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The State of Public Health in France and Risk Factors

Preliminary Results of the 2014 European Health Interview Survey- The Health, Health Care and Insurance Survey (EHIS-ESPS 2014)

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According to the preliminary results of the 2014 European Health Interview Survey-The Health, Health Care and Insurance Survey (EHIS-ESPS 2014), conducted in private households (non-institutional population), almost one third of the population (aged 15 or over) in mainland France rated their health as fair, poor, or very poor. Almost 40% of respondents stated they had a chronic medical condition and a quarter had a health condition that limited their ability to perform common daily activities. These health indicators varied greatly according to the socio-professional categories, to the detriment of disadvantaged sections of the population, particularly households of unskilled workers.

Almost one in ten women and one in twenty men had depressive symptoms, which were more acute in persons aged 75 or over, and mainly concerned employed households. With 7% of the population suffering from depression, France is on a par with the European average.

Among the risk factors, 46% of the population in mainland France was excess overweight, (31% overweight, and 15% obese), which is less than most of the other European countries that took part in the survey. However, 28% of the respondents smoked (22% smoked daily), representing a smoking rate that is higher than the European average. These two risk factors vary greatly according to the socio-professional categories, to the detriment, in particular, of working-class households.

Two other *Issues in Health Economics/Studies and Results (Questions d'économie de la santé/ Études et Résultats)* will be published in 2017, presenting the preliminary results relating to health insurance and access to healthcare. All the survey's results will, in any case, be released in an IRDES (Institute for Research and Information in Health Economics) report, which will be published in 2017.

In 2014, 70% of the people aged 15 or over in mainland France rated their health as 'good' or 'very good', 23% considered it to be 'fairly good', and 7% stated that their health was 'poor' or 'very poor'. These results are drawn from the European Health

Interview Survey-The Health, Health Care and Insurance Survey (EHIS-ESPS) which, in 2014, surveyed around 10,000 households and over 26,500 individuals in mainland France about their health, their access to complementary health insurance and healthcare, and

their health behaviours (Sources and Method inset, p. 5).

The main findings of the survey relating to health and risk factors are presented in

terms of self-declared health (perceived health, chronic illnesses, and functional limitations, that is the three variables of the Mini European Health Module), depressive symptoms, and risk factors, in this case obesity and tobacco consumption. After each survey, a study is made of the disparities between the socio-professional categories, and a comparison is made with the results from the other European countries that participated in the European Health Interview Survey, when the data is available.

Self-declared health marked by a high level of social inequality

The respondents who rated their health as 'fair', 'poor', or 'very poor' represented 32% of women and 29% of men respectively. In 2014, 38% of people aged 15 or over (38% of women and 37% of men) stated they had a chronic health condition or long-standing illness¹, and 26% of the respondents had a health condition that limited their ability to perform common daily activities (27% of women and 24% of men).

Health problems increase with age. Hence, 12% of those aged 15–39 rated

their health as 'fair', 'poor', or 'very poor', compared with 60% of those aged 65 or over. This was also the case with the respondents who stated they had a chronic health condition (18% and 66% respectively in the same age groups) and the respondents who stated they had a health condition that limited their ability to perform common daily activities (10% and 52% respectively).

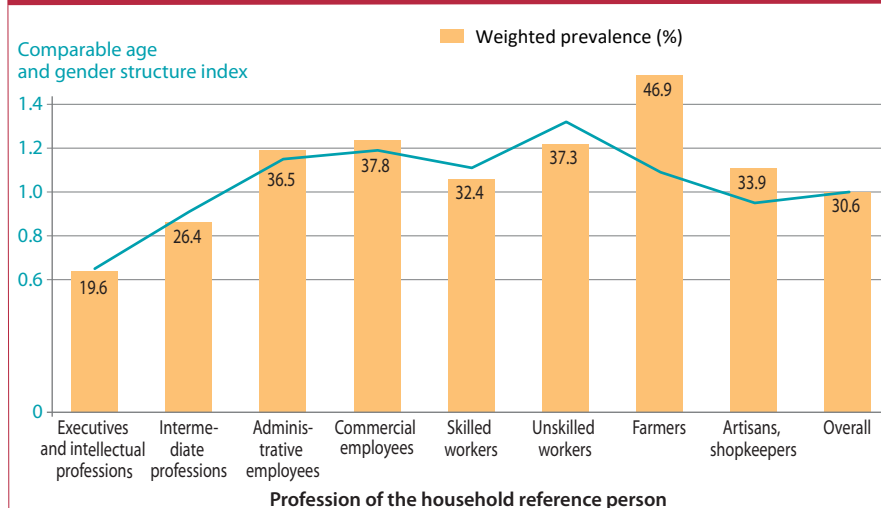
Health problems also varied greatly according to the individuals' social background, determined via the socio-professional category of the household reference person (Graph 1). Hence, farmers' households had the poorest health status, which must, in particular, be viewed in the context of the higher average age of this section of the population. With a comparable age and gender structure, unskilled workers were in the poorest health, according to the three dimensions of the Mini European Health Module: comparable age and gender structure indexes were 1.3 for health rated as 'fair', 'poor', or 'very poor', 1.1 for the mention of a chronic illness, and 1.2 for the mention of activity limitations. Next came administrative and commercial employees, with indexes that were significantly lower for perceived health (1.2), but comparable with those of unskilled workers



The 2014 European Health Interview Survey – The Health, Health Care and Insurance Survey (EHIS-ESPS 2014) was the last wave of the Health, Health Care and Insurance Survey (ESPS) conducted by IRDES. The survey included the questions in the second wave of the European Health Interview Survey (EHIS), required in the framework of the European Regulation No. 141/2013. In this respect, it was conducted in collaboration with the French Centre of Research, Studies, and Statistics (Direction de la Recherche, des Études, de l'Évaluation et des Statistiques, or DREES) at the Ministry of Social Affairs and Health. The European Health Survey, which will take place every six years as of the 2019 edition, will be conducted by the DREES and IRDES (Institute for Research and Information in Health Economics). It will be cross-referenced with the French medico-administrative databases (SNIIRAM-PMSI), which will be integrated into the National Health Data System (Système National des Données de Santé, or SNDS), and contain a module of questions specific to France on complementary health insurance. The European Statistics on Income and Living Conditions (EU-SILC; Statistiques sur les Ressources et Conditions de Vie, or SRCV) survey, conducted in France by the National Institute of Statistics and Economic Studies (INSEE), will complete the health monitoring system by conducting the Mini European Health Module every year, and, every three years, a module on health composed of a European section and a section specific to France, which will be devoted to complementary health insurance in 2017.

G1

People declaring a health status perceived as 'fair', 'poor', or 'very poor' according to the socio-professional category of the household reference person



Reading: 20% of people aged 15 or over living in households in which the reference person was an executive or in a higher intellectual occupation stated that their health was 'fair', 'poor', or 'very poor'. With a comparable age and gender structure, the proportion of executives who stated that their health was poor was the lowest, that is 0.65 times the proportion of the entire population.

Scope: Population aged 15 or over living in private households in mainland France.

Source: EHIS-ESPS 2014, DREES-IRDES.

[Download the data](#)

for chronic health conditions (1.1) and activity limitations (1.2). Respondents living in executive households had significantly less health problems than all the other categories, with indexes of 0.7, 0.9, and 0.7 respectively for the three dimensions of self-declared health. The differences between social groups are more pronounced in terms of perceived health and activity limitations than the mention of chronic health conditions.

Eurostat uses the SILC (Statistics on Income and Living Conditions) survey to compare the results with the ques-

¹ This response does not necessarily refer to serious illnesses: the mention of health problems or chronic health conditions may also include cardiovascular risk factors (hypercholesterolemia, excess weight, etc.), problems such as minor vision difficulties corrected by glasses, and so on.

tions on comparative health in European countries in the Mini European Health Module. In France, the results are similar to those presented here and drawn from the EHIS: France is on a par with the European average, except for the mention of chronic health issues, which is around 5 points higher than the European average in France (Eurostat, 2017)².

survey was very similar to the prevalence of full-blown depressive orders measured in other surveys via structured diagnostic interviews; the gap between men and women was also present (Beck, Guignard, 2012). France ranked eighth out of the 26 European countries for which data

is available, but is around the European average, with 7% of people aged 15 or over suffering from depression (Graph 2).

The frequency of these symptoms varied according to age (Graph 3). In the case of women, there was an initial marked

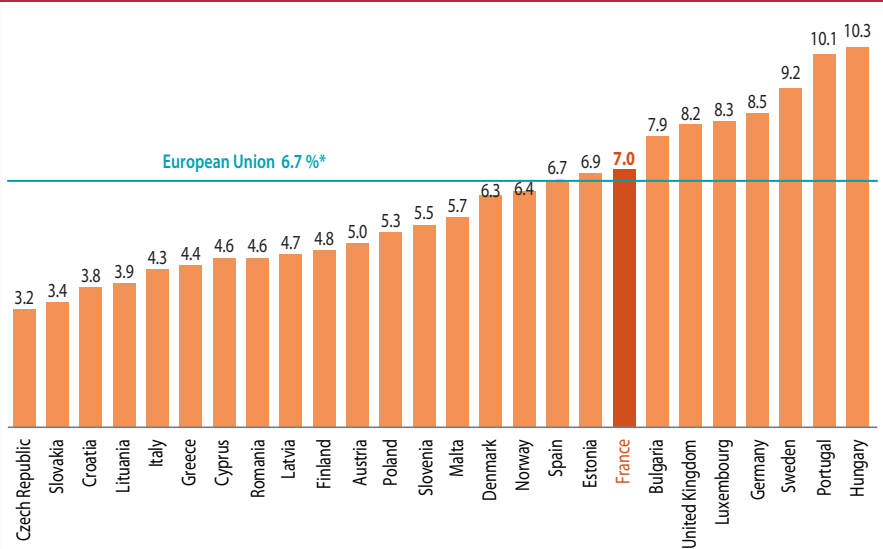
9% of women and 5% of men had depressive symptoms

In 2014, the European Health Interview Survey-The Health, Health Care and Insurance Survey (EHIS-ESPS) introduced, as part of a European Regulation, the questions in the eight-item Patient Health Questionnaire (PHQ-8) module (see inset below). They measure the presence and intensity of depressive symptoms via responses to eight questions on mental health. According to this module, around 9% of women and 5% of men living in private households in mainland France had depressive symptoms in the two weeks leading up to the survey. The frequency of depression symptoms revealed in the

² The differences between European countries may be due to various phenomena: a variable frequency of health problems, differences in the age-gender structure of the populations, different propensities to declare a health problem, or to diagnose pathologies.

G2

Frequency of the reporting of depressive symptoms in European countries



* The 'European Union' average is calculated from data from 26 countries — among the 28 EU countries —, for which data on depressive symptoms is available (Belgium and Holland not included).

Note: The differences between the European countries may be due to various phenomena: Distinct frequencies of depressive symptoms, composition effects linked to the age of the population in the countries, and distinct tendencies to report symptoms mentioned in the questionnaire.

Reading: In France, 7.0% of the population had depressive symptoms. The European average is 6.7% (average weighted in accordance with the population of each country).

Scope: Population aged 15 or over living in private households in mainland France.

Source: EUROSTAT, EHIS 2014.

[Download the data](#)

E

Mental health assessment in the 2014 EHIS-ESPS survey

The PHQ-8 module (Brief Patient Health Questionnaire-Depression Module) was introduced for the first time in 2014 in the EHIS-ESPS survey. It is based on the approach to depression adopted in the American Psychiatric Association (APA) reference manual, the Diagnostic and Statistical Manual of Mental Disorders, fourth edition (DSM-IV). It sets criteria for assessing mental health in surveys, and, more precisely, a possible depression, based on questions relating to the existence and intensity of symptoms suggestive of a depressive episode, reported in the two weeks prior to the survey.

The module contains eight questions relating to a lack of interest or pleasure in things; Sadness, depression, and despair; sleep disorders; fatigue and lack of energy; changes in appetite; difficulties in concentrating; self-esteem; difficulty in moving or speaking, and, conversely, any possible increases in activity.

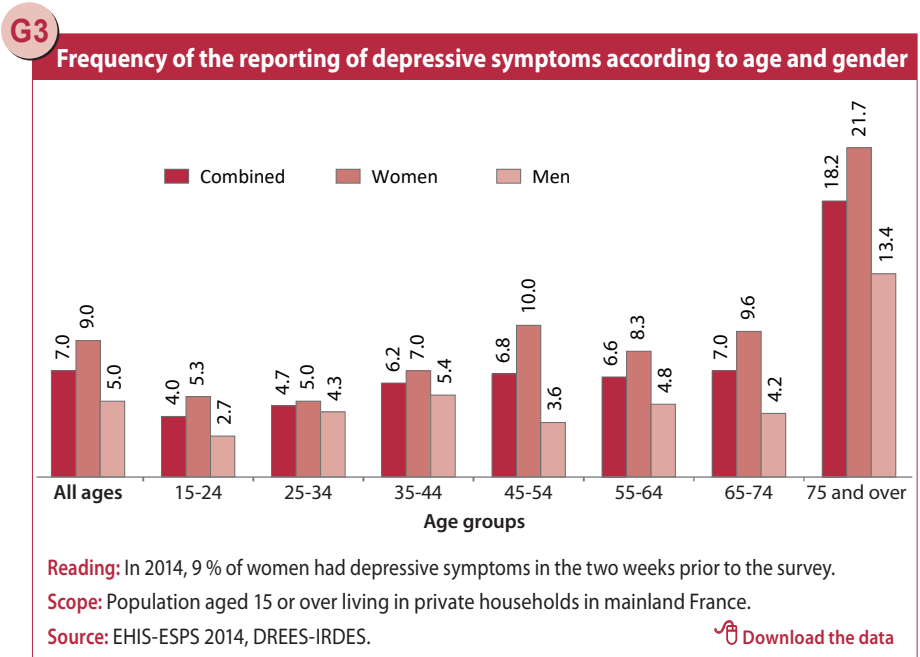
The first two questions in the assessment used in this survey are filter questions. The existence of at least two of the eight dimensions investigated on more than half the days, and the fact that at least one of the two dimensions is a lack of interest or pleasure in things, or sadness, depression, or

despair indicates that the person has depressive symptoms. This approach underpins the preliminary results presented by Eurostat (Eurostat, 2017). It does, however, differ from other approaches which can be used, particularly a cumulative scoring system, in which each of the 8 dimensions are equivalents and the score extends from 0 to 24, with a threshold of 10 to identify people who have depressive symptoms. Nevertheless, literature on the subject has noted the closeness of the results based on the various indicators (Kroenke et al., 2008).

Unlike a declaration of depression on the list of 15 declared illnesses (an affirmative response to the question 'Have you suffered from depression during the last twelve months?'), the identification of depressive symptoms via the PHQ-8 module does not require the respondent to identify the depressive state. Although it assesses the existence and intensity of depressive symptoms, the PHQ-8 module is not a personalised diagnosis tool, like other mental health modules, such as the CIDI-SF (Composite International Diagnostic Interview-Short Form). It does, however, make it possible to identify a sample population's vulnerability to depressive symptoms and make comparisons between populations.

increase around the age of 45, and then a second increase at advanced ages, as of the age of 75. In the case of men, the latter increase was particularly pronounced. Hence, while 5% of women and 3% of men aged 15–24 had depressive symptoms, this was the case for 10% of women and 4% of men aged 65–74, and 22% of women and 13% of men aged 75 or over (living at home).

The increase in the frequency of depressive episodes in people at advanced ages is an expected result, but the extent seems to vary according to the measurement method. The increase measured with the PHQ-8 module is considerably greater than the increase in the number of people who declared that they had suffered from depression at some point during the year (9% of people aged 75 or over, compared with 6% of all those aged 15 or over). This difference can be seen in the European averages, but to a lesser degree: 13% of people aged 75 or over had depressive symptoms, compared with 7% of all those aged 15 or over. Likewise, 10% of people aged 75 or over declared they were suffering from depression, compared with 7% of all those aged 15 or over. It is possible that the PHQ-8 module struggles



to distinguish between depressive symptoms and health issues related to ageing and the loss of autonomy. However, this difference may also be due to a lack of knowledge or under-reporting of depression among elderly people. Hence, the PHQ-8 module could be considered as better than the reporting of depression at identifying a decline in mental health, and takes better account of the effects of

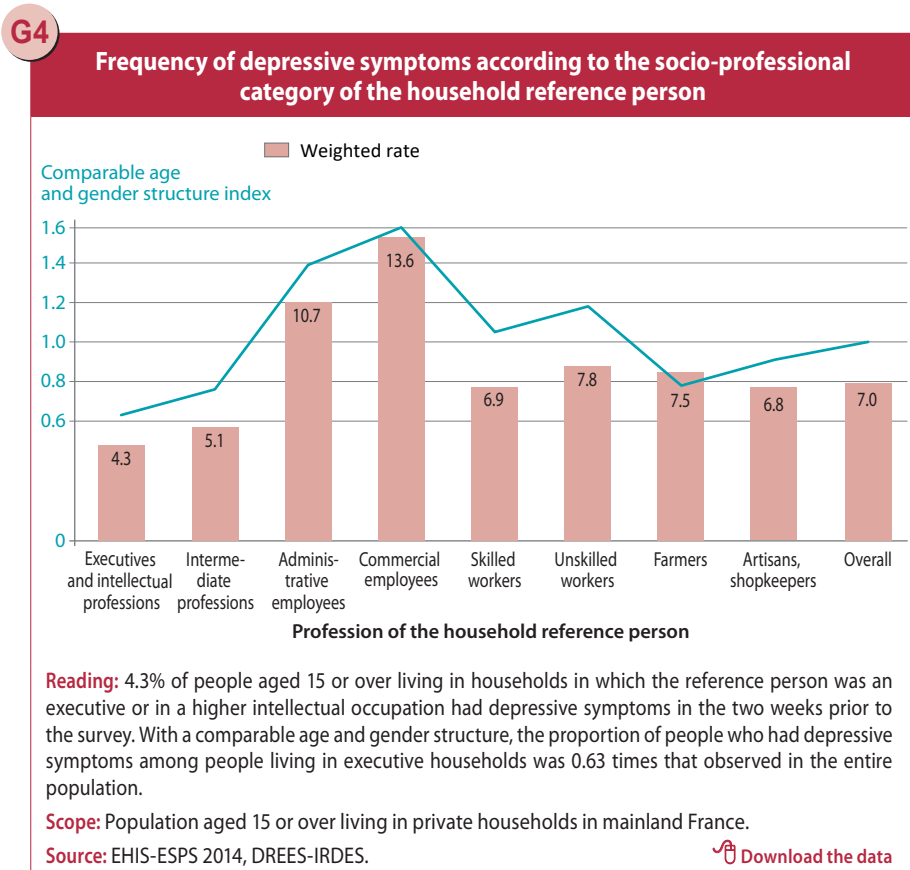
ageing and the loss of autonomy on mental health.

Social disparities in mental health were also observed. With a comparable age and gender structure, and based on the socio-professional category of the household reference person, employees reported depressive symptoms much more frequently than the whole of the population (an index of 1.6 for commercial employees and 1.4 for administrative employees, compared with 1.0 for the whole population), in contrast with executives (0.6) and, to a lesser extent, intermediate professions and farmers (0.8), and artisans, shopkeepers, and company managers (0.9) [Graph 4].

In 2014, 28% of respondents smoked (22% smoked daily) in France

In 2014, around 28% of people (aged 15 or over) living in mainland France smoked, 22% of whom smoked daily³. The proportion of smokers was thus slightly higher in France than the average across the

³ These percentages (in the 15–75 age group) are slightly lower than those in the 2014 Health Barometer (Guignard et al., 2015): according to the EHIS-ESPS survey, 24% smoked daily and 6% smoked occasionally, compared with 28% who smoked daily and 6% who smoked occasionally in the Health Barometer (a telephone health survey of a representative sample of the population of mainland France).



27 European countries for which data is available (EU-28 minus Ireland). Indeed, on average, 24% of Europeans smoked, 19% of whom smoked daily. France ranked fifteenth in terms of daily smoking among the male population (26% of men in France compared with the European average of 23%), and sixteen in terms of daily smoking among the female population (19% of women in France compared with the European average of 16%). Women's tobacco consumption has moved closer to that of men over recent years in France (Guignard et al., 2015).

In the 25–34 age group, 41% smoked, 32% of whom smoked daily and 9% occasionally, making it the age group with the highest rate of tobacco use. This rate was lower in the 15–24 age group (33%), due to a lower rate of daily smokers (24%). In the next age groups, the daily and occasional consumption of tobacco decreased, with 38% of smokers in the 35–44 age group, 34% in the 45–54 age group, 22% in the 55–64 age group, 12% in the 65–74 age group, and less than 5% in the 75 or over age group. This trend can very probably be explained by a combination of three factors (Guignard et al., 2015): the cessation of tobacco consumption over the course of a lifetime, the differential in life expectancy between smokers and non-smokers, and generational disparities.

After accounting for the effect of the age and gender structure, workers (unskilled

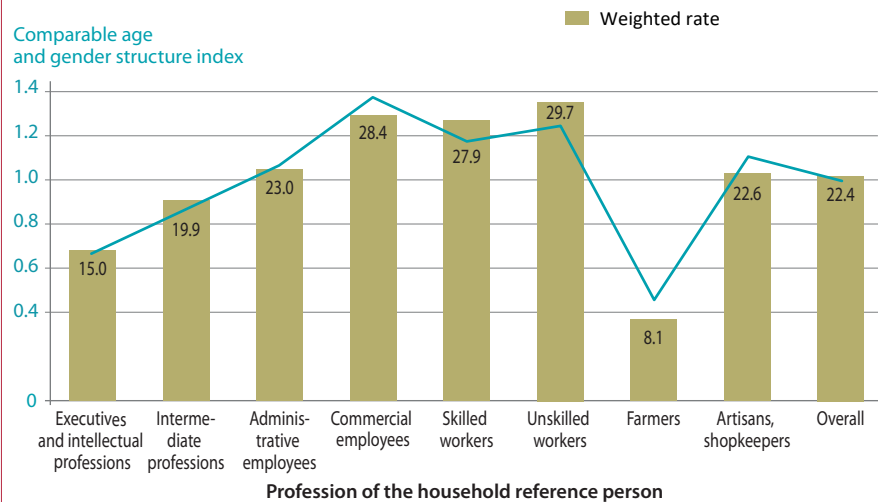
and skilled) and commercial employees were the main categories who smoked daily, with indexes between 1.2 and 1.4 (compared with 1 for the whole of the population). Conversely, the farmers (0.5) and the executives and higher intellectual occupations (0.7) were less likely to smoke daily (Graph 5). Occasional smoking was more frequent among executives than in the whole of the population. To understand the social disparities in tobacco consumption, it is necessary to take into

account the reasons for tobacco use (psychotropic effects, social integration, particularly among young people, social support, a way of projecting oneself into the future and having a sense of control over one's life, etc.), which may vary according to the social milieu (the High Committee on Public Health or HCSP, 2009).

These results do not include the use of electronic cigarettes. In the 15 or over age group, 7% stated that they used them

G5

Daily smoking according to the socio-professional category of the household reference person



Reading: 15% of people aged 15 or over living in households in which the reference person was an executive or in a higher intellectual occupation smoked daily. With a comparable age and gender structure, the proportion of daily smokers among people living in executive households was 0.67 times the proportion observed in the entire population.

Scope: Population aged 15 or over living in private households in mainland France.

Source: EHIS-ESPS 2014, DREES-IRDES.

[Download the data](#)

SOURCES AND METHOD

In 2014, the Health, Health Care and Insurance Survey (ESPS) was the basis of the European Health Interview Survey (EHIS) and was thus called the EHIS-ESPS survey. The Health, Health Care and Insurance Survey (ESPS), conducted every two years by the French Institute for Research and Information in Health Economics (IRDES) since 1988, is representative of the population in mainland France living in private households (non-institutional population). It explores the relations between health, access to healthcare, access to compulsory complementary health insurance, and the social and economic status of the respondents.

Sample

The sample of participants in the Health, Health Care and Insurance Survey (ESPS) is constituted as a sub-sample of the Échantillon Généraliste de Bénéficiaires (EGB), a permanent representative sample of the population covered by French health insurance. In 2014, it covered

around 92% of the health insurance beneficiaries, as certain schemes did not feature in the sampling frame. The survey covers the sampled beneficiaries and the members of their household, some of whom have health insurance schemes that do not feature in the survey's sampling frame (particularly the student schemes). It thus covers over 95% of the population of mainland France in private households.

Since the Health, Health Care and Insurance Survey (ESPS) sample is drawn from the French Health Insurance medico-administrative databases, it is possible to supplement the declarative data with a year's consumption of care recorded in the files containing care bills reimbursed by the French Health Insurance system (the National Inter-Scheme Information System on Health Insurance (Système national d'information inter-régimes de l'Assurance maladie, or SNIIRAM) and the Medical Information

Systems Programme (Programme médicalisé des systèmes d'information, or PMSI)) for the sampled beneficiaries and their potential and associated beneficiaries associated with a particular social security number. Moreover, a whole range of background data can be obtained from the geocoding of the respondents' addresses (Célant et al., 2014).

Scope

The survey was conducted in two waves, the first from January to June 2014, and the second from September to December 2014, in order to take into account the seasonal nature of certain pathologies. The data is collected in a variety of ways (by telephone, face-to-face interviews, and self-administered questionnaires). In 2014, the EHIS-ESPS survey covered around 10,000 households and over 26,500 people.

More page 6.

daily or occasionally: 6% used them and smoked, and only 1% used them but did not consume any tobacco.

**In the 15 or over age group,
46% were excess overweight:
31% were overweight
and 15% were obese**

The 2014 EHIS-ESPS survey also recorded the respondents' weight and height, which made it possible to calculate their Body Mass Index (BMI), the ratio between their weight (expressed in kilogrammes) and height in meters squared. Four per cent of the respondents were underweight (for adults, BMI lower than 18.5; the thresholds were less and varied according to age in the 15–17 age group). Half of those in the 15 or over age group had a normal BMI, that is one that did not represent a risk factor, while 46% were slightly overweight (adults who had a BMI higher than 25), 31% were overweight (adults who had a BMI of between 25 and 30), and 15% had a BMI characteristic of obesity (adults who had a BMI higher than 30).

France ranked favourably among the European countries⁴. In Europe, half the population is slightly overweight; 15% of the population is obese and 35% overweight and, conversely, 3% of Europeans are underweight. Overweightness is least frequent in France, while the rate of obesity is on a par with the European average.

SOURCES AND METHOD (MORE)

The European Health Interview Survey (EHIS)

The health questions that are set out in the European regulations were administered in the self-administered questionnaire offered to all the members (aged 15 or over) of the sampled households, representing a total of 15,729 responses. A specific weighting adjustment, in accordance with Eurostat's recommendations, was applied to this population, ensuring that it was representative of the people living in private households in mainland France.

Comparable age and gender structure indexes

The prevalences according to socio-professional category in the graphs have been age- and gender-standardised, represented by a curve. It aims to eliminate the differences in the age and gender structures between a subpopulation (for example, the farmers, who are on average older) and the entire population. The comparable age and gender structure index, established through indirect standardisation, is equal to the number of cases actually 'observed' in the subpopulation, proportional to the number of 'expected' cases. The

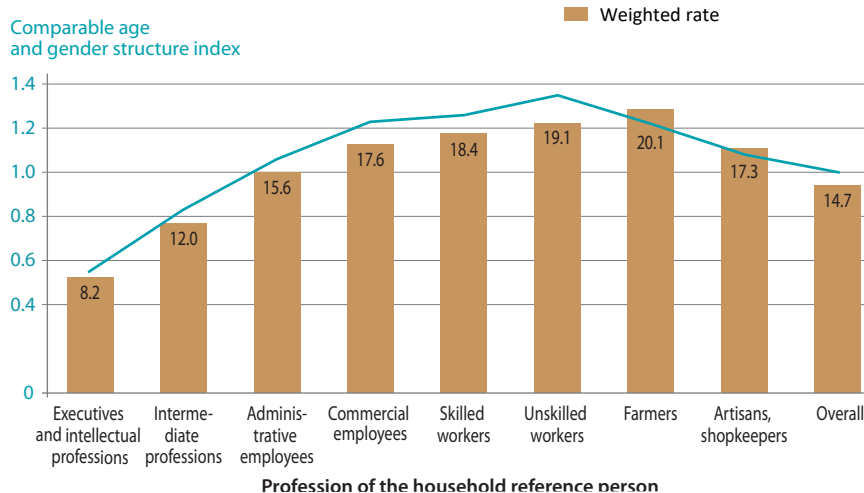
latter is calculated by applying the prevalences observed by gender and age group in the entire population to the members, by gender and age group, of the subpopulation. An index higher (or lower) than 1 signifies that, in terms of a comparable age and gender structure, the prevalence is higher (or lower) in the subpopulation studied than in the entire population.

Caveat

In 2014, the scope of the Health, Health Care and Insurance Survey (ESPS) was broadened to include new schemes and a new weighting adjustment, for the subpopulation in the European Health Interview Survey (people aged 15 or over who responded to the self-administered questionnaire) and in compliance with Eurostat's recommendations, was calculated. These two developments make it difficult to make a direct comparison between the results of the 2012 and 2014 Health, Health Care and Insurance Surveys (Célant *et al.*, 2014, to be published by Irdes). Tables with comparable scopes and weighting adjustments will be made available on the Irdes Internet site in 2017 (<http://www.irdes.fr/english/home.html>).

G6

Frequency of obesity according to the socio-professional category of the household reference person



Reading: 8% of people aged 15 or over living in households in which the reference person was an executive or in a higher intellectual occupation were obese. With a comparable age and gender structure, the proportion of obese people among people living in executive households was 0.55 times the proportion observed in the entire population.

Scope: Population aged 15 or over living in private households in mainland France.

Source: EHIS-ESPS 2014, DREES-IRDES.

[Download the data](#)

In France, obesity rates were 15% for both men and women. However, more men (37%) than women (25%) were overweight. These gender-based differences can also be seen across the entire European population and in most of the European countries.

The distribution of the population by BMI class varied according to age: 75% of those aged 15–24 had a normal BMI, but the proportion of people with a normal BMI then decreased steadily, applying to only 36% of those aged 65–74. It

then increased to 46% in the 85 or over age group. Leanness was mainly observed among the youngest section of the population (15–24 age group) and the oldest (85 or over age group). The frequency of overweightedness and obesity reached a plateau around the ages of 65–84: over 20% of people in this age group were obese and almost 40% were overweight.

⁴ EU-28 minus Ireland, for which no data is yet available.

With an obesity rate of 20% in the 15 or over age group, people living in households in which the reference person was a farmer were the social category that was most likely to suffer from obesity. However, with a comparable age and gender structure, the frequency of obesity in these people was closer to that of households of employees, workers and artisans, and shopkeepers and company managers, who had an index

that was 1.2 to 1.3 times higher than that of the entire population. Executives were least likely to be obese, with an index that was 0.6 times that of the entire population and, to a lesser extent, the intermediate professions (0.8 times) [Graph 6]. Because the data is declarative, and in view of the societal norms relating to body image, it is possible that inaccuracies that occurred in self-reported body weight and height were

recorded, without calling into question the orders of magnitude presented in this document⁵. ♦

⁵ The results in the 30–69 age group in the 2014 EHIS-ESPS survey were very similar to the published results from the Constances cohort, which were based on a clinical examination (Matta et al., 2016), and those presented in the report 'L'état de santé de la population en France, Rapport 2015' (2015 French public health report), based on various sources (Prost, Rey, 2015).

7 FOR FURTHER INFORMATION

- Beck J.-F., Guignard R. (2012). « La dépression en France (2005-2010) : prévalence, recours au soin et sentiment d'information de la population », *La santé de l'homme*, n° 421.
- Célant N., Guillaume S., Rochereau T. (2014). « Enquête sur la santé et la protection sociale 2012 », rapport de l'Irdes, n° 556, juin.
- Eurostat (2017) : <http://ec.europa.eu/eurostat/web/health/health-status-determinants/data/database>
- Guignard R., Beck F., Wilquin J.L., Andler R., Nguyen-Thanh V., Richard J.B., et al. (2015). « La consommation de tabac en France et son évolution : résultats du Baromètre santé 2014 ». *Bulletin épidémiologique hebdomadaire (BEH)*, 17-18):281-8.
- HCSP (2009). *Les inégalités sociales de santé, sortir de la fatalité*. Rapport, Haut Conseil de la santé publique (HCSP), décembre.
- Kroenke K., Strine T. W., Spitzer R. L., Williams J. B. W., Berry J. T., Mokdad A. H. (2008). 'The PHQ-8 as a Measure of Current Depression in the General Population', Research Report, *Journal of Affective Disorders*.
- Matta J., Zins M., Feral-Pierssens A.-L., Carette C., Ozguler A., Goldberg M., Czernichow S. (2016). « Prévalence du surpoids, de l'obésité et des facteurs de risque cardio-métaboliques dans la cohorte Constances », *Bulletin épidémiologique hebdomadaire (BEH)*, n° 35-36.
- Prost T., Rey S. (dir.) (2015). *L'Etat de santé de la population en France*. Rapport 2015, Drees, collection Etudes et statistiques.



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