Occupational diseases statistics - occupational cancers

Statistics Explained

Data extracted in February 2025.
Planned article update: February 2026.

EXPERIMENTAL

Highlights

" In 2022, the number of newly recognised cases of people having an occupational cancer in the EU was 3 309. "

" The number of newly recognised cases of people having an occupational cancer was considerably lower in the period 2020-22 than in earlier years, at least in part reflecting the impact of the COVID-19 pandemic on occupational health services. "

" The most common types of occupational cancers in the EU were mesothelioma and cancer of the lung and bronchus, with 1 383 and 1 328 cases, respectively, in 2022. "

This article presents a set of main statistical findings in relation to indicators concerning occupational cancers in the European Union (EU) . Such data are used to assess EU legislation on health and safety at work and facilitate monitoring of preventive actions. The statistics presented are experimental and are based on administrative data; these data reflect different legal and social security systems, which impact on procedures for the recognition, detection and reporting of occupational diseases. The data for the EU include data for 24 EU countries : data for Germany, Greece and Portugal are not included. Country profiles for individual EU countries are available on Eurostat's website in the relevant dedicated section . The country profiles show the national situation in relation to statistics on occupational diseases.

Overall developments

Occupational cancer is the term given to cancers caused by exposure to carcinogenic factors in the working environment, generally due to long-term exposure. Many cancer cases present themselves several years after the exposure took place, in some cases over 40 years later.

Table 1 presents a time series of the number of recognised cases of occupational malignant neoplasms (malignant neoplasms are hereafter referred to as cancers) in the EU from 2013 (the beginning of the available time series) to 2022. The total number of cases was relatively stable between 2013 and 2019, ranging from 3 848 to 3 978. There was a clear fall in the number in 2020 and a small rebound in 2021 that also continued in 2022. The relatively low case numbers in 2020, 2021 and 2022 reflect the impact of the COVID-19 pandemic and related containment measures, in particular the impact on healthcare systems; see the
Context section for more information. In 2022, there were 3 309 cases of occupational cancers recognised in the EU.

Number of recognised cases of occupational cancers, EU, 2013–22

ICD10 label	ICD10 code	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Malignant neoplasms	C	3 978	3 890	3 888	3 894	3 971	3 892	3 848	3 094	3 258	3 309
Malignant neoplasm of nasal cavity and middle ear	C30	43	69	49	60	45	59	52	48	54	52
Malignant neoplasm of accessory sinuses	C31	94	87	95	131	116	96	102	99	110	112
Malignant neoplasm of larynx	C32	23	40	29	39	25	27	34	21	15	11
Malignant neoplasm of bronchus and lung	C34	1 724	1 668	1 700	1 573	1 575	1 569	1 572	1 286	1 277	1 328
Malignant melanoma of skin	C43	4	11	13	9	10	12	14	7	11	10
Other malignant neoplasms of skin	C44	92	100	104	97	96	111	129	85	73	97
Mesothelioma	C45	1 623	1 530	1 524	1 543	1 588	1 529	1 510	1 275	1 409	1 383
Malignant neoplasm of bladder	C67	240	263	256	309	369	367	303	161	148	143
Lymphoid leukaemia	C91	11	8	8	11	16	3	5	11	15	7
Myeloid leukaemia	C92	25	17	19	27	28	22	19	11	14	20
Leukaemia of unspecified cell type	C95	15	18	12	11	17	11	13	11	16	19
Other malignant neoplasms	Remainder	84	79	79	84	86	86	95	79	116	127

Note: excluding Germany, Greece and Portugal.

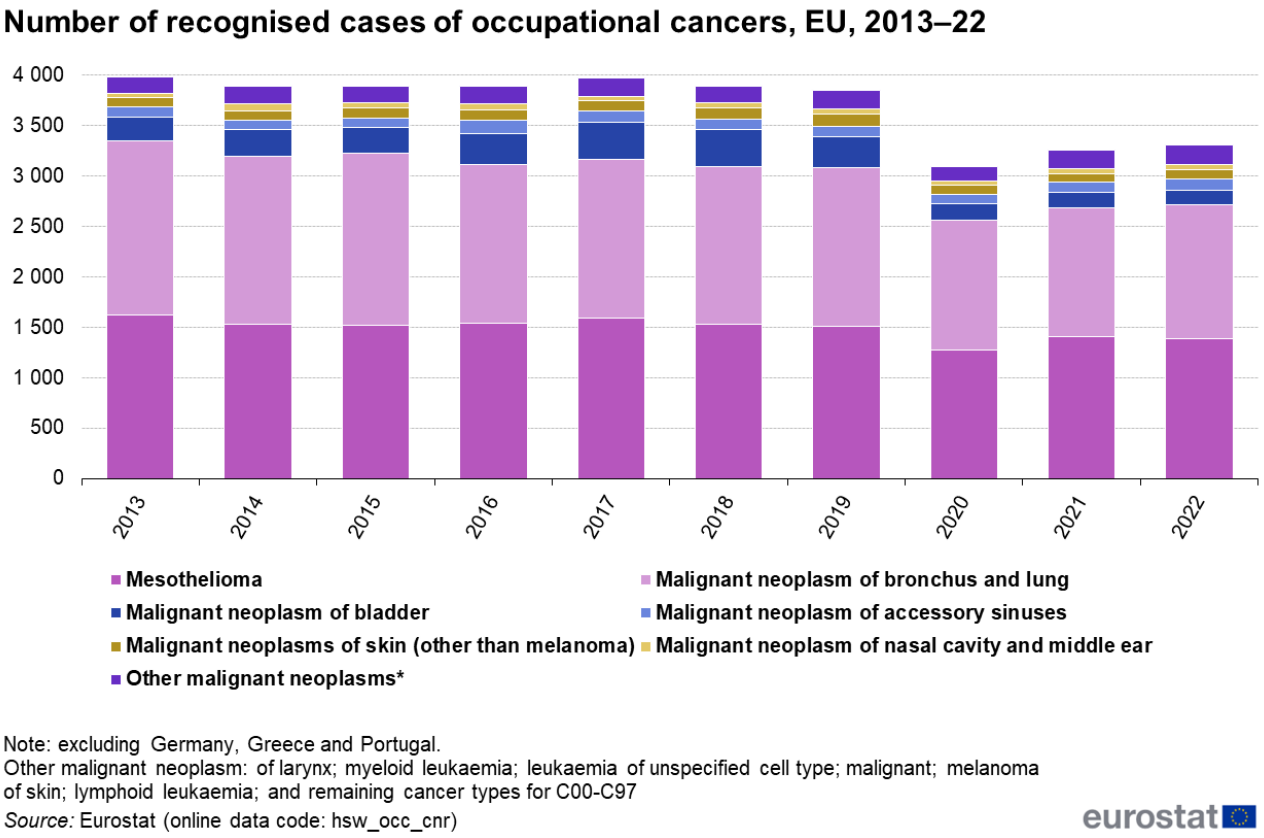
Source: Eurostat (online data code: hsw_occ_cnr)

eurostat

Table 1: Number of recognised cases of occupational cancers, EU, 2013–22 Source: Eurostat (hsw_occ_cnr)

The 2 most common types of occupational cancer in 2022 were **mesothelioma** , a type of cancer connected to asbestos exposure, which develops in the thin layer of tissue that covers many of the internal organs (such as the lungs, abdomen or heart), known as the mesothelium, and **lung and bronchus cancer** .

In 2022, the number of recognised cases of mesothelioma as an occupational cancer was 1 383 while the number of cases of lung and bronchus cancer was 1 328. Together, these 2 types of cancer accounted for around four fifths (81.9%) of all recognised cases of occupational cancers, as can be seen in Figure 1.



Note: excluding Germany, Greece and Portugal.
Other malignant neoplasm: of larynx; myeloid leukaemia; leukaemia of unspecified cell type; malignant; melanoma of skin; lymphoid leukaemia; and remaining cancer types for C00-C97
Source: Eurostat (online data code: hsw_occ_cnr)

Figure 1: Number of recognised cases of occupational cancers, EU, 2013–22 Source: Eurostat (hsw_occ_cnr)

Figure 2 presents the share of each type of occupational cancer among all recognised cases of occupational cancers in 2013 and 2022. Given the nature of such diseases – typically resulting from long-term exposure – it is unsurprising that the shares of each particular type of cancer within the total were similar in both years.

- The share accounted for by mesotheliomas grew from 40.8% in 2013 to 41.8% in 2022, an increase of 1.0 percentage point (pp) , as the share for cancer of the accessory sinuses was up 1.0 pp from 2.4% to 3.4%. The share of other skin cancers than melanoma also increased from 2.3% to 2.9%, up 0.6 pp and the share for cancer of the nasal cavity and middle ear was up 0.5 pp from 1.1% to 1.6%.
- There was also an increase of 1.7 pp for the residual category of other malignant neoplasms.
- Smaller percentage point changes were observed for lymphoid leukaemia (down of 0.1 pp), cancer of the larynx (down 0.3 pp), malignant melanomas of skin and leukaemia of unspecified cell type (both up 0.2 pp).
- The share accounted for by lung cancer fell from 43.3% in 2013 to 40.1%, a decrease of 3.2 pp, while the share for cancer of the bladder was down 1.7 pp from 6.0% to 4.3%.
- No variation was observed for myeloid leukaemia (same share in both years).

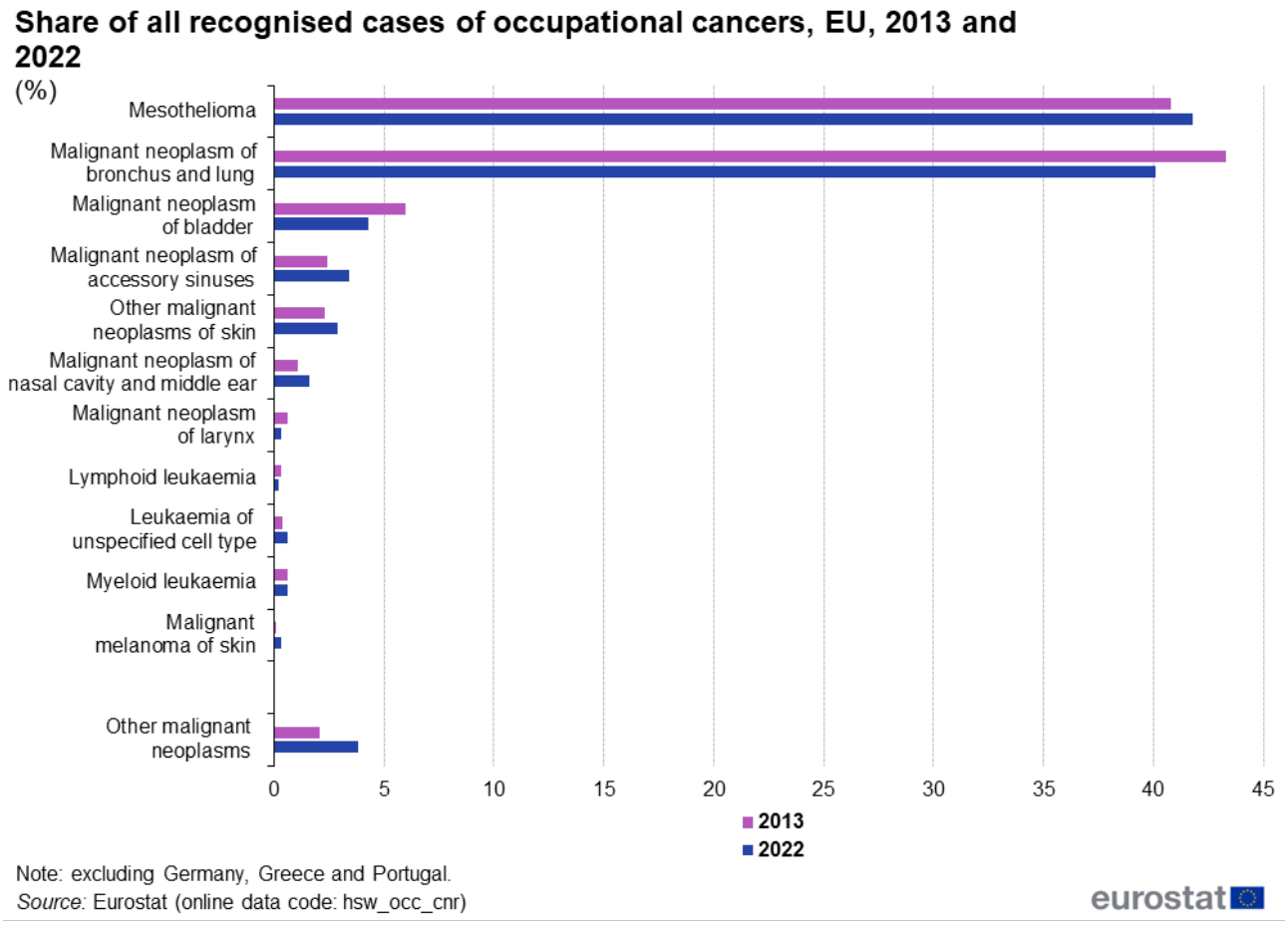


Figure 2: Share of all recognised cases of occupational cancers, EU, 2013 and 2022 (%) Source: Eurostat (hsw_occ_cnr)

Number of recognised cases of occupational cancers by order of magnitude

The 4 small line charts which make up Figures 3a and 3b show the development between 2013 and 2022 in the number of recognised cases of each type of cancer. The various types of cancer are grouped into the 4 charts according to the order of magnitude of the number of recognised cases; the 4 charts all have different scales on their y-axes.

Unsurprisingly, the 2 most common types of occupational cancers – **mesothelioma** and **lung cancer** – showed broadly similar developments between 2013 and 2022 as the total for all occupational cancers.

- Both recorded a relatively overall fall in the number of cases between 2013 and 2022, down 14.8% for mesotheliomas and down 23.0% for lung cancer.
- The fall in the number of cases of cancer of the bladder between 2013 and 2022 was notably stronger (down 40.4%).
- The number of cases of other cancers, residual category rebounded 51.2% between 2013 and 2022, and also the number for cancers of the accessory sinuses (up 19.1%).

Bladder cancer was the third most common specific type of occupational cancer in 2022, with 143 cases. There was a rapid increase in the number of cases between 2015 and 2017 (up 44.1%), with the number remaining high in 2018 before falling back in 2019 (down 17.4%). As for the more common types, the number of cases recognised for bladder cancer fell strongly in 2020, down 46.9%. This downward development continued into 2022 when a fall of 3.4% was observed.

For the residual category of **other malignant neoplasms** , the number of cases was relatively stable during the

early years of the period studied, varying between 79 and 86 cases from 2013 to 2018. In 2019 there was an increase of 10.5%, before a fall of 16.8% in 2020. The 2022 data reaches the highest level in the time series following the 2021 rebound.

The number of cases of **cancer of the accessory sinuses** was relatively stable between 87 and 112 most years from 2013 to 2022, with somewhat higher values in 2016 and 2017.

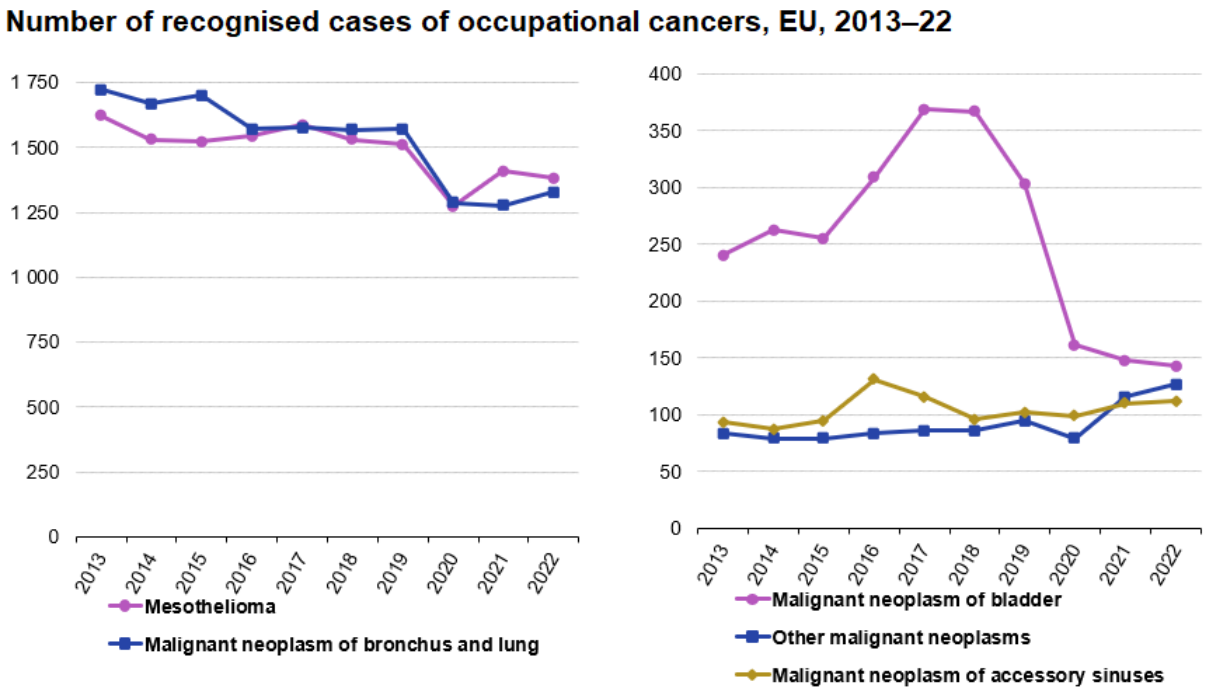


Figure 3a: Number of recognised cases of occupational cancers, EU, 2013–22 Source: Eurostat (hsw_occ_cnr)

The less common types of occupational cancers often displayed more varied developments.

- **Skin cancers other than melanoma** were the fifth most common (specific) type of occupational cancer in 2022, with 97 cases recognised. The development in the number of cases between 2013 and 2021 was relatively volatile with increases and decreases alternating every 2 years. The largest annual rates of change were observed in the 4 most recent years. Overall, the number of cases increased by 5.4% in 2022 compared with 2013.
- **Cancer of the nasal cavity and middle ear** was the 6th most common type of occupational cancer in 2022, with 52 cases. As for skin cancers other than melanomas, the development for cancer of the nasal cavity and middle ear between 2013 and 2022 was relatively volatile with increases and decreases alternating every year between 2013 and 2019, with annual rates of change varying from -29.0% to 60.5%. The developments were more subdued in the most recent years, with a rise of 12.5% in 2021 followed by a fall of 3.7% in 2022.
- The 5 least common types of occupational cancer were each recognised in equal or fewer than 20 cases in 2022.
  - The number of cases of **leukaemia of unspecified cell type** ranged between 11 and 19 cases from 2013 to 2022.
  - From 2013 to 2019, the number of recognised cases of **cancer or the larynx** fluctuated between 23 and 40 cases; in the last 3 years 2020, 2021 and 2022 the number fell below this range, to 21, 15 and 11 cases, respectively.

– The number of cases of **lymphoid leukaemia** is small in 2022, 7 in total, making this the least common specific type of recognised cancer (among those studied) in 2022, but varied in relative terms greatly during the years from 2013 to 2021: the highest number was 16 cases in 2017 and the lowest 3 cases in the following year.
– Between 2013 and 2022, the number of recognised cases of **myeloid leukaemia** ranged from 11 cases in 2020 to 28 cases in 2017; in the most recent year 2022, there were 20 cases.
– The number of cases of **malignant melanoma of skin** was at its lowest, at 4 cases, at the start of the time series (2013) and peaked at 14 cases in 2019. There were 10 cases in 2022.

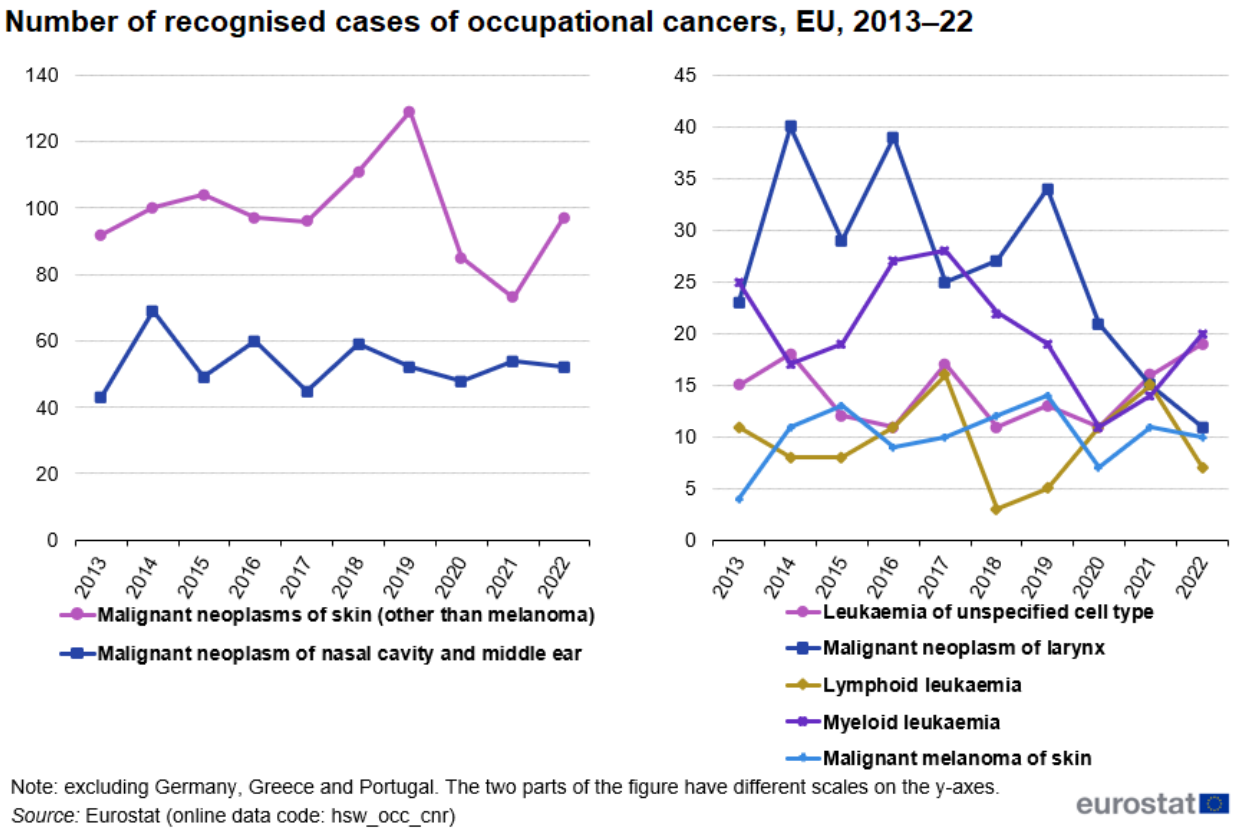


Figure 3b: Number of recognised cases of occupational cancers, EU, 2013–22 Source: Eurostat (hsw_occ_cnr)

Source data for tables and graphs

- Occupational disease statistics – occupational cancers: tables and figures

Data sources

Legal basis

Occupational disease statistics are based on administrative data collected nationally by various organisations, usually the national statistical offices. Regulation (EC) No 1338/2008 outlines the domain specific requirements of the data collection, for example in terms of the aim, scope, subjects covered, reference periods, intervals and time limits for data provision and metadata.

Geographical coverage

Germany and Greece did not take part in the pilot data collection while Portugal provided data for 2013–2015. As such, the data used to compile the data for the EU are based on the availability among 24 EU Member States.

List of occupational cancers

The analysis of occupational cancers (malignant neoplasms) is composed of 11 specific cancers and a residual category of other malignant neoplasms.

- C Malignant neoplasms
  - C30 Malignant neoplasm of nasal cavity and middle ear
  - C31 Malignant neoplasm of accessory sinuses
  - C32 Malignant neoplasm of larynx
  - C34 Malignant neoplasm of bronchus and lung
  - C43 Malignant melanoma of skin
  - C44 Other malignant neoplasms of skin
  - C45 Mesothelioma
  - C67 Malignant neoplasm of bladder
  - C91 Lymphoid leukaemia
  - C92 Myeloid leukaemia
  - C95 Leukaemia of unspecified cell type
  - Other malignant neoplasms

Variables collected

Although not presented in this article, the following information is requested for each recognised occupational disease case

- sex
- age
- employment status during the period of harmful exposure
- occupation during the period of harmful exposure
- economic activity of the employer
- severity
- exposure factor.

Data with breakdown by some variables is available in the dedicated section on occupational diseases .

Experimental nature

The experimental nature of these statistics is mainly related to the fact that the data on recognised cases of occupational diseases reflect not only the occurrence of such diseases, but also the way in which the concept of occupational disease has been integrated into national social security systems. The existence of different legal systems and procedures for the recognition of occupational diseases in the EU makes comparisons difficult, noting that a low number of recognised cases of an occupational disease in a given EU country is neither a sign of the absence of such a disease nor necessarily a clear proof of successful prevention. In the same way, well-established detection systems and large-scale information campaigns could explain the high numbers of reported and recognised cases in some countries.

Context

EU statistics on occupational diseases are essential elements in the European Commission's strategy to assess the efficiency of EU legislation on health and safety at work. To improve the working conditions, knowledge of the numbers, rates, frequencies and trends of occupational diseases are fundamental. They allow preventive actions across the EU to be monitored and prioritised.

At the present time, there is no EU-wide database regarding statistics on occupational diseases. The objective of the EU's pilot exercise in this area is to respond to the need for data by gathering national data in a single database and from this starting point to provide information on the developments concerning the most commonly recognised occupational diseases within the EU. These requirements are underlined in Regulation (EC) No 1338/2008 of the European Parliament and of the Council of 16 December 2008; annex V . Beyond providing information on the occurrence of diseases, these data could potentially provide other useful information regarding causality (exposure and medical consequences), which is needed for the prevention and evaluation of occupational diseases. The pilot data collection aims to support further development of the EU's occupational diseases statistics.

Note for reference years 2020, 2021 and 2022

With the COVID-19 pandemic, preventive measures were put in place with the aim of limiting the spread of the Coronavirus and to combat the epidemic. Some of these measures resulted in activities being either completely stopped or restricted by many employers. In some cases, employees were encouraged or obliged to work remotely, for example from home. For the economic sectors where activity was stopped or reduced, the number of accidents decreased. Inactivity or reduced activity in certain sectors resulted in a smaller number of workers and/or working hours. Consequently, there was an atypical decrease in the number of reported occupational diseases. By contrast, in certain other sectors the COVID-19 pandemic generated an increase in activity, for example, for human health activities, residential care activities or social work activities without accommodation. The increased activity in sectors such as these generally generated higher numbers of reported occupational diseases (or reported accidents at work in some countries) when the cases of COVID-19 of occupational origin were included according to national practices and legislation. Occupational health services that deal with the administrations in charge of receiving notifications, reporting, investigations and recognition of occupational diseases may have operated with limited capacities. The impact of all the actions described above led to a decrease in the total number of all short-listed occupational diseases (not just cancer) in the data collected for reference years 2020, 2021 and 2022 (compared with 2019 and the previous years for which data are available).

Explore further

Other articles

- Health in the European Union – facts and figures – online publication, see
  - Health statistics introduced
  - Accidents and injuries statistics
- Accidents at work statistics
- Occupational_diseases_statistics

Database

- Health , see

Health and safety at work (hsw)

Occupational diseases (from 2013 onwards; source: EODS) (hsw_occ)

Recognised cases of occupational cancers – experimental statistics (hsw_occ_cnr)

Thematic section

- Health
- Experimental statistics

Methodology

- Variables collected

External links

- European Agency for Safety and Health at Work
- European Commission – Employment, Social Affairs and Inclusion – Health and safety at work
  - EU strategic framework (2021–2027)
- European Foundation for the Improvement of Living and Working Conditions (EUROFOUND) – Health and well-being at work
- International Labour Organization (ILO) – Safety and health at work
- World Health Organisation (WHO) – Occupational health