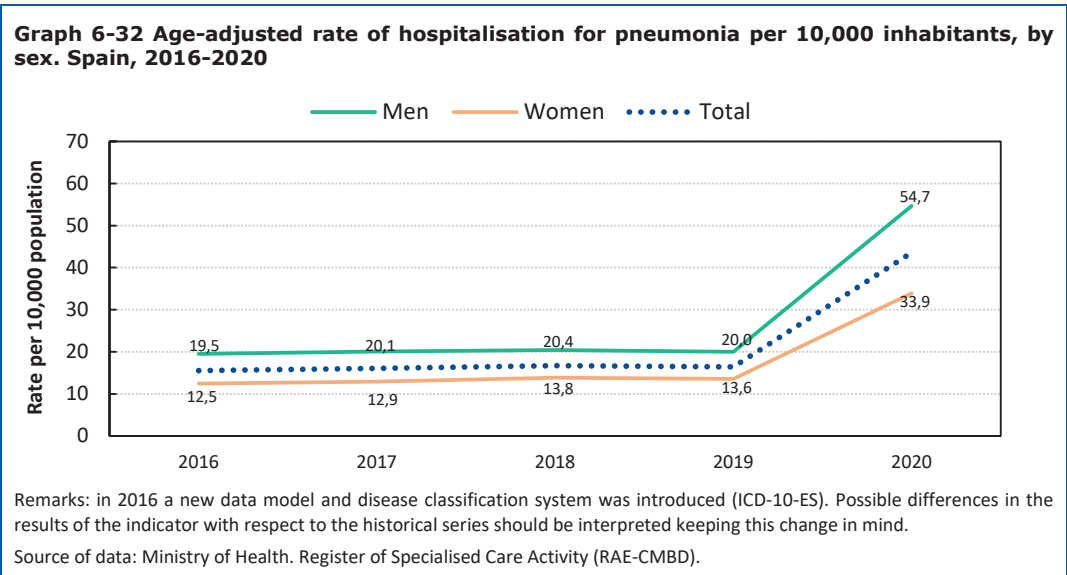
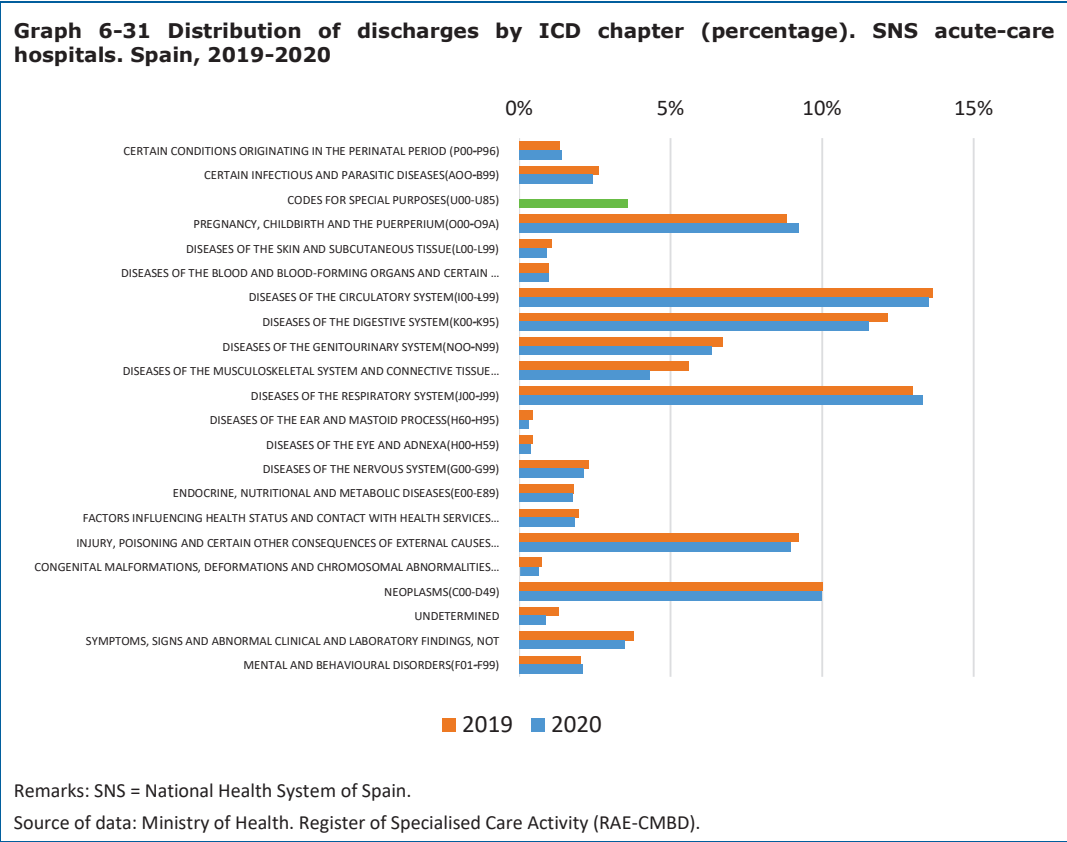


Remarks: SNS = National Health System of Spain.

Source of data: Ministry of Health. Register of Specialised Care Activity (RAE-CMBD).

6.7.2.2 Morbidity pattern in hospitalisation

In relation to the pattern of morbidity attended in hospitals, the distribution of discharges (expressed in percentage) for 2019 and 2020 appears in the graph below. The figure depicts an increase in the chapters associated with cases of SARS-CoV-2 infection, mainly the emergency chapter which has a new code for COVID-19 infection (U07.1) and also the chapter corresponding to diseases of the respiratory system. Within this last group of diseases, a notable rise in pneumonia is observed in 2020.



Higher in-hospital mortality is also associated with the chapters related to these patients. Thus mortality in cases of infectious disease, which was 16% in 2019, increases to 19%, while that of the new cases of COVID-19 is 14% and that of diseases of the respiratory system gains four percentage points, from 7% to 11%.

6.8 Vaccination against COVID-19

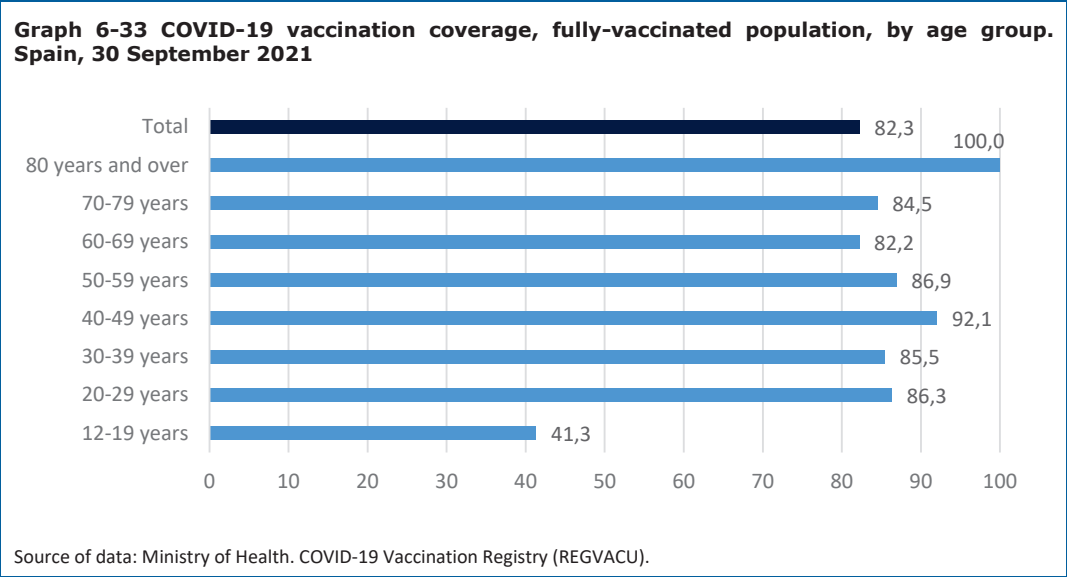


The combined efforts of the Ministry of Health and the regional health ministries have enabled Spain to develop and launch an effective strategy for COVID-19 vaccination, which is achieving one of the highest rates of vaccination coverage in the world.

The strategic plan underlying this process was drawn up by the Vaccination Programme and Register Committee, which is part of the Public Health Commission of the SNS Interterritorial Council.⁸⁰ Tactical and operative planning is also shared and coordinated by health authorities at all levels.

The information system for registering the incipient vaccines (REGVACU) was developed from September to November 2020, with a philosophy based on the registration and integration of data at the regional level and exploitation at the national level, with features that allow for georepresentation and analysis by age groups.

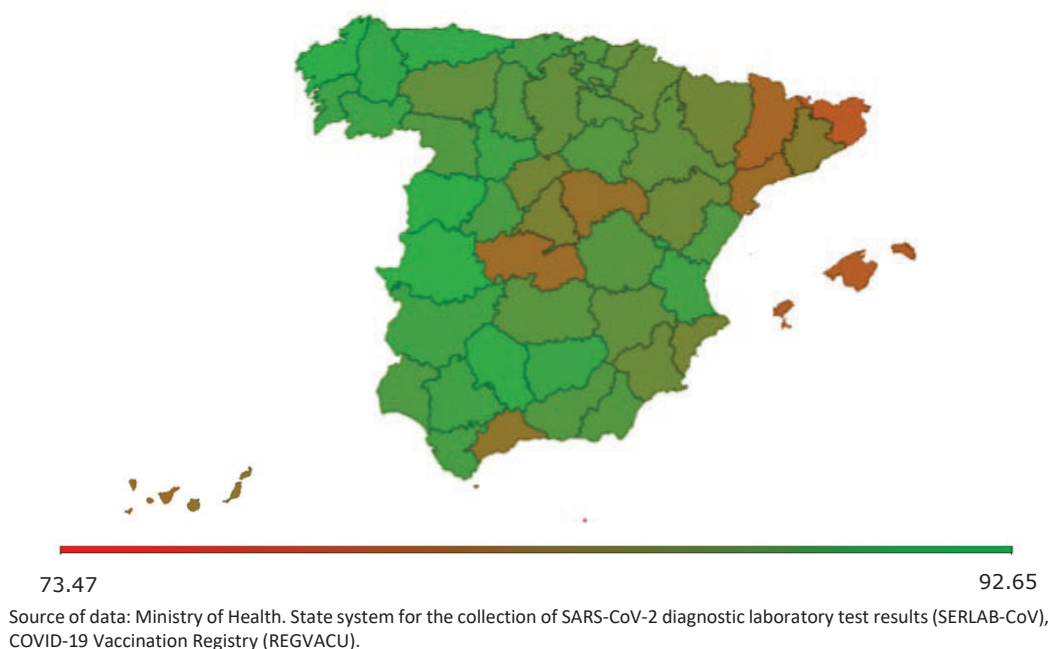
As mentioned in Section 1.2, information from SERLAB-CoV has made it possible to integrate data regarding diagnostic tests with those from REGVACU. Currently both sources supply the information for the different forms of the EU Digital COVID Certificate.



In the following graph, coverage as of 30 September 2021 is shown by province, with figures above 90% in the following provinces: Cáceres, Salamanca, La Coruña, Córdoba, Asturias, Lugo, Jaén, Pontevedra, Badajoz, Sevilla, Ourense, Valencia and Valladolid.

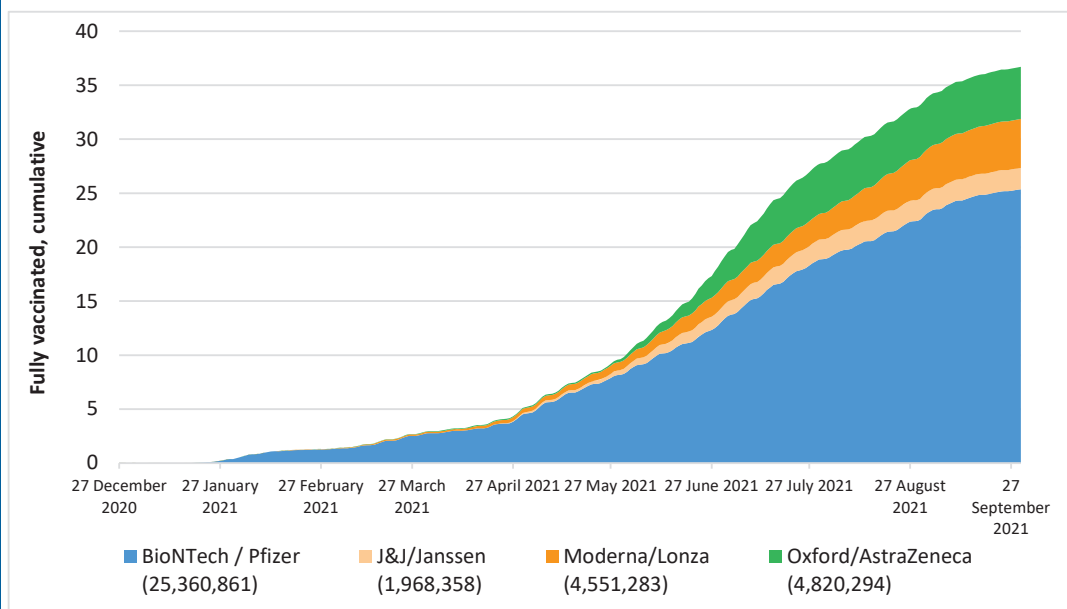
⁸⁰<https://www.sanidad.gob.es/profesionales/saludPublica/ccayes/alertasActual/nCov/vacunaCovid19.htm>

Graph 6-34 COVID-19 vaccination coverage by province. Spain, 30 September 2021



By manufacturer, the BioN Tech/Pfizer vaccine has been, by far, the most administered of all the vaccines administered.

Graph 6-35 Number of fully-vaccinated persons by manufacturer. Spain, 30 September 2021

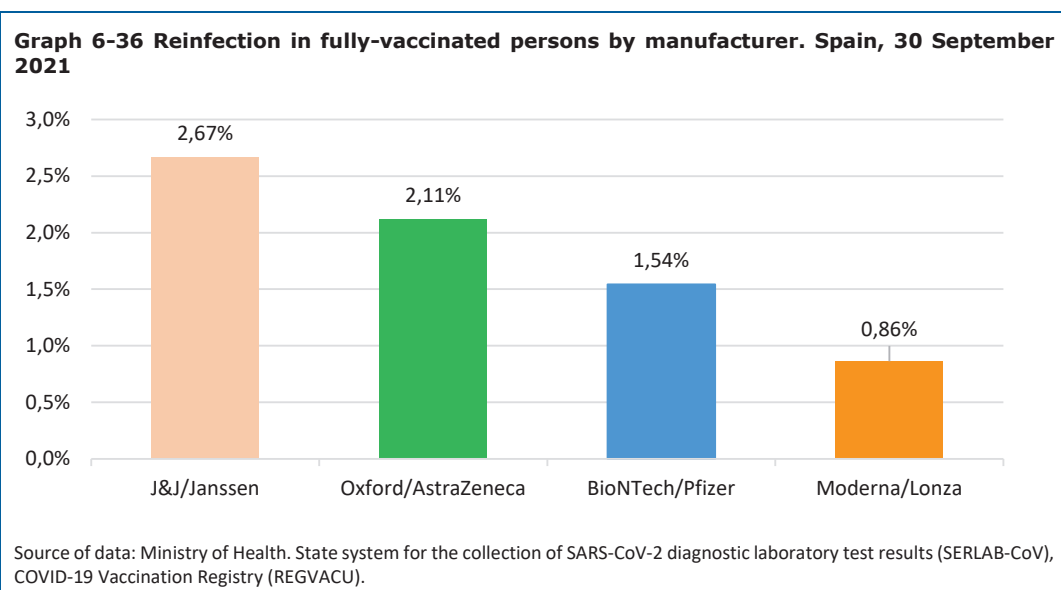


Source of data: Ministry of Health. State system for the collection of SARS-CoV-2 diagnostic laboratory test results (SERLAB-CoV), COVID-19 Vaccination Registry (REGVACU).

An important aspect of analysis has been the week-by-week monitoring of reinfections among the vaccinated. The percentage of the population that has been fully vaccinated and test positive again after completing vaccination is 1.60%, with the percentage being the highest between 12 and 23 weeks after the final dose.

Age group	% (+) after final dose	% (+) under 4 weeks	%(+) between 4 and 11 weeks	%(+) between 12 and 23 weeks	%(+) between 24 and 36 weeks
aged 12-19	0.47	0.13	0.15	0.18	0.01
aged 20-29	1.47	0.35	0.32	0.53	0.19
aged 30-39	1.64	0.36	0.31	0.69	0.20
aged 40-49	2.02	0.49	0.45	0.81	0.20
aged 50-59	1.79	0.28	0.64	0.50	0.32
aged 60-69	1.63	0.43	0.37	0.61	0.19
aged 70-79	1.32	0.07	0.31	0.50	0.43
aged 80 and over	1.78	0.17	0.16	0.80	0.60
Total	1.60	0.31	0.38	0.60	0.26

Source of data: Ministry of Health. State system for the collection of SARS-CoV-2 diagnostic laboratory test results (SERLAB-CoV).



6.8.1 Unvaccinated population, by reason

REGVACU collects information about people who have provided a reason that justifies not being vaccinated (existence of an exception or immunization contraindication) and also about those who have rejected vaccination.

Rejection of vaccination affects 23.60 out of every 100,000 inhabitants, the highest rate being in the population aged 80 and over and the lowest in population aged 12 to 19.

Table 6-19 Rates of non-vaccinated population by age groups and reason, per 100,000 inhabitants. Spain, March 2020-September 2021		
Age groups	Reason for non-vaccination	Vaccine refused by patient
12 to 19	0.85	7.59
20 to 29	2.54	26.69
30 to 39	2.69	23.99
40 to 49	2.00	21.60
50 to 59	1.69	24.80
60 to 69	1.96	23.42
70 to 79	2.50	22.76
80 and over	14.19	88.06
Total	2.42	23.60
Source of data: Ministry of Health. State system for the collection of SARS-CoV-2 diagnostic laboratory test results (SERLAB-CoV), COVID-19 Vaccination Registry (REGVACU).		

6.9 Experience and opinion of the population in relation to the pandemic



Knowing the level of satisfaction of citizens with the healthcare services and listening to their opinion about measures linked to health policy objectives take on special relevance during this period in which healthcare services have had to adapt to the pandemic as it evolved. Usually this information is collected through the Healthcare Barometer but, due to circumstances related to the pandemic, it has not been possible to conduct these inquiries in the past two years. However, we do have some information about citizen experiences with the healthcare services, from the monthly Opinion Barometer carried out by the Sociological Research Centre (CIS).

The CIS Barometer consists of an interview conducted with a sample of the Spanish population aged 18 and over. Gender and age quotas are applied during the selection of individuals and the sample size ranges from 2,904 in September 2020 to 4,258 in June 2020.

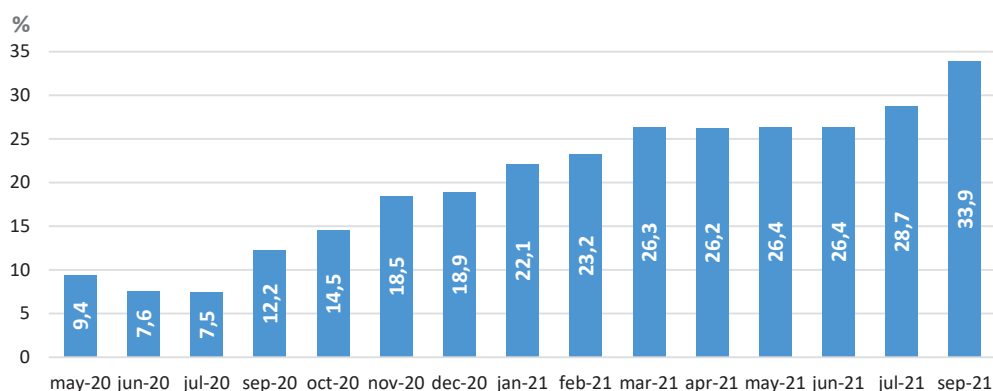
Starting in May 2020 the monthly CIS Barometer has included questions about the respondent's state of health and his/her use of healthcare services in relation to COVID-19 infection, the need for additional measures to control the virus and the coronavirus vaccine.

The following sections present the results obtained in the surveys carried out by the CIS every month between May 2020 and September 2021.

6.9.1 Use of healthcare services

The percentage of persons interviewed who have had contact with the healthcare services because they thought they had symptoms related to coronavirus has increased from 9.4% in May of 2020 to 33.9% in September of 2021.

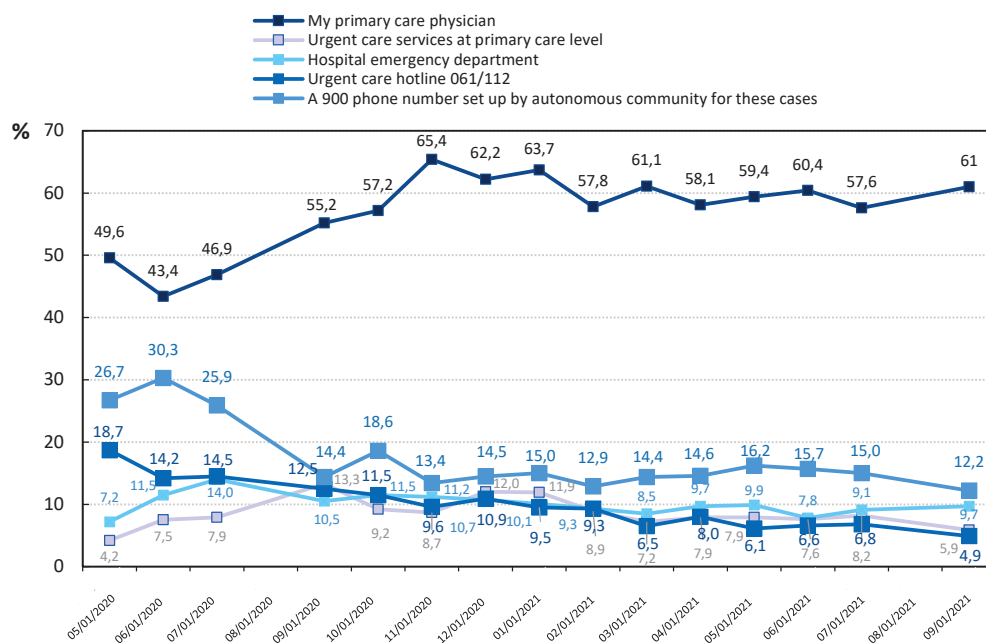
Graph 6-37 Percentage of interviewees who reported having had contact with the healthcare services because they thought they had symptoms associated with coronavirus. Spain, May 2020-September 2021



Source of data: Sociological Research Centre (CIS). Opinion Barometer.

Around 50% of these people sought out contact with their primary care physician. The second most commonly used service were the 900 numbers offered by the autonomous communities. Between May and June 2020 their use was as high as 30%, although in subsequent months it remained stable at around 15%.

Graph 6-38 Public healthcare service contacted by interviewees who reported having had symptoms associated with coronavirus. Spain, May 2020-September 2021

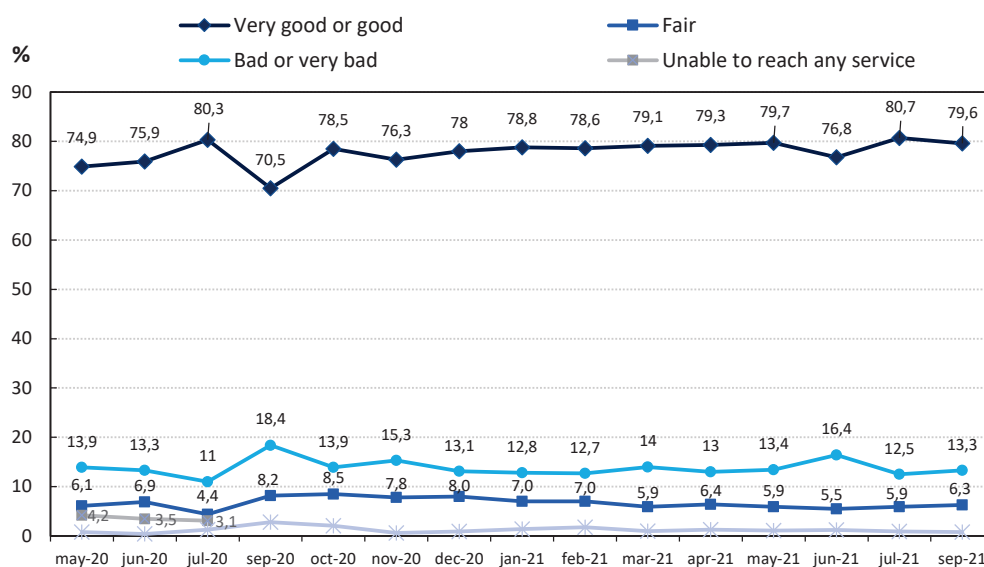


Remarks: The only response options shown are those that correspond to public healthcare services and that have been included in the entire time series presented.

Source of data: Sociological Research Centre (CIS). Opinion Barometer.

The percentage of people with a positive opinion (good or very good) of the care received varies between 70.5% in the month of September 2020 and 80.7% in the month of July 2021.

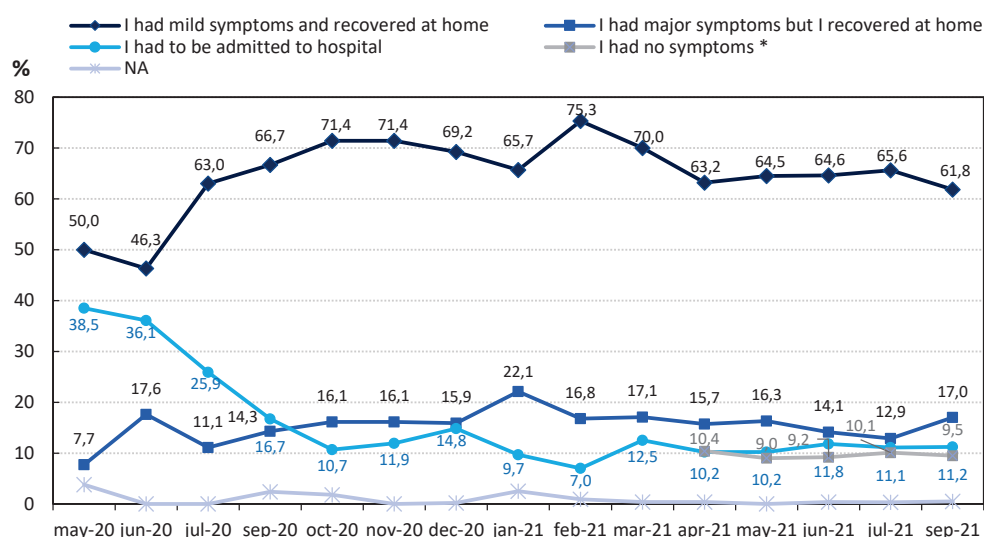
Graph 6-39 Opinion of the care received by interviewees who contacted a healthcare service because they had symptoms associated with coronavirus. Spain, May 2020-September 2021



Source of data: Sociological Research Centre (CIS). Opinion Barometer.

Most people who were finally diagnosed with COVID-19 (by PCR or antigen test) recovered from the illness at home with care provided mostly by primary care doctors and/or nurses, and this care was provided mostly by teleconsultation. The percentage of people who needed to go to the hospital dropped from 38.5% in May of 2020 to 11.2% in September of 2021, while there was an increase in the people who got through the illness at home, with either minor or major symptoms.

Graph 6-40 Progression of the illness in persons diagnosed with coronavirus. Spain, May 2020-September 2021

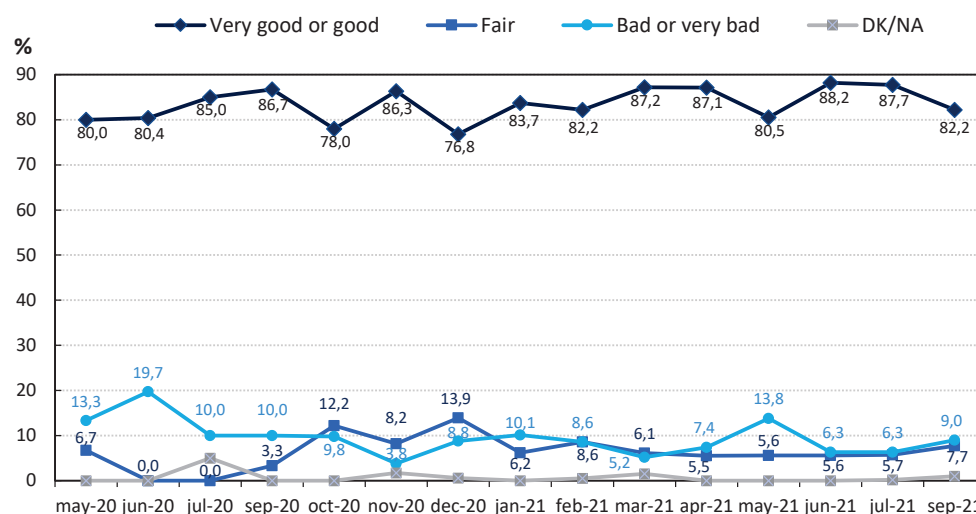


Remarks: *This response option was included in the Barometer of April 2020 and thereafter.

Source of data: Sociological Research Centre (CIS). Opinion Barometer.

A positive opinion (good or very good) of the care received during the illness ranges from 76.8% in December of 2021 and 88.2% in June.

Graph 6-41 Opinion of the care received by interviewees who were diagnosed with coronavirus and recovered from the illness at home. Spain, May 2020-September 2021



Source of data: Sociological Research Centre (CIS). Opinion Barometer.

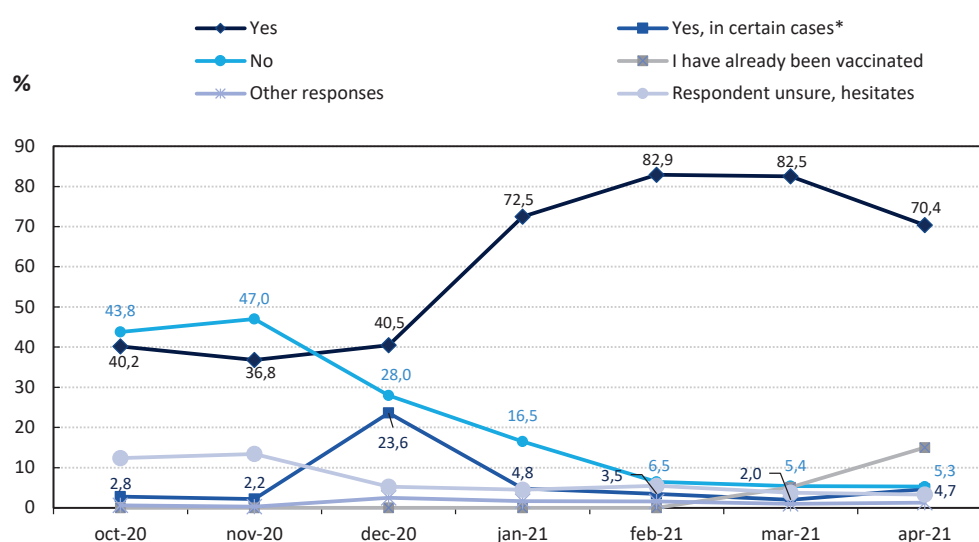
6.9.2 Need for reforms in the healthcare system

In the Barometers carried out in 2020 a vast majority of interviewees mentioned that reforms should be made in the Spanish healthcare system, with figures ranging 84.0% in September and 89.6% in May. In September 2021 this opinion is shared by 83.3% of the interviewees. The reforms that would bring "allocation of more economic resources" and "increase in personnel" are those that receive most support.

6.9.3 Attitudes regarding COVID-19 vaccination

Since October 2020 the percentage of people who rejected vaccination against COVID-19 has fallen drastically. The percentage stood at 43.8% in October 2020 and had fallen to 5.5% by April 2021

Graph 6-42 Attitudes towards receiving the COVID-19 vaccination. Spain, May 2020-September 2021



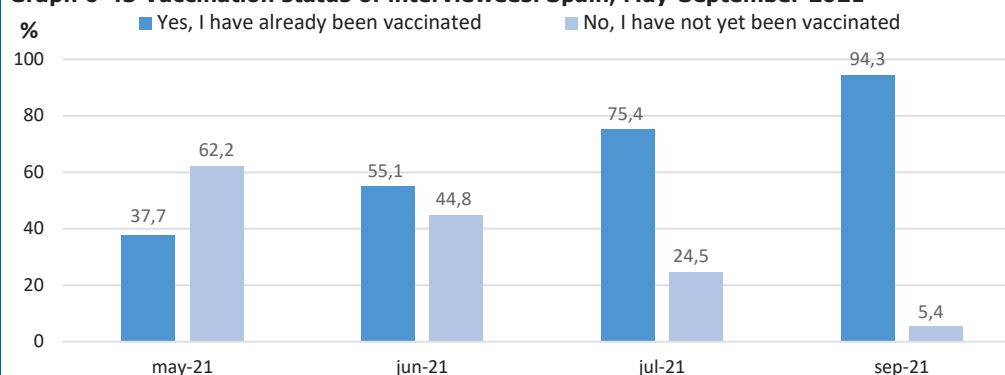
Remarks: The formulation of the question “Do you plan to get to vaccinated...” changed over time: in January the phrase “when a vaccine becomes available” was eliminated and in March the phrase “when it is your turn” was added. Starting in May of 2021 this question is posed only to people who have not yet been vaccinated and this data is not included in the graph because it affects the comparability of the data series.

* The category “In certain cases” refers to the following response options: “Yes, if it is safe, has been proven effective, can be trusted”, “Yes, depending on the vaccine’s origin”, “Yes, if enough information about it is available”, “Yes, if it is recommended by scientific and/or health authorities”.

Source of data: Sociological Research Centre (CIS). Opinion Barometer.

From May to September 2021 the available data reflect the success of the vaccination campaign, with the percentage of interviewees who report having been vaccinated jumping from 37.7% to 94.2%.

Graph 6-43 Vaccination status of interviewees. Spain, May-September 2021



Source of data: Sociological Research Centre (CIS). Opinion Barometer.

The following table shows the reasons given by interviewees for not being willing to be vaccinated and starting in April by those who had not yet been vaccinated. Among the main reasons reported by those not willing to be vaccinated immediately are “not trusting these vaccines” and “being afraid of health risks/side effects” and “preferring to wait and see how it goes”.

Table 6-20 Reasons given by people who have not been vaccinated or are not willing to do so. Spain, January 2021-September 2021								
	Jan 2021	Feb 2021	Mar 2021	Apr 2021	May 2021	Jun 2021	Jul 2021	Sep 2021
I do not trust these vaccines	23.5	31.2	29.3	34.6	25.3	35.4	28.5	26.0
I do not believe they are effective	5.7	8.3	7.1	5.2	8.7	5.2	8.1	6.4
I am afraid they might have health risks/side effects	26.3	18.5	20.1	25.3	25.3	15.6	16.9	20.4
I have low chances of being infected	2.4	3.2	3.5	1.0	4.8	3.0	3.2	2.8
I have had COVID-19	2.1	-	4.6	3.4	0.2	2.2	4.3	3.5
I prefer to wait to see how they work	14.1	9.2	6.0	3.5	7.7	6.9	12.0	6.4
I am against all vaccines in general (starting in Feb)		4.3	1.7	3.1	4.4	7.1	1.1	4.3
I do not have enough information	2.0	1.5	3.7	1.1	0.7	1.4	1.1	2.8
They are other people who are more vulnerable or at greater risk	3.4	0.8	1.0	-	-	0.8	1.1	2.7
I never get vaccinated	1.0	1.0	1.5	1.6	1.5	-	-	-
Its safety is not guaranteed: there have been few trials, it is too soon, insufficient analysis	6.1	4.6	4.6	3.7	4.2	3.1	7.6	5.6
I have allergies, other diseases or treatments, am breastfeeding or pregnant	3.4	3.0	2.1	3.6	3.7	2.3	4.2	2.8
Denial of COVID-19 (starting in March)			3.1	2.8	0.7	3.1	4.2	1.4
I do not think it is necessary (without specifying why) (starting in March)			4.6	3.7	7.3	4.7	3.1	7.0
Other reason	6.8	12.9	4.9	5.8	3.1	7.3	2.5	5.0
(NOT TO BE READ TO INTERVIEWEE) Unsure, hesitates	2.3	1.3	1.9	1.0	1.8	-	1.1	-
No Answer	0.8	0.2	-	0.5	0.8	1.9	1.1	2.9
(N)	855	899	1,006	1,002	1,007	1,009	1,090	1,283
Source of data: Sociological Research Centre (CIS). Opinion Barometer.								

In September of 2021 the CIS asked about whether the vaccine should be obligatory and 47.6% of the interviewees were in favour of requiring people to be vaccinated, even if they did not want to, and 64.5% of those who did not generally support this measure were in favour of making it obligatory in certain cases such as healthcare personnel, workers at homes for the elderly and people who have direct contact with the general public.

Table Index

Table 2-1 Official population figures as of 1 January 2019, 2020 and 2021, by sex and autonomous community. Spain	55
Table 2-2 Population registered in the SNS Protected Population Database. Spain, 2019-2021	58
Table 3-1 Life expectancy at birth by sex and by autonomous community. Spain, 2019	60
Table 3-2 Healthy life years at age 65 (HLA65) by sex and autonomous community. Spain, 2019	63
Table 5-1 Childhood vaccination coverage. Spain, 2017-2020	119
Table 5-2 Average length of stay (days) in hospitals, by type of care and type of entity. Spain, 2010 y 2019	129
Table 5-3 Percentage of major outpatient surgery in SNS hospitals, by autonomous community and type of entity. Spain, 2019	130
Table 5-4 Situation of SNS surgical waiting list. Spain, 2020	150
Table 5-5 Number of medicine presentations added to SNS pharmaceutical benefits, regardless of when their commercialization begins. Spain, 2019	162
Table 5-6 Active ingredients added to SNS pharmaceutical benefits, regardless of when their commercialization begins, by ATC1 and ATC5 classification. Spain, 2019	163
Table 5-7 First ten therapeutic subgroups with highest consumption in packs, by ATC2 classification. Spain, 2019	167
Table 5-8 First ten therapeutic subgroups with highest hospital consumption based on MSP. Spain, 2019	169
Table 5-9 Number of SNS primary care centres and local primary care centres, ratio LPCC/PCC and ratio PCC+LPCC per 100,000 inhabitants by autonomous community. Spain, 2019	172
Table 5-10 Hospitals according to size (total number of beds) by autonomous community. Spain, 2019	175
Table 5-11 Total beds according to size of hospital, by autonomous community. Spain, 2019	176

Table 5-12 Available medical technologies by type of ownership (SNS or private). Number of machines in use, percentage of total and ratio per million population. Spain, 2019	179
Table 5-13 Distribution of Reference Centres, Services and Units (CSUR) of the SNS, by autonomous community. Spain, 2019	179
Table 5-14 List of new Reference Centres, Services and Units (CSUR) of the SNS, designated in 2019	180
Table 5-15 Number and ratio per 1,000 population of professionals working in the SNS, total and distribution by care level. Spain, 2019	180
Table 5-16 Number of physicians working in SNS primary care, total, and distribution by type of care. Spain, 2019	183
Table 5-17 Number of general practitioners and paediatricians in Primary Care Teams of the SNS, total, and ratio per 1,000 population, by autonomous community. Spain, 2019	183
Table 5-18 Number and ratio per 1,000 population of physicians working in patient care in SNS hospitals, by autonomous community. Spain, 2019	184
Table 5-19 Number of physicians in the 112/061 Urgent Care and Emergency Services according to work site, by autonomous community. Spain, 2019	186
Table 5-20 Number of nurses working in SNS primary care, total, and distribution by type of care. Spain, 2019	189
Table 5-21 Number and ratio per 1,000 population of nurses working in patient care in SNS hospitals, by autonomous community. Spain, 2019	189
Table 5-22 Number and ratio per 1,000 population of specialised care nurses working in patient care in SNS hospitals, by autonomous community. Spain, 2019	190
Table 5-23 Number of nurses in the 112/061 Urgent Care and Emergency Services according to work site, by autonomous community. Spain, 2019	191
Table 5-24 Number of other professionals who work in the SNS, by autonomous community. Spain, 2019	194
Table 5-25 Number of other healthcare professionals working in SNS primary care, total, and distribution by type of professional. Spain, 2019	195
Table 5-26 Number of other professionals working in SNS primary care, total, and distribution by type of professional. Spain, 2019	195

Table 5-27 Number of other professionals working in SNS hospitals, total, and distribution by type of professional. Spain, 2019	195
Table 5-28 Number of healthcare professionals other than physicians working in SNS hospitals, total, and distribution by type of professional. Spain, 2019	195
Table 5-29 Number of other professionals working in the 112/061 Urgent Care and Emergency Services, total, and distribution by type of professional. Spain, 2019	195
Table 5-30 Total health expenditure, public and private. Millions of Euros, percentage of gross domestic product (GDP) and Euros per capita. Spain, 2015-2019	198
Table 5-31 Consolidated public health expenditure, by sector. Millions of Euros. Spain, 2015-2019	205
Table 5-32 Consolidated public health expenditure, by autonomous community. Millions of Euros, percentage of GDP and Euros per capita. Autonomous Communities sector. Spain, 2019	205
Table 6-1 Diagnostic tests during the first period: from start of pandemic to 21 June 2020(*). España	218
Table 6-2 Diagnostic tests during the second period: from 22 June to 6 December 2020. Spain	219
Table 6-3 Diagnostic tests during the third period: from 7 December 2020 to 14 March 2021. Spain	220
Table 6-4 Diagnostic tests during the fourth period: from 15 March to 19 June 2021. Spain	221
Table 6-5 Diagnostic tests during the fifth period: from 20 June 2021 to the present (this report includes information up to 30 September). Spain	222
Table 6-6 Diagnostic tests by sex. Spain, March 2020-September 2021	224
Table 6-7 Positive diagnostic tests per age group. Spain, March 2020-September 2021	224
Table 6-8 Rate of positives per 1,000 school children. Spain, September 2020 to June 2021 (including holiday periods during school year)	227
Table 6-9 Reinfection rate per 1,000 population. Spain, March 2020-September 2021	228
Table 6-10 Baseline* and maximum numbers of ICU beds per 100,000 population, by autonomous community. Spain, January 2020-September 2021	230

Table 6-11 Cases of COVID-19 infection and close contacts registered in clinical primary care records, by sex and large age groups. Spain, March to December 2020	233
Table 6-12 Number of Temporary Incapacity processes related to COVID-19 by autonomous community, initiated in 2020-2021 period. Spain	234
Table 6-13 Distribution of people with (+) test and people hospitalised, by pandemic periods. Spain, January 2020-September 2021	236
Table 6-14 Some indicators of SNS primary care activity. Spain, 2019 y 2020	247
Table 6-15 Cases registered in SNS primary care, by body system. Spain, 2019 and 2020	248
Table 6-16 Most frequent acute respiratory infections: cases registered in SNS primary care. Spain, 2017 and 2020	248
Table 6-17 Hospital activity. SNS acute-care hospitals. Spain, 2019 and 2020	249
Table 6-18 Reinfection among the fully-vaccinated, by age group. Spain, 30 September 2021	255
Table 6-19 Rates of non-vaccinated population by age groups and reason, per 100,000 inhabitants. Spain, March 2020-September 2021	256
Table 6-20 Reasons given by people who have not been vaccinated or are not willing to do so. Spain, January 2021-September 2021	261

Graphs Index

Gráfico 2-1 Population pyramid, by sex. Spain, 2021	56
Graph 2-2 Changes in population, by sex. Spain, 2007-2021	56
Graph 2-3 Changes in the population protected by the SNS with publicly-funded healthcare (2007-2021)	58
Graph 3-1 Life expectancy at birth by sex and autonomous community. Spain, 2019	60
Graph 3-2 Changes in life expectancy at birth, by sex. Spain, 2007-2019	61
Graph 3-3 Changes in life expectancy at 65, by sex. Spain, 2006-2019	62
Graph 3-4 Changes in healthy life years at 65 (HLY65), by sex. Spain, 2006-2019	63
Graph 3-5 Positive perception of health status, percentage by sex and age group. Spain, 2020	64
Graph 3-6 Positive perception of health status, percentage by sex and autonomous community. Spain, 2020	64
Graph 3-7 Positive perception of health status, percentage by sex and level of education. Spain, 2020	65
Graph 3-8 Assessment of health-related quality of life for children and adolescents, by sex and autonomous community. Spain, 2017	66
Graph 3-9 Assessment of health-related quality of life for children and adolescents, by sex and education level. Spain, 2017	66
Graph 3-10 Recorded prevalence of COPD in population aged 40 and over per 1,000 inhabitants, by sex and autonomous community. Spain, 2019	67
Graph 3-11 Recorded prevalence of COPD per 1,000 inhabitants, by sex and age and by sex and income level. Spain, 2019	68
Graph 3-12 Recorded prevalence of COPD in population aged 40 and over, by sex. Spain, 2013-2019	68
Graph 3-13 Age-adjusted rate of hospitalisation for COPD per 10,000 inhabitants. Spain, 2019	69

Graph 3-14 Age-adjusted rate of hospitalisation for COPD per 10,000 inhabitants. Spain, 2010-2019	69
Graph 3-15 Recorded prevalence of pneumonia per 1,000 inhabitants, by sex and autonomous community. Spain, 2019	70
Graph 3-16 Recorded prevalence of pneumonia per 1,000 inhabitants, by sex and age and by sex and income level. Spain, 2019	70
Graph 3-17 Recorded prevalence of pneumonia per 1,000 inhabitants, by sex. Spain, 2013-2019	71
Graph 3-18 Age-adjusted rate of hospitalisation for pneumonia per 10,000 inhabitants. Spain, 2019 and 2020	71
Graph 3-19 Age-adjusted rate of hospitalisation for pneumonia per 10,000 inhabitants, by sex. Spain, 2010-2019	72
Graph 3-20 Recorded prevalence of ischaemic heart disease per 1,000 inhabitants, by sex and autonomous community. Spain, 2019	73
Graph 3-21 Recorded prevalence of ischaemic heart disease per 1,000 inhabitants, by sex and age and by sex and income level. Spain, 2019	73
Graph 3-22 Age-adjusted rate of hospitalisation for ischaemic heart disease per 10,000 inhabitants. Spain, 2019	74
Graph 3-23 Age-adjusted rate of hospitalisation for ischaemic heart disease per 10,000 inhabitants, by sex. Spain, 2019	74
Graph 3-24 Recorded prevalence of cerebrovascular disease per 1,000 inhabitants, by sex and autonomous community. Spain, 2019	75
Graph 3-25 Recorded prevalence of cerebrovascular disease per 1,000 inhabitants, by sex and age and by sex and income level. Spain, 2019	75
Graph 3-26 Age-adjusted rate of hospitalisation for cerebrovascular disease per 10,000 inhabitants. Spain, 2019	76
Graph 3-27 Age-adjusted rate of hospitalisation for cerebrovascular disease per 10,000 inhabitants, by sex. Spain, 2019	76
Graph 3-28 Recorded prevalence of mental health disorders per 1,000 inhabitants, by sex and age and by sex and social class. Spain, 2019	77
Graph 3-29 Age-adjusted recorded prevalence of mental health disorders per 1,000 inhabitants, by sex and autonomous community. Spain, 2019	77

Graph 3-30 Age-adjusted hospitalisation rate for mental health disorders per 10,000 inhabitants. Spain, 2019	78
Graph 3-31 Age-adjusted rate of hospitalisation for mental health disorders per 10,000 inhabitants, by sex. Spain, 2010-2019	78
Graph 3-32 Recorded prevalence of the most frequent mental health problems per 1,000 inhabitants. Spain, 2013-2019	79
Graph 3-33 Recorded prevalence of the most frequent mental health problems in persons under the age of 25 per 1,000 inhabitants. Spain, 2013-2019	79
Graph 3-34 Recorded prevalence of anxiety disorders per 1,000 inhabitants, by sex and age and by sex and social class. Spain, 2019	80
Graph 3-35 Recorded prevalence of anxiety disorders per 1,000 inhabitants in general population and in young people under age of 25, by autonomous community. Spain, 2019	80
Graph 3-36 Prevalence of depression symptoms and severity of symptomatology reported in population aged 15 and over, by sex and age. Spain, 2020	81
Graph 3-37 Prevalence of symptoms of depression reported in population aged 15 and over, by sex and autonomous community. Spain, 2020	81
Graph 3-38 Prevalence of depression symptoms reported in population aged 15 and over, by sex and education level. Spain, 2020	82
Graph 3-39 Age-adjusted hospitalisation rate for malignant tumours per 10,000 inhabitants. Spain, 2019	83
Graph 3-40 Age-adjusted rate of hospitalisation for malignant tumours per 10,000 inhabitants, by sex. Spain, 2010-2019	83
Graph 3-41 Recorded prevalence of most frequent malignant tumours per 1,000 inhabitants, by sex and autonomous community. Spain, 2019	84
Graph 3-42 Age-adjusted rate of hospitalisation of different malignant tumours per 10,000 inhabitants, by sex and autonomous community. Spain, 2019.	85
Graph 3-43 Age-adjusted hospitalisation rate for most frequent malignant tumours per 10,000 inhabitants. Spain, 2010-2019	86
Graph 3-44 Age-adjusted mortality rate per 100,000 inhabitants, by sex. Spain, 2019	87
Graph 3-45 Age-adjusted mortality rate per 100,000 inhabitants, by sex. Spain, 2001-2019	87

Graph 3-46 Age-adjusted rate of death from chronic obstructive pulmonary disease per 100,000 inhabitants, by sex and autonomous community. Spain, 2019	88
Graph 3-47 Age-adjusted rate of death from chronic obstructive pulmonary disease per 100,000 inhabitants, by sex. Spain, 2019	89
Graph 3-48 Age-adjusted rate of death from chronic obstructive pulmonary disease per 100,000 inhabitants, by sex. Spain, 2001-2019	89
Graph 3-49 Age-adjusted rate of death from pneumonia and influenza per 100,000 inhabitants, by sex and autonomous community. Spain, 2019	90
Graph 3-50 Age-adjusted rate of mortality from pneumonia and influenza per 100,000 inhabitants, by sex. Spain, 2019	90
Graph 3-51 Age-adjusted rate of mortality from pneumonia and influenza per 100,000 inhabitants, by sex. Spain, 2001-2019	91
Graph 3-52 Age-adjusted rate of death from ischaemic heart disease per 100,000 inhabitants, by sex and autonomous community. Spain, 2019	92
Graph 3-53 Age-adjusted rate of death from ischaemic heart disease per 100,000 inhabitants, by sex. Spain, 2019	92
Graph 3-54 Age-adjusted rate of death from ischaemic heart disease per 100,000 inhabitants, by sex. Spain, 2000-2019	93
Graph 3-55 Age-adjusted rate of death from cerebrovascular disease per 100,000 inhabitants, by sex and autonomous community. Spain, 2019	93
Graph 3-56 Age-adjusted rate of death from cerebrovascular disease per 100,000 inhabitants, by sex. Spain, 2019	94
Graph 3-57 Age-adjusted rate of death from cerebrovascular disease per 100,000 inhabitants, by sex. Spain, 2000-2019	94
Graph 3-58 Age-adjusted rate of death from malignant tumours per 100,000 inhabitants, by sex and autonomous community. Spain, 2019	95
Graph 3-59 Age-adjusted rate of mortality from malignant tumours per 100,000 inhabitants, by sex. Spain, 2019	95
Graph 3-60 Age-adjusted rate of death from malignant tumours per 100,000 inhabitants, by sex. Spain, 2001-2019	96
Graph 3-61 Age-adjusted rate of death from the most frequent malignant tumours per 100,000 inhabitants, by sex and autonomous community. Spain, 2019	97

Graph 3-62 Age-adjusted rate of death from the most frequent malignant tumours per 100,000 inhabitants, by sex. Spain, 2001-2019	98
Graph 3-63 Age-adjusted rate of death by suicide per 100,000 inhabitants, by sex and autonomous community. Spain, 2019	99
Graph 3-64 Age-adjusted rate of suicide per 100,000 inhabitants, by sex. Spain, 2019	99
Graph 3-65 Age-adjusted rate of death by suicide per 100,000 inhabitants, by sex. Spain, 2000-2019	100
Graph 3-66 Crude rate of death by suicide per 100,000 inhabitants, changes in young people and adolescents, by sex. Spain, 2001-2019	101
Graph 4-1 Dependency ratio by autonomous community. Spain, 2019	103
Graph 4-2 Changes in dependency ratio. Spain, 2000-2019	103
Graph 4-3 Percentage of men and women aged 25 to 64 who report having completed the first phase of Compulsory Secondary Education or less, by autonomous community. Spain, 2019	104
Graph 4-4 Changes in percentage of men and women aged 25 to 64 who report having completed the first phase of Compulsory Secondary Education or less, by sex. Spain, 2000-2019	105
Graph 4-5 Rate of population at risk of poverty or social exclusion (AROPE). Spain, 2019	106
Graph 4-6 Rate of population at risk of poverty or social exclusion (AROPE), by level of education. Spain, 2019	106
Graph 4-7 Daily tobacco use in population aged 15 and over, by sex and autonomous community. Spain, 2020	107
Graph 4-8 Daily tobacco use in group aged 15 to 24, by sex and education level. Spain, 2020	108
Graph 4-9 Changes in the prevalence of daily tobacco use in population aged 15 and over and in group aged 15 to 24, by sex. Spain, 1993-2020	108
Graph 4-10 Prevalence of alcohol consumption in the past year in population aged 15 and over, by autonomous community. Spain, 2020	109
Graph 4-11 P Prevalence of alcohol consumption in the past year in population aged 15 and over, by sex and social class. Spain, 2020	110

Graph 4-12 Consumption of alcoholic beverages in population aged 15 and over. Percentage distribution. Spain, 2020	110
Graph 4-13 Prevalence of hazardous drinkers in population aged 15 and over, by sex and autonomous community. Spain, 2020	111
Graph 4-14 Changes in hazardous drinking in population aged 15 and over and aged 15-24, by sex. Spain, 2011-2020	112
Graph 4-15 Heavy episodic drinking of alcohol at least once a month in the past 12 months in population aged 15 and over, by age and sex. Spain, 2020	113
Graph 4-16 Heavy episodic drinking of alcohol at least once a month in the past 12 months in population aged 15 and over, by sex and autonomous community. Spain, 2020	113
Graph 4-17 Prevalence of obesity in adult population (aged 18 and over), by sex and autonomous community. Spain, 2020	114
Graph 4-18 Prevalence of obesity in adult population (aged 18 and over), by sex and social class. Spain, 2020	115
Graph 4-19 Changes in the prevalence of excess weight in adult population (aged 18 and over). Percentage distribution. Spain, 1993-2020	115
Graph 4-20 Prevalence of sedentariness in population aged 15 and over, by sex and autonomous community. Spain, 2020	116
Graph 4-21 Changes in the prevalence of sedentariness in population aged 15 and over and in group aged 15 to 24, by sex. Spain, 1993-2020	117
Graph 5-1 Flu vaccination coverage in persons aged 65 and over, by autonomous community. Spain, campaigns 2019/2020 and 2020/2021	120
Graph 5-2 Changes in flu vaccination coverage in persons aged 65 and over. Spain, campaigns 2005/2006 a 2020/2021	120
Graph 5-3 Coverage of programmes for early detection of breast and colorectal cancer, by autonomous community. Spain, 2020	122
Graph 5-4 Changes in coverage of programmes for early detection of breast and colorectal cancer. Spain, 2009-2020	122
Graph 5-5 Average number of visits to primary care health centres, by sex and autonomous community. Spain, 2019	123
Graph 5-6 Number of visits (millions) in SNS primary care, by type of professional and where visit takes place. Spain, 2019	124

Graph 5-7 Average number of visits in SNS primary care, by autonomous community. Spain, 2019	124
Graph 5-8 Average number of visits in SNS primary care, by age group. Spain, 2019	125
Graph 5-9 Average number of visits to primary care physician in the SNS, by age group and sex. Spain, 2019	125
Graph 5-10 Average number of primary care nurse visits in the SNS, by age group and sex. Spain, 2019	126
Graph 5-11 Average number of SNS primary care visits, by autonomous community. Spain, 2010-2019	126
Graph 5-12 Specialised care visits, by hospital type (SNS or private). Spain, 2019	127
Graph 5-13 Number of specialised care visits at acute care hospitals, SNS and total, by autonomous community. Spain, 2019	127
Graph 5-14 Discharges in acute care hospitals per 1,000 inhab./year, by type of entity (SNS or total). Spain, 2010-2019	128
Graph 5-15 Average length of stay (days) in hospitals, by type of care and type of entity. Spain, 2019	129
Graph 5-16 Percentage of major outpatient surgery (MOS) in SNS hospitals. Spain, 2019	130
Graph 5-17 Overall percentage of readmissions in SNS acute care hospitals, by autonomous community. Spain, 2019	131
Graph 5-18 Changes in overall percentage of readmissions in SNS acute care hospitals. Spain, 2007-2019	131
Graph 5-19 Number of urgent visits in primary care, by age and sex. Spain, 2019	133
Graph 5-20 Number of urgent visits in primary care, by autonomous community. Spain, 2019	133
Graph 5-21 Number of urgent visits in primary care. Spain, 2010-2019	134
Graph 5-22 Average number of visits to SNS emergency departments. Spain, 2010-2019	135

Graph 5-23 Average number of visits to SNS emergency departments, by autonomous community. Spain, 2019	135
Graph 5-24 Care requests made to 112/061 Urgent Care and Emergency Services. Spain, 2012-2019	136
Graph 5-25 Care requests made to 112/061 Urgent Care and Emergency Services, by autonomous community. Spain, 2019	136
Graph 5-26 In-hospital mortality due to pneumonia per 100 discharges, by sex and autonomous community. Spain, 2019	138
Graph 5-27 Changes in in-hospital mortality due to pneumonia per 100 discharges. Spain, 2009-2019	138
Graph 5-28 Post-infarction in-hospital mortality per 100 discharges with this diagnosis, by sex and autonomous community. Spain, 2019	139
Graph 5-29 Changes in post-infarction in-hospital mortality per 100 discharges with this diagnosis, by sex. Spain, 2007-2019	140
Graph 5-30 In-hospital mortality due to ischaemic stroke, by sex and autonomous community. Spain, 2019	141
Graph 5-31 In-hospital mortality due to hemorrhagic stroke, by sex and autonomous community. Spain, 2019	141
Graph 5-32 Use of antidepressants by autonomous community. Defined daily doses per 1,000 inhabitants per day (DDI) of chemical therapeutic subgroup ATC N06A. Spain, 2019	143
Graph 5-33 Changes in use of antidepressants. Defined daily doses per 1,000 inhabitants per day (DDI) of chemical therapeutic subgroup ATC N06A. Spain, 2010-2019	143
Graph 5-34 Use of hypnotics and sedatives by autonomous community. Defined daily doses per 1,000 inhabitants per day (DDI) of chemical therapeutic subgroup ATC N05C. Spain, 2019	144
Graph 5-35 Changes in the use of hypnotics and sedatives. Defined daily doses per 1,000 inhabitants per day (DDI) of chemical therapeutic subgroup ATC N05C. Spain, 2010-2019	144
Graph 5-36 Emergency psychiatric readmissions in SNS hospitals, by autonomous community. Spain, 2019	145
Graph 5-37 Changes in emergency psychiatric readmissions in SNS hospitals. Spain, 2008-2019	145

Graph 5-38 Percentage of breast-conserving cancer surgery. Spain, 2019	146
Graph 5-39 Percentage of breast-conserving surgery. Spain, 2000-2019	147
Graph 5-40 Waiting time for appointment with primary care physician. Spain, 2019	148
Graph 5-41 Average waiting time (days) for an initial consultation in specialised care. Spain, 2020	148
Graph 5-42 Average waiting time (days) for an initial consultation in specialised care. Spain, 2010-2020	149
Graph 5-43 Average waiting time (days) for non-urgent surgical procedure. Spain, 2010-2020	150
Graph 5-44 Average waiting time (days) and percentage of patients with wait of over 6 months for non-urgent surgical procedure. Spain, 2020	151
Graph 5-45 Changes in opinions regarding the functioning of the healthcare system. Spain, 2008-2019	152
Graph 5-46 Opinion regarding the proper functioning of the healthcare system by autonomous community. Spain, 2019	152
Graph 5-47 Changes in the degree of satisfaction with the functioning of the public healthcare system. Spain, 2005-2019	153
Graph 5-48 Degree of satisfaction of population with public healthcare system. Spain, 2019	153
Graph 5-49 Changes in the degree of satisfaction with the different care levels and types of care provision into which the SNS is organized. Spain, 2010-2019	154
Graph 5-50 Changes in the degree of satisfaction with the different care levels and types of care provision into which the SNS is organized. Spain, 2019	154
Graph 5-51 Changes in the perception of co-ordination between care levels of the SNS. Spain, 2017-2019	155
Graph 5-52 Opinion on the co-ordination between care levels, by sex and autonomous community. Spain, 2019	156
Graph 5-53 Satisfaction of citizens with their participation in decisions concerning their health problems and treatment, in primary care and specialised care. Spain, 2013-2019	157

Graph 5-54 Satisfaction of citizens with their participation in decisions concerning their health problems and treatment in primary care and specialised care, by autonomous community. Spain, 2019	157
Graph 5-55 Changes in the reported lack of access to prescribed medicines for economic reasons. Spain, 2016-2019	158
Graph 5-56 Reported lack of access to prescribed medicines for economic reasons, by autonomous community. Spain, 2019	158
Graph 5-57 Changes in the reported lack of access to prescribed medicines for economic reasons. Spain, 2014-2020	159
Graph 5-58 Reported lack of access to dental care for economic reasons. Percentage distribution by sex and autonomous community. Spain, 2020	160
Graph 5-59 Reported lack of access to dental care for economic reasons. Percentage distribution by sex and social class. Spain, 2020	160
Graph 5-60 Pharmaceutical expenditure (in millions of Euros) through SNS medical prescriptions (autonomous communities, INGESA and mutuels). Spain, 2010-2019	165
Graph 5-61 Average expenditure per prescription/pack (autonomous communities, INGESA and mutuels). Spain, 2010-2019	166
Graph 5-62 SNS pharmaceutical expenditure per person per year (autonomous communities, INGESA and mutuels). Spain, 2010-2019	166
Graph 5-63 Number of prescriptions/packs per person per year (autonomous communities, INGESA and mutuels). Spain, 2010-2019	167
Graph 5-64 Number of inhabitants (average) per dispensing pharmacy. Spain, 2019	171
Graph 5-65 Changes in the number of PCC and LPCC in the SNS. Spain, 2004-2019	173
Graph 5-66 Number of hospitals in the SNS, by type of care provided. Spain, 2019	174
Graph 5-67 Number of hospitals in the SNS, by autonomous community. Spain, 2019	174
Graph 5-68 Changes in number of hospitals by size (total number of beds). Spain, 2004-2019	175

Graph 5-69 Number of available beds, by type of hospital (SNS or private) and autonomous community. Spain, 2019	177
Graph 5-70 Available beds per 1,000 population in acute-care hospitals, by type of hospital (SNS or private). Spain, 2010-2019	177
Graph 5-71 Day hospital beds, by type of hospital (SNS or private). Spain, 2010-2019	178
Graph 5-72 Day hospital beds, by type of care provided. Spain, 2019	178
Graph 5-73 Changes in the number of physicians working in patient care and ratio per 1,000 population. Spain, 2000-2019	181
Graph 5-74 Changes in the number of physicians working in patient care activities, by sex. Spain, 2000-2019	181
Graph 5-75 Changes in the number of physicians working in patient care, by age group. Spain, 2000-2019	182
Graph 5-76 Physicians working in patient care in the SNS. Spain, 2019	182
Graph 5-77 Ratio of physicians working in patient care in Primary Care Teams per 1,000 population, by autonomous community. Spain, 2019	184
Graph 5-78 Ratio of physicians working in patient care in SNS hospitals per 1,000 population, by autonomous community. Spain, 2019	185
Graph 5-79 Changes in number of physicians in patient care in SNS Primary Care Teams and hospitals. Spain, 2010-2019	187
Graph 5-80 Changes in the number of physicians working in patient care in the 112/061 Urgent Care and Emergency Services of the SNS. Spain, 2012-2019	187
Graph 5-81 Changes in the number of nurses working in patient care and ratio per 1,000 population. Spain, 2000-2019	188
Graph 5-82 Nurses working in patient care in the SNS. Spain, 2019	188
Graph 5-83 Ratio of nurses who work in patient care in Primary Care Teams per 1,000 population, by autonomous community. Spain, 2019	190
Graph 5-84 Rate of nurses working in patient care in SNS hospitals per 1,000 inhabitants, by autonomous community. Spain, 2019	191
Graph 5-85 Changes in number of nurses working in patient care in SNS Primary Care Teams and SNS hospitals. Spain, 2010-2019	192

Graph 5-86 Changes in the number of nurses working in patient care in the 112/061 Urgent Care and Emergency Services of the SNS. Spain, 2010-2019	193
Graph 5-87 Other professionals who work in the SNS. Spain, 2019	193
Graph 5-88 Ratio of other professionals working in SNS per 1,000 population, by autonomous community. Spain, 2019	194
Graph 5-89 Changes in number of students graduating in medicine and ratio per 1,000 inhabitants. Spain, 2005-2020	196
Graph 5-90 Changes in number of students graduating in medicine and ratio per 1,000 inhabitants. Spain, 2005-2020	196
Graph 5-91 Total health expenditure. Percentage contribution of public expenditure and private expenditure. Spain, 2015-2019	199
Graph 5-92 Public health expenditure and private health expenditure. Interannual variation rate (expressed as percentage). Spain, 2015-2019	199
Graph 5-93 Total health expenditure by function of care. Percentage distribution and millions of Euros. Spain, 2019	200
Graph 5-94 Total health expenditure, public and private, in curative and rehabilitative care services. Percentage distribution by mode of production. Spain, 2019	201
Graph 5-95 Total health expenditure by provider. Percentage distribution and millions of Euros. Spain, 2019	202
Graph 5-96 Total health expenditure by source of funding. Percentage distribution and millions of Euros. Spain, 2019	203
Graph 5-97 Health expenditure by the government, by source of funding. Percentage distribution and millions of Euros. Spain, 2019	203
Graph 5-98 Private health expenditure, by source of funding. Percentage distribution and millions of Euros. Spain, 2019	204
Graph 5-99 Direct health expenditure by households, by health care function. Percentage distribution. Spain, 2019	204
Graph 5-100 Consolidated public health expenditure, by autonomous community. Interannual variation rate (expressed as percentage). Autonomous Communities sector. Spain, 2018-2019	206
Graph 5-101 Public health expenditure managed by the autonomous communities, percentage structure by main elements of economic classification. Spain, 2019	207

Graph 5-102 Public health expenditure managed by the autonomous communities, percentage structure by main elements of functional classification. Spain, 2019	207
Graph 5-103 Public health expenditure per capita, by autonomous community. Euros per capita. Autonomous Communities sector. Spain, 2019	208
Graph 5-104 Changes in per capita public health expenditure of the Autonomous Communities sector. Spain, 2015-2019	208
Graph 5-105 Public health expenditure managed by autonomous communities, primary health care services (percentage). Autonomous Communities sector. Spain, 2019	209
Graph 5-106 Changes in the public healthcare expenditure on primary health care services of the Autonomous Communities sector (percentage). Spain, 2015-2019	210
Graph 5-107 Public health expenditure managed by autonomous communities on hospital and specialised care services (percentage). Autonomous Communities sector. Spain, 2019	210
Graph 5-108 Changes in the public health expenditure on hospital and specialised care services of the Autonomous Communities sector (percentage). Spain, 2015-2019	211
Graph 5-109 Public health expenditure managed by autonomous communities on remuneration of personnel (percentage). Autonomous Communities sector. Spain, 2019	211
Graph 5-110 Changes in the public health expenditure on remuneration of personnel. Autonomous Communities sector (percentage). Spain, 2015-2019	212
Graph 5-111 Average annual per person expenditure on healthcare good and services, by autonomous community. Spain, 2019	213
Graph 5-112 Changes in the average annual per person expenditure on healthcare goods and services, by sex. Spain, 2015-2019	213
Graph 5-113 Average annual per person expenditure on healthcare good and services, by level of education. Spain, 2015-2019	214
Graph 5-114 Changes in the proportion of population with large household expenditure health (> 10%) as a share of total household expenditure. Spain, 2015-2019	214
Graph 6-1 Cumulative incidence at 14 days: cases per 100,000 population. Spain, March 2020-September 2021	217

Graph 6-2 Changes in rate of positives per 1,000 population, by province. Spain, March 2020-September 2021	223
Graph 6-3 Changes in the number of positive cases per age group. Spain, first period: from start of pandemic to 21 June 2020	225
Graph 6-4 Changes in the number of positive cases per age group. Spain, second period: from 22 June to 6 December 2020	225
Graph 6-5 Changes in the number of positive cases per age group. Spain, third period: from 7 December 2020 to 14 March 2021	226
Graph 6-6 Changes in the number of positive cases per age group. Spain, fourth period: from 15 March to 19 June 2021	226
Graph 6-7 Changes in the number of positive cases per age group. Spain, fifth period: from 20 June to 30 September 2021	227
Graph 6-8 Total number of reinfected persons, by sex and age group. Spain, March 2020-September 2021	228
Graph 6-9 Daily evolution of the number of temporary ICU beds. Spain, March 2020-September 2021	230
Graph 6-10 Evolution of the number of COVID-19 tests performed in primary care health centres. Spain, March 2020-September 2021	232
Graph 6-11 Changes in the number of COVID-19 tests registered in SERLAB-CoV and diagnoses registered in Primary Care centres. Spain, March to December 2020	233
Graph 6-12 Changes in number of cases of Temporary Incapacity processed in Primary Care. Spain, 2017-2020	235
Graph 6-13 Changes in the number of positive tests and hospitalisations due to COVID-19. Spain, March 2020-September 2021	236
Graph 6-14 Changes in number of hospitalised COVID-19 patients. Spain, March 2020-September 2021	237
Graph 6-15 Changes in the COVID-19 hospitalisation rates, by autonomous community. Spain, March 2020-September 2021	237
Graph 6-16 Changes in activity and occupation of intensive care units with respirators. Spain, March 2020-September 2021	238
Graph 6-17 Changes in the COVID-19 hospitalisation rates, by autonomous community. Spain, March 2020-September 2021	239

Graph 6-18 Distribution of cases and mortality in hospitalised COVID-19 cases, by age group and sex. Acute-care hospitals in the SNS. Spain, 2019-2020	240
Graph 6-19 Distribution of cases and mortality in COVID-19 cases attended in ICU, by age group and sex. Acute-care hospitals in the SNS. Spain, 2019-2020	241
Graph 6-20 Wait time for visits with Family and Community Medicine physicians in SNS Primary Care. Spain, 2019-2021.	242
Graph 6-21 Surgery waiting list of the SNS. Spain, from June 2019 to June 2021.	243
Graph 6-22 Waiting list for consultations with specialists of SNS hospitals. Spain, from June 2019 to June 2021.	244
Graph 6-23 Number of ordinary visits (in millions) in SNS primary care. Spain, 2015-2020.	245
Graph 6-24 Number of ordinary visits in the form of teleconsultations (millions) in SNS primary care. Spain, 2015-2020.	245
Graph 6-25 Percentage of home care visits out of the total number of SNS primary care visits. Spain, 2015-2020.	245
Graph 6-26 Number of visits per year by population to SNS primary care. Spain, 2015-2020.	246
Graph 6-27 Changes in flu vaccination coverage in persons aged 65 and over, pregnant women and healthcare personnel. Spain, campaigns 2017/2018 to 2020/2021.	247
Graph 6-28 Distribution (percentage) by month of emergency and programmed admissions. SNS acute-care hospitals. Spain, 2019-2020	250
Graph 6-29 Average length of stay (days) and percentage of deaths among hospitalised cases. SNS acute-care hospitals. Spain, 2019-2020	251
Graph 6-30 Average length of stay (days) and mortality (percentage) in ICU, by month. SNS Hospitals. Spain, 2019-2020	251
Graph 6-31 Distribution of discharges by ICD chapter (percentage). SNS acute-care hospitals. Spain, 2019-2020	252
Graph 6-32 Age-adjusted rate of hospitalisation for pneumonia per 10,000 inhabitants, by sex. Spain, 2016-2020	252
Graph 6-33 COVID-19 vaccination coverage, fully-vaccinated population, by age group. Spain, 30 September 2021	253

Graph 6-34 COVID-19 vaccination coverage by province. Spain, 30 September 2021	254
Graph 6-35 Number of fully-vaccinated persons by manufacturer. Spain, 30 September 2021	254
Graph 6-36 Reinfection in fully-vaccinated persons by manufacturer. Spain, 30 September 2021	255
Graph 6-37 Percentage of interviewees who reported having had contact with the healthcare services because they thought they had symptoms associated with coronavirus. Spain, May 2020-September 2021	257
Graph 6-38 Public healthcare service contacted by interviewees who reported having had symptoms associated with coronavirus. Spain, May 2020-September 2021	257
Graph 6-39 Opinion of the care received by interviewees who contacted a healthcare service because they had symptoms associated with coronavirus. Spain, May 2020-September 2021	258
Graph 6-40 Progression of the illness in persons diagnosed with coronavirus. Spain, May 2020-September 2021	258
Graph 6-41 Opinion of the care received by interviewees who were diagnosed with coronavirus and recovered from the illness at home. Spain, May 2020-September 2021	259
Graph 6-42 Attitudes towards receiving the COVID-19 vaccination. Spain, May 2020-September 2021	260
Graph 6-43 Vaccination status of interviewees. Spain, May 2021-September 2021	260

List of abbreviations

A

ATC	Anatomical, Therapeutic and Chemical classification system, used to code medicines based on their pharmacological effect, therapeutic indications and chemical structure. It is divided into five levels, from level 1 (ATC1), which is the most general, to level 5 (ATC5), the most detailed
ATC1	ATC Level 1. This level specifies the organ or system upon which the medicine acts. It is divided into 14 main groups, each identified by a letter of the alphabet
ATC2	ATC Level 2. This level specifies the medicine's therapeutic subgroup
ATC5	ATC Level 5, the medicine's active ingredient or pharmacological association
HLY65	Healthy Life Years at 65
HLYb	Healthy Life Years at birth

B

BS	Healthcare Barometer (<i>Barómetro Sanitario</i>)
BDCAP	Clinical Primary Care Database (<i>Base de Datos Clínicos de Atención Primaria</i>)
BD-PP-SNS	Database containing information pertaining to Individual Health Cards, managed by the National Health System of Spain (SNS)

C

MDC	Major Diagnostic Category
ICD-10	International Classification of Diseases, 10th revision
CIP-CA	Personal Identification Code assigned by the autonomous community (<i>Código de Identificación Personal propio de cada comunidad autónoma</i>)
CIP-SNS	Personal Identification Code assigned by the National Health System of Spain (<i>Código de Identificación Personal único del Sistema Nacional de Salud</i>)
CIS	Sociological Research Centre (<i>Centro de Investigaciones Sociológicas</i>)
CL	Local Primary Care Centre (<i>Consultorio Local</i>)
CMA	Major Outpatient Surgery (<i>Cirugía Mayor Ambulatoria</i>)
CMBD	Minimum Data Set (<i>Conjunto Mínimo Básico de Datos</i>)
CMC	Centre of Management and Control COVID-Information System for the monitoring of the pandemic
CNE	National Epidemiology Centre, Carlos III Health Institute (<i>Centro Nacional de Epidemiología, Instituto de Salud Carlos III</i>)
CNED-A	National Classification of Education-A (<i>Clasificación Nacional de Educación-A</i>)
CNED-2014	National Classification of Education-2014 (<i>Clasificación Nacional de Educación-2014</i>)
CNH	National Catalogue of Hospitals (<i>Catálogo Nacional de Hospitales</i>)
COVID-19	Coronavirus disease-19
CS	Primary Care Centre (<i>Centro de Salud</i>)
CSUR	Reference Centres, Services and Units (<i>Centros, Servicios y Unidades de Referencia</i>)

D

DDD	Daily Defined Dose
DDI	Daily Dose per Inhabitant (DDD per 1,000 inhabitants and day)
DTaP	Diphtheria, Tetanus and acellular Pertussis

E

€	Euro
EAP	Primary Care Team (<i>Equipo de Atención Primaria</i>)
ECDC	European Centre for Disease Prevention and Control
ECV	Survey on Living Conditions (<i>Encuesta de Condiciones de Vida</i>)
EESE	European Survey of Health in Spain (<i>Encuesta Europea de Salud en España</i>)
ENSE	Spanish National Health Survey (<i>Encuesta Nacional de Salud de España</i>)
EPA	Economically Active Population Survey (<i>Encuesta de Población Activa</i>)
EPF	Survey of Family Budgets (<i>Encuesta de Presupuestos Familiares</i>)
COPD	Chronic Obstructive Pulmonary Disease
AROPE	At Risk of Poverty and/or Exclusion
ESO	Compulsory Secondary Education (<i>Educación Secundaria Obligatoria</i>)
EU-SILC	EU Statistics on Income and Living Conditions
Eurostat	European Statistics Office
LE ₆₅	Life Expectancy at 65
LEB	Life Expectancy at Birth

F

FSE	Specialised Health Care Training (<i>Formación Sanitaria Especializada</i>)

G

g/day	Grams per day
g/l	Grams per litre
DRG	Diagnostic-Related Groups

H

Inhab.	Inhabitants
HBS	Household Budget Survey (Eurostat)
Hib	Haemophilus influenzae type b

I

BMI	Body Mass Index
INCLASNS	SNS Key Indicators (<i>Indicadores Clave del Sistema Nacional de Salud</i>)
INE	National Statistics Institute (<i>Instituto Nacional de Estadística</i>)

INGESA	National Institute of Health Management (<i>Instituto Nacional de Gestión Sanitaria</i>)
IPAQ	International Physical Activity Questionnaire
HAI	Healthcare-Associated Infection
ISFAS	Social Institute of the Armed Forces (<i>Instituto Social de las Fuerzas Armadas</i>)

K

Kg/m ²	Kilograms per square metre

L

LDL	Low Density Lipoproteins

M

mg/dL	Miligram per decilitre
MUFACE	Insurance Mutual for Civil Servants (<i>Mutualidad General de Funcionarios Civiles del Estado</i>)
MUGEJU	Insurance Mutual for Employees of the Judiciary (<i>Mutualidad General Judicial</i>)

N

NA	No answer
DK	Don't know

O

OECD	Organisation for Economic Cooperation and Development
SDG	Sustainable Development Goals
WHO	World Health Organisation
UN	United Nations
OTC	Over-the-counter drug (pharmaceutical that can be sold without a prescription)

P

PAC	Primary Care unit dedicated to urgent care services (<i>Punto de Atención Continuada</i>)
PCR	Polymerase Chain Reaction
PEN	National Statistics Plan (<i>Plan Estadístico Nacional</i>)
GDP	Gross Domestic Product
FOB	Faecal Occult Blood Test
MSP	Manufacturer's Selling Price
RP	Retail Price
RP-VAT:	Retail Price-Value Added Tax

R

RAE-CMBD	Register of Specialised Care Activity based on CMBD at discharge (<i>Registro de Actividad de Atención Especializada del Conjunto Mínimo Básico de Datos al alta hospitalaria</i>)
REGVACU	COVID-19 Vaccination Registry (<i>Registro de Vacunación contra el COVID-19</i>)
RENAVE	National Epidemiological Surveillance Network (<i>Red Nacional de Vigilancia Epidemiológica</i>)
MRI	Magnetic Resonance Imaging

S

SARS-CoV-2	Severe Acute Respiratory Syndrome coronavirus 2
SCP	Term used to designate pharmaceutical packs without a tamper-evident label, dispensed in hospital pharmaceutical services (<i>Sin Cupon Precinto</i>)
SERLAB	State System for the Collection of Diagnostic Laboratory Tests SARS-CoV-2 (<i>Sistema estatal de Recogida de las pruebas diagnósticas de Laboratorio de SARS-CoV-2</i>)
SIAE	Specialised Care Information System (<i>Sistema de Información de Atención Especializada</i>)
SIAP	Primary Care Information System (<i>Sistema de Información de Atención Primaria</i>)
SiViES	System for Surveillance in Spain (<i>Sistema para la Vigilancia en España</i>)
SISCAT	Integrated Healthcare System for Public Use of Catalonia (<i>Sistema Sanitari Integral D'utilització Pública de Catalunya</i>) (<i>Sistema Sanitario Integral de Utilización Pública de Catalonia</i>)
SISLE-SNS	Waiting List Information System of the SNS (<i>Sistema de Información Sanitaria de Lista de Espera en el SNS</i>)
SNS	National Health System of Spain (<i>Sistema Nacional de Salud</i>)
SUAP	Primary Care unit dedicated to urgent care services (<i>Servicios de Urgencias de Atención Primaria</i>)

T

CAT	Computerized Axial Tomography
Td	Tetanus Diphtheria vaccine, low concentration
TSI	Individual Health Card (<i>Tarjeta Sanitaria Individual</i>)
MMR	Measles, Mumps and Rubella vaccine

U

SDU	Standard Drink Unit
ICU	Intensive Care Unit
EU	European Union
EU-28	European-28 Member States (2013-2020)

V

vs. Versus

W

WHO World Health Organization

Sources and information systems

Accreditation of teaching centres and units in Specialised Health Care Training

Accreditation is the systematic, independent and documented process by which a centre or service is recognised to be qualified as a teaching centre or unit for the training of specialists in the health sciences, in compliance with certain standards which include minimum requisites regarding human and physical resources, care activity, teaching and research activity, and quality, among others.

The initiative for seeking accreditation is taken by the entity upon which the centre depends. A report must be obtained by the teaching commission of that entity, along with a favourable opinion by the Regional Ministry of Health of that autonomous community, which will send it to Spain's Ministry of Health. The Ministry of Health makes a ruling on the request after receiving reports from the national commissions that comprise the National Council on Health Science Specialties.

Accredited teaching centres and units are subject to periodic external teaching audits performed by the Ministry of Health. The auditing processes and ensuing improvement plans are also monitored, so as to ensure ongoing quality improvement.

More information at:

<https://www.sanidad.gob.es/profesionales/formacion/AcreDocCntUniForSanEsp.htm>

Opinion Barometer

The monthly opinion barometers of the Sociological Research Centre (CIS) consist of a survey, using a standardised questionnaire and conducted using the same methodology. They are performed on a monthly basis (except August) and their main objective is to measure Spanish public opinion at that time. To this end, around 2,500 interviews are conducted with randomly chosen persons within the national territory. In addition to their opinions, a great deal of social and demographic information about them is collected.

These studies contain a section of questions that are always included and are used to determine the "barometer indicators" of each survey. In addition to these questions, each barometer contains a variable question section, which each month is devoted to a specific topic of social or political interest.

Starting in May 2020, the monthly CIS Opinion Barometer has included questions about the respondent's state of health and his/her use of healthcare services in relation to COVID-19 infection, the need for additional measures to control the virus and the coronavirus vaccine.

The Opinion Barometers are part of the 2017-2020 National Statistics Plan (PEN). Conducting them is the responsibility of the CIS. Information is collected and published every month.

More information at:

https://www.cis.es/cis/opencm/ES/11_barometros/index.jsp

Healthcare Barometer

The Healthcare Barometer gathers information, through a questionnaire and direct personal interview, about citizen perceptions of the healthcare system's functioning, the impact of measures related to healthcare policy, awareness and/or attitudes with regard to health problems of particular interest at a given time and the penetration of informative campaigns. The questionnaire has a section that changes, exploring different dimensions defined for each yearly study. The classification variables are age, sex, level of education, occupation, size of municipality in which the respondent lives, his or her income level, and autonomous community in which he or she lives.

The Healthcare Barometer forms part of the 2017-2020 National Statistic Plan (PEN). Conducting the surveys is the responsibility of the Ministry of Health in collaboration with the Sociological Research Centre (CIS). The data is gathered and published on an annual basis.

More information at:

https://www.sanidad.gob.es/estadEstudios/estadisticas/BarometroSanitario/home_BS.htm

Clinical Primary Care Database

Clinical Primary Care Database (BDCAP) refers to a set of data related to the care provided at the first care level. The information is collected in a homogenous, systematic manner that also provides a time perspective, which allows the effective content of the care provided to be analysed based on primary sources, that is, the clinical records used in primary care.

The BDCAP is conceived as a population-wide database, representative at the autonomous community level, of the individuals assigned to SNS Primary Care services.

The analyses conducted focus on the user and on the health problems and related events that occur to the user over time, and on the actions taken in response.

More information at:

<http://www.sanidad.gob.es/estadEstudios/estadisticas/estadisticas/estMinisterio/SIAP/home.htm>

SNS Protected Population Database

Database containing information on the persons entitled to publicly-funded healthcare services in the SNS. It is managed by the Ministry of Health with the collaboration of the autonomous communities and administrative insurance mutuals, and it contains enough data to correctly identify each citizen and keep that person's health situation and location up to date.

The Ministry of Health is responsible for generating a Personal Identification Number (CIP-SNS) for each person, which is unique in the SNS and lasts the person's lifetime. This number, which is associated with the Individual Health Card that each autonomous community or body issues to its populace, serves as a link to any other personal healthcare-related numbers (CIP-AUT, CIP-MUT) that an individual may be assigned in different autonomous communities or by the insurance mutuals. This will allow the clinical information associated with these identification numbers to be retrieved.

More information at:

https://www.sanidad.gob.es/profesionales/hcdsns/Interop_plena_tarj_sanit.htm

National Catalogue of Hospitals

The National Catalogue of Hospitals (CNH) provides basic information about the hospitals in operation as of 31 December of each year. As a directory it contains information about the hospital (name, address, telephone number, town and municipality), total number of beds, type of facility, whether an agreement with the private sector exists, and if it is accredited as a teaching centre.

The National Catalogue of Hospitals is created by the Ministry of Health in collaboration with the competent ministries in the autonomous communities, INGESA and the Ministry of Defence. The data is gathered and published on an annual basis.

More information at:

<https://www.sanidad.gob.es/ciudadanos/prestaciones/centrosServiciosSNS/hospitales/home.htm>

Population Figures

The Official Population Figures from the National Statistics Institute (INE) provide a quantitative measure of the population residing in Spain, in each autonomous community, in each province and on each island (in the case of insular provinces), disaggregated by basic demographic characteristics such as sex, year of birth, age, nationality and country of birth. The population data series is obtained from intercensal population estimates for the period 1971-2012 and starting in 2012 from the Official Population Figures.

These data are used as the reference population data in all INE statistical operations (surveys, national accounting, indicators, etc.) and they are transmitted at the international level as Spain's official population data for all purposes.

More information at:

http://www.ine.es/inebaseDYN/cp30321/cp_inicio.htm

Centre of Management and Control COVID – Information System for the monitoring of the pandemic (CMC)

The Centre of Management and Control COVID – Information System for the monitoring of the pandemic (CMC) has as its source the data sent by hospitals every day in compliance with the regulations to this effect established in Ministerial Order SND/233/2020, of 15 March, which lays down certain information obligations as provided by Royal Decree 463/2020, of 14 March, by which the state of alarm is declared in order to manage the situation of healthcare crisis caused by COVID-19 and subsequent measures, up to and including Law 2/2021, of 29 March, on urgent measures for the prevention, contention and coordination needed to confront the healthcare crisis caused by COVID-19.

As regards content, hospitals are required to notify, every day and by unit (conventional hospitalisation and ICU), the data regarding the care capacity situation, including the total number of beds, the number of beds occupied by COVID cases and the number of COVID admissions and discharges in the past 24 hours.

Mortality by cause of death

Statistical operation performed by the National Statistics Institute (INE) in collaboration with the regional statistics institutes and the ministries with competence in health of the autonomous communities, and the Civil Registries (Ministry of Justice). It is part of the National Statistics Plan 2017-2020.

It contributes to a better understanding of the phenomenon of mortality by looking at the basic cause of death, distinguishing between late foetal deaths and others, and it provides information with which to construct health indicators. As study variables it uses deceased persons and late foetal deaths. The classification variables are cause of death, sex, age, month of death, province of residence and province in which the death occurred. The data is gathered on a monthly basis and is published annually.

More information at:

https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736176780&menu=resultados&idp=1254735573175#!tabs-1254736194710

European Survey of Health in Spain

The European Survey of Health in Spain (ESEE), conducted by the National Statistics Institute (INE), is the Spanish part of the European Health Interview Survey (EHIS), coordinated by Eurostat. The questionnaire for Spain was adapted by the INE in collaboration with the Ministry of Health in order to allow comparisons with the main indicators of the Spanish National Health

Survey, with the addition of a series of variables. The methodology used makes it possible to continue the series of the main national indicators.

It is a survey conducted every five years on households, in which health information about the population residing in Spain, aged 15 and over, is gathered by means of a common European questionnaire. This information makes it possible to plan and evaluate health care actions, both European and Spanish.

The questionnaire comprises 4 modules: sociodemographic (household and individual), health status, healthcare and health determinants.

More information at:

<https://www.sanidad.gob.es/estadEstudios/estadisticas/EncuestaEuropea/home.htm>

Spanish National Health Survey

The Spanish National Health Survey is a statistical report prepared by the Ministry of Health in collaboration with the National Statistics Institute (INE). Included in the National Statistics Plan 2017-2020, its general objective is to provide information about perceived morbidity, use of healthcare services, health behaviour and lifestyle habits, and prevention activities.

Data is gathered by means of a questionnaire and a direct personal interview and the study variables are self-assessment of health, activity limitations, use of healthcare services and medicines, lifestyle habits, healthcare coverage. The classification variables are age, sex, size of habitat, country of origin and socioeconomic status (level of education, occupation and income). The data is gathered and published every five years.

More information at:

<https://www.sanidad.gob.es/estadEstudios/estadisticas/encuestaNacional/home.htm>

Survey on Living Conditions

The Survey on Living Conditions (SLC) has been conducted since 2004. Based on harmonised criteria for all European Union countries, its main objective is to serve as a source of reference for comparative studies examining income distribution and social exclusion in Europe.

The SLC provides the European Commission with a high-quality statistical instrument for the study of poverty and inequality, the monitoring of social cohesion in its area of action, the analysis of the population's needs and the impact of social and economic policies on households and individuals, and also for the design of new policies.

More information at:

https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736176806&menu=ultiDatos&idp=1254735976608

Economically Active Population Survey

Spain's Economically Active Population Survey (EPA) is an ongoing sample-based study conducted on a quarterly basis by the National Statistics Institute (INE). It targets households and its aim is to provide data on the workforce and its various categories, and on the population not connected to the labour market. The initial sample is about 65,000 families per quarter, which equals approximately 160,000 people.

The EPA has been conducted since 1964 and the current methodology, which has been used since 2005, is harmonized with the European Union (EU).

More information at:

http://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736176918&menu=resultados&idp=1254735976595

Survey of Family Budgets

Spain's Survey of Family Budgets (EPF) provides yearly information about the nature and destination of consumer spending on goods and services in monetary terms, and also about different characteristics of the living conditions present in households. It reflects the expenditure of all private residential households in Spain and uses the ECOICOP/EPF classification of good and services, which has different levels of disaggregation, from 12 large expenditure groups to a maximum disaggregation of 5 digits. Group 06 is the one that pertains to health. The ECOICOP/EPF is an adaptation of the Classification of Goods and Services used by Eurostat for its Household Budget Surveys (COICOP/HBS).

More information at:

https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736176806&menu=ultiDatos&idp=1254735976608

Life Expectancies and Healthy Life Years in Spain

The Life Expectancy estimates have been obtained from the abbreviated life tables with five-year age groups (prepared by the Ministry of Health), the deaths occurring in the calendar year, provided by the Natural Population Movement statistics and the Official Population Figures of the resident population at mid-year, both of which are published by the National Statistics Institute (INE).

For the calculation of the Healthy Life Years estimates (prepared by the Ministry of Health) the prevalence of activity limitations, drawn from the Spanish National Health Surveys, are used.

More information at:

<https://www.sanidad.gob.es/estadEstudios/estadisticas/sisInfSanSNS/vidaSaludable.htm>

Statistics on consumption of pharmaceutical benefits through SNS prescriptions and insurance mutuals for civil servants

Statistical report included in the National Statistics Plan 2017-2020 prepared by the Ministry of Health with the participation of the health services of all the autonomous communities, INGESA, MUFACE, ISFAS and MUGEJU. It provides information about the use of medicines and health products included in SNS pharmaceutical benefits, prescribed by SNS medical prescriptions (including prescriptions by MUFACE, ISFAS and MUGEJU) and dispensed through pharmacies.

More information at:

<https://www.sanidad.gob.es/estadEstudios/estadisticas/sisInfSanSNS/medProdSanit.htm>

Statistics on consumption of medicines in SNS hospitals

Statistical report included in the National Statistics Plan 2017-2020 to provide information on the consumption of medicines in the hospitals of the National Health System of Spain (SNS), with the participation of the health services of all the autonomous communities and INGESA. The publication of the data on the Ministry of Health website began in 2017.

More information at:

<https://www.sanidad.gob.es/profesionales/farmacia/ConsumoHospitalario/home.htm>

Statistics on university students

Prepared by the Ministry of Education and Vocational Training, this statistical report provides information annually about the number of students enrolled and of graduates, as well as their

gender, age, nationality, place of usual residence, and, in the case of graduates, the marks obtained, as indicated on the academic transcript. This report is part of the National Statistics Plan (PEN) and is published annually.

The Ministry of Universities participates in the data collection process using the Integrated University Information System (SIIU), which consists of an information platform shared by universities, autonomous communities and the Ministry of Education and Vocational Training. The platform contains information at the micro level of students and personnel connected to the universities. The SIIU is structured around subject areas: academics, human resources, R+D, scholarships and grants, job placement. All these subject areas are supported with auxiliary files, which establish the framework of each area. The academic area contains information about enrolled university students and graduates.

More information at:

<https://www.ciencia.gob.es/portal/site/MICINN/menuitem.7eeac5cd345b4f34f09dfd1001432ea0/?vgnnextoid=0930dd449de8b610VgnVCM1000001d04140aRCRD>

Statistics on Public Expenditure on Health

Statistical information prepared by the Ministry of Health in collaboration with the competent ministries in the autonomous communities, MUFACE, MUGEJU, ISFAS, National Social Security Institute, Ministry of Defence and Ministry of the Interior. It is part of the National Statistics Plan 2017-2020.

The general objective of these statistics is to obtain the aggregate figure of public expenditure on health; classification by national accounting aggregates and economic, functional and by-sector classification of expenditure; territorial breakdown of public expenditure on health; and methodological approximation to OECD's system of health accounts.

The study variables of an economic nature are: employee remuneration, intermediate consumption, agreements between the SNS and private centres, current transfers, capital expenditure. As functional variables it uses: hospital and specialised services, primary care services, public health services, collective health services, pharmacy, transportation, prostheses. Its national accounting variables are: collective consumption, individual consumption, non-market production, market production. The classification variables are: services provided and agents executing the expenditure. The data is gathered and published on an annual basis.

More information at:

<http://www.sanidad.gob.es/estadEstudios/estadisticas/inforRecopilaciones/gastoSanitario2005/home.htm>

Statistics on 112/061 Urgent Care and Emergency Services

The 112/061 Urgent Care and Emergency Services hotline facilitates identification of citizens and enables them to contact the necessary services when facing an urgent healthcare need –especially emergency situations–. The services coordinate care and ensure the best possible response to the situation.

All autonomous communities have their own coordinating centre linked to the medical hotline 061, which works in conjunction with the general emergency hotline 112, although it largely maintains its own organisational structure and management.

This statistical report is prepared by the Ministry of Health in collaboration with the competent ministries in the autonomous communities and autonomous cities of Ceuta and Melilla. It is part of the Primary Care Information System (SIAP).

More information at:

<http://www.sanidad.gob.es/estadEstudios/estadisticas/estadisticas/estMinisterio/SIAP/Estadisticas.htm>

Statistics on vaccinations

Its general objective is to know more about the vaccinations administered to the population, in relation to the vaccination calendar. Study variables are type of vaccine and doses administered and the classification variable is age. The data is gathered and published on an annual basis. To obtain the percentages of coverage the definitions used are those proposed by the Vaccination Programme and Register Committee and the Public Health Commission in October of 2017. Since 2017 coverage has been calculated by birth cohorts.

Vaccination statistics are included in the official statistics inventory of the General State Administration and are the responsibility of the Ministry of Health, in collaboration with the competent ministries in the autonomous communities and autonomous cities of Ceuta and Melilla.

More information at:

<https://www.sanidad.gob.es/profesionales/saludPublica/prevPromocion/vacunaciones/calendario-y-coberturas/coberturas/home.htm>

Demographic indicators. Total, youth and old-age dependency ratios

The dependency ratio is a basic demographic indicator prepared by the National Statistics Institute (INE). The total dependency ratio is the quotient obtained by dividing the population aged under 16 or over 64 and residing in Spain as of 1 January of year "x" by the population aged between 16 and 64, expressed as a percentage.

It is an indicator with clear economic significance, as it represents the relative measure of the potentially inactive population over the potentially active population.

The youth or <16 dependency ratio is the quotient obtained by dividing the population aged under 16 and residing in Spain as of 1 January of year "x" by the population aged 16 to 64, expressed as a percentage.

The old-age or 64+ dependency ratio is the quotient obtained by dividing the population aged over 64 and residing in Spain as of 1 January of year "x" by the population aged 16 to 64, expressed as a percentage.

More information at:

<http://www.ine.es/jaxiT3/Tabla.htm?t=1453&L=0>

Health Indicators

The Ministry of Health has a state-wide system of health indicators that offers a periodic analysis of the healthcare situation in Spain as a whole and in the different autonomous communities. These indicators provide information on the magnitude of a wide variety of health problems and their evolution over time, which allows trends and geographic distribution to be properly assessed. The indicators are obtained using different sources offering relevant healthcare information, from governmental records, health surveys, notification systems to healthcare statistics. An analysis of the situation in Spain in relation to other countries of the European Union has been incorporated, which is extraordinarily valuable.

More information at:

<https://www.sanidad.gob.es/estadEstudios/estadisticas/inforRecopilaciones/indicadoresSalud.htm>

Natural Population Movement statistics

The Natural Population Movement statistics comprise the statistics pertaining to births, deaths and marriages. They are published annually by the National Statistics Institute (INE).

The Statistical Report on Births provides information on the births occurring in Spain every year.

It is prepared in collaboration with the autonomous communities, the Civil Registries being the primary source of information, which in turn comes from the Report of Birth Forms. These forms must be filled in when the demographic event is registered at the Civil Registry, by the parents, relatives or other persons required by law to report the birth, or, in its absence, by the head of the Civil Registry.

The Statistical Report on Deaths provides information on the deaths occurring in Spain every year. It is prepared in collaboration with the autonomous communities. The data comes from the Medical Certificate of Death/Report of Death Forms. This document is completed by various parties. The doctor who certifies the death fills in the sections related to personal data and the causes of death. The Civil Registry in which the death is registered completes the sections concerning the registration, while the informant or family members of the deceased provide the information regarding residence, nationality and profession of the deceased. In the case of deaths occurring in special circumstances and in which a court is involved, the information is provided by the court.

More information at:

Natural Population Movement. Statistical Report on Births

<http://www.ine.es/jaxi/menu.do?type=pcaxis&path=%2Ft20%2Fe304&file=inebase&L=0>

Natural Population Movement. Statistical report on Deaths

<http://www.ine.es/jaxi/menu.do?type=pcaxis&path=/t20/e306/&file=inebase>

Official Nomenclator of SNS pharmaceutical benefits

The Official Nomenclator of SNS pharmaceutical benefits is the database maintained by the Ministry of Health on the pharmaceutical benefits provided by the SNS.

The Nomenclator can be accessed electronically and it is available to all Public Administrations involved in the provision of SNS pharmaceutical benefits and to the General Board of Professional Associations of Pharmacists.

National Epidemiological Surveillance Network

The National Epidemiological Surveillance Network (RENAVE) of the National Epidemiology Centre (CNE), part of the Carlos III Health Institute, has among its functions that of systematically gathering epidemiological information, and then analysing, interpreting and publishing the results. Its ultimate objective is to monitor transmissible diseases in order to reduce their incidence in the community. The surveillance carried out by RENAVE entails both the notification and epidemiological research of cases and outbreaks of transmissible diseases. The cases of diseases subject to epidemiological surveillance are notified to the competent authorities at the different territorial levels. RENAVE notification protocols establish standardised declaration methods and case definitions, so the declaration of cases to the CNE by the various autonomous communities takes place in a homogenous fashion. The CNE then aggregates, analyses and disseminates the information. The case definitions are those that have been approved by the European Commission and adopted for their inclusion in RENAVE protocols. Finally, the CNE is responsible for informing the European Centre for Disease Prevention and Control (ECDC) of any diseases that are the object of surveillance in the European Union.

More information at:

<https://www.isciii.es/QueHacemos/Servicios/VigilanciaSaludPublicaRENAVE/Paginas/default.aspx>

Register of Specialised Care Activity

Statistical use of the Register of Specialised Care Activity (RAE-CMBD) is the responsibility of the Ministry of Health, working in collaboration with the competent ministries in the autonomous communities and INGESA and it forms part of the National Statistics Plan 2017-2020. The statistical operations seek to provide a better understanding of processes related to hospitalisation

(diagnosis, comorbidity, type of care and type of process) involving both inpatients and outpatients receiving care at hospitals. The study variables are dates of admission and discharge, main and secondary diagnosis, diagnostic and therapeutic procedures, destination and situation upon discharge, key elements of the patient's health and hospital records, and how the care is financed. The classification variables are age, sex, place of residence, place of hospitalisation. The data is gathered and published on an annual basis.

More information at:

<http://www.sanidad.gob.es/estadEstudios/estadisticas/cmbdhome.htm>

National Register of Specialists in Training

The National Registry of Specialists in Training depends on the Ministry of Health. The names of persons given a place in a specialised training programme are added to the Register, once their slot has been assigned to them. The annual evaluations and final evaluations of the specialists in training are also recorded, along with any incidents related to suspension or completion of the training. The National Register of Specialists in Training makes it possible to effectively coordinate and monitor the specialised training received by those who have undergraduate training in the health sciences, once they have passed the corresponding access exam.

More information at:

<https://www.sanidad.gob.es/profesionales/formacion/registroEspecialistas/home.htm>

COVID-19 Vaccination Registry

The objective of the COVID-19 Vaccination Registry (REGVACU) is to oversee the strategy of vaccination against SARS-CoV-2, in compliance with the Resolution of the Directorate of Public Health, of December 16, 2020, which establishes the Information System for the oversight of vaccination against COVID-19. The registry includes the details that must be completed by each person vaccinated, such as the birth date, place of residence, type of vaccine, manufacturer, batch and also the reason for vaccination. The application allows the data to be processed for statistical purposes and also makes it possible to create a geographical representation of the data. In addition, the processed data will enable certificates to be issued at the request of the concerned party, always with the security measures put in place in the area of data protection.

State system for the collection of SARS-CoV-2 diagnostic laboratory test results

A state-wide system for collecting SARS-CoV test results (SERLAB-CoV) has been created to aid in the management of the COVID-19 pandemic. Its objective is the early identification, and geographic localisation, of new positive cases, thus providing essential information for the rapid and effective coordination of actions between autonomous communities and also between the state and autonomous communities.

The system is updated with the information provided every day by the autonomous communities, the autonomous cities of Ceuta and Melilla, and INGESA, and also by the Carlos III Health Institute and the Ministry of Defence, bodies that have previously collected the data from the public and private laboratories that perform diagnostic testing.

SERLAB-CoV makes it possible to analyse the information both as a whole and disaggregated by territory, by autonomous community, province, municipality or zip code. The geographical representation of the data can be viewed on maps. The analyses can be performed from two perspectives, that of the tests conducted and also that of the persons who have been tested.

System of Health Accounts

The System of Health Accounts is a set of statistical operations that has been used in Spain since 2005. The unit responsible for performing the operations is the Subdirector General of the Basic Basket of SNS Services and Compensation Funds, attached to the Ministry of Health. The Spanish System of Health Accounts, which adheres to the guidelines set forth in *A System of Health Accounts* published in 2000 by the OECD, is based on a tri-axial framework, from which a structure of accounts and classifications is created: functions, providers and funding sources. The functional classification distinguishes between basic functions and related functions. Only expenditures in the former are considered to generate total health expenditure. Expenditures in the training of healthcare personnel and in research and development in the area of health, which are considered related functions, are excluded from the total health expenditure. However, health expenditure includes expenditure on care for dependent persons when such care is strictly health-related. It also includes the personal care necessary to perform the basic activities of daily life.

The main sources of information used by the Spanish system of accounts are, in the area of public expenditure, the Public Healthcare Expenditure Statistics (EGSP) and, in the area of private expenditure, the expenditure by households in final consumption of healthcare goods and services, which is provided by the National Statistics Institute, through the National Accounts. Estimates of expenditure in the area of long-term care are based on data about the utilization and cost of social services used by dependent persons published by the Institute for Social Services and the Elderly (IMSERSO) and also on data about economic benefits facilitated by the Ministry of Labour and Social Economy and the Ministry of Inclusion, Social Security and Migration.

The SHA has been adopted by the OECD, Eurostat and WHO as a frame of reference for compiling and processing health expenditure information. The data is gathered and published on an annual basis.

More information at:

<http://www.sanidad.gob.es/estadEstudios/estadisticas/sisInfSanSNS/SCS.htm>

Alcántara Information System

The Alcántara application is used by the Ministry of Health to compile data concerning pharmaceutical consumption and expenditure generated through SNS medical prescriptions dispensed in pharmacies. To generate consumption and expenditure reports, the invoicing statistics furnished by the regional health services, INGESA and insurance mutuals are processed and prescription files are validated.

Hospital Consumption Information System

The Hospital Consumption Information System processes the files documenting the consumption of medicines in the SNS hospital network. The files are provided by the regional health services and INGESA.

Specialised Care Information System. Statistics on Specialised Care Centres

The general objective of the Specialised Care Information System (SIAE) is to gather information about the care activity, the economic and teaching activities of establishments providing inpatient care (hospitals) and their structural characteristics, and also that of outpatient healthcare centres, which are the main providers of specialised care services. Having such data also makes it possible to obtain indices, show how the sector functions and monitor its development.

As study variables it uses: the care services offered, bed capacity, personnel, discharges, length of stay, consultations, admissions, diagnostic techniques, activity in other areas, surgical activity, obstetric activity, urgent care services, expenditures, investments and income. As classification variables it uses the type of specialised care centre: inpatient care (hospital), outpatient care, type of care provided, type of centre in terms of financing, legal structure, whether it has an agreement

with the SNS, and whether it is accredited as a teaching centre. The data is gathered and published on an annual basis.

This statistical operation is the responsibility of the Ministry of Health in collaboration with the competent ministries in the autonomous communities and the autonomous cities of Ceuta and Melilla. It is part of the National Statistics Plan 2017-2020.

More information at:

<http://www.sanidad.gob.es/estadEstudios/estadisticas/estHospIInternado/inforAnual/homeESCRI.htm>

Primary Care Information System of the SNS

The Primary Care Information System (SIAP) of the SNS furnishes information on personnel, activity (general and in specific benefits) and the number of SNS physical and/or functional centres the purpose of which is to provide primary care. As study variables it uses personnel, activity and the primary care centres. The data is gathered and published on an annual basis.

Preparation of the statistical report is the responsibility of the Ministry of Health in collaboration with the competent ministries in the autonomous communities. It is part of the National Statistics Plan 2017-2020.

More information at:

<http://www.sanidad.gob.es/estadEstudios/estadisticas/estadisticas/estMinisterio/siap.htm>

Information System for the Monitoring of Reference Centres, Services and Units

The data in the Information System for the Monitoring of Reference Centres, Services and Units (SISCSUR) comes from the patient registers that each CSUR is required to maintain. This system allows for the annual monitoring of activity designation criteria as well as procedure indicators and outcomes, with a view to improving standards and detecting deviations in CSUR functioning. The standard used in this process is the activity designation criterion agreed upon by the Interterritorial Council of the SNS (CISNS).

More information at:

<http://www.sanidad.gob.es/profesionales/CentrosDeReferencia/home.htm>

SNS Waiting List Information System

The SNS Waiting List Information System (SISLE) furnishes information on the number of patients waiting for programmed surgery and the number of patients waiting for a specialised care consultation at the time of the data cut. Data collection follows the criteria laid down in Royal Decree 1039/2011, of 15 July, which establishes framework criteria to ensure that healthcare benefits can be accessed within a reasonable period, so that such access occurs under conditions of effective equality.

Data is published twice yearly, once the Interterritorial Council of the SNS has been informed of the data and has approved publication. The data cuts are December 31st and June 30th of each year.

More information at:

<https://www.sanidad.gob.es/estadEstudios/estadisticas/infor.rRecopilaciones/listaEspera.htm>

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