

26 June 2020

National Health Survey 2019

Less smoking, but increased risky alcohol consumption

- More than half of the population aged 18 or more (4.6 million) continue to have overweight (36.6%) or obesity (16.9%) in 2019 with a slight increase compared to 2014 (36.4% overweight and 16.4% obesity).
 - The majority of the population aged 15 or over (65.6%) did not practice any sports activity on a regular basis, with only 13.6% of those reporting practicing physical exercise one or two days a week, less 1.8 pp than in 2014. However, the number of persons who walk every day for transportation increased (from 2.5 million in 2014 to 3.0 million in 2019).
 - 66.8% of the population with 15 years or more reported eating fruit every day and 41.7% vegetables or salads.
 - Only 0.5% reported not eating meat, fish, or any derived products; and 2.8% did not consume meat or meat products.
 - In 2019, 17.0% of the population aged 15 and over was a currently smoker, 3.0 pp. less than in 2014; 1.3 million people (14.2%) smoked daily and 248 thousand (2.8%) smoked occasionally. The tobacco consumption on a regular basis registered a ratio of 2.0 men for each woman.
 - About 6.2 million people reported having consumed an alcoholic drink in the 12 months prior to the interview: 1.8 million did it on a daily basis (14 p.p. less than in 2014). On the other hand, 2.6 million (more than 40% of the reference population) reported having consumed 6 or more alcoholic beverages on a single occasion or event (risky single-occasion drinking) at least once within the 12 months prior to the interview, corresponding an increase when compared to 2014 (33.2%).
 - 8.0% of the resident population aged 15 and over (716 thousand people) had depressive symptoms and 1.9% (about 170 thousand people) had no one to turn to in case of a serious personal problem.
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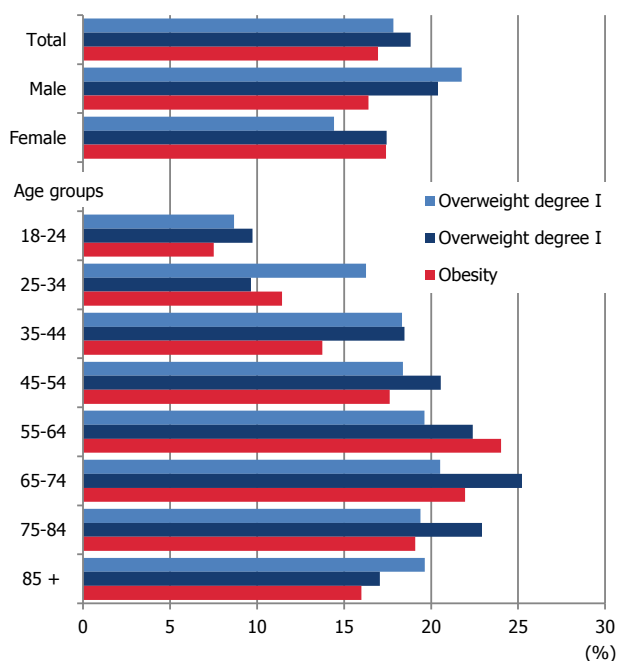
Statistics Portugal publishes the main results of the National Health Survey 2019 (INS 2019), held in the whole country between September 2019 and January 2020.

The INS 2019 is a survey harmonised and regulated at European Union level (Commission Regulation (EU) No 141/2013), enabling the international comparison of the results. National questions were also included, with a view to obtaining data on relevant issues for characterising the population health status (namely reproductive health, food consumption, satisfaction with life, and long-term disability). This Press release describes the main results of health determinants and compares them with those of the previous survey (2014).

More than half of the population aged 18 or over was overweight or obese

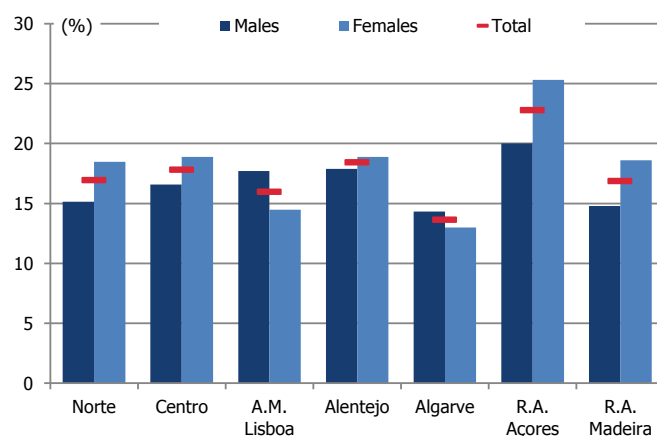
In 2019, more than half of the population aged 18 or over (53.6%) was overweight¹ or obese, that is, those persons had a body mass index (BMI) of 25 or more kg/m². Obesity (30 or more kg/m²) affected 1.5 million people aged 18 or over (16.9%), with women being more affected than men (17.4% and 16.4%, respectively). Also according to the survey results, obesity mainly affected the population from 55 to 74 years old, with values above 20%.

Figure 1. Proportion of population aged 18 or over with overweight or obesity by sex and age group, Portugal, 2019



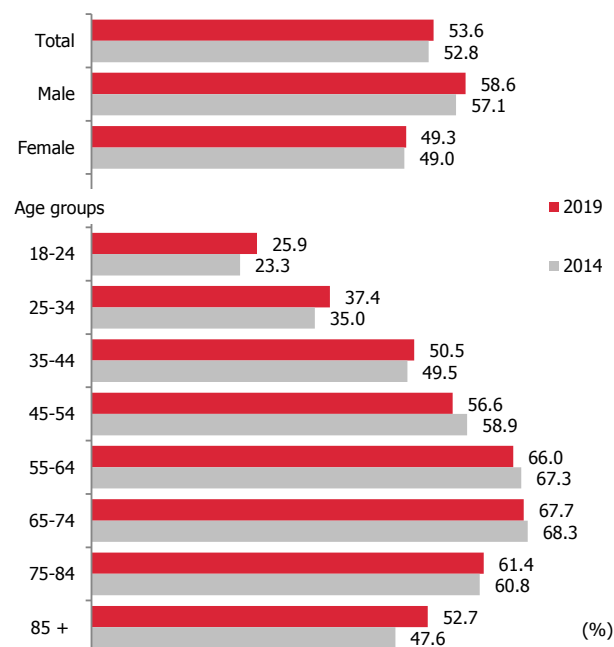
The resident population of Região Autónoma dos Açores recorded the highest proportion of people with a body mass index classified as obesity, with a particular emphasis on the female population (25.3%). The Algarve registered the lowest one (13.6%).

Figure 2. Proportion of population aged 18 or over with obesity by sex, NUTS II, 2019



The proportion of overweight or obese adults increased 0.8 pp. when compared to 2014, mainly for men (plus 1.5 pp.) and the youngest groups (18 to 34 years old) and the elders (85 or more years).

Figure 3. Proportion of population aged 18 or over with overweight and obesity by sex and age group, Portugal, 2014 and 2019

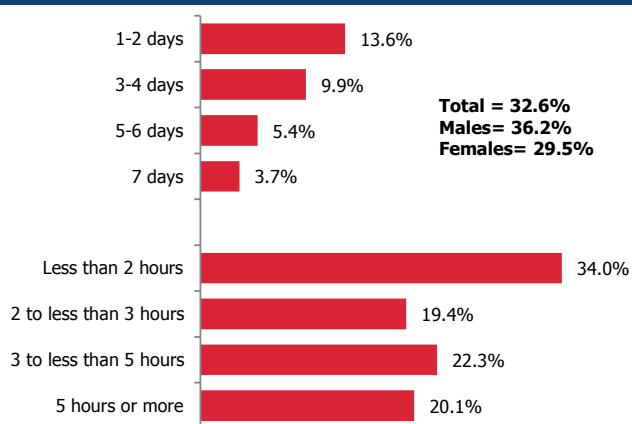


¹ Overweight degree I (BMI between 25 Kg/m² and less than 27 kg/m²) and degree II (IMC between 27 Kg/m² and less than 30 kg/m²).

The number of people who walk every day has increased

The majority of the population aged 15 and over did not practice any physical activity on a regular basis (65.6%) in 2019, with 13.6% of people reporting practicing physical exercise one or two days a week (15.4% in 2014). For 34.0% of the population, weekly exercise was performed by less than two hours. Physical exercise was a daily practice for 3.7% of the population (4.8% in 2014).

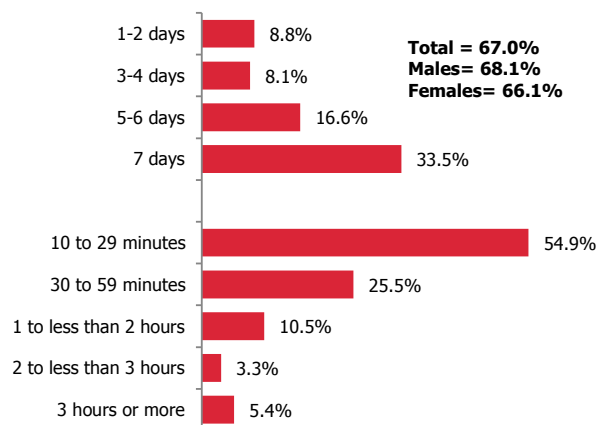
Figure 4. Proportion of population aged 15 or over who practices any physical activity by number of days in a week and average time per week, Portugal, 2019



However, more than 1/3 of the population aged 15 and over (3.0 million) walked for transportation daily; most of them spending less than 30 minutes on average. In relation to 2014, there were over 500 thousand people who walked to get to and from places daily.

The proportion of men who walked for transportation (68.1%) was higher than that of women (66.1%) and on longer trips.

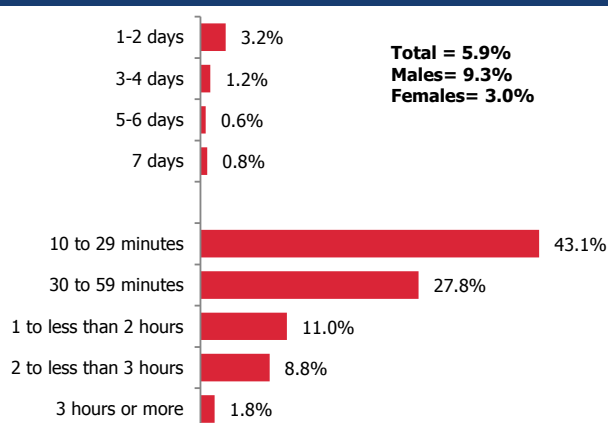
Figure 5. Proportion of population aged 15 or over who walk for transportation by number of days in a week and average time per day, Portugal, 2019



In 2019, about 5.9% of residents aged 15 and over cycled to get to and from places; 0.8% did it every day. Unlike walking, the number of people who used bicycle for transportation has not increased compared to 2014.

The proportion of men who reported cycling (9.3%) is significantly higher than that for women (3.0%).

Figura 6. Proportion of population aged 15 or over who cycling to get to and from places by number of days in a week and average time per day, Portugal, 2019



The survey results also show an increase of the population performing their daily tasks mostly sitting or standing, in activities involving light physical effort, for

more than half of the population (from 47.0 % in 2014 to 50.7% in 2019).

About 1/4 of the population reported spending more than eight hours a day sitting, including time spent at work, getting to and from places and at home.

Less than half the population consumed vegetables or salads daily

About 5.9 million people aged 15 and over (66.4%) consumed fruit daily (excluding fruit juices); on average, 2.3 portions. Daily fruit consumption was less frequent among people aged 15 to 24 and more frequent after 45 years old. On the other hand, 5.4% of the population under analysis consumed fruit less than once a week and 2.3% never did.

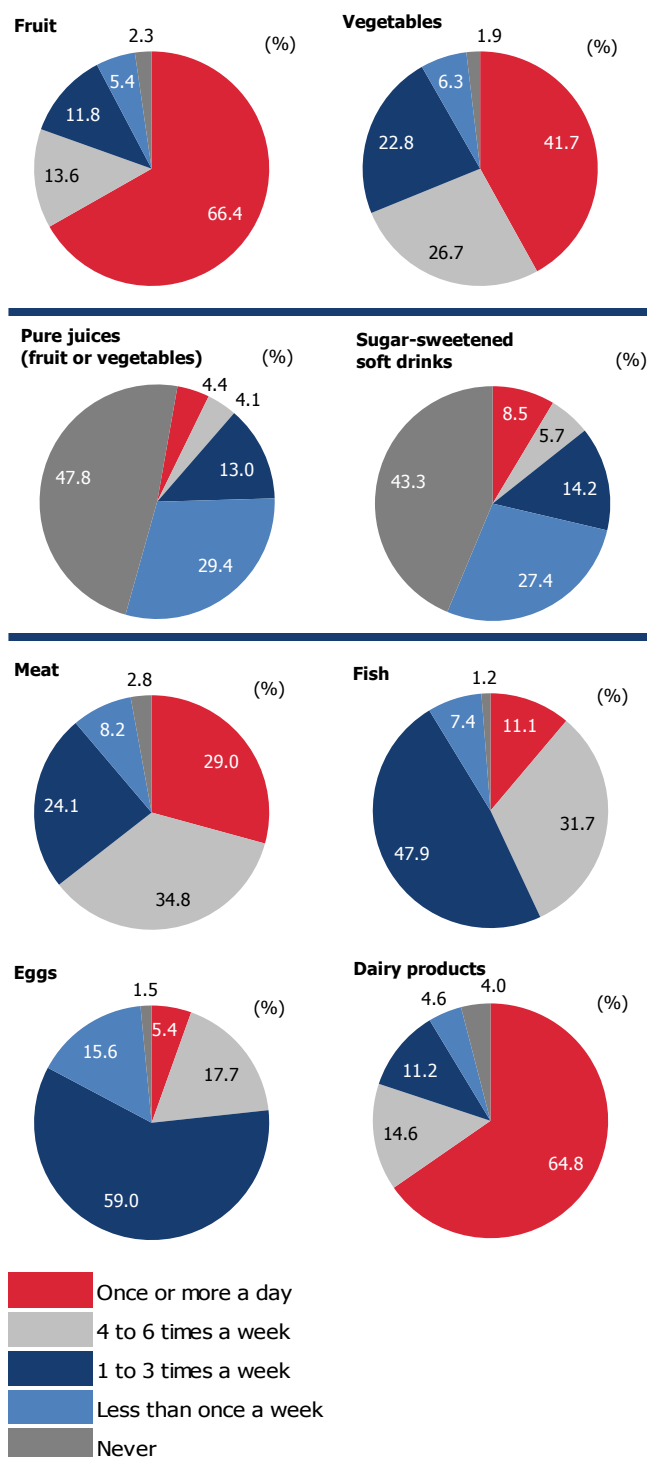
In 2014, 71% of people reported consuming fruit daily; however, in the previous survey, fruit consumption covered fresh or frozen fruit juices, so it is not possible to establish a direct comparison between the two indicators. Even so, it appears that the average number of portions of fruit consumed per day remained the same.

The results of the 2019 survey indicate that there were 3.7 million (41.7%) people who consumed vegetables or salads daily (excluding soups, potatoes and juices): on average 2.0 portions per day. Women did it more often (46.5%) than men (36.2%), and the daily consumption of vegetables or salads by the population aged 55 to 74 years old was also more frequent (46.0%). Only 33.7% of young people aged 15 to 24 consumed vegetables or salads daily.

In 2014, 55.1% of people reported consuming vegetables daily; however, in that year, the consumption of vegetables and salads included soups

and natural juices, making unfeasible any direct comparison with the results of 2019.

Figure 7. Proportion of population aged 15 or over by frequency of eating fruit, vegetables, pure juices, soft drinks and animal products Portugal, 2019



The proportion of people aged 15 and over who consumed vegetables or salads less than once a week was 6.3% and the proportion of people who never consumed it accounted for 1.9%.

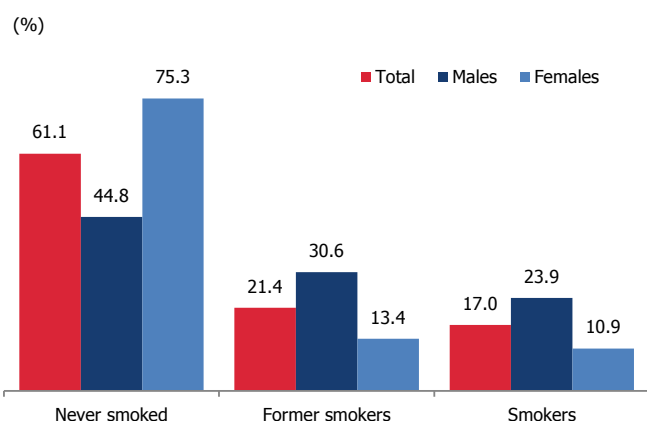
In 2019, 4.0% of the population under analysis did not consume dairy products, 2.8% did not consume meat or meat products, 1.2% did not consume fish, seafood or derived products and 1.5% did not consume eggs or products made with eggs.

The survey results estimate that around 42 thousand people (0.5%) did not consume meat, fish, or any products derived from them.

The number of smokers has decreased

In 2019, 17.0% of persons aged 15 and over were smokers, 3.0 p.p. less than in 2014, and 21.4% were former smokers. The majority of the population, 61.1%, had never smoked.

Figure 8. Proportion of population aged 15 or over by smoking condition and sex, Portugal, 2019



The survey results also show that 1.3 million people (14.2%) smoked daily and 248 thousand smoked occasionally (2.8%). About half of regular smokers consumed up to 10 cigarettes a day, but in the case of

men, the daily consumption of 11 to 20 cigarettes (50.3%) prevailed.

The percentage of women who reported never having smoked (75.3%) largely exceeded the percentage of men in the same condition (44.8%).

Almost 30% of the population drank alcohol daily, despite a decrease of 5 pp. compared to 2014

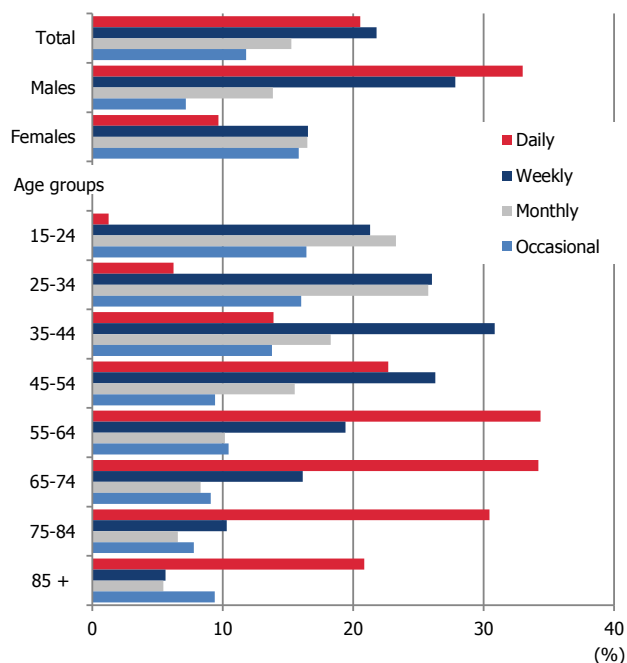
About 6.2 million people (69.4%) aged 15 or more reported having consumed alcoholic drinks in the 12 months prior to the interview, with 1.8 million doing so daily (29.6%), 1, 9 million (31.4%) consumed regularly but not every day and 1.0 million (17.0%) only occasionally.

Compared to the 2014 results, the daily consumption of alcohol decreased by 5 pp. (34.5% in 2014), a change that is shared by men and women but more evident in the older age groups.

In 2019, daily consumption was more frequent in the population aged 55 to 74 (about 34% of the population of those ages).

By sex, 40.3% of men consumed alcohol daily, while more than half of women did it monthly or only occasionally.

Figure 9. Proportion of population aged 15 or over by frequency of consumption of alcoholic drinks by sex and age group, Portugal, 2019



2.6 million people, corresponding to 42.8%, reported having consumed 6 or more alcoholic drinks on a single occasion or event (risky single-occasion drinking) at least once in the previous 12 months.

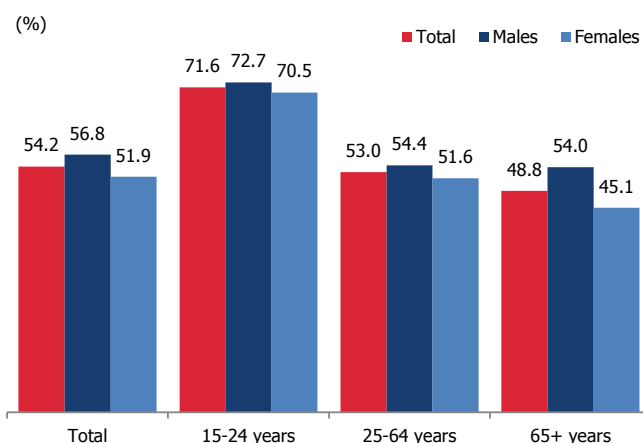
This result reflects an increase of about 9.6 pp. compared to 2014 (33.2%). That increase was higher for women (30.3% in 2019 and 18.1% in 2014). However, as in 2014, the risky single-occasion drinking is more expressive in the male population, about the double in 2019 (in 2014 it was more than triple).

Life satisfaction reaches the highest values among the youngest

About half of the resident population aged 15 or over (4.8 million people) was satisfied or quite satisfied with life in late 2019. Among young people aged 15 to 24, the percentage of satisfied or quite satisfied slightly

exceeded 70%, while among the population aged 65 or over it was less than 50%.

Figure 10. Proportion of population aged 15 or over with levels "satisfied and quite satisfied" with life, by sex and age group, Portugal, 2019



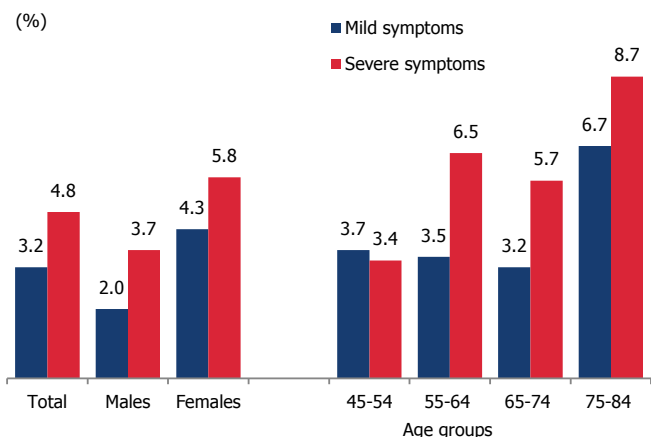
On the other hand, 8.7% of the resident population aged 15 or over (about 772 thousand) expressed a negative assessment of their life in general, being dissatisfied or rather dissatisfied. This negative view reaches the highest value among women aged 65 and over, exceeding 10%.

In general, the level of satisfaction with life has increased in the last five years (in 2014 they represented 50.5% of the population); especially in young people (15 to 24 years old).

8.0% with depressive symptoms

In 2019, about 716 thousand people aged 15 or more experienced depressive symptoms according to the PHQ-8 methodology (Patient Health Questionnaire Depression Scale), equivalent to 8.0% of the reference population. Considering the population with prevalence of depressive symptoms, about 60% observed mild symptoms and 40.2% severe symptoms.

Figura 11. Proportion of population aged 15 or over with prevalence of depression symptoms by sex and age group, Portugal, 2019

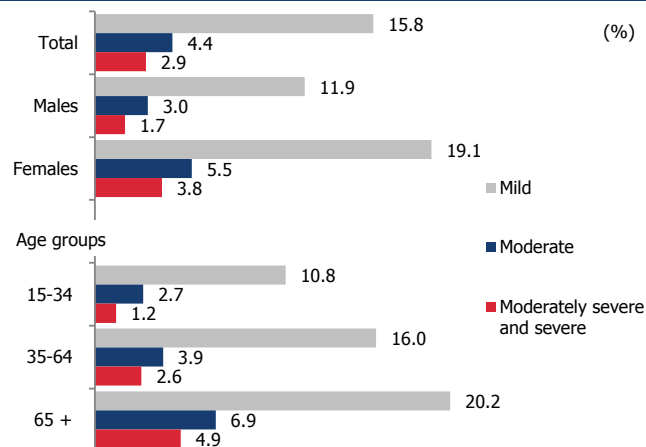


The comparison with the previous year results shows a slight decrease in the population with these symptoms (10.0% in 2014), mainly due to the prevalence of mild symptoms (6.3% in 2014 and 3.2% in 2019), as people with severe symptoms increased by 1.1 pp.

The prevalence of depressive symptoms is more expressive for women and in the older age groups. Approximately 70% of people with depressive symptoms were women and it is among the elders that the proportion of depressive symptoms reaches higher values. In the case of men, higher percentages are observed only after 75 years of age. In the case of women, proportions greater than 10% are observed from the age of 45 onwards, in the age group from 75 to 84 years, where it is near 20%, and in the age group of 85 or more years, where it is 24.5%.

This psychological assessment model also allows obtaining data on the intensity of depressive symptoms, revealing that 1.4 million people aged 15 or more had mild depressive symptoms, almost 400 thousand had moderate depressive symptoms and 254 thousand had severe or moderately severe symptoms.

Figure 12. Proportion of population aged 15 or over by degree of intensity of depression symptoms, sex and age group, Portugal, 2019



Also in this matter the data show a slight improvement compared to 2014, especially in the moderate intensity in the population of the highest age group.

Around 170 thousand people had no one to turn to in case of a serious personal problem

The majority of the population reported having social support to solve a personal problem: 60.1% indicated being able to get help from three or more persons and 35.7% to one or two people.

According to the Social Support Scale indicator, for about 1 million people (12.6% of the population) social support was poor and for about 30% (almost 2.7 million) it was strong. The possibility of strong social support was more frequent (over 30%) at younger and older (75 and over) ages.

The results show a slight decrease compared to 2014 in the social support of the population, as well as in the perception of the number of people to whom they can count on in case of serious personal problems.

Figure 13. Proportion of population aged 15 or over by degree of perceived social support, sex and age group, Portugal, 2019

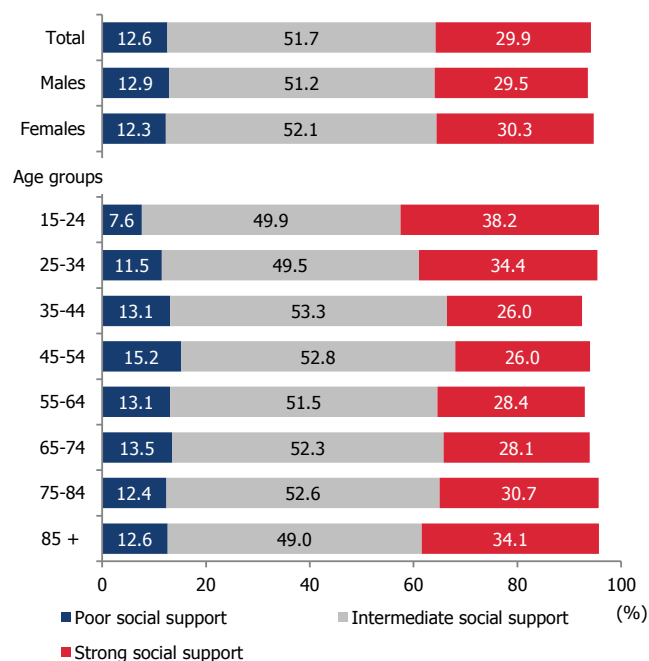
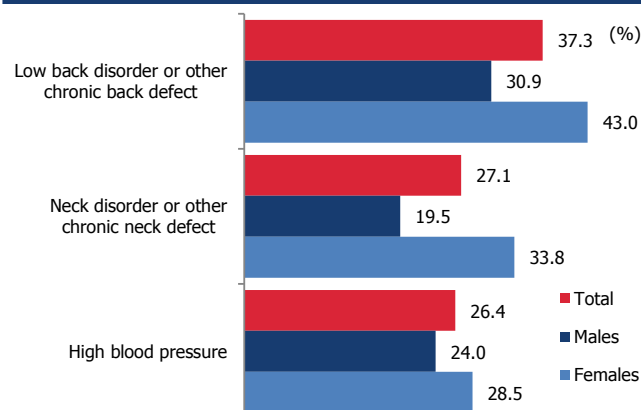
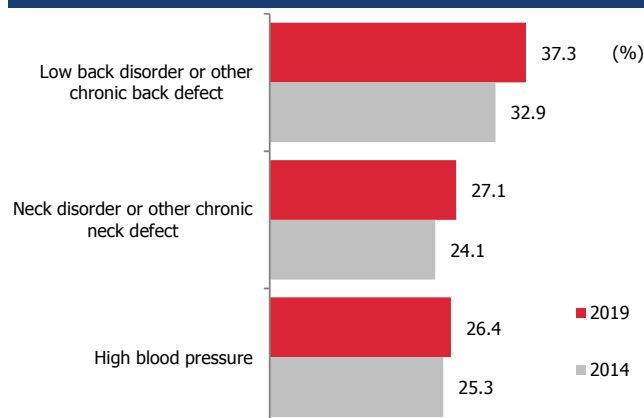


Figure 14. Proportion of population aged 15 or over with some chronic diseases by sex, Portugal, 2019



In comparison to 2014, the proportion of people who reported suffering from low back disorder (4.4 pp. more), neck disorder and other chronic neck defect (3.1 pp. more) and high blood pressure (1.1 pp. more) has increased.

Figure 15. Proportion of population aged 15 or over with some chronic diseases, Portugal, 2014 and 2019



Increased the proportion of people with low back and neck pain

Chronic disorders, namely low back disorder or other chronic back defect and neck disorder or other chronic neck disorder, were the most frequently referred chronic diseases in 2019, respectively 37.3% and 27.1%. High blood pressure was reported by 26.4% of the population.

Table 1: Parity Indexes to self-reported chronic diseases by sex, age group, grupo etário, level of education, body mass index and smoking and alcohol consumption condition, Portugal, 2019

Portugal	Sex	Age groups	Education	BMI	Smoking	Alcohol
	(Females/ Males)	(45+ years/ 15-44 years)	(Secondary and higher/ no level and basic education)	(Overweight and obesity/ normal weight)	(Smoker/ Not smoker)	(Consumption/ Never consumed)
No.						
Asthma	152	152	182	141	604	205
Chronic bronchitis, chronic obstructive pulmonary disease, emphysema	156	529	378	197	903	183
Myocardial infarction and its chronic consequences	108	3 157	x	x	x	311
Coronary heart disease or angina pectoris	133	3 667	x	232	2 012	173
High blood pressure	137	1 173	435	288	904	271
Stroke and its chronic consequences	177	2 087	x	209	x	168
Arthrosis	220	1 558	541	222	1 137	206
Low back disorder or other chronic back defect	159	365	259	179	629	281
Neck disorder or other chronic neck defect	198	498	291	174	713	243
Diabetes	112	1 798	743	375	1 335	241
Allergies	162	134	105	118	580	290
Cirrhosis of the liver	89	1 476	x	x	x	x
Urinary incontinence	248	1 149	529	216	1 444	179
Kidney problems	138	699	x	285	710	170
Depression	251	329	277	212	524	189
High blood lipids	135	924	330	266	824	289

Source: Statistics Portugal, National Health Survey

Note: Note: Parity index - ratio between (i) the number of people with the indicated disease and a certain characteristic (e.g. women) and (ii) the number of people with the same disease and the opposite characteristic (e.g. men), multiplied by 100.

Parity indices for chronic diseases

Table 1 shows, for a list of 16 chronic diseases self-reported by the surveyed population, parity indices according to a specific set of demographic characteristics of the population (sex, age group and attained education level) and other characteristics associated with health status and health determinants related to lifestyles (overweight or obesity and tobacco and alcohol consumption habits, among others that could be considered).

Each cell shows the result of the ratio between (i) the number of people with the indicated disease and a certain characteristic (e.g. women) and (ii) the number of people with the same disease and the opposite characteristic (e.g. men), multiplied by 100.

From its analysis it can be concluded that all diseases, with the exception of cirrhosis of the liver, affect relatively more women than men. In the case of depression, urinary incontinence and arthrosis, this ratio reaches maximum values, of 251 and 248 women for

every 100 men, respectively. In contrast, of the liver is a disease that predominantly affects men (89 women per 100 men).

The survey results also indicate that age, as well as tobacco consumption, are the main differentiating characteristics of morbidity among those presented in the table, with parity rates much higher, in general, than those observed for the remaining selected characteristics (sex, attained education level, overweight or obesity and alcohol consumption).

Coronary heart disease or angina pectoris, myocardial infarction or stroke (stroke) are quite more frequent among people aged 45 and over (3,667, 3,157 and 2,087 people, respectively, for every 100 people aged below that threshold). Coronary heart disease is also one of the most frequent chronic diseases in the case of smokers (2,112 smokers for every 100 non-smokers).

Regarding the Body Mass Index, being overweight or obese increases the probability of having a disease. The most extreme cases occur for diabetes (375 overweight or obese people for every 100 people with normal weight), high blood pressure (288) and kidney problems (285).

Finally, having consumed alcohol in the reference period also shows a positive association with the prevalence of diseases, with the maximum values found for myocardial infarction (311 people who consumed alcohol for every 100 people who did not), allergies (290) and high cholesterol (289).

Methodological note

The **National Health Survey 2019** (INS 2019) was carried out by Statistics Portugal, based on a representative sample of 22,191 dwellings across the whole Portuguese territory. This survey integrates the EHIS project (European Health Interview Survey), whose regular collection is established by the Regulation of the European Parliament and of the Council on statistics on public health and health and safety at work (Regulation (EC) No 1338/2008). Regulation EC 2018/255, of 19 February, defines the variables and criteria applicable to the 2019 collection.

The main objective of this survey is to characterize the resident population aged 15 or over in three major domains: health status, health care and health determinants related to lifestyles. Like the survey carried out in 2014, INS 2019 was harmonized and regulated at European level (according to the Commission Regulation referred to in the previous paragraph), allowing for the international comparison of results. In this Press release, there are however no international comparisons as data are not yet available for most countries in the European Union, a situation that will only be possible in the last quarter of this year.

National questions designed with the collaboration of the *National Health Institute Doutor Ricardo Jorge* (INSA) have also been included, with a view to ensure the collection of data on topics relevant to the characterization of the health status of the Portuguese population (namely reproductive health, food consumption, life satisfaction, and long-term incapacity) and the comparability with data collected in the 4th National Health Survey 2005/2006 and the INS 2014.

The survey's target population are the individuals aged 15 and over residing in Portuguese territory in the reference period.

Sample selection followed a multistage sampling design stratified by region, with primary sampling units (PSU) constituted by INSPIRE grid cells of 1km², being selected systematically with probability proportional to the number of dwellings. Secondary sampling units (SSU) (the dwellings) were randomly and systematically selected in each primary sampling unit. In each dwelling (22,191 in total), only one individual was selected using the last anniversary method.

The INS 2019 was collected from September 2019 to January 2020 through face-to-face and web interviews. 14,617 valid responses were obtained, corresponding to an overall response rate of 65.9% for the whole country.

The estimated results are obtained using individual weights, adjusted according to the distribution of these units by NUTS 2 region, five-year age groups, sex, education levels according to the ISCED 2011 classification (0-2; 3-4; 5-8) and household size (1, 2, 3, 4 and + individuals); for this, it had been taken into account the provisional estimates of the resident population in December 31st, 2019, and the breakdown of the population by education levels and household size according to the results of the 4th quarter of 2019 of the Labour Force Survey.

In order to improve the robustness of the weights, several winsorizing studies were carried out (a technique that allows limiting extreme values), and we chose to limit the values of the weights above the percentile 95.

The INS 2019, similarly to the previous edition, is organized into three main areas: health status, health care, and health determinants related to lifestyles. In this Press release the main results obtained in relation to health determinants are presented and, whenever possible, the comparison with those obtained in the previous edition (2014).

All the indicators from the series started in 2014 are available on INE's website, corresponding to estimates of population detailed by sex, age group, region of residence, education level and activity status.

The margins of error were calculated for each estimate in relation to the values that would be obtained in a survey of the entire population, using the coefficients of variation. Estimates are not disseminated when the respective coefficient of variation is greater than 20%.

Concepts related to the indicators referred in this Press Release

Body mass index: International index adopted by the World Health Organization (WHO) to determine if a person is underweight, normal weight, overweight or obese. The body mass index corresponds to the quotient between a person's weight in kilograms and the square of their height in meters. Body mass index classification: low weight (BMI <18.5 kg/m²); normal weight (BMI ≥18.5 kg/m² and <25 kg/m²); overweight degree I (BMI ≥25 kg/m² and <27 kg/m²); overweight degree II (BMI ≥27 kg/m² and <30 kg/m²); and obesity (BMI ≥30 kg/m²).

Cervical pain: Pain located in the cervical segment of the spine.

Depression: Common mental disorder that presents with depressed mood, loss of interest or pleasure, decreased energy, feelings of guilt or low self-esteem, sleep or appetite disturbances and lack of concentration.

High blood pressure (hypertension): Chronic disease that manifests itself in high blood pressure values, namely systolic blood pressure values greater than or equal to 140 mm Hg (millimeters of mercury) and / or diastolic blood pressure values greater than 90 mm Hg.

Low back pain: Pain located in the lumbar segment of the spine.

Pain: Unpleasant sensory and emotional experience associated with a real or potential tissue injury, or described in terms of that injury.

Physical activity: Body activity produced by skeletal muscles resulting in energy expenditure.

Mental health: Health status related to the individual's ability to realize their own potential, be able to deal with daily stress, work productively and contribute to the community in which they belong.

Social support: Set of social resources that people perceive as being available, or that are effectively provided to them by non-professionals, both in the context of formal support groups and informal help networks.

Notes about **indicators referred in this Press Release**

Data on **satisfaction with life** result from the application of the life satisfaction scale (Diener et al., 1985) composed of 5 questions that assess how the individual feels about his life (for example "my living conditions are excellent "," if I could live my life again, it would hardly change anything "). The indicator is calculated from the sum of the 7-point scale quotation, with extremes 1 (strongly disagree) and 7 (strongly agree) forming a score from 0 to 35 points. The recommended categorization consists of 6 levels between very dissatisfied and very satisfied.

Data on **social support** result from the application of the OSS-3 scale (Social Support Scale) composed of 3 questions centered on the quality of the contact network and the perception of social support. According to international recommendations, this scale allows the calculation of indicators per se, as well as a scale through the construction of a score (considering the three questions together) that reach between poor, medium and strong social support.

The **mental health data** result from the application of the psychological assessment instrument of 8 questions Patient Health Questionnaire Depression Scale (PHQ-8). This instrument allows the calculation of two indicators:

1) Prevalence of depressive symptoms: according to the PHQ-8 methodology, people show severe symptoms of depression if they indicate "more than half the days" in five of the eight analysis components including the 1st (Frequency of little interest or pleasure) in doing the usual things) and / or the 2nd (Frequency with which you felt down, depressed or helpless); mild depression symptoms are considered to be people who indicate between two and four of the eight criteria including at least one of the items mentioned.

2) Intensity of depressive symptoms: indicator calculated from the sum of the quotation of the four categories of response to the 8 items, forming a score between 0 and 24. The recommended categorization consists of 4 degrees of intensity: light, moderate, strong and very strong.