# Monitoring the health conditions of the population

The Ottawa Charter, a document created by the World Health Organization (WHO) during the First International Conference for Health Promotion held in this Canadian city in 1986, affirmed that the requisites for health are: peace, education, clothes, food, accommodation, a stable ecosystem, social justice and equity.

The Committee on Social Determinants of Health affirmed, in the summary of their final report of 2008, that:

"...Social justice is a matter of life or death. It affects the way people live, their consequent chance of illness, and their risk of premature death.

...Within countries there are dramatic differences in health that are closely linked with degrees of social disadvantage. Differences of this magnitude, within and between countries, simply should never happen. These inequities in health, avoidable health inequalities, arise because of the circumstances in which people grow, live, work and age, and the systems put in place to deal with illness. The conditions in which people live and die are, in turn, shaped by political, social and economic forces." *(Commission on Social Determinants of Health/Executive summary of the final report 2008)* 

One of the most commonly used indicators to evaluate the conditions of health and social progress and development within a country is that of life expectancy (table 18), but there are other indicators, such as the expectations of health, which help to adjust years to the reality of quality of life.

The expectations of health provide a way of dividing the life expectancy into sections which are lived under different circumstances: for example, in good health and poor health. These measures respond to the growing interest in obtaining indicators of the quality of life (life in good health) instead of indicators of quantity (table 19) only.

The expectancy of health extends the concept of life expectancy to cover mobility and disablement.

| <b>TABLE 18.</b> Basic demographic indicators. European data, 2005 |      |       |  |  |  |  |  |
|--|------|-------|--|--|--|--|--|
|  | Men  | Women |  |  |  |  |  |
| Austria  | 75.8 | 81.4  |  |  |  |  |  |
| Belgium  | 75.3 | 81.0  |  |  |  |  |  |
| Bulgaria   | 68.7 | 75.8  |  |  |  |  |  |
| Cyprus   | 76.0 | 80.1  |  |  |  |  |  |
| Czech Republic   | 72.1 | 78.4  |  |  |  |  |  |
| Denmark  | 75.2 | 79.7  |  |  |  |  |  |
| Estonia  | 66.3 | 77.2  |  |  |  |  |  |
| Finland  | 74.6 | 81.4  |  |  |  |  |  |
| France   | -    | -     |  |  |  |  |  |
| Germany  | 74.5 | 78.7  |  |  |  |  |  |
| Greece   | 76.0 | 80.9  |  |  |  |  |  |
| Hungary  | 67.9 | 76.0  |  |  |  |  |  |
| Iceland  | 78.5 | 82.4  |  |  |  |  |  |
| Italy  | -    | -     |  |  |  |  |  |
| Latvia   | 64.8 | 76.0  |  |  |  |  |  |
| Liechtenstein  | 76.6 | 83.0  |  |  |  |  |  |
| Lithuania  | 64.7 | 76.8  |  |  |  |  |  |
| Luxembourg   | 75.6 | 81.2  |  |  |  |  |  |
| Norway   | 76.9 | 81.7  |  |  |  |  |  |
| Netherlands  | 76.5 | 80.9  |  |  |  |  |  |
| Poland   | 70.1 | 78.6  |  |  |  |  |  |
| Portugal   | 74.0 | 80.4  |  |  |  |  |  |
| Romania  | 68.7 | 75.5  |  |  |  |  |  |
| Slovakia   | 69.6 | 77.4  |  |  |  |  |  |
| Slovenia   | 73.1 | 80.1  |  |  |  |  |  |
| Spain  | 76.0 | 82.6  |  |  |  |  |  |
| Sweden   | 77.6 | 81.9  |  |  |  |  |  |
| Switzerland  | 77.9 | 83.0  |  |  |  |  |  |
| United Kingdom   | 75.7 | 79.5  |  |  |  |  |  |

### TABLE 19 Degis domographic indicators. European data 2005

Life expectancy at birth by country and sex. Units: years. Data are subject to continuous updating. Updated information is available on the web page of Eurostat. Spanish data provided by Eurostat does not always correspond to the latest update, and the most recent information is that published in the section with the corresponding details. Source: National Statistics Institute. Data provided by Eurostat, 2005.

| TABLE 19. Health conditions. Life expectancy, 2007* |       |       |       |  |  |  |  |  |  |
|---|-------|-------|-------|--|--|--|--|--|--|
| Health conditions                                   | Total | Men   | Women |  |  |  |  |  |  |
| Life expectancy at birth                            | 80.23 | 76.96 | 83.48 |  |  |  |  |  |  |
| Life expectancy at 65 years                         | 19.29 | 17.19 | 21.12 |  |  |  |  |  |  |
| Life expectancy with good health at birth           | 55.10 | 56.30 | 53.90 |  |  |  |  |  |  |
| Life expectancy with good health at 65 years        | 7.00  | 7.40  | 6.60  |  |  |  |  |  |  |
| Life expectancy disability free at birth            | 70.69 | 69.03 | 72.39 |  |  |  |  |  |  |
| Life expectancy disability free at 65 years         | 12.00 | 11.00 | 12.00 |  |  |  |  |  |  |

\*Provisional data. Key indicators of the National Health System, December 2007. Source: National Statistics Institute.

The calculation of health expectations<sup>8</sup>, and in particular the life expectancy free of disability (EVLD, *esperanza de vida libre de discapacidad*), were developed to tackle the issue of whether the increase in life expectancy was accompanied by an increase in the amount of time lived in poor health (in fig. 1 the pyramid of the disabled is superimposed over that of the general population<sup>9</sup>).

From a general point of view, figure 2 shows how the process of emergence of health problems is gradual. Chronic illnesses are the first to appear, and they lead to a posterior perception that one suffers from poor health in general. The limitations experienced in the performance of activities registers later, that is, the phenomenon of disability. The most serious disabilities, those which require assistance and affect domestic activities and caring for oneself, are the last to appear.

From figure 3 we can see that while women expect to live longer without disabilities than men, they also suffer from them for a longer time due to their greater life expectancy.

Women suffer from chronic illnesses before men and also perceive their health to be worse in general. The number of years expected to be lived

These probabilities by age are derived from the incidence rates of entry and emergence from each state, in the same way that in calculating life expectancy, the probabilities are obtained from the registered number of deaths. The probabilities are therefore calculated from the movement observed within a defined period and provide information on the number of transitions into and out of each state. More information is available at: www.ine.es/daco/daco42/discapa/meto.pdf

9 Figures 1-5 are derived from the Survey on Disabilities, Deficiencies and Health Conditions (1999). Available at: www.ine.es/daco/daco42/discapa/espe.pdf

<sup>8</sup> The calculation of expectations of health in the context of a specific state of health is based on the techniques used to obtain life expectancy. The population in each age group is divided in accordance with the specific probability for each age of falling into one of the possible states.







without chronic illness is 38 for women and 41 for men. Women live a little over 58 years in good health, while men live almost 60.

The difference in life expectancy free of disability (EVLD) (figs. 4 and 5) is constant between men and women until 45 years of age, but from this age it reduces to become almost imperceptible. The difference of 3.6 years which can be seen in EVLD at birth reduces to 1 year at 65 years of age, and to 0.12 years at 80.

The lengthening of life expectancy which has occurred in recent decades must be accompanied by good conditions of health so that these extra years can be lived with autonomy in terms of the individual, the family and society. To understand the real effect of aging on the health of the population, and given that there are sizeable differences between the sexes in terms of life expectancy, the analysis of EVLD should be completed by relating it with  $EV^{10}$ .

Throughout the years, the National Health Survey (ENSE, *Encuesta Nacional de Salud*), which was first carried out in 1987 (also in 1993, 1995,

<sup>10</sup> Survey on Disabilities, Deficiencies and Health Conditions (1999).

Report available at: www.ine.es/daco/daco42/discapa/espe.pdf





1997, 2001 and 2003), has been adapted in accordance with the changes in the measurements applied. In this sense, and without changing the historical base, the Ministry of Health and Consumers' Affairs has revised and improved some aspects of the survey for its 2006 version<sup>11</sup>.

11 The methodological change introduced in ENSE 2003 and the revision of the questionnaire used in ENSE 2006 can make comparison of the part of the information between these versions difficult, which should be taken into account for studies carried out using this source of information.

This edition has incorporated dimensions which have not previously been explored in relation with public health, as in the case of mental health, and the determinants of health in relation with the physical and social environment of the persons. Similarly, there has been a reformulation of certain questions to begin the process of adapting the survey to the requirements of the project for a European Health Survey.

The main objectives of ENSE are to measure the characteristics and distribution of perceived morbidity within the population of Spain and the characteristics and distribution of some health-related behaviours and habits. The survey also explores the use of health services by the population.

The survey was also carried out in 1993, 1995, 1997 and 2001. As a result of the Framework Agreement for collaboration between the Ministry of Health and Consumers' Affairs and the National Statistics Institute (INE, *Instituto Nacional de Estadística*), the National Health Survey has been carried out with this organism since the 2003 edition.

#### Perceived health conditions

According to the data collected in the 2006 edition of the ENSE, 70% of the population indicate that they perceive their health condition as good or very good. Men affirm a better state of health than women do. 75.1% of men affirm that their state of health is good or very good, compared with 65% of women (table 20).

| TABLE 20. Evaluation of perceived health conditions, 2003 and 2006 |                       |                |       |       |  |  |  |  |
|--|-----------------------|----------------|-------|-------|--|--|--|--|
|  | 20                    | 03             | 2006  |       |  |  |  |  |
|  | Men                   | Women          | Men   | Women |  |  |  |  |
| Very good  | 14.73                 | 12.07          | 23.25 | 19.57 |  |  |  |  |
| Good   | 60.95                 | 55.02          | 51.87 | 45.40 |  |  |  |  |
| Normal   | 18.50                 | 23.52          | 18.87 | 25.96 |  |  |  |  |
| Bad  | 4.45                  | 7.05           | 4.35  | 6.67  |  |  |  |  |
| Very bad   | 1.37                  | 2.35           | 1.67  | 2.40  |  |  |  |  |
| Source: National He  | alth Survey in Spain, | 2003 and 2006. |       |       |  |  |  |  |

The perception of a positive state of health reduces as age increases: only 41.6% of men and 29.1% of women (table 21) affirmed good health in the group of 75 years and over.

| 2003   |             |             |  |  |  |  |  |
|--|-------------|-------------|--|--|--|--|--|
|  | Men         | Women       |  |  |  |  |  |
|  | 75 years ol | ld and over |  |  |  |  |  |
| Very good  | 6.49        | 4.99        |  |  |  |  |  |
| Good   | 35.13       | 24.15       |  |  |  |  |  |
| Normal   | 42.00       | 44.92       |  |  |  |  |  |
| Bad  | 11.64       | 20.07       |  |  |  |  |  |
| Very bad   | 4.74        | 5.86        |  |  |  |  |  |
| Source: National Health Survey in Spain, 2003 and 2006 |             |             |  |  |  |  |  |

**TABLE 21.** Evaluation of perceived health conditions in over 75s (percentages),

 2003

A certain tendency can be observed in the perception of one's health by social class, as seen in figure 6. Both men and women belonging to a less privileged social class (IV-V) declared worse health than those of higher social class (I-II). Positive evaluations of health are perceived in 70.11 % of men and 60.02 % of women in classes IV-V, compared with 84.26 % of men and 75.94 % of women in classes I-II.

Seen over time, between the survey of 1987 and 2006, the percentage of the population which perceive their state of health as positive (good or very good) indicates a slight decrease. In 1987, 73.9 % of the population (77.9 % of men and 70 % of women) considered that their state of health was positive, compared with 71.2 % in 2006.

Spain is the first country within the European Union (EU) to analyse the quality of life of children in the framework of a national health survey, using a tool approved by the European Commission, the 10 questions included in the Kidscreen questionnaire.

This questionnaire explores *how people between 8 and 15 years of age have felt in the previous 7 days,* if they have felt fit and energetic, if they have felt sad, if they have felt lonely, if they have done what they wanted to do in their free time or if they feel they have been fairly treated by their parents, among other aspects.

The information is used to make a quality of life index with reference to standardized values obtained through a study carried out in Europe. These readings reflect that, on the scale of standards of quality of life for children in the EU (50), the average quality of children's lives in Spain was superior  $(61,8)^{12}$ .

12 National Health Survey. Press note of the Ministry of Health and Consumers' Affairs.



# The *mental health* of the population has also been explored for the first time, by means of the general health questionnaire for adults GHQ-12, which permits a filtering of the population, detecting the prevalence of probable cases of psychiatric morbidity or psychological anguish in the population, and the SDQ questionnaire of strengths and difficulties for children which permits the detection of probable cases of mental and behavioural disorders in children.

21.3 % of the population aged 16 or over (15.6 % of men and 26.8 % of women) present risks of poor mental health, and this risk increases with age.

In the age group of 75 and over, 25% of men and 39.5% of women present these risks. As regards the age group between 4 and 15, 22.1% of the total present risks of poor mental health (23.2% of boys and 21% of girls).

#### Social environment

In general, the population of Spain consider that they have good social support. Only 3.4% (3.2% of men and 3.6% of women) of the population aged 16 and over consider that their level of social support is low. In both cases, the perception of insufficient social support is greater at a more advanced age. This is affirmed in the age group of 75 and over by 4.3% of men and 5.5% of women.

The evaluation of dynamics within the family is explored with the Apgar<sup>13</sup> test, and shows that 93.4 % of persons aged 16 or over state that they have a good family environment. By sex, 93.7 % of men and 93.1 % of women affirm that they have a normal functioning family.

Even so, *women dedicate 25 hours more to the care of the children* (men dedicate on average 40 hours a week whereas women dedicate 65). 32.4 % of men and 58,5 % of women who live in households with persons over 74 years of age take responsibility for their care. A similar pattern of care applies when the household includes persons with disabilities (33.2 % of men and 64.3 % of women affirm that they are responsible for their care).

As regards the general care of the family, 35.9% of men and 81.5% of women aged 16 and over carry out domestic chores, such as washing up, cooking and ironing. Men and women who perform *household tasks* spend on average 15 hours a week on them, in the case of men, and 28 hours in the case of women.

The excess of work and the lack of free time, the performance of repetitive tasks with scant social recognition, together with situations of economic dependency take their toll on women's health, especially those in socially underprivileged classes who have only worked in the domestic environment. This group is most vulnerable to illness<sup>14</sup>.

13 The Apgar family questionnaire (Family APGAR) was designed in 1978 by Dr. Gabriel Smilkstein (1978) to explore the functioning of families. The Apgar acronym refers to the five components of the function of the family: adaptability, partnership, growth, affection and resolve.

The Apgar neonatal test is different, conceived and designed by Dr. Virginia Apgar as a system to evaluate post natal well-being immediately after birth, considering 5 parameters: cardiac frequency, breathing, muscle tone, irritability reflexes and colouring.

14 Health and Gender Report 2006. "Life Span's Central Ages". Available at: www.msc.es/ciudadanos/proteccionSalud/Women/docs/informeSaludGenero2006.pdf

# Mortality by cause

The most common pathologies, which represent the greatest burden on the health system, the family and society, have received special attention in all countries and on the part of specialised international agencies.

The National Health System has created and set in motion a number of strategies between 2006 and 2007 for handling cancer, coronary heart disease, diabetes, mental health, palliative care, stroke (ictus) and chronic obstructive pulmonary disease (EPOC).

Cardiovascular disease continued to represent the principal cause of death in 2006, accounting for 32.51 % of all deaths. By sex, these illnesses were also the principal cause of death among women, while among men the principal cause of death were tumours (table 22).

| TABLE 22. Deaths by cause of death and sex, 2006 and 2004   |                |              |            |         |  |  |  |
|---|----------------|--------------|------------|---------|--|--|--|
|   | 20             | 06           | 20         | 04      |  |  |  |
|   | Men            | Women        | Men        | Women   |  |  |  |
| All causes  | 194,154        | 177,324      | 194,928    | 177,006 |  |  |  |
| Illnesses of the circulatory system   | 55,433         | 65,327       | 56,359     | 67,508  |  |  |  |
| Tumours   | 63,147         | 38,536       | 62,937     | 37,548  |  |  |  |
| Illnesses of respiratory system   | 23,000         | 16,510       | 23,182     | 15,967  |  |  |  |
| External causes   | 11,204         | 4,935        | 11,837     | 5,207   |  |  |  |
| Illnesses of the digestive system   | 10,445         | 8,906        | 10,444     | 8,913   |  |  |  |
| Illnesses of the nervous system and the sense organs  | 6,214          | 9,507        | 5,630      | 8,493   |  |  |  |
| Abnormal laboratory and clinical symptoms, signs and<br>discoveries, not classified elsewhere                       | 4,743          | 5,803        | 4,586      | 5,919   |  |  |  |
| Endocrinal, nutritional or metabolic disorders  | 4,496          | 7,027        | 4,668      | 7,250   |  |  |  |
| Illnesses of the genitourinary system   | 4,414          | 4,991        | 4,054      | 4,480   |  |  |  |
| Mental or behavioural disorders   | 4,173          | 7,934        | 4,066      | 7,812   |  |  |  |
| Infectious diseases or parasites  | 3,951          | 3,250        | 4,083      | 3,135   |  |  |  |
| Illnesses of the osteomuscular system and conjunctive tissue  | 1,034          | 2,329        | 1,072      | 2,474   |  |  |  |
| Congenital malformations, deformities and chromosome abnormalities  | 515            | 419          | 558        | 444     |  |  |  |
| Disease of the skin or subcutaneous tissue  | 357            | 726          | 330        | 664     |  |  |  |
| Illnesses of the blood or haematopoietic organs and certain disorders affecting the mechanisms of the immune system | 503            | 724          | 548        | 743     |  |  |  |
| Illnesses originating in the perinatal period   | 525            | 386          | 574        | 428     |  |  |  |
| Pregnancy, birth and post natal period  | 0              | 14           | 0          | 21      |  |  |  |
| Source: Deaths by cause of death, 2006. National Statistic  | s Institute. A | vailable at: | www.ine.es | ;       |  |  |  |

Among the illnesses of the circulatory system (table 23), cerebral vascular disease was the main cause of death in general and the principal cause among women (19,047 deaths). Among the cardiovascular diseases, ischaemic heart disease (acute myocardial infarction, angina pectoris, etc.) was again the principal cause of death among men (with 22,028 deaths).

| TABLE 23. Deaths by illnesses of the circulatory system, 2006 and 2004 |         |        |        |         |  |  |  |  |
|--|---------|--------|--------|---------|--|--|--|--|
|  | 20      | 06     | 20     | 04      |  |  |  |  |
|  | Total   | Men    | Women  | Total   |  |  |  |  |
| Total  | 120,760 | 55,433 | 65,327 | 123,867 |  |  |  |  |
| Cerebral vascular disease  | 32,900  | 13,853 | 19,047 | 34,250  |  |  |  |  |
| Acute myocardial infarction  | 22,028  | 12,852 | 9,176  | 23,496  |  |  |  |  |
| Heart failure  | 18,895  | 6,566  | 12,329 | 19,123  |  |  |  |  |
| Other heart diseases   | 17,142  | 7,637  | 9,505  | 16,728  |  |  |  |  |
| Other ischaemic heart diseases   | 15,064  | 8,355  | 6,709  | 15,344  |  |  |  |  |
| High blood pressure disorders  | 6,676   | 2,120  | 4,556  | 6,206   |  |  |  |  |
| Other illnesses of the blood vessels                                   | 3,906   | 2,640  | 1,266  | 4,024   |  |  |  |  |
| Arteriosclerosis   | 2,798   | 1,038  | 1,760  | 3,130   |  |  |  |  |
| Chronic cardiac rheumatic diseases                                     | 1,351   | 372    | 979    | 1,566   |  |  |  |  |

Source: Deaths by cause of death, 2006. National Statistics Institute. Available at: www.ine.es

Tumours continued to occupy second place, being responsible for 27.37 % of the total number of deaths (table 24). Cancer of the trachea, bronchus and lung continued to be the most important (19,532 deaths in 2006), and to affect men more than women. Breast cancer remains the most significant among women, with 5,956 deaths. Although the number of deaths diminished in 2005 (0.1 % compared with the previous year), there was a slight increase in deaths for this cause in 2006 (0.12 % compared with 2005). Cancer of the colon continued to be one of the most significant causes of death among men and women (5,644 and 4,285 deaths respectively).

The third group of causes of death in terms of the number of deaths was that of illnesses of the respiratory system (table 25). The number of deaths due to illnesses of the respiratory system as a percentage of the total number of deaths rose from 10.5 % in 2004 to 10.64 % in 2006.

Among the other causes of death (table 26), the continuing rise in the number of deaths due to Alzheimer's disease (8,013 deaths) and high blood pressure (6,206 deaths) should be noted.

Among those causes of death which displayed the greatest decrease in 2006 were traffic accidents (fig. 7 and table 27), which were responsible for 4,144 deaths, and AIDS, with 1,313 deaths.

| TABLE 24. Death by tumours, 2006 and 2004  |          |        |        |         |  |  |  |  |
|--|----------|--------|--------|---------|--|--|--|--|
|  | 20       | 06     | 20     | 04      |  |  |  |  |
|  | Total    | Men    | Women  | Total   |  |  |  |  |
| Total  | 101,683  | 63,147 | 38,536 | 100,485 |  |  |  |  |
| Malignant tumour of the trachea, bronchus and lung   | 19,532   | 16,894 | 2,638  | 19,092  |  |  |  |  |
| Malignant tumour of the colon  | 9,929    | 5,644  | 4,285  | 9,803   |  |  |  |  |
| Malignant tumour of the breast   | 6,020    | 64     | 5,956  | 5,891   |  |  |  |  |
| Malignant tumour of the stomach  | 5,716    | 3,542  | 2,174  | 5,811   |  |  |  |  |
| Malignant tumour of the prostate   | 5,412    | 5,412  | 0      | 5,694   |  |  |  |  |
| Malignant tumour of the bladder  | 4,526    | 3,742  | 784    | 4,496   |  |  |  |  |
| Malignant tumour of the liver and the intrahepatic bile ducts  | 4,440    | 2,934  | 1,506  | 4,435   |  |  |  |  |
| Malignant tumour of the lymph tissue, the<br>haematopoietic organs and similar tissue, except<br>leukaemia | 4,124    | 2,130  | 1,994  | 4,271   |  |  |  |  |
| Malignant tumour of the brain  | 2,509    | 1,389  | 1,120  | 2,386   |  |  |  |  |
| Other malignant tumours of the digestive system  | 2,409    | 1,059  | 1,350  | 2,396   |  |  |  |  |
| Malignant tumour of the lip, mouth cavity and pharynx  | 2,147    | 1,733  | 414    | 2,228   |  |  |  |  |
| Malignant tumour of the oesophagus   | 1,760    | 1,497  | 263    | 1,832   |  |  |  |  |
| Malignant tumour of the ovaries  | 1,760    | 0      | 1,760  | 1,713   |  |  |  |  |
| Malignant tumour of the kidneys, except the renal pelvis   | 1,757    | 1,106  | 651    | 1,626   |  |  |  |  |
| Malignant tumour of the throat   | 1,541    | 1,482  | 59     | 1,625   |  |  |  |  |
| Other malignant tumours of the skin and soft tissue  | 1,075    | 617    | 458    | 1,003   |  |  |  |  |
| Other neurological or endocrine malignant tumours  | 617      | 271    | 346    | 566     |  |  |  |  |
| Malignant tumour of the cervix   | 604      | 0      | 604    | 539     |  |  |  |  |
| Malignant tumour of other female genital organs  | 451      | 0      | 451    | 472     |  |  |  |  |
| Benign tumours   | 398      | 161    | 237    | 361     |  |  |  |  |
| Malignant tumour of the bones and cartilage joints   | 304      | 177    | 127    | 288     |  |  |  |  |
| Other malignant tumours of the urinary tract   | 219      | 159    | 60     | 186     |  |  |  |  |
| Courses Deaths by agues of death 2006 National Ctatistic   | 1 10 1 1 |        |        |         |  |  |  |  |

# TABLE 24. Death by tumours, 2006 and 2004

Source: Deaths by cause of death, 2006. National Statistics Institute. Available at: www.ine.es

| TABLE 23. Deaths by innesses of the respiratory system, 2000 and 2004  |        |        |        |        |  |  |  |  |
|--|--------|--------|--------|--------|--|--|--|--|
|  | 20     | 06     | 2004   |        |  |  |  |  |
|  | Total  | Men    | Women  | Total  |  |  |  |  |
| Total  | 39,510 | 23,000 | 16,510 | 39,149 |  |  |  |  |
| Other illnesses of the<br>respiratory system                           | 14,232 | 6,689  | 7,543  | 13,412 |  |  |  |  |
| Chronic illnesses of the lower<br>respiratory tract (except<br>asthma) | 13,606 | 10,624 | 2,982  | 14,650 |  |  |  |  |
| Pneumonia  | 7,815  | 4,083  | 3,732  | 7,356  |  |  |  |  |
| Respiratory failure  | 3,080  | 1,442  | 1,638  | 2,777  |  |  |  |  |
| Asthma   | 729    | 148    | 581    | 867    |  |  |  |  |
| Flu  | 48     | 14     | 34     | 87     |  |  |  |  |

#### TABLE 25. Deaths by illnesses of the respiratory system, 2006 and 2004

Source: Deaths by cause of death, 2006. National Statistics Institute. Available at: www.ine.es

#### TABLE 26. Deaths by cause of death, 2004-2006

|  | 2006  |       |       | 2005  |       |       | 2004  |       |       |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|  | Total | Men   | Women | Total | Men   | Women | Total | Men   | Women |
| Alzheimer's<br>disease                     | 9,172 | 2,804 | 6,368 | 8,976 | 2,697 | 6,279 | 8,013 | 2,519 | 5,494 |
| High blood<br>pressure disorders           | 6,676 | 2,120 | 4,556 | 6,661 | 2,121 | 4,540 | 6,206 | 1,965 | 4,241 |
| Illnesses of the<br>kidneys and<br>urethra | 6,545 | 3,227 | 3,318 | 6,831 | 3,367 | 3,464 | 6,168 | 3,022 | 3,146 |

Source: Deaths by cause of death, 2006. National Statistics Institute. Available at: www.ine.es



| TABLE 27. Deaths in trainc accidents involving motor venicles by age, 2004-2000 |                          |                                   |                                   |                          |                          |                                   |                                   |                          |                          |                                   |                                   |                          |
|---|--------------------------|-----------------------------------|-----------------------------------|--------------------------|--------------------------|-----------------------------------|-----------------------------------|--------------------------|--------------------------|-----------------------------------|-----------------------------------|--------------------------|
|   |                          | 20                                | 04                                |                          |                          | 2005                              |                                   |                          |                          | 2006                              |                                   |                          |
|   | Under 15 years<br>of age | Between 15 and<br>34 years of age | Between 35 and<br>64 years of age | 65 years old<br>and over | Under 15 years<br>of age | Between 15 and<br>34 years of age | Between 35 and<br>64 years of age | 65 years old<br>and over | Under 15 years<br>of age | Between 15 and<br>34 years of age | Between 35 and<br>64 years of age | 65 years old<br>and over |
| Total   | 130                      | 1,974                             | 1,713                             | 1,050                    | 112                      | 1,794                             | 1,619                             | 948                      | 99                       | 1,645                             | 1,550                             | 850                      |
| Men   | 75                       | 1,598                             | 1,365                             | 692                      | 73                       | 1,491                             | 1,315                             | 631                      | 70                       | 1,364                             | 1,249                             | 539                      |
| Women   | 55                       | 376                               | 348                               | 358                      | 39                       | 303                               | 304                               | 317                      | 29                       | 281                               | 301                               | 311                      |
| Deaths by acc   | cident. N                | Vational                          | Statisti                          | cs Instit                | ute.                     |                                   |                                   |                          |                          |                                   |                                   |                          |

TABLE 27. Deaths in traffic accidents involving motor vehicles by age 2004-2006

During the period under analysis, the number of suicides in 2005 declined by 3.6% compared with 2004. There were 3,399 deaths by suicide (2,570 men and 829 women), and the figure fell again by 4.7 % in 2006 with respect to 2005. These figures reveal a level of male mortality three times higher than among women in suicides and self-inflicted injuries (table 28).

| TABLE 28. Deaths by cause of death, 2004-2006 |            |             |       |       |       |       |       |       |       |
|---|------------|-------------|-------|-------|-------|-------|-------|-------|-------|
|   | 2004       |             |       |       | 2005  |       | 2006  |       |       |
|   | Total      | Men         | Women | Total | Men   | Women | Total | Men   | Women |
| Traffic accidents<br>involving motor vehicles | 4,867      | 3,730       | 1,137 | 4,473 | 3,510 | 963   | 4,144 | 3,222 | 922   |
| AIDS  | 1,551      | 1,271       | 280   | 1,450 | 1,168 | 282   | 1,313 | 1,035 | 278   |
| Suicide and self-inflicted injuries           | 3,507      | 2,651       | 856   | 3,399 | 2,570 | 829   | 3,246 | 2,512 | 734   |
| Aggressions (homicides)                       | 585        | 374         | 211   | 389   | 292   | 97    | 376   | 250   | 126   |
| Deaths by accident Nation                     | al Statist | ics Institu | ite   |       |       |       |       |       |       |

As regards the number of deaths due to aggression (homicides), 2006 saw a decline of 3.5% in the total number compared with 2005. There was, however, an increase of 23% in deaths due to aggression and homicide among women.

# Lifestyles and preventive practices

As regards health-related lifestyle habits, 50 % of the population of Spain affirm that they have never smoked, 20.5 % declare themselves to be ex-smokers and 26.4 % of the population aged 16 and over affirm that they smoke every day. By sex, 31.6 % of men smoke, while 21.5 % of women do so (table 29).

| TABLE 29. Daily smokers by age group and sex, 2007        |       |       |  |  |  |  |  |  |
|---|-------|-------|--|--|--|--|--|--|
| Men Women   |       |       |  |  |  |  |  |  |
| 65 years old and over                                     | 14.18 | 2.67  |  |  |  |  |  |  |
| Between 45 and 64 years of age                            | 34.27 | 20.95 |  |  |  |  |  |  |
| Between 25 and 44 years of age                            | 38.83 | 30.44 |  |  |  |  |  |  |
| Between 16 and 24 years of age         24.96         28.9 |       |       |  |  |  |  |  |  |
| Courses Ministry of Leolth and Consumers                  |       |       |  |  |  |  |  |  |

Source: Ministry of Health and Consumers' Affairs-National Statistics Institute. Spanish National Health Survey, 2006.

According to the data from ENSE, between the years of 1993 and 2006, there has been a steady descent in the percentage of men who smoke daily. In the case of women, it appears that the trend for the percentage of women smokers to rise in relation with the total number of smokers has been inverted since 2003 (20.8 % in 1993, 24.7 % in 2001, and 21.5 % in 2006).

As regards *alcohol consumption*, 26 % of the population of 16 and over affirm that they never drink, 5.8 % declare themselves to be ex-drinkers, while 19.8 % drink occasionally and 48.4 % consume alcoholic beverages regularly. 7 % of men and 3 % of women consume alcohol in quantities considered to be dangerous.

60.6 % of the population of 16 years and older practice physical exercise in their free time. Among children this percentage reaches 80.3 %. However, 17.6 % of boys and 21.9 % of girls are sedentary. Almost 3 out of every 10 children are *overweight or obese* (table 30).

Of every 10 adults aged 18 or over, 4 are overweight and 1.5 are obese. While in 1987 over 7 % of the population aged 18 or over presented a body mass index equal to or greater than  $30 \text{ kg/m}^2$ , this population stood at over 15 % in 2006.

| TABLE 30. Body mass index in the adult and infant population, 2006 |       |       |       |  |  |  |  |
|--|-------|-------|-------|--|--|--|--|
| Adult population   | Total | Women | Men   |  |  |  |  |
| Insufficient weight (<18,5 kg/m <sup>2</sup> )                     | 1.79  | 3.07  | 0.54  |  |  |  |  |
| Normal weight (18,5-24,9 kg/m <sup>2</sup> )                       | 45.71 | 52.33 | 39.27 |  |  |  |  |
| Overweight (25,0-29,9 kg/m <sup>2</sup> )                          | 37.13 | 29.41 | 44.65 |  |  |  |  |
| Obesity (>=30,0 kg/m²)   | 15.37 | 15.19 | 15.55 |  |  |  |  |
| Infant population  | Total | Girls | Boys  |  |  |  |  |
| Normal weight or insufficient weight                               | 72.39 | 74.17 | 70.68 |  |  |  |  |
| Overweight   | 18.67 | 17.09 | 20.19 |  |  |  |  |
| Obesity  | 8.94  | 8.74  | 9.13  |  |  |  |  |

#### TABLE 30. Body mass index in the adult and infant population, 2006

Body mass index = [weight (kg)/stature (m) squared].

The cut-off points used for the body mass index for overweight and obesity among children are those published in Cole TJ, Bellizzi MC, Flegal KM, Dietz WH. Establishing a standard definition for child overweight and obesity worldwide: international survey. BMJ 2000; 320: 1-6.

Source: Ministry of Health and Consumers' Affairs-National Statistics Institute. Spanish National Health Survey, 2006.

Quetelet index created by the Institute of Health Information.

The efforts made by public authorities and the agents involved in the fight against *drug addiction* are beginning to produce results. This can be seen in the National Survey on Drug Use among Students of Secondary Education (Estudes<sup>15</sup>) 2006-2007. For the first time since 1994, drug consumption has declined among students of 14 to 18 years of age, especially tobacco, *cannabis* and cocaine, and there is greater awareness of the risks, and students consider that it is more difficult to obtain drugs now than 2 years ago.

The data makes it clear that alcohol and tobacco continue to be the drugs most widely consumed among students between 14 and 18 years of age, followed by *cannabis:* 79.6 % have consumed alcoholic beverages on at least one occasion, 46.1 %, tobacco and 36.2 %, *cannabis.* The proportion of habitual or current consumers (those who have consumed in the last 30 days) rises to 58 % in the case of alcohol, 27.8 % in the case of tobacco and 20.1 % in the case of *cannabis.* 

15 The Survey of Drugs at School was started in 1994 as a biannual initiative. It forms part of the studies which the Government Delegation for the National Plan on Drugs carry out systematically. The information provided by this type of study permits the creation of policies for the prevention and reduction of consumption of different types of drugs.

The objective is to analyse the tendencies in consumption among young people aged 14 to 18. In this edition, the fieldwork was carried out between November 2006 and February 2007. The sample includes 26,454 secondary students from 577 public and private educational centres across Spain.

The consumption of cocaine, ecstasy, hallucinogenics, amphetamines, volatile inhalants or heroin is, in general, far lower than the data registered for alcohol, tobacco and *cannabis* (table 31).

| TABLE 31. Prevalence of drug consumption, 2004-2006        |                                     |      |      |  |  |  |
|--|-------------------------------------|------|------|--|--|--|
|  |                                     | 2004 | 2006 |  |  |  |
| Prevalence of<br>consumption<br>on one occasion            | Alcohol                             | 82.0 | 79.6 |  |  |  |
|  | Тоbассо                             | 60.4 | 46.1 |  |  |  |
|  | Cannabis                            | 42.7 | 36.2 |  |  |  |
|  | Cocaine                             | 9.0  | 5.7  |  |  |  |
|  | Hypnosedatives without prescription | 7.0  | 7.6  |  |  |  |
|  | Ecstasy                             | 5.0  | 3.3  |  |  |  |
|  | Amphetamines                        | 4.8  | 3.4  |  |  |  |
|  | Hallucinogenics                     | 4.7  | 4.1  |  |  |  |
|  | Volatile inhalants                  | 4.1  | 3.0  |  |  |  |
|  | Heroin                              | 0.7  | 1.0  |  |  |  |
|  | Alcohol                             | 81.0 | 74.9 |  |  |  |
|  | Cannabis                            | 36.6 | 29.8 |  |  |  |
|  | Cocaine                             | 7.2  | 4.1  |  |  |  |
| Prevalence of  | Hypnosedatives without prescription | 4.7  | 4.8  |  |  |  |
| consumption<br>within the last<br>12 months                | Ecstasy                             | 2.6  | 2.4  |  |  |  |
|  | Amphetamines                        | 3.3  | 2.6  |  |  |  |
|  | Hallucinogenics                     | 3.1  | 2.8  |  |  |  |
|  | Volatile inhalants                  | 2.2  | 1.8  |  |  |  |
|  | Heroin                              | 0.4  | 0.8  |  |  |  |
| Prevalence of<br>consumption<br>within the last<br>30 days | Alcohol                             | 65.6 | 58.0 |  |  |  |
|  | Тоbассо                             | 37.4 | 27.8 |  |  |  |
|  | Cannabis                            | 25.1 | 20.1 |  |  |  |
|  | Cocaine                             | 3.8  | 2.3  |  |  |  |
|  | Hypnosedatives without prescription | 2.4  | 2.4  |  |  |  |
|  | Ecstasy                             | 1.5  | 1.4  |  |  |  |
|  | Amphetamines                        | 1.8  | 1.4  |  |  |  |
|  | Hallucinogenics                     | 1.5  | 1.3  |  |  |  |
|  | Volatile inhalants                  | 1.1  | 1.1  |  |  |  |
|  | Heroin                              | 0.4  | 0.5  |  |  |  |

Source: Director General of the National Plan on Drugs (DGPNSD, *Dirección General del Plan Nacional sobre Drogas*). National Survey on Drug Use in Secondary Education (Estudes), 1994-2006.

The decline in consumption of most substances is evident when compared with the figures from 2004. The prevalence of alcohol consumption has dropped by 6.1 points (74.9 % in 2006 compared with 81 % in 2004), that of *cannabis* by 6.8 (29.8 % in 2006 compared with 36.6 % in 2004), and cocaine by 3.1 points (4.1 % in 2006 compared with 7.2 % in 2004).

In the cases of *cannabis* and cocaine, the rising trend observed in all forms of consumption (at least one occasion, in the last 12 months or in the last 30 days) which seemed unstoppable has finally been halted. The figures for alcohol and tobacco are lower than those of 1994, both in terms of experimental and habitual consumption.

The age at which consumption begins remains low (around 14 years of age) and no significant changes are observed compared with the data from 2004. It has also been confirmed that the proportion of consumers increases with age and reaches its highest level among 18 year old students.

As regards the differences between the sexes, boys consume more illegal drugs than girls, who are more likely to consume tobacco and tranquillisers. The conduct of both sexes is similar with regard to alcohol. In the case of illegal drugs, the distinctions between the sexes become greater as consumption rises or becomes more intensive, which is to say that the relative difference is greater for consumption 'in the last 30 days' than 'on at least one occasion' (table 32 and fig. 8).



| TABLE 32. Drug consumption by sex, 2004-2006 |  |      |       |      |       |  |  |
|--|--|------|-------|------|-------|--|--|
|  |  | 2004 |       | 2006 |       |  |  |
|  |  | Men  | Women | Men  | Women |  |  |
| Consumption on one occasion                  | Alcohol                                | 81.5 | 82.5  | 78.4 | 80.7  |  |  |
|  | Tobacco                                | 56.6 | 64.1  | 42.0 | 49.8  |  |  |
|  | Cannabis                               | 45.3 | 40.2  | 38.0 | 34.6  |  |  |
|  | Cocaine                                | 11.3 | 6.8   | 6.8  | 4.7   |  |  |
|  | Hypnosedatives without<br>prescription | 6.2  | 3.3   | 5.7  | 2.7   |  |  |
| one occasion                                 | Ecstasy                                | 6.0  | 3.9   | 4.2  | 2.5   |  |  |
|  | Amphetamines                           | 6.0  | 3.6   | 4.2  | 2.7   |  |  |
|  | Hallucinogenics                        | 5.8  | 8.1   | 5.8  | 9.2   |  |  |
|  | Volatile inhalants                     | 5.2  | 2.9   | 4.1  | 2.0   |  |  |
|  | Heroin                                 | 1.1  | 0.3   | 1.5  | 0.5   |  |  |
|  | Alcohol                                | 80.6 | 81.5  | 73.4 | 76.3  |  |  |
|  | Cannabis                               | 39.4 | 33.7  | 31.6 | 28.2  |  |  |
|  | Cocaine                                | 9.4  | 5.1   | 5.2  | 3.1   |  |  |
| Consumed within                              | Hypnosedatives without<br>prescription | 4.4  | 1.8   | 4.1  | 1.6   |  |  |
| the last 12 months                           | Ecstasy                                | 3.3  | 1.9   | 3.3  | 1.6   |  |  |
|  | Amphetamines                           | 4.3  | 2.3   | 3.3  | 2.0   |  |  |
|  | Hallucinogenics                        | 4.0  | 5.5   | 3.7  | 5.8   |  |  |
|  | Volatile inhalants                     | 0.8  | 0.1   | 1.2  | 0.3   |  |  |
|  | Heroin                                 | 3.0  | 1.4   | 2.6  | 1.1   |  |  |
|  | Alcohol                                | 32.9 | 41.9  | 24.8 | 30.6  |  |  |
|  | Tobacco                                | 65.5 | 65.7  | 58.1 | 58.0  |  |  |
|  | Cannabis                               | 28.3 | 22.0  | 22.3 | 18.0  |  |  |
|  | Cocaine                                | 5.1  | 2.6   | 3.1  | 1.6   |  |  |
| Consumed within the last 30 days             | Hypnosedatives without<br>prescription | 2.3  | 0.7   | 2.0  | 0.7   |  |  |
|  | Ecstasy                                | 1.9  | 1.0   | 2.1  | 0.7   |  |  |
|  | Amphetamines                           | 2.7  | 1.0   | 2.0  | 1.0   |  |  |
|  | Hallucinogenics                        | 1.8  | 3.0   | 2.0  | 2.8   |  |  |
|  | Volatile inhalants                     | 0.7  | 0.1   | 0.9  | 0.2   |  |  |
|  | Heroin                                 | 1.6  | 0.7   | 1.7  | 0.6   |  |  |

Source: Director General of the National Plan on Drugs. National Survey on Drug Use in Secondary Education (Estudes), 1994-2006.

Use of health services<sup>16</sup>

The primary causes of hospitalization among women were associated with pregnancy, birth and post-natal care, at 24.6 % of the total. The increasing participation of this group in the total number of hospital admissions corresponds with the evolution of the number of births in Spain, which in 2005 and 2006 have reached their highest levels since 1990. Other causes of hospitalization correspond to the group of illnesses of the circulatory system (10.4 %), illnesses of the digestive apparatus (9.6 %), tumours (7.7 %) and illnesses of the respiratory system (7.5 %).

Among men, the illnesses which led to the greatest number of hospitalizations were those of the circulatory system, with 15.3% of the total. The illnesses of the digestive apparatus were the next most important with 14.8%, followed by illnesses of the respiratory system (13.2%), injuries and intoxications (10%) and tumours (9.6%).

If the admissions for issues related with pregnancy, birth and postnatal care are excluded, the largest percentage of use of health services corresponds to men (53.5%).

The average age of hospital admissions was 51 years of age (53 for men and 49 for women).

Persons aged 85 and over represented 6.3 % of hospital admissions in 2006. It should be noted that percentage of admissions corresponding to higher age groups (65-74, 75-84, 85 and over) has increased in relation with the total number as a consequence of the proportional increase of their numbers in the population as a whole. These three age groups represented more than 37 % of the total number of hospital admissions in 2006, compared with 32.3 % in 1996.

16 The Survey of Hospital Morbidity brings together a sample of information from 85% of both public and private Spanish hospitals in 2006, which means that the volume of patients received directly from hospitals includes 91% of the total of overnight hospital admissions produced in this country. The health information is centred on the principal diagnosis responsible for admission according to the criteria of the clinical or facultative services which treated the patient, and which figures in the hospital admission form received by the patient.