

Analysis of Work-related Injury and Illness 2001 - 2014

Agriculture, Forestry & Fishing

A plain
English guide



This report is published as part of the ESRI and Health and Safety Authority (HSA) *Research Programme on Health Safety and wellbeing at Work*. It has been peer reviewed. The authors are solely responsible for the content and the views expressed.

Analysis of Work-related Injury and Illness 2001 - 2014

Agriculture, Forestry and Fishing Sector

Sectoral Analysis No. 4: Agriculture Sector
by O. Kenny, B. Maître and H. Russell (April 2018)



Analysis of Work-related Injury and Illness 2001 - 2014

About this report

This report is a summary of the longer document named in the title above. It focuses on the **Agriculture, Forestry and Fishing** sector findings of earlier reports that examined work-related injury and illness across the economy as a whole.

All injuries and illnesses reported by workers are included regardless of whether or not they were absent from work, as many people continue to work while sick or injured.

For ease of reading, the 'agriculture, forestry and fishing' sector is simply referred to as the 'agriculture' sector throughout.

Why is this report necessary?

The agriculture sector has traditionally had one of the highest rates of work-related injuries and fatalities. Between 2009 and 2015, the fatality rate was 10 times higher than that for other sectors, at 23 per 100,000 workers. From 2010 to 2014, the average injury rate causing any days off work was 34 per 1,000 workers compared to 22 across other sectors.

It is important, therefore, to examine and analyse these trends and patterns in the sector with a view to improving worker health and wellbeing, and reducing the number of fatalities and injuries.

How was this report completed, and what research information does it cover?

We used information from the Central Statistics Office's (CSO) Quarterly National Household Survey (QNHS) to inform this report. Specifically, we used information gathered in the annual special module on work-related accidents and illnesses. The module is restricted to those who are employed at the time of the survey, or who are not currently employed but had worked during the 12-month reference period.

For example, in 2015, in the case of injuries, respondents were asked:

'How many, if any, injuries did you incur at work (excluding commuting) during the period January 2014 to December 2014?'

For illnesses, the following question was asked:

'How many, if any, illnesses or disabilities have you experienced during the 12 months January 2014 to December 2014, that you believe were caused or made worse by your work?'

Respondents were also asked how many days they had taken off work as a result of these injuries or illnesses.

The QNHS is carried out in private households and the responses are unconnected to any workplace reporting.

Using the survey information, we analysed it and applied it to the sector under the following headings:

- Worker and job characteristics and risk of injury
- Worker fatalities in the agriculture sector
- Work-related illness in the agriculture sector
- Days lost due to illness and injury
- Inspections

The findings for each section are presented below.

Worker and job characteristics and risk of injury

In this section, we examined the relationship between the risks of injury among agriculture sector workers and a range of factors such as personal and job characteristics – for example, age, gender, nationality, shift work, whether workers were employees or self-employed, how experienced they were, and so on.

The significant findings were:

- The risk of injury was significantly higher in the boom years of 2001 – 2007 (4.0%) than in the recession years of 2008 – 2011 (2.4%).
- Men have a higher risk of injury (3.7%) than women (2.2%).
- Those working fewer than 30 hours a week and those working variable hours are the highest risk groups at 4% and 3.6% respectively.
- The risk of injury for those with less than six months' experience is over seven times greater than for those with 1 – 2 years' experience.

Worker fatalities in the agriculture sector

Analysis of the information regarding worker fatalities over the period in question yielded the following findings:

- This sector had the largest number of fatalities over the period 2001 to 2014.
- Between 2001 and 2008, the fatality rate was five to seven times greater than for all sectors combined.
- The number of fatalities increased in the recession and recovery years unlike other sectors which recorded a drop.
- One-third of workplace fatality victims in this sector were aged 65 years and over.

Work-related illness in the agriculture sector

In this section, we examined the association between illness and time period (the boom years 2001 – 2007; recession years 2008 – 2011; and recovery years 2012 – 2014), together with the characteristics of those working in the agriculture sector and their job structure.

Over the period 2002 to 2014, 63% of all illnesses reported by workers in this sector were due to musculoskeletal disorders, compared to 47% across all sectors. Respiratory problems represented the second most common form of work-related illness in this sector, at 10%.

The significant findings were:

- Across all time periods, musculoskeletal problems accounted for 63% of all illnesses reported in this sector, compared to 47% for all sectors combined.
- Respiratory problems were the second highest work-related illness reported (10%).
- Those over 65 years are significantly more likely to report an illness (5.4%), compared to those under the age of 35 years (1.9% to 2.8%).
- The risk of illness is significantly higher for those who are self-employed (4.7%) compared to employees (3.2%).
- Those working less than 30 hours a week have the greatest risk of illness at 9.8%. This is significantly higher than those working from 30 to over 50 hours a week (4.4% to 2.5%) and to those working variable hours (4.9%).

Days lost due to illness and injury

In this section, we examined the information in terms of two timeframes – the boom years of 2001 – 2007 and the recession and recovery years of 2008 – 2014. The main findings were as follows:

- In the boom years (2001–2007), the average rate of days lost to injury was 342 per 1,000 workers, which was **lower** than the rate across all other sectors (421 per 1,000 workers).
- The agriculture sector, unlike other sectors, recorded a rise in the rate of days lost to injury in the recession and recovery years – from 342 per 1,000 workers in the 2001 – 2007 period to 413 in the 2008 – 2014 period.
- In the boom years, the average rate of days lost to illness was 556 per 1,000 workers, which was **higher** than the rate across all other sectors (428 per 1,000 workers).
- While the rate of days lost to illness dropped in the recession and recovery years, it still remained higher than all other sectors combined.

Inspections

In this section, we examined the impact of health and safety inspections in relation to the rates of injury and illness. The main conclusions were as follows:

- The inspection rate per 1,000 workers in this sector was consistently higher than in other sectors.
- Inspection rates peaked at 38.9 per 1,000 workers in 2011 and 2012.
- The peak rate of 38.9 per 1,000 workers in 2012 was five times the inspection rate in other sectors.

Where can I get more information?

You can get the full version of this document on the Economic and Social Research Institute (ESRI) website www.esri.ie

Also, you can download the following documents:

Trends and patterns in occupational health and safety in Ireland.

Risk Taking and Accidents on Irish Farms.

Work-related musculoskeletal disorders and stress, anxiety and depression in Ireland: Evidence from the QNHS 2002–2013.

These are ESRI publications and are available on their website at www.esri.ie/publications/

You can also access plain English summaries of these publications on the Health and Safety Authority's website at: www.hsa.ie/eng/Publications_and_Forms/Publications

*'healthy,
safe and
productive
lives'*

Further Information and Guidance

Visit our website at
www.hsa.ie

Call our contact centre on
1890 289 389

Email us at
wcu@hsa.ie

Use **BeSMART**, our free
online risk
assessment tool at
www.besmart.ie

Check out our range of
free online
courses at
www.hslearning.ie



HEALTH AND SAFETY
AUTHORITY