

Workplace fatal injuries in Great Britain, 2022

Data up to March 2022

Annual statistics

Published 6 July 2022



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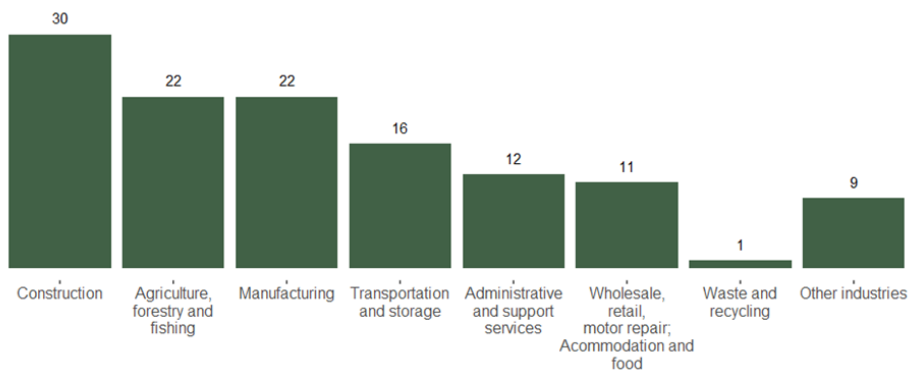
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Summary

123 workers killed in work-related accidents in 2021/22.

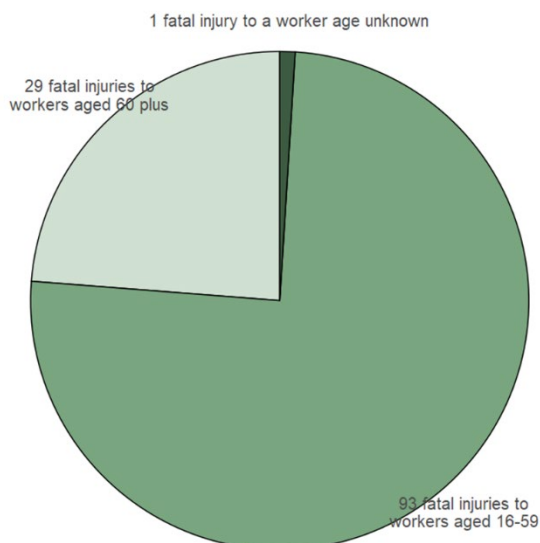
Fatal injuries to workers by main industry (2021/22)

Around a quarter of fatal injuries to workers in 2021/22 were in the Construction sector (30 deaths), with a further 18% in each of the Agriculture, forestry and fishing sector and the Manufacturing sector (22 deaths in each). This is a similar profile of deaths by industry as seen in previous years.



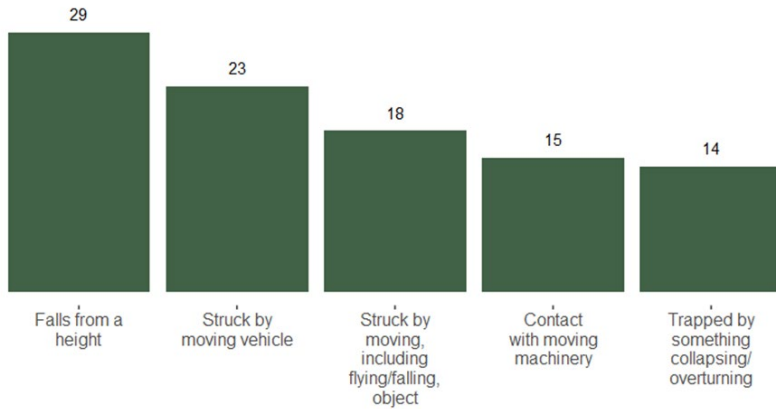
Fatal injuries to workers by age (2021/22)

Around a quarter of the deaths in 2021/22 were to workers aged 60 and over (29), similar to the profile in earlier years.



Main kinds of fatal accidents for workers (2021/22)

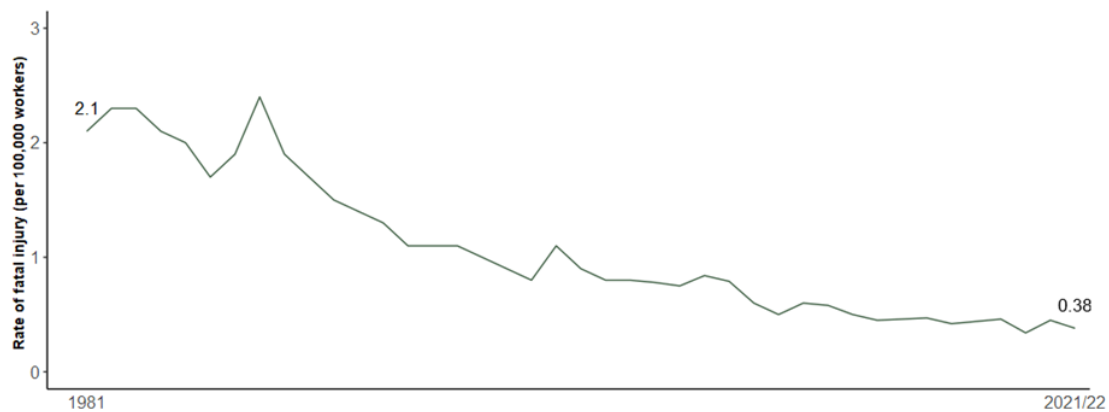
The most common kinds of fatal accidents to workers in 2021/22 continue as falls from a height, struck by moving vehicle, and struck by moving, including flying/falling, object. These accounted for over half of all fatal accidents to workers in 2021/22.



Note: Chart above shows all accident kinds accounting for 10 or more deaths in 2021/22.

Rate of fatal injury per 100,000 workers

Over the long-term, there has been a downward trend in the rate of fatal injuries to workers, though in the recent years prior to the coronavirus pandemic, the rate had been broadly flat. In both 2020/21 and 2021/22 the rate remains broadly in line with pre-pandemic levels.



80 members of the public were also killed in 2021/22 as a result of a work-related accident (excluding deaths to ‘patients and service users’ in the healthcare and adult social care sectors in England).

Data source: RIDDOR - Reporting of Injuries, Diseases and Dangerous Occurrences Regulations. Figures for 2021/22 are published as provisional at this stage and will be finalised in July 2023.

Introduction

Important Note: The coronavirus (COVID-19) pandemic and the government's response has impacted recent trends in health and safety statistics published by HSE, including fatal injury statistics. This should be considered when comparing across time periods. More details can be found in our technical report on the impact of the coronavirus pandemic on health and safety statistics, see www.hse.gov.uk/statistics/coronavirus/covid-19.pdf.

This report provides headline numbers on deaths resulting from a work-related accident in 2021/22 that were reportable under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR) to any of the main enforcing authorities for health and safety at work¹. Numbers include both fatal injuries to workers and to members of the public. The counts for 2021/22 are currently provisional and will be finalised in July 2023 to take account of any necessary adjustments. [See annex for more details]. In tables and chart headings, 2021/22 is marked as 'p' for clarity.

Fatal injuries are thankfully rare events. There is a degree of chance and randomness to the annual count resulting in an element of natural variation from one year's count to the next. To allow for this natural variation, alongside figures for 2021/22, this report also presents the annual average estimate for the five years 2017/18-2021/22, which reduces the effect of year-on-year fluctuations and gives a more stable current picture.

The figures make up part of a long running series enabling both short and long-term comparisons of change. The information includes only those cases of fatal injury that the enforcing authorities have judged as meeting the reporting criteria for workplace injuries as set out in the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR). Two notable exclusions from these statistics, as outside the scope of injury reporting under RIDDOR, are fatal diseases (including COVID-19) and fatal accidents on non-rail transport systems. (See Annex for more details).

¹ Main enforcing authorities include the Health and Safety Executive, Local Authorities, Office for Nuclear Regulation and Office of Rail and Road. These statistics do not cover the Care Quality Commission (CQC) which is the lead enforcement body for incidents to 'patients and service users' in the healthcare and adult social care sectors in England. Therefore generally, the number of deaths to members of the public exclude deaths in the health and social care sector in England.

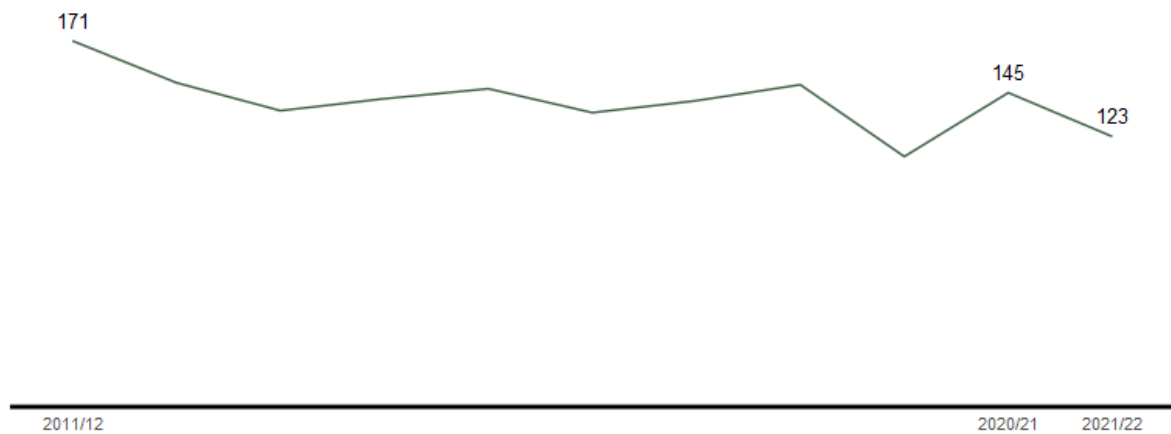
Fatal injuries to workers

Headline figures

A total of 123 workers were killed in work-related accidents in Great Britain in 2021/22, a decrease of 22 fatalities from 2020/21.

The numbers of fatal injuries are subject to random variation, fluctuating year-on-year, therefore it is necessary to look at trends over a number of years. In the recent years prior to the coronavirus pandemic, the number of annual fatalities had been broadly flat. In both 2020/21 and 2021/22 the number of annual deaths remain broadly in line with pre-pandemic levels.

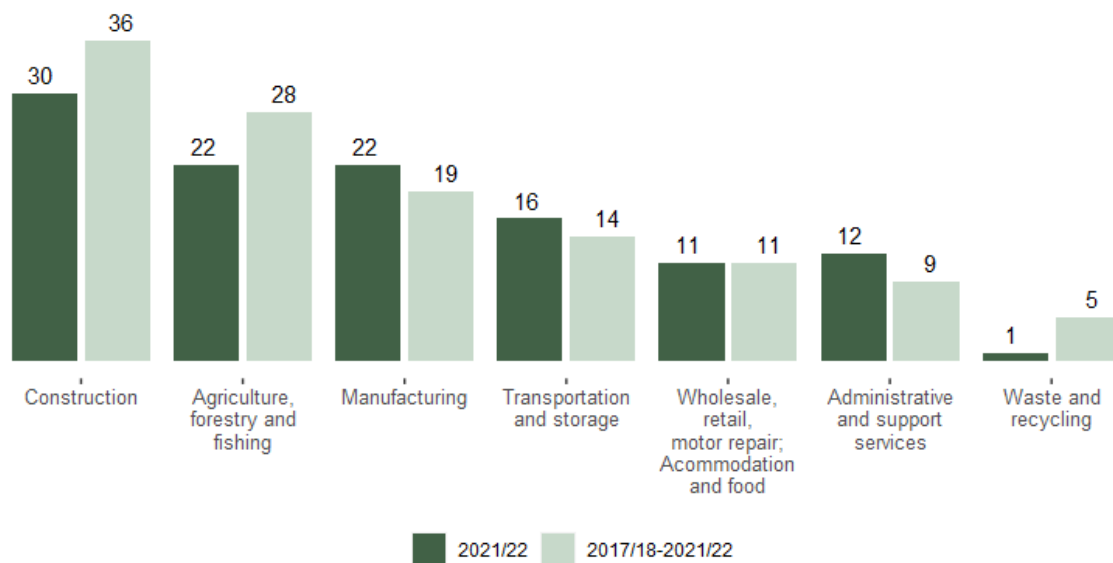
Figure 1: Fatal injuries to workers: GB 2011/12 - 2021/22p.



Injuries by industry²

There are two ways of looking at fatality numbers. The first is to look at the absolute count. On this basis, Construction and Agriculture, forestry and fishing tend to come out worst as they account for the greatest number of fatalities each year.

Figure 2: Number of fatal injuries by selected main industry group, 2021/22p and annual average for 2017/18-2021/22p.



The profile of fatal injuries to workers by industry sector in 2021/22 is broadly similar to the profile for the 5-year period 2017/18-2021/22, with 73% of fatal injuries in 2021/22 occurring in four industry sectors: Construction, Agriculture, forestry and fishing, Manufacturing and Transportation and storage.

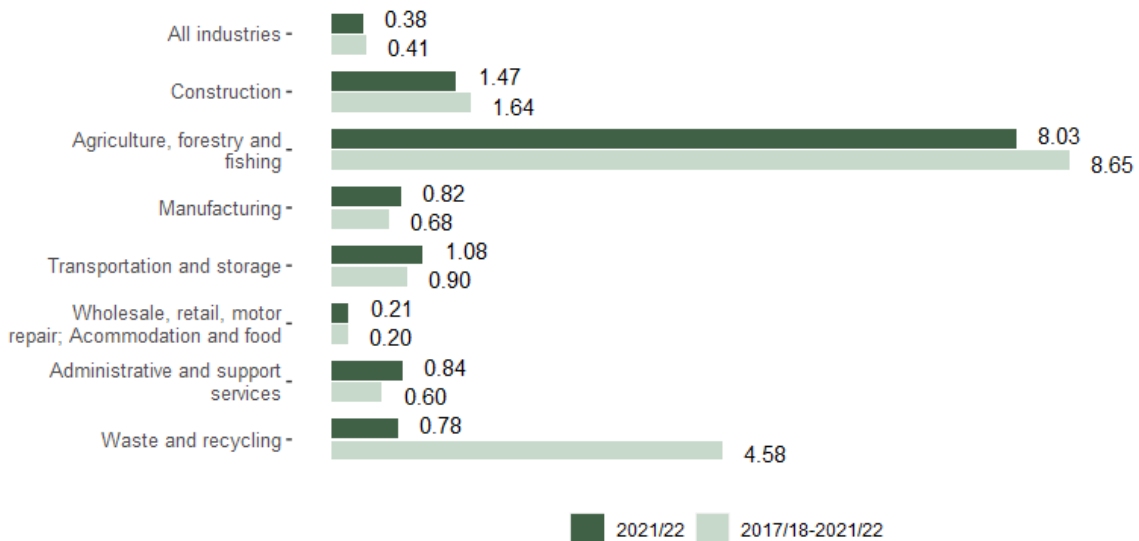
- The number of injuries in Construction in 2021/22 was 30, a decrease of 10 from the previous year total (40). The five-year average for fatal injuries in this sector is 36.
- In Agriculture, forestry and fishing in 2021/22 there were 22 fatal injuries, a decrease of 12 from the previous year total (34). The five-year average for fatal injuries in this sector is 28.
- The Manufacturing sector saw 22 fatal injuries in 2021/22, an increase of 3 from the previous year total (19). The five-year average for fatal injuries in this sector is 19.

² Industry is defined using the 2007 [Standard Industrial Classification](#). See annex for more details.

- In the Transportation and storage sector the total number of fatal injuries in 2021/22 was 16, an increase of 5 from the previous year total (11). The five-year average for fatal injuries in this sector is 14.

The second approach of looking at fatality numbers is to consider the **fatal injury rate** in terms of the number of fatalities per 100,000 workers employed. On this basis, Agriculture, forestry and fishing comes out worst.

Figure 3: Rate of fatal injuries by selected main industry group (per 100,000 workers), 2021/22p and annual average for 2017/18-2021/22p.



Based on the annual average rates for 2017/18-2021/22 (as this reduces the effect of year-on-year fluctuations and gives a more stable picture):

- The rate of fatal injury to workers in the Agriculture, forestry and fishing sector remains markedly higher than the average across all industries: 21 times as high as the all industry rate.
- The Waste and recycling sector also has an elevated rate of fatal injury over this period compared to the average across all industries: 11 times as high. However, with just one worker death in the sector in 2021/22 the rate for this year alone is markedly lower than the average rate for this sector across the five-year period.
- The rate of fatal injury in Construction, while around four times as high as the average rate across all industries, is considerably less than the rate in Agriculture, forestry and fishing despite accounting for a greater number of cases.

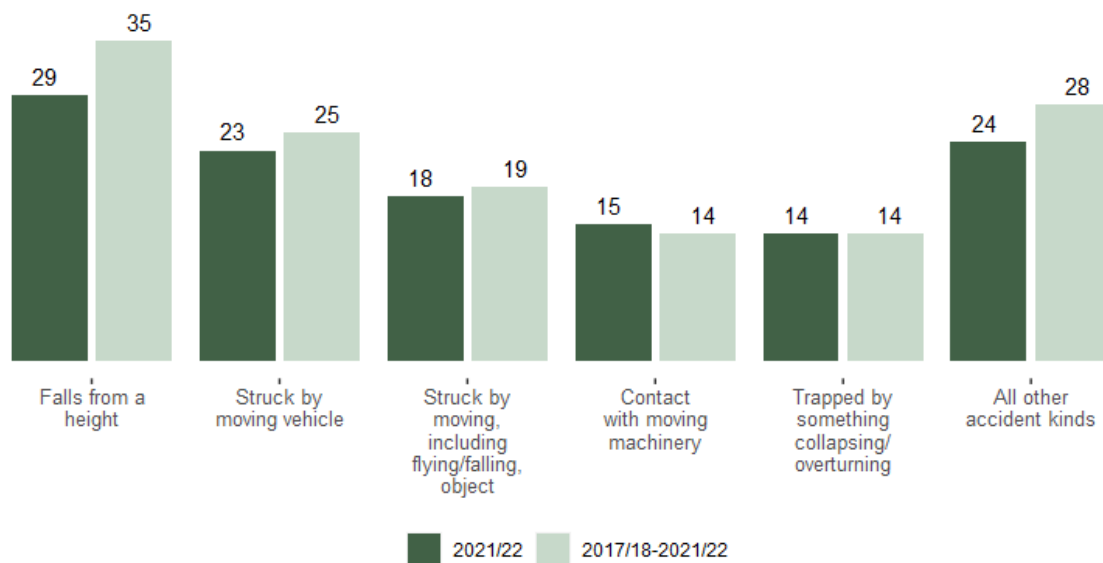
- The Manufacturing and the Transportation and storage sectors have a rate of fatal injury around 1.5 and 2 times the average rate across all industries respectively.
- While the combined 'Wholesale, retail, motor repair; Accommodation and food services' sector accounted for around 8% of fatal injuries between 2017/18 and 2021/22, in terms of rate the overall sector is relatively low risk with an injury rate of around half the average rate across all industries. However, there will be variation in risk across activities within the sector.

For more details of fatal injuries by main industry sector, see Table 1 www.hse.gov.uk/statistics/tables/ridfatal.xlsx.

Injuries by accident kind

79% of all fatal injuries were accounted for by just 5 different accident kinds in the combined five-year period 2017/18-2021/22 (see Figure 4 below).

Figure 4: Number of fatal injuries to workers by accident kind, 2021/22p and annual average for 2017/18-2021/22p.



Falls from a height, being struck by a moving vehicle and being struck by a moving, including flying or falling, object continue as the three main causes of fatal injury, between them accounting for over half of all fatal injuries each year since at least 2001/02.

- In 2021/22, 29 fatal injuries were due to Falls from a height accounting for 24% of all worker deaths over the year.
- Struck by moving vehicle accounted for 23 fatal injuries to workers in 2021/22, representing 19% of the total number of deaths over the year.
- 15% (18) of the fatal injuries in 2021/22 were caused by Struck by moving, including flying/falling, object.

For more details of fatal injuries by accident kind, see Table 3 www.hse.gov.uk/statistics/tables/ridfatal.xlsx.

Injuries by gender and age

Fatal injuries to workers are predominately to male workers. In 2021/22, 116 (94%) of all worker fatalities were to male workers, a similar proportion to earlier years.

In terms of age, 24% of fatal injuries in 2021/22 were to workers aged 60 and over, even though such workers made up only 11% of the workforce.

Figure 5: Number of fatal injuries by age group, 2021/22p.

Base: Deaths where age was known. There was one death where age was unknown in 2021/22 which is excluded from the chart below.

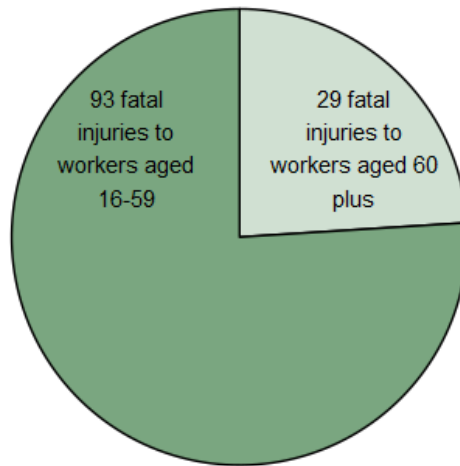
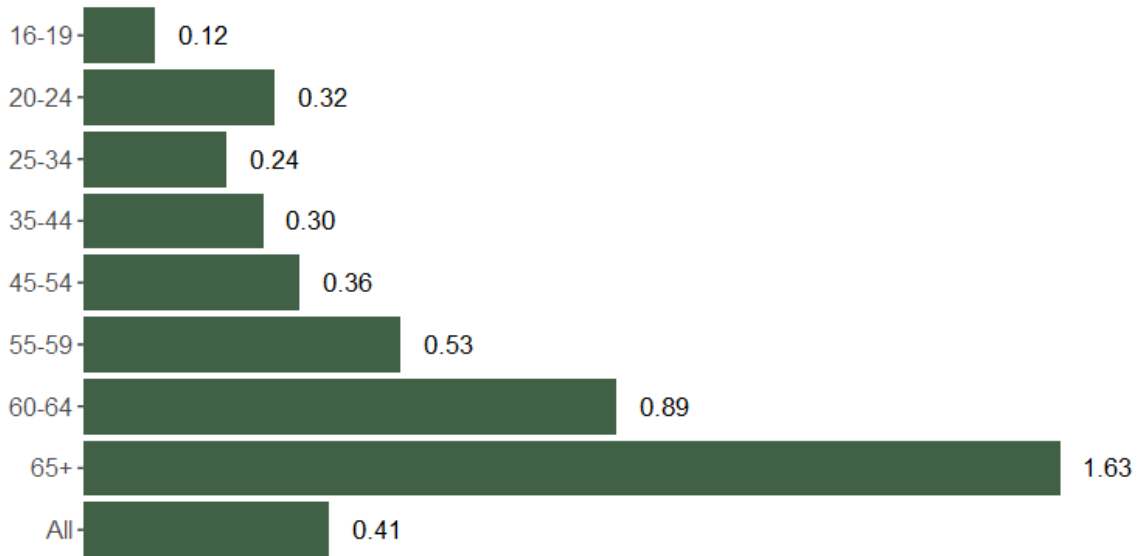


Figure 6 below shows the fatal injury rate by age group for the period 2017/18-2021/22. This clearly shows how the rate of fatal injury increases with age, with workers aged 60-64 having a rate around twice the average rate across all age groups and workers aged 65 and over a rate that is four times as high as the average rate across all age groups.

Figure 6: Rate of fatal injuries by age group (per 100,000 workers), annual average for 2017/18-2021/22p.



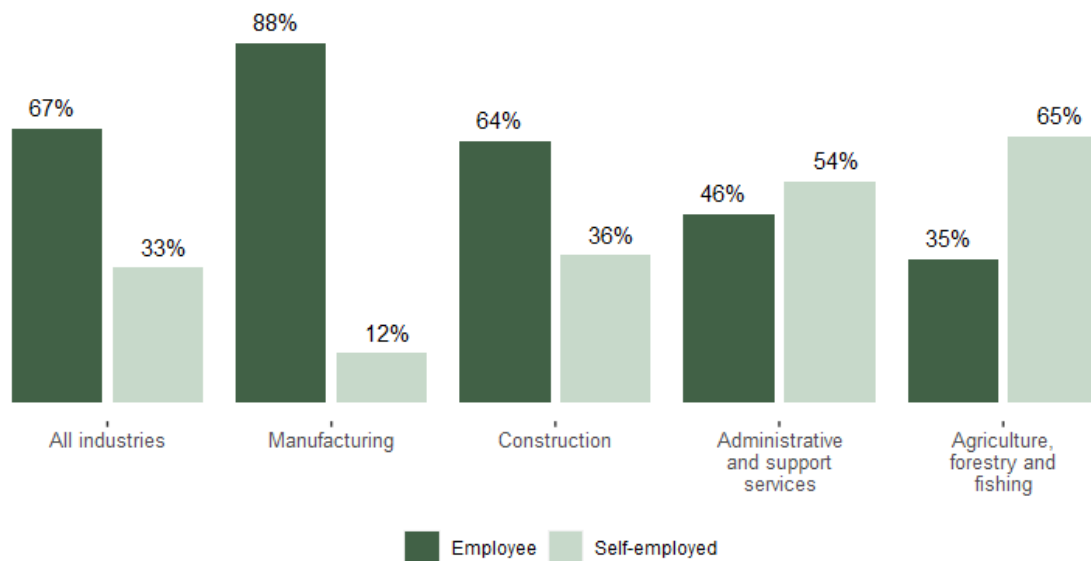
For more details of fatal injuries by age and gender, see Table 4 www.hse.gov.uk/statistics/tables/ridfatal.xlsx.

Injuries by employment status

In the period 2017/18-2021/22, 33% of fatal injuries were to self-employed workers (for 2021/22 the proportion was 34%) even though such workers made up only 16% of the workforce.

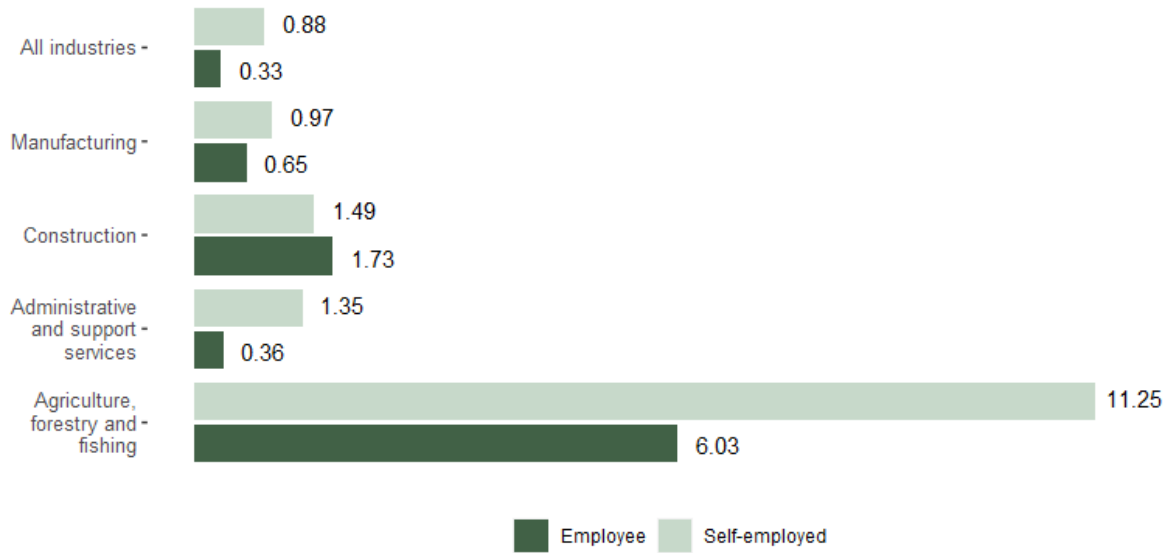
By industry, the proportion of fatal injuries to employees and the self-employed varies considerably, to some extent reflecting the relative make-up of the working population between employees and self-employed. Over the 5-year period 2017/18-2021/22, 65% of fatal injuries in Agriculture, forestry and fishing and 54% in Administrative and support services are to self-employed workers. This compares with 36% in Construction and 12% in Manufacturing.

Figure 7: Fatal injury by employment status for selected industries, 2017/18-2021/22p.



However, some of the difference in the proportion of fatal injuries to the self-employed by industry is due to variations in the rate of fatal injury to these workers. Overall, the fatal injury rate for the self-employed for the five-year period 2017/18-2021/22 is 2.5 times that of the employee rate, though this varies by industry. This increased rate for self-employed workers is particularly evident in the Agriculture, forestry and fishing sector and Administration and Support service activities. However, in Construction and Manufacturing, there is more parity in the rate of fatal injury between employees and self-employed workers.

Figure 8: Rate of fatal injuries to employees and self-employed workers (per 100,000 employees/self-employed) for selected industries, 2017/18-2021/22p.

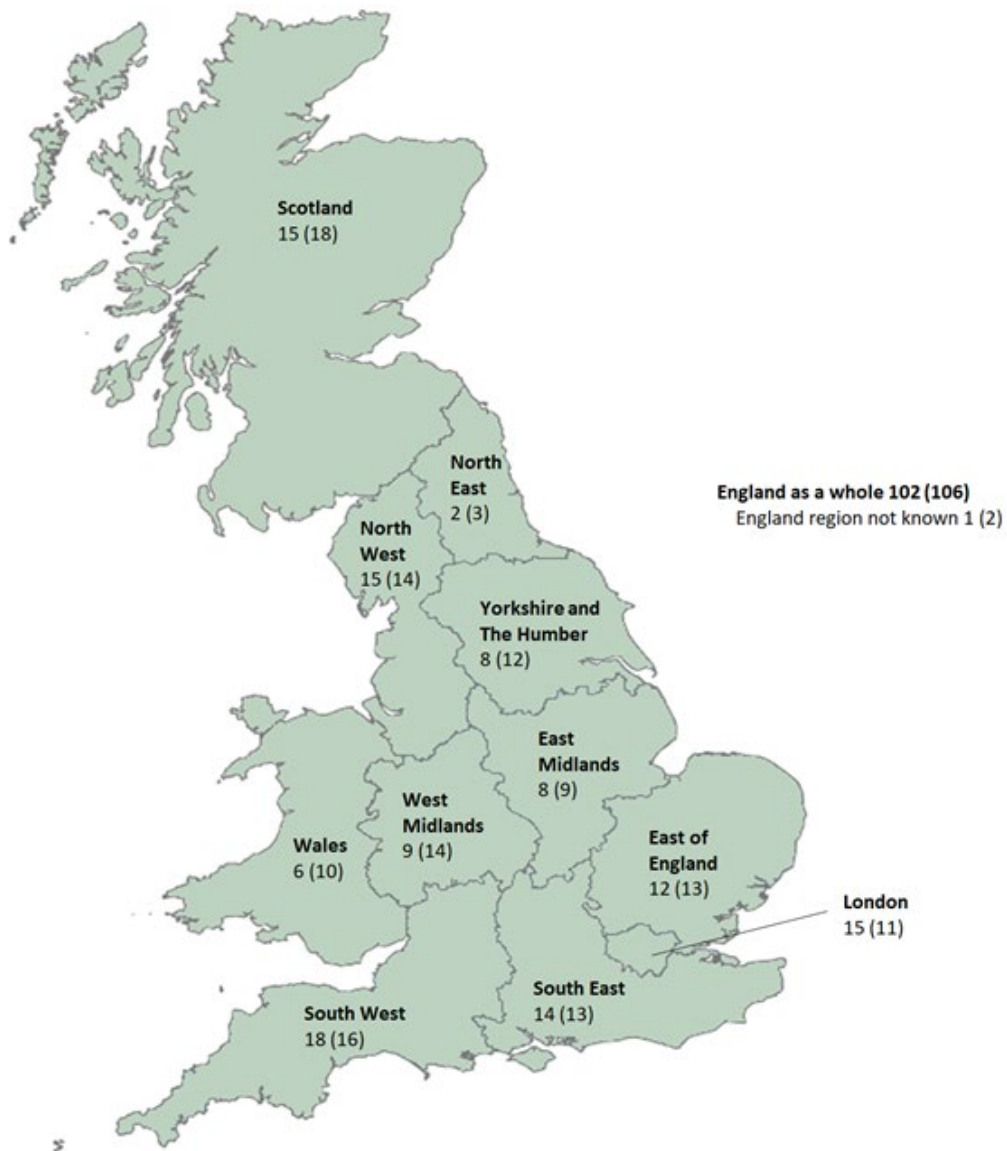


For more details of fatal injuries by employment status, see www.hse.gov.uk/statistics/tables/ridfatal.xlsx.

Injuries by country within GB

Figure 9 below shows the country or region where the accident occurred for fatalities in 2021/22. The number of fatalities in some regions is relatively small, hence susceptible to considerable variation. Accidents involving multiple fatalities can also affect annual totals. Therefore, Figure 9 also shows the annual average number of deaths for the five-year period 2017/18-2021/22 as this reduces the effect of year-on-year fluctuations.

Figure 9: Number of fatal injuries by country and region within GB, 2021/22p and annual average for 2017/18-2021/22p (annual average number in brackets).



In terms of fatal injury rate, England consistently has a lower injury rate than either Scotland or Wales. However, injury rates are strongly influenced by variations in the mix of industries and occupations and in England there are a greater proportion of people working in lower risk jobs than in Scotland and Wales. The country injury rate does not make allowance for the varying composition of the workforce between these three nations.

For more details of fatal injuries by country and region within GB, see Table 5, www.hse.gov.uk/statistics/tables/ridfatal.xlsx.

Injury comparisons with other countries

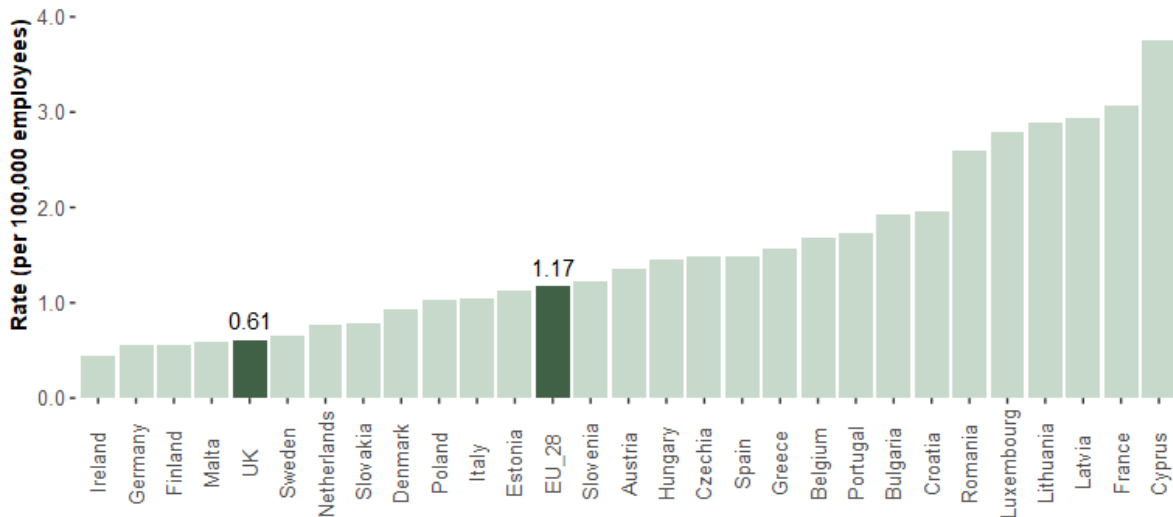
Health and safety systems differ across Europe in recording and reporting workplace fatal injuries. To enable comparisons across member states with differing industrial backgrounds, the European statistical office (Eurostat) publishes data in as standardised a form as possible. Data available from Eurostat shows the UK's historical performance is favourable compared to countries across the EU, with relatively low rates of workplace fatalities.

(See the appendix in www.hse.gov.uk/statistics/european/european-comparisons.pdf for further details on the standardisation process).

Based on the most recent comparable data to 2018, the UK consistently shows one of the lowest rates of fatal injury compared to countries across the EU.

- In 2018 the UK standardised rate, at 0.61 per 100,000 employees, was amongst the lowest of all European countries and compares favourably with most large economies such as France, Italy, Spain and Poland. Germany has a lower rate at 0.55 per 100,000 employees
- Similarly, the UK three-year average rate for 2015-2017 (0.52 per 100,000 employees) was one of the lowest of all EU countries. These three-year averages are provided to reduce the effects of yearly fluctuations, especially for countries with relatively small workforces.
- Standardised rates published by Eurostat are based on fatalities occurring across 12 common industry sectors, excluding transport. Whilst road traffic accidents should not be included in these rates, their removal may not always be complete. This should be considered when reviewing rates for individual countries.

Figure 10: Standardised incidence rates (per 100,000 employees) of fatal injuries at work for 2018.



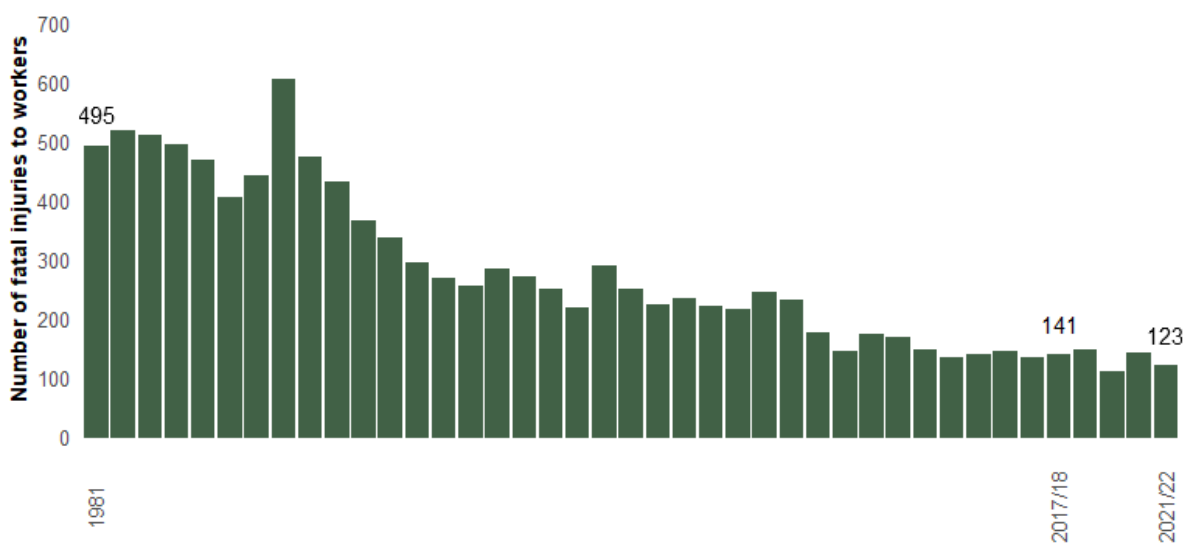
Global comparisons, for example, with the USA, Asia etc. are not available due to differences in definitions of workplace accidents and reporting systems.

For more details see www.hse.gov.uk/statistics/european/table1.xlsx.

Longer term trends

Despite long term reductions in the number of workers killed by work activities, each year such cases continue, with 123 such deaths in 2021/22. This number compares with 251 twenty years ago (2001/02) and 495 in 1981 (prior to 1981 only fatal injury numbers to employees were reported to enforcing authorities).

Figure 11: Number of fatal injuries to workers in Great Britain 1981-2021/22p.

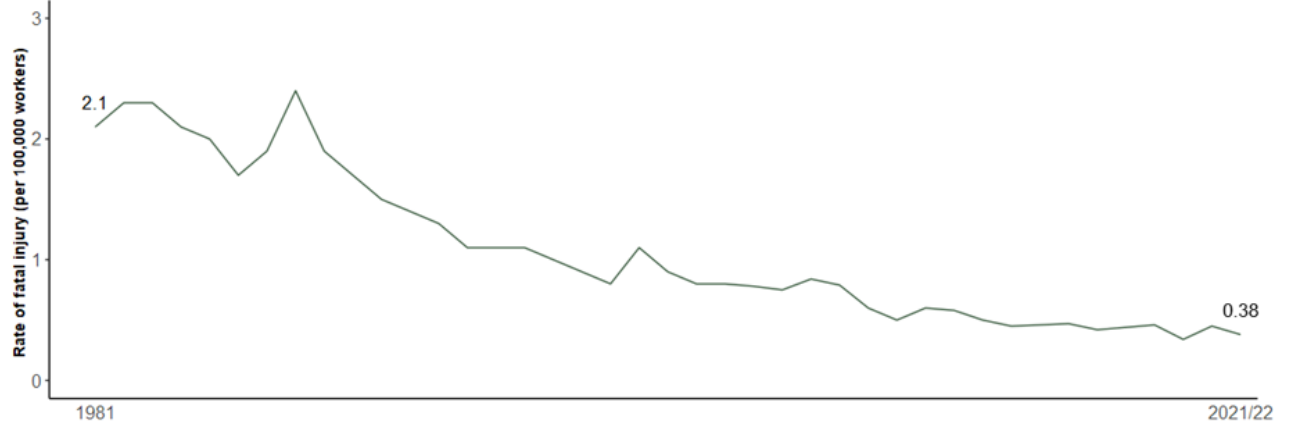


As described in earlier sections, the 123 worker deaths in 2021/22 represents a decrease of 22 from the previous year. However, it is possible that this change can be explained by natural variation in the figures. In statistical terms the number of fatalities has remained broadly level over most of the last decade, with the number in both 2020/21 and 2021/22 broadly in line with the pre-pandemic level.

Taking employment levels into account, the 123 worker fatalities in 2021/22 gives rise to a fatal injury rate of 0.38 deaths per 100,000 workers. While this is lower than the rate in 2020/21 (0.45 per 100,000 workers), the difference is not statistically significant.

When considering trends in fatal injuries over time it is preferable to consider the rate of injury rather than just the number of injuries as the rate accounts for changes in the numbers in employment between years. Over the long-term, there has been a downward trend in the rate of fatal injuries to workers, though in the recent years prior to the coronavirus pandemic, the rate had been broadly flat. In both 2020/21 and 2021/22 the rate remains broadly in line with pre-pandemic levels.

Figure 12: Rate of fatal injuries to workers in Great Britain 1981-2021/22p.



For more details see www.hse.gov.uk/statistics/tables/ridhist.xlsx and www.hse.gov.uk/statistics/tables/ridfatal.xlsx.

Alternative measure of fatal injury rate

The fatal injury rate is expressed as a rate per 100,000 workers, in line with international definitions. Injury rates are constructed by dividing the count of fatal injuries by the corresponding number of workers. This is then multiplied by a factor of 100,000 to give a rate per 100,000 workers.

Coronavirus has introduced challenges to measuring employment, particularly around workers on furlough (either fully or partially). The employment estimates include workers temporarily away from work, including in 2020/21 and 2021/22 furloughed workers. This has had the effect of over-estimating the number of workers actually 'at-work' in these years compared to previous years, which in turn will have underestimated the fatal injury rate.

An alternative measure of injury rate to allow for this change in the labour market from furlough is to consider deaths per 100 million hours worked. Using the UK estimate of total hours worked it is possible to construct such rates.^{3,4}

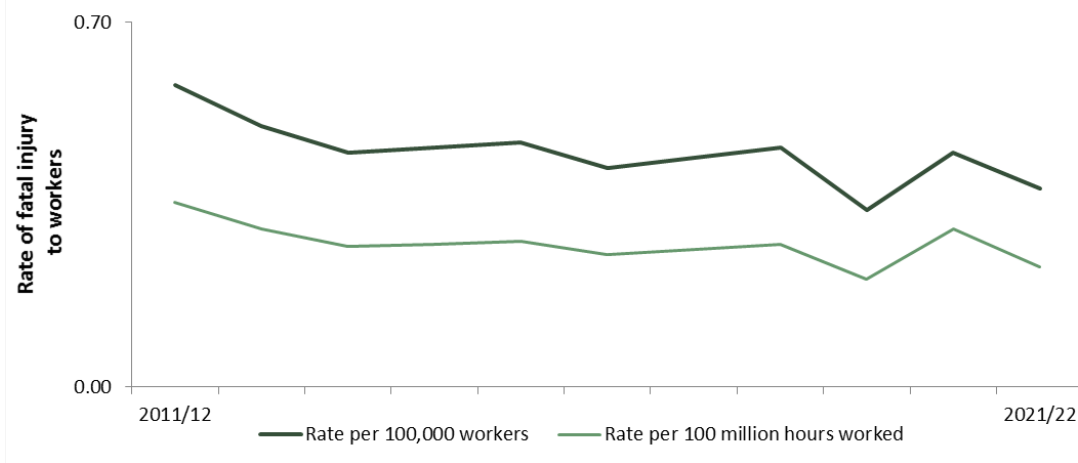
The rate of fatal injury per 100 million hours worked follows a very similar pattern to the rate per 100,000 workers, as shown in Figure 13 below and supports the conclusion that the rate of fatal injury in both 2020/21 and 2021/22 is in-line with pre-pandemic levels.

3

www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/time-series/ybus/lms

4 Published estimates for hours worked are for the UK (including Northern Ireland) rather than GB and are used here as a proxy for hours worked in GB. (Unlike estimates of number of workers used in the rate calculation which are based on GB).

Figure 13: Rate of fatal injury to workers, 2011/12 – 2021/22p expressed as (1) rate per 100,000 workers and (2) as rate per 100 million hours worked.



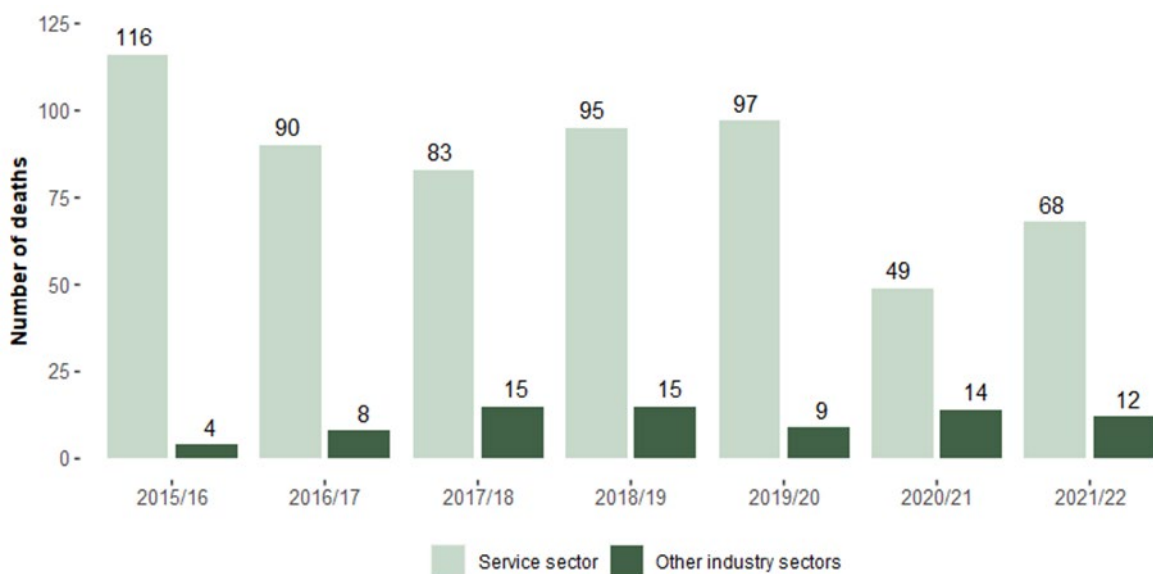
Fatal injuries to members of the public

A total of 80 members of the public were killed as a result of a work-related accident in 2021/22 (excluding deaths to 'patients and service users' in England in health and social care premises registered with CQC). This is an increase of 17 from last year's low of 63 deaths but remains statistically significantly below the pre-pandemic level (annual average of 106 deaths per year to members of the public over the five-year period 2015/16-2019/20).

The reduction in deaths to members of the public compared to pre-pandemic levels is particularly evident in the Services sector (SIC G-U), with 68 work-related deaths to members of the public in the latest year, (up from 49 in 2020/21), compared to an annual average of 96 deaths per year over the 5-year period 2015/16-2019/20).

Figure 14: Number of work-related deaths to members of the public by industry group, 2015/16-2021/22p.

[Note: Excludes deaths to 'patients and service users' in England in health and social care premises registered with CQC].



ANNEX: Sources and definitions

Coverage of fatal injury numbers

Fatal injuries included in this report are those that the relevant enforcing authority (namely HSE, Local authorities or the Office of Rail and Road) have judged as reportable under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations (RIDDOR).

Certain types of work-related injury are not reportable under RIDDOR, hence excluded from these figures. Particular exclusions include:

- Fatal accidents involving workers travelling on a public highway (a 'road traffic accident'). Such incidents are enforced by the police and reported to the Department for Transport. Those killed whilst commuting (travelling from home to work, and vice versa) are also excluded. For road accident statistics, see www.gov.uk/government/collections/road-accidents-and-safety-statistics.
- Fatal accidents involving workers travelling by air or sea. These incidents are the responsibility of the Air Accident Investigation Branch and Marine Accident Investigation Branch of the Department for Transport and reported accordingly;
- Fatalities to members of the armed forces on duty at the time of incident;
- Fatal injuries at work due to 'natural causes', often heart attacks or strokes, unless brought on by trauma due to the accident.

Furthermore, the count of work-related deaths to members of the public does not include deaths to 'patients and service users' in the healthcare and adult social care sectors in England reportable under RIDDOR where the Care Quality Commission (CQC) is the lead enforcement body.

Fatal injury statistics presented in this report also exclude deaths from diseases (including COVID-19). Typically, for many occupational diseases, death occurs many years after first exposure to the causative agent. The asbestos-related cancer mesothelioma is one of the few examples where deaths due to an occupational disease can be counted directly. There were 2,544 such deaths in GB in 2020 - see www.hse.gov.uk/statistics/causdis/asbestos-related-disease.pdf. Other occupational deaths usually have to be estimated rather than counted. Each year around 13,000

deaths from occupational lung disease and cancer are estimated to have been caused by past exposure, primarily to chemicals and dust, at work. (This estimate includes the count of mesothelioma deaths).

Provisional nature of the latest statistics

On first publication, RIDDOR data is classified as provisional and marked with a 'p' suffix. The following year data are finalised and marked as 'r' (revised). The revised (finalised) figures for fatal injuries can go down as well as up, by up to +/-3% on finalisation for fatal injuries to workers. The change from provisional to final usually reflects more up-to-date information following the detailed investigations of these incidents, but also Regulation 6 of RIDDOR covers situations where someone dies of their injuries within a year of their accident. The finalised figure for 2020/21 is 145 revised from 142.

Table 1: Differences in provisional and finalised counts of fatal injuries to workers, 2017/18-2021/22p.

| Year | Provisional figure | Revised finalised figure | Difference |
|----------|--------------------|--------------------------|------------|
| 2021/22p | 123 | - | NA |
| 2020/21r | 142 | 145 | +3 |
| 2019/20 | 111 | 113 | +2 |
| 2018/19 | 147 | 149 | +2 |
| 2017/18 | 144 | 141 | -3 |

Fatal injury rates

Differences in the size of the workforce will impact on comparisons of the number of fatalities, both over time and between one group and another within a year (e.g. between different industry groups). In order to make robust comparisons, it is important to consider the rate of fatal injury. The rate is constructed by dividing the count of fatal injuries by the employment estimate. This is then multiplied by a factor of 100,000 to give a rate per 100,000 workers, in line with international standards. The source of employment data used to construct the injury rates from 2004/05 onwards is the Annual Population Survey (APS).

Statistical significance

The total fatal injury count is subject to a degree of chance and randomness; if exactly the same conditions prevail in two different years, then it is likely that the annual count will differ due to natural variation. We use tests of statistical significance at the 95% confidence level to judge whether a difference between years is likely to be explained by natural variation alone or whether it represents a statistically significant difference. (Note statistical significance should not be confused with the significance of each injury. Every casualty is a tragedy and has both a social cost and a personal cost to those directly affected).

Industry definitions

The table below presents the 2007 Standard Industrial Classification (SIC) codes used to define the top-level industry groupings presented in this report.

| SIC Code | Industry Description |
|---------------------|--|
| Section A | Agriculture, forestry and fishing |
| Section B | Mining and quarrying |
| Section C | Manufacturing |
| Section D | Electricity, Gas, Steam and Air Conditioning supply |
| Section E | Water Supply, Sewerage, Waste Management and Remediation |
| Division 38 | Waste and recycling |
| Section F | Construction |
| Section G, I | Wholesale and retail trade; repair of motor vehicles and motorcycles; accommodation and food service activities |
| Section H | Transportation and storage |
| Section J-N | Communication, business services and finance |
| Section N | Administrative and support services |
| Section O-Q | Public administration; education; human health and social work activities |
| Section R-U | Arts, entertainment and recreation; all other service activities |

For more details of what is included in these SIC codes, please see the [2007 Standard Industrial Classification](#).

National Statistics

National Statistics status means that statistics meet the highest standards of trustworthiness, quality and public value. They are produced in compliance with the Code of Practice for Statistics, and awarded National Statistics status following assessment and compliance checks by the Office for Statistics Regulation (OSR). The last compliance check of these statistics was in 2013.

It is Health and Safety Executive's responsibility to maintain compliance with the standards expected by National Statistics. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with the OSR promptly. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated when standards are restored. Details of OSR reviews undertaken on these statistics, quality improvements, and other information noting revisions, interpretation, user consultation and use of these statistics is available from www.hse.gov.uk/statistics/about.htm.

An account of how the figures are used for statistical purposes can be found at www.hse.gov.uk/statistics/sources.htm.

For information regarding the quality guidelines used for statistics within HSE see www.hse.gov.uk/statistics/about/quality-guidelines.htm.

A revisions policy and log can be seen at www.hse.gov.uk/statistics/about/revisions/. Additional data tables can be found at www.hse.gov.uk/statistics/tables/.

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