

11 November 2020

Rectified version at 12-11-2020, 6.00 pm

## Accidents at work and other work-related health problems - Labour Force Survey ad hoc module

2<sup>nd</sup> quarter of 2020

On page 7 the text "(...) repetitive hand and arm movements (66.3%).", is rectified to "(...) repetitive hand and arm movements (66.9%)". Figures 10 and 11 have been changed. These corrections have no impact on the attached tables.

### **Severe time pressure or overload of work affects more than 40% of the employed population**

In 2020, 165.1 thousands of persons aged 15 to 74 who were employed in the 2nd quarter or had been employed in the previous twelve months, reported having had at least one accident at work during that period, i.e. 3.2% of the employed population. In 2013, this percentage was 4.0%.

The occurrence of accidents at work continues to be reported mainly by those aged between 35 and 44 years old (3.5%), and by more men (3.7%) than women (2.6%). In 2020, those working in Construction (section F) are no longer the most affected by the occurrence of accidents at work in the twelve months prior to the interview, with a decrease in the risk of accidents from 5.8% in 2013 to 4.0%.

In 2020, 482.5 thousand persons aged 15 to 74 reported having had at least one health problem caused or aggravated by work i.e. 56.7 thousand fewer people than in 2013.

Work-related health problems continue to affect mainly women: 7.8%, compared to 5.9% for men. The existence of this kind of problems is more frequent after 55 years old.

Bone, joint or muscle problems as a whole were identified in 2020 as the most serious by 59.9% of the population with at least one work-related health problem.

In the 2nd quarter of 2020, 82.2% of employed persons indicated that they were exposed to risk factors for physical health at the workplace, 6.6 pp more than in 2013. Repetitive hand or arm movements were the risk factor most frequently reported by respondents (66.3%).

On the other hand, 54.0% of employed people reported exposure to risk factors for mental well-being at the workplace, 17.2 pp more than in 2013. From the risk factors considered in the survey, severe time pressure or overload of work (43.1%) and having to deal with difficult customers, patients, pupils etc. (37.1%) were the ones identified more frequently by those affected by this kind of risk.

Note that 2013 was a third consecutive year of contraction of the economic activity, with employment recording a decrease of 2.6%, and that, in the context of the pandemic, the information available for the first three quarters of this year, indicates a reduction in economic activity in that period. However, the functioning of the labour market has different characteristics, and the high number of employed people working from home or in a simplified lay-off scheme in the 2nd quarter of 2020 should be emphasised. In particular, the employed population from 15 to 74 years old working from home amounted to more than 1 million people, almost ¼ of the employed population of that age group, which may have been one of the factors for reducing the incidence of accidents at work in 2020.

## 1. Introduction

Statistics Portugal publishes the results of the Labour Force Survey ad hoc module 2020 on “Accidents at work and other work-related health problems”, which was collected together with the Labour Force Survey in the 2nd quarter of 2020. It is the third edition of this ad hoc module, already carried out in 2007 and 2013.

It includes three topics of analysis:

(1) **Accidents at work** in the twelve months prior to the interview: the questions were addressed to all persons aged 15 to 74, employed in the reference week or who had been employed in the twelve months prior to the reference week. In addition to the number and type of accidents at work, the questionnaire addresses the duration of absence from work because of the accident at work.

An accident at work is any accident that occurs in the course of work i.e. whilst engaged in an occupational activity or during the time spent at work and which results in a physical or mental injury and excluding commuting accidents that occur during the journey between home and the workplace. The module covers only work accidents with physical injuries.

(2) **Work-related health problems** suffered in the twelve months prior to the interview: the questions were addressed to all persons aged 15 to 74, employed during the reference week or who have ever been employed.

This topic includes any illness, disability or other physical or psychological problem (excluding accidents at work) that the person considers to have been caused or aggravated by work (either current or previous), thus not being restricted to situations reported or recognized by health authorities. Health problems having occurred more than a year before the interview are covered if

they have an impact during the twelve months prior to the date of the interview.

For the most serious health problem, it was asked the type of problem, the duration of absence from work and the degree of limitation in performing normal daily activities due to it.

(3) **Risk factors at work that can affect mental well-being or physical health**: the questions were addressed to all persons aged 15 or over employed in the reference week. In this topic, only non-proxy responses were considered.

The questions concern exposure to certain factors in the workplace that persons are subject to on a daily basis. Factors that may affect physical health included exposure to chemicals, dust, vapors, fumes or gases; noises or vibrations; difficult work postures or movements; handling heavy loads; activities that require a lot of visual concentration; the risk of an accident. Such factors as exposure to harassment or persecution, violence or threat of violence, the pressure of deadlines or work overload were classified as factors that can affect mental well-being.

An Excel file is attached to this Press release where the module's target questions are made available broken down by several characterization variables: sex, age group, main activity (Section of CAE-Rev. 3), occupation (Professional group according to CPP-10), and NUTS 2 region. It does not cover all the information of the module, especially when it is associated with the information from the Labour Force Survey, so that, for a deeper exploitation of the data collected, it is possible to access specific tables, upon request and complying with principles of statistical quality.

## 2. Main results

### 2.1. Accidents at work

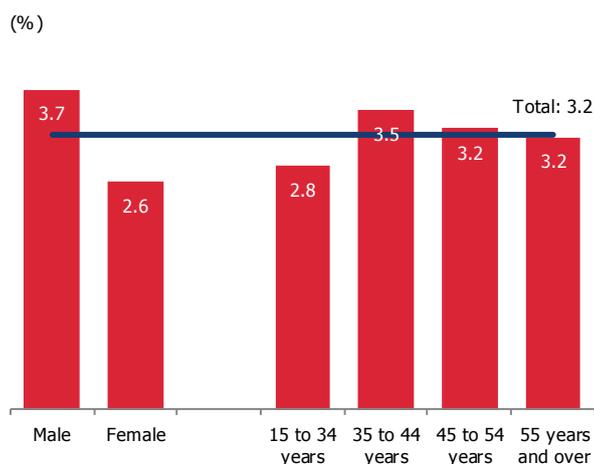
*(Tables 1 to 3 of the Excel attached file)*

According to the results of the module, 165.1 thousand persons aged 15 to 74 years had had at least one accident at work in the twelve months prior to the interview, representing 3.2% of the employed population, less 54.3 thousand people and 0.8 pp (percentage points) than in 2013.

In 2020, the occurrence of at least one accident at work continues to be reported by more men (3.7%) than women (2.6%), but the difference between sexes has narrowed in relation to 2013.

Accidents at work occurred mainly to persons aged 35 to 44 years old (3.5%), 0.6 pp less than in 2013 (4.0%). However, it was in the age group of 45 to 54 years old that the percentage of accidents at work decreased the most (from 4.6% in 2013 to 3.2% in 2020).

**Figure 1: Persons employed or who were employed up to one year before the reference week and reported at least one accident at work in the previous 12 months by sex and age group, Portugal, 2020**

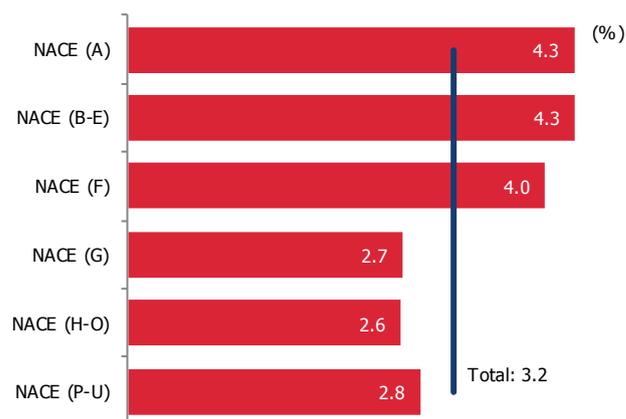


As a percentage of the employed population aged 15-74 years.

Considering the most recent accident at work, 44.5% of the injured were unavailable to work between one day and one month (6.0 pp more than in 2013), and 15.3% for more than one month (less 3.0 pp). For 30.6% of people, the accident did not imply absence from work (minus 3.9 pp).

In the 2nd quarter of 2020, unlike 2013, Construction (section F) workers were not the ones mostly reporting the occurrence of accidents at work in the twelve months prior to the interview, with a decrease in the risk of accidents in this activity, from 5.8% in 2013 to 4.0%. In 2020, the risk of an accident mainly and equitably affected workers in Agriculture, forestry and fishing (section A) and those in Mining and quarrying, manufacturing, electricity, gas, steam and air conditioning supply, water supply; sewerage, waste management and remediation activities (sections B to E), with 4.3% in both cases.

**Figure 2: Persons employed or who were employed up to one year before the reference week and reported at least one accident at work in the previous 12 months by economic activity section (NACE-Rev.2), Portugal, 2020**

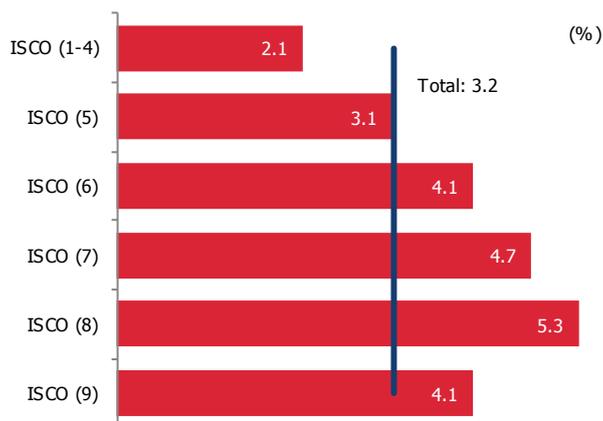


As a percentage of the employed population aged 15-74 years.

Note: The description of each section of NACE rev.2 should be consulted in the annex (page 8).

The risk of accidents at work in the 2nd quarter of 2020 mainly affected plant and machine operators and assemblers (group 8), with 5.3%, and crafted and related trades workers (group 7), with 4.7%.

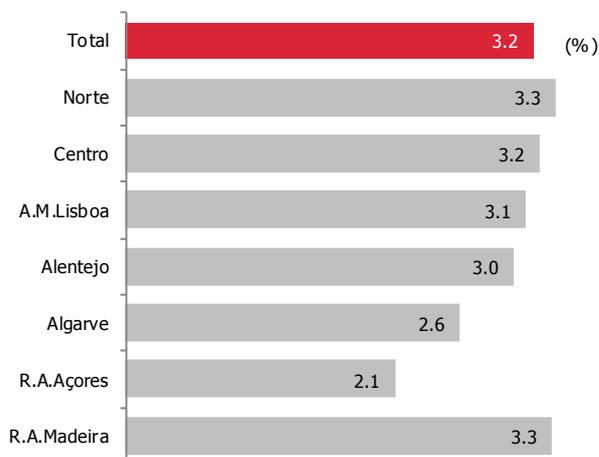
**Figure 3: Persons employed or who were employed up to one year before the reference week and reported at least one accident at work in the previous 12 months by occupational group (ISCO-08), Portugal, 2020**



As a percentage of the employed population aged 15-74 years.  
Note: "Armed forces occupations" are not included due to insufficient responses. The description of each occupational group (ISCO-08) should be consulted in the annex (page 8).

According to the results of the survey, the risk of accidents at work affected residents in Norte and in the Região Autónoma da Madeira slightly more, with higher proportions between the injured and the employed population equal to 3.3%, and lesser residents in the Região Autónoma dos Açores (2.1%) and Algarve (2.6%).

**Figure 4: Persons employed or who were employed up to one year before the reference week and reported at least one accident at work in the previous 12 months, Portugal and NUTS 2, 2020**



As a percentage of the employed population aged 15-74 years.

## 2.2. Work-related health problems

*(Tables 4 to 7 of the Excel attached file)*

The results of the module also allow to assess aspects of work-related health problems caused or aggravated in the twelve months prior to the interview i.e. the problems that arose during that twelve-month period, even though caused before.

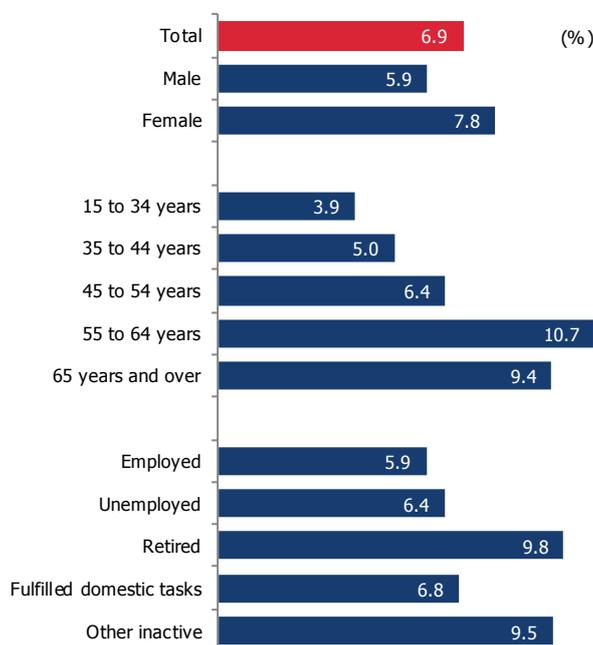
Around half a million people aged 15 to 74 (482.5 thousand) reported having had a health problem caused or aggravated by work, representing 6.9% of the population employed at the time of the interview or ever employed, less 56.7 thousand persons than in 2013.

Work-related health problems continue to affect women mainly and increasingly: 7.8%, compared to 5.9% men, and a growing gender gap, from 1.5 pp in 2013 to 1.9 pp in 2020.

The existence of problems is more frequent from the age of 55: 10.7% of people from 55 to 64 years old, and 9.4% of those aged 65 or older.

Work-related health problems were also most referred by people who at the time of the survey were retired or in other types of inactivity, 9.8% and 9.5%, respectively, in contrast to 5.9% in the case of those who were employed.

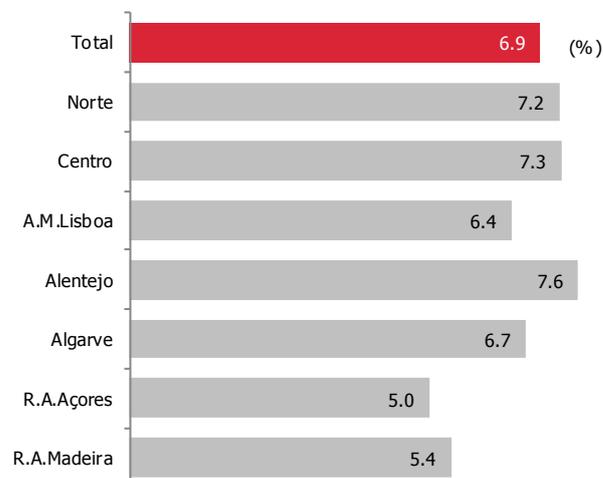
**Figure 5: Persons employed or having ever been employed, who reported at least one work-related health problem in the previous 12 months by sex, age group and activity status, Portugal, 2020**



As a percentage of the population ever employed aged 15-74 years.

The survey results also indicate that work-related health problems mainly affected residents in Alentejo (7.6%) and relatively less residents in the autonomous regions of Açores (5.0%) and Madeira (5.4%).

**Figure 6: Persons employed or having ever been employed, who reported at least one work-related health problem in the previous 12 months, Portugal and NUTS 2, 2020**



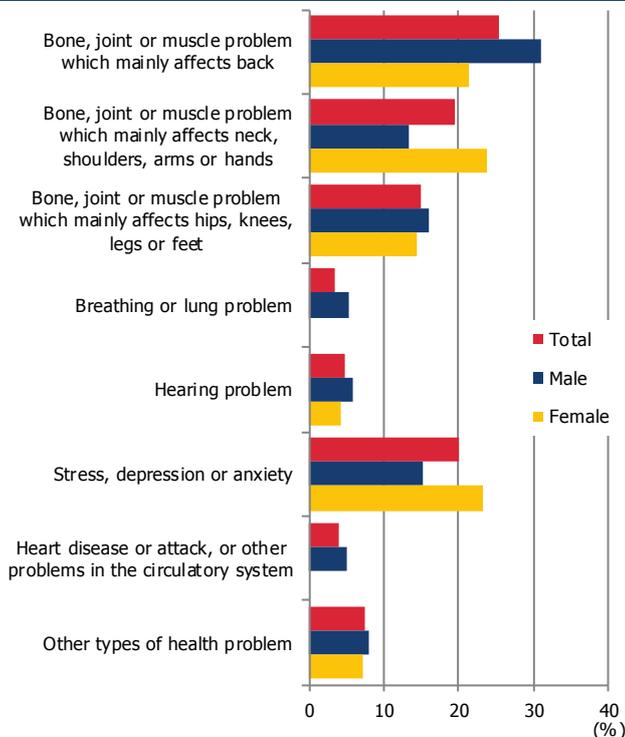
As a percentage of the population ever employed aged 15-74 years.

Bone, joint or muscle problems as a whole (i.e. all those that mainly affect the back, neck, shoulders, arms, hands, hips, legs and feet) were identified in 2020 as the most serious by 59.9% of the population with at least one problem, 6.0 pp more than in 2013.

Among those, bone, joint or muscle problems that mainly affect the back stand out, referred to as the most serious problem in 2020 by 25.4% of the population under analysis, more often by men (31.2%) than by women (21.4%).

Musculoskeletal problems in the neck, shoulders, arms and hands affected 19.5% of the population, more frequently in the case of women (23.7%) than in men (13.3%).

**Figure 7: Persons employed or having ever been employed, who reported at least one work-related health problem in the previous 12 months by health problem and sex, Portugal, 2020**



As a percentage of the population ever employed aged 15-74 years with at least on work-related health problem.

(a) Includes skin problem, headache and/or eyestrain, infectious disease (virus, bacteria or other type of infection), stomach, liver, kidney or digestive problem and other types of health problems.

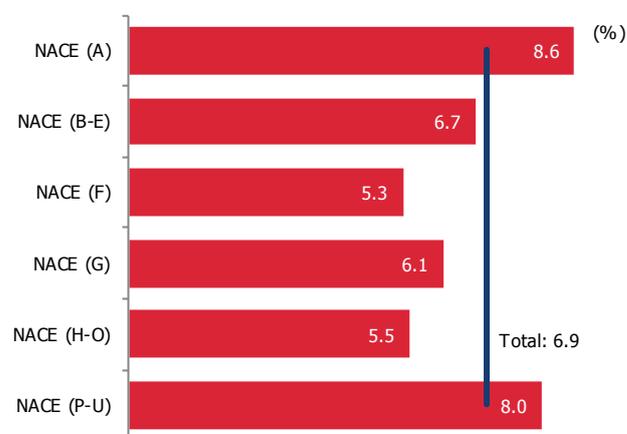
Taking the most serious work-related health problem as a reference, the percentage of the population reporting that it considerably limited their ability to carry out day to day activities increased substantially from 49.4% in 2013 to 55.3% in 2020.

Yet, in 39.2% of the cases the absence from work of the affected people was less than one day, which represents an increase of 8.4 p.p. in relation to 2013.

By economic activity, people who work or have worked in agriculture, forestry and fishing (section A) and in education, human health and social support, artistic, entertainment, sports and recreational activities, other activities services, activities of households employing domestic staff and for their own use, and activities of

international organizations and other extraterritorial institutions (Sections P to U) were the ones who registered work-related health problems in higher proportions: 8.6% and 8.0%, respectively, in comparison to the national average (6.9%).

**Figure 8: Persons employed or having ever been employed, who reported at least one work-related health problem in the previous 12 months by economic activity section (NACE-Rev.2), Portugal, 2020**

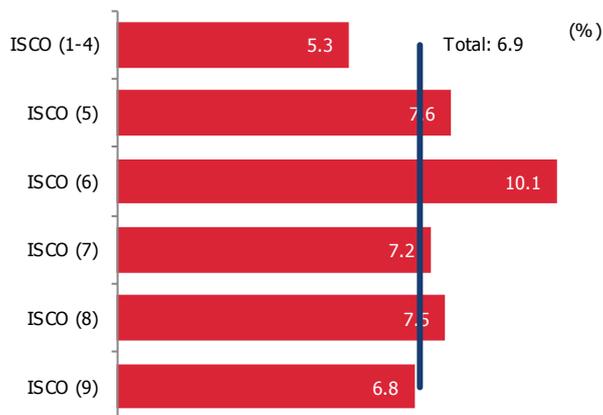


As a percentage of the population ever employed aged 15-74 years.

Note: The description of each section of NACE rev.2 should be consulted in the annex (page 8).

Considering the occupational group, the relative incidence of work-related health problems was greater for skilled agricultural, forestry and fishery workers: 10.1%.

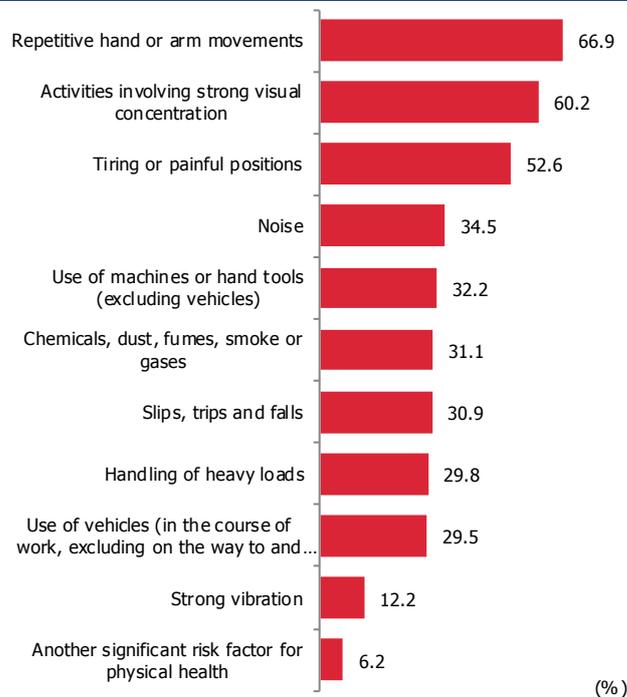
**Figure 9: Persons or having ever been employed, who reported at least one work-related health problem in the previous 12 months by occupational group (ISCO-08), Portugal, 2020**



As a percentage of the population ever employed aged 15-74 years.

Note: "Armed forces occupations" are not included due to insufficient responses. The description of each occupational group (ISCO-08) should be consulted in the annex (page 8).

**Figure 10: Persons employed exposed to at least one risk factor for physical health at the workplace, by risk factor, Portugal, 2020**



As a percentage of the employed population.

### 2.3. Risk factors at work that can affect mental well-being or physical health

*(Tables 8 to 13 of the Excel attached file)*

Of total people employed in the reference week, 82.2% indicated that they were exposed to risk factors that could affect physical health at their workplace, 6.6 pp more than in 2013. These factors continue to affect mainly men (83.5%) than women (80.8%), and very similarly age groups up to 55 years old. Alentejo was the one region where most people reported exposure to these risk factors, 86.2%<sup>1</sup>, and the lowest in the Região Autónoma da Madeira, 80.0%.

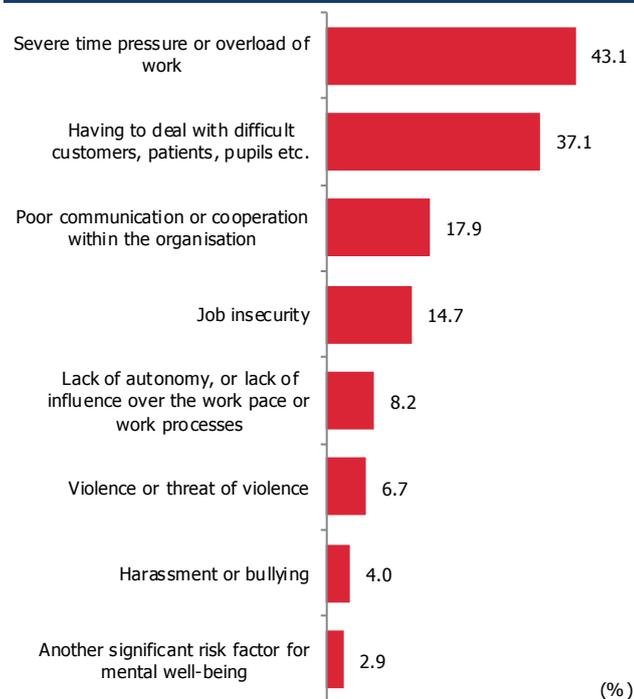
Of the physical health risk factors considered in the survey, the one that was most frequently identified was repetitive hand and arm movements (66.9%).

54.0% of people employed in the reference week indicated that they were exposed to a risk factor for mental health in their workplace, 17.2 pp more than in 2013. In 2020 these factors affected slightly more women (54.8%) than men (53.3%), and more often the age groups from 35 to 54 years old. Alentejo was the one region where most people reported exposure to this type of risk factors, 56.7%, and the lowest in the Região Autónoma da Madeira, with 51.2%.

Of the mental health risk factors considered in the survey, those that were most frequently identified were the severe time pressure or overload of work (43.1%) and having to deal with difficult customers, patients, pupils etc. (37.1%).

<sup>1</sup> Region characterized by a predominance of activities in agriculture, animal production, hunting and extractive industries, associated to a higher incidence of accidents at work and health problems related to work.

**Figure 11: Persons employed exposed to at least one risk factor for mental well-being at the workplace, by risk factor, Portugal, 2020**



As a percentage of the employed population.

## Annex

### Portuguese classification of occupations, 2010 (CPP-2010 / ISCO-08)

- 0 Armed Forces occupations
- 1 Legislative power and executive bodies representatives, leaders, directors and executive managers
- 2 Intellectual and scientific activities specialists
- 3 Technicians and associate professionals
- 4 Clerical support workers
- 5 Personal service, protection and safety workers and salespersons
- 6 Farmers and skilled agricultural, fishery and forestry workers
- 7 Industry and construction skilled workers and craftsmen
- 8 Plant and machine operators, and assemblers
- 9 Not skilled workers

### Portuguese classification of economic activities (CAE-rev.3 / NACE-Rev.2)

- A Agriculture, forestry and fishing
- B Mining and quarrying
- C Manufacturing
- D Electricity, gas, steam and air conditioning supply
- E Water supply; sewerage, waste management and remediation activities
- F Construction
- G Wholesale and retail trade; repair of motor vehicles and motorcycles
- H Transportation and storage
- I Accommodation and food service activities
- J Information and communication
- K Financial and insurance activities
- L Real estate activities
- M Professional, scientific and technical activities
- N Administrative and support service activities
- O Public administration and defence; compulsory social security
- P Education
- Q Human health and social work activities
- R Arts, entertainment and recreation
- S Other service activities
- T Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use
- U Activities of extraterritorial organisations and bodies

### Technical note

The ad hoc module on Accidents at work and work-related health problems (ATPS 2020) was collected together with Labour Force Survey in the 2nd quarter of 2020, similarly to previous editions carried out in 2007 and 2013. The Labour Force Survey is a sampling quarterly survey aimed at residents in private households in Portugal, whose main objective is to characterize the population in relation to the labour market.

The characteristics observed in the survey refer mainly to the situation during a predefined week (from Monday to Sunday), named the reference week. Reference weeks are distributed evenly over the quarter and year. The interviews are usually carried out in the week immediately following the reference week.

In the 2nd quarter of 2020, the information was obtained by direct computer-assisted interviewing, exclusively by telephone, due to the limitations imposed by the measures to fight against the pandemic COVID-19.

The ad hoc module on Accidents at work and work-related health problems included three topics of analysis:

(1) **Accidents at work** in the twelve months prior to the interview: the questions were addressed to all persons aged 15 to 74, employed in the reference week or who had been employed in the twelve months prior to the reference week. In addition to the number and type of accidents at work, the questionnaire addresses the duration of absence from work because of the accident at work.

An **accident at work** is any accident that occurs in the course of work i.e. whilst engaged in an occupational activity or during the time spent at work and which results in a physical or mental injury and excluding commuting accidents that occur during the journey between home and the workplace. The module covers only work accidents with physical injuries.

(2) **Work-related health problems** suffered in the twelve months prior to the interview: the questions were addressed to all persons aged 15 to 74, employed during the reference week or who have ever been employed.

This component includes any illness, disability or other physical or psychological problem (excluding accidents at work) that the person considers to have been caused or aggravated by work (either current or previous), thus not being restricted to situations reported or recognized by health authorities. Health problems having occurred more than a year before the interview are covered if they have an impact during the twelve months prior to the date of the interview.

For the most serious health problem, it was asked the type of problem, the duration of absence from work and the degree of limitation in performing normal daily activities due to it.

(3) **Risk factors at work that can affect mental well-being or physical health:** the questions were addressed to all persons aged 15 or over employed in the reference week. In this component, only non-proxy responses were considered.

The questions concern exposure to certain factors in the workplace that persons are subject to on a daily basis. Factors that may affect physical health included exposure to chemicals, dust, vapors, fumes or gases; noises or vibrations; difficult work postures or movements; handling heavy loads; activities that involving strong of visual concentration; the risk of an accident. Such factors as exposure to harassment or bullying, violence or threat of violence, the pressure of deadlines or work overload were classified as factors that can affect mental well-being.

As a context of the analysis, variables from the Labour Force Survey (2nd quarter of 2020) were used, taking advantage from the collection of the module together with the main permanent survey. Examples of this are the sex and age group of persons, as well as the economic activity and occupational group in which they belonged at the time of the interview (in the case of employees) or the last working activity (in the case of non-employees at the time of the interview).

The estimation of results takes into account the weighting procedure of the Labour Force Survey. Yet, because the final sample (respondents) of the module is lower than that of the Labour Force Survey, two specific weights are used:

- A weight that takes into account the people who responded to the main survey but not the module, which is applied in the components of accidents at work and work-related health problems: the estimates of the total relevant population given by the 2nd quarter of 2020 of the Labour Force Survey, by sex and 11 age groups (15-24 years; 25-29 years; 30-34 years; 35-39 years; 40-44 years; 45-49 years; 50-54 years; 55-59 years; 60-64 years; 65-70 years; 70 or more years) were used as margins for the calibration;

- A weight that takes into account only the non-proxy answers in the component of risk factors that may affect mental well-being or physical health: the estimates of the total relevant population given by the 2nd quarter of 2020 of the Labour Force Survey, by sex and 5 age groups (15-24 years; 25-29 years; 30-34 years; 35-39 years; 40-44 years; 45-49 years; 50-54 years; 55-59 years; 60-64 years; 65-70 years; 70 or more years) were used as margins for the calibration, with the number of age groups being lesser than in the previous weight due to a smaller number of responses.

Estimates with a coefficient of variation greater than 22% are not included or referred to in this analysis.