As part of the Strategic Plan 2018-2023, WorkSafe Tasmania has established a number of strategies to aid in fulfilling its promise to the Tasmanian community of ‘Safe and Well, Every Day’. These strategies include a focus on Targeted Harm Reduction and Building Culture and Capability. A component of both of these strategies is implementing new ways to engage with and educate the community on injury trends and areas of risk in order to work towards better health, safety and wellbeing outcomes.

The Industry Overview reports provide an account of the work health and safety (WHS) performance of each industry group across Tasmania. They aim to identify and focus on emerging or existing WHS issues, for evaluation and action. They compare most current WHS performance relative to previous years and, where applicable, to other industries across Tasmania.
INDUSTRY BACKGROUND

Agriculture, Forestry and Fishing (AFF) is a key part of the Tasmanian economy with an estimated gross value add of over 2.7 billion dollars annually.

It is also a significant contributor to exports, estimated at over 18% of the 3.8 billion dollar market. Seafood, meat and fruit and vegetable commodities posted annual export gains of 13%, 25% and 21% to November 2018 respectively.

This diverse industry includes Aquaculture and Fishing, Crop and Livestock Farming, Hunting and Trapping, Nursery and Floriculture, and Forestry and Logging.

INDUSTRY PROFILE

Employment

AFF accounts for 5% of total employment across Tasmania (approximately 12,000 workers) and is the ninth largest employing industry.

Hours worked in AFF are forecast to remain within ranges of previous years; that is, between 390,000 & 550,000 hours per week.

Parts of this industry are seasonal with workforce varying throughout the year and from year to year to meet demand. The industry as a whole has benefited from recent advances in automation and technology to lessen reliance on human labour.

Age Profile

Approximately half (49%) of workers in this industry are over the age of 45, higher than the average for Tasmanian workers (42%). Of particular interest is that 6% of workers in Agriculture, Forestry and Fishing are over the age of 65 years (see Figure 1). This is twice the proportion of workers in this age group statewide and second highest among each of the 19 industries. This may be due to owner-operator establishments and is an important consideration in WHS for the industry as many jobs in AFF are physically demanding.

Industry Group Breakdown

The majority of workers in AFF are in the Sheep, Beef Cattle and Grain Farming group followed closely by Aquaculture, estimated at 21% and 18% respectively. The third and fourth largest employing groups are Fruit and Tree nut growing and Dairy Cattle farming (11% and 10% respectively). See Figure 2 below.

There are 15 active industry groups within AFF, and there was the addition of one from the previous year: Deer Farming.


**INJURY NUMBERS AND TRENDS**

Agriculture Forestry and Fishing (AFF) reported the seventh highest number of injuries in 2018. Injury numbers have decreased 12% in the last ten years, notably lower than the statewide decrease of 22%.

The serious injury frequency rate was fourth highest of all industries at nine serious injuries per million hours worked in 2018.

There have been 22 work related fatalities in AFF in the last ten years, the second highest across all industries.

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**INJURY NUMBERS**

There were 474 injuries in AFF in 2018. This is the seventh highest number of injuries out of 19 industries and accounts for 6% of total injuries across the state.

The number of injuries per year in AFF has decreased by 12% in last ten years. This is notably lower than the decrease of 22% across all industries (between 2009 and 2018). See Figure 3.

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**SERIOUS INJURIES**

A serious injury is one that results in the worker requiring at least one week off work due to their injury.

AFF has averaged 173 serious injuries per year (44% of all AFF injuries) in the last ten years.

AFF reported the seventh highest number of serious injuries of any industry division in 2018 (6% of all serious injuries state wide).

**SERIOUS INJURY FREQUENCY RATES**

Frequency rates are calculated as the number of injuries per million hours worked. This gives context to the injury numbers by taking into account the size of an industry’s workforce, and the part time/full time mix of the industry.

The serious injury frequency rate in AFF is fourth highest among all industry divisions, estimated at approximately nine serious injuries per million hours worked (see Figure 4 over page).
The number of serious injuries per year in AFF decreased 35% between 2009 and 2018.

This is higher than the 20% statewide decrease in serious injuries for all industries in this period.

This is in contrast to the lower than statewide decrease in total injury numbers, suggesting AFF has seen either a reduction in the occurrence of more severe injuries, or an improvement in injury outcomes lessening the length of time lost from work.

The AFF serious injury frequency rate has decreased over the last ten years by approximately 21% on a three year rolling average basis, from 13.1 serious injuries per million hours worked in 2009-2011 to 10.3 serious injuries per million hours worked in 2016-2018.

The serious injury frequency rate for all industries reduced slightly less over this period, decreasing approximately 18.5% (from 10.3 to 8.7 serious injuries per million hours worked). See Figure 5.

On a non-rolling (actual) basis, the serious injury frequency rate for AFF has declined 36% between 2009 and 2018 from 13.7 to 8.7 serious injuries per million hours worked. The statewide serious injury frequency rate declined 22% from 9.8 to 8.4 serious injuries per million hours worked in the same period (2009-2018).

**TRENDS IN SERIOUS INJURY NUMBERS AND FREQUENCY RATES OVER 10 YEARS**

There have been 22 work related fatalities in AFF over the last ten years, the second highest of all industries. Statewide, there have been 87 work related fatalities in the last ten years (2009-2018).

The 22 fatalities in AFF in the last ten years consisted of 17 workers and five bystanders.

**Figure 4. Serious injury frequency rate by industry 2018**

**Figure 5. Three year rolling average serious injury frequency rate 2009-2018**

**FATALITIES**

**Figure 6. Serious injury frequency rate by industry 2018**
Workers aged in the 25-34 age group had the highest serious injury frequency rate of all age groups, with those aged over 65 reporting the lowest serious injury frequency rate.

Farm, Forestry and Garden workers accounted for over half of all serious injuries in 2018.

Almost half of all serious injuries in the last ten years occurred in one of three industry groups: Sheep, Beef Cattle and Grain Farming, Aquaculture or Dairy Cattle Farming.

**AGE GROUP ANALYSIS**

Workers aged between 25 and 34 years had the highest serious injury frequency rate in AFF, at 14 serious injuries per million hours worked, while those aged over 65 had the lowest rate at approximately five serious injuries per million hours worked. See Figure 6 below.

**INDUSTRY GROUP ANALYSIS**

The Sheep, Beef Cattle and Grain Farming group and the Aquaculture group each accounted for 16% of all serious injuries in the last ten years. These were followed by the Dairy Cattle Farming group at 14% of serious injuries in the same period.

The serious injury frequency rate for Sheep, Beef Cattle and Grain Farming workers is highest, at an estimated 24 serious injuries per million hours worked. This is followed by the Nursery and Floriculture Production group at 20 serious injuries per million hours worked.

The next highest serious injury frequency rates are in Mushroom and Vegetable growing, Dairy Cattle Farming, Agriculture and the Fishing Support Services group with 18, 16 and 13 serious injuries per million hours worked respectively. See Figure 7 below.

**OCCUPATION ANALYSIS**

Farm, Forestry and Garden workers accounted for the largest proportion of serious injuries at 54%.

This proportion is over seven times the value represented by the next occupation group with the highest number of serious injuries: Miscellaneous Labourers, which accounted for 7% of serious injuries in the last ten years.

Farmers and Farm managers were the occupation group with the next highest proportion of serious injuries at 6%.
AGRICULTURE, FORESTRY AND FISHING
INDUSTRY SNAPSHOT 2018

THE WORKFORCE

This industry covers a wide range of activities, separated into 15 groups:

- Poultry Farming
- Sheep, Beef Cattle and Grain Farming
- Dairy Cattle Farming
- Fishing
- Aquaculture
- Other Livestock Farming
- Deer Farming
- Fruit and Tree Nut Growing
- Mushroom and Vegetable Growing
- Forestry and Logging
- Other Crop Growing
- Nursery and Floriculture Production
- Agriculture and Fishing Support Services
- Forestry Support Services
- Hunting and Trapping
- Fruit and Tree Nut Growing
- Mushroom and Vegetable Growing
- Forestry and Logging
- Other Crop Growing

THE INJURIES

- 474 injuries across the industry in 2018
- 44% of injuries over the last ten years resulted in at least one week off work

THE PEOPLE

- 25-34 year olds reported the highest serious injury frequency rate
- Sheep, Beef Cattle and Grain Farming reported the highest serious injury frequency rate at 24 serious injuries per million hours worked

THE CAUSES

The most common causes of injury across the industry:

- Body stressing
- Falls, slips and trips
- Being hit by moving objects
- Hitting objects with a part of the body

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DISCLAIMER: The information provided herein was believed correct at the time of publication. The information is made available for general information only and should not be taken as a substitute for professional advice.

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6% aged 65+
around twice the average proportion state wide
THE SECOND HIGHEST OF ALL INDUSTRIES

5% of the total Tasmanian workforce

serious injuries per million hours worked
16% higher than the state average of 8.7

1 in 3 workers injured in the last ten years worked in either
Sheep, Beef Cattle and Grain Farming or Aquaculture

Farm, Forestry and Garden Workers reported 54% of all serious injuries

ACTION AREAS
Priority conditions and causes identified in the WorkSafe Strategic Plan 2018-2023 relevant to the industry

Musculoskeletal disorders
Hazardous manual tasks
Slips, trips and falls
Safe movement of vehicles and plant
Body stressing was the most common cause of injury in Agriculture, Forestry and Fishing (AFF), accounting for 28% of all serious injuries in the last ten years. Being hit by moving objects followed by Falls, trips and slips of a person were the next most common causes of injuries making up 27% and 23% of injuries respectively over the last ten years.

Falls, trips and slips of a person has increased as a proportion of all serious injuries in recent years. In contrast, Vehicle incidents and other have reduced as a proportion of injuries.

Most Common Causes of Injury

At the broadest level, Body stressing was the most common cause of injury in AFF over the last ten years, accounting for 28% of all serious injuries statewide. Body stressing causes, on average, 36% of serious injuries.

Being hit by moving objects followed by Falls, trips and slips of a person were the next most common causes of injuries making up 27% and 23% of injuries respectively (2009-2018).

At a serious injury mechanism class level, Falls on the same level was the main cause of serious injuries (15%) in AFF. This is followed closely by Muscular stress while handling objects other than lifting, carrying, or putting down (14%).

Muscular stress while lifting, carrying, or putting down objects was the next most common injury mechanism in AFF at 8%.

These top three injury mechanisms account for well under half of all serious injuries in this industry (38%) which suggests the injury mechanisms in this industry are quite varied, reflecting diverse work activities and environments.

Trends in Injury Cause

In 2018, Body stressing and Falls, trips and slips of a person accounted for 29% of serious injuries each, followed by Being hit by moving objects at 25%.

Body stressing, Falls, trips and slips of person and Being hit by moving objects injuries have increased as a proportion of serious injuries in recent years. Vehicle incidents and other have on the other hand reduced approximately 10% from 2015 highs (see Figure 8).

Figure 8. Trends in percentage of injuries represented by the most common injury causes 2014 - 2018
TRENDS IN THE MOST COMMON INJURY CAUSES

**Body stressing**

Repetitive movement, low muscle loading injuries have doubled as a proportion of all serious Body stressing injuries, from 7% in 2014 to 13% in 2018.

Muscular stress while handling objects other than lifting, carrying or putting down, remains the most common type of Body stressing but has decreased 19% as a proportion of serious Body stressing injuries between 2014 and 2018. It now accounts for around 39% of all Body stressing injuries.

**Falls, trips and slips of a person**

Falls from a height has increased 13% as a proportion of all serious Falls, trips and slips of a person injuries in AFF between 2014 and 2018. It now accounts for 42% of all Falls, trips and slips of a person injuries.

Most Falls from a height in AFF involve falling from either a ladder; falling from a horse or falling down stairs. Falling from or stepping down from vehicles is also a common type of Falls from a height.

**Being hit by moving objects**

Within the Being hit by moving objects injury mechanism, the proportion of Being hit by moving objects serious injuries increased dramatically in 2018, from 40% the year before to 45% of all serious injuries in 2018.

These injuries involve a wide range of objects with some of the most common including knives, fencing, tree limbs and rope/twine.

Being hit by an animal incidents on the other hand have decreased to 23% of all Being hit by moving object serious incidents in 2018 (now the second most common Being hit by moving object serious injury).
Most Common Injury Causes by Industry Group

At an industry group level within Agriculture, Forestry and Fishing, injury causes are somewhat consistent with either Falls on same level or Muscular stress while handling objects other than lifting, carrying, or putting down the most common cause in most industry groups.

The top causes of injury are indicated for each industry group in the graphic below.

**Sheep, Beef Cattle and Grain Farming**
- Muscular stress while handling objects other than lifting, carrying, or putting down: 17%
- Falls on the same level: 16%
- Being hit by an animal: 16%
- Muscular stress while lifting, carrying, or putting down objects: 7%

**Aquaculture**
- Muscular stress while handling objects other than lifting, carrying, or putting down: 15%
- Falls on the same level: 15%
- Muscular stress while lifting, carrying, or putting down objects: 10%
- Being hit by moving objects: 10%

**Dairy Cattle Farming**
- Being hit by an animal: 24%
- Falls on the same level: 11%
- Vehicle accident: 10%

**Forestry and Logging**
- Falls on the same level: 19%
- Muscular stress while handling objects other than lifting, carrying, or putting down: 14%
- Being hit by moving objects: 11%

**Fruit and Tree Nut Growing**
- Falls from a height: 15%
- Falls on the same level: 12%
- Being hit by moving objects: 12%
- Muscular stress while handling objects other than lifting, carrying, or putting down: 10%

**Mushroom and Vegetable Growing**
- Falls on the same level: 15%
- Muscular stress while handling objects other than lifting, carrying, or putting down: 14%
- Muscular stress while lifting, carrying, or putting down objects: 10%

**Agriculture and Fishing Support Services**
- Muscular stress while handling objects other than lifting, carrying, or putting down: 23%
- Falls on the same level: 12%
- Muscular stress while lifting, carrying, or putting down objects: 9%
Nursery and Floriculture Production

- Repetitive movement, low muscle loading: 19%
- Muscular stress while handling objects other than lifting, carrying, or putting down: 12%
- Muscular stress with no objects being handled: 11%
- Muscular stress while lifting, carrying, or putting down objects: 11%

Forest Support Services

- Falls on the same level: 29%
- Muscular stress while handling objects other than lifting, carrying, or putting down: 15%
- Falls from a height: 10%

Poultry Farming

- Falls on the same level: 21%
- Unspecified mechanisms of injury: 17%
- Muscular stress while lifting, carrying, or putting down objects: 15%

Other Crop Growing

- Muscular stress while handling objects other than lifting, carrying, or putting down: 33%
- Falls on the same level: 13%
- Being hit by moving objects: 13%
- Muscular stress with no objects being handled: 7%

Other Livestock Farming

- Falls from a height: 30%
- Being hit by an animal: 21%
- Muscular stress while lifting, carrying, or putting down objects: 9%
- Trapped between stationary and moving objects: 9%

Fishing

- Falls on the same level: 23%
- Hitting moving objects: 23%
- Muscular stress with no objects being handled: 8%
- Being hit by moving objects: 8%

Hunting and Trapping

- Being hit by moving objects: 50%
- Muscular stress while lifting, carrying, or putting down objects: 25%
- Hitting moving objects: 25%
As part of the Strategic Plan 2018-2023, WorkSafe Tasmania will be working to reduce harm in Tasmanian workplaces through targeted harm reduction programs. This includes targeting priority industries and high consequence activities, and focusing on priority conditions and their causes.

As one of the identified priority industries, Construction workplaces should expect increased engagement with WorkSafe Tasmania through a range of avenues.

**PRIORITY AREAS AND PLANNED ACTIVITIES**

Through the development of a Compliance Plan to inform inspectorate priorities, a number of awareness campaigns and a variety of other engagement activities, WorkSafe Tasmania will be targeting the following priority conditions and causes of injury identified in the Strategic Plan 2018-2023.

- **Hazardous Manual Tasks**
- **Slips, Trips and Falls**
- **Safe Movement of Vehicles and Plant**
- **Mental Health Conditions**
- **Musculoskeletal Disorders**
- **Asbestos Related Diseases**
Purpose and Scope of Work
This purpose of this report is to provide an account of the work health and safety performance of Agriculture, Forestry and Fishing in Tasmania. The aim is to identify and focus on emerging or existing WHS issues, for evaluation and action. It compares most current Agriculture, Forestry and Fishing WHS performance relative to previous years, and where applicable, to other industries in Tasmania.

Data
The data used in the preparation of this report comes from the WorkSafe Tasmania Information Management System (WIMS). While every effort is taken to ensure the accuracy of this report, all data is provided by Licensed and Self Insurers and the Tasmanian State Service. WorkSafe Tasmania cannot ensure the accuracy of the data.

Denominator data is from Safe Work Australia and the Australian Bureau of Statistics (ABS). Supporting statistics include sources like the Department of Treasury and Finance Tasmania.

WIMS data used in this report was current to February 2019. The latest Safe Work Australia data was at end 2017. ABS data, where applicable, is the most recent available from its website.

This report provides data on a calendar year basis unless otherwise stated.