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1 Introduction

The Health Report is an annual commitment of the Ministry of Health in response, first, to the need to make information available periodically on the main public health indicators and, second, to the desire for transparency and accountability. The purpose of this document, therefore, is to present the most recent health figures, which should enable an overall evaluation of public health in Catalonia, as well as exhaustive monitoring of progress with the health targets set by the Health Plan for Catalonia 2011-2015. The intention is also for each report to highlight one aspect of health or health-related issue considered particularly important in the circumstances prevailing as the report is being written.

The health status of a population is one of the main indicators of the level of a society's development and its citizens' degree of well-being, as well as a measure of its potential for growth and progress in the future. The Health Plan for Catalonia 2011-2015 set a whole series of targets – considered achievable – for public health and well-being, and for policies relating to healthcare actions and to transforming the public healthcare system, which affect the organisation of care services and the way they are provided. However, it recognises the importance of other sectors of activity for the state of public health, so it calls for intersectoral action through the promotion of interministerial policies, by means of the Interministerial Public Health Plan (PINSAP).

It should therefore be no surprise that the single-subject part of the 2013 Health Report focuses on the evaluation of various health indicators according to different levels of social position, measured on the basis of social class and educational level. This information has too often been absent from the majority of sources of systematic information on healthcare systems, but it is gradually starting to become available. Specifically in relation to Catalonia, all the information from the Health Survey of Catalonia (ESCA) can be assessed on the basis of these social-condition variables successively since 1994 and now, thanks to continuous ESCA, this can be done every year.

This report brings together a range of indicators considered fundamental, since they seek to give an overview, from the perspective of the whole of Catalonia, of changes over time and of certain socio-demographic characteristics of its people. It also contains monitoring of changes to indicators relating to the health targets of the Health Plan for Catalonia to be achieved by 2015 and 2020; the aforementioned single-subject chapter on social inequalities; and some particularly noteworthy examples of the Ministry of Health's work over the last year.

This Health Report is intended to be useful and to show, not just changes to health indicators, but also how health is distributed across each of the population groups that need to be considered to ensure the equity of the Ministry's actions. We hope that you find the content of the report interesting and useful; it has involved the participation and cooperation of a group of professionals from a variety of fields, who must be thanked for their contribution, which is added to the joint effort to maintain and improve Catalonia's collective health.

2 Executive summary

The health indicators for Catalonia's population show that mortality, life expectancy and self-perceived health alike have been moving in the right direction in recent years. However, as is to be expected in a country with one of the highest life expectancies and a well-established healthcare system, more than a third of adults suffer chronic diseases that, in many cases, lead to various levels of disability and, in almost 1 out of 10 people, a certain level of dependence.

The incidence rates of tuberculosis and AIDS are continuing their downwards trends of the last few years. However, sexually transmitted infections remain a major public health problem. A smaller number of epidemics have been detected than in previous years and the influenza intensity was moderate in 2013. Environmental indicators (atmosphere, water, food) show similar levels to those of previous years, with reduced levels of particulate matter up to 10 microns in size (PM10) compared with 2012, and a generally high level of legislative compliance. The main causes of mortality remain tumours in men and circulatory system conditions in women.

As regards health-related lifestyle issues, 2 out of 3 people partake in a healthy level of physical activity, but there is still a long way to go before the recommended fruit and vegetable consumption levels are reached. Risky alcohol consumption has remained very stable and the steady decline in tobacco consumption deserves to be highlighted. The majority of preventive practices remain at high levels, especially mammograms to screen for breast cancer. Use of services continues to show a high level of general practice use, a slight decline in recourse to emergency departments, and reduced medicine use. Satisfaction with the services received remains high.

The report also shows some health indicators by region. It should be stressed that no distribution pattern can be detected that systematically shows any of the regions to be at a disadvantage. What can be detected, however, are significant differences in the values of various self-perceived health and lifestyle indicators between men and women, and between the working and unemployed adult populations.

Studying the indicators by social class and educational level shows a gradient that tends to favour the better-off classes and groups with a higher educational level. When consideration is given to changes in indicators by social class and education, distributions tend to be more homogenous, but that cannot be generalised to all indicators. Health indicators for the child population are positive; however, while there has been progress recently, the eating habits, sedentary leisure habits, and prevalence of overweight and obesity amongst children remain worrying.

Monitoring of indicators relating to the health targets of the Health Plan for Catalonia shows that 2 out of 3 are on track to be achieved, but 10 of the 27 require further work in order for the goals to be reached. It is hoped that the intensive implementation of initiatives like master plans, such as the Mental Health and Addictions Master Plan (PDSMiA) that this report highlights, the Interministerial Public Health Plan (PINSAP), the Chronicity Prevention and Care Programme (PPAC) and the Interministerial Plan for Health and Social Care and Interaction (PIAISS) will contribute to achieving these goals.

3 Context

Catalonia's population has experienced an uneven growth rate in recent decades. In 1981-2000, the population went from 5,956,414 to 6,261,999 inhabitants, and it aged significantly, with the proportion of those aged 65 and over going from 11.2% to 17.4%. Following the latest census, the Catalan Institute of Statistics (Idescat) estimates the population, as of 1 January 2014, at 7,438,696, of whom 3,653,723 are men and 3,784,973 are women. Growth by over a million people during the course of the 21st century should be attributed, in varying degrees, to all demographic events. Despite reaching high levels, life expectancy has not stopped increasing; immigration has reduced the average age of the population and had a significant impact on the higher birth rate; and the number of children per woman was 1.39 in 2012, after a maximum of 1.53 per woman in 2008.

For the second consecutive year, however, Catalonia's population has declined, specifically by a little over 40,000 during the course of 2013. Idescat's recent population and demographic-event figures show that we have entered a new phase. First, the birth rate has been decreasing since 2008, both because of declining fertility and because of a lower number of women of fertile age; moreover, although life expectancy is continuing its upwards trend, the rate of increase has slowed. As a consequence, natural growth remains positive (births are exceeding deaths), but the difference is increasingly small. In the coming years, it must be expected that the birth rate will continue to decline, both because of reduced fertility (caused in part by the departure of foreign women, with a higher fertility rate than native Catalans), and because the generations of childless women born in the 1980s and 1990s have reached the age of motherhood. Second, net migration was negative in 2012, with 156,418 people emigrating from Catalonia, while 146,612 arrived from outside. Finally, people aged 65 and over represented 17.9% of the total population in 2013, and the ageing of the population is expected to continue increasing in the coming years.¹

This demographic decline is part of the first of the three simultaneous crises described in the *Pla de govern 2013-2015* ('Government Plan 2013-2016'), which form the basis of the seven pillars, some of which directly or indirectly affect the social determinants of public health: pillar 1, economic recovery and job creation; pillar 2, social cohesion and public services; pillar 4, sustainability and stability of the public finances; pillar 5, streamlined, transparent government; and pillar 6, sustainable development and territorial cohesion.²

Part One

- **Life expectancy and healthy life expectancy**
- **How we assess our health**
- **What health problems we have**
- **How our environment affects us**
- **What we do for our health**
- **What we die of**
- **The territory**
- **Situations of vulnerability**
- **Evolution over time**

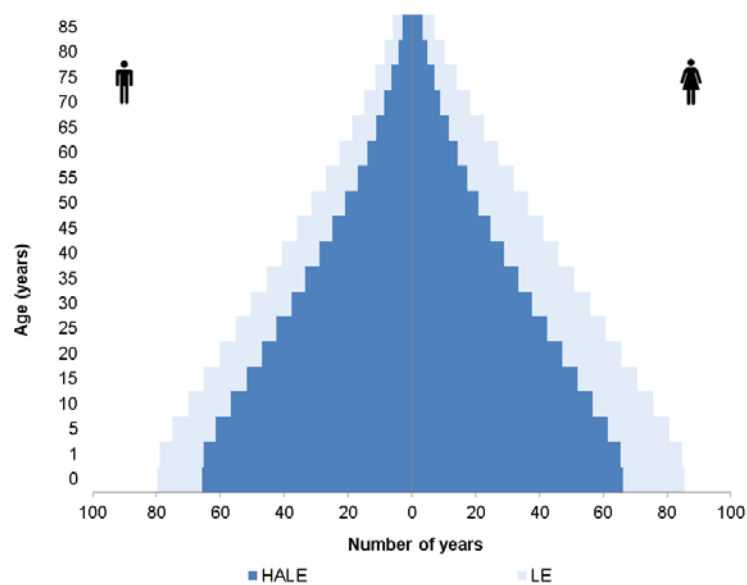
4 Life expectancy and healthy life expectancy

Life expectancy (LE) and healthy life expectancy (HALE) are health indicators measuring duration and quality of life. They are interpreted as the time that we could expect to live in reaching a given age and how healthy we would be during those years (if risks of mortality and the proportion of good self-perceived health did not change, in each of the age and sex groups).

In Catalonia, LE at birth in 2012 was 79.8 years for men and 85.4 years for women, following the slightly upwards trend of previous years; this improvement can also be seen in the majority of age groups. Although there remain differences between the sexes, mortality in Catalonia is similar to the Spanish average and above the European average.

In 2012, HALE at birth was 65.7 years for men and 66.2 years for women, representing 82.3% and 77.5% of life expectancy for each sex, respectively. This means that men's lives are shorter than those of women, but a higher proportion of their lives is spent in good health than those of women, in whom this proportion is smaller (figure 1).

Figure 1. Life expectancy (LE) and healthy life expectancy (HALE) by sex and age. Catalonia, 2012

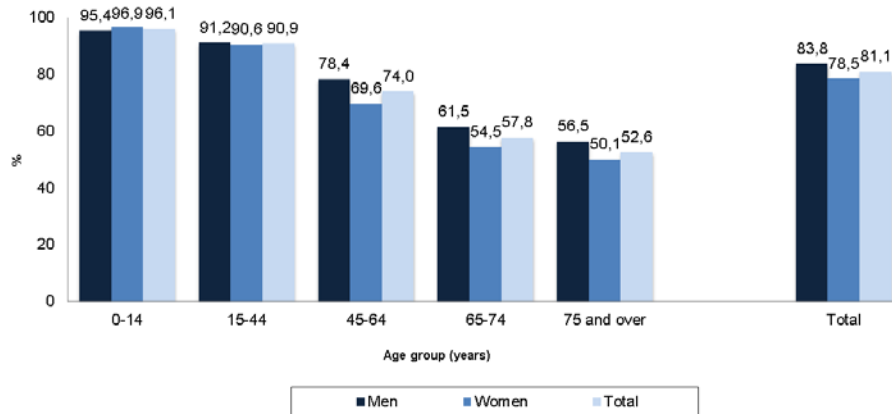


Source: RMC 2012, ESCA 2013. Ministry of Health.

5 How we assess our health

In Catalonia, people generally have a positive assessment of their health status. In 2013, 8 out of 10 people perceived their own health as excellent, very good or good. Self-perceived health is worse in women, and as age increases in both sexes (figure 2).

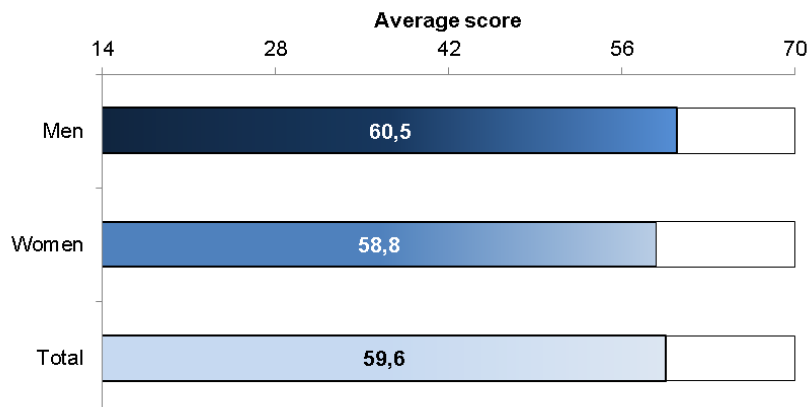
Figure 2. Positive (excellent, very good or good) self-perceived health status in the general population, by age group and sex. Catalonia, 2013



Source: Health Survey of Catalonia (ESCA) 2013. Ministry of Health.

From the point of view of positive mental health or mental well-being, on a scale of 14-70 points, the average level of mental well-being of the Catalan population aged 15 or over is 59.6 points, higher in men. The Catalan population demonstrates a satisfactory level of mental well-being in comparison with the Scottish population, used as a benchmark, which achieved an average score of 49.9 in 2010³ (figure 3).

Figure 3. Average score of mental well-being in population aged 15 and over, by sex. Catalonia, second half of 2013



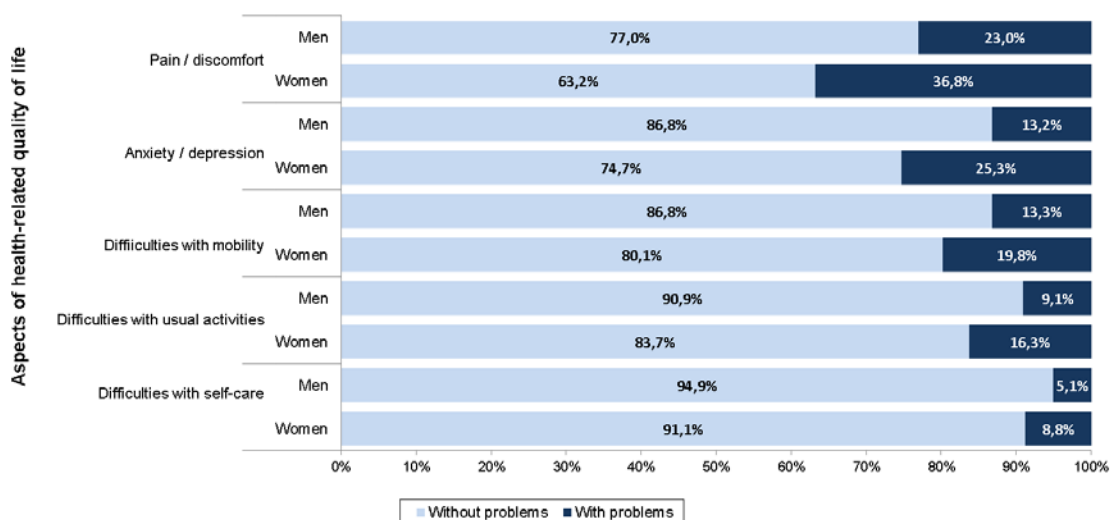
Source: Health Survey of Catalonia (ESCA), second half of 2013. Ministry of Health.

6 What health problems we have

6.1 Health-related quality of life

The quality of life of 4 out of 10 adults is affected by their suffering a health condition. The most common problems are pain and discomfort, suffered by 30.0% of the adult population, anxiety and depression, suffered by 19.5%, and difficulties walking, suffered by 16.6%. All these problems affect proportionally more women than men (figure 4).

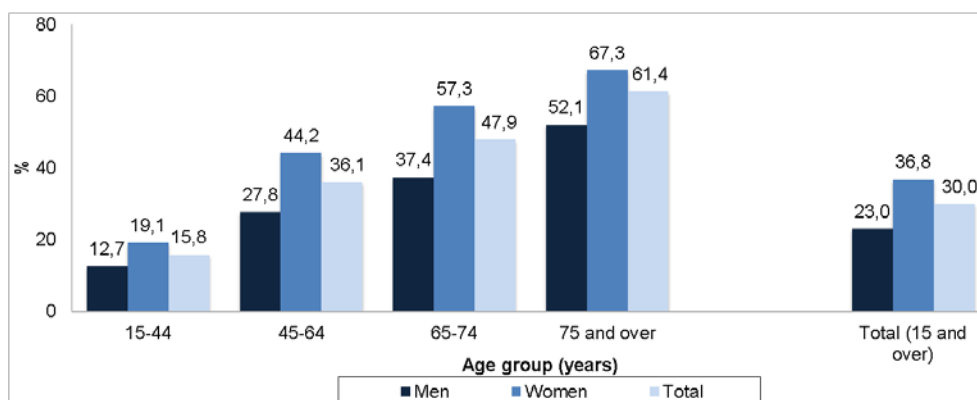
Figure 4. Adult population with health problems affecting quality of life, by sex. Catalonia, 2013



Source: Health Survey of Catalonia (ESCA) 2013. Ministry of Health.

The older the age group, the greater the percentage of the population aged 15 and over with problems of pain or discomfort (figure 5).

Figure 5. Population aged 15 and over with problems of pain or discomfort (EQ-5D-5L), by age group and sex. Catalonia, 2013

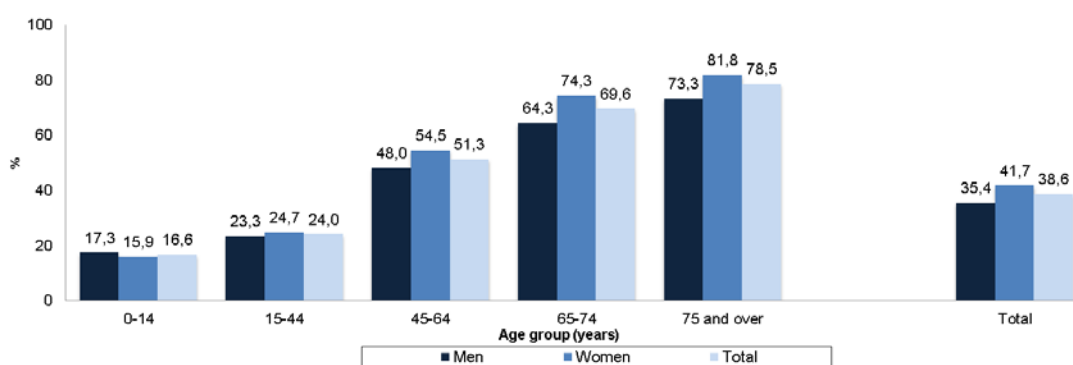


Source: Health Survey of Catalonia (ESCA) 2013. Ministry of Health.

6.2 Chronic conditions

Of the general population, 38.6% suffer from a **chronic disease or health condition**^a (35.4% of men and 41.7% of women).⁴ The older the age group, the higher the percentage of the population suffering a chronic disease; it is also greater in women of all age groups, except the group aged 0-14 (figure 6). The percentage of the adult population suffering from a chronic illness or health condition is almost identical for Catalonia (42.6%; 39.0% of men and 46.1% of women) as for Spain (42.5%; 37.8% of men and 46.9% of women; ENSE 2011-2012).

Figure 6. General population suffering from a chronic disease or health condition, by age group and sex. Catalonia, 2013



Source: Health Survey of Catalonia (ESCA) 2013. Ministry of Health.

In relation to **chronic problems that the adult population suffers or has suffered**,^b the percentage is 78.0% of the population aged 15 and over (72.8% of men and 82.9% of women). The distribution of conditions varies according to age and sex (table 1).

Table 1. Main chronic conditions that the population aged 15 and over suffer or have suffered, by age group and sex. Catalonia, 2013

Table 1. Main chronic conditions that the population aged 15 and over suffer or have suffered, by age group and sex. Catalonia, 2013							
Men							
Aged 15-44		Aged 45-64		Aged 65-74		Aged 75 and over	
Chronic allergies	15,6%	High cholesterol	34,8%	Hypertension	61,5%	Hypertension	70,1%
Chronic lumbar or dorsal back pain	14,4%	Hypertension	34,0%	High cholesterol	43,2%	Cataracts	60,1%
Frequent migraine or headache	12,8%	Chronic lumbar or dorsal back pain	32,6%	Chronic lumbar or dorsal back pain	41,3%	Prostatitis	50,6%
Chronic cervical back pain	12,4%	Osteoarthritis, arthritis or rheumatism	26,7%	Osteoarthritis, arthritis or rheumatism	41,0%	Osteoarthritis, arthritis or rheumatism	49,6%
High cholesterol	11,0%	Chronic cervical back pain	21,0%	Prostatitis	35,6%	High cholesterol	41,7%
Women							
Aged 15-44		Aged 45-64		Aged 65-74		Aged 75 and over	
Frequent migraine or headache	23,4%	Chronic lumbar or dorsal back pain	44,4%	Osteoarthritis, arthritis or rheumatism	65,4%	Osteoarthritis, arthritis or rheumatism	76,0%
Chronic cervical back pain	21,7%	Osteoarthritis, arthritis or rheumatism	43,4%	Hypertension	59,3%	Hypertension	73,8%
Chronic lumbar or dorsal back pain	21,2%	Chronic cervical back pain	41,1%	High cholesterol	52,2%	Cataracts	64,0%
Anaemia	19,6%	Depression / anxiety	34,3%	Chronic lumbar or dorsal back pain	51,0%	Chronic lumbar or dorsal back pain	57,9%
Chronic allergies	15,8%	Varicose veins in legs	32,2%	Chronic cervical back pain	44,2%	Chronic cervical back pain	48,1%

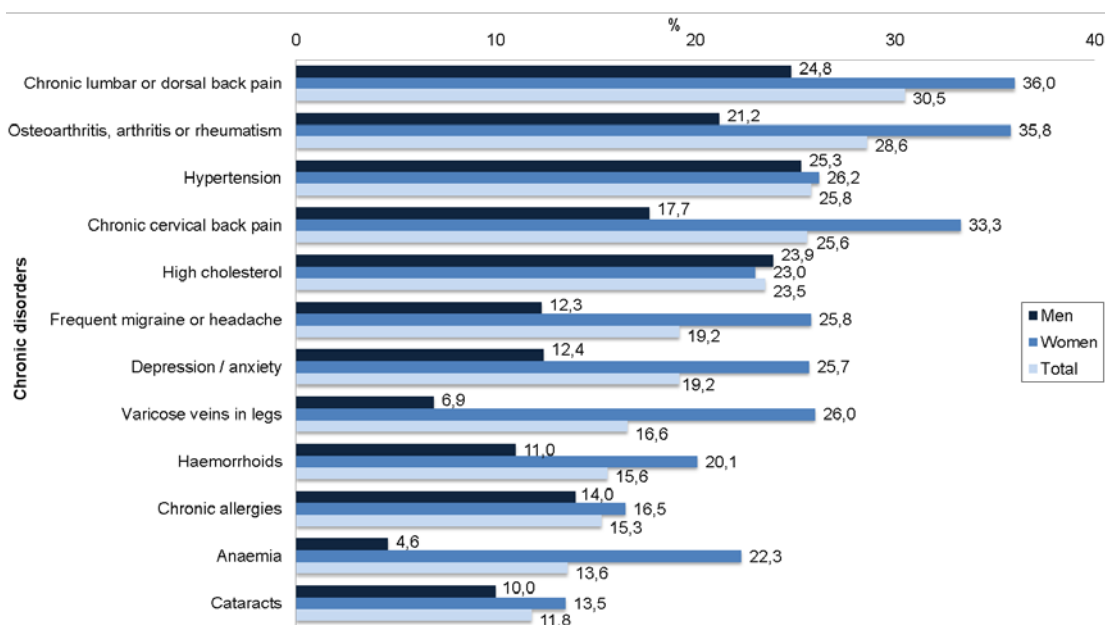
Source: Health Survey of Catalonia (ESCA) 2013. Ministry of Health.

^a 'Chronic condition' is understood to mean any that has lasted or is expected to last six months or more (Minimum European Health Module).

^b The ESCA asks respondents whether they 'suffer or have suffered' from a list of 28 health conditions.

The most common chronic conditions in the adult population are musculoskeletal system disorders, circulatory system disorders, migraine, depression or anxiety, and chronic allergies (figure 7).

Figure 7. Main chronic conditions that the population aged 15 and over suffer or have suffered (with a prevalence of above 10%) based on a list of 28 chronic conditions, by sex. Catalonia, 2013

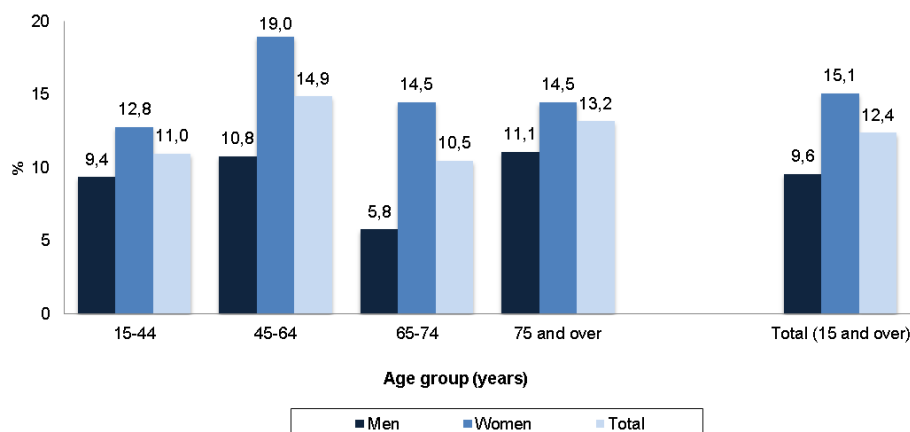


Source: Health Survey of Catalonia (ESCA) 2013. Ministry of Health.

6.3 Mental disorders

Of the population aged 15 and over, 12.4% are at risk of suffering a mental disorder⁵ (9.6% of men and 15.1% of women). Mental disorder is more prevalent in women than men across all age groups (figure 8).

Figure 8. Population aged 15 and over at risk of suffering a mental disorder (Goldberg), by age group and sex. Catalonia, 2013

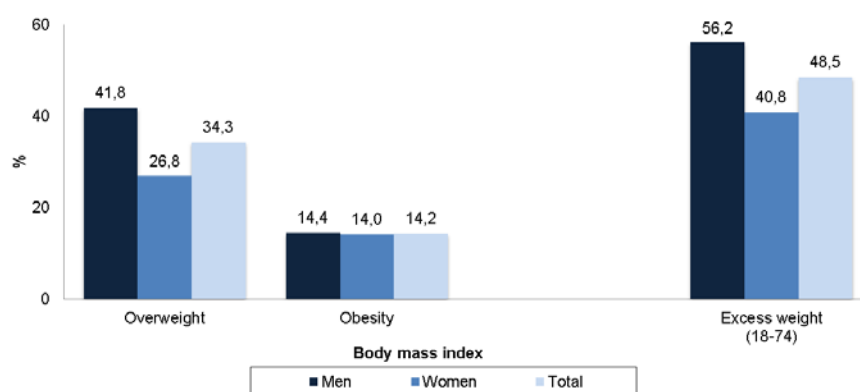


Source: Health Survey of Catalonia (ESCA) 2013. Ministry of Health.

6.4 Excess weight

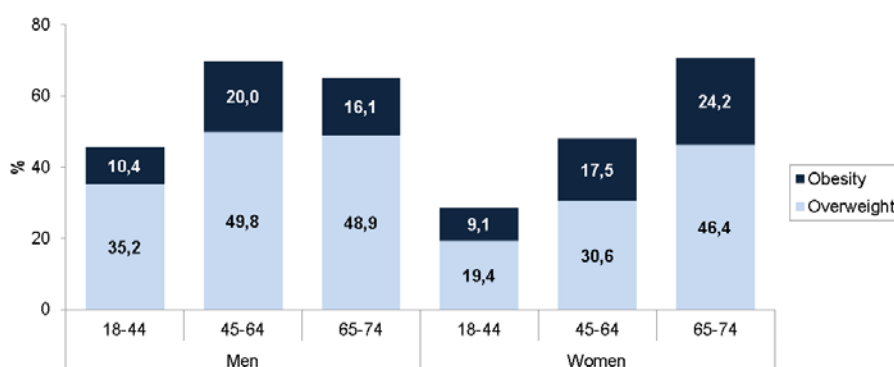
Excess weight, meaning the **overweight** and **obesity** categories combined, is a problem with a major impact on the health status. Almost half the population aged 18-74 (48.5%) carry excess weight (since they are either overweight or obese); 34.3% are overweight and 14.2% obese. More men (41.8%) are overweight than women (26.8%), and similar numbers are obese from both sexes (14.4% of men and 14.0% of women; figure 9). The older the age group, the more people there are who are overweight and obese in both sexes, but especially women (figures 9 and 10).

Figure 9. Distribution of body mass index (BMI)* categories for adults carrying excess weight aged 18-74, by sex. Catalonia, 2013



Source: Health Survey of Catalonia (ESCA) 2013. Ministry of Health.
* BMI obtained from stated weight and height.

Figure 10. Distribution of body mass index (BMI)* categories for adults carrying excess weight aged 18-74, by age group and sex. Catalonia, 2013



Source: Health Survey of Catalonia (ESCA) 2013. Ministry of Health.
* BMI obtained from stated weight and height.

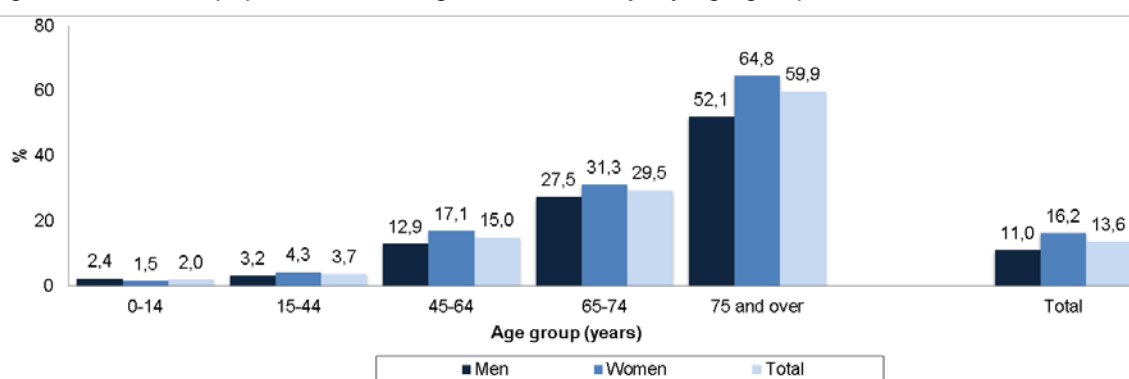
In the European Union, on the basis of 2010 figures, 52% of the adult population carry excess weight, with 16.6% obese (16.6% of men, 16.5% of women).

6.5 Disabilities

Of the general population, 13.6% suffer from a disability. In the population aged 0-14, 2.0% of people have a disability, while 15.7% of the population aged 15 and over are disabled (18.8% of women and 12.6% of men). The older the age group, the more common disabilities are (figure 11 and table 2).

The main disabilities suffered by the population aged 15 and over are similar for men and women, and relate to significant obstacles to movement (11.3%), walking problems (6.7%) and severe difficulties carrying out household chores (5.5%). All forms of disability, except for serious speech problems, are more common in women than men.

Figure 11. General population suffering from a disability, by age group and sex. Catalonia, 2013



Source: Health Survey of Catalonia (ESCA) 2013. Ministry of Health.

Table 2. Estimate of the number of cases with a disability, by age group and sex. Catalonia, 2013

Age group	Prevalence			Estimated number of cases 2013*		
	Men	Women	Total	Men	Women	Total
0-14	2.4	1.5	2.0	15,000	9,000	23,000
15-44	3.2	4.3	3.7	52,000	66,000	118,000
45-64	12.9	17.1	15.0	124,000	168,000	292,000
65-74	27.5	31.3	29.5	81,000	105,000	186,000
75 and over	52.1	64.8	59.9	139,000	275,000	414,000
Total	11.0	16.2	13.6	411,000	622,000	1,033,000

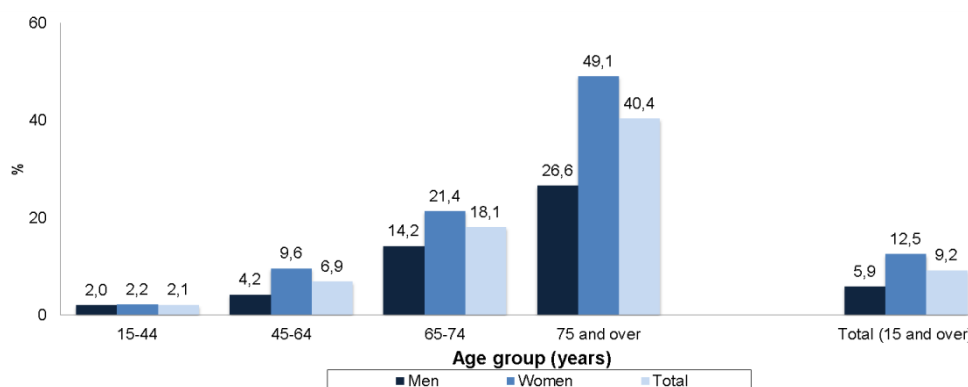
* Reference population on 1 January 2013. Estimated number of cases, rounded to nearest thousand.

Source: Health Survey of Catalonia (ESCA) 2013. Ministry of Health.

6.6 Dependence

Some 593,000 people, 9.2% of the population aged 15 and over (5.9% and 12.5% of women), are in a situation of dependence, meaning they need the help or company of other people to carry out activities of daily living because of a health condition. Of the adult population, 4.7% need help or company on a regular basis and 4.5% on an isolated basis (figure 12 and table 3).

Figure 12. Adult population in a situation of dependence, by age group and sex. Catalonia, 2013



Source: Health Survey of Catalonia (ESCA) 2013. Ministry of Health.

Table 3. Adult population in a situation of dependence, by age group and sex. Catalonia, 2013

Age group	Prevalence			Estimated number of cases 2013*		
	Men	Women	Total	Men	Women	Total
15-44	3.2	4.3	3.7	33,000	33,000	66,000
45-64	12.9	17.1	15.0	40,000	94,000	134,000
65-74	27.5	31.3	29.5	42,000	72,000	114,000
75 and over	52.1	64.8	59.9	71,000	209,000	280,000
Total	11.0	16.2	13.6	186,000	407,000	593,000

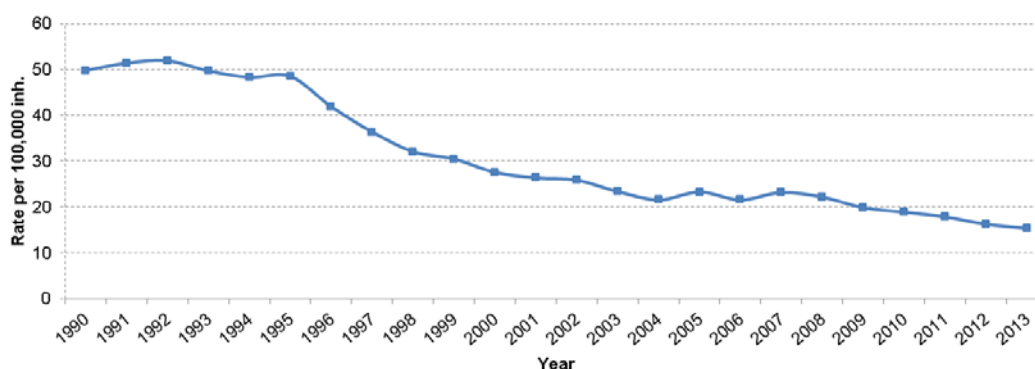
* Reference population on 1 January 2013. Estimated number of cases, rounded to nearest thousand.

Source: Health Survey of Catalonia (ESCA) 2013. Ministry of Health.

6.7 Communicable diseases

In 2013, there were 1,162 reported cases of tuberculosis (TBC) in residents of Catalonia, a rate that equates to 15.4 cases per 100,000 inhabitants, 5% less than the year before (figure 13). Of these cases, 58.9% are men and 41.1% are women, with rates of 18.4 and 12.5 per 100,000 inhabitants, respectively; 49.1% are in people born outside Spain and 50.9% are in natives, with rates of 43.1 and 9.5 per 100,000 inhabitants, respectively. TBC cases are not evenly spread across Catalonia: 69.2% are concentrated in the Barcelona Health Region and 28.4% in the city of Barcelona.

Figure 13. Evolution of tuberculosis incidence rate. Catalonia, 1990-2013

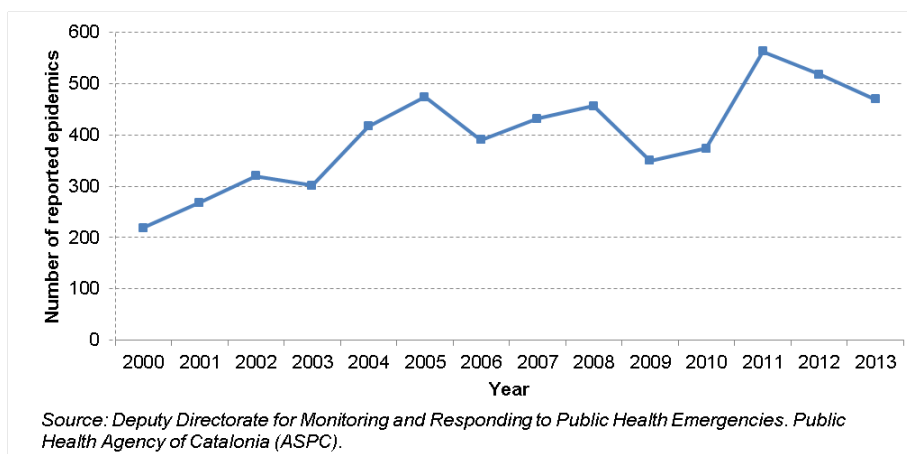


Source: Epidemiological Repository of Catalonia (REC) for tuberculosis. Public Health Agency of Catalonia

Sexually transmitted infections (STIs) continue to represent a significant public health problem in terms of morbidity and mortality from the complications and consequences they can cause if not properly diagnosed and treated. In 2013 (provisional figures), there were 566 **HIV** diagnoses reported in Catalonia, with a diagnosis rate of 7.8 cases per 100,000 inhabitants. As regards **AIDS**, the downwards trend has continued, with 130 cases reported and an incidence rate of 1.6 cases per 100,000 inhabitants (1.7 in 2012). The most common STIs in 2013 were warts and condylomata from the **human papillomavirus**, with 93.2 cases per 100,000 inhabitants (75.9 in 2012), followed by genital infection caused by the **herpes simplex virus**, with 36.9 cases per 100,000 inhabitants (29.6 in 2012). The most common infections that can be treated with antibiotics (bacterial origin) were **gonorrhoea** (12.7 cases per 100,000 inhabitants in 2013 and 11.3 in 2012), **trichomoniasis** (11.7 cases per 100,000 inhabitants in 2013 and 10.9 in 2012), **syphilis** (11.1 cases per 100,000 inhabitants in 2013 and 10.3 in 2012) and **chlamydia** (11.1 cases per 100,000 inhabitants in 2013 and 12.4 in 2012). In 2013, only 58 cases of **lymphogranuloma venereum** were diagnosed, representing a rate of 0.8 cases per 100,000 inhabitants, 20.0% lower than observed in 2012.⁶

During 2013, there were 470 **epidemics** reported, almost 10% less than in 2012. Very high figures were recorded for outbreaks of whooping cough, although a considerable increase had already been recorded in recent years. Food poisoning outbreaks increased slightly compared with the year before, although the low levels observed in recent years continued. During 2013, there was a measles epidemic that caused a total of 47 cases; within this outbreak, once the relevant genetic research had been conducted, three chains of infection were detected, started by several cases imported from other countries. In all of the outbreaks together, a total of 3,010 people were affected, 260 of whom had to be hospitalised and two of whom died (figure 14).

Figure 14. Epidemics reported in Catalonia, 2000-2013



In 2012, the microorganisms most commonly implicated in enteritis were *Campylobacter* and *Salmonella*. There were 3,143 cases of *Campylobacter* and 2,219 of *Salmonella* reported, with an incidence rate of 41.5 cases per 100,000 inhabitants and 29.3 per 100,000 inhabitants, respectively. The rate for *Campylobacter* is very similar to that for 2012, while the *Salmonella* rate is higher. The provisional 2013 figures reflect an increase in cases caused by both microorganisms (47.3 per 100,000 inhabitants for *Campylobacter* and 29.9 per 100,000 inhabitants for *Salmonella*).

As regards **vaccine-preventable diseases**, 53 cases of **measles** were recorded during 2013 (incidence rate of 0.7 per 100,000 inhabitants) as a result of importing cases from other autonomous communities and various European countries. No cases of rubella were detected; nor were any cases of congenital rubella syndrome reported or identified by active searching. There were 14 cases recorded with clinical symptoms compatible with **flaccid paralysis** in those aged under 15 (incidence rate of 1.01 per 100,000 inhabitants), who tested negative for poliovirus. As for mumps, 606 cases were reported (8.0 cases per 100,000 inhabitants). The 2013 level of **mumps** decreased in comparison with that recorded in 2012 (8.6 and 8.0 cases per 100,000 inhabitants), but it is significantly higher than the previously recorded rate. **Whooping cough** remains at epidemic levels, albeit lower than those recorded in 2011. The incidence rate in 2013 was 13.2 cases per 100,000 inhabitants, while the rate for 2011 was 20.8 per 100,000 inhabitants. Incidences of **hepatitis A** continued with the downwards trend that has begun over the last few years: in 2013, there was a rate of 1.4 per 100,000 inhabitants, slightly lower than the rate recorded in 2011 (1.6 cases per 100,000 inhabitants). **Hepatitis B** was unchanged, with the same incidence rate as 2012 (1.4 cases per 100,000 inhabitants). Invasive disease from *Haemophilus influenzae type b* was unchanged in 2013, in comparison with the last few years (0.05 cases per 100,000 inhabitants).

Invasive pneumococcal diseases^a presented an incidence rate slightly below that of 2012 (12.3 cases per 100,000 inhabitants in 2013 and 13.4 cases per 100,000 inhabitants in 2012). In children aged under 5, the incidence rate declined by 33.7% compared with 2012 (25.2 cases per 100,000 inhabitants in 2013 and 38.0 cases per 100,000 inhabitants in 2012).

Monitoring of **influenza** through the Information Plan for Acute Respiratory Infections in Catalonia (PIDIRAC) has shown that influenza levels in Catalonia over winter 2013-2014 were at a moderate intensity.

As regards epidemiological monitoring of **congenital Chagas disease**, in 2012, 163 pregnant women were notified that they had tested positive for *Trypanosoma cruzi*, 134 of whom (82.2%) were of Bolivian origin. In 2012, there were 153 babies born of mothers who had tested positive, 97 of whom (63.4%) correctly completed the monitoring with the subsequent serological test at 9 months of age. Of these, three were *T. cruzi* positive, which gives a congenital transmission rate of 3.1%, according to the provisional figures.

6.8 Which illnesses lead to consultation of a general practitioner or hospitalisation

More than half of adults consulting a general practitioner do so because of high blood pressure (34.9%) or diabetes (16.4%, table 4). Chronic conditions are also amongst the most common reasons.

Table 4. Main reasons for consulting a general practitioner amongst the adult population. Catalonia, 2013

CCS diagnosis categories	Appointments
Essential hypertension	14,130,229
Diabetes without complications	6,619,921
Chronic obstructive pulmonary disease and bronchiectasis	2,265,284
Chronic kidney failure	2,010,440
Asthma	1,954,955
Spondylosis, disorders of the inter-vertebral discs and other back pain	1,916,932
Medical examination/evaluation	1,595,262
Administrative/social admission	1,217,689
Hyperlipidaemia	1,044,043
Anxiety disorders	851,815
Others	6,871,621
Total	40,478,191

Source: General Practice Minimum Basic Dataset Register (CMBDAP) 2013. CatSalut.

^a 2013: provisional figures.

The main reasons for hospitalisation follow very similar proportions (table 5).

Table 5. Main reasons for hospitalisation amongst the general population. Catalonia, 2013

Broad CCS diagnosis group	Hospitalisations
Circulatory system disorders	117,525
Nervous system and sensory organ disorders	116,267
Digestive system disorders	110,426
Injuries and intoxication	96,241
Respiratory system disorders	95,797
Tumours	95,378
Complications with pregnancy, birth and postnatal care	87,281
Genitourinary system disorders	78,517
Musculoskeletal system and connective tissue disorders	71,730
Others	108,345
Total	977,507

Source: Hospital Minimum Basic Dataset Register (CMBDAH) 2013. CatSalut.

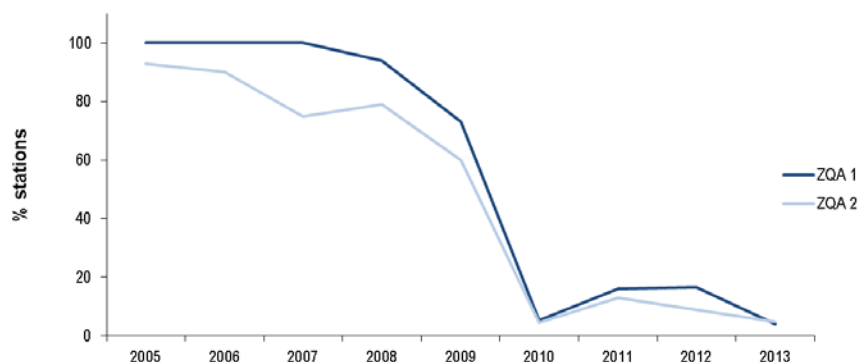
7 How our environment affects us

The environment is all the physical, chemical and biological influences that interact with people. The air we breathe, the water we drink and the food we eat affect our health and well-being. In Europe, environmental factors are considered the most important influence on illnesses, and it is estimated that they are responsible for almost 20% of deaths across the continent.

Atmospheric pollution is one of the main environmental health risks. The most significant of the pollutants affecting air quality in Catalonia are particulate matter, nitrogen dioxide and tropospheric ozone.

As regards particulate matter less than 10 microns in size (PM_{10}), figure 15 shows that, in general, 2013 levels were slightly lower than those for 2012, in terms both of averages and of times the daily limit was exceeded. The annual limit was not exceeded in 2013, but what did happen is that the daily limit was exceeded more times than is permitted (falling into the 90.4 percentile) at three measurement points in Catalonia. These points are located in air quality zones (ZQAs) 1 (Àrea de Barcelona), 2 (Vallès-Baix Llobregat) and 6 (Plana de Vic).

Figure 15. Change to the percentage of stations that exceeded the daily PM_{10} limit in the Àrea de Barcelona air quality zone (ZQA1) and the Vallès-Baix Llobregat air quality zone (ZQA2), 2005-2013

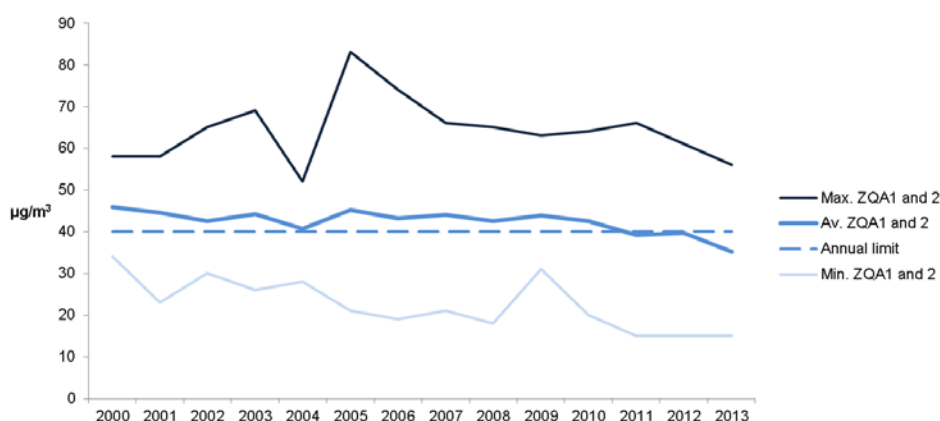


Source: 30 years monitoring and improving air quality in Catalonia. Yearbook 2013. Ministry of Territory and Sustainability.

As regards tropospheric ozone, 79 hours above the threshold for informing the public were recorded in the whole of 2013. These figures are similar to those for 2012 and slightly above the average for recent years. The thresholds were exceeded at 11 out of 49 measurement points. The ZQAs in which the threshold for informing the public was exceeded are: Àrea de Barcelona, Vallès-Baix Llobregat, Camp de Tarragona, Plana de Vic, Maresme, Comarques de Girona, Alt Llobregat and Pirineu Oriental. On the other hand, the warning threshold was not exceeded at all in 2013.

As regards nitrogen dioxide, the number of times the hourly limit set for NO₂ was exceeded in 2013 remained within the permitted range (legislation permits this hourly limit to be exceeded at a given point up to 18 times per year). As regards the annual limit, it was exceeded in ZQA1 (at 17% of measurement points) and in ZQA2 (at 50% of measurement points). The trend over the last few years has been towards great stability, although it points to a very slow decline (figure 16).

Figure 16. Change to the annual NO₂ average, in µg/m³, in the Àrea de Barcelona (ZQA1) and Vallès-Baix Llobregat (ZQA2). 2000-2013



Source: 30 years monitoring and improving air quality in Catalonia. Yearbook 2013. Ministry of Territory and Sustainability.

As regards drinking water, the results of the analyses conducted in 2012 show a high level of legislative compliance amongst the various supply networks and zones in Catalonia. In relation to microbiological contaminants, some parameters were exceeded, but in isolated situations and mainly in small population centres. As far as physical and chemical parameters are concerned, 92.47% of the sampled areas were within the parameters laid down in the current legislation determining water suitability. The parameters that were exceeded most were those for nitrates, followed by arsenic and fluoride.

As regards food safety, actions taken in this area can reduce the risk and incidence rates of foodborne diseases, minimise the presence of biological, chemical or physical hazards in foodstuffs, and protect consumers' interests and increase their confidence. The targets and actions taken as regards food safety are set out in the *Pla de seguretat alimentària* ('Food Safety Plan'), an instrument to complement the Health Plan for Catalonia, which acts as a frame of reference for everything related to food safety, particularly prevention and monitoring actions aimed at the Catalan population. Figures on food-monitoring results are available in the *Memòria anual sobre la situació de la seguretat alimentària* ('Annual Food Safety Situation Report') and in the various reports on the results of the health protection programmes.

8 What we do for our health

8.1 What lifestyles we have

Various scientific studies indicate that lifestyles, such as being physically active and eating healthily, have a positive impact on reducing morbidity and mortality from chronic conditions; meanwhile, others, such as smoking, risky alcohol consumption and drug use increase risk of morbidity and mortality. For example, the WHO estimates that 3.3 million deaths that occurred in 2012 could be attributed to alcohol, 5.9% of the world total.⁷

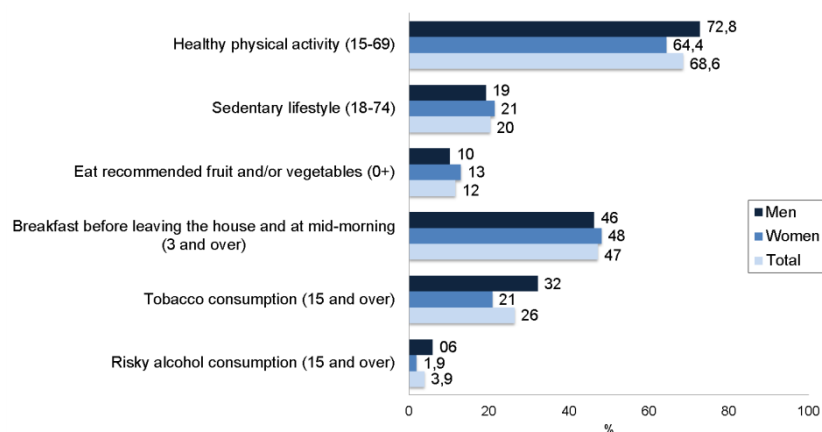
In 2013, on the basis of regular physical activity, 68.6% of the population aged 15-69 partakes in a **healthy physical activity**, while 20.3% of the population aged 18-74 is **sedentary**.

As regards **eating habits**, 11.7% of the general population follows recommendations in 2013, consuming five daily portions of fruit and/or vegetables. This percentage is above the Spanish average (9.7%, National Health Survey of Spain, ENSE 2011-2012). The proportion of people following the recommendation is higher in older age groups. Of the population aged 3 and over, 47.3% eat breakfast before leaving the house and at mid-morning at least four times per week. The older the age group, the lower the percentage of the population eating breakfast twice, above all because they are abandoning the habit of mid-morning breakfast.

Tobacco consumption declined between 1990 and 2013, particularly amongst men. Of the population aged 15 and over, 26.5% are smokers (daily or occasional) in 2013: 32.2% of men and 20.9% of women. Smoking is more prevalent amongst men than women at all ages, with the percentages very close amongst young people aged 15-24 and further apart the older the age group. In comparison with the Spanish results in the ENSE 2011-2012, Catalonia is below average for proportion of smokers (daily and occasional).

Of the population aged 15 and over, 3.9% have risky **alcohol** consumption (6.0% of men and 1.9% of women). The most significant risky consumption amongst both sexes (13.8% of young men and 6.2% of young women) takes place in the 15-24 age group. Figures from the Spanish Government Survey on the Use of Drugs in Secondary Education (ESTUDES) 2012 show that 79.8% of Catalan secondary school students aged 14-18 had consumed alcohol at some time in their life, 77.2% had done so in the 12 months leading up to the survey and 68.5% in the previous 30 days. According to figures from the ENSE 2011-2012, risky alcohol consumption affects 1.4% of the population of Spain as a whole aged 15 and over (2.0% of men and 0.9% of women).⁸

Figure 17. Distribution of habits and lifestyles of the population, by sex. Catalonia, 2013



Source: Health Survey of Catalonia (ESCA) 2013. Ministry of Health.

Tables 6 and 7 show the change in **illicit drug use** in the population aged 15-64 and in the population of students aged 14-18. Derivatives of cannabis and cocaine are the substances in this category use of which is most prevalent. However, in relation to the proportion of people who had consumed cannabis in the 30 days prior to the survey, the upwards trend of 2006-2007 has been reversed, with use declining consistently since then. A drop in cocaine use has also been observed since then, although it has stabilised amongst secondary school students in recent years.⁹

Table 6. Changes to the prevalence of drug use in the last 30 days amongst the population aged 15-64 (%). Catalonia, 1997-2011

	1997	1999	2001	2003	2005	2007	2009	2011
Cannabis	4.0	4.3	8.3	11.4	13.9	9.7	8.7	8.1
Ecstasy and designer drugs	0.1	0.1	1.0	0.6	0.8	0.8	0.3	0.1
Cocaine	0.9	1.0	1.4	0.7	1.7	2.6	1.5	0.7
Amphetamines (speed)	0.2	0.4	0.6	0.1	0.6	0.6	0.4	0.0
Heroin	0.0	0.1	0.0	0.2	0.0	0.0	0.1	0.0

Source: Directorate-General for Substance Abuse. Public Health Agency of Catalonia. Analysis of the Spanish Household Alcohol and Drugs Survey (EDADES) and the Spanish Government Survey on the Use of Drugs in Secondary Education (ESTUDES). Government National Drugs Plan Delegation. Spanish Ministry of Health, Social Services and Equality

Table 7. Changes to the prevalence of drug use in the last 30 days amongst secondary school students aged 14-18 (%). Catalonia, 1994-2012

	1994	1996	1998	2000	2002	2004	2006	2008	2010	2012
Cannabis	17.1	21.5	22.1	22.3	26.8	30.4	25.1	23.1	21.3	17.0
Ecstasy and designer drugs	2.6	3.8	2.3	2.5	1.3	1.1	1.5	1.3	1.1	1.7
Cocaine	0.8	1.9	3.5	2.0	2.7	3.4	2.7	1.5	1.3	1.5
Amphetamines (speed)	2.7	3.5	2.1	1.1	1.5	1.8	1.6	1.2	0.8	1.1
Heroin	0.2	0.3	0.2	0.1	0.1	0.5	0.8	0.3	0.7	0.6

Source: Directorate-General for Substance Abuse. Public Health Agency of Catalonia. Analysis of the Spanish Household Alcohol and Drugs Survey (EDADES) and the Spanish Government Survey on the Use of Drugs in Secondary Education (ESTUDES). Government National Drugs Plan Delegation. Spanish Ministry of Health, Social Services and Equality

8.2 What preventive steps we take

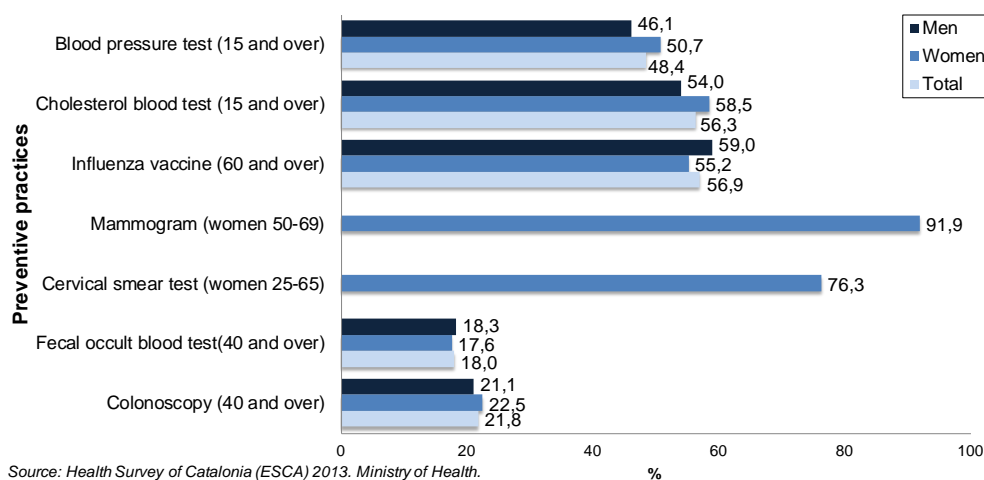
Of the population aged 15 and over, 48.4% check their **blood pressure** periodically (46.1% of men and 50.7% of women) and 56.3% periodically review their blood **cholesterol** level (54.0% of men and 58.5% of women). The older the age group, the more both practices increase, particularly in those aged 65 and over.

In 2012, vaccination coverage in the child population was 92.2%. Of the population aged 60 and over, 56.9% are regularly vaccinated against influenza when autumn starts (59.0% of men and 55.2% of women); the percentage is higher for older age groups.

In women, 91.9% of the priority group (aged 50-69) undergo a periodic mammogram, while 76.3% of those in the 25-65 age group undergo a periodic cervical smear test.

Of the population aged 40 and over, 18.3% occasionally have their stool tested for hidden blood to detect bowel cancer or polyps, and 21.8% undergo a colonoscopy (figure 18).

Figure 18. Frequency of preventive measures amongst the adult population, by sex. Catalonia, 2013



Other preventive measures are those relating to early detection of risky alcohol consumption by the general practitioner, such as the 'Beveu menys' ('Drink Less') programme, and the specific harm-reduction programmes for active drug users, especially those who may take their drugs intravenously: the Hepatitis Specific Action Plan (PASH), the Overdose Prevention Programme (PPS) and the Needle Exchange Programme (PIX). For children and young people there are programmes such as 'L'aventura de la vida' ('The Adventure of Life') and two multimedia websites, Elpep.info and Laclara.info, among others.

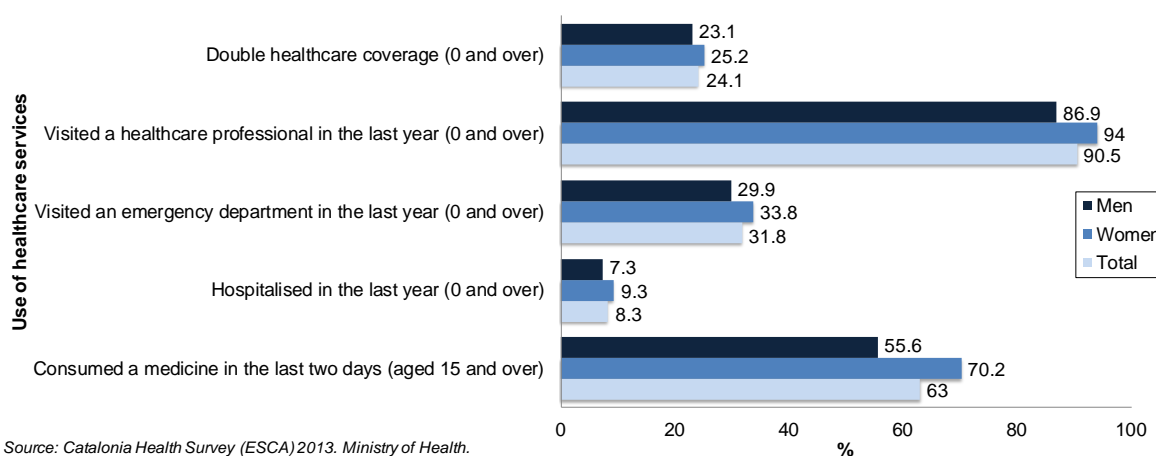
8.3 What use we make of healthcare services

Public healthcare is an entitlement of 99.8% of the population. There are 24.1% with **double healthcare coverage**, meaning they have the right to public healthcare and, at the same time, they also have a private health insurance, taken out either individually or by their company. Double healthcare coverage is more common in the population aged 0-14 and that aged 45-64.

Of the general population, 90.5% **have visited a healthcare professional** at least once in the last year (94.5% of those aged 0-14 and 89.7% of those aged 15 and over). Of the general population, 76.7% have been seen by a general practitioner or paediatrician. Of women aged 15 and over, 43.2% have been seen by a gynaecologist. Of the general population, 36.5% have been to the dentist in the last year, while 20.5% have been to an optometrist or optician. Of the general population, 20.4% have been seen by a nurse in the last year.

Of the general population, 31.8% have visited the **emergency department** in the last 12 months: 29.8% of the adult population and 42.7% of the child population. Of the population that have been to the emergency department, 57.2% went to a public hospital, 27.1% a primary care centre or a continuous care centre and 10.1% a private hospital. Of the general population, 8.3% have been **hospitalised** for at least one night in the last year.

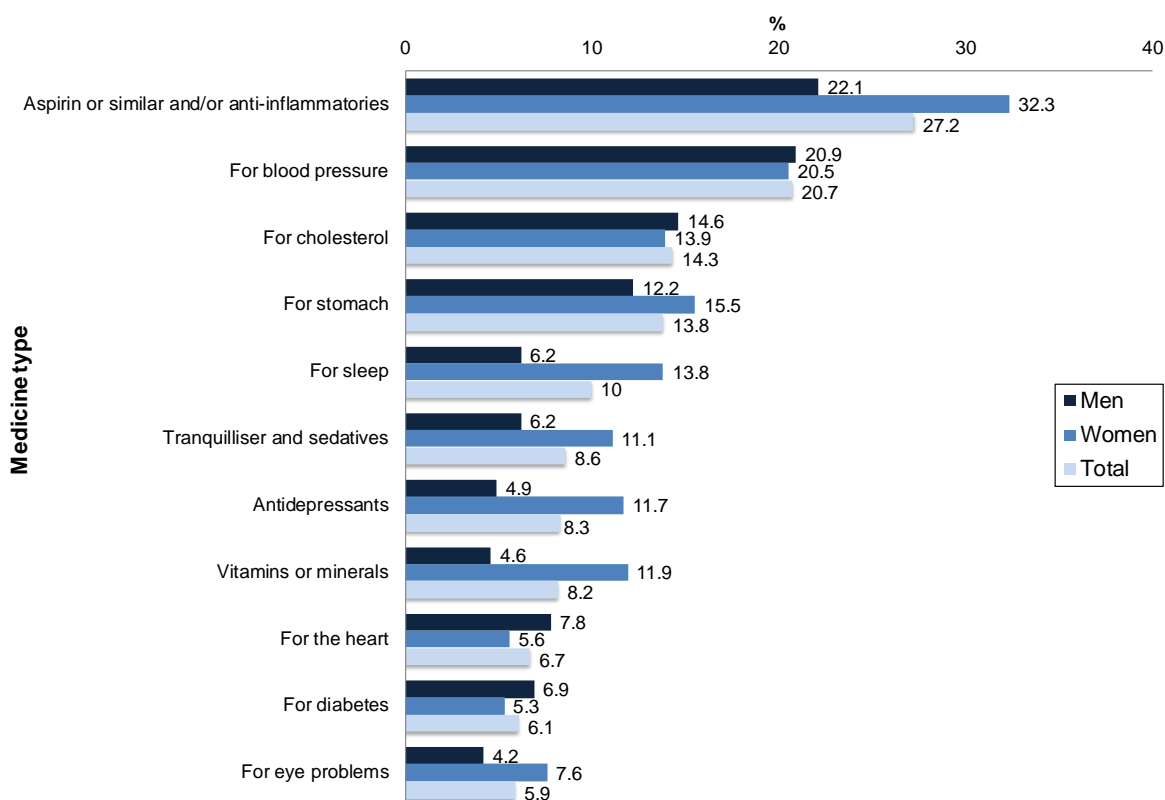
Figure 19. Use of healthcare services, by sex. Catalonia, 2013



Source: Catalonia Health Survey (ESCA) 2013. Ministry of Health.

Of the population aged 15 and over, 63.0% have taken some form of **medicine** during the two days before the interview (55.6% of men and 70.2% of women). The medicines that the adult population have taken in the highest proportions are aspirin or similar to alleviate pain and/or anti-inflammatories, followed by hypertension drugs and medicine for controlling cholesterol (figure 20).

Figure 20. Medicine use in the 2 days before the interview amongst the population aged 15 and over according to type of medicine, by sex. Catalonia, 2013



Source: Health Survey of Catalonia (ESCA) 2013. Ministry of Health.

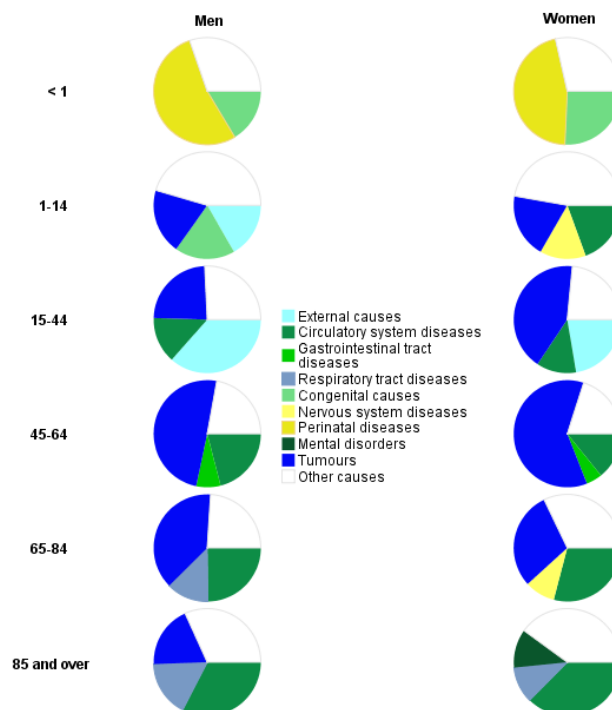
Of the general population who have used a healthcare service in the last 12 months, 90.1% were satisfied with it (90.6% of men and 89.7% of women). The percentages of the population satisfied with the care services used are highest in the 0-14 age group and in the 75 and over group. The satisfaction percentage is highest amongst the population that has used private services most frequently (98.0%) compared with those who have used public ones (88.1%).

9 What we die of

Mortality and the most common causes of death are very related to the structure of the population as regards age group and sex. For this reason, knowing the mortality pattern of a population provides very approximate information about the health or illness situation in a given territory.

As in recent years, the major groups of most common causes of death were tumours in men and circulatory system conditions in women. These two causes account for more than half of deaths; however, taking both sexes together, **circulatory system conditions** caused the most deaths. The mortality pattern by age groups – sorting the causes into broad condition categories to include a larger number of cases – was very similar to previous years. Children are affected by congenital and perinatal disorders; amongst young and middle-aged people, external causes (accidents and violence) and tumours are the most common; tumours and circulatory system conditions are the most common conditions for middle-aged and older people; and, finally, respiratory, neurological and mental illnesses are the most common cause of death amongst the oldest people (figure 21).

Figure 21. Three most important causes of death* in broad condition categories, by age group and sex. Catalonia, 2012



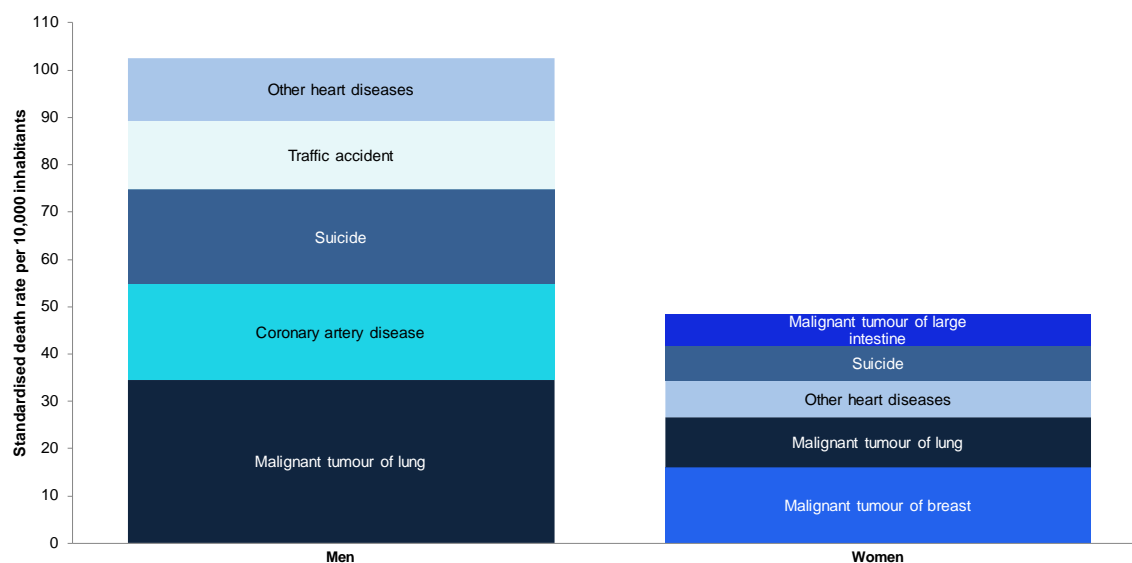
* Distribution of frequencies over the total of each age group and sex.
Source: Mortality Registry of Catalonia. Analysis of mortality in Catalonia 2012.

In terms of more specific diagnoses, the five conditions that cause most deaths amongst women (in absolute terms) – and, therefore, that place the greatest qualitative demand on

healthcare services – are dementia, cerebrovascular diseases, coronary artery disease, a section that includes other heart diseases and Alzheimer's. In men, the most common pathologies are coronary artery disease, lung cancer, bronchitis and asthma, cerebrovascular conditions and other heart diseases. This pattern of chronic pathology is largely related to the fact that the majority of deaths take place aged 80 and over.

There is also a need to consider a set of conditions that cause **premature death** and that are of great health significance because they are perceived by the population as deaths occurring before their time. These deaths cause the loss of many potential years of life, which is estimated using the age-standardised rate (with Catalonia of 1991 as the benchmark population) set out in figure 22 and has a different pattern to that of the general causes of mortality. The figure presents the five most significant causes of premature death in women and men, organised from lowest rate to highest rate. In women, the most common are malignant tumours, other heart diseases and suicide; for men, they are malignant lung tumour, heart diseases and external causes (suicide and road traffic accidents). It also highlights that this premature mortality is much higher in men than in women.

Figure 22. Five foremost causes of premature death,* by sex. Catalonia, 2012



* According to the age-standardised rates for potential years of life lost (benchmark population: Catalonia 1991).
Source: Catalan Register of Deaths (RMC). Catalonia Death Rate Analysis 2012.

10 The territory

Analysis by health region of a selection of indicators does not show defined patterns from which it could be deduced that some regions systematically achieve better or worse results than others. Indicators by health region for 2012-2013 are presented, first, as raw percentages of the total,^a with an indication of which results are above or below the Catalonia average to a statistically significant degree (table 8). However, the population of each health region has a different age structure and, so as to monitor the effect of this, maps 1-3 present the age-standardised percentages, for which purpose the age structure of the population of Catalonia on 1 January 2013 was applied as a standard population in all regions. This means that the results in the table and on the maps may not match. The fact of the result being significantly above or below the average does not mean, *per se*, a negative or positive assessment of the result.

Table 8. Selected indicators (raw %), by health region and total. Catalonia, 2012-2013

Indicator		Health regions							
		Lleida	Camp de Tarragona	Terres de l'Ebre	Girona	Catalunya Central	Alt Pirineu i Aran	Barcelona	
1	Positive (excellent, very good or good) self-perceived health status (general population)	T	83,8%	82,9%	83,6%	82,9%	77,7%	90,2%	81,7%
2	Excess weight (overweight and obesity) (aged 18-74)	T	52,8%	52,3%	50,9%	48,1%	49,5%	48,2%	48,1%
3	Disability (aged 15 and over)	T	9,2%	13,3%	15,7%	20,0%	17,7%	28,8%	17,9%
4	Risk of suffering a mental disorder(Goldberg) (aged 15 and over)	T	16,2%	7,9%	5,6%	9,4%	15,2%	3,2%	12,0%
5	Pain or discomfort (EQ-5D-5L) (aged 15 and over)	T	30,6%	27,1%	34,3%	25,6%	33,7%	30,5%	29,0%
6	Chronic disease or health condition (general population)	T	38,8%	41,4%	43,1%	30,7%	40,5%	43,5%	38,2%
7	Suffers or has suffered arterial hypertension (aged 15 and over)	T	26,6%	22,5%	26,2%	24,5%	31,2%	22,0%	24,7%
8	Suffers or has suffered high cholesterol (aged 15 and over)	T	19,9%	21,5%	17,5%	19,4%	24,1%	15,3%	23,6%
9	Tobacco consumption (aged 15 and over)	T	29,7%	28,9%	28,5%	29,8%	30,0%	28,9%	26,4%
10	Risky alcohol consumption (aged 15 and over)	T	4,9%	3,9%	2,5%	4,1%	3,4%	1,1%	3,9%
11	Sedentary lifestyle (aged 18-74)	T	23,0%	26,9%	30,8%	15,1%	16,7%	23,3%	18,1%
12	Healthy physical activity (aged 15-69)	T	48,0%	59,9%	56,1%	65,1%	71,9%	52,9%	73,5%
13	Periodic blood pressure test (aged 15 and over)	T	68,2%	51,2%	58,6%	53,2%	46,3%	62,8%	49,2%
14	Periodic cholesterol blood test (aged 15 and over)	T	67,7%	72,3%	60,5%	55,6%	54,3%	65,3%	56,6%
15	Periodic mammogram (women aged 50-69)	W	100,0%	89,0%	93,8%	95,8%	91,1%	95,3%	92,7%
16	Periodic cervical smear (women aged 25-65)	W	75,0%	78,7%	78,7%	75,6%	70,2%	82,5%	80,1%
17	Double healthcare coverage (general population)	T	22,0%	17,5%	11,2%	18,2%	16,1%	26,0%	28,5%
18	Medicine taken in the last 2 days (aged 15 and over)	T	58,6%	58,9%	54,2%	62,4%	69,3%	45,9%	62,6%
19	Visits to a healthcare professional in the last 12 months (general population)	T	88,3%	90,7%	86,8%	89,8%	92,5%	83,3%	91,8%
20	Hospitalisation in last 12 months (general population)	T	8,1%	11,4%	6,3%	6,5%	9,4%	7,1%	7,4%
21	Visited an emergency department in the last 12 months (general population)	T	30,3%	35,1%	23,3%	28,4%	32,6%	16,1%	32,4%
22	Satisfaction with public healthcare services used (general population)	T	88,2%	83,4%	86,7%	93,0%	89,1%	86,7%	89,7%

Significant differences with the Catalonia average, with a 95% confidence interval

Significantly above Catalonia average

Significantly below Catalonia average

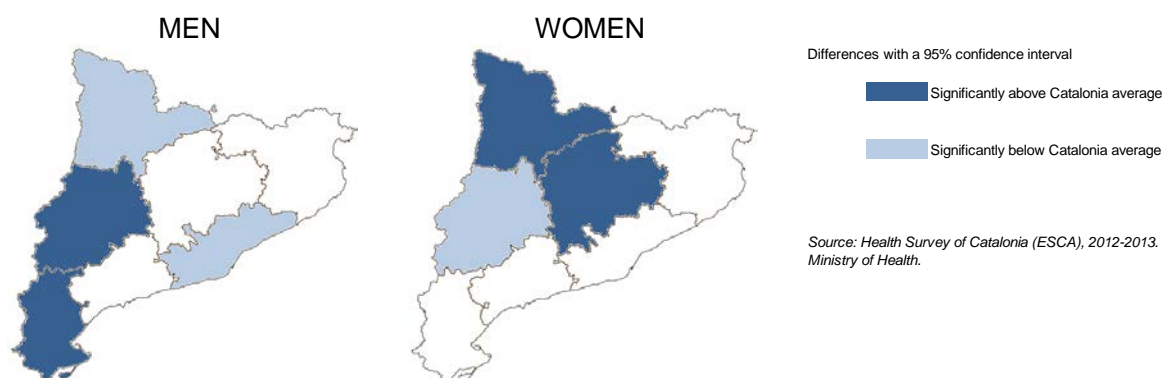
Source: Health Survey of Catalonia (ESCA), 2012-2013. Ministry of Health.

^a See Annex 2 for the raw percentages of the indicators selected for each sex in table 6.

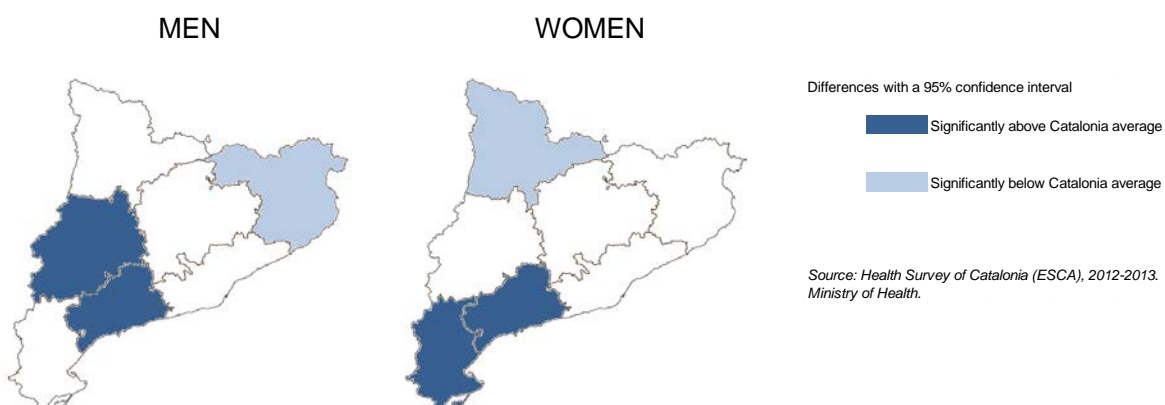
Map 1. Age-standardised percentage of population with **positive self-perceived health status**, by health region and sex. Catalonia, 2012-2013 (standard population on 1 January 2013)^a



Map 2. Age-standardised percentage of population aged 15 and over that **smoke**, by health region and sex. Catalonia, 2012-2013 (standard population on 1 January 2013)



Map 3. Age-standardised percentage of population aged 18-74 that carry **excess weight**, by health region and sex. Catalonia, 2012-2013 (standard population on 1 January 2013)



^a Age-standardised percentage, using the direct method (standard population on 1 January 2013). Standardised percentages that are significantly different from the Catalonia average are presented with a 95% confidence interval.

For the results for years 1994, 2006 and 2012-2013, the change over time per health region of a selection of health status and lifestyle indicators does not show defined patterns per health region either (figures 23-25).

Figure 23. Age-standardised percentage of population with **positive self-perceived health status**, by health region and sex. Catalonia, 1994, 2006 and 2012-2013

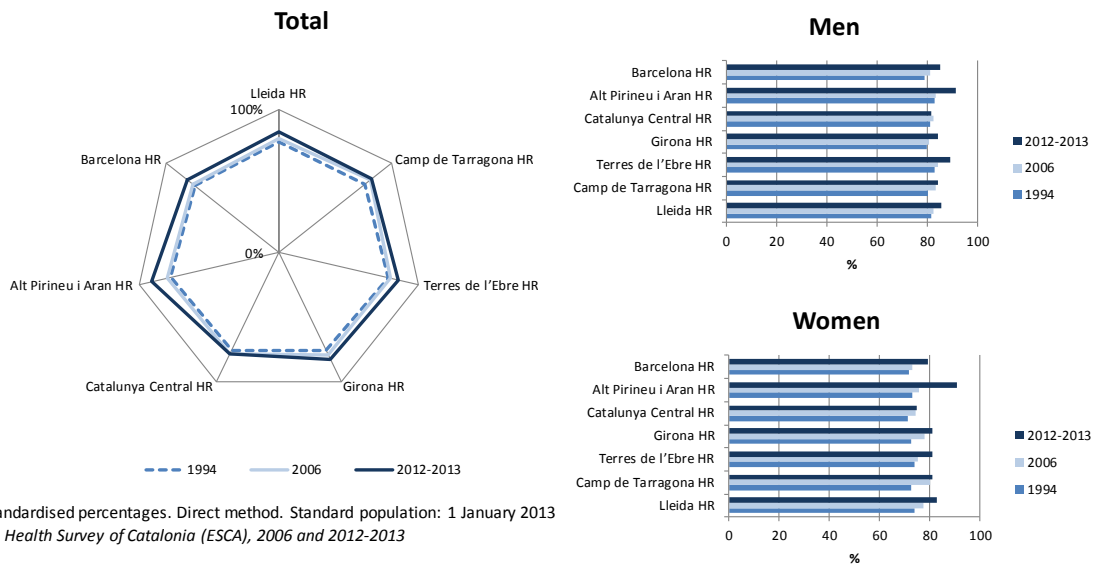


Figure 24. Age-standardised percentage of population aged 15 and over that **smoke**, by health region and sex. Catalonia, 1994, 2006 and 2012-2013

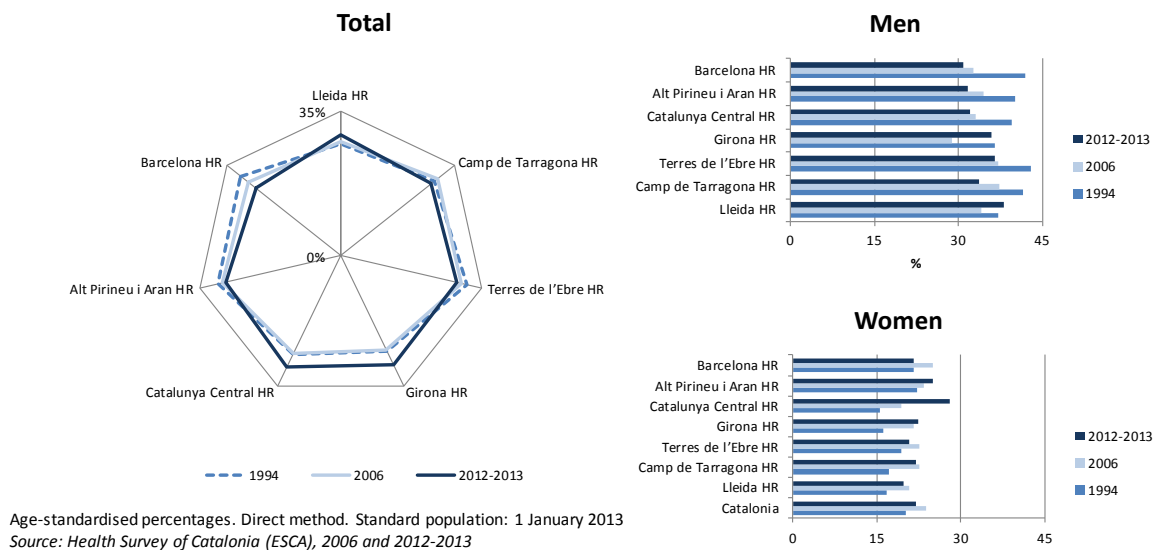
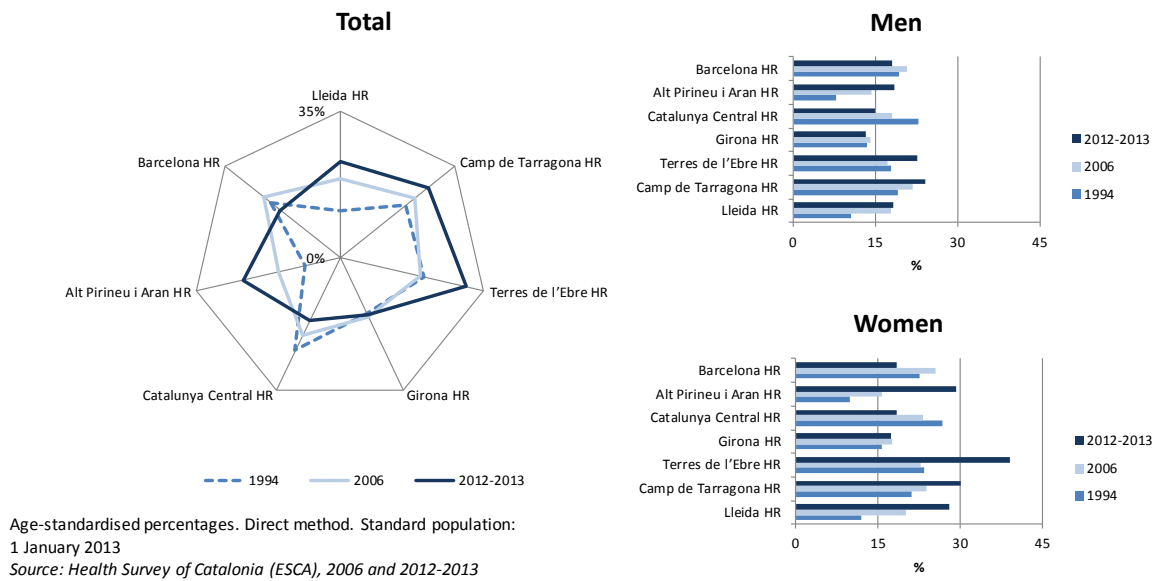


Figure 25. Age-standardised percentage of population aged 18-74 that have **sedentary lifestyles**, by health region and sex. Catalonia, 1994, 2006 and 2012-2013



As regards territorial distribution of mortality, it can be seen that the standardised mortality index is higher in the Camp de Tarragona Health Region and lower in the Barcelona Health Region.

11 Situations of vulnerability

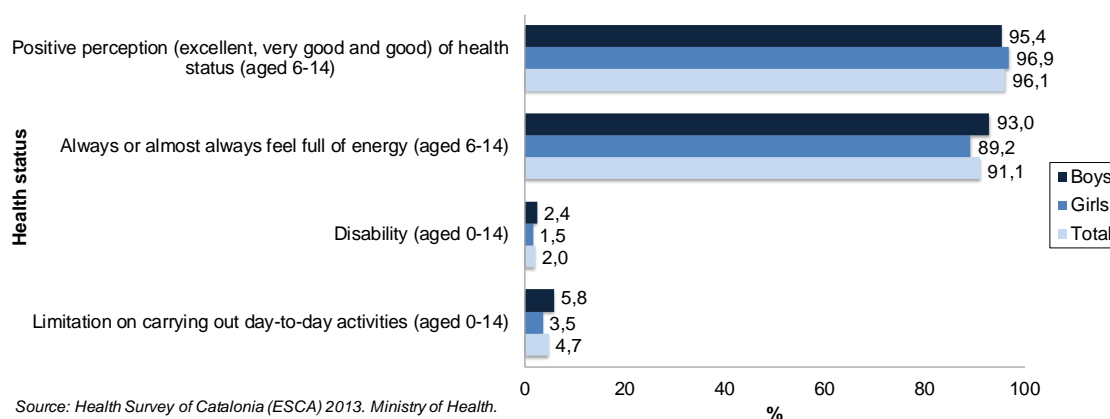
The main factors in health inequality are age, sex, socio-economic situation, educational level and region. People become more vulnerable the more of these inequality factors are added to the equation. Health inequalities relating to age, gender and employment situation are set out below.

11.1 Child population health

The population aged under 15 resident in Catalonia in 2013 was 1,186,867 people (15.7% of the total). Since 2009, the number of births recorded in Catalonia has been declining year on year; in 2012, it was 77,098, which was 4.7% less than in 2011. The gross birth rate in 2012 was 10.3 births per 1,000 inhabitants, half a point below the rate for the previous year. The infant mortality rate in Catalonia in 2012 was low, with 2.94 child deaths per 1,000 born alive; meanwhile, this rate for the whole of the EU-28 was 3.8 in 2012.

As regards the **health status** of the child population in 2013, positive self-perceived health status was high (96.1%) and 93.0% of the population aged 6-14 felt full of energy all of almost all of the time. On the other hand, 2.0% of those aged under 15 had some form of disability and 4.7% had some limitation on carrying out day-to-day activities because of a health condition (figure 26).

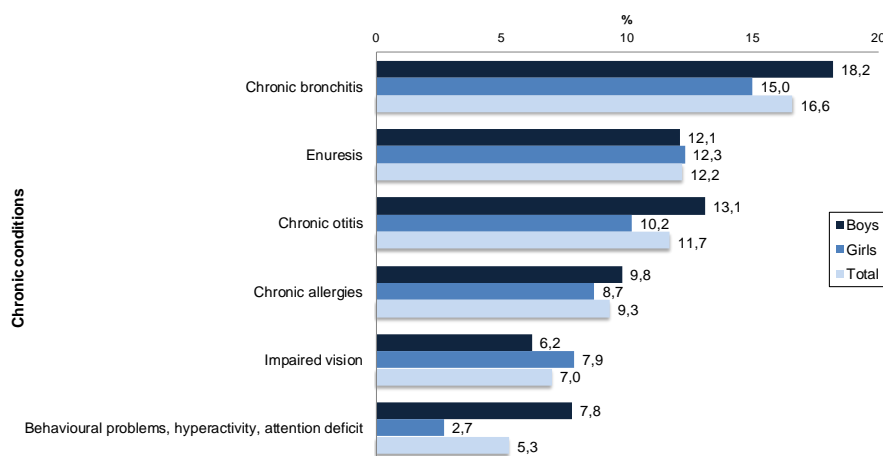
Figure 26. Indicators of the health status of the child population, by sex. Catalonia, 2013



Of the population aged 0-14, 53.5% suffer or have suffered a **chronic condition**^a (55.0% of men and 51.9% of women). The most common are chronic bronchitis, enuresis and chronic otitis (figure 27).

^a The ESCA asks respondents whether they 'suffer or have suffered' from a list of 18 health conditions.

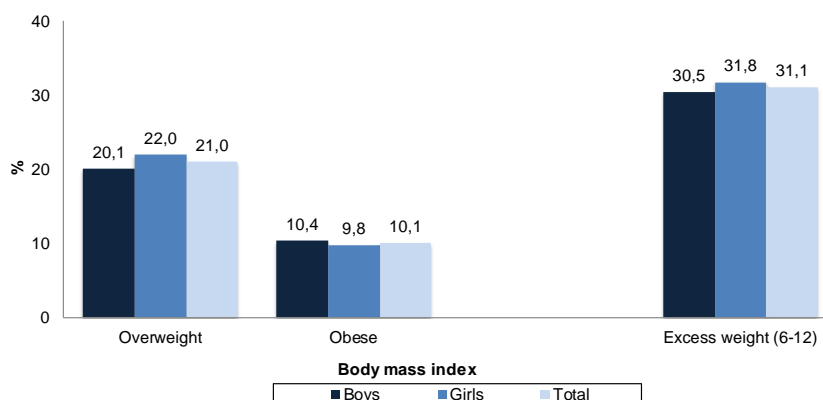
Figure 27. Main chronic conditions that the population aged under 15 suffer or have suffered (with a prevalence of above 5%) based on a list of 18 chronic conditions, by sex. Catalonia, 2013



Source: Health Survey of Catalonia (ESCA) 2013. Ministry of Health.

In Catalonia, 31.1% of the population aged 6-12 carry excess weight (30.5% of men and 31.8% of women). More girls are overweight (22.0%) than boys (20.1%), while more boys (10.4%) are obese than girls (9.8%; figure 28).

Figure 28. Distribution of body mass index (BMI)* categories for populations carrying excess weight aged 6-12, by sex. Catalonia, 2012-2013



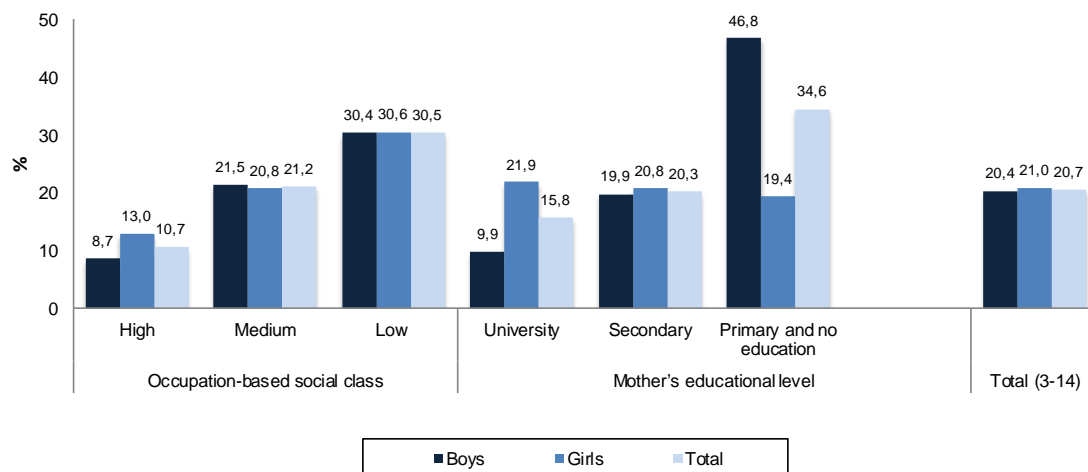
Source: Health Survey of Catalonia (ESCA), 2012-2013. Ministry of Health.
* BMI obtained from stated weight and height, as per the WHO.

In Catalonia, in 2012-2013, the population aged 2-17 the percentages of both boys and girls who were overweight were below the Spanish average. As regards obesity, the percentage was above average for boys and around the average for girls (ENSE 2011-2012).

As regards **lifestyles**, 28.8% of the population aged 6-14 participated every day or almost every day of the month in 2013 in physically exertive games or sports, while 20.9% never or almost never participated. In their free time, 96.1% of the population aged 3-14 watched television daily and 79.7% played in the park or street daily. Finally, 20.7% of the population aged 3-14 had **sedentary leisure** habits, meaning that they dedicated two hours or more every day of the week to watching television or video games. The proportion of the population

aged 3-14 with sedentary leisure habits is higher in the more disadvantaged social classes and when their mother has a primary education or none at all (figure 29).

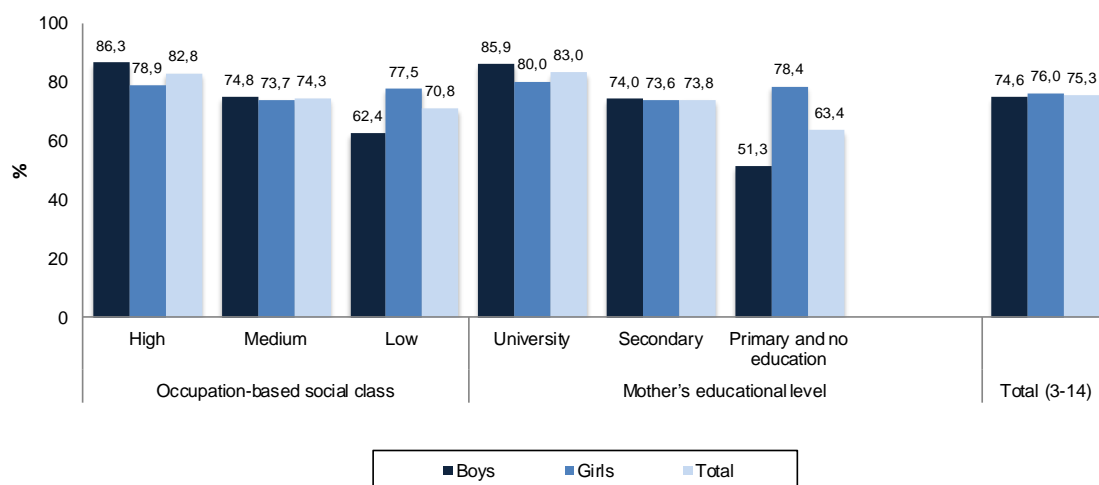
Figure 29. Population aged 3-14 with sedentary leisure habits, by social class and sex, and by mother's educational level and sex. Catalonia, 2013



Source: Health Survey of Catalonia (ESCA) 2013. Ministry of Health.

Of the population aged 3-14, 75.3% **consumed hypercaloric products** (fast food, sugary drinks, or salty snacks and food) at least three times per week (74.6% of boys and 76.0% of girls). The percentage of children with low hypercaloric product consumption was very high amongst those of the higher social classes and amongst those whose mothers had a university education (figure 30).

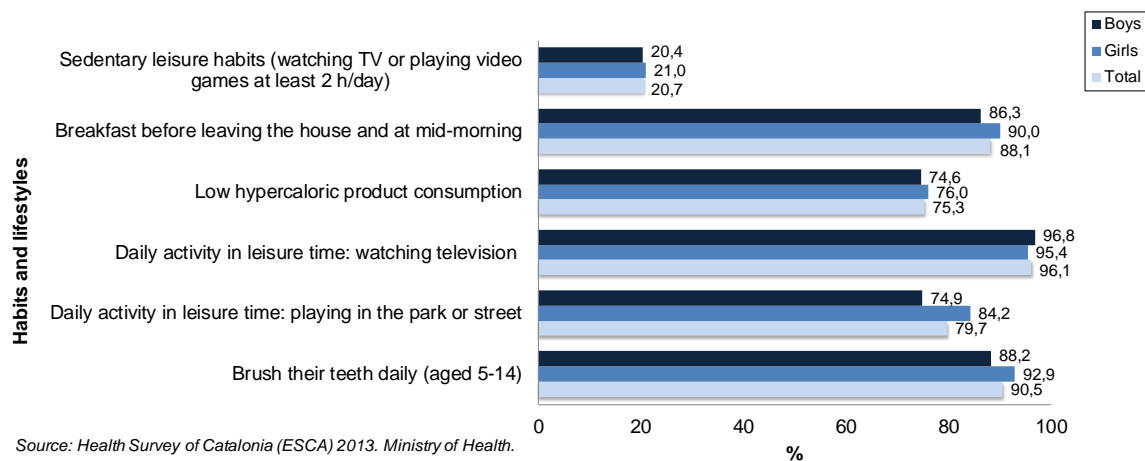
Figure 30. Population aged 3-14 with low hypercaloric product consumption, by social class and sex, and by educational level and sex. Catalonia, 2013



Source: Health Survey of Catalonia (ESCA) 2013. Ministry of Health.

Of the population aged 3-14, 88.1% (86.3% of boys and 90.0% of girls) **eat breakfast before leaving the house and at mid-morning** at least four times per week. The older the age group, the smaller this proportion. Of children aged 5-14, 90.5% brush their teeth at least once per day (88.2% of boys and 92.9% of girls; figure 31).

Figure 31. Lifestyles of the population aged 3-14, by sex. Catalonia, 2013



Source: Health Survey of Catalonia (ESCA) 2013. Ministry of Health.

Between 2011 and 2013, there was a statistically significant drop in the population aged 3-14 with sedentary leisure habits, from 26.9% to 20.7%; the percentage of children having breakfast before leaving the house and at mid-morning also increased, from 80.5% to 88.1%.

As regards **use of healthcare services**, 94.5% of minors have had an appointment with the paediatrician or general practitioner, 42.7% had been to the emergency department, and 4.3% and been hospitalised in the last year. Of children aged 0-14, 30.0% have taken some form of medicine in the two days before the interview (33.0% of boys and 26.8% of girls). The medicines taken in the highest proportions are aspirin or similar to alleviate pain and/or anti-inflammatories (12.0%), cough and cold medicine (7.2%), and vitamins and minerals (4.5%).

In 2013, the initial vaccination coverage recorded in the general practice medical records (eCAP) for children aged 0-1 (three doses) is 89% in relation to the polio, DTaP, Hib, hepatitis B and meningitis C **vaccines**. The percentage of booster vaccinations in children aged 1-2 is 84% for the polio vaccine, 85% for DTaP and Hib, and 89% for meningitis C. The DTaP/dTap booster vaccination rate for children aged 4-6 is 90%. MMR (measles, mumps and rubella) vaccine coverage is 90% for dose one (12-15 months) and 86% for dose two (3-6 years). In adolescents (boys and girls) in the second year of secondary school (ESO), Td vaccine has 81% coverage. In boys and girls in their sixth year of primary school, hepatitis A and B coverage was 86%, girls vaccination coverage against the human papillomavirus (HPV) is 82%, and chickenpox vaccination is 21%, according to figures obtained from school vaccination records.

Since 2012, vaccination coverage figures have been calculated on the basis of the general practice medical records (eCAP) of the main healthcare provider in Catalonia, the Catalan Institute of Health (ICS), which covers a population representing approximately 80% of the total for Catalonia. This is a preliminary step for obtaining accurate and complete coverage figures, since work is being done to obtain more exhaustive figures on vaccination coverage through shared medical records and the Vaccine Information Service of Catalonia (SIVAC).

11.2 Gender

In 2013, 50.7% of the population of Catalonia are women; they account for a higher proportion of older age groups, over 60% from the age of 80 upwards. Of the population aged 15 and over, 9.1% live alone (7.6% of men and 10.6% of women); of people aged 64 and over, 20.9% live alone (10.8% of men and 28.4% of women).

In the majority of indicators presented, there are different patterns for men and women.

Life expectancy at birth is higher in women than in men; on the other hand, the proportion of healthy life expectancy is higher in men than in women.

Women are less likely than men to breach guidelines about consuming products that are harmful to the health (tobacco and risky alcohol consumption), and a greater proportion of women eat the recommended five daily pieces of fruit and/or vegetables than men. The proportion of women with a healthy level of physical activity is lower than for men. Women have higher blood-pressure and blood-cholesterol levels than men.

As regards their health status, women have a worse self-perceived health status, and a higher proportion suffer problems affecting quality of life, such as pain or discomfort, anxiety or depression, and mobility problems. A larger proportion of women suffer chronic health conditions than men, they are more likely to suffer mental illness, and a greater proportion of them suffer some form of disability than men. A higher proportion of women need the help of other people to carry out normal day-to-day activities than men. A lower proportion of women are overweight than men, with proportions for obesity the same.

As regards use of healthcare services, the proportions of women who have visited a healthcare professional and who have been hospitalised in the last year are higher than for men. The difference in visits to emergency departments in the last year is not significant. The percentage of women aged 15 and over who have taken some form of medicine in the last two days is higher than for men (table 9).

Table 9. Results for a selection of indicators, by sex (raw %). Catalonia, 2013

	Indicator	2013			Difference by sex ¹
		Men	Women	Total	
1	Positive self-perceived health status (general population)	83,8%	78,5%	81,1%	Yes
2	Excess weight (overweight and obesity) (aged 18-74)	56,2%	40,7%	48,5%	
3	Disability (aged 15 and over)	12,6%	18,8%	15,7%	Yes
4	Risk of suffering mental disorder (aged 15 and over)	9,6%	15,1%	12,4%	Yes
5	Pain or discomfort (aged 15 and over)	23,0%	36,8%	30,0%	Yes
6	Chronic disease or health condition (general population)	35,4%	41,7%	38,6%	Yes
7	Suffers or has suffered arterial hypertension (aged 15 and over)	25,3%	26,2%	25,8%	
8	Suffers or has suffered high cholesterol (aged 15 and over)	23,9%	23,0%	23,5%	
9	Tobacco consumption (aged 15 and over)	32,2%	20,9%	26,5%	Yes
10	Risky alcohol consumption (aged 15 and over)	6,0%	1,9%	3,9%	Yes
11	Sedentary lifestyle (aged 18-74)	19,2%	21,4%	20,3%	
12	Healthy physical activity (aged 15-69)	72,8%	64,4%	68,6%	Yes
13	Blood pressure test (aged 15 and over)	46,1%	50,7%	48,4%	Yes
14	Cholesterol blood test (aged 15 and over)	54,0%	58,5%	56,3%	Yes
15	Double healthcare coverage (general population)	23,1%	25,2%	24,1%	
16	Medicine taken in the last 2 days (aged 15 and over)	55,6%	70,2%	63,0%	Yes
17	Visits to a healthcare professional in the last 12 months (general population)	87,0%	94,0%	90,5%	Yes
18	Hospitalisation in the last 12 months (general population)	7,3%	9,3%	8,3%	
19	Visits to an emergency department in the last 12 months (general population)	29,9%	33,8%	31,8%	Yes
20	Satisfaction with public healthcare services used (aged 15 and over)	87,8%	86,1%	86,9%	

Source: Health Survey of Catalonia (ESCA) 2013. Ministry of Health.

¹ Significant difference between the average for each sex, with a 95% confidence interval.

The main causes of death differ according to gender and age group. Premature mortality is higher in men than in women, and the types and proportion of principal causes of premature death differ between men and women.

11.3 Employment situation

Of the working-age population (i.e. aged 16-64), 62.0% are employed (65.7% of men, 58.2% of women) and 14.2% are unemployed (17.0% of men and 11.3% of women); 13.9% of women are full-time housewives and 9.6% of the working-age population are studying, without differentiation between the sexes. There are significant differences in various health indicators, depending on employment situation (table 10).

The unemployed population and full-time housewives have a worse self-perceived health status than the working population. The proportion of the population at risk of suffering some form of mental illness is higher amongst the unemployed population than amongst the employed: more than double for the population as a whole and more than triple for women. The proportion of working-age women who are full-time housewives and are at risk of suffering some form of mental illness is significantly lower than the proportion of women who are unemployed. The percentage of women with a disability is higher amongst unemployed women and full-time housewives than amongst those who work.

Smoking is more prevalent amongst the unemployed population as a whole than amongst the employed. A higher proportion of unemployed men partake in a level of activity considered healthy than amongst those who work. A lower proportion of the unemployed population, especially men, test their cholesterol periodically than amongst the working population. A lower proportion of unemployed women aged 25-64 undergo a periodic smear than employed women.

As regards use of healthcare services, a lower proportion of the unemployed population have double healthcare coverage than amongst the working population, and a lower proportion, especially amongst women, have visited a healthcare professional in the last year than amongst the working population.

Higher proportions of full-time housewives have problems of pain or discomfort, suffer a chronic disease or health condition, or suffer hypertension and high cholesterol than working women. On the other hand, tobacco consumption and sedentary lifestyles are less prevalent amongst full-time housewives than amongst employed women. A lower proportion of full-time housewives have double healthcare coverage than employed women.

Table 10. Results for a selection of indicators, by employment situation and sex (raw %). Catalonia, 2012-2013

Area	Indicator		Employment situation			
			Employed	Unemployed	Housework	
Health status	1	Positive self-perceived health status (aged 16-64)	M	91,2%	83,3%	
			W	87,7%	79,7%	77,6%
			T	89,6%	81,9%	
	2	Excess weight (overweight and obesity) (aged 18-64)	M	56,9%	56,9%	
			W	34,0%	36,2%	47,9%
			T	46,2%	48,7%	
	3	Disability (aged 18-64)	M	3,9%	5,5%	
			W	4,6%	8,9%	13,7%
			T	4,2%	6,8%	
	4	Risk of suffering a mental disorder (aged 16-64)	M	5,4%	18,0%	
			W	12,9%	21,6%	13,4%
			T	8,8%	19,4%	
	5	Problems of pain or discomfort (aged 16-64)	M	14,8%	17,5%	
			W	24,0%	30,4%	37,4%
			T	19,1%	22,5%	
	6	Chronic disease or health disorder (16-64)	M	28,8%	31,4%	
			W	32,2%	35,1%	47,8%
			T	30,4%	32,9%	
	7	Suffers or has suffered arterial hypertension (aged 16-64)	M	16,5%	17,9%	
			W	11,0%	10,9%	23,5%
			T	14,0%	15,1%	
	8	Suffers or has suffered high cholesterol (aged 16-64)	M	18,6%	20,3%	
			W	13,3%	16,5%	20,4%
			T	16,2%	18,8%	
Lifestyles	9	Tobacco consumption (aged 16-64)	M	37,8%	44,0%	
			W	29,1%	34,7%	20,0%
			T	33,8%	40,3%	
	10	Risky alcohol consumption (aged 16-64)	M	6,2%	8,2%	
			W	2,3%	2,4%	0,8%
			T	4,4%	5,9%	
	11	Sedentary lifestyle (aged 18-64)	M	16,4%	18,8%	
			W	20,1%	15,6%	11,9%
			T	18,1%	17,5%	
	12	Healthy physical activity (aged 16-64)	M	68,4%	76,7%	
			W	65,4%	63,6%	70,6%
			T	67,0%	71,5%	
Preventive practices	13	Blood pressure test (aged 16-64)	M	43,2%	39,1%	
			W	42,1%	39,3%	50,6%
			T	42,7%	39,2%	
	14	Cholesterol blood test (aged 16-64)	M	55,2%	45,5%	
			W	53,8%	47,9%	57,9%
			T	54,6%	46,5%	
15	Periodic mammogram (aged 50-64)	W	94,0%	95,7%	93,6%	
16	Periodic cervical smear test (aged 25-64)	W	82,3%	71,1%	76,6%	
Use of healthcare services	17	Double healthcare coverage (aged 16-64)	M	29,1%	9,7%	
			W	32,9%	21,4%	15,3%
			T	30,9%	14,3%	
	18	Medicine taken in the last 2 days (aged 16-64)	M	43,2%	45,2%	
			W	61,3%	62,1%	66,2%
			T	51,6%	51,9%	
	19	Visits to a healthcare professional in the last 12 months (aged 16-64)	M	82,8%	79,8%	
			W	94,9%	90,1%	92,6%
			T	88,4%	83,9%	
	20	Hospitalisation in the last 12 days (aged 16-64)	M	5,2%	6,5%	
			W	8,3%	8,5%	10,0%
			T	6,7%	7,3%	
21	Visits to an emergency department in the last 12 months (aged 16-64)	M	25,1%	27,6%		
		W	31,0%	37,7%	27,7%	
		T	27,8%	31,6%		
22	Satisfaction with public healthcare services used (aged 16-64)	M	87,5%	86,6%		
		W	86,6%	84,1%	87,6%	
		T	87,1%	85,6%		

Source: Health Survey of Catalonia (ESCA), 2012-2013. Ministry of Health.

Significant difference with a 95% confidence interval in relation to the figure for the corresponding employed population.

12 Changes Over Time

The prevalence of many health-related phenomena varies according to sex; many are normally more prevalent the older the age group. For that reason, to avoid the confusion caused by some phenomena observed when making comparisons between regions or over a period of time, it is necessary to take into account the demographic makeup of the population by sex and age, and to standardise estimates of these. Despite the almost 20 years that have passed between 1994 and 2013, with significant population growth, the changes to the social makeup, and the increased life expectancy, the percentage of the total population aged 65 and over has not changed substantially (16.7% in 1994 and 17.4% in 2013). However, women living longer than men leads to their being relatively older in comparison with men: 15.0% of men and 19.8% of women were aged 65 and over in 2013. There follows a presentation of the change over time of various selected indicators in relation to their health status, their lifestyles and their use of healthcare services (graph 32).

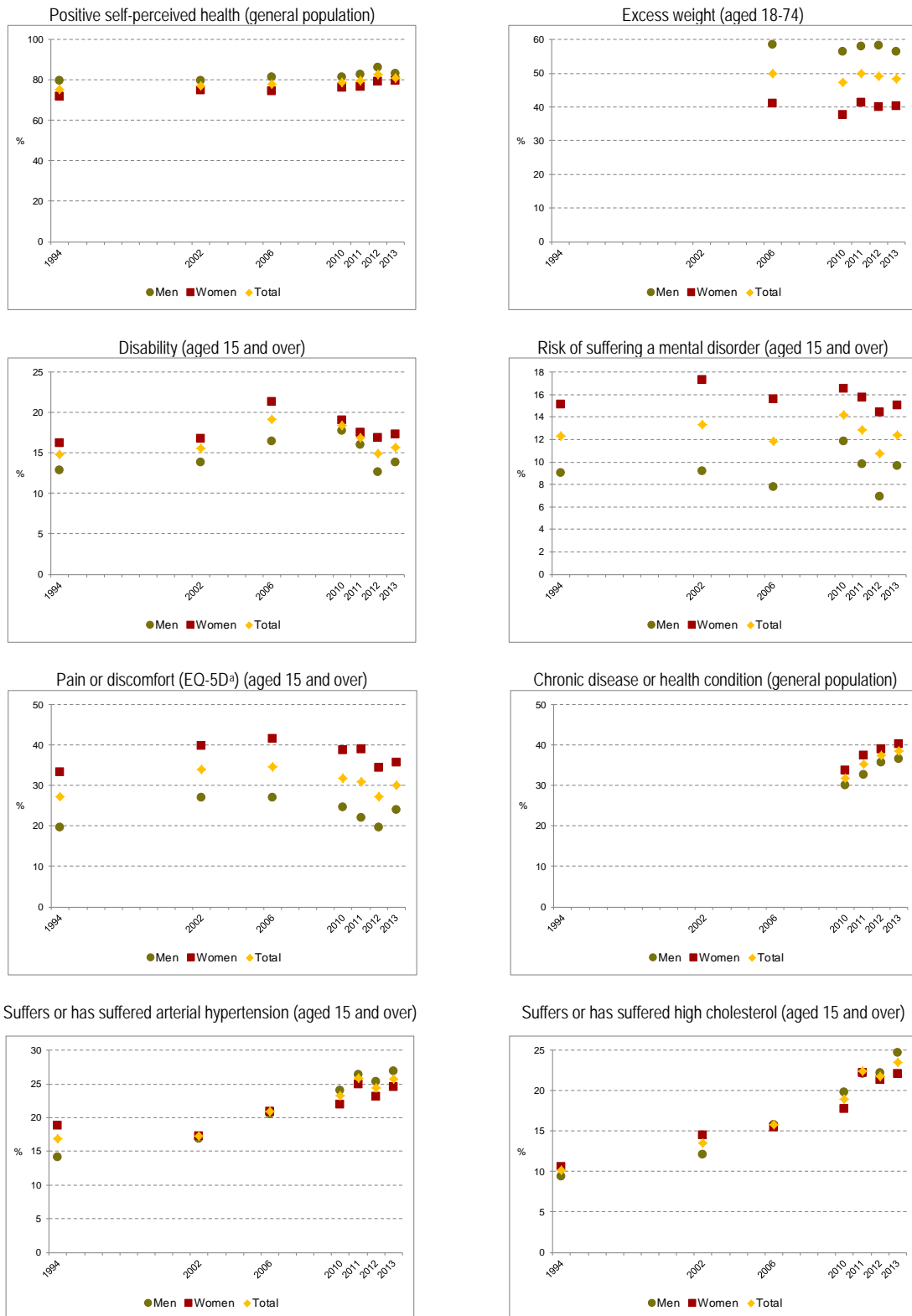
In relation to standardised indicators of health status, positive self-perceived health status has improved over the course of the period, while populations with chronic health conditions, hypertension and hypercholesterolaemia are increasingly prevalent. People carrying excess weight, people for whom pain and discomfort are reducing their quality of life, people with a disability and people at risk of suffering a mental health problem are all as prevalent as they were in 1994.

In relation to lifestyles, the downwards trend in tobacco consumption has been maintained since 1994; however, the level for women is higher in 2013 than it was in 1994. The percentage of the population aged 18-74 living sedentary lifestyles and the proportion of risky alcohol consumption in the population aged 15 and over are similar in 2013 to their 1994 levels, having peaked in 2006 and 2010, respectively. Healthy physical activity in the population aged 15-69 is on a downwards trend in 2010-2013.

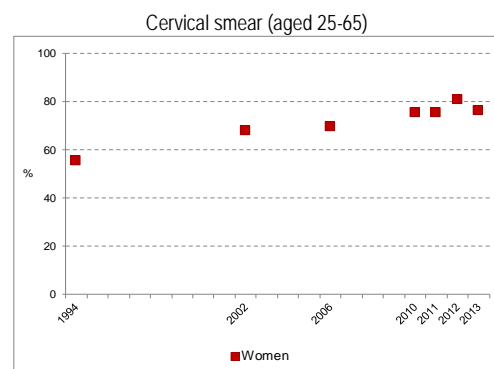
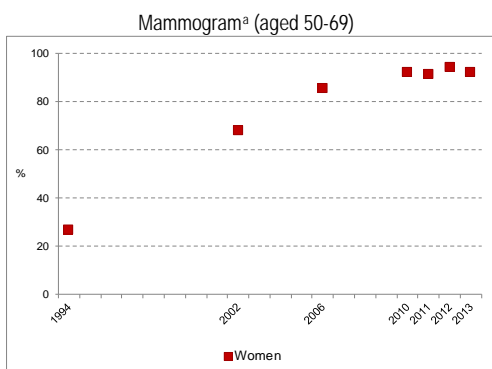
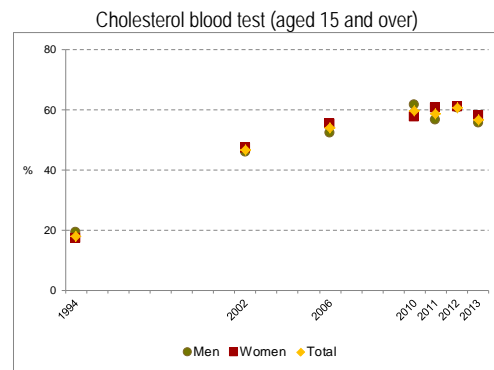
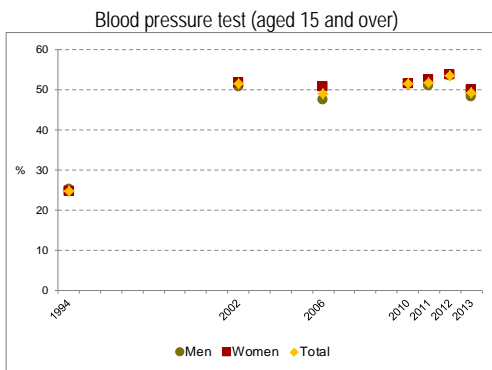
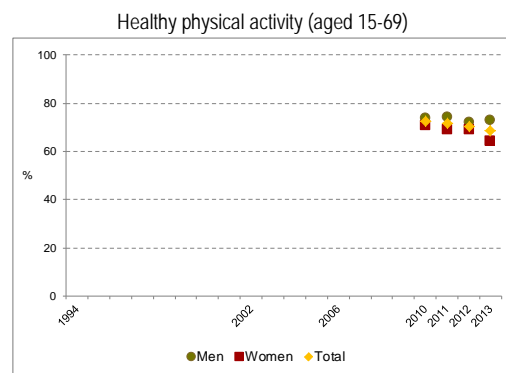
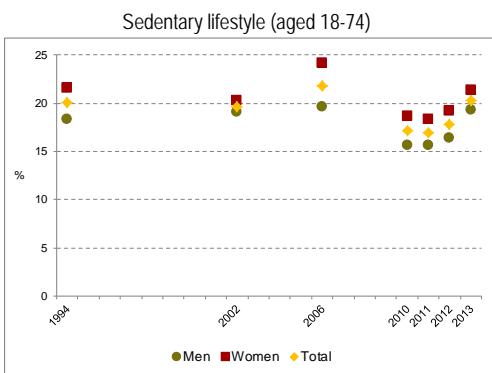
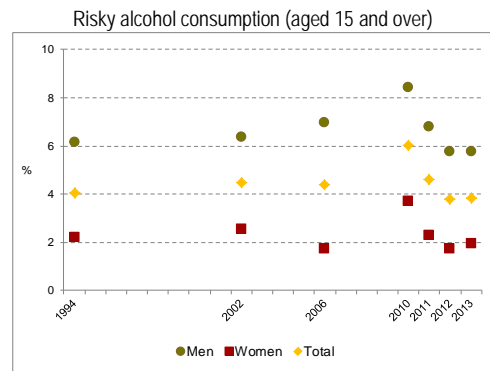
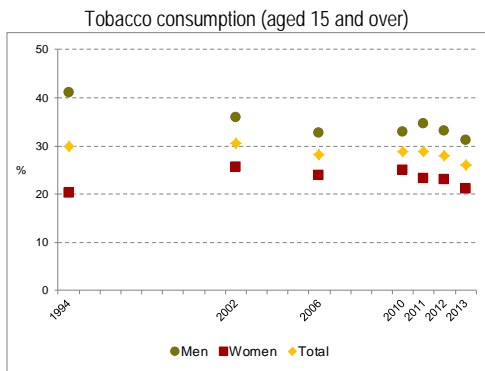
As regards, preventive practices, blood pressure testing remains stable at 2002 levels. Blood-cholesterol testing, periodic cervical smear tests and periodic mammograms remain stable at high rates.

Double healthcare coverage increased to a peak in 2010, since when the percentage has been declining. Change over time in medicine use has followed a similar pattern. Visits to healthcare professionals and to emergency departments in the last year remain stable, as do the percentage of hospitalisations in recent years. Finally, satisfaction with the public healthcare services used in the last year remains at similar levels to 1994.

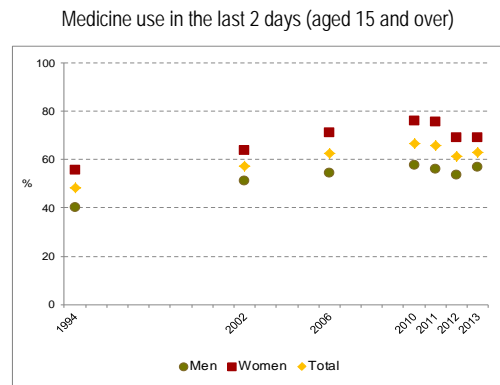
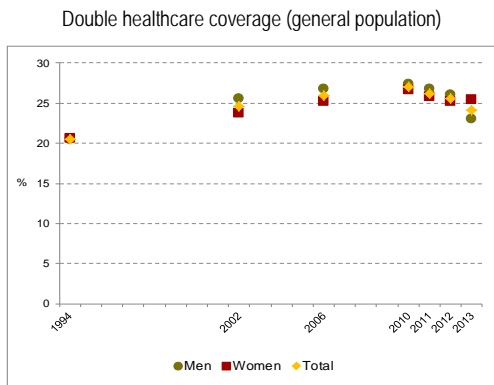
Figure 32. Trends with some Catalonia Health Survey (ESCA) indicators, by sex (age-standardised percentages). Catalonia, 1994-2013



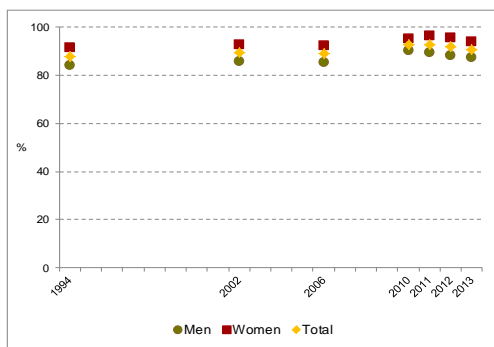
^a EQ 5D-3L: 1994, 2002, 2006, 2010. EQ 5D-5L: 2011, 2012, 2013.



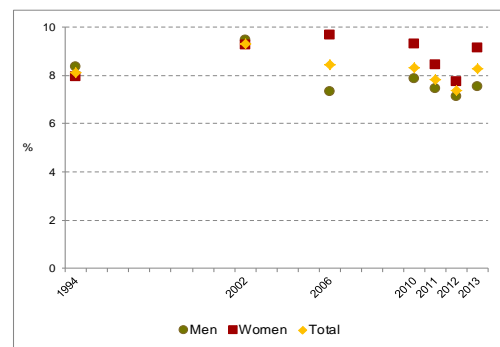
^a Non-standardised proportions, specific to the 50-69 age group.



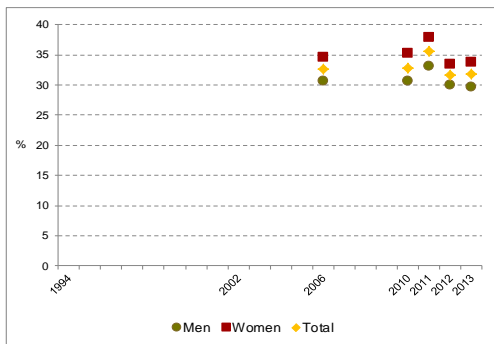
Visit to a healthcare professional in the last year (general population)



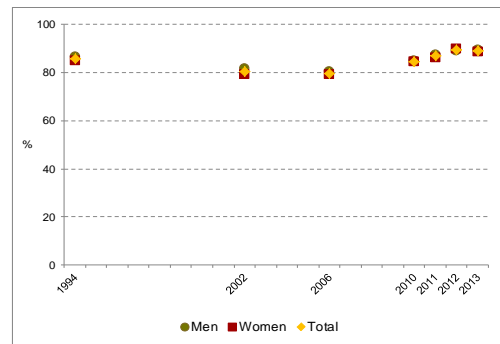
Hospitalisation in the last year (general population)



Visit to an emergency department in the last year (general population)



Satisfaction with public healthcare services used (aged 15 and over)



Standardised using the direct method. standard population on 1 January 2013, as per the Catalan Institute of Statistics (Idescat) Population Register.

Source: Health Survey of Catalonia (ESCA), 1994, 2002, 2006, 2010, 2011, 2012 and 2013. Ministry of Health.

Part Two

- **Equity in health**

13 Equity in health

Any variation in the health status or in a health indicator due to a disadvantage caused by the environment or by socio-economic factors is considered health inequality. This chapter analyses social inequities in health, habits and behaviour, and use of services by the Catalan population, on the basis of the Health Survey of Catalonia (ESCA).

Public health has been affected by key issues such as the environment, water, hygiene, air pollution and overcrowding since the start of industrialisation and city growth in the 18th century.¹⁰ The 21st century is a stage in which urbanisation, demographic change, and social and cultural challenges necessitate new analysis and intervention tools for reducing health inequalities.

Inequality shows the highest and lowest concentration or dispersal of the distribution of a variable in various predefined population groups (educational level and social class). In order to justify the prioritisation of actions, it is not enough for the figures to show inequality; rather, these inequalities must result in inequity. The concept of inequity incorporates a social judgment, so it is relative in time and space. In a definition widely accepted by the scientific community, Margaret Whitehead and Goran Dahlgren define as inequitable those inequalities that are avoidable, unnecessary and unjust.^{11,12,13} The model used by Whitehead and Dahlgren – one of the most widely used determinants of health for explaining inequalities – starts from the personal characteristics of the individual (age, sex and hereditary factors) and contextualises them in their surroundings, from the most immediate to the most distant: individual lifestyle factors, social support from family and community surroundings, living and working conditions, and socio-economic and cultural conditions. The model adopted by the Commission for Reducing Health Inequalities in Spain (CRDSE)¹⁴ also takes into account the determinants relating to socio-economic and political structure and context that define a social structure and a distribution of power and resources. This hierarchy is reflected in the various factors leading to inequality.

These differences are not a question of poor and rich people, but a problem of opportunity, since not everyone has the same opportunities to enjoy the best possible health.¹⁵ Knowing the scale, distribution and causes of these inequalities must be the first step in articulating policies and actions to reduce them.¹⁶

Determinants of health have an influence on health status, whether directly or through lifestyle. The population belonging to the most disadvantaged social class or with the lowest educational level has the most health problems, with regard both to perceived health, and to health measured on the basis of chronic conditions, risk of suffering mental health problems, or disabilities and dependence.

In health inequalities, there is a visible social gradient; that is, the lower the social group in society's hierarchy, the lower its life expectancy, the worse its perceived health and health-related quality of life, and the more frequent its illnesses.^{17,18}

A large number of countries and international organisations have proved the importance of health inequalities. Understanding the scale and distribution of the health inequalities in a community is a prerequisite for proving the existence of inequity and, consequently, for developing public policies to tackle it:^{11,15}

- Health inequalities are ethically unacceptable
- Poor health is a factor in social exclusion
- Public health can improve more efficiently if the health of the population groups with the most cumulative problems is promoted
- Reducing social inequalities helps to cut the amount of the population needing healthcare
- Reducing inequalities leads to lower costs for social and healthcare services
- Reducing health inequalities can increase the population's capacity for work

Catalonia has a healthcare system that has developed over time in response to new care challenges in an environment of increasing healthcare spending.¹⁹ In this sense, healthcare planning in Catalonia uses the Health Plan for Catalonia as a frame of reference;²⁰ in line with the direction of travel of international healthcare policy, it forms part of the Catalan Executive's strategic agenda in relation to healthcare issues, by providing information on the healthcare and service needs of the population, and by setting out the major areas for priority action.

There is a difference between the causes of good health and the causes of health inequality. This therefore needs to be taken into account in order for actions to achieve their goals. The factors that cause an improvement in the health of the general population – such as communal improvements to the environment, hygiene, drinking water, immunisation and decent housing – do not always reduce health inequalities, so factors such as income, educational level and sex need to be handled differently.²¹

The ESCA serves as a source of information for analysing the populations health differences and inequalities, as well as for identifying needs, inequities and, consequently, priority problems.

Analysis of health differences and inequalities that has been conducted on the basis of the ESCA 2006 and 2012-2013 combines three thematic areas and four inequality factors. The thematic areas are determinants and lifestyles, health status, health-related quality of life, and use of healthcare services. As for the inequality factors, they are occupation-based social class, educational level, and sex and age. Age is taken into account in all the other factors

because the frequencies have been standardised, using the direct method, for the age of the population of Catalonia on 1 January 2013.

Occupation-based social class

Occupation-based social class is an important measure of social inequality because it situates each individual in the social structure. In the ESCA, it is a proxy variable based on the current or former occupation of the surveyed person, which is complemented with information on activity of the company and employment situation,²² and does not express either risk exposure in the specific job, such as toxic substances or workplace accidents, or the description of the environment in which the interviewed person lives.²³

The evidence for the existence of health inequalities between socio-economic groups is acknowledged by many experts and countries, and even the WHO has stated that one of the health targets that all countries should adopt is reducing differences in health status and morbidity between social classes.²⁴

Differences are detected in practically all health indicators on the basis of social class. In general, the more disadvantaged classes have worse health levels, partake in unhealthy behaviours in higher proportions, and make more use of healthcare services than the better-off social classes.

The distribution of population by occupation-based social class in 2013 can be seen in tables 11 and 12. By age group and sex, it can be observed that, the older the age group, the lower the proportion of well-off classes and the higher the concentration of disadvantaged classes.

Table 11. General population by occupation-based social class, by age group and by sex. Catalonia, 2013

Occupation-based social class		Aged 0-14	Aged 15-44	Aged 45-64	Aged 65-74	Aged 75 and over	Total
Men	Group I	16.8	10.7	9.1	9.5	9.1	11.1
	Group II	7.7	10.1	10.2	7.0	5.9	9.2
	Group III	27.4	30.2	28.8	24.9	18.4	28.1
	Group IVa	26.9	21.7	29.8	30.4	37.6	26.4
	Group IVb	11.4	14.6	13.8	23.3	20.2	15.0
	Group V	8.0	9.7	6.6	4.3	6.8	8.0
Women	Group I	11.5	10.3	8.8	11.0	4.4	9.5
	Group II	12.3	12.4	13.8	5.3	6.7	11.5
	Group III	25.7	34.3	29.5	19.6	16.0	28.5
	Group IVa	23.5	18.5	22.1	22.5	23.9	21.1
	Group IVb	13.6	10.8	11.1	20.5	15.9	12.7
	Group V	10.3	11.4	10.3	11.1	14.4	11.3
Total	Group I	14.2	10.5	9.0	10.3	6.2	10.3
	Group II	9.9	11.2	12.0	6.1	6.4	10.3
	Group III	26.6	32.2	29.1	22.1	16.9	28.3
	Group IVa	25.3	20.1	25.9	26.2	29.2	23.7
	Group IVb	12.5	12.8	12.4	21.8	17.6	13.8
	Group V	9.1	10.5	8.5	7.9	11.5	9.6

Source: Health Survey of Catalonia (ESCA) 2013. Ministry of Health.

Table 12. General population by occupation-based social class (grouped), by age group and by sex. Catalonia, 2013

Occupation-based social class		Aged 0-14	Aged 15-44	Aged 45-64	Aged 65-74	Aged 75 and over	Total
Men	High (groups I and II)	24.5	20.8	19.3	16.5	15.0	20.3
	Middle (groups III and IVa)	54.3	51.9	58.6	55.2	56.0	54.6
	Low (groups IVb and V)	19.4	24.3	20.4	27.6	27.0	22.9
Women	High (groups I and II)	23.8	22.8	22.6	16.2	11.1	21.0
	Middle (groups III and IVa)	49.2	52.8	51.6	42.1	39.9	49.6
	Low (groups IVb and V)	23.9	22.3	21.4	31.7	30.3	24.0
Total	High (groups I and II)	24.1	21.7	21.0	16.4	12.6	20.6
	Middle (groups III and IVa)	51.9	52.4	55.0	48.3	46.1	52.1
	Low (groups IVb and V)	21.6	23.3	20.9	29.7	29.0	23.5

Source: Health Survey of Catalonia (ESCA) 2013. Ministry of Health.

Educational level

Educational level is presented as a factor explaining health inequalities because it classifies the population with some common characteristics that make its members act in a specific way in relation to everything affecting health. The most common explanations justifying the choice of educational level as an individual determinant of health are based on the fact that a higher educational level helps better to understand information about health risks, enables more appropriate use of healthcare services, situates people in higher socio-occupational groups, and alleviates the risks associated with stressful situations, such as work or losing one's job.^{25,26}

In recent years, numerous studies have confirmed the existence of health differences between populations based on educational level, as well as on inequalities.^{27,28,29,30,31} Populations with higher educational levels demonstrate lower morbidity rates in the majority of chronic conditions and increased life expectancy; moreover, people who have dedicated more years to study have more positive health-related behaviour.³²

One problem with educational level is the generational effect, since older people generally have lower educational levels because they have had fewer opportunities. Nevertheless, this generational fracture is diluted in the adult population and disappears in younger age groups, in which the educational levels achieved by boys and girls even out.

One of the most common explanations justifying the choice of educational level as an individual determinant of health is based on the fact that a higher educational level:

- Helps to absorb information on health risk better
- Enables more appropriate use of healthcare services
- Alleviates the risks relating to work and losing one's job

In this sense, educational level, as well as having a direct relationship with health, also establishes an indirect relationship because employment rates are higher amongst people with higher educational levels, especially for women.

Some authors have taken the view that the relative importance of educational level is greater than other facts, such as income, in variations in mortality rates in the United States over the course of 10 years (1955-1965).³⁵

In 2013, the population aged 15 and over with a primary education or without any education represents 21.0% of the population, 59.0% have a secondary education and 19.9% have a university education. Women achieve higher educational levels. The percentage of the population aged 65 and over with a university education is low and lower in women than in men, while the percentage of this population with a primary education or with no education is very high and higher in women than in men.

The educational level variable is determined by age of population because the “primary or no education” category is essentially focused on the population aged 64 and over; on the other hand, the majority of those with a university education are in the younger population aged 45 and under (table 13).

Table 13. Educational level of the population aged 15 and over, by age group and sex (%). Catalonia, 2013

	Educational level	Aged 15-44	Aged 45-64	Aged 65-74	Aged 75 and over	Total
Men	Primary or no education	10.8	14.0	37.3	55.9	18.1
	Secondary	65.4	67.0	49.4	37.9	62.1
	University	23.5	18.9	13.3	6.1	19.7
Women	Primary or no education	10.7	17.8	48.9	64.6	23.7
	Secondary	62.0	61.7	42.9	32.7	56.1
	University	27.4	20.5	8.2	2.3	20.1
Total	Primary or no education	10.7	15.9	43.4	61.3	21.0
	Secondary	63.8	64.3	45.9	34.7	59.0
	University	25.4	19.7	10.6	3.8	19.9

Source: Health Survey of Catalonia (ESCA) 2013. Ministry of Health.

13.1 Determinants and lifestyles

Differences in exposure to or protection from health risks and people's vulnerability are related to individual behaviour, which is determined, amongst other things, by sex, as a biological factor, and by gender, as a social factor; the influence of this has been very heterogeneous between the various generations of women that make up present-day society. Other structural environmental factors³³ – such as economic, social and cultural factors³⁴ – influenced by educational level and social class also determine differences and inequalities in lifestyles and habits, such as tobacco consumption, excessive alcohol consumption, carrying excess weight or preventive practices.

The importance of lifestyles as an intermediate variable for health has been widely studied. Mackenbach's conclusions are particularly significant, taking the view that social inequalities translate to life-expectancy differences, which oscillate between four and six years in men, and between two and four years in women.³⁵

Dahlgren and Whitehead³⁶ ascribe importance to educational level as a significant factor in emerging from poverty and changing the lifestyles that influence health status. Therefore, in their report, they assert that 'Generally, qualifications improve people's chances of getting a job and of having better pay prospects and the resulting increase in standard of living. This in turn improves opportunities to obtain the prerequisites for health – nutritious food, safe housing, a good working environment and social participation'.

The various conditions and lifestyles analysed are tobacco consumption, risky alcohol consumption, sedentary lifestyles and preventive practices.

Tobacco consumption

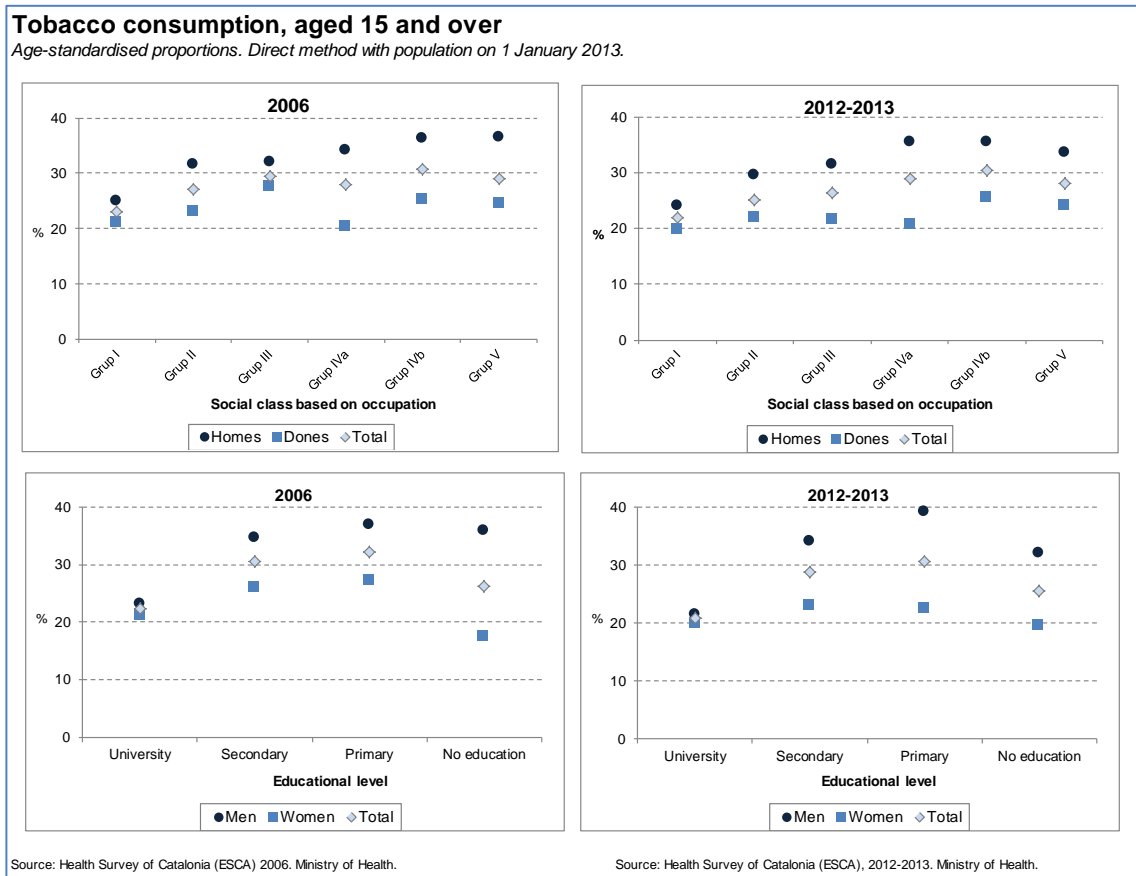
Tobacco consumption is one of the main risk factors for health in developed countries and is a public health problem because it affects the psychological, physical and social well-being of the population.³⁷ Smoking is more prevalent amongst men than women in all age groups.^a

Throughout Europe, in general, a larger difference has been observed in the tobacco consumption of men and women of lower socio-economic level, especially if calculated on the basis of income or occupation. However, there are exceptions in Southern Europe, where smoking seems to be more prevalent in well-off socioeconomic groups, especially amongst women.³⁸ In Catalonia, the more disadvantaged the social group, the more prevalent smoking is. The proportion of smokers is lower in better-off social groups and amongst those with a university education. As for educational level, consumption is similar for men and women with a university education, while in other social groups and in those with an educational level below university, consumption is always higher in men.

The pattern observed in 2012-2013 is the same as in 2006.

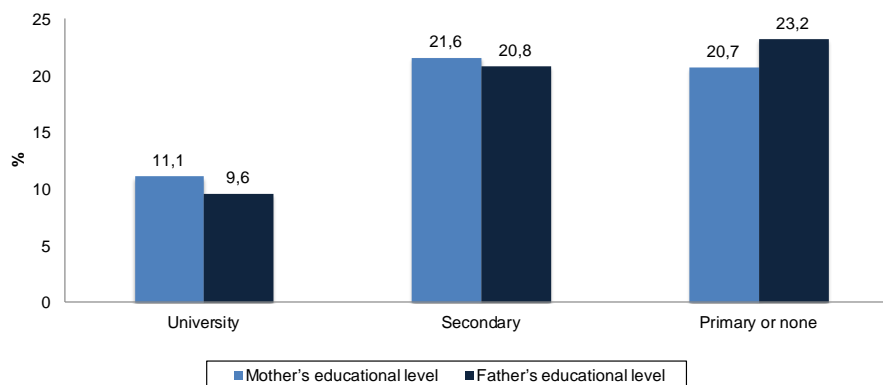
a. A smoker is understood as a person who smokes at the moment, whether daily or occasionally.

Figure 33. Prevalence of smoking in population aged 15 and over, by social class and sex, and by educational level and sex. Catalonia, 2006 and 2012-2013



The lower the educational level of the mother or father, the higher the percentage of children exposed to the negative consequences of smoking because of cohabiting with smokers (figure 34).

Figure 34. Population aged 0-14 exposed to tobacco smoke at home by educational level of mother and father. Catalonia, 2012-2013

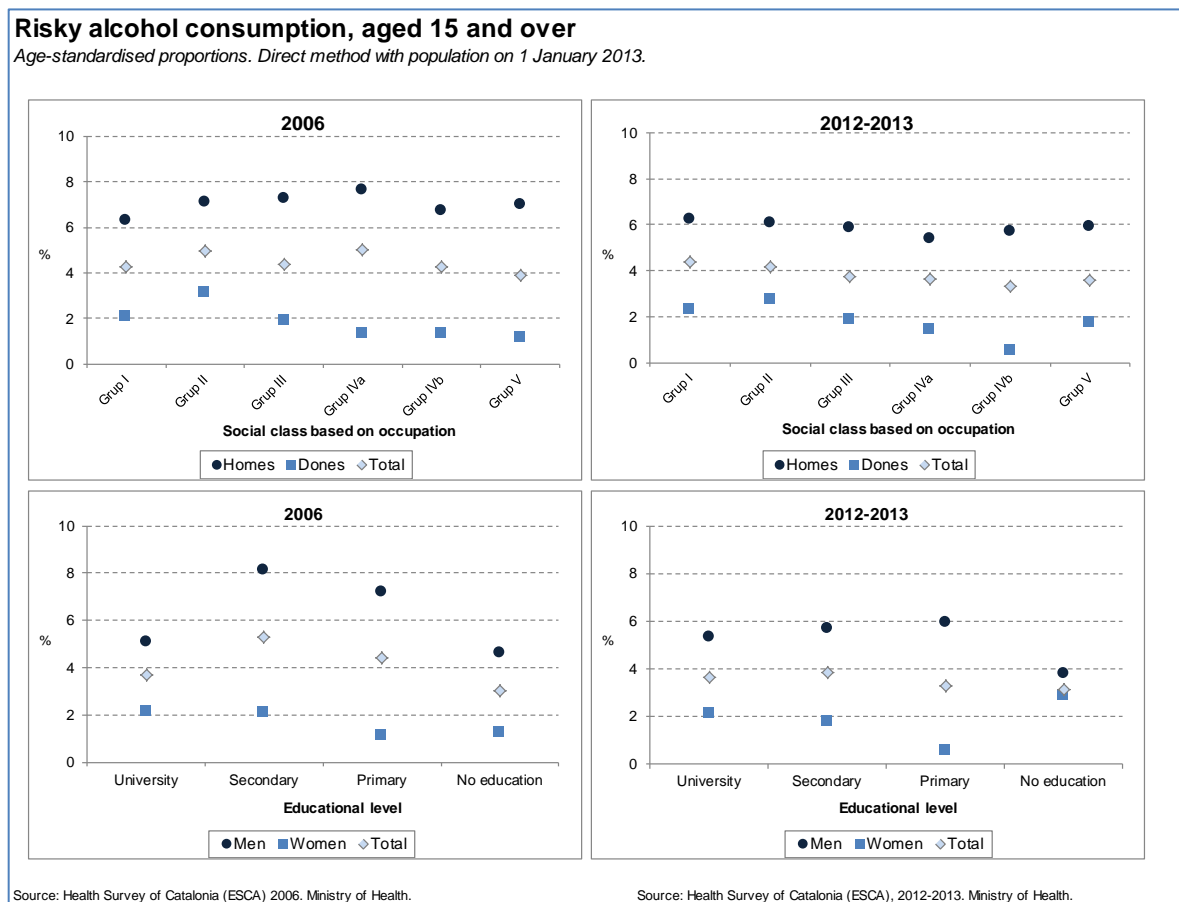


Risky alcohol consumption

Risky alcohol consumption is more prevalent amongst men than women^a and more common amongst young people; the older the age group, the less common it is.

In 2012-2013, there is slightly more risky alcohol consumption amongst the population belonging to better-off social groups. There are higher percentages of at-risk drinkers amongst men with a primary education and amongst women with a university education. As regards the pattern observed in 2006 and in 2012-2013, the trend by social class has reversed and the differences between educational level groups are smaller.

Figure 35. Risky alcohol consumption in the population aged 15 and over, by social class and sex, and by educational level and sex. Catalonia, 2006 and 2012-2013



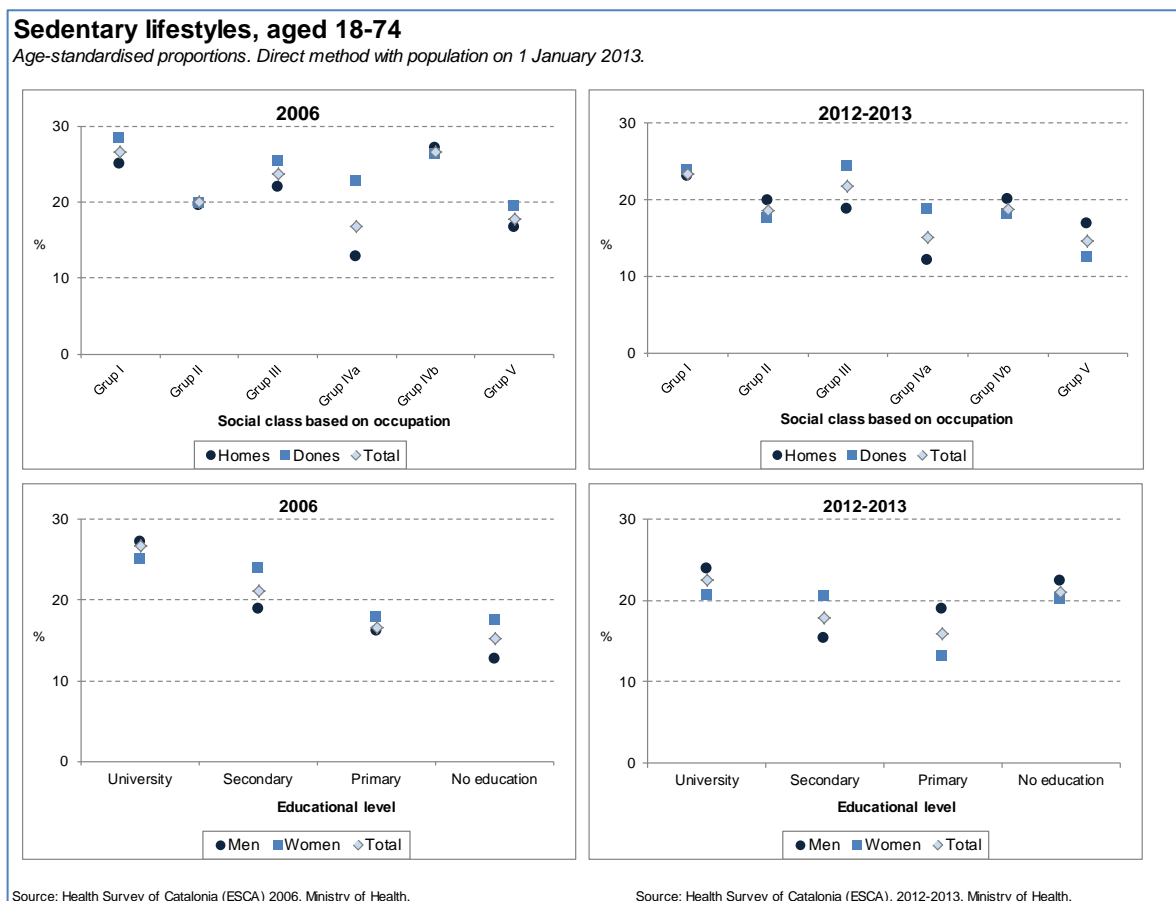
a. A man is an at-risk drinker if his consumption is 28 standard alcohol units per week or more; the number of units for women is 17. Consuming alcohol five or more times consecutively at least once per month also qualifies a person as an at-risk alcohol drinker.

Physical activity

Regular physical activity throughout life is important for staying in good health, physically and mentally. The 2013 figures show that men spend more time on physical activity than women.

Both sexes demonstrate fairly similar levels of sedentary lifestyles across the social classes and educational levels, but there is a clearer gradient for the educational level variable than for social class. The highest percentages of sedentary lifestyles are amongst middle-class women and upper-class men, and amongst those with a university education and those without an education. The educational level pattern observed in 2006 and in 2012-2013 has changed: the population without an education were the most sedentary in 2006, but they reached levels similar to those of the university-educated population in 2012-2013.

Figure 36. Population aged 18-74 with sedentary lifestyles, by social class and sex, and by educational level and sex. Catalonia, 2006 and 2012-2013



In the child population, there is a very significant relationship between social class and physical activity. Physical activity outside school in the population aged 3-14 is more common in the better-off classes, while playing in the yard or street is most common amongst the children of the more disadvantaged classes, with significant differences between the social groups at either extreme. As figure 29 shows, the proportion of boys and girls with sedentary

leisure habits (watching television and playing computer or video games for more than two hours per day, daily) increases, by statistically significant amounts, the more disadvantaged the social class.

Preventive practices

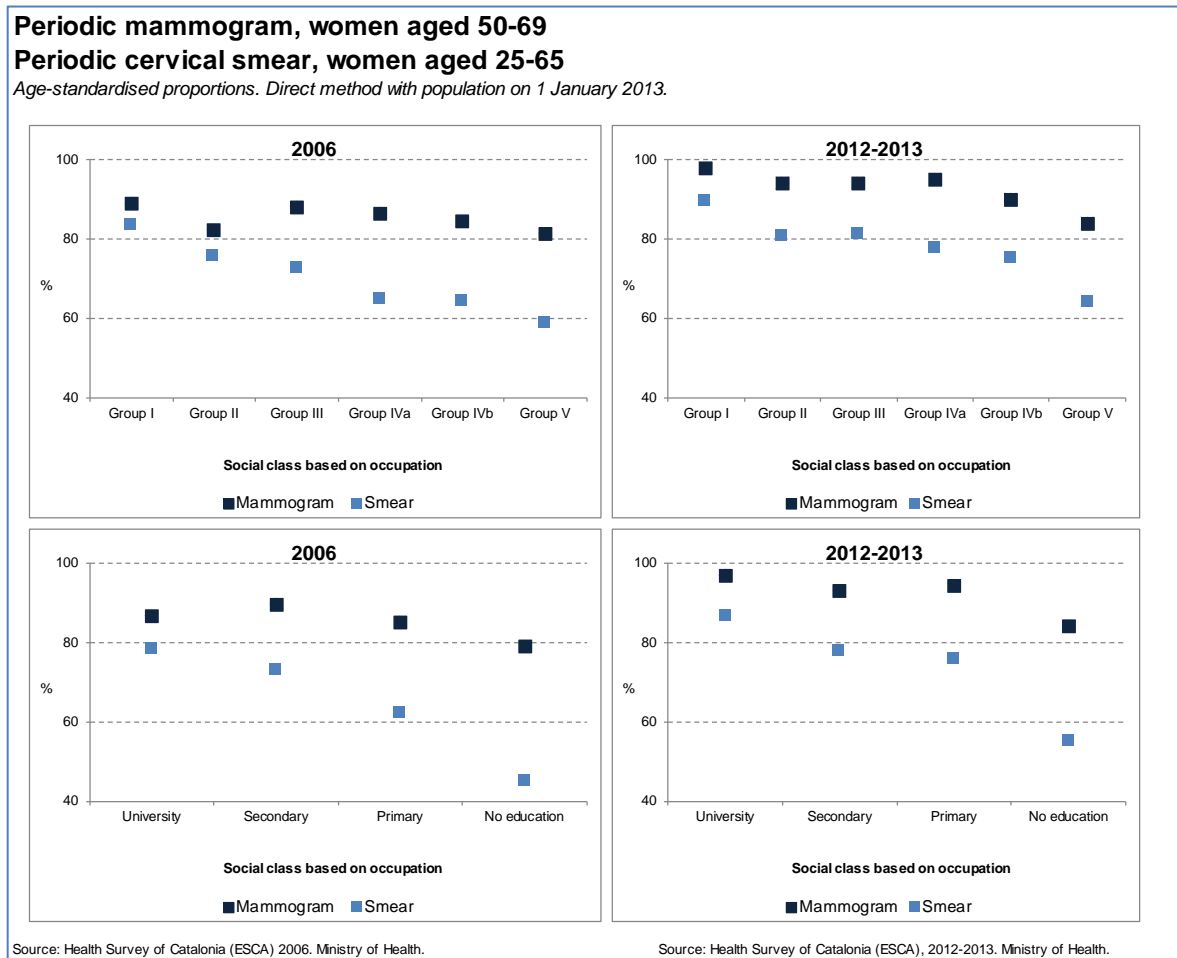
Preventive attitudes in relation to health and habits in general – such as periodic blood-pressure and blood-cholesterol testing – are similar in relation to sex and social class, but there is a slight gradient in relation to educational level. The better-educated a group, the more blood-pressure testing increases, while blood-cholesterol testing declines slightly the lower a group's educational level.

In relation to the previous period, it can be seen that inequalities between the social classes are smaller on both measurements, while the gradient between educational levels has stayed the same in relation to these two preventive practices.

Higher proportions of the female population aged 50-69 (priority group) undergo periodic mammograms in the better-off social classes and amongst women with a university education. As well as increasing the number of women having mammograms, the implementation of the Population-Based Breast Cancer Screening Programme (PPCCM) in Catalonia has reduced the differences by making the process more accessible. The increase in the proportion of women undergoing mammograms has been smaller amongst those from the most disadvantaged group and those with no education.

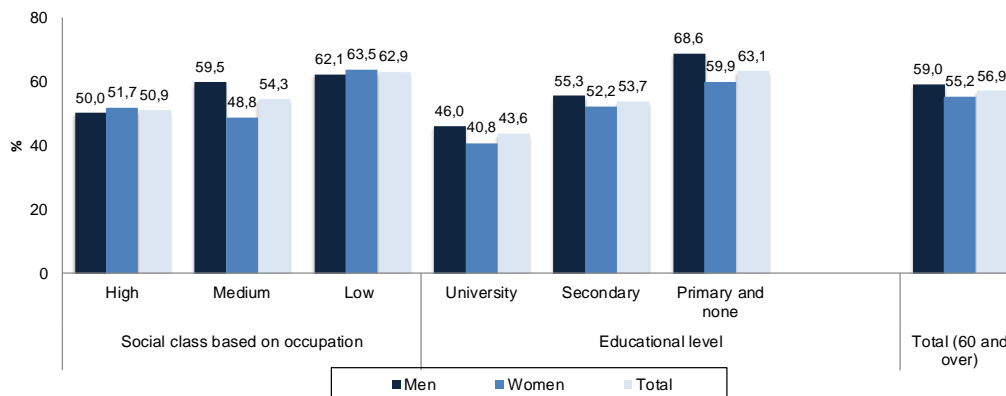
Smears are a preventive practice that lacks a population-wide programme; they present a clearer gradient, being more common amongst the better-off classes and women with a university education.³⁹

Figure 37. Women aged 50-69 who undergo periodic mammograms and women aged 25-65 who undergo a periodic cervical smear, by social class and by educational level. Catalonia, 2006 and 2012-2013



The more disadvantaged the social class, the higher the proportion of people aged 60 and over who are regularly vaccinated against influenza at the start of autumn; the proportion is also higher for the population with a primary education or no education.

Figure 38. Population aged 60 and over that is regularly vaccinated against the flu, by social class and sex, and by educational level and sex. Catalonia, 2013



Source: Health Survey of Catalonia (ESCA) 2013. Ministry of Health.

13.2 Health status and health-related quality of life

Health and health-related quality of life are multi-dimensional concepts incorporating elements of physical, mental and psychological health, as well as other elements such as independence and social relations with the environment. Some of the ESCA variables enabling the description of a population's health status and quality of life are self-perceived health status, excess weight and quality of life (measured from EuroQol), as well as chronic conditions, disability and mental health.⁴⁰

In the analysis of social inequalities, there are two different but complementary views for explaining the prevalence of health conditions in the more disadvantaged social strata.⁴¹ On the one hand, using mental health as an example, some evidence points to the reason being that poor mental health moves people down the social ladder; on the other, some studies advocate the cause/effect theory of class, in which higher rates of mental illness are found in those people who have always been part of the more disadvantaged social strata, presumably because they are more exposed to risk and stress factors, with fewer support resources.

Health status

The perception that people have of their own health expresses a sensation of individual well-being, beyond their physical problems or illnesses. Comparative studies of European countries indicate the existence of a relationship between sex and self-perceived health in the majority of places, based on worse self-assessment of health amongst women than men; this relationship is even stronger if social-class and educational-level variables are introduced.⁴²

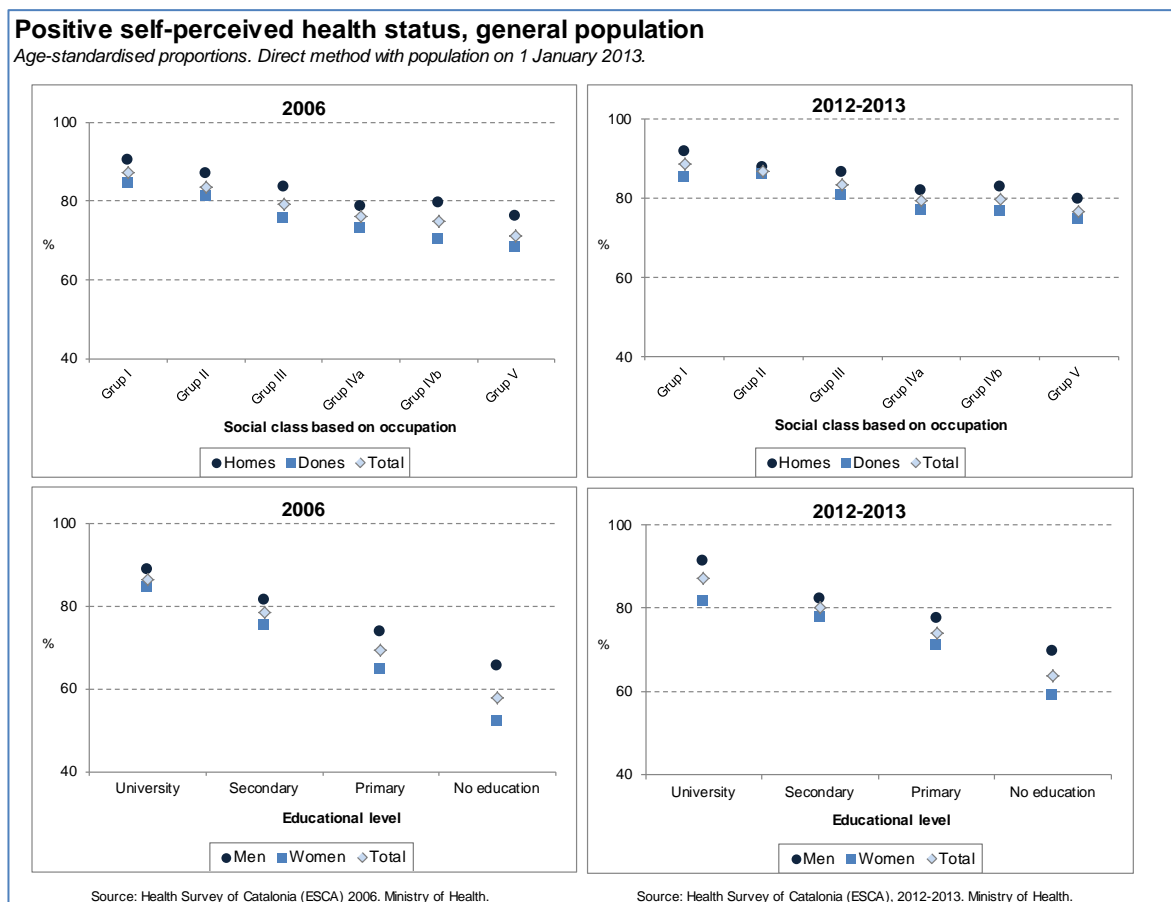
Despite the influence of ageing, any people belonging to more disadvantaged socio-economic groups and those with lower educational levels have a worse self-perceived health status, especially women.

In Europe, people belonging to more disadvantaged socio-economic groups have a worse self-perceived health status.³⁶ In Catalonia, according to the ESCA 2012-2013, there is a very clear gradient in the population's self-perceived health in relation to both social class and educational level. As such, the more disadvantaged the social group, the higher the proportion who claim that their health is normal or poor; also, the lower a population's educational level, the worse their self-perceived health, particularly women.

In children, there is also a relationship between the family's social class and their health status, meaning that boys and girls belonging to more disadvantaged social classes display a worse health status, while children whose mothers have lower educational levels have a worse self-perceived health status.

The gradient observed in 2006 has remained the same for 2012-2013.

Figure 39. Positive (excellent, very good or good) self-perceived health status in the general population, by social class and sex, and by educational level and sex. Catalonia, 2006 and 2012-2013



Health-related quality of life

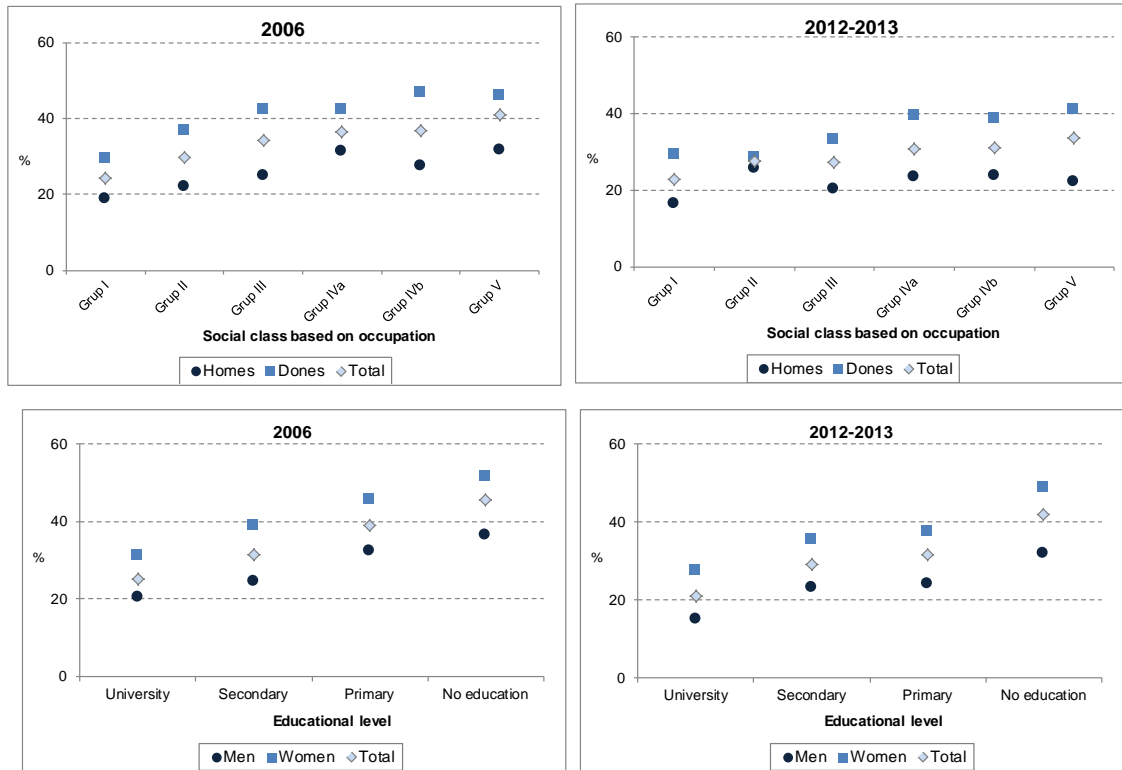
In any of the five aspects of health-related quality of life (measured using EQ-5D^{a,43,44}), the proportion of the population with problems is lower amongst people from the better-off classes. The gradient is even more pronounced in the educational-level variable, in which the proportion of people with problems is higher the lower their educational level (if any).

In relation to 2006, the gradient observed for the pain or discomfort aspect in 2012-2013 has remained practically the same.

^a The 2006 figures are estimated using EQ-5D-3L, and those for 2012-2013 using EQ-5D-5L.

Pain or discomfort (EQ-5D), aged 15 and over

Age-standardised proportions. Direct method with population on 1 January 2013.



Source: Health Survey of Catalonia (ESCA) 2006. Ministry of Health.

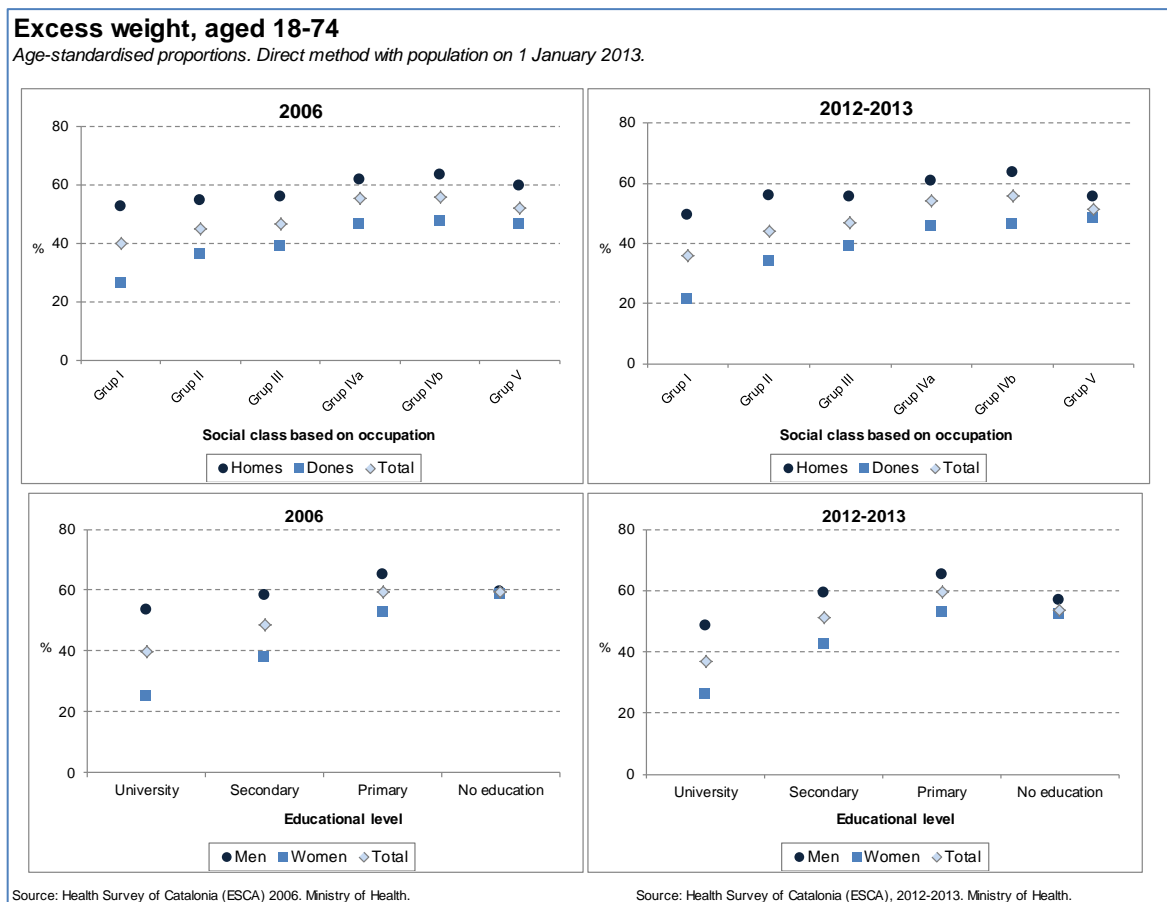
Source: Health Survey of Catalonia (ESCA), 2012-2013. Ministry of Health.

Excess weight (overweight and obesity)

Excess weight is relatively more common in the more disadvantaged social classes and amongst people with primary education or no education. In the child population, the gradient between social class and excess weight is also clearly observable, with higher percentages of overweight and obese boys and girls in more disadvantaged families.

The patterns most commonly observed in 2006 for excess weight amongst the more disadvantaged social classes and for people with lower educational levels have remained the same for 2012-2013.

Figure 41. Population aged 18-74 carrying excess weight, by social class and sex, and by educational level and sex. Catalonia, 2006 and 2012-2013



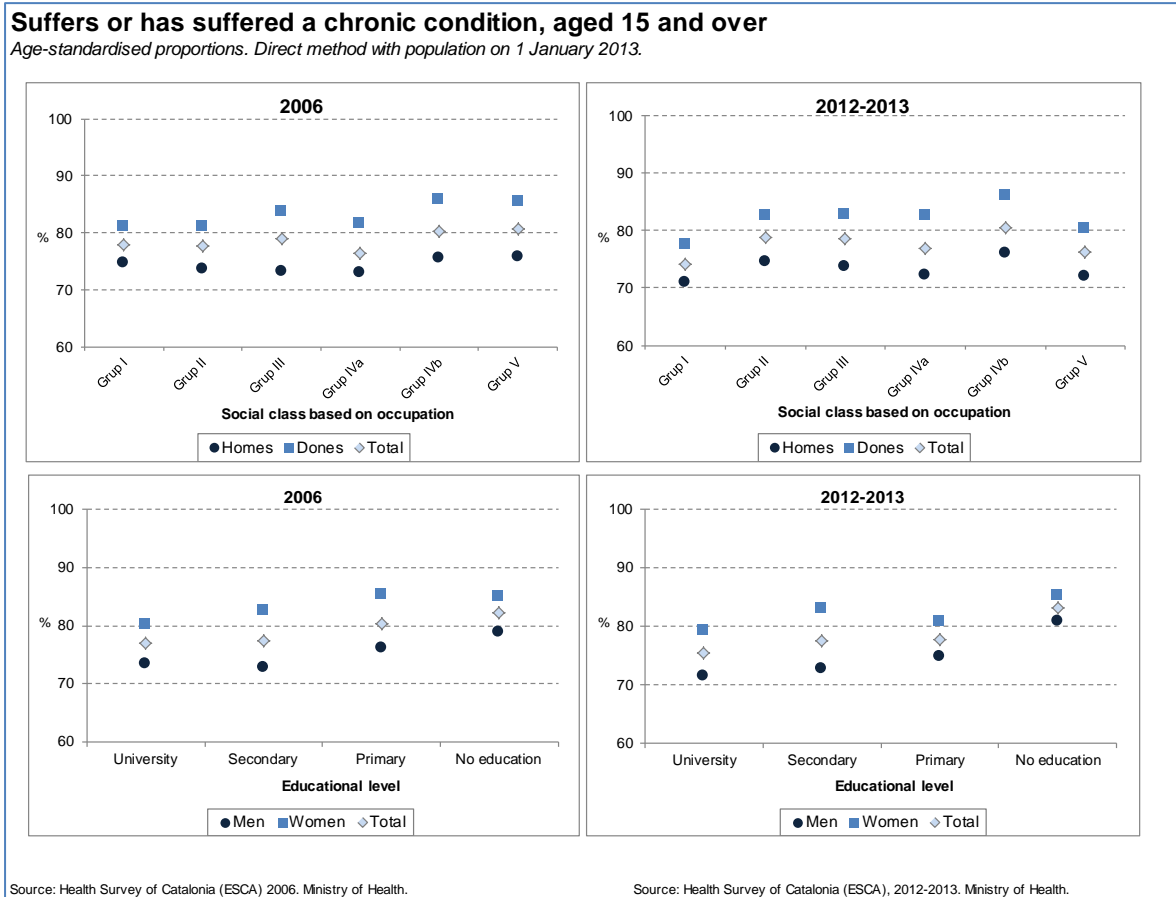
Chronic Conditions

The ESCA studies the presence of chronic conditions based on a list of 28 health conditions, selected because they are very prevalent in the population or because they lead to significant resource consumption. The results of this question show that chronic conditions are more common in women than in men, and that comorbidity is higher in women and in the older population.

A comparative study of the population aged 25-79 in eight European countries during the 1990s showed a major difference in the prevalence of nervous-system problems, cardiovascular problems, diabetes and arthritis, according to social class; there were no differences in problems with the digestive system or skin problems; only allergies were more prevalent in higher socio-economic groups.⁴⁵

In Catalonia, the results of analysing all chronic conditions in 2006 show that, the more disadvantaged their social class or the lower their educational level, the more people reported chronic conditions; the gradient was more pronounced for educational level. The pattern observed in 2012-2013 is similar to that in 2006.

Figure 42. Population aged 15 and over who suffer or have suffered a chronic condition, by social class and sex, and by educational level and sex. Catalonia, 2006 and 2012-2013



Mental disorders

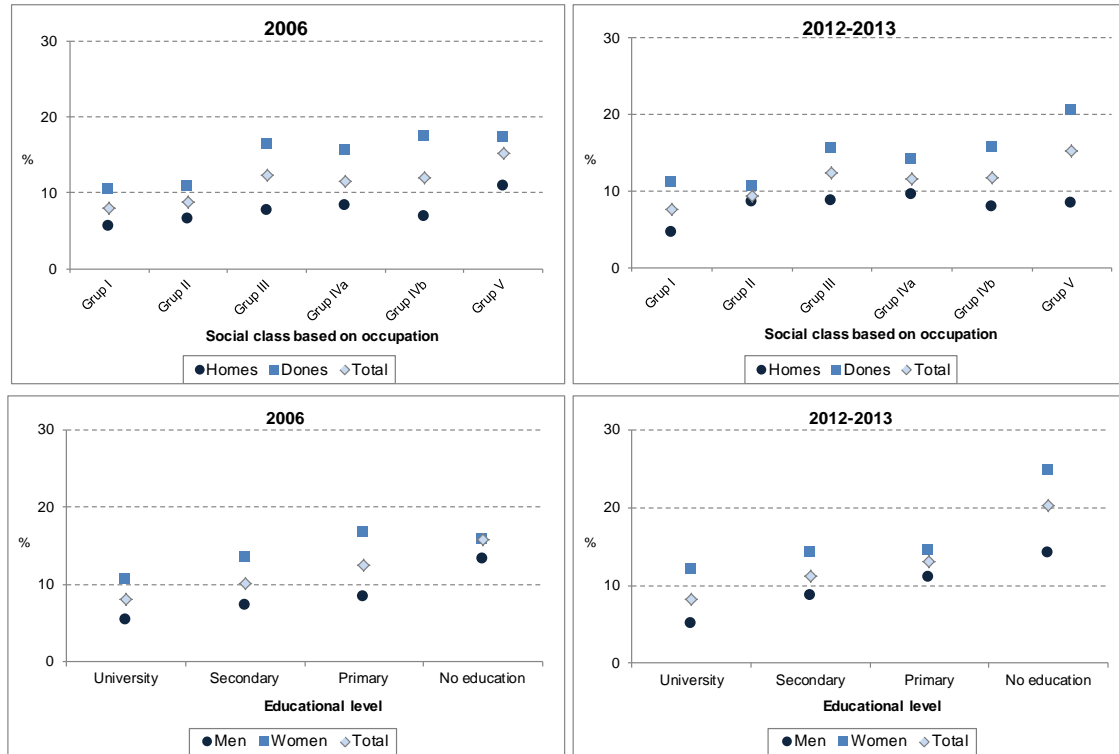
In all age groups, women are more likely than men to be suffering some form of mental disorder (anxiety, depression, insomnia, etc.) at the time of interview. The percentage of people at risk of suffering a mental disorder is higher amongst people belonging to the more disadvantaged social classes, and amongst people with a primary education or none at all.

The gradient observed for social class in 2012-2013 is similar to that for 2006. For educational level, the gradient is more marked in 2012-2013 than in 2006.

Figure 43. Population aged 15 and over at risk of suffering a mental disorder (Goldberg), by social class and sex, and by educational level and sex. Catalonia, 2006 and 2012-2013

Risk of suffering a mental disorder, aged 15 and over

Age-standardised proportions. Direct method with population on 1 January 2013.



Source: Health Survey of Catalonia (ESCA) 2006. Ministry of Health.

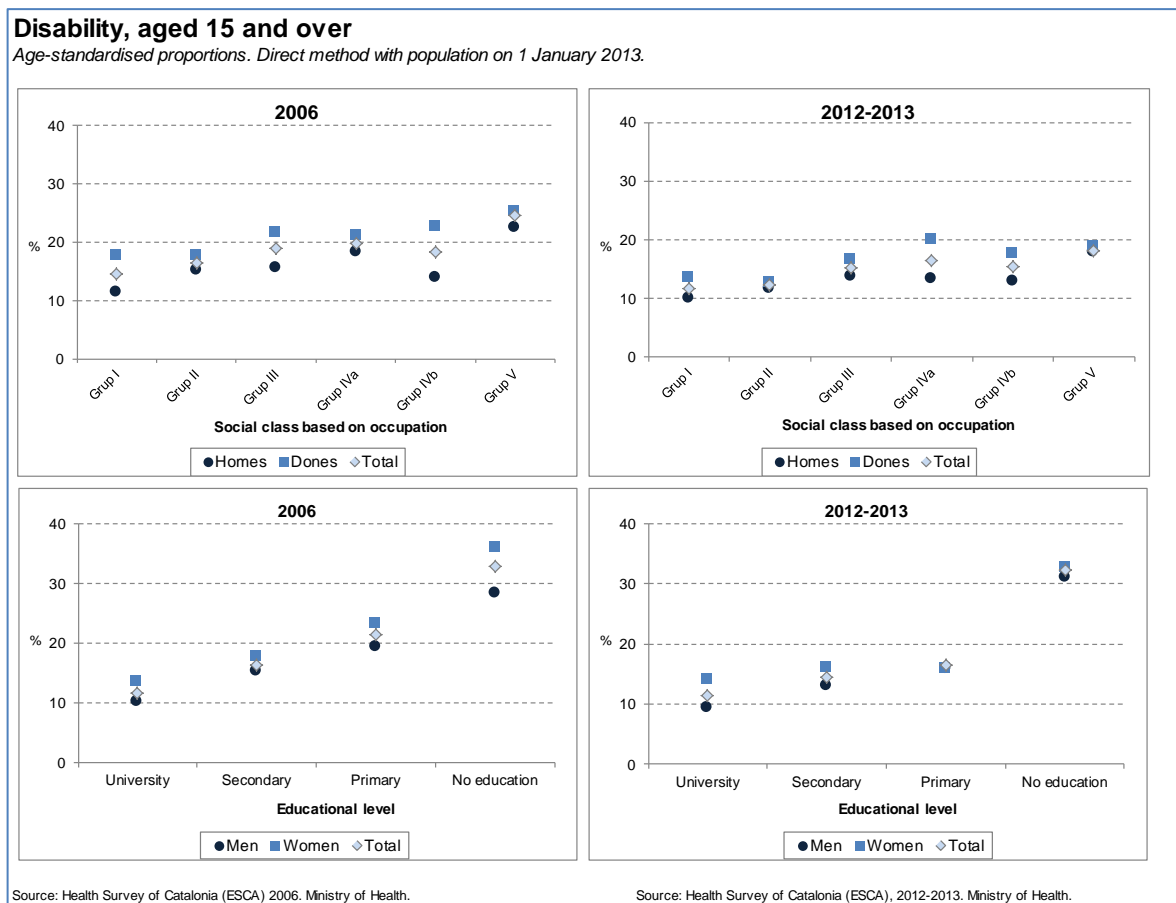
Source: Health Survey of Catalonia (ESCA), 2012-2013. Ministry of Health.

Disability

Disabilities are more prevalent amongst people aged 15 and over in the more disadvantaged social classes. By educational level, the proportion of adults with disabilities is higher in those with primary education or none at all than in those with a university education.

The social class pattern observed in 2006 has remained the same for 2012-2013. For educational level, the gradient is more marked in 2012-2013.

Figure 44. Population aged 15 and over with some form of disability, by social class and sex, and by educational level and sex. Catalonia, 2006 and 2012-2013



13.3 Use of healthcare services

Use of healthcare services is related to availability and need, either expected or on the basis of demand.

It is older people, particularly women, who use healthcare services most because they are the population groups with the most illnesses (chronic conditions, risk factors, comorbidity, or disability and dependence). In addition to this higher need and level of use, amongst women, there is the use they make of services as carers, because they do not always go to an appointment to resolve their own health problems, but often do so in their role caring for the health of their families.^{46,47}

Medicine use

Medicine use in the adult population is higher in women than in men in all age groups, except for the group aged 65-74, in which the medicine-use percentage is higher in men.

There is no difference by social class in the percentage of the population aged 15 and over who have taken some form of medicine. There are no differences by educational level between women, but there is a gradient amongst men, whereby the lower a group's educational level, the higher its medicine use.

In the period studied, there is no variation in the pattern by social class or educational level, and there are no significant differences by those variables.

Visits to healthcare professionals

There are no noticeable differences by social class or educational level in use of healthcare services, although visits are slightly more prevalent in the best-off social class and amongst those with a university education.

The gradient observed in 2006, whereby a larger proportion of the best-off classes and those with higher educational levels visited some sort of healthcare professional, did not remain the same for 2012-2013. However, inequalities by educational level were slightly reduced, since the 2006 gradient is no longer visible.

Population who have been hospitalised

The pattern observed in 2006, in which there was a higher hospitalisation percentage amongst the more disadvantaged classes and those with lower educational levels, did not remain the same for 2012-2013, since there are currently no significant differences by social group or educational level.

Population who have visited an emergency department

There is a slight gradient by social class and educational level in the proportion of the population who have visited an emergency department whereby, the better-off a population's social group or the higher its educational level, the lower the percentage that have visited an emergency department in the last 12 months. There were no changes between 2006 and 2012-2013.

Satisfaction with the public healthcare services used in the last year

During the last year, 67.8% of the general population have used public services most frequently, 16.5% have used private, and 15.3% have used none at all. Use of public healthcare services is higher amongst older people.

The inequalities by social class and educational level in the proportion of the population satisfied with the public healthcare services used in the last year declined between 2006 and 2012-2013.

Figure 45. General population satisfied with the public healthcare services that they have used most often in the last year, by social class and sex, and by educational level and sex. Catalonia, 2006 and 2012-2013

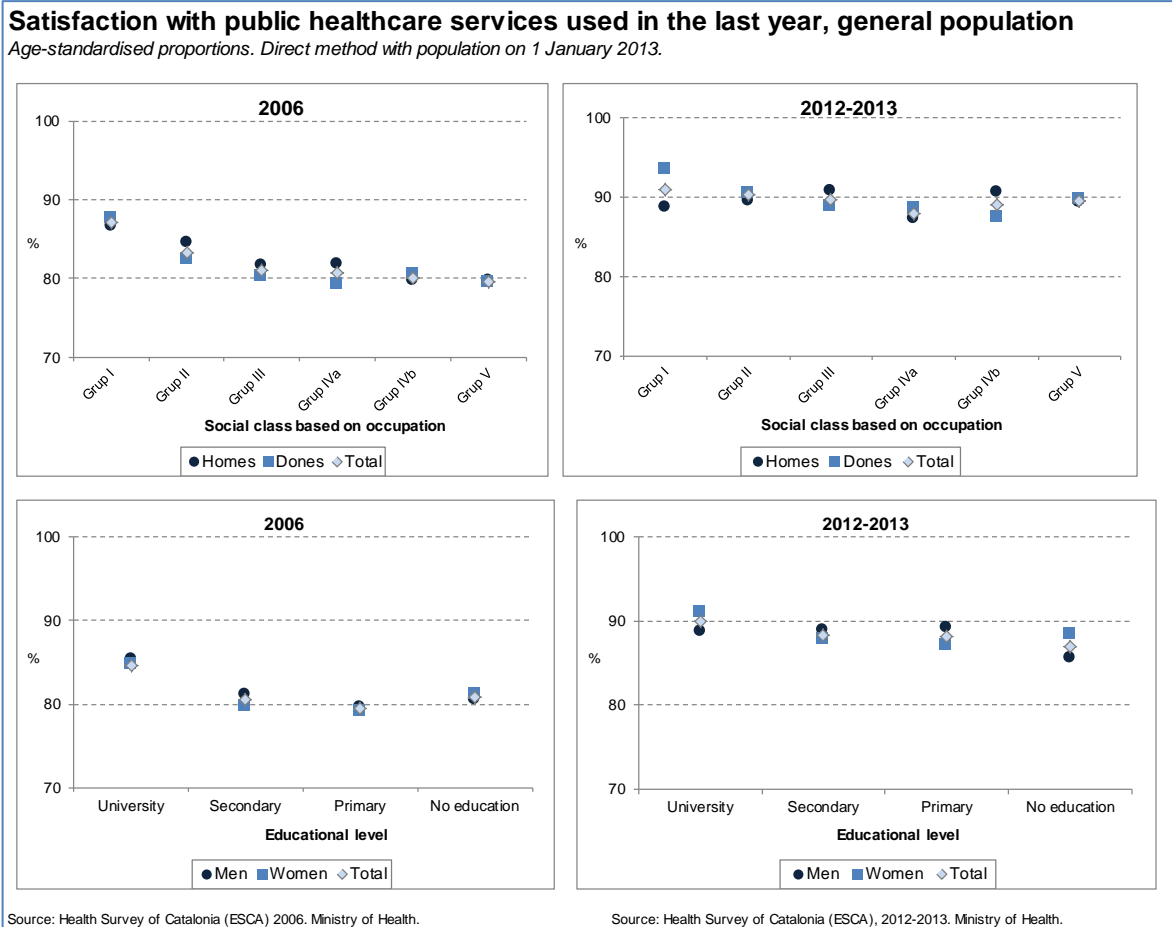


Table 15. Changes to the main ESCA indicators (raw % and CI=95%), by educational level. Total. Catalonia, 2006 and 2012-2013^a

		2006							2012-2013									
		Educational level					Total		Educational level					Total				
		University	Secondary	Primary or no education		University			Secondary	Primary or no education								
1	Positive (excellent, very good or good) self-perceived health status (aged 15 and over)	T	91.2%	(90,1-92,3)	84.1%	(83,3-84,9)	56.1%	(54,9-57,3)	75.5%	(74,8-76,2)	91.2%	(89,7-92,7)	82.3%	(81,2-83,4)	61.8%	(59,6-64,0)	79.2%	(78,3-80,1)
2	Excess weight (overweight and obesity) (aged 18-74)	T	34.9%	(33,0-36,8)	44.2%	(43,0-45,4)	64.9%	(63,5-66,3)	48.7%	(47,9-49,5)	34.3%	(31,8-36,8)	50.4%	(48,9-51,9)	62.1%	(59,3-64,9)	48.9%	(47,7-50,1)
3	Disability (aged 15 and over)	T	6.7%	(5,7-7,7)	9.4%	(8,7-10,1)	35.0%	(33,8-36,2)	17.9%	(17,3-18,5)	5.9%	(4,7-7,1)	11.6%	(10,7-12,5)	32.1%	(30,0-34,2)	15.4%	(14,6-16,2)
4	Risk of suffering a mental disorder (Goldberg) (aged 15 and over)	T	8.0%	(6,9-9,1)	10.3%	(9,6-11,0)	15.2%	(14,3-16,1)	11.6%	(11,1-12,1)	8.0%	(6,6-9,4)	11.5%	(10,6-12,4)	15.1%	(13,5-16,7)	11.6%	(10,9-12,3)
5	Pain or discomfort* (aged 15 and over)	T	19.7%	(18,1-21,3)	25.4%	(24,4-26,4)	50.8%	(49,5-52,1)	33.3%	(32,6-34,0)	16.9%	(14,9-18,9)	26.6%	(25,3-27,9)	45.0%	(42,7-47,3)	29.0%	(28,0-30,0)
6	Suffers or has suffered a chronic health condition (15 and over)	T	71.9%	(70,1-73,7)	71.8%	(70,8-72,8)	87.8%	(87,0-88,6)	77.4%	(76,8-78,0)	70.8%	(68,4-73,2)	75.6%	(74,4-76,8)	87.6%	(86,1-89,1)	77.5%	(76,6-78,4)
7	Suffers or has suffered arterial hypertension (aged 15 and over)	T	10.9%	(9,7-12,1)	12.7%	(11,9-13,5)	33.6%	(32,4-34,8)	19.7%	(19,1-20,3)	15.2%	(13,3-17,1)	21.2%	(20,0-22,4)	42.6%	(40,3-44,9)	25.1%	(24,1-26,1)
8	Suffers or has suffered high cholesterol (aged 15 and over)	T	10.7%	(9,5-11,9)	10.7%	(10,0-11,4)	22.9%	(21,8-24,0)	14.9%	(14,3-15,5)	16.1%	(14,2-18,0)	20.3%	(19,1-21,5)	33.7%	(31,5-35,9)	22.6%	(21,7-23,5)
9	Tobacco consumption (aged 15 and over)	T	24.6%	(22,9-26,3)	35.8%	(34,7-36,9)	22.4%	(21,4-23,4)	29.4%	(28,7-30,1)	23.8%	(21,6-26,0)	30.9%	(29,6-32,2)	21.5%	(19,6-23,4)	27.4%	(26,4-28,4)
10	Risky alcohol consumption (aged 15 and over)	T	4.2%	(3,4-5,0)	5.9%	(5,4-6,4)	3.1%	(2,7-3,5)	4.7%	(4,4-5,0)	4.2%	(3,1-5,3)	4.2%	(3,6-4,8)	2.6%	(1,9-3,3)	3.8%	(3,4-4,2)
11	Sedentary lifestyle (aged 18-74)	T	27.4%	(25,6-29,2)	20.6%	(19,6-21,6)	20.1%	(18,9-21,3)	21.7%	(21,0-22,4)	22.9%	(20,7-25,1)	17.7%	(16,5-18,9)	18.5%	(16,2-20,8)	19.1%	(18,1-20,1)
12	Periodic blood pressure test (aged 15 and over)	T	37.5%	(35,6-39,4)	37.5%	(36,4-38,6)	64.6%	(63,4-65,8)	46.6%	(45,8-47,4)	42.6%	(40,0-45,2)	46.9%	(45,5-48,3)	68.6%	(66,5-70,7)	50.8%	(49,7-51,9)
13	Periodic cholesterol blood test (aged 15 and over)	T	52.5%	(50,5-54,5)	44.9%	(43,8-46,0)	62.2%	(61,0-63,4)	52.0%	(51,2-52,8)	55.4%	(52,8-58,0)	54.4%	(53,0-55,8)	71.4%	(69,3-73,5)	58.4%	(57,3-59,5)
14	Periodic mammogram (women aged 50-69)	W	86.6%	(81,5-91,7)	89.5%	(87,2-91,8)	82.6%	(80,4-84,8)	85.5%	(84,0-87,0)	96.7%	(93,8-99,6)	93.0%	(91,0-95,0)	91.0%	(87,8-94,2)	93.0%	(91,5-94,5)
15	Periodic cervical smear (women aged 25-65)	W	78.0%	(75,5-80,5)	72.5%	(70,8-74,2)	58.7%	(56,3-61,1)	69.9%	(68,7-71,1)	86.0%	(83,3-88,7)	78.0%	(75,9-80,1)	67.8%	(63,2-72,4)	78.7%	(77,1-80,3)
16	Double healthcare coverage (aged 15 and over)	T	43.1%	(41,1-45,1)	28.5%	(27,5-29,5)	16.0%	(15,1-16,9)	26.6%	(25,9-27,3)	47.0%	(44,4-49,6)	21.8%	(20,6-23,0)	11.8%	(10,3-13,3)	24.4%	(23,4-25,4)
17	Medicine taken in the last 2 days (aged 15 and over)	T	55.1%	(53,1-57,1)	54.5%	(53,4-55,6)	73.7%	(72,6-74,8)	61.3%	(60,5-62,1)	55.3%	(52,7-57,9)	58.4%	(57,0-59,8)	76.8%	(74,9-78,7)	62.1%	(61,0-63,2)
18	Visits to a healthcare professional in the last 12 months (aged 15 and over)	T	89.2%	(88,0-90,4)	85.4%	(84,6-86,2)	89.5%	(88,7-90,3)	87.5%	(87,0-88,0)	91.0%	(89,5-92,5)	89.2%	(88,3-90,1)	93.2%	(92,1-94,3)	90.5%	(89,9-91,1)
19	Hospitalisation in the last 12 months (aged 15 and over)	T	6.7%	(5,7-7,7)	7.3%	(6,7-7,9)	12.6%	(11,8-13,4)	9.1%	(8,7-9,5)	7.5%	(6,1-8,9)	7.5%	(6,7-8,3)	11.5%	(10,0-13,0)	8.4%	(7,8-9,0)
20	Visits to an emergency department in the last 12 months (aged 15 and over)	T	27.0%	(25,2-28,8)	31.2%	(30,1-32,3)	34.1%	(32,9-35,3)	31.5%	(30,8-32,2)	27.3%	(25,0-29,6)	28.9%	(27,6-30,2)	33.1%	(31,0-35,2)	29.6%	(28,6-30,6)
21	Satisfaction with public healthcare services used (aged 15 and over)	T	81.6%	(79,5-83,7)	78.0%	(76,9-79,1)	81.1%	(80,0-82,2)	79.7%	(79,0-80,4)	88.0%	(85,7-90,3)	87.8%	(86,7-88,9)	89.1%	(87,5-90,7)	88.2%	(87,4-89,0)

T: total; W: women

Source: Health Survey of Catalonia (ESCA), 2006 and 2012-2013. Ministry of Health.

* EQ-5D, which evaluates the health status at the present time. 2006 with EQ-5D-3L. 2012 and 2013 with EQ-5D-5L.

^a The results of this table for each sex can be consulted in Annex 3.

Part Three

- **What the healthcare system does**

14 What the healthcare system does

The Health Plan for Catalonia 2011-2015 is the Ministry of Health's tool to respond to the future challenges faced by the Catalan healthcare system, in accordance with the Catalan Executive's explicit commitment to achieving the necessary change in the healthcare system.⁴⁸ The Plan is supported by three pillars.

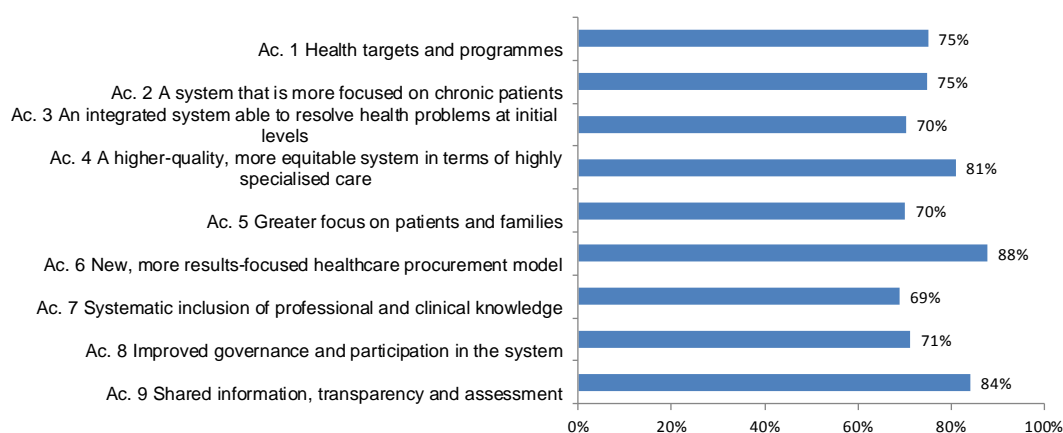
Pillar one sets 27 health targets for tackling priority health problems. It includes strategic projects, such as master plans (cardiovascular, oncology, respiratory system diseases, mental health, rheumatic and musculoskeletal system diseases, and social and health care) and the clinical safety of patients dealt with by care centres as priority measures for improving health. Also included is the intention for Catalonia to have an Interministerial Public Health Plan (PINSAP) to strengthen the inter-sectoral response to the main healthcare problems that need tackling.

Pillar two aims for a profound and decisive transformation of the care model. It involves a paradigm shift as regards prevention of and care for chronic conditions, the resolution of the most common problems at the initial levels of care, and a focus on great specialisation to achieve even greater levels of quality and excellence.

Pillar three proposes modernising the organisational model with a system more focused on patients and their families, introducing changes in procurement of healthcare services, incorporating professional knowledge, and improving governance, transparency and evaluation.

These three pillars are divided into nine actions and 33 projects. Figure 46 summarises each action's percentage of achievement for 2013, which is at 76.2% for all the actions provided for in the Health Plan for Catalonia 2011-2015 taken together.

Figure 46. Percentage of achievement for the actions (Ac.) of the Health Plan in 2013



Source: Health Plan for Catalonia 2011-2015. Ministry of Health.

14.1 Monitoring of the health targets of the Health Plan for Catalonia 2011-2015

Action 1.4 of the Health Plan for Catalonia 2011-2015 commits to conducting annual monitoring of change in the indicators for evaluating the 27 health targets set. It is essential to know whether the direction and intensity of change are sufficient to achieve the level committed to by the planned deadline, which is 2015 for risk-reduction targets, and 2020 for those evaluated in terms of mortality and morbidity. On the other hand, there is a need to evaluate the importance of realising aspirations as regards health results in the form of explicit and measurable targets because, first, this makes it possible to see whether progress in the desired direction is being made and, second, it increases transparency and accountability. The document *Marcant fites* ('Reaching Milestones')⁴⁹ sets out the starting point for the indicators for each of the health targets set in the Health Plan for Catalonia and the level to be achieved, at the same time as introducing elements for comparison at Spanish and EU level.

The updated indicator values are presented for each target's indicator.^a There has been assessment of whether progress is being made in the direction and with the intensity of change desired, based on the difference between the observed indicator value and the estimated value, by means of a linear trend between the reference point (initial value 2011) and the value to be achieved by 2015 or 2020, depending on the nature of the target (table 16). This means that, if the 2011-2013 trend and intensity are maintained:

Progress is being made

The general target proposing a 5% increase in the healthy life expectancy proportion (target 1).

Reduced mortality rates due to circulatory system diseases, to cancer, to ischemic heart disease, and to ictus (targets 2, 3, 7 and 8).

Reduced mortality rate due to breast cancer in women (target 9).

Reduced incidence of hip fracture (target 12).

Reduced prevalence of smoking (target 14).

Fewer people carrying excess weight (target 17).

Increased proportion of patients with hypertension monitoring their condition and increased proportion of at-risk patients having cardiovascular risk assessments (targets 18 and 19).

Reduction in patients with CHF being re-hospitalised after 30 days (target 22).

Targets for reducing surgical infection rates in knee replacement, hip replacement and colorectal surgery, and pneumonia rates associated with mechanical ventilation (targets 24-27).

^a The benchmark year for the monitoring values for each indicator are the most recent available in June 2014. This means they relate to January 2014 when the information source is General Practice Service Information Systems (SISAP)/Catalan Institute of Health (ICS); 2013 for the ESCA, the CMBDHA and some HAI Prevention in Catalan Hospitals (VINCat) indicators; 2012 for some VINCat and Catalan Register of Deaths (RMC) indicators; and monitoring of the 2000-2004 group for cancer survival.

Quicker pace required to achieve them

Reduced rates of respiratory condition mortality, mental illness mortality, colorectal cancer mortality, and suicide mortality (targets 5, 6, 10 and 11).

Reduced amputation level in people aged 45-74 with diabetes (target 13).

Reduced prevalence of sedentary lifestyles in the population (target 15).

Increased prevalence of partaking in healthy physical activity (target 16).

Fewer patients with diabetes and COPD being re-hospitalised after 30 days (targets 20 and 21).

Reduced average hospital-acquired infection rate (target 23).

The target of increasing cancer survival to five years (target 4) is updated every five years. The latest result available, for men and women, is from 2012 and shows a move in the right direction.

Table 16. Health and risk-reduction targets from the Health Plan for Catalonia 2011-2015. Situation in 2013

No.	Objective Indicator		Initial reference point	2013*	2020 target	Assessment ¹
By 2020, we need to:						
1	Increase the proportion of life expectancy lived in good health in men and women by 5% <i>Quotient between healthy life expectancy and life expectancy, by sex (%)</i>	Men	82.3	82.3	86.4	+++
		Women	74.1	77.5	77.8	
		Total	78.0	79.8	81.9	
2	Reduce the mortality rate due to diseases of the circulatory system by 20% <i>Age-standardised mortality rate per 100.000 inh. from circulatory system diseases</i>	Men	202.4	189.1	161.9	+++
		Women	124.4	118.8	99.5	
		Total	158.6	149.5	126.8	
3	Reduce the global mortality rate due to cancer by 10% <i>Age-standardised mortality rate per 100.000 inh. from cancer</i>	Men	275.3	261.1	247.8	+++
		Women	125.6	119.3	113.0	
		Total	189.5	180.5	170.6	
4	Increase the five-year survival rate of cancer by 15% <i>Relative five-year survival rate for all cancers (%)</i>	Men	46.0	Unav.	52.9	Unav.
		Women	56.4	Unav.	64.9	
		Total	50.2	Unav.	57.7	
5	Reduce the mortality rate due to respiratory diseases by 10% <i>Age-standardised mortality rate per 100.000 inh. due to respiratory system diseases</i>	Men	87.6	89.5	78.8	---
		Women	31.2	33.9	28.1	
		Total	53.3	55.9	48.0	
6	Reduce the mortality rate due to mental disorders by 10% <i>Age-standardised mortality rate per 100.000 inh. due to mental disorders</i>	Men	24.7	26.5	22.2	---
		Women	24.0	24.9	21.6	
		Total	24.6	26.0	22.1	
7	Reduce the mortality rate due to ischemic heart disease by 15% <i>Age-standardised mortality rate per 100.000 inh. due to ischemic heart disease</i>	Men	71.3	66.8	60.6	+++
		Women	26.8	26.3	22.8	
		Total	45.8	43.5	38.9	
8	Reduce the mortality rate from ictus by 15% <i>Age-standardised mortality rate per 100.000 inh. due to cerebrovascular disorders</i>	Men	41.6	39.7	35.3	+++
		Women	30.6	28.2	26.0	
		Total	35.4	33.2	30.1	
9	Reduce the mortality rate due to breast cancer by 10% <i>Age-standardised mortality rate per 100.000 inh. due to malignant breast tumour</i>	Women	21.4	18.2	19.2	+++
10	Reduce the mortality rate due to colorectal cancer by 5% <i>Age-standardised mortality rate per 100.000 inh. due to malignant colorectal tumour</i>	Men	36.5	35.8	34.7	---
		Women	17.1	17.5	16.2	
		Total	25.3	25.3	24.1	
11	Keep the mortality rate due to suicide to below the current level <i>Age-standardised mortality rate per 100.000 inh. due to suicide and self-harm</i>	Men	8.5	9.6	< 8.5	---
		Women	2.4	3.1	< 2.4	
		Total	5.3	6.2	< 5.3	
12	Reduce the incidence of hip fracture in people aged 65 and over by 10% <i>Age-standardised hospitalisation rate per 10,000 inh. from hip fracture in the population aged 65 and over</i>	Men	48.7	39.9	43.9	+++
		Women	83.2	89.5	74.9	
		Total	70.5	68.4	63.4	
13	Reduce amputations in people with diabetes aged 45-74 by 10% <i>Amputation rate per 10,000 inh. in people with diabetes aged 45-74</i>	Men	39.5	42.8	35.6	---
		Women	10.8	12.9	9.7	
		Total	27.4	30.1	24.7	

* The mortality rate figures corresponding to targets 1-3 and 5-11 are from the previous year (2012).

1. +++: favourable change

+ : favourable change, but to a lesser extent that would be desirable

---: unfavourable change

Unav.: Not available in the short/medium term

N/A: Not applicable

No.	Objective Indicator		Initial reference point	2013	2015 target	Assessment ¹
By 2015, we need to:						
14	Reduce the prevalence of smoking to below 28% <i>Prevalence of tobacco consumption in the population aged 15 and over (%)</i>	Men	35.8	32.2	N/A	+++
		Women	23.4	20.4	N/A	
		Total	29.5	26.5	< 28.0	
15	Reduce the prevalence of sedentary lifestyles to below the 2010 level <i>Prevalence of sedentary lifestyles in the population aged 18-74 (%)</i>	Men	15.4	19.2	< 15.5	---
		Women	18.3	21.4	< 18.7	
		Total	16.8	20.3	< 17.1	
16	Increase the proportion of adults who follow the recommendations for healthy physical activity per week by 10% <i>Prevalence of healthy physical activity (moderate and high IPAQ) in population aged 15-69 (%)</i>	Men	74.1	72.8	81.5	---
		Women	69.0	64.4	75.9	
		Total	71.6	68.6	78.8	
17	Reduce the prevalence of excess weight (overweight and obesity) in the population to below the 2010 level <i>Prevalence of excess weight declared in population aged 18-74 (%)</i>	Men	57.4	56.2	< 56.6	+
		Women	41.5	40.7	< 38.2	
		Total	49.5	48.5	< 47.4	
18	Increase the proportion of hypertensive patients in primary care with values of BP < 140/90 mmHg by 15% <i>Percentage of hypertensive patients attended in primary care with values of BP < 140/90 mmHg (%)</i>	Total	63.3	69.7	72.8	+++
19	Increase the proportion of patients in primary care aged 35-74 with cholesterol levels > 200 mg/dl with cardiovascular risk assessment by 15% <i>Percentage of patients aged 35-74 in primary care with cholesterol levels > 200 mg/dl with cardiovascular risk assessment (%)</i>	Total	84.0	92.0	96.6	+++
20	Reduce the proportion of readmissions within 30 days in patients with diabetes by 15% <i>Percentage of diabetes patients being re-admitted within 30 days (%)</i>	Total	5.5	6.2	4.7	---
21	Reduce the proportion of readmissions within 30 days in patients with chronic obstructive pulmonary disease (COPD) by 15% <i>Percentage of COPD patients being re-admitted within 30 days (%)</i>	Total	17.1	17.4	14.5	---
22	Reduce the proportion of readmissions within 30 days in patients with congestive heart failure (CHF) by 15% <i>Percentage of CHF patients being re-admitted within 30 days (%)</i>	Total	15.5	14.5	13.2	+
23	Reduce the average rate of prevalence of hospital-acquired infection to below 7% <i>Prevalence of hospital-acquired infection (%)</i>	Total	7.0	7.7	< 7.0	---
24	Reduce the surgical infection rate in knee replacements to below 3.5% <i>Overall incidence rate of surgical site infection (SSI) in scheduled knee-replacement surgery (%)</i>	Total	3.0	2.5	< 3.5	+++
25	Reduce the surgical infection rate in hip replacements to below 3% <i>Overall incidence rate of surgical site infection (SSI) in scheduled hip-replacement surgery (%)</i>	Total	2.8	2.4	< 3.0	+++
26	Reduce the surgical infection rate in colorectal surgery to below 21% <i>Overall incidence rate of surgical site infection (SSI) in scheduled colorectal surgery (%)</i>	Total	20.6	18.2	< 21.0	+++
27	Reduce the average incidence rate of pneumonia associated with mechanical ventilation to below 12 episodes per 1,000 days of ventilation <i>Incidence rate of pneumonia associated with mechanical ventilation</i>	Total	5.6	6.2	< 12	+++

1. +++: favourable change
 +: favourable change, but to a lesser extent that would be desirable
 ---: unfavourable change

Unav.: Not available in the short/medium term
 N/A: not applicable

14.2 Drafting and implementation of the Interministerial Public Health Plan

The Executive Agreement of 20 November 2012 created the Interministerial Health Committee (CIS), entrusted with drafting the Interministerial Public Health Plan (PINSAP),⁵⁰ in line with Law 18/2009, of 22 October, on public health,⁵¹ in order to take steps in relation to determinants of public health; this requires a joint approach from the social sectors of the various public authorities, at both autonomous-community and local level.

Protecting and improving public health requires action from all sectors of the Catalan Government, public authorities and society in general, by means of actions relating to the main determinants of health, both collective and individual. As such, the PINSAP is in line with the recommendations of the World Health Organisation's 'Health in All Policies' strategy, set out in its Health 2020 document.⁵²

During 2013, the content was debated, and proposals, areas of work and priority actions were formulated with 2015 in mind; these were eventually compiled in the final document adopted in the Executive Agreement of 18 February 2014, on which date, work began in implementing the PINSAP.

As such, over the course of 2013, the PINSAP started a gradual process of promoting an intersectoral approach to designing and implementing initiatives on determinants of health, with the following objectives:

- Improving public health through interministerial and intersectoral action
- Effectively establishing health as an issue on which government policy is based, as per the 'Health in All Policies' strategy
- Involving all government ministries so that they can capitalise on the positive influence they have on health
- Improving coordination and promoting any synergies that increase the effectiveness, efficiency and equity of intersectoral actions relating to public health and well-being

Initially, sectoral and intersectoral actions by each ministry of the Government of Catalonia that significantly influence public health were identified and an inventory of them produced. Subsequently, a proposal for actions was drawn up in cooperation with other stakeholders.

The proposal was drafted on the basis of the Dahlgren and Whitehead model for determinants of health,⁵³ which enables easy visualisation of the influence the various sectors of society have on public health. This model has been adapted with contributions relating to the social inequalities that influence health, the effects of the crisis on local areas, and other criteria relating to socio-economic and cultural influences. The selection of the proposed actions paid a great deal of attention to criteria of feasibility – since the measures were ones that the

responsible ministries had started relevant to health protection and promotion – and of the benefit that they have as PINSAP actions.

Then, in late 2013, the CIS selected, from the various ministerial actions, some that had the greatest impact on quality of life and could contribute most to reducing health inequalities. It also consulted some 40 entities that were potentially involved, as well as representatives of local governments, of other institutions, of social and economic stakeholders, of the involved scientific societies, of professional corporations, and of civil society in general.

Since the start of 2014, it has been decided how each action will be put into operation in relation to the sectors involved, within the timeframe of 2014-2015 and by 2020, in harmony with the Health Plan for Catalonia. The PINSAP document agrees a series of thirty actions, new or already-existing, that promote its interministerial and intersectoral component, grouped into two pillars and 14 areas for action (table 17).

Table 17. Pillars and areas for action of the Interministerial Public Health Plan (PINSAP)

Pillar 1. Increasing the healthy life years of the population of Catalonia (promoting a healthier Catalonia). This pillar includes 10 areas for interministerial and intersectoral action:

1. Mobility
2. Food
3. Environment
4. Employment
5. Town planning and housing
6. Education
7. Culture, leisure and physical activity
8. Healthcare system
9. Social policy
10. Cross-cutting (community health)

Pillar 2. Incorporating a health perspective into designing and evaluating public policy. Includes four areas for interministerial and intersectoral action:

1. Incorporating a health perspective into decision making
2. Data and research
3. Commitment between the various sectors and public authorities
4. Commitment to community participation

The PINSAP also includes criteria for evaluating and monitoring the actions that need to be taken, and for developing basic results indicators for improving health and lifestyles, and for priority social determinants (table 18).

Table 18. Basic indicators of the Interministerial Public Health Plan (PINSAP)

A. Basic indicators of health and lifestyles

1. Life expectancy
2. Healthy life expectancy
3. Perception of poor health
4. Standardised mortality rate (overall or specific)
5. Avoidable mortality from causes susceptible to action from intersectoral health policies (overall and for AIDS/HIV infection, malignant lung tumour, alcoholic liver disease, road-traffic accident, suicide, homicide)
6. Prevalence of tobacco consumption
7. Prevalence of alcohol consumption
8. Prevalence of overweight and obesity
9. Prevalence of sedentary lifestyles
10. Psychological well-being index

B. Basic indicators of social determinants

1. Employment and unemployment rates
2. Educational level achieved
3. Average annual income per home, person and consumption unit
4. Risk of poverty or social exclusion rate
5. People legally recognised as disabled
6. Homes by consumer goods they own
7. Satisfaction with working conditions
8. Existence of various situations in job
9. Existence of discrimination in workplace
10. Air pollution:
 - a. Nitrogen dioxide (NO₂): percentage of stations complying with the annual limit (VLa) for NO₂ in ZQA1 and ZQA2
 - b. Particulate matter up to 10 microns in size (PM10): percentage of stations complying with the annual limit (VLa) for PM10 in ZQA1 and ZQA2
 - c. Ozone (O₃): percentage of stations exceeding the human health target level (VOPS)

C. Impact indicators for the formulated actions

Each action included in the PINSAP will have at least one indicator that will enable evaluation of its implementation level and, to the greatest extent possible, its effectiveness and impact. In view of the multiple factors with an effect on health, it is hard to attribute the changes observed in result indicators (such as life expectancy or infant mortality) to a single audit service, so there can be no clear attribution of the implemented policies' health impact.

In February 2014, the PINSAP 2014-2015 was adopted (Executive Agreement 24/2014 of 18 February, Official Journal of the Government of Catalonia (DOGC) No. 6566, of 20/02/2014). The public presentation that took place next represented the start of implementation of the PINSAP, as well as publicity activities and work with the involved public authorities.

The PINSAP document, as well as other materials and information, can be found at the PINSAP website of the Public Health Agency of Catalonia.

14.3 Interministerial Plan for Health and Social Care and Interaction (PIAISS)

The population projection for Catalonia expects for 2050 a remarkable increase of aging, when 32.4% of the population will be aged over 65, and increased life expectancy, which will be over 90 years. These two facts allow us to anticipate a significant increase in chronicity, leading us to a transformation of the welfare state in general and the care model in particular.

The evolution of chronicity in each individual goes through several stages. In the first, emergent health conditions are uncomplicated: individual's healthcare needs at that time are simple and usually this can be handled by one or two professionals without much need for coordination or technical means. In later stages, health condition becomes complex, and due care requires the involvement of many professionals, the implication of individuals or families, a perfect coordination of different services that serve as to the ensure continuity of care and the necessary structural and technical means, more or less sophisticated depending on this person's health condition.

When the condition of complexity is present in a person with chronic disease, healthcare needs increase, usually being both social and healthcare needs. The comprehensive assessment of the individual in any of the evolutionary stages of chronicity detects and highlights those health care needs that should be tackled. For this reason, appropriate prioritization is needed to provide the best care to each individual.

The implementation of the Health Plan for Catalonia 2011-2015 and the creation and development of the Chronicity Prevention and Care Programme (PPAC) have highlighted the need to develop the current health care model into a comprehensive and integrated system of health care from a dual perspective – health and social care – and a single vision. The aim of this is no other than to equip Catalonia with a health care service with the capacity to respond adequately to the population phenomenon that is shaping chronic disease; in other words, to provide a care system that makes a comprehensive assessment of the individual, determines his or her care needs and provides a prioritised response in health and social care matters.

In this regard, the Government Agreement of 25 February 2014 created the Interministerial Social and Health Care and Interaction Plan (PIAISS), whose mission is to promote an integrated approach to people with complex health condition requiring social and health care, who are currently around 5% of the general population. The PIAISS is a draft consensus drawn up by the three ministries involved (Presidency, Health, and Social Welfare and Family) and local authorities, approved by the governance body of the Plan.

The Plan is designed with a single vision, which is the result of the combination of both sectors. It is intended to prioritize the most appropriate care response depending on the needs of each person, assigning a professional to each person to take responsibility and to ensure

that the planned care is a reality by ensuring the involvement of the individuals or their families in the development and implementation of the care plan and always considering advance decisions freely expressed by the person or legal representative.

It is expected that in the coming years more people will be at the older age groups requiring more complex care, who should be preferably cared for in their homes or in the community; therefore families, caregivers and society in general will play a more relevant role. When the situation of the person requires other medical assistance availability and suitability will have to be assured, such as an acute care hospitals, intermediate care centres, residential care, day hospitals, a day centres, etc., involving the community and volunteers.

The *raison d'être* of the Plan, and also the reason for the direct involvement of the Ministry of the Presidency, is to assure the best care for people in the short and long term through a transformation of the care model, which aims to anticipate and act preventively and proactively to demographic, social and economic changes that are drawn on the horizon.

To enable this transformation the following projects recently approved by the governance body of the PIAISS are expected to be developed until the end of 2015:

1. Promote the involvement of persons in the new context of care to look after their health.
2. Integrate clinical practice from the social and health primary care perspective.
3. Design and implement the Catalan model of integrated care at home.
4. Design and implement the Catalan model of care for people living in residential services.
5. Adapt and organise the long-term health and social care and mental health.
6. Integrate information systems to share health and social data needed to care for persons anywhere in Catalonia and evaluate its results.
7. Share objectives, indicators and evaluation of results in the care process of these persons.

14.4 The example of mental health and addictions: the Mental Health and Addictions Master Plan

The Mental Health and Addictions Master Plan (PDSMiA) sets out the bases of the model to be implemented in Catalonia, establishes the planning criteria, and provides guidelines for developing and adapting Catalan services, with a view to the future and a global perspective, in both health and social care.

The actions prioritised by the PDSMiA are in line with the Health Plan for Catalonia 2011-2015 and fit with the forecasts set out in the strategic plan of the Directorate-General for Health Planning and Research. The priorities set for Catalonia are also inspired by the WHO Action Plan for the European Region (Helsinki, 2005 and updated in Turkey, September 2013). The strategies prioritised as regards mental health were worked on together and brought into line with those relating to actions prioritised by the Health Plan, specifically with the key elements of actions 1, 2 and 3.

1. *With the Programme for Preventing and Caring for Chronic Conditions (PPAC, action 2 of the Health Plan), the main targets and areas of work have involved incorporating mental illnesses as priority conditions*

- a. Definition and implementation of depression care pathways

Depression has been prioritised and care pathways created for the various regions of Catalonia.

The creation and implementation of care pathways is a priority and, at the same time, it represents an opportunity to optimise the coordination of the various mechanisms in each region. The aim is to harmonise strategies to provide a comprehensive response that retains continuity of care for a person suffering depression, in its various manifestations. A key aspect of the depression care pathway is detecting suicide risks.

The care pathway aims to set up circuits and an organisational framework in between professionals, teams and care levels; it is becoming the frame of reference for promoting best practice, reducing variability, and ensuring quality and effectiveness.

First, the clinical practice guide (GPC) for depression produced by the Spanish Health Service (SNS) was adapted to the care situation in Catalonia. Based on this GPC, a digital version was created and loaded onto the e-CAP IT package at all the general practices involved in the medical record-sharing scheme.

In order to promote the implementation of the pathway, one joint action between the PDSMiA and the PPAC was to hold seven decentralised seminars for training professionals about depression care pathways, attended by 300 people throughout Catalonia.

As a result of these interactive workshops, a strategic analysis has been conducted of the strengths and weaknesses of implementing the care pathways, and follow-up recommendations have been produced to facilitate their implementation.

b. Pacient Expert Catalunya[®] Programme

A first draft of the *Guia del pacient expert en depressió* ('Patient Expert in Depression Guide') has been produced. The project is currently at the pilot stage, in order to review the draft guide and associated teaching material.

c. Chronic condition prevention and care

The PPAC has identified a series of generic clinical characteristics relating to complex situations that patients with mental illnesses often also suffer, particularly when they are severe.

People with mental illnesses are increasingly presenting chronic physical comorbidities. At the same time, this comorbidity is linked to conditions relating to substance use and dependence. In this context, the PDSMiA, the PPAC and the Interministerial Plan for Health and Social Care and Interaction have started to work together, in order to:

- Identify complication criteria in patients with mental illnesses, with or without comorbidity
- Facilitate the convergence of strategies on severe mental illness and the Individualised Therapy Plan (PTI) with proposals for complex chronic patients and the Shared Individual Intervention Plan (PIIC), so that complications relating to a psychopathological component will be in harmony with those caused by anything else, from concept, designation and clinical-management perspectives
- Generate a shared best-practice model that ensures comprehensive care for all of people's health and social care needs, within the framework of a system of integrated services for Catalonia

Shared best practices are particularly important in the interaction of mental health and physical comorbidity, given the variability in the firmness and distribution of clinical leaderships.

2. *With the Deputy Directorate-General of the Portfolio of Services and the Health Map (action 3 of the Health Plan), an evaluation and reformulation of the portfolio of mental health services in general practices has been produced*

One of the goals is to concentrate care for non-serious mental illnesses in general practices, by consolidating the portfolio of mental health services in general practices, with specialist support teams from mental health centres that travel around between general practices.

This objective is being realised in the shape of the programme for a portfolio of mental health and addition services in general practices, which were set up in Catalonia in 2006 and are established in approximately 50% of its territory. In 2012, an evaluation was conducted of the state of implementation of the various actions carried out at each general practice. Amongst other things, this evaluation picked up on how variable the implementation of the programme, the type of professionals and the activities carried out were. Nevertheless, the figures show significant and relevant differences between the regions in which the portfolio of mental health services in general practices is established and those in which it is not.

A change in the trend regarding referrals to specialist care was noticed over the period 2006-2012, with a significant 29% decrease in referrals from general practices to adult mental health centres, while referrals continued increasing (23%) in regions without a portfolio of mental health services in general practices. This drop in referrals relates to mental illnesses of low complexity, anxiety disorders, slight depression, chronic depression and adjustment disorders. Finally, it was also noticed that there was an improvement in adaptation to demand, enabling specialist care to focus its attention on more complicated serious pathologies.

This year, the Mental Health and Addiction Advisory Council has worked with scientific societies – the Catalan Society for Family and Community Medicine (CAMFiC) and the Catalan Psychiatry and Mental Health Society (SCPSM) – to draw up a Delphi questionnaire aimed at achieving a broad consensus on which common activities should be carried out at all general practices in Catalonia. This Delphi questionnaire involved some 40 professionals, representing both general practices and mental health services, from various disciplines (general practitioners, paediatricians, psychiatrists, nurses and social workers), as well as managers from both fields. The results obtained will be presented in September.

3. *The Suicide Risk Code (CRS)*

As per the WHO recommendations, also set out in the Action Plan for the European Region for the next few years, the Ministry of Health has prioritised suicide prevention. The policies set out aim to reduce mortality, increase the survival rate for people affected by suicidal behaviour, and prevent the repetition of suicide attempts in high-risk patients.

The Ministry of Health is promoting Catalonia's participation in the European Alliance Against Depression (EADD) and has developed two pilot schemes: one in the Dreta de l'Eixample district of Barcelona and the other in Sabadell. This project is carrying out a series of strategies and programmes for intervening against depression and suicide risk, with a general focus and comprehensive care.

A key aspect of the Clinical Practice Guide (GPC) for depression in force in Catalonia is evaluating suicide risk. The GPC describes the figures that help with clinical decision making and includes a series of instructions that facilitate risk assessment. The information is also included in the shared medical records.

With the support of a broad multidisciplinary group of experts, a protocol for action in the face of a suicide-risk situation has been created, and an IT application has been developed for recording information and facilitating the coordination and monitoring of at-risk people by all the services involved. The trial implementation of the CRS has now started in the regions selected for pilot schemes: Lleida Health Region, Camp de Tarragona Health Region, Vallès Occidental Est and the city of Barcelona.

4. *The Comprehensive Care Plan for People with Mental Disorders and Addictions*

In line with the European Union, the Catalan Executive has been working with entities in the mental health sector (affected people, families, providers and professionals) to promote the implementation of the Comprehensive Care Plan for People with Mental Illnesses and Addictions (PIAPTMA) over the next few years, with the following goals:

- Improving mental healthcare and the quality of life of the affected people and their families
- Integrating strategies for promoting health, preventing illness, care, and rejoining society and the labour market, by encouraging joint and complementary work by healthcare, social, educational, employment and justice services
- Encouraging good citizenship and social participation amongst people with mental health problems, and the reduction of social inequalities amongst this group
- Having recourse to a tool for planning and prioritising the public policies to be implemented from the various ministries of the Government of Catalonia for the care of such people

For the next few years, these actions have been prioritised into the following areas:

1. Promotion of mental health and encouragement of the actions necessary for implementing the Programme to Combat the Stigma Associated with Mental Illness (PLCEAMM)
2. Promotion of integration of the actions of healthcare, social and educational services relating to infants, school-age children and adolescents who are especially at-risk or vulnerable
3. Promotion of good citizenship and social participation amongst people with mental health problems, and promotion of their rights in care settings
4. Promotion and improvement of programmes to support families caring for people with mental illnesses
5. Actions relating the emergency and involuntary-admission protocols
6. Actions relating to rejoining the labour market
7. Improved psychiatric and mental health care in the legal system, for people who have been deprived of their liberty, and security measures
8. Actions relating to housing

Annexes

Annex 1. Environmental Indicators

Air quality

- As regards particulate matter up to 10 microns in size (PM10), it can be seen that, in general, 2013 levels are slightly lower than those for 2012, in terms both of averages and of times the daily limit was exceeded. The annual limit was not exceeded in 2013, but what did happen is that the daily limit was exceeded more times than is permitted (falling into the 90.4 percentile) at three measurement points in Catalonia. These points are located in air quality zones (ZQAs) 1 (Àrea de Barcelona), 2 (Vallès-Baix Llobregat) and 6 (Plana de Vic).
- As regards tropospheric ozone, 79 hours above the threshold for informing the public were recorded in the whole of 2013. These figures are slightly above the average for recent years. The thresholds were exceeded at 11 out of 49 measurement points. The ZQAs in which the threshold for informing the public was exceeded are Àrea de Barcelona, Vallès-Baix Llobregat, Camp de Tarragona, Plana de Vic, Maresme, Comarques de Girona, Alt Llobregat and Pirineu Oriental. On the other hand, the warning threshold was not exceeded at all in 2013.
- As regards nitrogen dioxide, the number of times the hourly limit set for NO₂ was exceeded in 2013 remains within the permitted range (legislation permits this hourly limit to be exceeded at a given point up to 18 times per year). The isolated cases of it being exceeded occurred in two places with heavy traffic in ZQA1 and two in ZQA2. As regards the annual limit, it was exceeded in ZQA1 (at 17% of measurement points) and in ZQA2 (at 50% of measurement points). The trend over the last few years has been towards great stability, although it points to a very slow decline.

Source: *Catalonia Air Quality Report, 2013. Directorate-General for Environmental Quality of the Ministry of Territory and Sustainability.*

Drinking water

- The results of the analyses conducted show a high level of compliance with drinking water-quality legislation amongst the various supply networks and zones in Catalonia.
- In relation to microbiological contaminants, some parameters were exceeded, but in isolated situations and mainly in small population centres.
- As far as physical-chemical parameters are concerned, 92.47% of the sampled areas were within the parameters laid down in the current legislation determining water suitability. The parameters that were exceeded most were those for nitrates, followed by arsenic and fluoride.

Source: *Public Health Agency of Catalonia, 2012. Ministry of Health.*

Annex 2. Selected indicators (raw %), by health region and sex. Catalonia, 2012-2013

Indicator		Health regions							
		Lleida	Camp de Tarragona	Terres de l'Ebre	Girona	Catalunya Central	Alt Pirineu i Aran	Barcelona	
1	Positive (excellent, very good or good) self-perceived health status (general population)	M	86.0%	84.9%	88.6%	85.3%	82.0%	91.0%	85.6%
		W	81.6%	80.9%	78.3%	80.5%	73.4%	89.4%	77.9%
2	Excess weight (overweight and obesity) (aged 18-74)	M	62.3%	60.5%	56.6%	55.5%	57.1%	58.6%	56.6%
		W	42.5%	44.1%	44.9%	40.2%	41.8%	36.4%	39.9%
3	Disability (aged 15 and over)	M	7.3%	12.0%	12.1%	16.8%	12.9%	20.7%	14.0%
		W	11.3%	14.3%	18.7%	24.0%	23.3%	34.3%	21.7%
4	Risk of suffering a mental disorder (Goldberg) (aged 15 and over)	M	13.7%	6.4%	5.1%	5.9%	9.6%	1.2%	8.6%
		W	18.8%	9.4%	6.1%	13.0%	20.8%	5.4%	15.2%
5	Pain or discomfort (aged 15 and over)	M	23.3%	18.7%	23.5%	18.5%	26.1%	25.7%	21.0%
		W	38.2%	35.4%	45.3%	33.0%	41.3%	35.5%	36.5%
6	Chronic disease or health condition (general population)	M	35.5%	40.4%	39.3%	27.2%	34.6%	39.7%	35.4%
		W	42.3%	42.4%	47.0%	34.3%	46.4%	47.5%	40.9%
7	Suffers or has suffered arterial hypertension (aged 15 and over)	M	25.9%	24.5%	27.5%	25.4%	29.9%	20.8%	24.1%
		W	27.2%	20.6%	24.9%	23.7%	32.5%	23.4%	25.4%
8	Suffers or has suffered high cholesterol (aged 15 and over)	M	22.1%	20.3%	18.3%	20.4%	22.6%	14.7%	23.7%
		W	17.5%	22.7%	16.7%	18.3%	25.6%	15.9%	23.5%
9	Tobacco consumption (aged 15 and over)	M	39.6%	35.0%	37.1%	37.2%	32.6%	32.7%	31.8%
		W	19.5%	22.5%	19.7%	22.3%	27.4%	24.9%	21.4%
10	Risky alcohol consumption (aged 15 and over)	M	6.9%	6.0%	4.4%	6.1%	5.6%	1.6%	6.0%
		W	2.8%	1.8%	0.5%	2.1%	1.3%	0.6%	1.8%
11	Sedentary lifestyle (aged 18-74)	M	18.2%	23.8%	22.6%	13.0%	15.1%	18.5%	17.8%
		W	28.0%	30.1%	39.5%	17.4%	18.3%	28.8%	18.4%
12	Healthy physical activity (aged 15-69)	M	48.7%	62.8%	58.3%	69.4%	74.6%	58.9%	76.5%
		W	47.1%	56.8%	53.6%	60.4%	69.0%	46.1%	70.6%
13	Periodic blood pressure test (aged 15 and over)	M	63.1%	46.6%	55.9%	52.6%	43.6%	60.3%	47.8%
		W	73.4%	55.9%	61.3%	53.9%	49.0%	65.4%	50.4%
14	Periodic cholesterol blood test (aged 15 and over)	M	63.1%	70.5%	58.7%	55.0%	52.3%	60.1%	55.0%
		W	72.5%	74.2%	62.2%	56.2%	56.2%	70.7%	58.2%
15	Periodic mammogram (women aged 50-69)	W	100.0%	89.0%	93.8%	95.8%	91.1%	95.3%	92.7%
16	Periodic cervical smear (women aged 25-65)	W	75.0%	78.7%	78.7%	75.6%	70.2%	82.5%	80.1%
17	Double healthcare coverage (general population)	M	19.6%	19.0%	12.5%	17.5%	16.7%	27.8%	28.2%
		W	24.6%	16.0%	9.7%	18.9%	15.6%	24.0%	28.8%
18	Medicine taken in the last 2 days (aged 15 and over)	M	51.6%	51.3%	51.2%	53.6%	58.0%	40.0%	54.3%
		W	65.9%	66.5%	57.3%	71.3%	80.3%	52.1%	70.3%
19	Visits to a healthcare professional in the last 12 months (general population)	M	85.4%	85.6%	83.1%	86.1%	88.6%	76.8%	88.2%
		W	91.4%	95.9%	90.6%	93.6%	96.4%	90.2%	95.3%
20	Hospitalisation in the last 12 months (general population)	M	8.4%	11.5%	7.3%	5.2%	6.8%	6.4%	6.7%
		W	7.8%	11.3%	5.2%	7.8%	11.9%	7.9%	8.2%
21	Visits to an emergency department in the last 12 months (general population)	M	29.7%	34.0%	24.6%	28.7%	30.5%	16.1%	29.9%
		W	30.9%	36.2%	22.0%	28.0%	34.7%	16.1%	34.8%
22	Satisfaction with public healthcare services used (general population)	M	89.7%	84.3%	89.0%	92.3%	89.1%	84.9%	89.6%
		W	86.8%	82.6%	84.5%	93.6%	89.0%	88.5%	89.8%

Significant differences with the Catalonia average, with a 95% confidence interval

Significantly above Catalonia average

Significantly below Catalonia average

Source: Health Survey of Catalonia (ESCA), 2012-2013. Ministry of Health.

Annex 3. Changes to the main ESCA indicators, by social class and educational level. Catalonia, 2006 and 2012-2013

Table 19. Changes to the main ESCA indicators (raw % and CI=95%), by social class. Men. Catalonia, 2006 and 2012-2013

		2006													2012-2013															
		Social class based on occupation													Social class based on occupation															
		Upper			Middle			Lower			Total		Upper			Middle			Lower			Total								
		Group I	Group II	Group III	Group IVa	Group IVb	Group V	%	CI95%	Group I	Group II	Group III	Group IVa	Group IVb	Group V	%	CI95%	Group I	Group II	Group III	Group IVa	Group IVb	Group V	%	CI95%					
1	Positive (excellent, very good or good) self-perceived health status (general population)	M	92.4%	(90.6-94.2)	88.2%	(86.1-90.3)	86.4%	(85.0-87.8)	79.3%	(77.8-80.8)	80.6%	(78.4-82.8)	77.2%	(74.4-80.0)	83.4%	(82.6-84.2)	92.7%	(90.4-95.0)	90.2%	(87.4-93.0)	88.2%	(86.4-90.0)	80.9%	(78.9-82.9)	81.4%	(78.5-84.3)	82.9%	(79.1-86.7)	85.4%	(84.4-86.4)
2	Excess weight (overweight and obesity) (aged 18-74)	M	48.9%	(46.1-53.7)	54.1%	(50.4-57.8)	54.0%	(51.6-56.4)	60.6%	(58.6-62.6)	62.0%	(59.0-65.0)	56.5%	(52.7-60.3)	56.9%	(55.7-58.1)	48.0%	(42.5-53.5)	56.0%	(50.4-61.6)	55.1%	(51.9-58.3)	61.3%	(58.2-64.4)	63.7%	(59.5-67.9)	54.1%	(48.0-60.2)	57.2%	(55.5-58.9)
3	Disability (aged 15 and over)	M	7.3%	(5.4-9.2)	12.0%	(9.7-14.3)	12.1%	(10.6-13.6)	16.8%	(15.4-18.2)	12.9%	(10.9-14.9)	20.7%	(17.9-23.5)	14.0%	(13.2-14.8)	8.2%	(5.4-11.0)	8.1%	(5.2-11.0)	11.4%	(9.5-13.3)	14.1%	(12.1-16.1)	14.1%	(11.3-16.9)	13.7%	(9.8-17.6)	12.1%	(11.1-13.1)
4	Risk of suffering a mental disorder (Goldberg) (aged 15 and over)	M	5.7%	(4.0-7.4)	6.7%	(4.9-8.5)	7.1%	(5.9-8.3)	8.1%	(7.0-9.2)	8.7%	(5.2-8.2)	11.1%	(8.9-13.3)	7.6%	(7.0-8.2)	4.4%	(2.3-6.5)	8.1%	(5.2-11.0)	8.8%	(7.1-10.5)	9.5%	(7.9-11.1)	7.8%	(5.7-9.9)	7.7%	(4.7-10.7)	8.3%	(7.4-9.2)
5	Pain or discomfort* (aged 15 and over)	M	15.8%	(13.2-18.4)	20.0%	(17.2-22.8)	21.8%	(19.9-23.7)	28.8%	(28.0-31.6)	26.4%	(23.8-29.0)	30.5%	(27.3-33.7)	24.9%	(23.9-25.9)	14.5%	(10.9-18.1)	22.8%	(18.4-27.4)	18.5%	(16.1-20.9)	24.2%	(21.8-26.6)	24.7%	(21.3-28.1)	18.8%	(15.2-24.4)	21.1%	(19.8-22.4)
6	Suffers or has suffered a chronic health condition (15 and over)	M	70.9%	(67.6-74.2)	71.7%	(68.5-74.9)	70.0%	(67.9-72.1)	71.5%	(69.8-73.2)	73.9%	(71.3-76.5)	73.4%	(70.3-76.5)	71.6%	(70.6-72.6)	88.2%	(83.4-73.0)	72.0%	(67.2-76.8)	71.6%	(68.9-74.3)	73.4%	(70.9-75.9)	77.1%	(73.7-80.5)	67.3%	(61.9-72.7)	72.0%	(70.6-73.4)
7	Suffers or has suffered arterial hypertension (aged 15 and over)	M	15.9%	(13.3-18.5)	16.8%	(14.0-19.2)	17.1%	(15.4-18.8)	19.3%	(17.8-20.8)	20.9%	(18.5-23.3)	18.9%	(16.2-21.6)	18.3%	(17.4-19.2)	21.0%	(16.8-25.2)	19.4%	(15.2-23.6)	21.9%	(19.4-24.4)	30.6%	(28.0-33.2)	27.8%	(24.2-31.4)	23.3%	(18.5-28.1)	24.6%	(23.5-26.1)
8	Suffers or has suffered high cholesterol (aged 15 and over)	M	11.9%	(9.6-14.2)	13.0%	(10.6-15.4)	14.4%	(12.8-16.0)	15.4%	(14.0-16.8)	16.8%	(14.6-19.0)	13.6%	(11.2-16.0)	14.6%	(13.8-15.4)	21.6%	(17.4-25.8)	19.8%	(15.6-24.0)	21.1%	(18.6-23.6)	24.4%	(22.0-26.8)	25.9%	(22.4-29.4)	23.1%	(18.3-27.9)	22.7%	(21.4-24.0)
9	Tobacco consumption (aged 15 and over)	M	26.5%	(23.3-29.7)	33.5%	(30.2-36.8)	34.1%	(32.0-36.2)	35.3%	(33.5-37.1)	37.3%	(34.5-40.1)	37.9%	(34.5-41.3)	34.5%	(33.5-35.5)	25.4%	(20.9-29.9)	31.3%	(26.4-36.2)	33.2%	(30.3-36.1)	35.3%	(32.6-38.0)	34.6%	(30.8-38.4)	35.6%	(30.1-41.1)	33.2%	(31.7-34.7)
10	Risky alcohol consumption (aged 15 and over)	M	7.0%	(5.2-8.8)	7.4%	(5.5-9.3)	7.8%	(6.6-9.0)	8.0%	(7.0-9.0)	7.1%	(5.6-8.6)	7.4%	(5.6-9.2)	7.6%	(7.0-8.2)	6.6%	(4.0-9.2)	6.0%	(3.5-8.5)	6.2%	(4.7-7.7)	5.3%	(4.0-6.6)	5.5%	(3.7-7.3)	6.4%	(3.8-9.2)	6.0%	(5.3-6.7)
11	Sedentary lifestyle (aged 18-74)	M	25.3%	(22.0-28.6)	19.2%	(16.3-22.1)	21.1%	(19.2-23.0)	12.6%	(11.2-14.0)	26.5%	(23.7-29.3)	16.3%	(13.5-19.1)	19.2%	(18.3-20.1)	22.8%	(19.2-27.4)	19.8%	(15.4-24.4)	18.7%	(16.2-21.2)	12.1%	(10.1-14.1)	19.7%	(16.2-23.2)	16.4%	(11.9-20.9)	17.8%	(16.5-19.1)
12	Periodic blood pressure test (aged 15 and over)	M	41.7%	(38.1-45.3)	44.1%	(40.6-47.6)	39.6%	(37.4-41.8)	45.8%	(43.9-47.7)	48.1%	(45.2-51.0)	40.3%	(36.9-43.7)	43.4%	(42.3-44.5)	44.2%	(39.1-49.3)	40.9%	(35.7-46.1)	46.3%	(43.3-49.3)	55.6%	(52.8-58.4)	54.5%	(50.5-58.5)	41.4%	(35.8-47.0)	49.0%	(47.4-50.6)
13	Periodic cholesterol blood test (aged 15 and over)	M	51.3%	(47.7-54.9)	49.3%	(45.8-52.8)	45.0%	(42.8-47.2)	52.0%	(50.1-53.9)	53.3%	(50.4-56.2)	45.9%	(42.4-49.4)	49.4%	(48.3-50.5)	56.7%	(51.6-61.8)	51.8%	(46.3-56.9)	54.9%	(51.9-57.9)	61.3%	(58.6-64.0)	60.7%	(56.8-64.6)	48.5%	(42.8-54.2)	56.7%	(55.2-58.2)
14	Double healthcare coverage (general population)	M	45.5%	(42.2-48.8)	42.8%	(39.6-46.0)	30.9%	(29.0-32.8)	19.7%	(18.2-21.2)	19.5%	(17.3-21.7)	15.4%	(13.0-17.8)	27.2%	(26.3-28.1)	53.5%	(49.1-57.9)	36.2%	(31.7-40.7)	29.9%	(27.4-32.4)	15.5%	(13.7-17.3)	11.9%	(9.5-14.3)	7.7%	(5.0-10.4)	24.7%	(23.5-25.9)
15	Medicine taken in the last 2 days (aged 15 and over)	M	48.4%	(44.8-52.0)	51.3%	(47.8-54.8)	50.6%	(48.4-52.8)	52.1%	(50.2-54.0)	50.9%	(48.0-53.8)	52.7%	(49.2-56.2)	51.2%	(50.1-52.3)	49.3%	(44.2-54.4)	53.7%	(48.4-59.0)	51.2%	(48.2-54.2)	57.2%	(54.4-60.0)	58.2%	(54.3-62.1)	52.6%	(46.9-58.3)	53.9%	(52.3-55.5)
16	Visits to a healthcare professional in the last 12 months (general population)	M	88.5%	(86.4-90.6)	86.3%	(84.1-88.5)	83.6%	(82.1-85.1)	83.8%	(82.4-85.2)	86.2%	(84.3-88.1)	83.0%	(80.5-85.5)	84.6%	(84.1-85.5)	89.9%	(87.2-92.6)	86.6%	(83.6-90.0)	88.1%	(86.3-89.9)	85.8%	(84.0-87.6)	89.0%	(86.7-91.3)	86.0%	(82.5-89.5)	87.4%	(86.5-88.3)
17	Hospitalisation in the last 12 months (general population)	M	4.6%	(3.2-6.0)	5.2%	(3.8-6.6)	6.4%	(5.4-7.4)	7.5%	(6.5-8.5)	7.0%	(5.6-8.4)	8.5%	(6.7-10.3)	6.7%	(6.2-7.2)	5.5%	(3.5-7.5)	8.0%	(5.5-10.5)	6.5%	(5.2-7.8)	8.4%	(7.0-9.8)	6.5%	(4.7-8.3)	6.3%	(3.8-8.8)	7.0%	(6.3-7.7)
18	Visits to an emergency department in the last 12 months (general population)	M	25.3%	(22.4-28.2)	28.1%	(25.2-31.0)	31.0%	(29.1-32.9)	30.9%	(29.2-32.6)	31.6%	(29.1-34.1)	35.3%	(32.8-38.4)	30.6%	(29.6-31.6)	29.9%	(25.8-34.0)	30.9%	(26.6-35.2)	31.1%	(28.6-33.6)	28.0%	(25.7-30.3)	29.5%	(26.1-32.9)	33.4%	(28.6-38.2)	29.9%	(28.6-31.2)
19	Satisfaction with public healthcare services used (general population)	M	87.1%	(84.2-90.0)	84.7%	(81.8-87.6)	81.6%	(79.7-83.5)	81.7%	(80.1-83.3)	79.8%	(77.4-82.2)	79.4%	(76.4-82.4)	81.8%	(80.9-82.7)	87.7%	(82.0-93.4)	89.6%	(84.1-95.1)	90.5%	(87.8-93.2)	87.6%	(84.9-90.4)	90.3%	(86.8-93.8)	89.5%	(84.4-94.6)	89.3%	(87.8-90.8)

M: men

Source: Health Survey of Catalonia (ESCA), 2006 and 2012-2013. Ministry of Health.

* EQ-5D, which evaluates the health status at the present time. 2006 with EQ-5D-3L. 2012 and 2013 with EQ-5D-5L.

Table 20. Changes to the main ESCA indicators (raw % and CI=95%), by social class. Women. Catalonia, 2006 and 2012-2013

		2006														2012-2013														
		Social class based on occupation													Total	Social class based on occupation													Total	
		Upper			Middle				Lower							Upper			Middle				Lower							
		Group I		Group II	Group III		Group IVa		Group IVb		Group V		Group I			Group II	Group III		Group IVa		Group IVb		Group V							
%	CI95%	%	CI95%	%	CI95%	%	CI95%	%	CI95%	%	CI95%	%	CI95%	%	CI95%	%	CI95%	%	CI95%	%	CI95%	%	CI95%							
1	Positive (excellent, very good or good) self-perceived health status (general population)	w	88.7%	(86.5-90.9)	82.9%	(80.5-85.3)	77.1%	(75.5-78.7)	70.1%	(68.2-72.0)	68.6%	(66.9-72.3)	60.2%	(57.6-62.8)	73.8%	(72.9-74.7)	87.8%	(84.8-91.0)	86.3%	(83.2-89.4)	82.0%	(80.0-84.0)	74.9%	(72.4-77.4)	72.7%	(69.2-76.2)	72.4%	(68.4-76.4)	78.4%	(77.2-79.6)
2	Excess weight (overweight and obesity) (aged 18-74)	w	23.0%	(19.7-26.3)	33.4%	(30.0-36.8)	38.0%	(33.9-38.1)	47.5%	(45.1-49.9)	47.9%	(44.5-51.3)	50.0%	(46.7-53.3)	40.3%	(39.1-41.5)	21.1%	(16.3-25.9)	33.3%	(28.3-38.3)	37.2%	(34.2-40.2)	47.3%	(43.8-50.8)	49.8%	(45.0-54.6)	48.3%	(42.7-53.9)	40.5%	(36.8-42.2)
3	Disability (aged 15 and over)	w	11.3%	(8.9-13.7)	14.3%	(12.0-16.6)	18.7%	(17.1-20.3)	24.0%	(22.1-25.9)	23.3%	(20.7-25.9)	34.3%	(31.7-36.9)	21.7%	(20.8-22.6)	10.1%	(6.8-13.4)	11.5%	(8.3-14.7)	14.3%	(12.2-16.4)	23.1%	(20.4-25.8)	21.8%	(18.3-25.3)	22.1%	(18.0-26.2)	18.5%	(17.3-19.7)
4	Risk of suffering a mental disorder (Goldberg) (aged 15 and over)	w	10.9%	(8.6-13.2)	10.8%	(8.7-12.9)	15.9%	(14.4-17.4)	15.8%	(14.2-17.4)	17.4%	(15.0-19.8)	19.0%	(16.8-21.2)	15.5%	(14.7-16.3)	10.3%	(7.0-13.6)	11.1%	(6.0-14.2)	15.4%	(13.3-17.5)	14.0%	(11.8-16.2)	16.2%	(13.0-19.4)	20.1%	(16.2-24.0)	14.8%	(13.7-15.9)
5	Pain or discomfort* (aged 15 and over)	w	23.8%	(20.6-27.0)	33.0%	(29.8-36.2)	39.2%	(37.2-41.2)	44.8%	(42.7-47.1)	47.3%	(44.2-50.4)	52.7%	(49.9-55.5)	41.5%	(40.4-42.6)	27.3%	(22.4-32.2)	27.7%	(23.2-32.2)	31.1%	(28.4-33.8)	42.0%	(38.8-45.2)	43.3%	(39.1-47.5)	43.8%	(38.7-48.5)	36.7%	(35.2-38.2)
6	Suffers or has suffered a chronic health condition (15 and over)	w	77.9%	(74.8-81.0)	79.0%	(76.3-81.7)	81.9%	(80.3-83.5)	82.8%	(81.2-84.4)	86.2%	(84.1-88.3)	88.7%	(86.9-90.5)	83.0%	(82.2-83.8)	76.4%	(71.7-81.1)	82.3%	(78.5-86.1)	81.6%	(79.3-83.9)	84.4%	(82.1-86.7)	88.3%	(85.5-91.1)	81.9%	(78.1-85.7)	82.8%	(81.6-84.0)
7	Suffers or has suffered arterial hypertension (aged 15 and over)	w	9.7%	(7.5-11.9)	13.2%	(10.9-15.5)	17.4%	(15.8-19.0)	25.8%	(23.9-27.7)	24.4%	(21.7-27.1)	30.3%	(27.7-32.9)	21.0%	(20.1-21.9)	16.8%	(12.7-20.9)	18.8%	(14.7-22.5)	18.4%	(16.1-20.7)	30.0%	(27.1-32.9)	32.0%	(28.0-36.0)	32.8%	(28.2-37.4)	25.4%	(24.0-26.8)
8	Suffers or has suffered high cholesterol (aged 15 and over)	w	10.6%	(8.3-12.9)	12.4%	(10.2-14.6)	12.2%	(10.8-13.6)	17.7%	(16.0-19.4)	18.3%	(15.9-20.7)	20.2%	(18.0-22.4)	15.3%	(14.5-16.1)	16.0%	(12.0-20.0)	16.4%	(12.7-20.1)	20.7%	(18.3-23.1)	25.4%	(22.6-28.2)	26.4%	(22.6-30.2)	24.5%	(20.3-28.7)	22.6%	(21.3-23.9)
9	Tobacco consumption (aged 15 and over)	w	23.7%	(20.5-26.9)	25.8%	(22.9-28.7)	30.2%	(28.3-32.1)	18.9%	(17.2-20.6)	24.9%	(22.2-27.6)	19.5%	(17.3-21.7)	24.3%	(23.4-25.2)	21.1%	(16.6-25.6)	23.1%	(18.9-27.3)	23.4%	(20.9-25.9)	19.5%	(17.0-22.0)	22.5%	(18.9-26.1)	22.8%	(18.7-26.9)	21.8%	(20.5-23.1)
10	Risky alcohol consumption (aged 15 and over)	w	2.7%	(1.5-3.9)	3.4%	(2.4-4.6)	2.0%	(1.4-2.6)	1.3%	(0.8-1.8)	1.3%	(0.6-2.0)	1.0%	(0.4-1.6)	1.8%	(1.5-2.1)	2.5%	(0.8-4.2)	2.9%	(1.2-4.6)	2.1%	(1.3-2.9)	1.3%	(0.6-2.0)	0.5%	(-0.1-1.1)	1.6%	(0.4-2.8)	1.8%	(1.4-2.2)
11	Sedentary lifestyle (aged 18-74)	w	29.4%	(25.8-33.0)	20.3%	(17.4-23.2)	25.6%	(23.7-27.5)	22.8%	(20.9-24.9)	26.6%	(23.6-29.6)	20.8%	(18.1-23.5)	24.3%	(23.3-25.3)	24.0%	(19.0-29.0)	17.8%	(13.5-21.7)	24.4%	(21.7-27.1)	18.9%	(16.1-21.7)	17.9%	(14.2-21.6)	12.5%	(8.8-16.2)	20.3%	(18.9-21.7)
12	Periodic blood pressure test (aged 15 and over)	w	38.6%	(34.9-42.3)	42.2%	(38.9-45.5)	45.5%	(43.4-47.6)	54.8%	(52.6-57.0)	51.3%	(48.2-54.4)	62.7%	(60.0-65.4)	48.8%	(48.7-50.9)	47.5%	(42.0-53.0)	46.8%	(41.8-51.8)	46.8%	(43.9-49.7)	55.8%	(52.6-59.0)	60.2%	(56.0-64.4)	53.7%	(48.8-58.6)	52.6%	(51.0-54.2)
13	Periodic cholesterol blood test (aged 15 and over)	w	54.4%	(50.7-58.1)	56.1%	(52.8-59.4)	51.9%	(49.8-54.0)	54.5%	(52.3-56.7)	52.4%	(49.3-55.5)	61.1%	(58.4-63.8)	54.6%	(53.5-55.7)	56.8%	(51.5-62.3)	56.2%	(51.3-61.1)	58.9%	(54.0-59.8)	61.7%	(58.6-64.8)	66.4%	(62.4-70.4)	57.8%	(52.7-62.5)	60.0%	(58.5-61.5)
14	Double healthcare coverage (general population)	w	47.6%	(44.2-51.0)	36.0%	(32.9-39.1)	30.6%	(28.8-32.4)	16.0%	(14.5-17.5)	16.5%	(14.3-18.7)	12.8%	(11.1-14.7)	25.2%	(24.3-26.1)	51.5%	(46.7-56.3)	40.2%	(35.8-44.6)	31.4%	(29.0-33.8)	15.0%	(13.0-17.0)	14.4%	(11.7-17.1)	6.3%	(4.1-8.5)	25.2%	(24.0-26.4)
15	Medicine taken in the last 2 days (aged 15 and over)	w	66.4%	(62.8-70.0)	62.4%	(59.2-65.6)	71.2%	(69.3-73.1)	71.1%	(69.1-73.1)	73.6%	(70.9-76.3)	77.8%	(75.5-80.1)	71.1%	(70.1-72.1)	68.7%	(63.6-73.8)	63.8%	(58.8-68.4)	67.8%	(65.1-70.5)	72.0%	(69.1-74.9)	74.4%	(70.7-78.1)	69.5%	(65.0-74.0)	70.1%	(68.7-71.5)
16	Visits to a healthcare professional in the last 12 months (general population)	w	95.0%	(93.5-96.5)	93.4%	(91.8-95.0)	91.1%	(90.0-92.2)	92.4%	(91.3-93.5)	92.4%	(90.9-93.9)	92.2%	(90.8-93.6)	92.3%	(91.8-92.8)	96.5%	(94.7-98.3)	94.2%	(92.1-96.3)	94.5%	(93.3-95.7)	95.4%	(94.2-96.6)	94.6%	(92.8-96.4)	93.8%	(91.8-96.0)	94.9%	(94.3-95.5)
17	Hospitalisation in the last 12 months (general population)	w	9.1%	(7.1-11.1)	10.2%	(8.3-12.1)	9.5%	(8.4-10.6)	9.4%	(8.2-10.6)	8.8%	(7.2-10.4)	13.0%	(11.2-14.8)	9.9%	(9.3-10.5)	5.4%	(3.2-7.6)	10.5%	(7.7-13.3)	8.4%	(6.9-9.9)	9.1%	(7.5-10.7)	9.0%	(6.8-11.2)	8.4%	(5.9-10.9)	8.6%	(7.8-9.4)
18	Visits to an emergency department in the last 12 months (general population)	w	29.6%	(26.5-32.7)	30.7%	(27.8-33.6)	34.6%	(32.8-36.4)	34.0%	(32.1-35.9)	38.8%	(36.0-41.6)	38.2%	(35.6-40.8)	34.7%	(33.7-35.7)	23.5%	(19.4-27.6)	32.6%	(28.4-36.8)	33.6%	(31.1-36.1)	34.5%	(31.8-37.2)	36.5%	(32.8-40.2)	38.1%	(33.8-42.4)	33.5%	(32.2-34.8)
19	Satisfaction with public healthcare services used (general population)	w	87.0%	(84.1-89.9)	81.3%	(78.4-84.2)	78.7%	(77.9-81.5)	79.8%	(78.0-81.6)	80.7%	(78.2-83.2)	81.4%	(79.2-83.6)	80.9%	(80.0-81.8)	91.9%	(87.0-96.8)	90.1%	(85.9-94.3)	88.4%	(85.5-91.3)	88.6%	(85.7-91.5)	87.7%	(83.6-91.8)	89.8%	(85.6-93.6)	89.1%	(87.7-90.5)

W: women
 Source: Health Survey of Catalonia (ESCA), 2006 and 2012-2013. Ministry of Health.
 * EQ-5D, which evaluates the health status at the present time. 2006 with EQ-5D-3L. 2012 and 2013 with EQ-5D-5L.

Table 21. Change in the main Health Survey of Catalonia (ESCA) indicators (raw % and CI=95%), by educational level. Men. Catalonia, 2006 and 2012-2013

			2006								2012-2013							
			Educational level						Total		Educational level						Total	
			University		Secondary		Primary or no education				University		Secondary		Primary or no education			
			%	CI95%	%	CI95%	%	CI95%	%	CI95%	%	CI95%	%	CI95%	%	CI95%	%	CI95%
1	Positive (excellent, very good or good) self-perceived health status (aged 15 and over)	M	91.8%	(90,2-93,4)	87.2%	(86,2-88,2)	66.1%	(64,3-67,9)	81.2%	(80,3-82,1)	92.9%	(91,0-94,8)	84.7%	(83,3-86,1)	70.1%	(67,0-73,2)	83.3%	(82,1-84,5)
2	Excess weight (overweight and obesity) (aged 18-74)	M	50.3%	(47,4-53,2)	53.7%	(52,1-55,3)	67.0%	(65,0-69,0)	56.9%	(55,7-58,1)	47.3%	(43,4-51,2)	58.5%	(56,4-60,6)	64.8%	(60,7-68,9)	57.2%	(55,5-58,9)
3	Disability (aged 15 and over)	M	7.1%	(5,6-8,6)	8.5%	(7,6-9,4)	26.4%	(24,8-28,0)	14.0%	(13,2-14,8)	5.2%	(3,5-6,9)	9.7%	(8,5-10,9)	25.5%	(22,5-28,5)	12.1%	(11,1-13,1)
4	Risk of suffering a mental disorder (Goldberg) (aged 15 and over)	M	5.7%	(4,4-7,0)	7.0%	(6,2-7,8)	9.5%	(8,4-10,6)	7.6%	(7,0-8,2)	4.8%	(3,2-6,4)	8.7%	(7,6-9,8)	10.7%	(8,6-12,8)	8.3%	(7,4-9,2)
5	Pain or discomfort* (aged 15 and over)	M	16.7%	(14,5-18,9)	19.2%	(18,0-20,4)	38.5%	(36,7-40,3)	24.9%	(23,9-25,9)	12.0%	(9,5-14,5)	20.5%	(18,9-22,1)	31.1%	(28,0-34,2)	21.1%	(19,8-22,4)
6	Suffers or has suffered a chronic health condition (15 and over)	M	69.3%	(66,6-72,0)	66.0%	(64,5-67,5)	82.0%	(80,6-83,4)	71.6%	(70,6-72,6)	67.4%	(63,9-70,9)	69.8%	(68,0-71,6)	82.6%	(80,0-85,2)	72.0%	(70,6-73,4)
7	Suffers or has suffered arterial hypertension (aged 15 and over)	M	14.2%	(12,2-16,2)	13.2%	(12,1-14,3)	28.7%	(27,0-30,4)	18.3%	(17,4-19,2)	19.0%	(16,0-22,0)	22.6%	(20,9-24,3)	36.3%	(33,0-39,6)	24.8%	(23,5-26,1)
8	Suffers or has suffered high cholesterol (aged 15 and over)	M	11.9%	(10,0-13,8)	11.4%	(10,4-12,4)	21.1%	(19,6-22,6)	14.6%	(13,8-15,4)	18.9%	(15,9-21,9)	21.0%	(19,4-22,6)	31.6%	(28,4-34,8)	22.7%	(21,4-24,0)
9	Tobacco consumption (aged 15 and over)	M	24.0%	(21,5-26,5)	39.3%	(37,8-40,8)	32.0%	(30,3-33,7)	34.5%	(33,5-35,5)	24.0%	(20,8-27,2)	36.5%	(34,6-38,4)	32.1%	(28,9-35,3)	33.2%	(31,7-34,7)
10	Risky alcohol consumption (aged 15 and over)	M	5.6%	(4,3-6,9)	9.3%	(8,4-10,2)	5.8%	(4,9-6,7)	7.6%	(7,0-8,2)	5.9%	(4,1-7,7)	6.3%	(5,3-7,3)	5.1%	(3,6-6,6)	6.0%	(5,3-6,7)
11	Sedentary lifestyle (aged 18-74)	M	26.9%	(24,3-29,5)	17.3%	(16,1-18,5)	18.0%	(16,4-19,6)	19.2%	(18,3-20,1)	23.6%	(20,3-26,9)	15.2%	(13,7-16,7)	19.7%	(16,3-23,1)	17.8%	(16,5-19,1)
12	Periodic blood pressure test (aged 15 and over)	M	39.4%	(36,6-42,2)	36.0%	(34,5-37,5)	58.0%	(56,2-59,8)	43.4%	(42,3-44,5)	43.7%	(39,9-47,5)	46.9%	(44,9-48,9)	60.8%	(57,5-64,1)	49.0%	(47,4-50,6)
13	Periodic cholesterol blood test (aged 15 and over)	M	52.4%	(49,5-55,3)	43.7%	(42,1-45,3)	57.6%	(55,8-59,4)	49.4%	(48,3-50,5)	55.7%	(51,9-59,5)	54.0%	(52,0-56,0)	65.8%	(62,6-69,0)	56.7%	(55,2-58,2)
14	Double healthcare coverage (aged 15 and over)	M	44.4%	(41,5-47,3)	29.2%	(27,8-30,6)	17.7%	(16,3-19,1)	28.0%	(27,0-29,0)	46.2%	(42,4-50,0)	20.3%	(18,7-21,9)	11.3%	(9,2-13,4)	23.4%	(22,1-24,7)
15	Medicine taken in the last 2 days (aged 15 and over)	M	47.8%	(44,9-50,7)	44.9%	(43,3-46,5)	63.0%	(61,2-64,8)	51.2%	(50,1-52,3)	46.5%	(42,7-50,3)	50.9%	(48,9-52,9)	69.4%	(66,3-72,5)	53.9%	(52,3-55,5)
16	Visits to a healthcare professional in the last 12 months (aged 15 and over)	M	84.1%	(82,0-86,2)	80.8%	(79,6-82,0)	85.6%	(84,3-86,9)	82.9%	(82,1-83,7)	85.8%	(83,2-88,4)	84.9%	(83,5-86,3)	88.5%	(86,3-90,7)	85.8%	(84,7-86,9)
17	Hospitalisation in the last 12 months (aged 15 and over)	M	4.6%	(3,4-5,8)	5.5%	(4,8-6,2)	11.0%	(9,8-12,2)	7.1%	(6,5-7,7)	5.5%	(3,8-7,2)	6.9%	(5,9-7,9)	10.7%	(8,6-12,8)	7.4%	(6,6-8,2)
18	Visits to an emergency department in the last 12 months (aged 15 and over)	M	25.5%	(23,0-28,0)	28.6%	(27,2-30,0)	30.3%	(28,6-32,0)	28.6%	(27,6-29,6)	25.1%	(21,8-28,4)	26.5%	(24,7-28,3)	29.3%	(26,2-32,4)	26.7%	(25,3-28,1)
19	Satisfaction with public healthcare services used (aged 15 and over)	M	83.4%	(80,5-86,3)	78.8%	(77,3-80,3)	80.9%	(79,3-82,5)	80.2%	(79,2-81,2)	87.2%	(83,6-90,8)	88.2%	(86,6-89,8)	89.6%	(87,3-91,9)	88.4%	(87,2-89,6)

M: men

Source: Health Survey of Catalonia (ESCA), 2006 and 2012-2013. Ministry of Health.

* EQ-5D, which evaluates the health status at the present time. 2006 with EQ-5D-3L. 2012 and 2013 with EQ-5D-5L.

Table 22. Change in the main Health Survey of Catalonia (ESCA) indicators (raw % and CI=95%), by educational level. Women. Catalonia, 2006 and 2012-2013

		2006								2012-2013								
		Educational level						Total		Educational level						Total		
		University		Secondary		Primary or no education				University		Secondary		Primary or no education				
		%	CI95%	%	CI95%	%	CI95%	%	CI95%	%	CI95%	%	CI95%	%	CI95%	%	CI95%	
1	Positive (excellent, very good or good) self-perceived health status (aged 15 and over)	W	90.6%	(89,0-92,2)	80.7%	(79,4-82,0)	47.9%	(46,2-49,6)	70.0%	(69,0-71,0)	89.5%	(87,3-91,7)	79.7%	(78,0-81,4)	55.6%	(52,5-58,7)	75.3%	(73,9-76,7)
2	Excess weight (overweight and obesity) (aged 18-74)	W	20.8%	(18,5-23,1)	33.7%	(32,1-35,3)	63.0%	(61,0-65,0)	40.3%	(39,1-41,5)	22.5%	(19,4-25,6)	41.5%	(39,3-43,7)	59.8%	(55,9-63,7)	40.5%	(38,8-42,2)
3	Disability (aged 15 and over)	W	6.3%	(5,0-7,6)	10.4%	(9,4-11,4)	42.0%	(40,3-43,7)	21.7%	(20,8-22,6)	6.7%	(4,9-8,5)	13.6%	(12,2-15,0)	37.1%	(34,1-40,1)	18.5%	(17,3-19,7)
4	Risk of suffering a mental disorder (Goldberg) (aged 15 and over)	W	10.2%	(8,5-11,9)	14.0%	(12,8-15,2)	20.0%	(18,6-21,4)	15.5%	(14,7-16,3)	11.0%	(8,7-13,3)	14.5%	(13,0-16,0)	18.6%	(16,2-21,0)	14.8%	(13,7-15,9)
5	Pain or discomfort* (aged 15 and over)	W	22.5%	(20,2-24,8)	32.3%	(30,7-33,9)	61.0%	(59,3-62,7)	41.5%	(40,4-42,6)	21.4%	(18,4-24,4)	33.2%	(31,2-35,2)	55.4%	(52,3-58,5)	36.7%	(35,2-38,2)
6	Suffers or has suffered a chronic health condition (15 and over)	W	74.3%	(71,9-76,7)	78.3%	(76,9-79,7)	92.6%	(91,7-93,5)	83.0%	(82,2-83,8)	73.9%	(70,7-77,1)	81.9%	(80,3-83,5)	91.4%	(89,7-93,1)	82.8%	(81,6-84,0)
7	Suffers or has suffered arterial hypertension (aged 15 and over)	W	7.7%	(6,2-9,2)	12.0%	(10,9-13,1)	37.7%	(36,0-39,4)	21.0%	(20,1-21,9)	11.7%	(9,4-14,0)	19.7%	(18,0-21,4)	47.3%	(44,2-50,4)	25.4%	(24,0-26,8)
8	Suffers or has suffered high cholesterol (aged 15 and over)	W	9.5%	(7,9-11,1)	9.8%	(8,8-10,8)	24.4%	(22,9-25,9)	15.3%	(14,5-16,1)	13.6%	(11,1-16,1)	19.7%	(18,0-21,4)	35.2%	(32,3-38,1)	22.6%	(21,3-23,9)
9	Tobacco consumption (aged 15 and over)	W	25.2%	(22,8-27,6)	31.9%	(30,4-33,4)	14.4%	(13,2-15,6)	24.3%	(23,4-25,2)	23.6%	(20,5-26,7)	24.9%	(23,1-26,7)	13.4%	(11,3-15,5)	21.8%	(20,5-23,1)
10	Risky alcohol consumption (aged 15 and over)	W	2.9%	(2,0-3,8)	2.2%	(1,7-2,7)	0.8%	(0,5-1,1)	1.8%	(1,5-2,1)	2.6%	(1,4-3,8)	1.9%	(1,3-2,5)	0.8%	(0,3-1,3)	1.8%	(1,4-2,2)
11	Sedentary lifestyle (aged 18-74)	W	27.8%	(25,3-30,3)	24.3%	(22,8-25,8)	22.1%	(20,4-23,8)	24.3%	(23,3-25,3)	22.3%	(19,3-25,3)	20.4%	(18,6-22,2)	17.5%	(14,5-20,5)	20.3%	(18,9-21,7)
12	Periodic blood pressure test (aged 15 and over)	W	35.8%	(33,1-38,5)	39.3%	(37,7-40,9)	70.0%	(68,4-71,6)	49.8%	(48,7-50,9)	41.6%	(38,0-45,2)	46.9%	(44,8-49,0)	74.6%	(71,9-77,3)	52.6%	(51,0-54,2)
13	Periodic cholesterol blood test (aged 15 and over)	W	52.6%	(49,8-55,4)	46.3%	(44,6-48,0)	66.1%	(64,5-67,7)	54.6%	(53,5-55,7)	55.1%	(51,5-58,7)	54.9%	(52,8-57,0)	75.7%	(73,1-78,3)	60.0%	(58,5-61,5)
14	Double healthcare coverage (aged 15 and over)	W	41.9%	(39,2-44,6)	27.7%	(26,2-29,2)	14.6%	(13,4-15,8)	25.2%	(24,3-26,1)	47.7%	(44,1-51,3)	23.4%	(21,6-25,2)	12.2%	(10,2-14,2)	25.3%	(23,9-26,7)
15	Medicine taken in the last 2 days (aged 15 and over)	W	61.9%	(59,2-64,6)	65.1%	(63,5-66,7)	82.5%	(81,2-83,8)	71.1%	(70,1-72,1)	63.5%	(60,0-67,0)	66.5%	(64,5-68,5)	82.4%	(80,1-84,7)	70.1%	(68,7-71,5)
16	Visits to a healthcare professional in the last 12 months (aged 15 and over)	W	93.9%	(92,6-95,2)	90.5%	(89,5-91,5)	92.7%	(91,8-93,6)	91.9%	(91,3-92,5)	95.8%	(94,3-97,3)	93.8%	(92,8-94,8)	96.7%	(95,6-97,8)	95.0%	(94,3-95,7)
17	Hospitalisation in the last 12 months (aged 15 and over)	W	8.6%	(7,0-10,2)	9.3%	(8,3-10,3)	13.9%	(12,7-15,1)	10.9%	(10,2-11,6)	9.3%	(7,2-11,4)	8.2%	(7,0-9,4)	12.1%	(10,1-14,1)	9.5%	(8,6-10,4)
18	Visits to an emergency department in the last 12 months (aged 15 and over)	W	26.4%	(25,9-30,9)	34.0%	(32,4-35,6)	37.2%	(35,6-38,8)	34.2%	(33,2-35,2)	29.5%	(26,2-32,8)	31.5%	(29,5-33,5)	35.9%	(32,9-38,9)	32.3%	(30,8-33,8)
19	Satisfaction with public healthcare services used (aged 15 and over)	W	79.8%	(76,8-82,8)	77.3%	(75,7-78,9)	81.2%	(79,8-82,6)	79.3%	(78,3-80,3)	88.7%	(85,7-91,7)	87.4%	(85,8-89,0)	88.8%	(86,7-90,9)	88.0%	(86,8-89,2)

W: women

Source: Health Survey of Catalonia (ESCA), 2006 and 2012-2013. Ministry of Health.

* EQ-5D, which evaluates the health status at the present time. 2006 with EQ-5D-3L. 2012 and 2013 with EQ-5D-5L.

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Bibliography

- ¹ Idescat. Anuari estadístic de Catalunya. Evolució de la població. Barcelona: Generalitat de Catalunya. Available at: <http://www.idescat.cat/pub/?id=aec&lang=en>
- ² Pla de Govern 2013-2016: mesures orientades a protegir l'estat del benestar i amb indicadors de control públic. Barcelona: Generalitat de Catalunya. Available at: http://premsa.gencat.cat/pres_fsvp/AppJava/notapremsavw/detall.do?id=204229
- ³ The Scottish Health Survey 2010 - volume 1: main report. Edinburgh: Scottish Government; 2011. Available at: <http://scotland.gov.uk/Publications/2011/09/27084018/91>
- ⁴ Eurostat. European health interview survey (EHIS wave 2). Methodological manual. Luxembourg: Publications Office of the European Union; 2013. Available at: http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-RA-13-018/EN/KS-RA-13-018-EN.PDF
- ⁵ Goldberg DP, Cooper B, Eastwood MR, Kedwart HB, Shepherd M. A standardized psychiatric interview for use in community surveys. *Br J Prev Soc Med.* 1970;24:18-23.
- ⁶ Centre d'Estudis Epidemiològics sobre les Infeccions de Transmissió Sexual i Sida de Catalunya (CEEISCAT). SIVES 2012. Sistema integrat de vigilància epidemiològica de la SIDA/VIH/ITS a Catalunya. Informe epidemiològic. Document tècnic 21. Barcelona: Generalitat de Catalunya. Agència de Salut Pública de Catalunya; 2013. Available at: http://www.ceeiscat.cat/documents/SIVES_2012.pdf
- ⁷ World Health Organization. Global status report on alcohol and health 2014. Luxembourg: World Health Organization; 2014.
- ⁸ Encuesta nacional de salud. España 2011/12 Serie Informes monográficos nº 1. Consumo de alcohol. Madrid: Ministerio de Sanidad, Servicios Sociales e Igualdad; 2013.
- ⁹ Epidemiologia. Drogues. Canal Salut. Generalitat de Catalunya. Departament de Salut. Available at: [Epidemiologia. Drogues. Canal Salut.](#)
- ¹⁰ Tapia JA. Economía y mortalidad en las ciencias sociales: del Renacimiento a las ideas de la transición demográfica. *Salud Colectiva.* 2005;1(3):285-308. Available at: <http://redalyc.uaemex.mx/redalyc/src/inicio/ArtPdfRed.jsp?iCve=73110303>
- ¹¹ Dahlgren G, Whitehead M. Policies and strategies to promote equity in health. Copenhagen: World Health Organisation; 1991.
- ¹² Mackenbach JP, Bakker M, editors. Reducing inequalities in health: a European perspective. London: Routledge; 2002.
- ¹³ Whitehead M, Dahlgren G. Concepts and principles for tackling social inequities in health: leveling up part 1. Studies on social and economic determinants of population health no. 2. Copenhagen: WHO Regional Office for Europe; 2007. Available at: http://www.enothe.hva.nl/copore/docs/concepts_and_principles.pdf
- ¹⁴ Comisión para Reducir las Desigualdades en Salud en España. Avanzando hacia la equidad: propuesta de políticas e intervenciones para reducir las desigualdades sociales en salud en España. Madrid: Ministerio de Sanidad y Política Social; 2010. Available at: http://www.mspsi.gob.es/profesionales/saludPublica/prevPromocion/promocion/desigualdadSalud/docs/Propuesta_Politicas_Reducir_Desigualdades.pdf
- ¹⁵ Sen A. Mortality as an indicator of economic success and failure. Florence: UNICEF Innocenti Research Centre; 1995. Available at: http://www.unicef-irc.org/publications/pdf/il_mortality.pdf
- ¹⁶ Mackenbach JP, Bakker MJ. European network on interventions and policies to reduce inequalities in health. Tackling socioeconomic inequalities in health: analysis of European experiences. *Lancet.* 2003;362:1409-14. Available at: <http://www.belspo.be/platformisd/Library/Mackenbach%20Bakker.pdf>
- ¹⁷ Wilkinson R, Marmot M. Social determinants of health: the solid facts. Copenhagen: WHO Regional Office for Europe; 2003. Available at: http://www.euro.who.int/_data/assets/pdf_file/0005/98438/e81384.pdf?ua=1
- ¹⁸ Marmot M, Wilkinson R. Social determinants of health. 2nd ed. Oxford: Oxford University Press; 2006.
- ¹⁹ Servei Català de la Salut. Els sistemes de pagament de la sanitat pública a Catalunya, 1981-2009. Barcelona: Generalitat de Catalunya. Departament de Salut; 2009. Available at: http://www20.gencat.cat/docs/salut/Minisite/catsalut/publicacions/18anys/Sistemes_pagament_sanitat_publica.pdf
- ²⁰ Departament de Salut. Pla de salut de Catalunya 2011-2015. Barcelona: Generalitat de Catalunya. Departament de Salut; 2012. Available at: <http://www20.gencat.cat/portal/site/salut/menuitem.08bf9901ea011adbe23ffed3b0c0e1a0/?vgnextoid=2de0fca770bd3310VgnVCM2000009b0c1e0aRCRD&vgnnextchannel=2de0fca770bd3310VgnVCM2000009b0c1e0aRCRD&vgnnextfmt=default>
- ²¹ Bonnefoy J, Morgan A, Kelly MP, Butt J, Bergman V. Constructing the evidence base on the social determinants of health: a guide. Geneva: World Health Organization; 2007. Available at: http://www.who.int/social_determinants/knowledge_networks/add_documents/mekn_final_guide_112007.pdf
- ²² Domingo A, Marcos J. Propuesta de un indicador de clase social basado en la ocupación. *Gac Sanit.* 1989;3:320-6.
- ²³ Kunst A, Mackenbach JP. Measuring socioeconomic inequalities in health. Copenhagen: WHO Regional Office for Europe; 2000.
- ²⁴ World Health Organisation. Health 21: an introduction to the health for all policy framework for the WHO European Region. European Health for All Series No. 5. Copenhagen: WHO Regional Office for Europe; 1998. Available at: <http://www.euro.who.int/document/EHFA5-E.pdf>

- ²⁵ Solar O, Irwin A. A conceptual framework for action on the social determinants of health. Social determinants of health discussion paper 2. Geneva: World Health Organization. Commission on Social Determinants of Health; 2007. Available at: http://www.who.int/social_determinants/resources/csdh_framework_action_05_07.pdf
- ²⁶ Acheson D. Independent inquiry into inequalities in health report. *BMJ*. Nov 28;1998;317(7171):1465-66. Available at: www.archive.official-documents.co.uk
- ²⁷ Bago d'Uva T, O'Donnell O, van Doorslaer E. Differential health reporting by education level and its impact on the measurement of health inequalities among older Europeans. *Int J Epidemiol*. Dec 2008;37(6):1375-83. Available at: <http://ije.oxfordjournals.org/cgi/reprint/37/6/1375>
- ²⁸ Pincus T, Callahan LF. Associations of low formal education level and poor health status: behavioral, in addition to geographic and medical, explanations? *J Clin Epidemiol*. 1994;47(4):355-61.
- ²⁹ Díaz E, Paredes D. Explicando el efecto de la clase social en la salud; la importancia de la educación. *Inguruak* 2007; 44: 91-110. Available at: <http://www.opikertu.org/dmdocuments/91explief.pdf>
- ³⁰ Report No. 20, 2006-2007: National strategy to reduce social inequalities in health. Paper presented to the Storting. Oslo: Norwegian Ministry of Health and Care Services; 2007. Available at: http://ec.europa.eu/health/ph_determinants/socio_economics/documents/norway_rd01_en.pdf
- ³¹ Gosling R, Bassett C, Gilby N, Angle H. Health education population survey: update from 2006 survey. Glasgow: NHS Scotland Publications; 2008. Available at: <http://www.healthscotland.com/scotlands-health/population/HEPS.aspx>
- ³² Lleras-Muney A, Cutler DM. Education and health: evaluating theories and evidence. In: Schoeni RF, House JS, Kaplan G, Pollack H, editors. Making Americans healthier: social and economics policy as health policy. New York: Russell Sage Foundation; 2008. Available at: http://www.econ.ucla.edu/alleras/research/books/Education_and_Health_July_2006.pdf
- ³³ Mackenbach JP, Stirbu I, Roskam AJ, Schaap M, Menvielle G, Leinsalu M, et al. Socioeconomic inequalities in mortality and morbidity: a cross-European perspective. Chapter 2. En: Tackling Health Inequalities in Europe: an Integrated Approach. Eurothine Final Report. Rotterdam: Department of Public Health, University Medical Centre Rotterdam; 2007. Available at: http://ec.europa.eu/health/ph_projects/2003/action1/docs/2003_1_16_frep_en.pdf
- ³⁴ Regidor E. Desigualdades socioeconómicas en la exposición al riesgo y en salud. En: Rodríguez M, Urbanos R. Desigualdades sociales en salud. Factores determinantes y elementos para la acción. Barcelona: Elsevier Masson; 2008. p. 11-40.
- ³⁵ Mackenbach JP. Health inequalities: Europe in profile. An independent, expert report commissioned by the UK Presidency of the EU. Brussels: European Commission; 2006. Available at: http://www.dh.gov.uk/prod_consum_dh/groups/dh_digitalassets/@dh/@en/documents/digitalasset/dh_4121584.pdf
- ³⁶ Dahlgren G, Whitehead M. European strategies for tackling social inequities in health: Leveling up Part 2. Studies on social and economic determinants of population health, 3. Copenhagen: WHO Regional Office for Europe; 2007. Available at: <http://www.euro.who.int/document/e89384.pdf>
- ³⁷ World Health Organization. Global health risks: mortality and burden of disease attributable to selected major risks. Geneva: World Health Organization; 2009. Available at: http://www.who.int/healthinfo/global_burden_disease/GlobalHealthRisks_report_full.pdf
- ³⁸ Kunst A, Giskes K, Mackenbach J. Socio-economic inequalities in smoking in the European Union. Applying an equity lens to tobacco control policies. Rotterdam: Department of Public Health, Erasmus Medical Center Rotterdam; 2004. Available at: http://old.ensp.org/files/ensp_socioeconomic_inequalities_in_smoking_in_eu.pdf
- ³⁹ Masuet C, Sécúli E, Brugulat P, Tresserras R. La práctica de la mamografía preventiva en Cataluña. Un paso adelante. *Gac Sanit*. 2004;18(4):321-5. Available at: <http://scielo.isciii.es/pdf/gsv18n4/breve.pdf>
- ⁴⁰ Generalitat de Catalunya. Departament de Salut. Enquesta de salut de Catalunya. Informes dels principals resultats. Barcelona: Direcció General de Planificació i Recerca en Salut. Departament de Salut; 2011, 2012, 2013, 2014. Available at: <http://www.gencat.cat/salut/esca>
- ⁴¹ Perry MJ. The relationship between social class and mental disorder. *J Prim Prev*. 1996 Sep;17(1):17-30.
- ⁴² Sécúli E, Brugulat P, Medina A, Mompert A, Tresserras R. La salut de les dones a Catalunya. Què en sabem? Barcelona: Generalitat de Catalunya. Departament de Salut; 2007.
- ⁴³ EuroQol Group. EuroQol-A new facility for the measurement of healthy-related quality of life. *Health Policy*. 1990;16(3):199-208.
- ⁴⁴ Rabin R, De Charro F. EQ-5D: a measure of health status from the EuroQol Group. *Ann Med*. 2001;33(5):337-43.
- ⁴⁵ Dalstra JAA, Kunst AE, Borrell C, Breeze E, Cambois E, Costa G, et al. Socioeconomic differences in the prevalence of common chronic diseases: an overview of eight European countries. *Int J Epidemiol*. 2005;34(2):316-26. Available at: <http://ije.oxfordjournals.org/cgi/reprint/34/2/316>
- ⁴⁶ Regidor E, Martínez D, Astasio P, Ortega P, Calle ME, Domínguez V. Asociación de los ingresos económicos con la utilización y la accesibilidad de los servicios sanitarios en España al inicio del siglo XXI. *Gac Sanit*. 2006;20:352-9. Available at: <http://scielo.isciii.es/pdf/gsv20n5/original2.pdf>
- ⁴⁷ Sáez M. Condicionantes en la utilización de los servicios de atención primaria. Evidencias empíricas e inconsistencias metodológicas. *Gac Sanit*. 2003 Sep-Oct;17(5 Suppl 5). Available at: <http://scielo.isciii.es/pdf/gsv17n5/especial.pdf>
- ⁴⁸ Generalitat de Catalunya. Departament de Salut. El sistema de Salut de Catalunya en procés de canvi. Balanç del Pla de salut 2011-2015 a meitat de període. Barcelona: Generalitat de Catalunya. Departament de Salut; 2013. Available at: <http://www.gencat.cat/salut/pladesalut>
- ⁴⁹ Generalitat de Catalunya. Departament de Salut. Marcant fites: seguiment anual dels objectius de Pla de salut. Barcelona: Direcció General de Regulació, Planificació i Recursos Sanitaris, Departament de Salut; 2012. Available at: http://www20.gencat.cat/docs/salut/Home/EI%20Departament/Pla_de_Salut/documents/arxius/marcant_fites.pdf

-
- ⁵⁰ Generalitat de Catalunya. Departament de Salut. Pla interdepartamental de salut pública (PINSAP). Agència de Salut Pública de Catalunya. Departament de Salut; 2014. Available at: <http://www20.gencat.cat/portal/site/salut/menuitem.003a2436be9bc6ec3bfd8a10b0c0e1a0/?vgnextoid=043c07814fdb2410VgnVCM1000008d0c1e0aRCRD&vgnnextchannel=043c07814fdb2410VgnVCM1000008d0c1e0aRCRD&vgnnextfmt=default>
- ⁵¹ Llei 18/2009, del 22 d'octubre, de salut pública. Diari Oficial de la Generalitat de Catalunya (5495); 30 Oct 2009. p. 81070-81116. Available at: <http://www20.gencat.cat/portal/site/portaldogc/menuitem.c973d2fc58aa0083e4492d92b0c0e1a0/?vgnextoid=485946a6e5dfe210VgnVCM1000000b0c1e0aRCRD&appInstanceName=default&action=fitxa&documentId=532871>
- ⁵² World Health Organization. Health 2020: a European policy framework supporting action across government and society for health and well-being. Copenhagen: WHO Regional Office for Europe; 2012. Available at: <http://www.euro.who.int/en/publications/abstracts/health-2020-a-european-policy-framework-supporting-action-across-government-and-society-for-health-and-well-being>
- ⁵³ Dahlgren G, Whitehead M. Policies and strategies to promote social equity in health. Stockholm: Institute for Futures Studies; 1991.