

# Priority industry snapshot: Agriculture

June 2018

The agriculture industry is identified as a national priority to reduce fatalities and serious claims under the *Australian Work Health and Safety Strategy 2012-2022*. The industry includes nine sub-industries: dairy cattle farming; deer farming; fruit and tree nut growing; mushroom and vegetable growing; nursery and floriculture production; poultry farming; sheep beef cattle and grain farming; other crop growing; and other livestock farming.

This is an overview of the industry and its work health and safety (WHS) performance, highlighting key WHS issues and segments of the industry where performance may be lagging.

## Key points

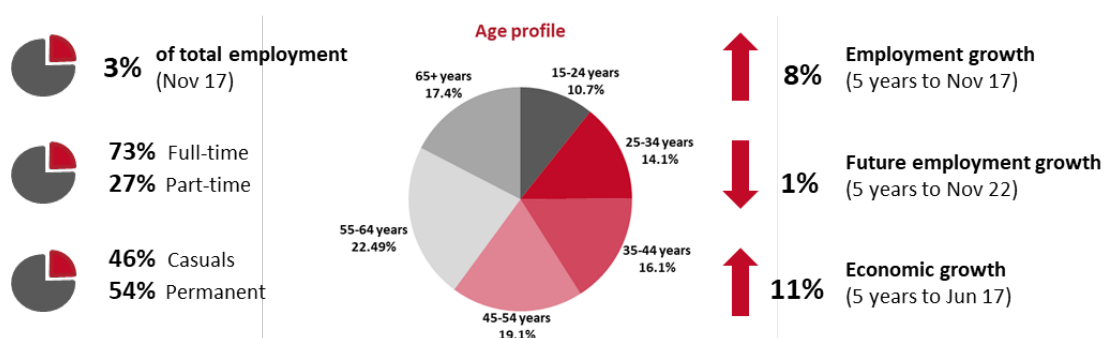
- Worker fatality rates are high with 14.6 fatalities per 100,000 workers and apart from some year-on-year volatility there has been no dramatic improvement over the last 10 years.
- Serious claims rates are high with 8.8 serious claims per million hours worked. However, the rates have decreased by 30 per cent over the last decade.
- In line with the older demographic of the industry, older workers account for the majority of worker fatalities, however, younger workers recorded the highest serious claim frequency rates.
- The sheep, beef cattle and grain farming sub-sector accounts for the majority of serious claims and worker fatalities.
- Livestock farmers account for 36 per cent of worker fatalities.
- Farm, forestry and garden workers account for almost 50 per cent of serious claims.
- Vehicle incidents account for 25 per cent of worker fatalities, followed by rollover of non-road vehicles (16 per cent).
- Being hit by an animal, muscular stress while handling objects, falls from a height, and falls on the same level all account for 11 per cent of serious claims.

# The Evidence<sup>1</sup>

## Industry profile<sup>2</sup>

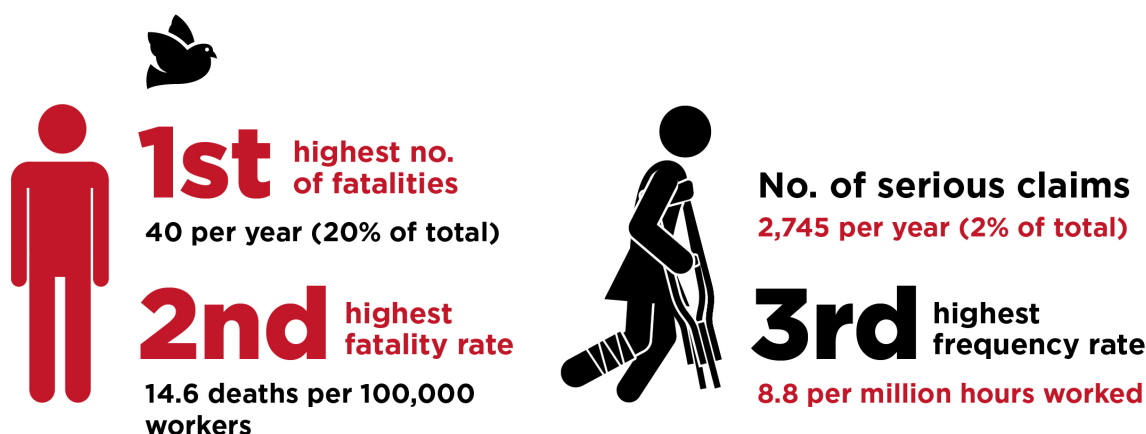
The agriculture, forestry and fishing industry accounted for only 3 per cent of total employment in November 2017, with employment growing in line with overall employment growth, up by 8 per cent over the five years to November 2017. While this recent employment growth has been relatively robust, employment in the industry is projected to decline slightly over the next five years, falling by 1 per cent by November 2022. This decline is in line with the industry's longer term history of employment declines that have largely been driven by advancements in technology.

The industry has the oldest age demographic of all industries with 17 per cent of workers aged over 65 years and a further 22 per cent aged 55-64 years. While the industry has a slightly higher proportion of full-time workers (73 per cent compared to the all industry average of 69 per cent), it also has a relatively high proportion of casual employees (46 per cent compared to the all industry average of 25 per cent), likely reflecting the industry's use of seasonal workers.



## Why is the agriculture industry a priority?

The nature of the work in the agriculture industry means it is a high risk industry and is reflected in the comparatively high rates of fatalities and serious workers' compensation claims. On average, the industry ranked second in terms of fatality rate and accounted for the highest number of fatalities over the last five years. The industry was ranked third for the frequency rate of serious claims.



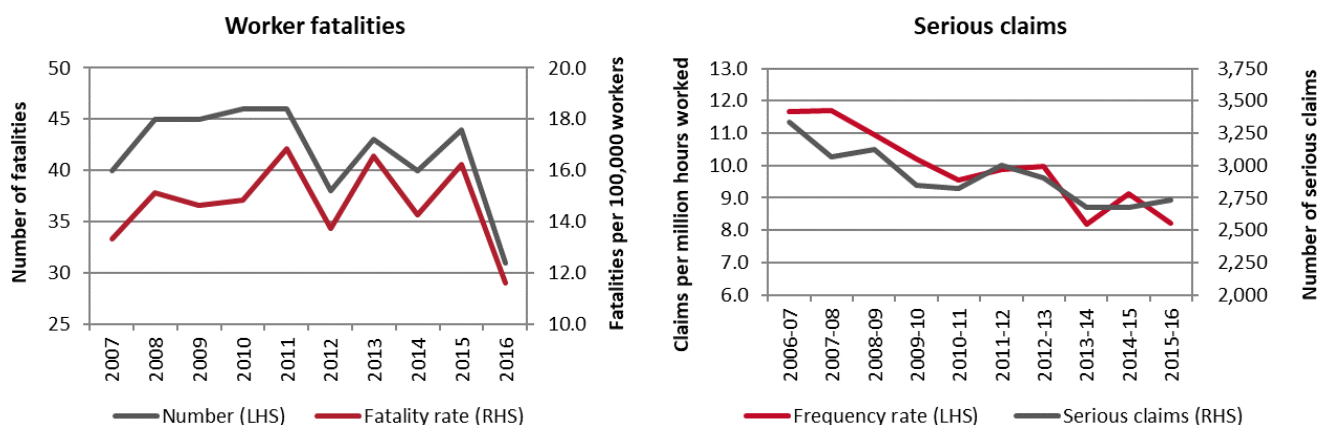
<sup>1</sup> Unless otherwise specified, the data contained in this report is sourced from Safe Work Australia's National Data Set for Compensation-based Statistics and Work-related Traumatic Injury Fatalities data set. Fatalities data relate to the period 2013 to 2016, while serious claim data related to 2012-13 to 2015-16.

<sup>2</sup> The data in this section refers to the broader agriculture, forestry and fishing industry and is sourced from the Australian Bureau of Statistics and the Department of Employment's *Employment Outlook to May 2022*.

## WHS performance of the industry

While the frequency rate of serious claims in the agriculture industry remains comparatively high, there have been substantial improvements over the last 10 years. Both the number of serious claims and the frequency rate have fallen significantly over the period – down by 18 per cent and 30 per cent respectively since 2006-07.

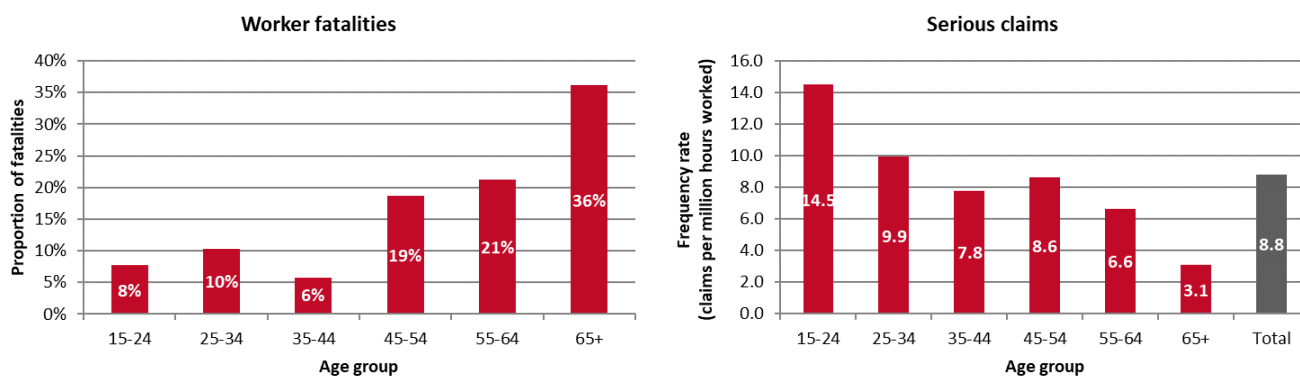
While there was a significant fall in the number of fatalities and the fatality rate for agriculture in 2016, this should be treated with some caution due to the volatility that can be displayed in this type of data. Both the number of fatalities and the fatality rate showed no dramatic improvement for the period until 2015.



## Demographics

Older workers accounted for the majority of worker fatalities, with workers aged 65 and over accounting for over a third (36 per cent) of the 155 workers killed in the industry from 2013-2016.

Younger workers, however, were more likely to make a compensation claim for a serious injury or illness. Workers aged under 25 years had the highest frequency rate (14.5 serious claims per million hours worked), followed by workers aged 25 to 34 years (9.9 serious claims per million hours worked) from 2012-13 to 2015-16.

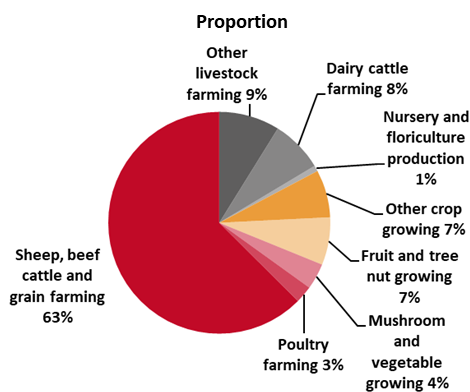


## Key areas of the industry

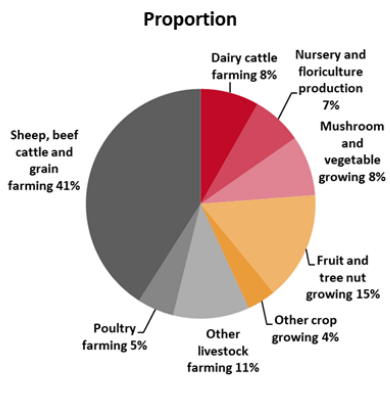
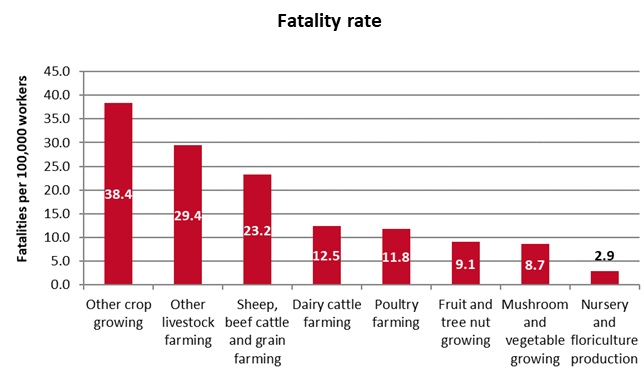
### Sub-industries

While the sheep, beef cattle and grain farming sub-industry makes up approximately a third of the agriculture industry workforce, it accounts for almost two-thirds of worker fatalities and just over 40 per cent of serious claims. Other livestock farming accounted for the next highest proportion of fatalities (9 per cent) and fruit and tree nut growing accounted for next highest proportion of serious claims (11 per cent).

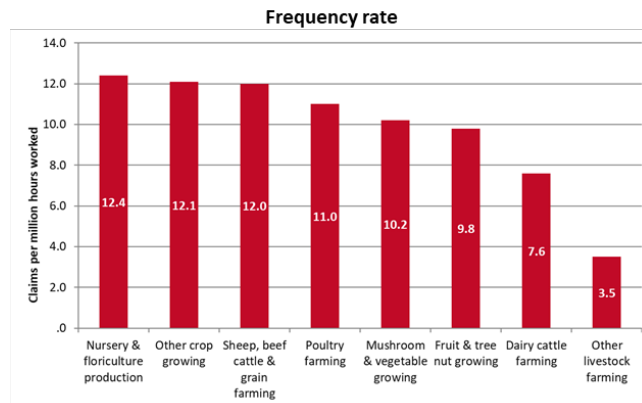
Accounting for size of the workforce, the other crop growing sub-industry recorded the highest fatality rate (38.4 fatalities per 100,000 workers). However, this rate should be treated with some caution due to the relatively small number of workers and fatalities in this sub-industry. The nursery and floriculture production sub-industry recorded the highest serious claim frequency rate (12.4 claims per million hours worked).



Worker Fatalities



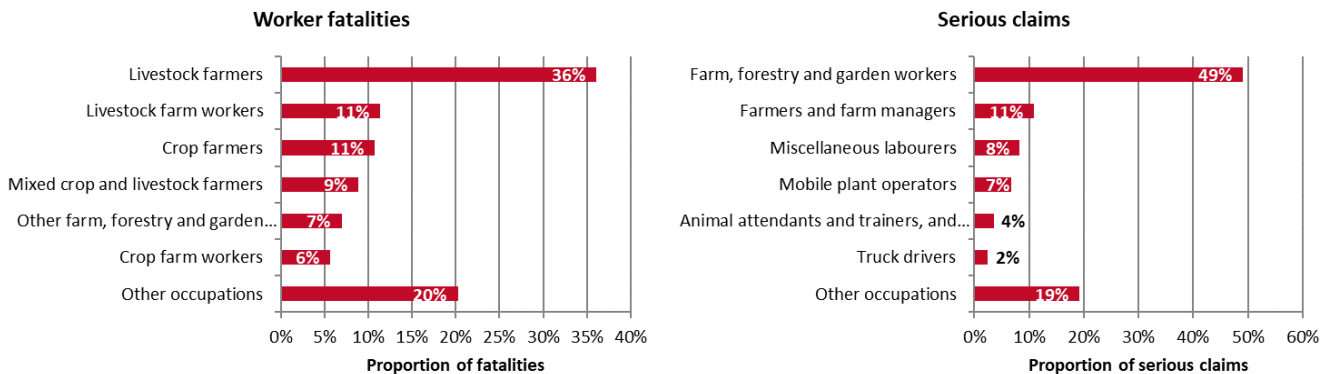
Serious claims



## Occupations

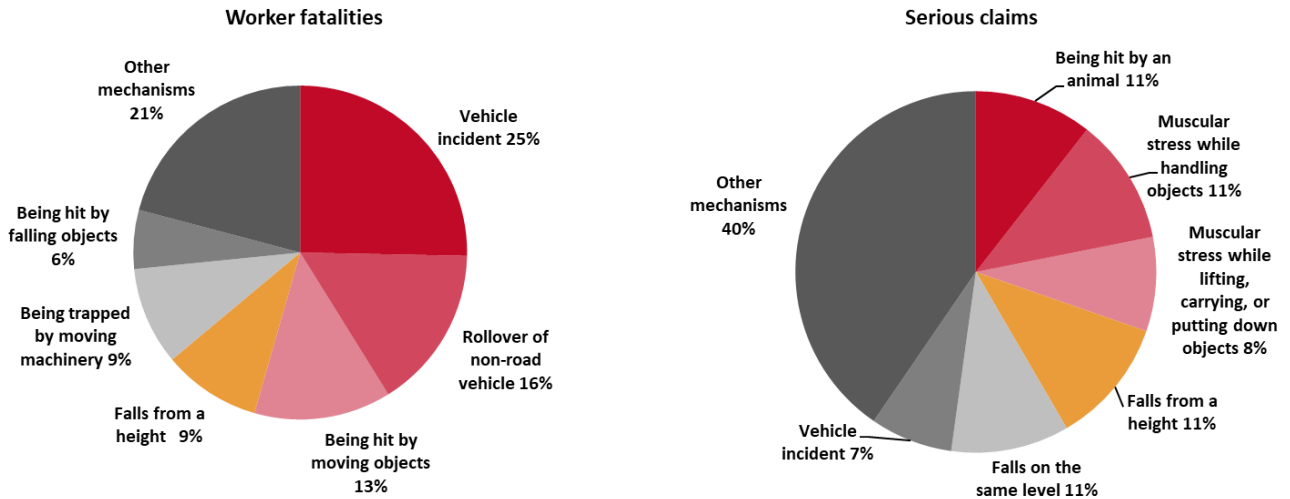
Livestock farmers (managers) accounted for the highest proportion of worker fatalities (36 per cent or 57 fatalities over the four year period), followed by livestock farm workers (labourers) (11 per cent or 18 fatalities), and crop farmers (11 per cent or 17 fatalities).

In relation to serious claims, farm, forestry and garden workers accounted for the highest proportion of serious claims (49 per cent or an average of 1,350 claims per year), followed by farmers and farm managers (11 per cent or an average of 300 claims per year).



## Key WHS issues in the industry

Vehicle incidents accounted for the largest proportion of fatalities (25 per cent) within the agriculture industry, followed by the rollover of non-road vehicles (16 per cent). For serious claims, the main cause of injuries were spread across being hit by an animal, muscular stress while handling objects, falls from a height, and falls on the same level – accounting for 11 per cent of serious claims each.



At the sub-industry level, vehicle incidents or the rollover of non-road vehicles was the main cause of fatalities in all sub-industries, except poultry farming and other crop growing, where the main cause was being hit by moving objects. For serious claims, the main cause of injuries varied across the sub-industries generally in line with the nature of the work. Being hit by an animal was the main cause of injury for dairy cattle farming and other livestock farming and falls from a height was the main cause for sheep, beef cattle and grain farming. Muscular stress while handling, lifting, carrying or putting down objects was the main cause of injury for the remaining sub-industries.

<u>Main causes of fatalities</u> [Note: only the main cause is included for some sub-industries due to the small number of fatalities]	<u>Main causes of injuries</u>
<b>Sheep, beef cattle and grain farming</b> <ul style="list-style-type: none"> <li>• Vehicle incident – 27%</li> <li>• Rollover of non-road vehicle – 13%</li> <li>• Being trapped by moving machinery – 11%</li> </ul>	<b>Sheep, beef cattle and grain farming</b> <ul style="list-style-type: none"> <li>• Falls from a height – 16%</li> <li>• Being hit by an animal – 14%</li> <li>• Muscular stress while handling, lifting, carrying or putting down objects – 14%</li> </ul>
<b>Dairy cattle farming</b> <ul style="list-style-type: none"> <li>• Vehicle incident – 42%</li> </ul>	<b>Dairy cattle farming</b> <ul style="list-style-type: none"> <li>• Being hit by an animal – 22%</li> <li>• Falls on the same level – 10%</li> <li>• Vehicle incident – 10%</li> </ul>
<b>Fruit and tree nut growing</b> <ul style="list-style-type: none"> <li>• Rollover of non-road vehicle – 27%</li> <li>• Vehicle incident – 18%</li> <li>• Being hit by moving objects – 18%</li> </ul>	<b>Fruit and tree nut growing</b> <ul style="list-style-type: none"> <li>• Muscular stress while handling objects – 16%</li> <li>• Falls on the same level – 13%</li> <li>• Falls from a height – 10%</li> </ul>
<b>Mushroom and vegetable growing</b> <ul style="list-style-type: none"> <li>• Rollover of non-road vehicle – 33%</li> </ul>	<b>Mushroom and vegetable growing</b> <ul style="list-style-type: none"> <li>• Muscular stress while handling objects – 13%</li> <li>• Muscular stress while lifting, carrying or putting down objects – 13%</li> <li>• Falls on the same level – 11%</li> </ul>
<b>Poultry farming</b> <ul style="list-style-type: none"> <li>• Being hit by moving objects – 50%</li> </ul>	<b>Poultry farming</b> <ul style="list-style-type: none"> <li>• Muscular stress while handling objects – 17%</li> <li>• Falls on the same level – 17%</li> <li>• Muscular stress while lifting, carrying or putting down objects – 15%</li> </ul>
<b>Other livestock farming</b> <ul style="list-style-type: none"> <li>• Vehicle incident – 29%</li> <li>• Rollover of non-road vehicle – 21%</li> <li>• Being hit by moving objects – 21%</li> <li>• Falls from a height – 21%</li> </ul>	<b>Other livestock farming</b> <ul style="list-style-type: none"> <li>• Being hit by an animal – 26%</li> <li>• Muscular stress while handling objects – 10%</li> <li>• Falls from a height – 9%</li> </ul>
<b>Other crop growing</b> <ul style="list-style-type: none"> <li>• Being hit by moving objects – 27%</li> <li>• Rollover of non-road vehicle – 18%</li> <li>• Being trapped by moving machinery – 18%</li> </ul>	<b>Other crop growing</b> <ul style="list-style-type: none"> <li>• Falls from a height – 13%</li> <li>• Falls on the same level – 12%</li> <li>• Muscular stress while handling objects – 9%</li> </ul>
	<b>Nursery and floriculture production</b> <ul style="list-style-type: none"> <li>• Muscular stress while lifting, carrying or putting down objects – 19%</li> <li>• Muscular stress while handling objects – 15%</li> <li>• Falls on the same level – 13%</li> </ul>