

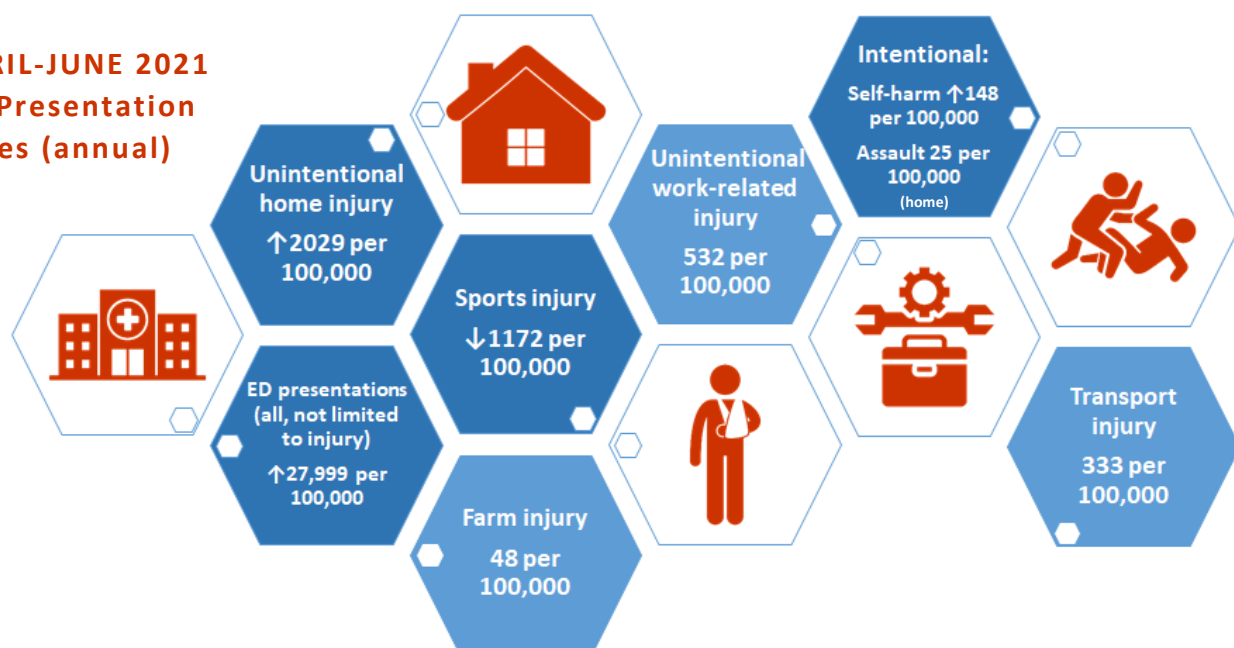
# INJURIES DURING THE COVID-19 PANDEMIC

Quarterly Bulletin – Edition 2 (2021)

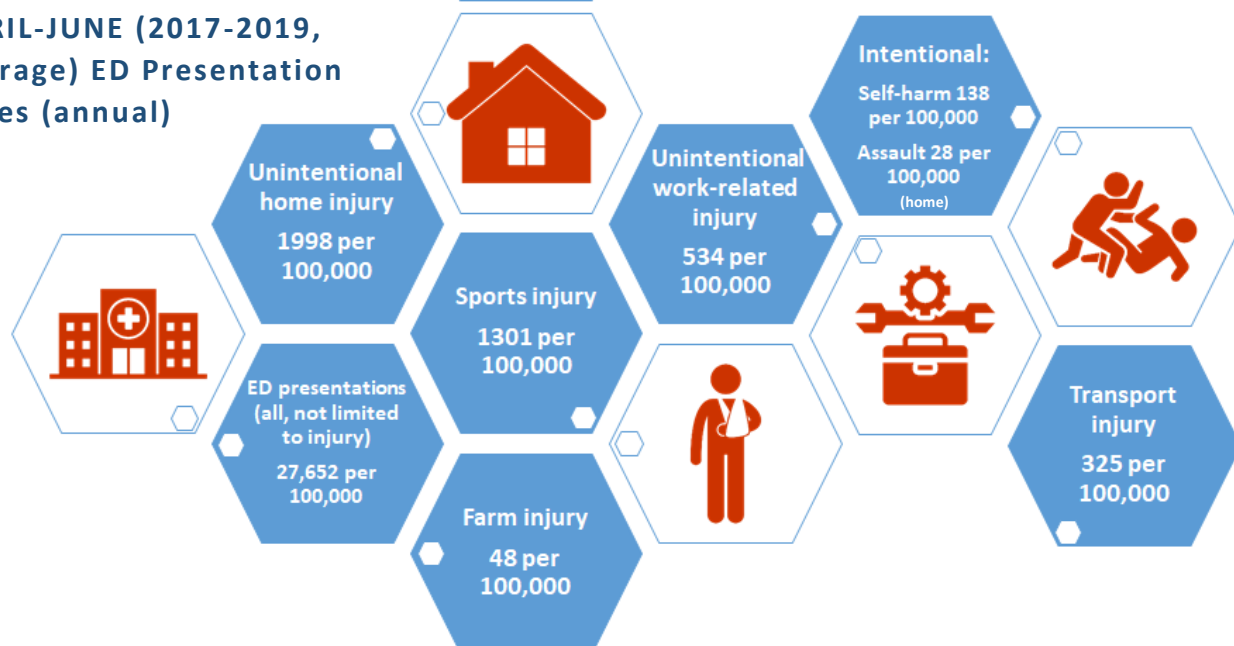
The following has been prepared by the Victorian Injury Surveillance Unit (VISU), Monash University Accident Research Centre (MUARC)

## Quarterly Bulletin – Edition 2: April to June 2021 Summary

### APRIL-JUNE 2021 ED Presentation Rates (annual)



### APRIL-JUNE (2017-2019, average) ED Presentation Rates (annual)



The ED presentation rate in the VEMD (not limited to injury) was slightly higher for the April to June 2021 period in comparison to the period April to June 2017-2019 (average):

↑ 27,999 per 100,000 (2021) vs 27,652 per 100,000 (2017-2019, average)

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## Background

In response to the global COVID-19 pandemic, Australia, including Victoria, has implemented physical distancing to limit transmission of the coronavirus. For most Victorians, in 2020 the physical restrictions and extensive period of lockdown had a marked impact on the pattern of exposure to the workplace, road network, sport and leisure activities and exposure to the home environment. The Victorian Injury Surveillance Unit (VISU) responded to this in 2020 by producing monthly injury bulletins, reporting on injuries in the home (including DIY injuries), farm, transport, self-harm and assault related injuries. The pandemic has also had a profound effect on use of health services, with Emergency Department (ED) attendances well below the level expected for the time of year, during periods of lockdown. Injury statistics were therefore provided not only in absolute terms but also relative to overall ED health service use. The last bulletin of 2020, presenting the injury statistics for November and December 2020, provided an overview of injury statistics during stepwise reopening.

In 2021, VISU will continue to present regular overviews of injury statistics during the pandemic. The bulletins in 2021 are quarterly, and to stay relevant to the current situation, the focus areas have shifted. The 2021 bulletins focus on injuries in the home, work-related injuries, farm injuries, sports injuries, intentional injury (self-harm; assault-home) and transport injury. The 2020 bulletins contained a comparison for each month from March 2020 onwards matched with the same month in 2019. This approach is not suitable for the 2021 bulletins as the comparison period needs to be pre-pandemic. Therefore, the relevant three-month period in 2021 is compared to the average of the same quarter in 2017, 2018 and 2019: an average across three years is used to provide robust baseline statistics. The three-month period in 2020 is also shown, but not used in statistical comparisons. In the 2021 quarterly bulletins, the injury statistics are no longer presented *relative to ED service use*, as ED service use is no longer below the expected levels for the time of year.

To provide context for the injury bulletin, a historical overview of key dates of the restrictions in metropolitan and regional Victoria in 2020 up to June 2021 has been provided in the Appendix section.

## Method

Data used to compile this bulletin were extracted from the Victorian Emergency Minimum Dataset (VEMD), which holds de-identified clinical records of presentations at Victorian public hospitals with designated 24-hour emergency departments (EDs) (currently 39 hospitals). ED presentations from 1 April 2017 to 30 June 2021 were analysed for this bulletin. A detailed outline of the methods used for case selection are provided in the Appendix section of this report. For more information on methods used by the Victorian Injury Surveillance Unit see [here](#) and background information and pre-COVID statistics see [here](#).

## Key Injury Groups



HOME



WORK



FARM



SPORTS



SELF-  
HARM



ASSAULT  
(home)

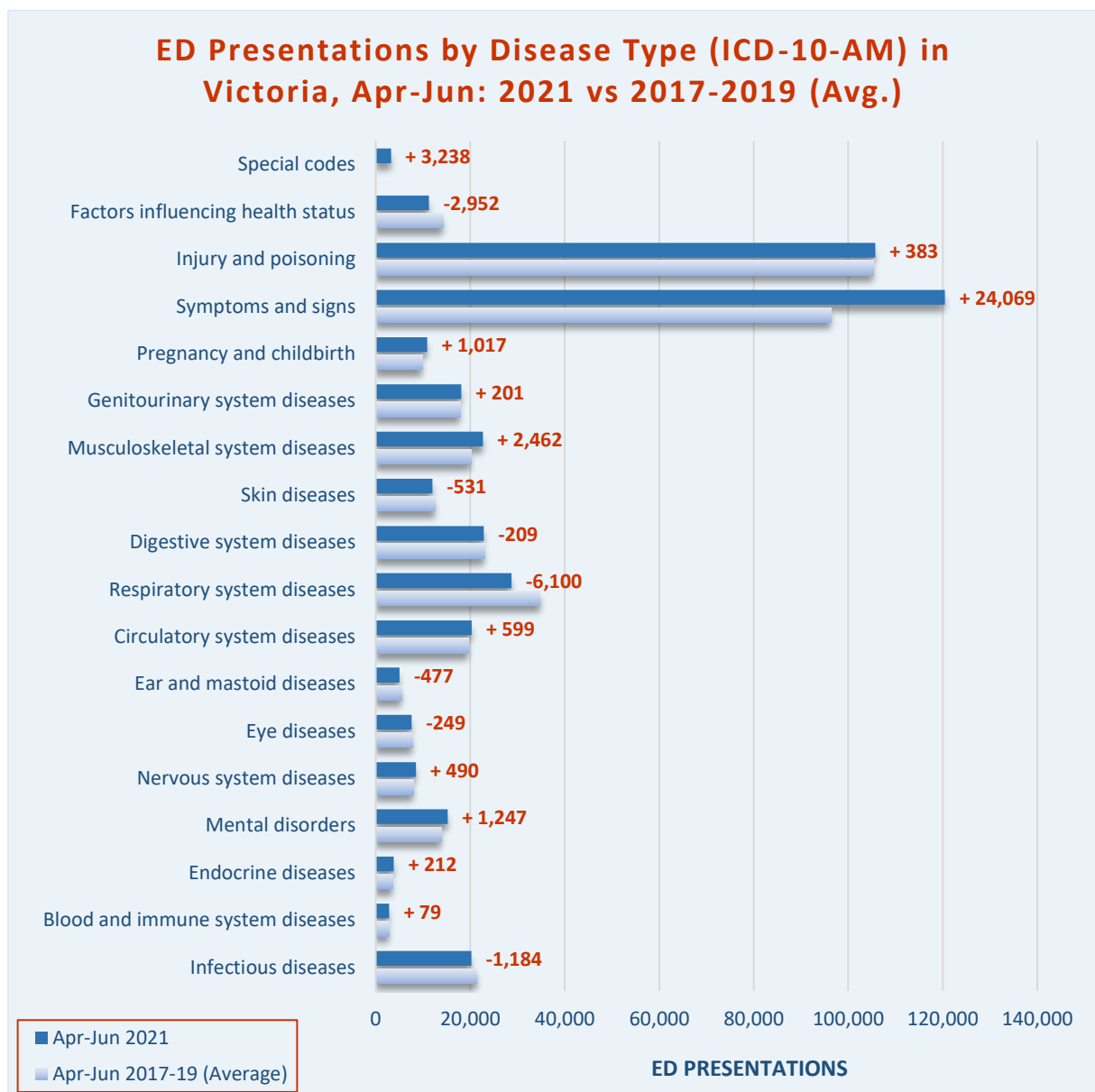


TRANSPORT

# 1.CONTEXT: OVERALL EMERGENCY DEPARTMENT PRESENTATIONS (APRIL-JUNE 2021)

In the three months from April to June 2021, there were 467,622 Emergency Department presentations in Victoria, as recorded in the Victorian Emergency Minimum Dataset (VEMD). This number is 6.4% higher than the number of ED presentations expected based on the average in April to June, in 2017 to 2019, which was 493,353. The corresponding difference in population-based rate in the second quarter of 2021 (27,918 per 100,000 population) vs. the average for the second quarter of 2017-2019 (27,570) was less pronounced at +1.3%, but still statistically significant at  $p < 0.0001$ .

An overview of the change in ED presentations in the second quarter of 2021 compared to the average for the second quarter in 2017 to 2019 is shown in the figure below, by diagnostic group. The two most commonly occurring diagnostic groups are *Injury and poisoning* and *Symptoms and signs*. The latter had the greatest increase in ED presentations in April-June 2021, in terms of proportional change as well as in absolute numbers. Within 'Symptoms and signs', the greatest increases were observed in *chest pain, unspecified* (+4798), *unknown and unspecified causes of morbidity* (+4626), and *other and unspecified abdominal pain* (+2607).



An overview of specific interest areas: viral illnesses, respiratory illnesses and adverse effects of COVID vaccines, are shown in the table below. The rate of ED presentations for viral infections was lower in April to June 2021 than in the same time period in 2017 to 2019 (averaged over three years), with a 7% decrease in the annual rate from 656 to 609 per 100,000 population. The rate was lower in April to June 2020, i.e. the early months of the COVID-19 outbreak: this is discussed in earlier bulletins (Editions 2-4)<sup>1</sup>. Rates of ED presentations for upper respiratory infections (unspecified) were not statistically significantly different in April to June 2021 than in the 2017-2019 comparison period. In the second quarter of 2020, rates of upper respiratory infection-related ED presentations were particularly low, similar to the pattern observed for viral infections.

Rates of pneumonia-related ED presentations were slightly lower in the second quarter of 2021 than in the 2017 to 2019 comparison period, with a 21% decrease in population-based rates, and asthma-related ED presentations showed a 22% decrease in rate. There were 442 ED presentations for adverse effects of COVID vaccines<sup>2</sup> presenting to the ED recorded in the VEMD in April to June 2021.

*Table 1 ED presentations for specific interest areas: viral illnesses, respiratory illnesses and adverse effects of COVID vaccines*

Category	April to June 2017 to 2019*		April to June 2020		April to June 2021	
Respiratory illness or virus-related ED presentations:	Frequency	Rate per 100,000 population	Frequency	Rate per 100,000 population	Frequency	Rate per 100,000 population
Viral infection, unspecified	10,424	656	6521	393	10,172	609
Upper respiratory infection, unspecified	4160	262	2322	140	4520	271
Pneumonia (broncho- or lobar)	3485	219	2227	134	2895	173
Asthma	5264	331	2187	132	4295	257
Adverse effects of COVID vaccines <sup>2</sup>	0	0	0	0	442	26

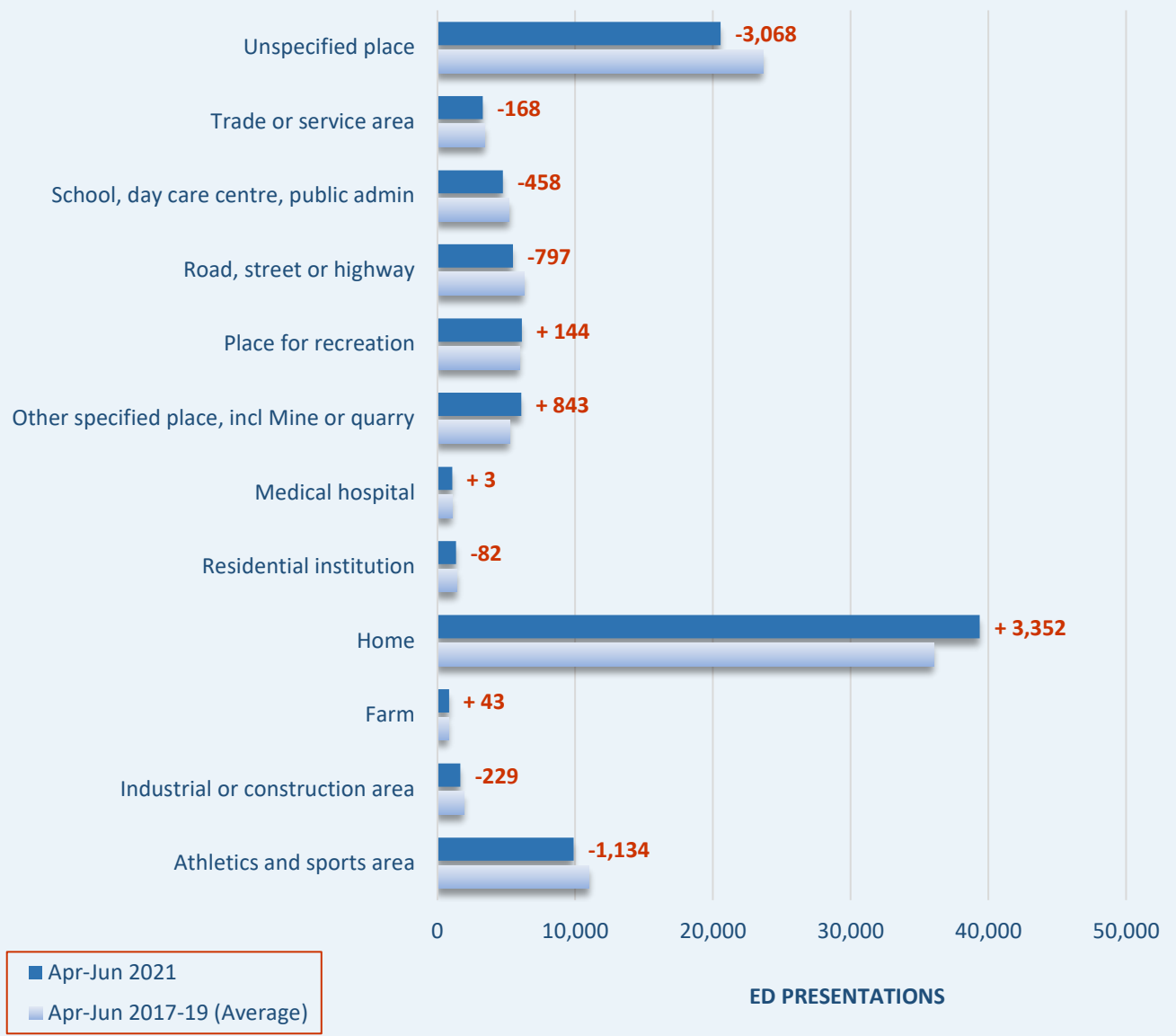
Data selection methods are explained in the Appendix section. Note: ED presentation numbers reflect the recently received consolidated ED data for the period up to June 2021. \*Three-year average.

The number of ED presentations due to injury and poisoning was 105,312 in the second quarter of 2017-2019 (averaged), 79,199 in the second quarter of 2020 and 105,695 in the second quarter of 2021. The focus of this bulletin is on unintentional home injury; work-related injury; farm injury; sports injury; intentional injury and transport injury. First, in the figure below, an overview is provided of injury related ED presentations in April to June 2021 and the comparison period in 2017 to 2019, by *place of injury occurrence*. The greatest increase was observed in home injuries, in absolute numbers (+3352); proportionally, home injuries increased by 9%. Marked reductions (comparing the second quarter of 2017 to 2019 (three-year average) to the second quarter of 2021) were observed in injuries that took place in the road, street or highway (-13%), industrial or construction areas (-12%) and, sport and athletic areas (-10%). Notably, injury related ED presentations with place coded to 'unspecified place' decreased by 13%.

<sup>1</sup> <https://www.monash.edu/muarc/research/research-areas/home-and-community/visu/injuries-during-the-covid-19-pandemic>

<sup>2</sup> Diagnostic code U077: Emergency use of U07.7 [COVID-19 vaccines causing adverse effects in therapeutic use]

## Injury and Poisoning ED Presentations by Place of Occurrence in Victoria, Apr-Jun: 2021 vs 2017-2019 (Avg.)



## 2. SUMMARY: EMERGENCY DEPARTMENT HEALTH SERVICE USE FINDINGS (VIC)



Comparing April-June 2021 to the control period of April-June in 2017-2019 (average over three years), the rate of ED presentations recorded in the VEMD increased by 1.3% from 27,570 per 100,00 to 27,918 per 100,000.

ED presentations for "symptoms and signs" had the greatest increase, both proportionally (+25%) and in absolute numbers (+24,069)



ED presentations for viral infections (unspecified), pneumonia and asthma decreased by 7%, 21% and 22%, respectively, in the second quarter of 2021 compared to the control period (the second quarter of 2017 – 2019, averaged)

In April to June 2021, 442 ED presentations were coded as due to adverse effects of COVID vaccines



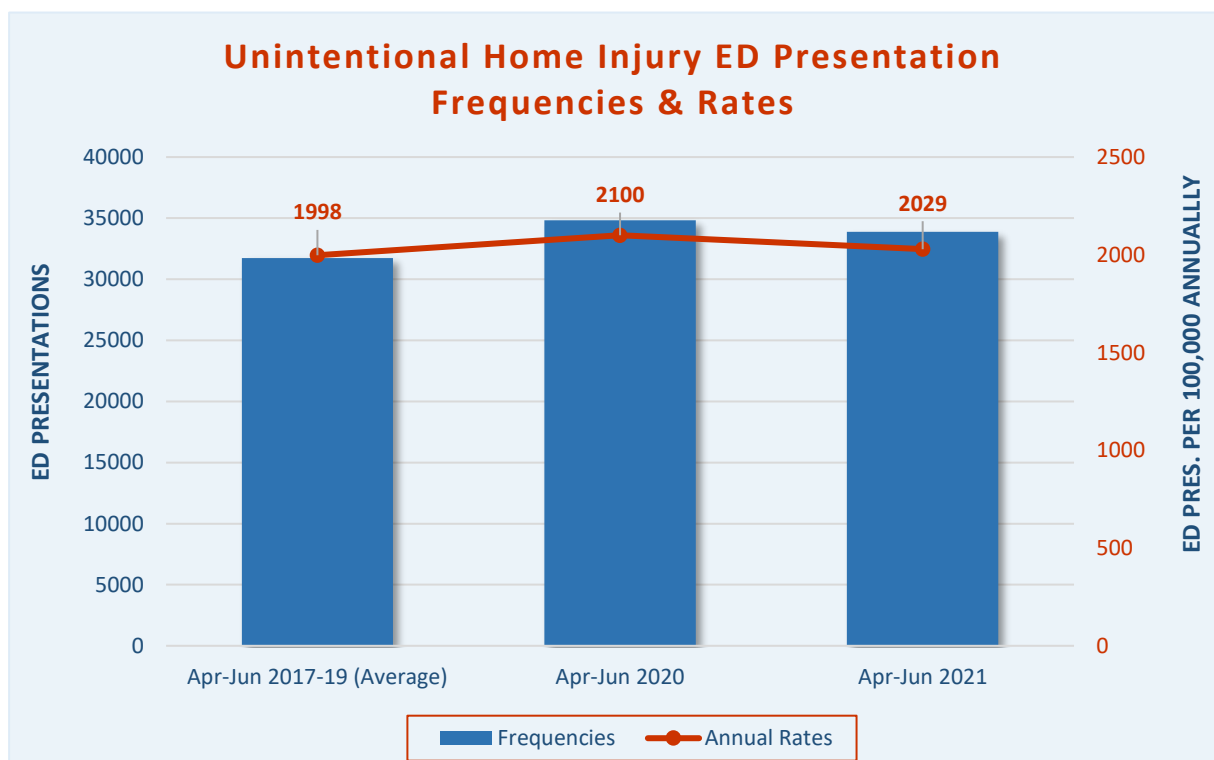
There were 105,695 injury and poisoning-related ED presentations in the second quarter of 2021 vs 105,312 in the control period (the second quarter of 2017 to 2019, averaged)

The home was the most commonly recorded place of injury occurrence, at both time points; home injury also had the greatest increase, in absolute numbers (+3352); proportionally, home injury increased by 9.3%



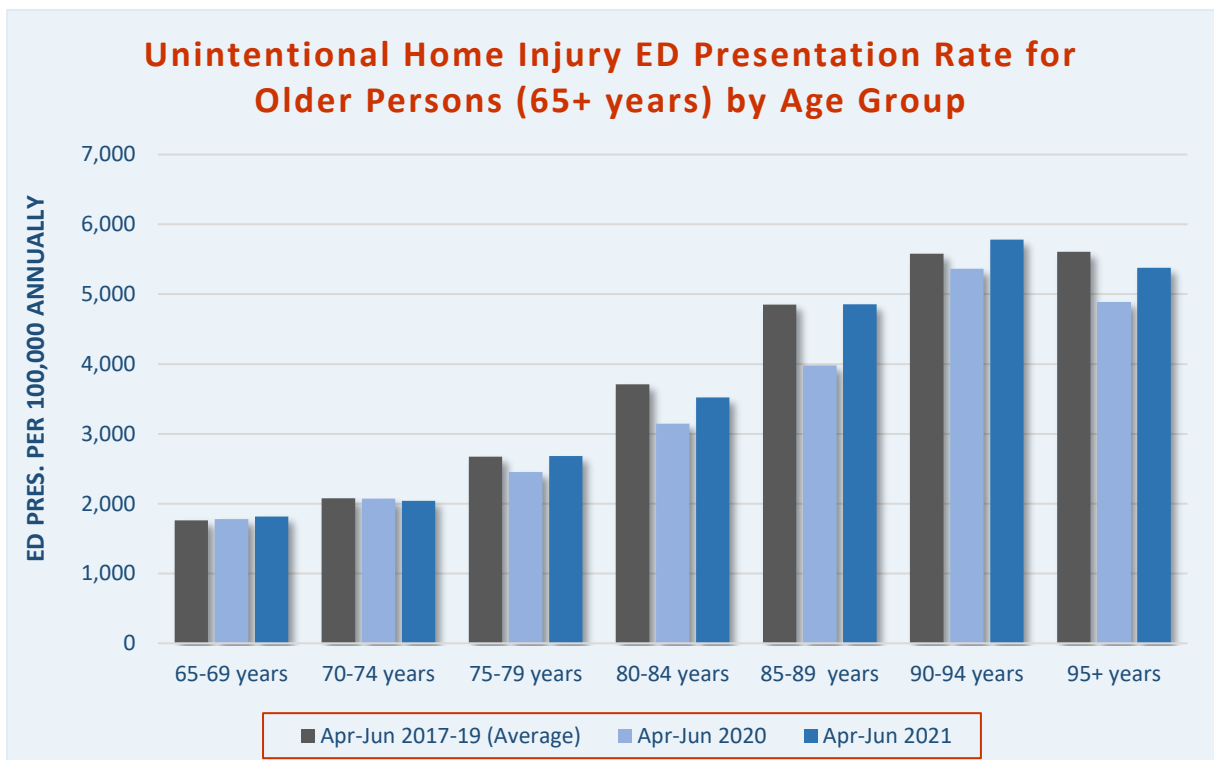
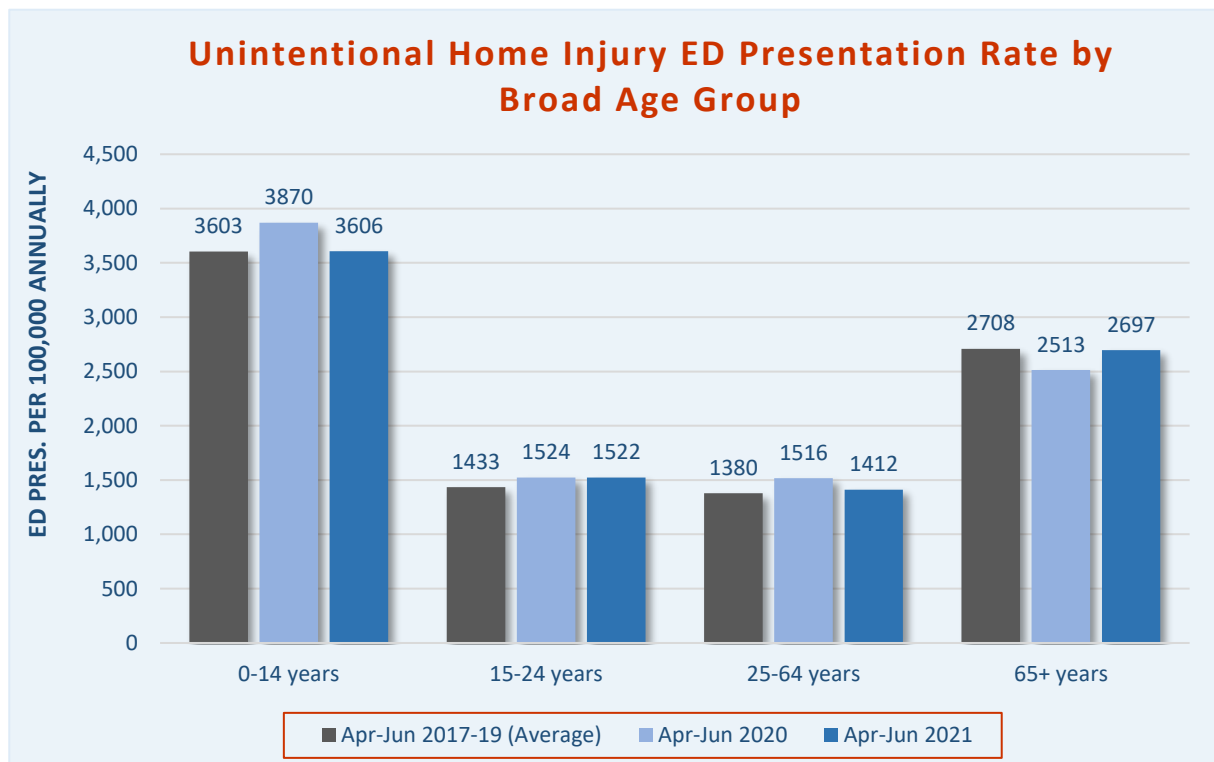
### 3. UNINTENTIONAL HOME INJURY

In the second quarter (April to June) of 2021, there were 33,883 ED presentations for unintentional home injuries recorded in the VEMD: the annual rate was 2029 home injury presentations per 100,000 population. In the comparison period of April to June 2017 – 2019 (averaged), 31,743 presentations were recorded, and the rate was 1998 per 100,000 population. These patterns are shown in the figure below; population-based rates increased marginally, by 1.6%. In April to June 2021, 7340 (22%) of ED presentations for home injury were subsequently admitted; this admission rate is similar to the 22% observed in the comparison period of April to June 2017 – 2019 (7030 subsequent admissions, average).



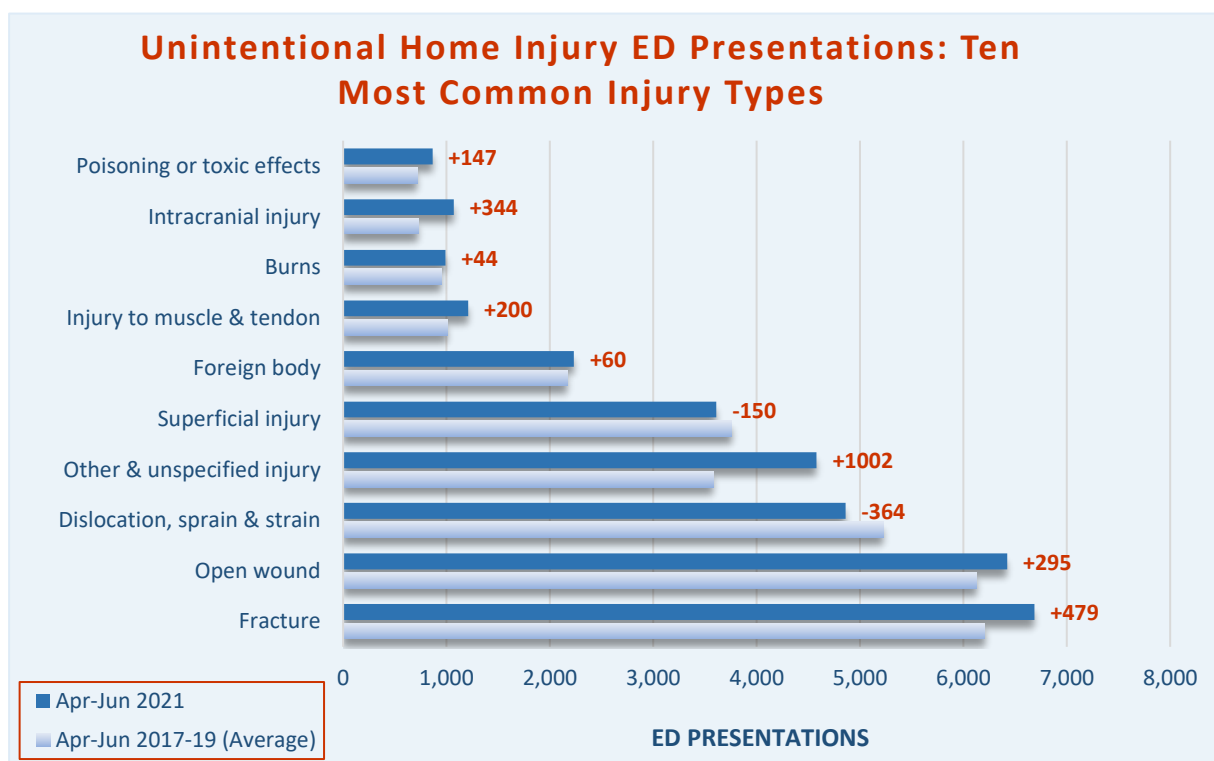
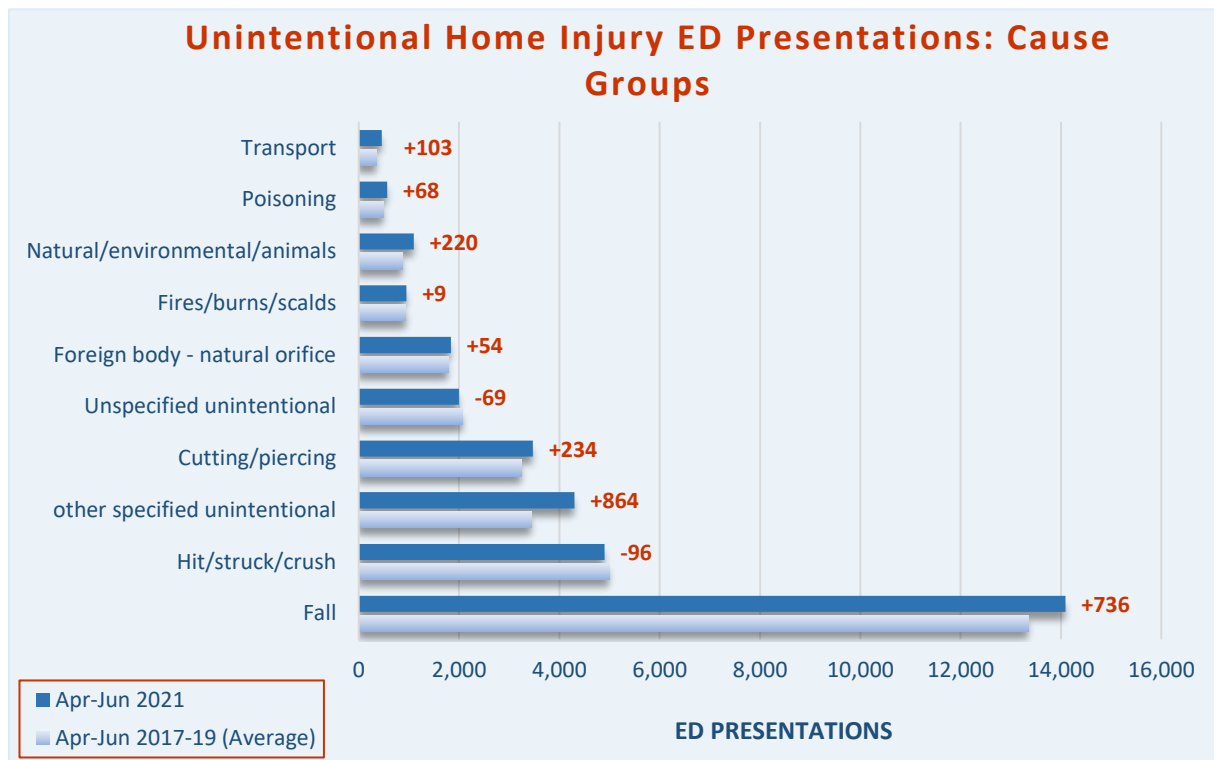
Unintentional home injury rates by broad age group are shown below, as well as more detailed age-specific rates for people aged 65 years and above. Both figures show the rates per 100,000 population in the second quarter of 2021, in the second quarter of 2017-2019 (averaged) as comparison, and the second quarter of 2020. The latter are included for completeness, but this time period is the focus of earlier editions of this bulletin<sup>3</sup>.

<sup>3</sup> <https://www.monash.edu/muarc/research/research-areas/home-and-community/visu/injuries-during-the-covid-19-pandemic>

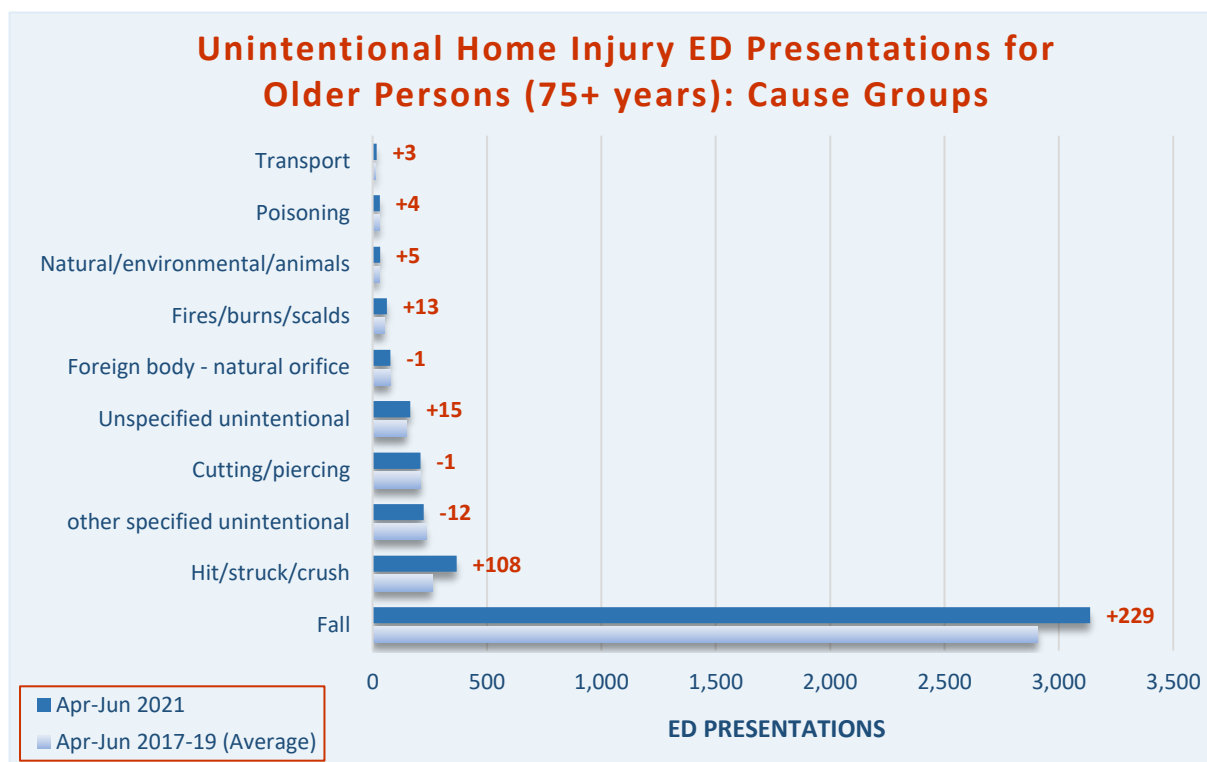


The cause of unintentional home injury ED presentations, and the main injury type, as recorded in the VEMD, are summarised in the graph below. Both in the second quarter of 2021 and in the comparison period (the second quarter of 2017 to 2019, averaged), the most common cause of injury in the home resulting in ED presentation was **falls**, followed by hit/struck/crush injury. The two most common injury types were fractures and open wounds.





Among people aged 75 years and above, the most common causes of unintentional home injury ED presentations are shown in the figure below. In this age group, 71-73% of unintentional home injuries were caused by falls. Among all-age unintentional home injury ED presentations, this proportion is much smaller, with 39-42% of cases caused by falls.

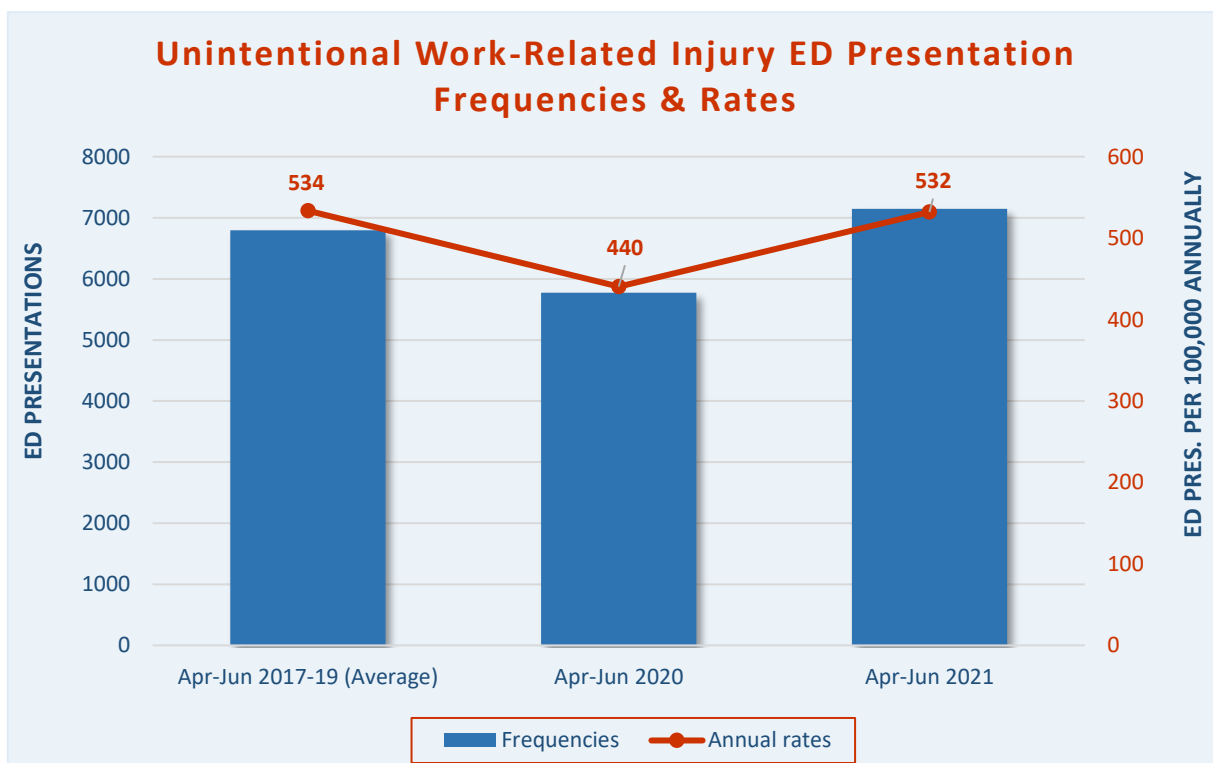


## SUMMARY: EMERGENCY DEPARTMENT PRESENTATIONS FOR UNINTENTIONAL HOME INJURY (VIC)

- ❑ Comparing April-June 2021 to the control period of April-June in 2017 - 2019 (average over three years), the rate of ED presentations for unintentional home injury in Victoria increased marginally, by 1.6% (from 1998 to 2029 presentations, respectively).
- ❑ The rate of admission subsequent to ED presentation for unintentional home injury was also similar at both time points (22%).
- ❑ Unintentional home injury was most common in the broad age group 0-14 years, followed by ages 65+ years, and relatively less common in the age groups 15-24 years and 25-64 years, at both time points (April-June 2021 and April-June in 2017-2019).
- ❑ Unintentional home injury rates increased with age above 75 years; this pattern continued until age 94 years. This pattern was observed at both time points (April-June 2021 and April-June in 2017-2019).
- ❑ The most common cause of unintentional home injury, at both time points, was falls (39-42% of cases); among people aged 75 years and above, falls was the injury cause in 71-73% of cases.
- ❑ In unintentional home injury ED presentations, the two most common injury types were fractures and open wounds.

## 4. WORK-RELATED INJURY

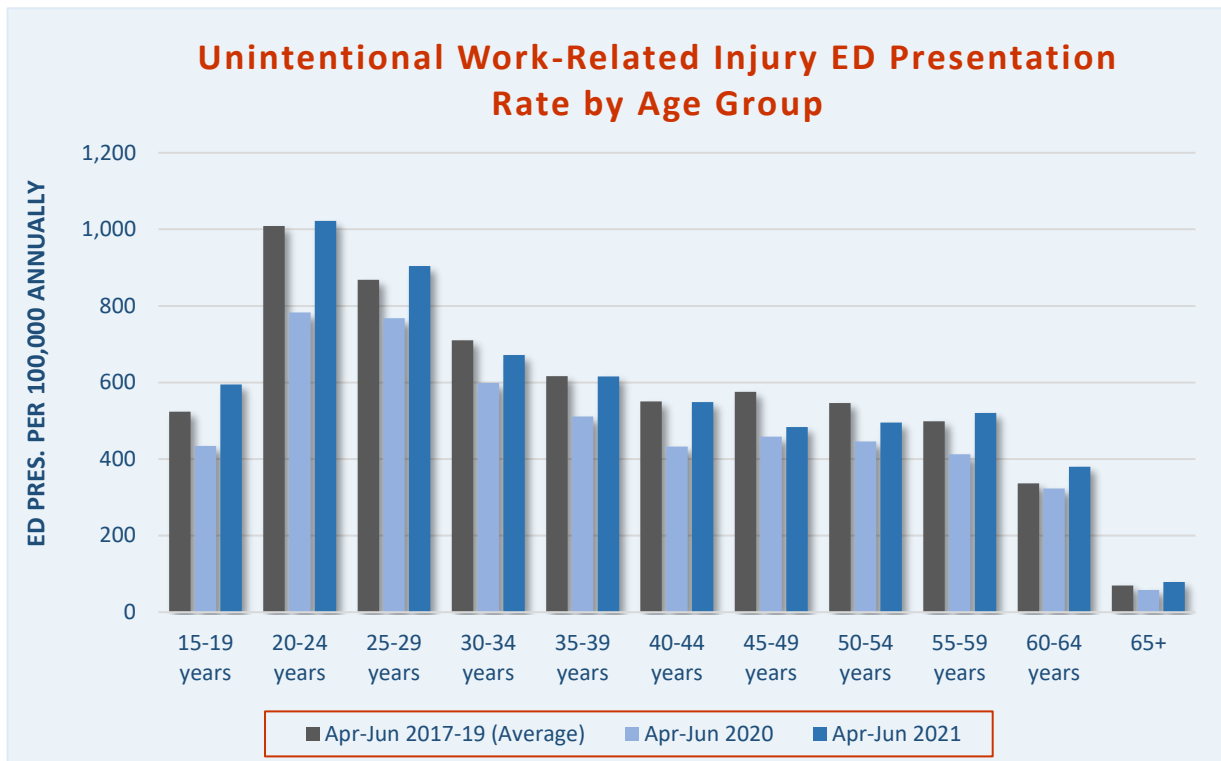
In the second quarter (April to June) of 2021, there were 7145 ED presentations for unintentional work-related injuries recorded in the VEMD among those 15 years and above: the annual rate was 532 work-related injury presentations per 100,000 population. Please note that the rates presented here are calculated based on the Victorian population, not based on the Victorian workforce or full-time equivalents. In the comparison period of April to June of 2017 – 2019 (averaged), 6794 presentations were recorded, and the rate was 534 per 100,000 population. These patterns are shown in the figure below; population-based rates of work-related injury in the second quarter of 2021 were similar to rates observed in the comparison period in 2017-2019. In April to June 2021, 1133 (16%) of ED presentations for work-related injury were subsequently admitted; this admission rate is similar to the 17% who were subsequently admitted in the comparison period of April to June 2017 to 2019 (1162 subsequent admissions, on average).



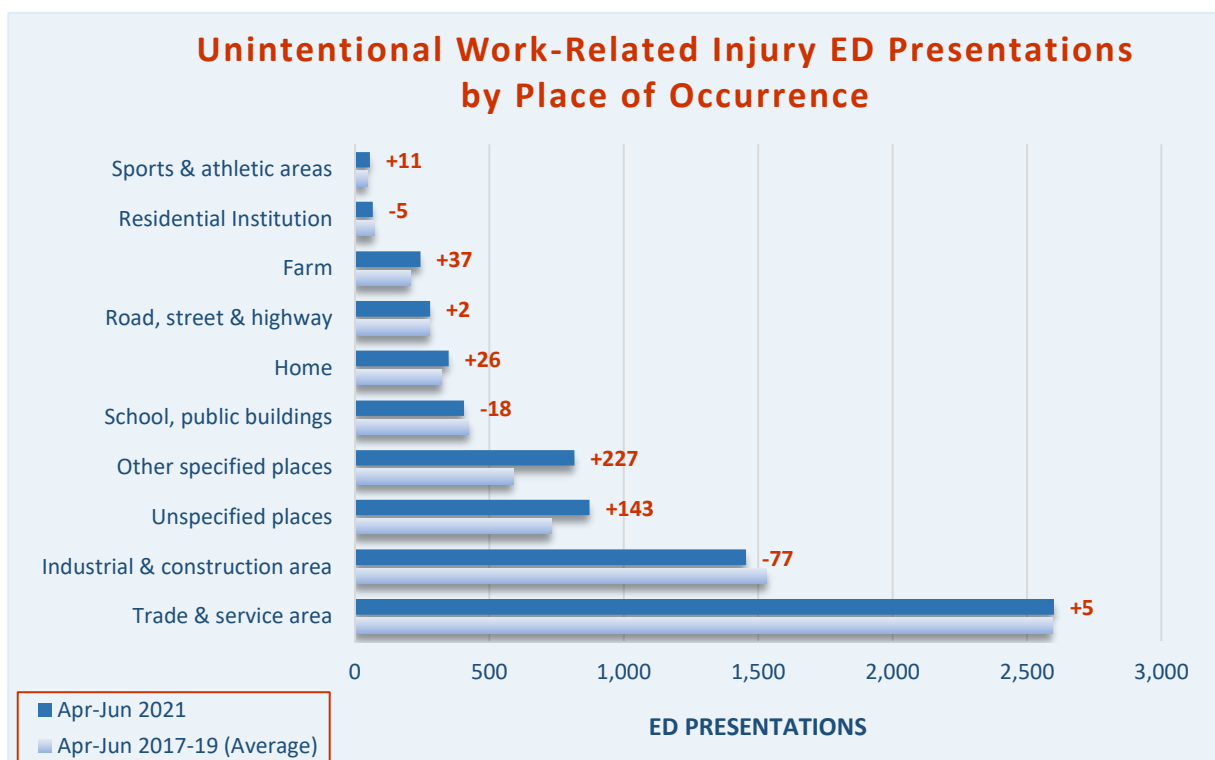
*Note: rates are calculated based on the Victorian population, not based on Victorian workforce full-time equivalents*

Unintentional work-related injury rates by age group (15 years and above) are shown below. The figure shows the rates per 100,000 population in the second quarter of 2021, in the second quarter of 2017-2019 (averaged) as comparison, and the second quarter of 2020. The latter are included for completeness, but this time period is the focus of earlier editions of this bulletin<sup>4</sup>. In each of the time periods, work-related injury rates peaked in the 20-24 years age group and then decreased with age until the 40-59 years age group. Rates were lowest at ages 65+ years, where workforce participation is also expected to be relatively low.

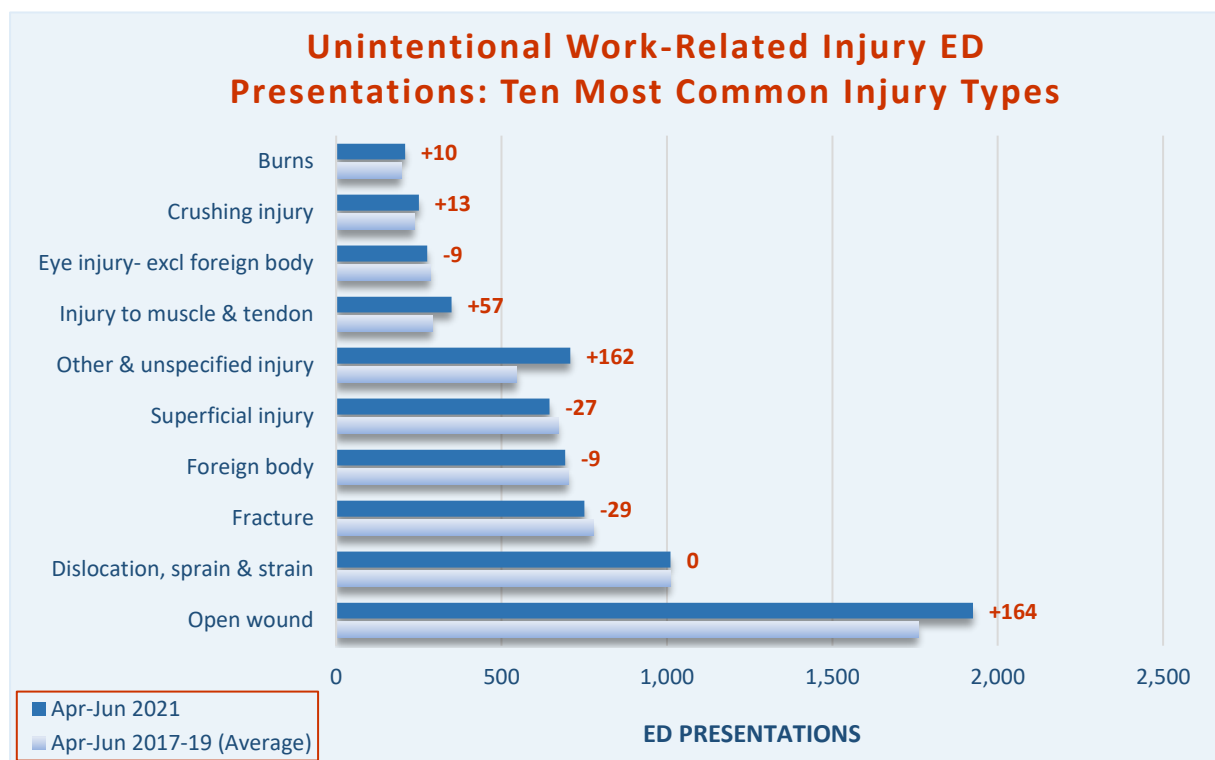
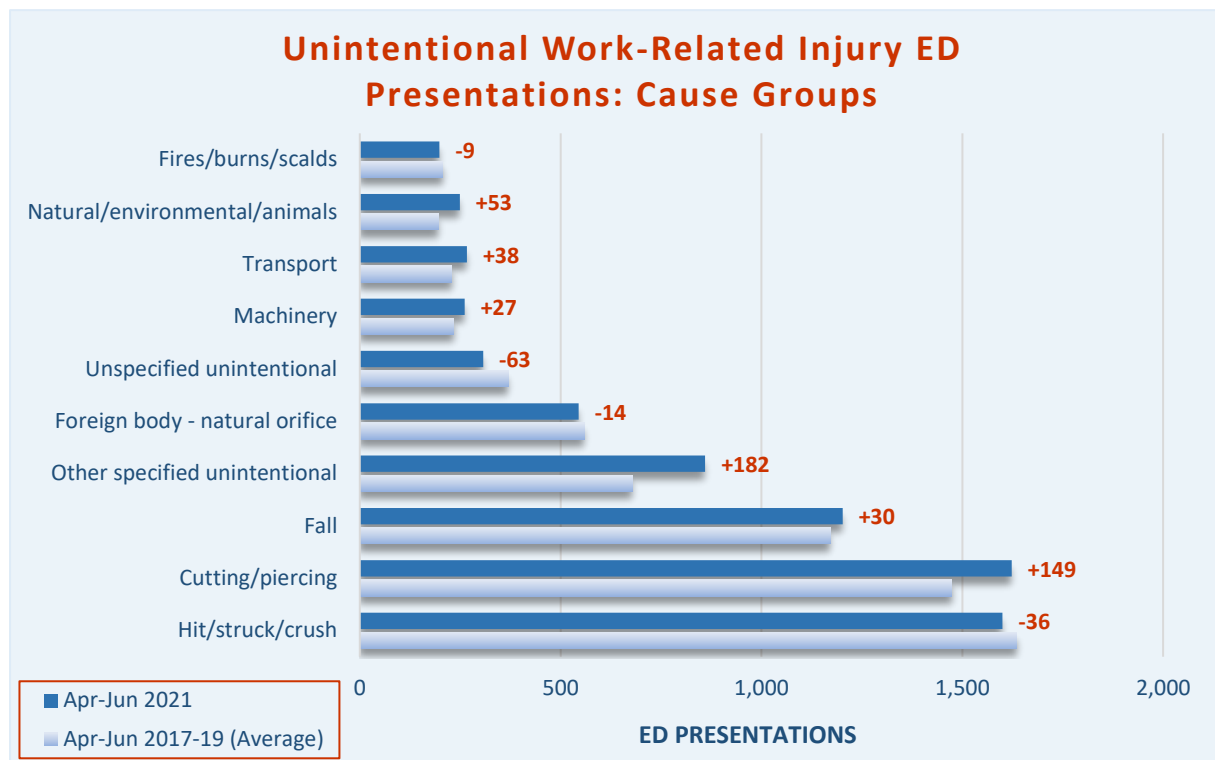
<sup>4</sup> <https://www.monash.edu/muarc/research/research-areas/home-and-community/visu/injuries-during-the-covid-19-pandemic>



The place of occurrence of unintentional work-related injury is shown in the figure below for ED presentations occurring in April to June 2021 and in the comparison period, April to June 2017-2019 (averaged). In both time periods, the most common place of occurrence was Trade and service area, followed by Industrial and construction area. Home injury was ranked 6<sup>th</sup> most common place of occurrence for both time periods.



The cause of unintentional work-related injury ED presentations, and the main injury type, as recorded in the VEMD, are summarised in the graphs below. Both in the second quarter of 2021 and in the comparison period (the second quarter of 2017 to 2019, averaged), the two most common causes of work-related injury resulting in ED presentation were hit/struck/crush injury and cutting/piercing injury. The most common injury type, in both time periods under comparison, was open wounds

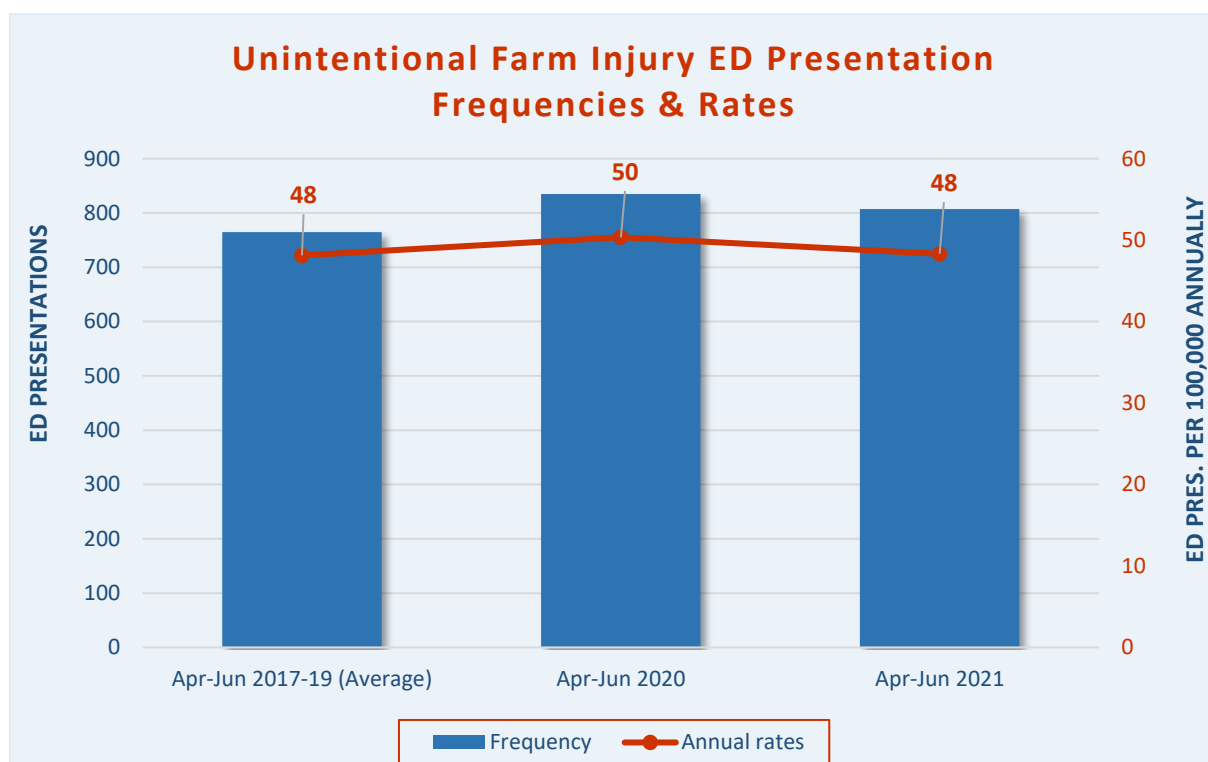


## SUMMARY: ED PRESENTATIONS FOR UNINTENTIONAL WORK-RELATED INJURY (VIC)

- ❑ Similar rates of ED presentations were observed for unintentional work-related injury in Victoria in April-June 2021 and in the control period in 2017-2019: respectively, 532 vs 534 ED presentations per 100,000 population annually.
- ❑ Rates are based on the general Victorian population by age group, not specified to workforce participation or full-time equivalents.
- ❑ The rates of admission subsequent to ED presentation for unintentional work-related injury were similar at both time points (16% and 17% for the second quarter of 2021 and the comparison period, respectively).
- ❑ Unintentional work-related injury resulting in ED presentation was most common in the age group 20-24 years, followed by a gradual decrease with increasing age, in both time points (April-June 2021 and April-June in 2017-2019).
- ❑ The two most common causes of unintentional work-related injury, at both time points, were cutting/piercing and hit/struck crush injuries.
- ❑ In unintentional work-related injury ED presentations, the most common injury type was open wounds, at both time points.

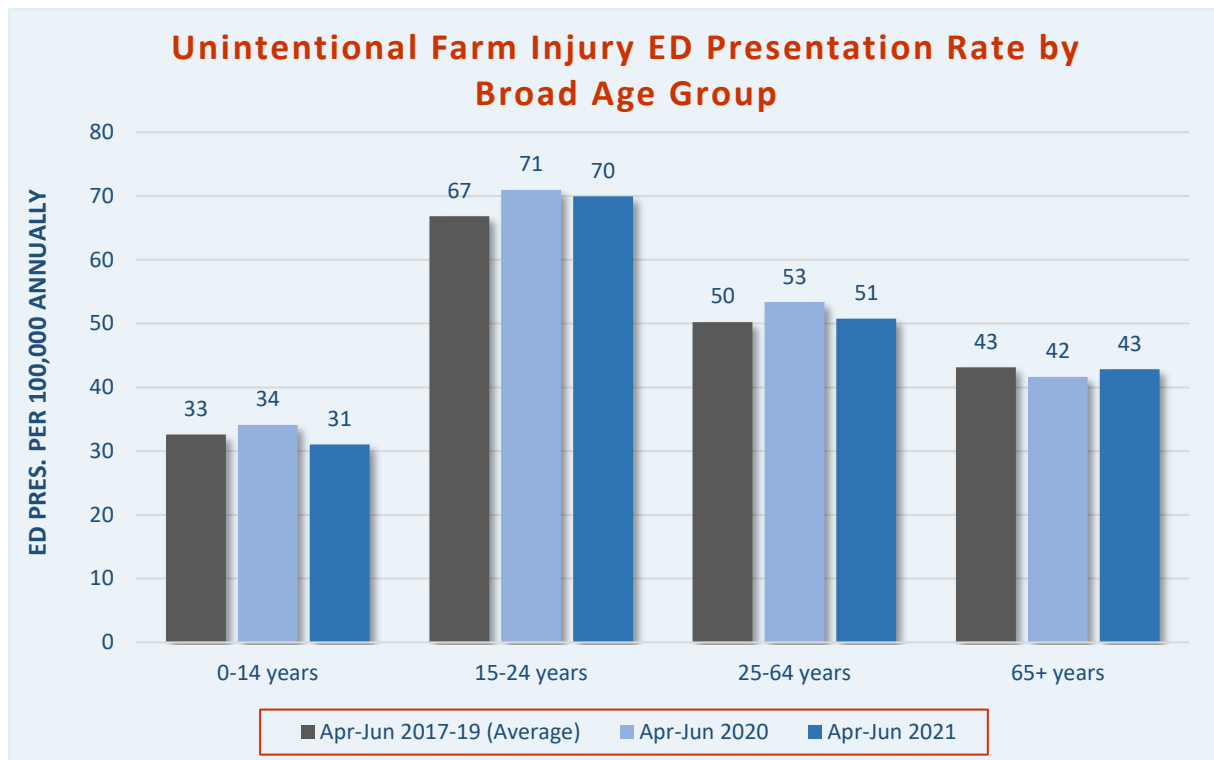
## 5. FARM INJURY

In the second quarter (April to June) of 2021, there were 807 ED presentations for unintentional farm injuries recorded in the VEMD: the annual rate was 48 farm-related injury presentations per 100,000 population. In the comparison period of April to June of 2017 – 2019 (averaged), 765 presentations were recorded, and the rate was 48 per 100,000 population. These patterns are shown in the figure below. In April to June 2021, 175 (22%) of ED presentations for farm injury were subsequently admitted; in the comparison period of April to June of 2017-2019, 188 (25%) of ED presentations for farm injuries were subsequently admitted, on average.

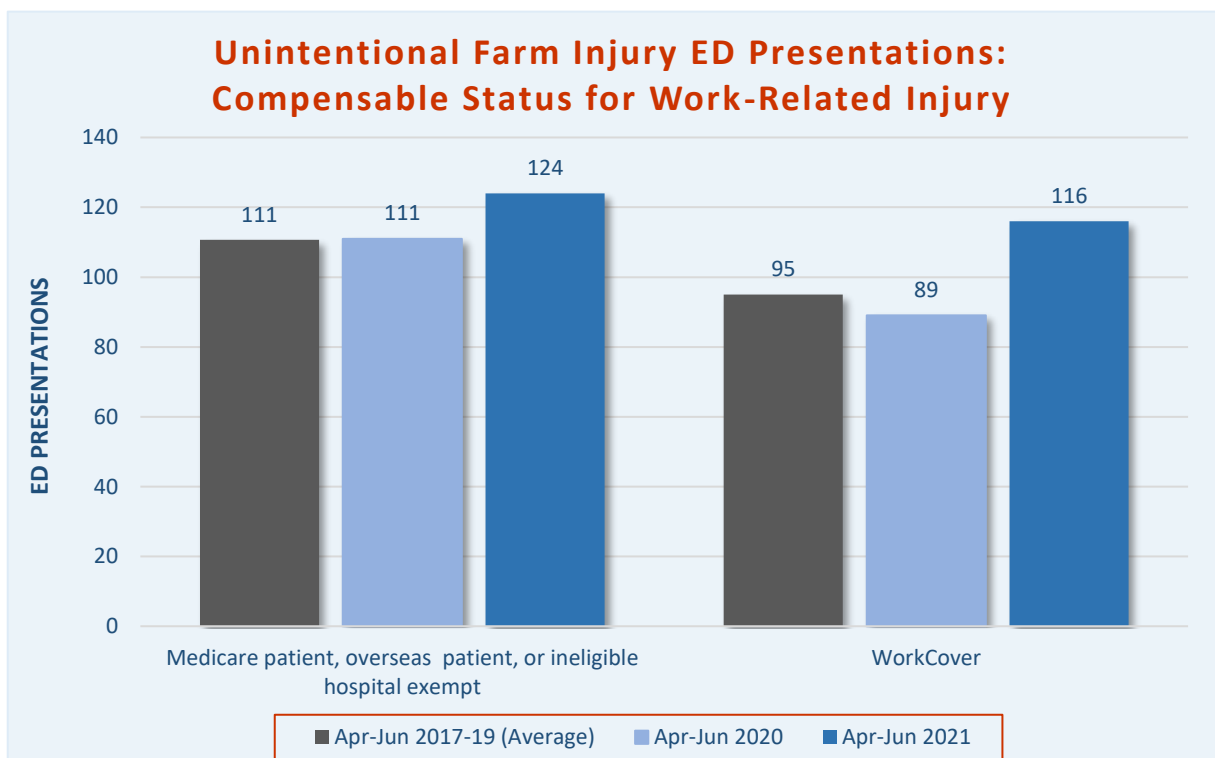


Unintentional farm injury rates by broad age group are shown below. The figure shows the rates per 100,000 population in the second quarter of 2021, in the second quarter of 2017-2019 (averaged) as comparison, and the second quarter of 2020. The latter are included for completeness, but this time period is the focus of earlier editions of this bulletin<sup>5</sup>. In each of the time periods, farm injury rates were highest in the 15-24 years broad age group. Rates were lowest at ages 0-14 years, in each of the time periods.

<sup>5</sup> <https://www.monash.edu/muarc/research/research-areas/home-and-community/visu/injuries-during-the-covid-19-pandemic>

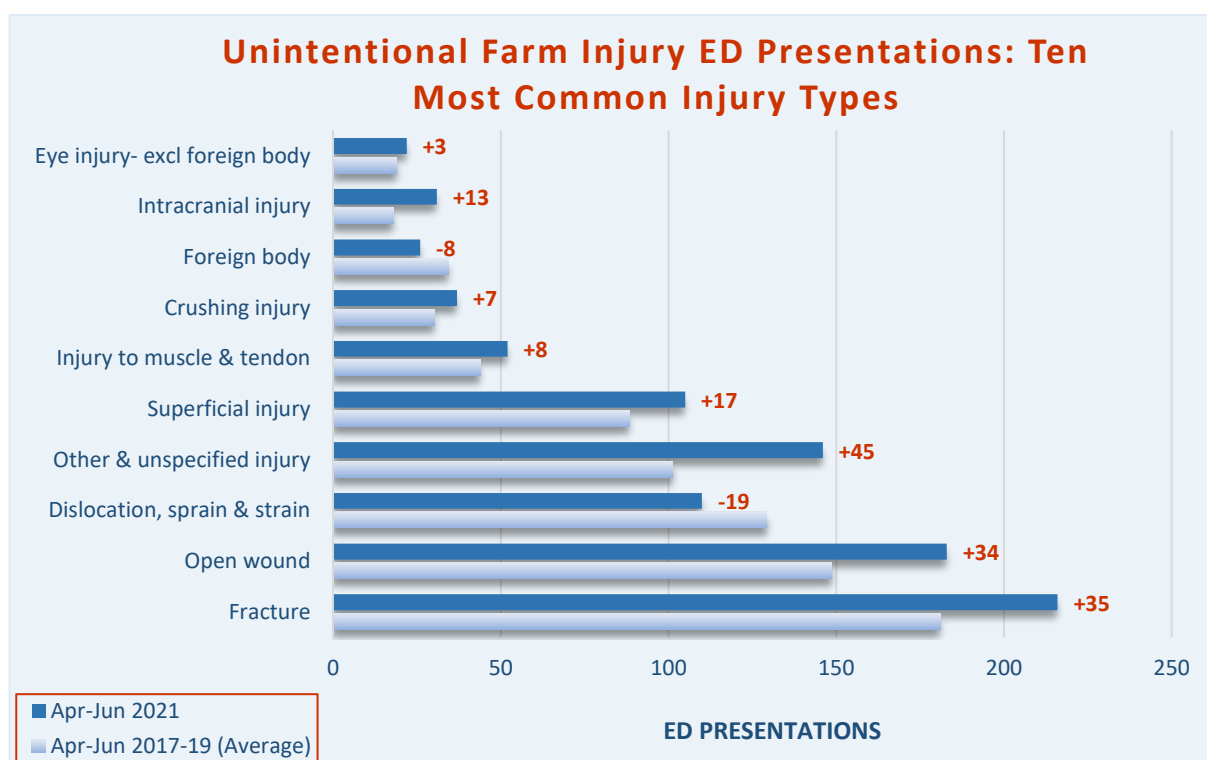
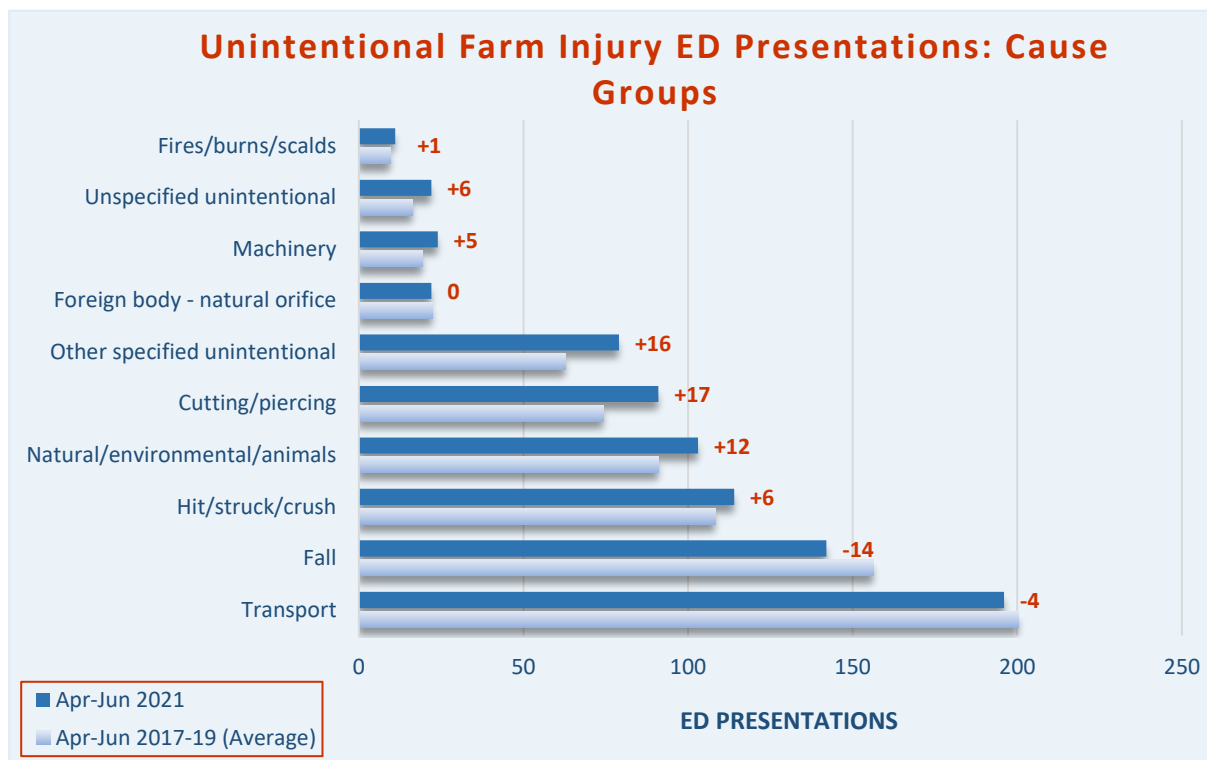


Please note that the farm injury statistics presented here include *work-related* as well as *non-work-related* farm injuries. ED presentations that were recorded as WorkCover patients are shown in the graph below; the remaining ED presentations were Medicare, overseas, or other patients. In the second quarter of 2021, 48% (n=116) of ED presentations for unintentional farm injuries were recorded as WorkCover patients; this compares to 46% (n=95) in the comparison period (second quarter of 2017-2019, averaged).





The cause of unintentional farm injury ED presentations, and the main injury type, as recorded in the VEMD, are summarised in the graphs below. Both in the second quarter of 2021 and in the comparison period (the second quarter of 2017 to 2019, averaged), the most common cause of farm injury resulting in ED presentation was transport, followed by fall-related injuries. The most common injury type, in both time periods under comparison, was fracture, followed by open wounds.

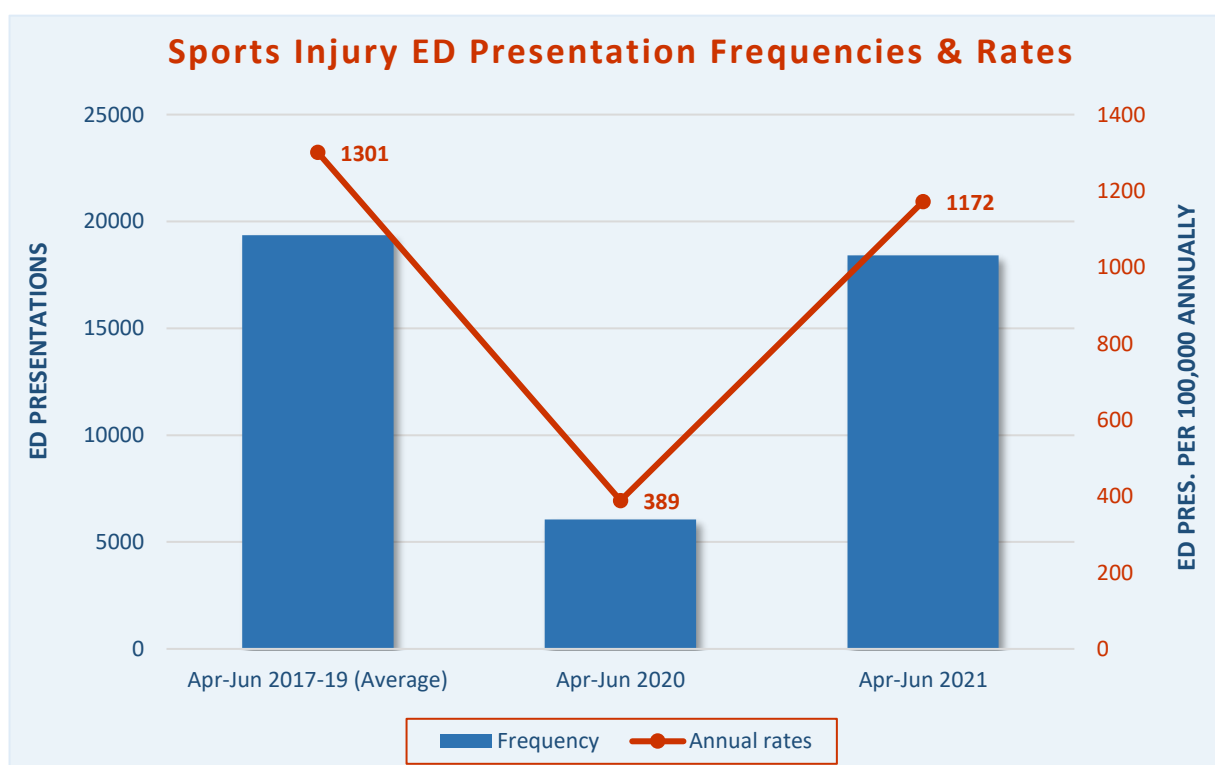


## SUMMARY: ED PRESENTATIONS FOR UNINTENTIONAL FARM INJURY (VIC)

- ❑ The rate of ED presentations for unintentional farm injury in Victoria was 48 ED presentations per 100,000 population annually, both in April-June 2021 and in the control period in 2017 to 2019.
- ❑ The rate of admission subsequent to ED presentation for unintentional farm injury was 25% in the second quarter of 2021 and 22% in the comparison period.
- ❑ Unintentional farm injury resulting in ED presentation was most common in the age group 15-24 years, in both time points (April-June 2021 and April-June in 2017-2019).
- ❑ Just under half of ED presentations for unintentional farm injuries were recorded as WorkCover patients: 48% and 46% of farm injury presentations, in the second quarter of 2021 and the comparison period in 2017-2019, respectively.
- ❑ The most common causes of unintentional farm injury, at both time points, was transport, followed by falls.
- ❑ In unintentional farm injury ED presentations, the most common injury types were fractures and open wounds, at both time points.

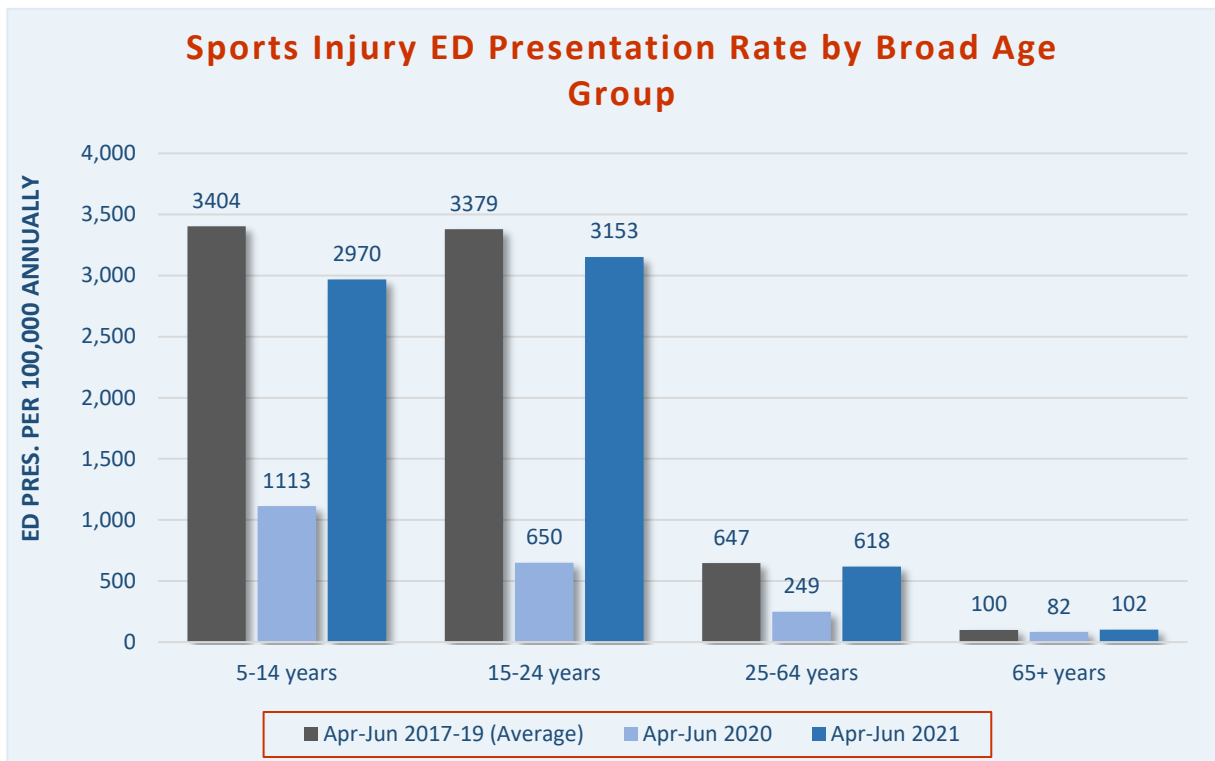
## 6. SPORTS INJURY

In the second quarter (April to June) of 2021, there were 18,415 ED presentations for sports injuries recorded in the VEMD among those aged 5 years and above: the annual rate was 1172 sports injury presentations per 100,000 population. In the comparison period of April to June of 2017 – 2019 (averaged), 19,351 presentations were recorded, and the rate was 1301 per 100,000 population. These patterns are shown in the figure below. Population-based rates of sports injury were 9.9% lower in the second quarter of 2021 compared to the comparison period in 2017-2019: this is a statistically significant difference. In April to June 2021, 2572 (14%) of ED presentations for sports injury were subsequently admitted; this admission rate is similar to the 13% observed in the comparison period of April to June 2017 to 2019 (2555 subsequent admissions, on average).

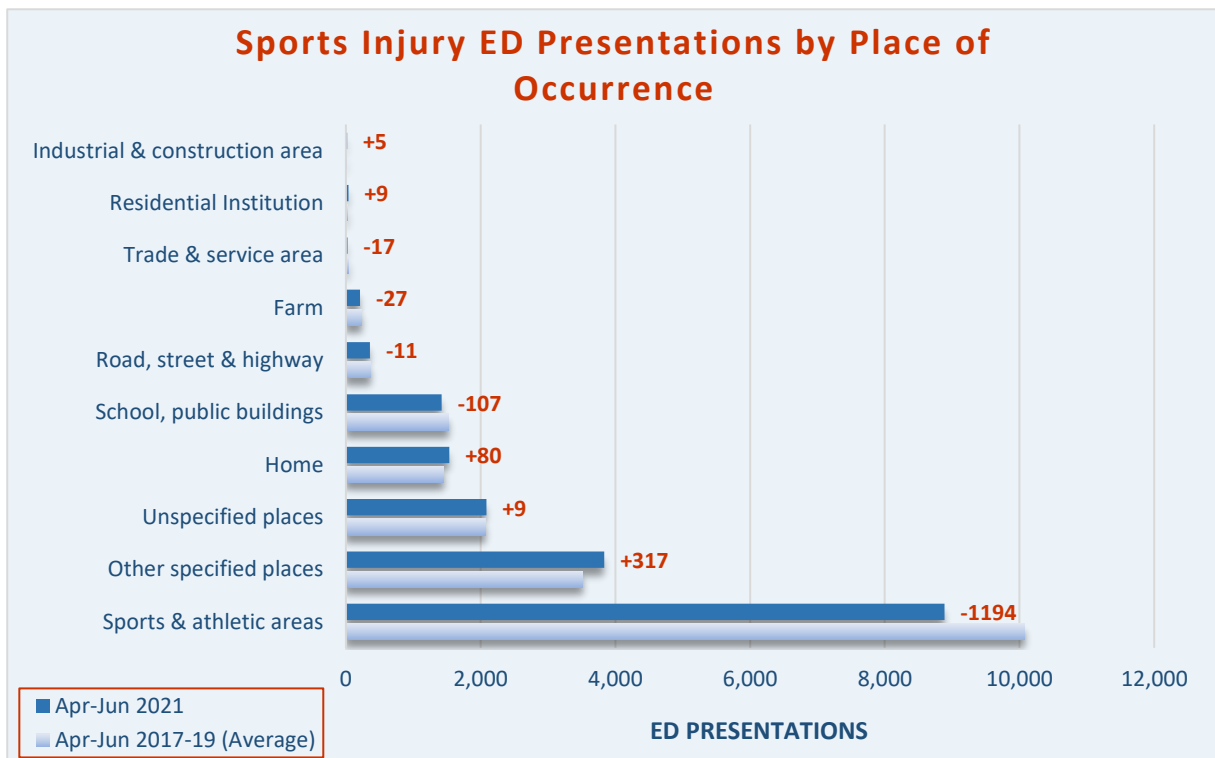


Unintentional sports injury rates by broad age group (5 years and above) are shown below. The figure shows the rates per 100,000 population in the second quarter of 2021, in the second quarter of 2017-2019 (averaged) as comparison, and the second quarter of 2020. The latter are included for completeness, but this time period is the focus of earlier editions of this bulletin<sup>6</sup>. In each of the time periods, sports injury rates were highest in the 5-14 years and 15-24 year age groups.

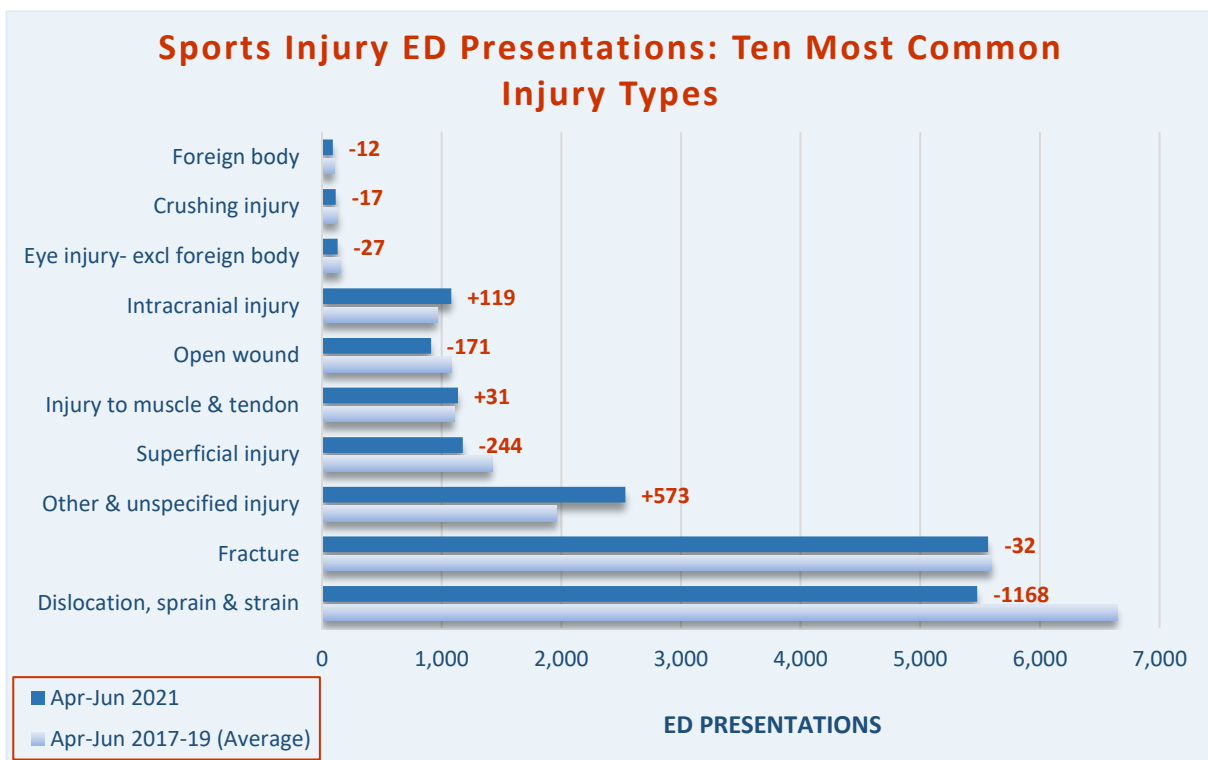
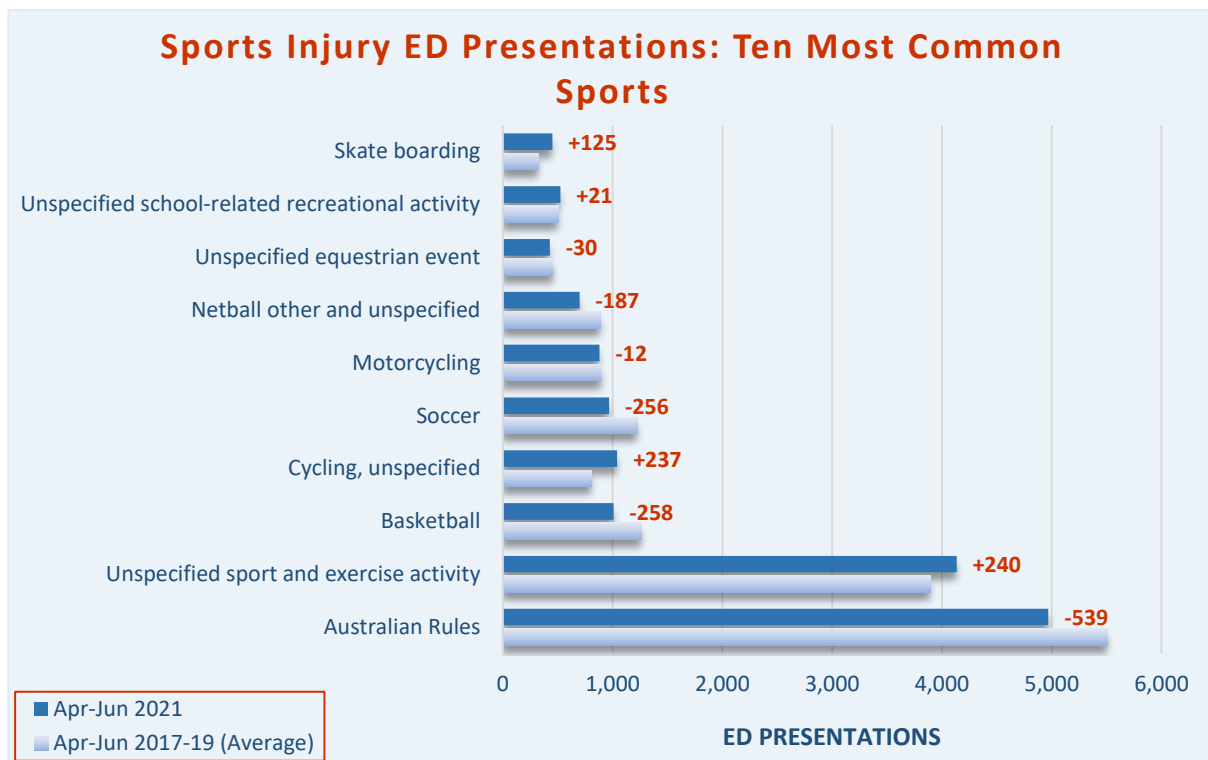
<sup>6</sup> <https://www.monash.edu/muarc/research/research-areas/home-and-community/visu/injuries-during-the-covid-19-pandemic>



The place of occurrence of sports injury is shown in the figure below: dark blue bars indicate the number of ED presentations in April to June 2021 and light blue bars indicate the ED presentations in the comparison period: April to June 2017-2019 (averaged). In both time periods, the most common place of occurrence was Sports & athletics areas. Home injury was ranked 4<sup>th</sup> most common place of occurrence in the second quarter of 2021 and 5<sup>th</sup> most common place of occurrence in the comparison period.



The ten most common sports injury ED presentations, and the main injury type, as recorded in the VEMD, are summarised in the graphs below. Both in the second quarter of 2021 and in the comparison period (the second quarter of 2017 to 2019, averaged), the most commonly specified sports injury was to *Australian Rules Football*. Unspecified sports and exercise activity, however, was the most commonly recorded activity category for sports injury. The two most common injury types, in both time periods under comparison, were fractures and dislocation, sprain & strain.



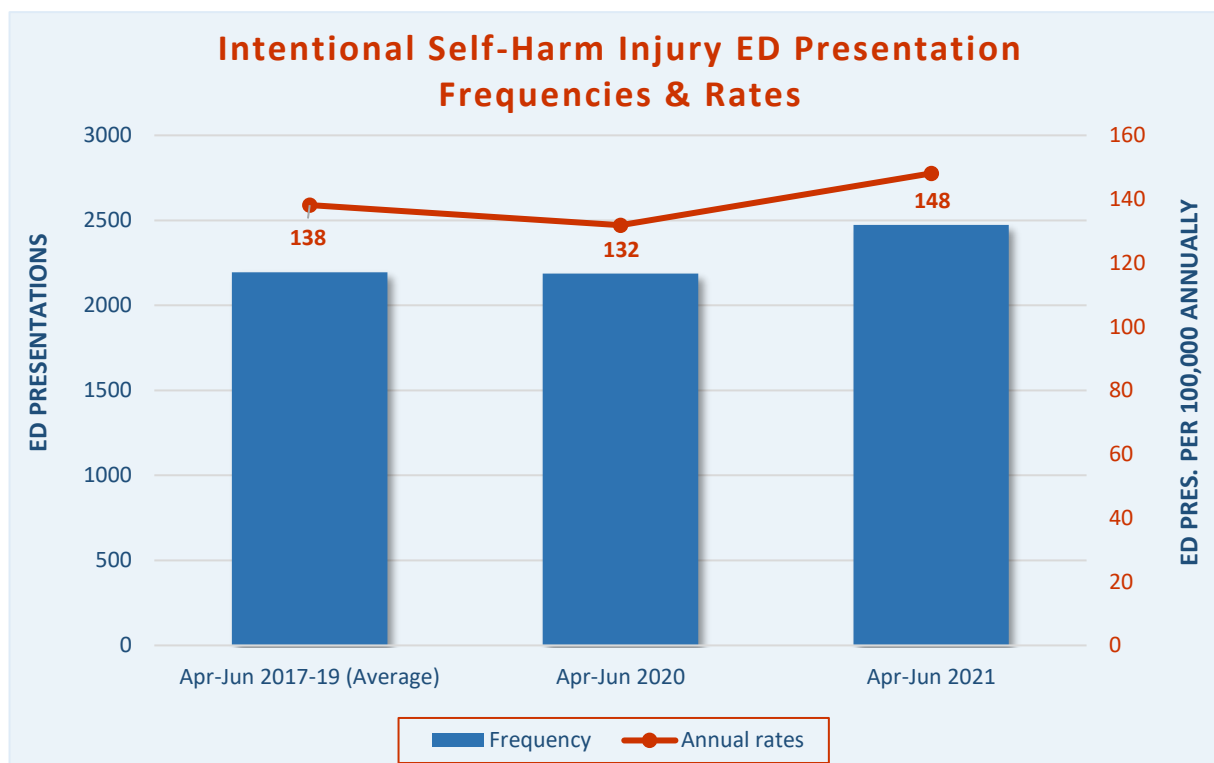
## SUMMARY: ED PRESENTATIONS FOR SPORTS INJURY (VIC)

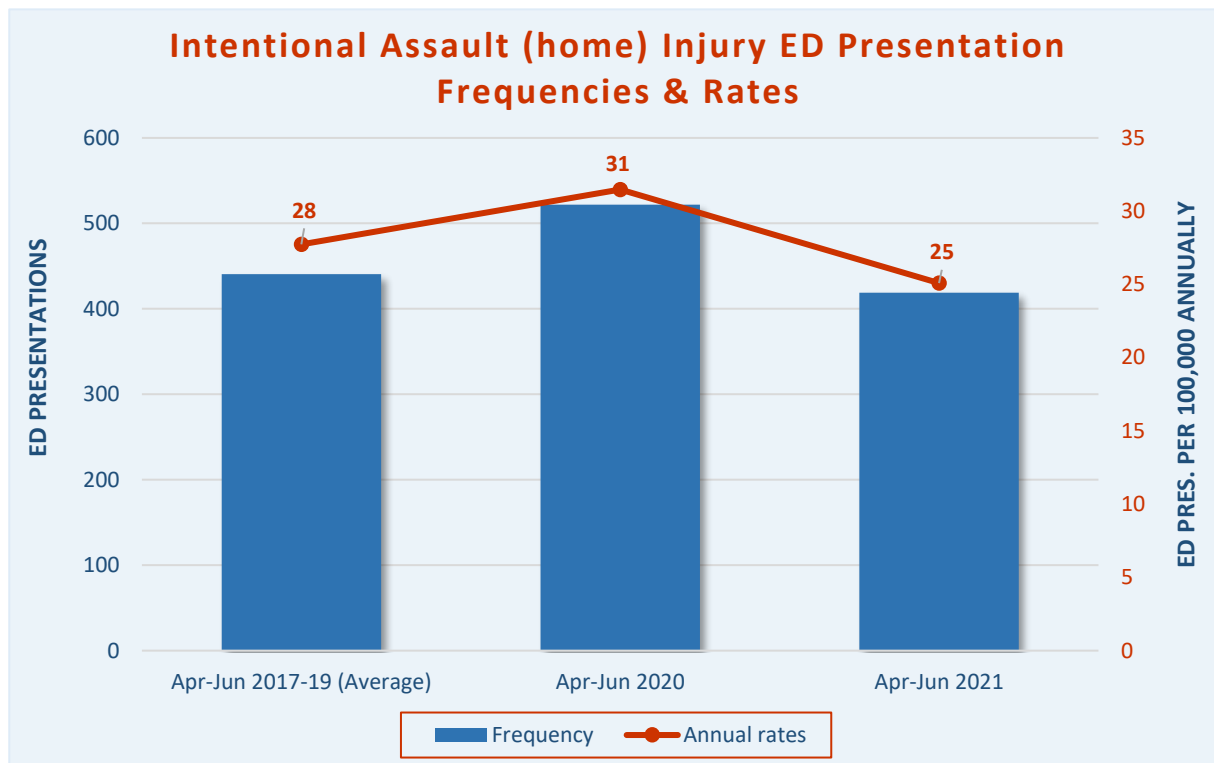
- ❑ The rate of ED presentations for sports injury in Victoria was 1172 per 100,000 population annually in April-June 2021 and 1301 in the control period in 2017 to 2019 (a 9.9% decrease in rate).
- ❑ The rate of admission subsequent to ED presentation for unintentional sports injury was 14% in the second quarter of 2021 and 13% in the comparison period in 2017-2019.
- ❑ Sports injury resulting in ED presentation was most common in the broad age groups 5-14 and 15-24 years, at both time points (April-June 2021 and April-June in 2017-2019).
- ❑ The most commonly specified sport injury ED presentation was related to Australian Rules Football, at both time points.
- ❑ At both time points, the most common place of occurrence was Sports and athletics areas; the home was ranked fourth in the second quarter of 2021 and the fifth in the comparison period.
- ❑ In sports injury ED presentations, the most common injury types were fractures and dislocations, sprain & strain, at both time points.

## 7. INTENTIONAL INJURY

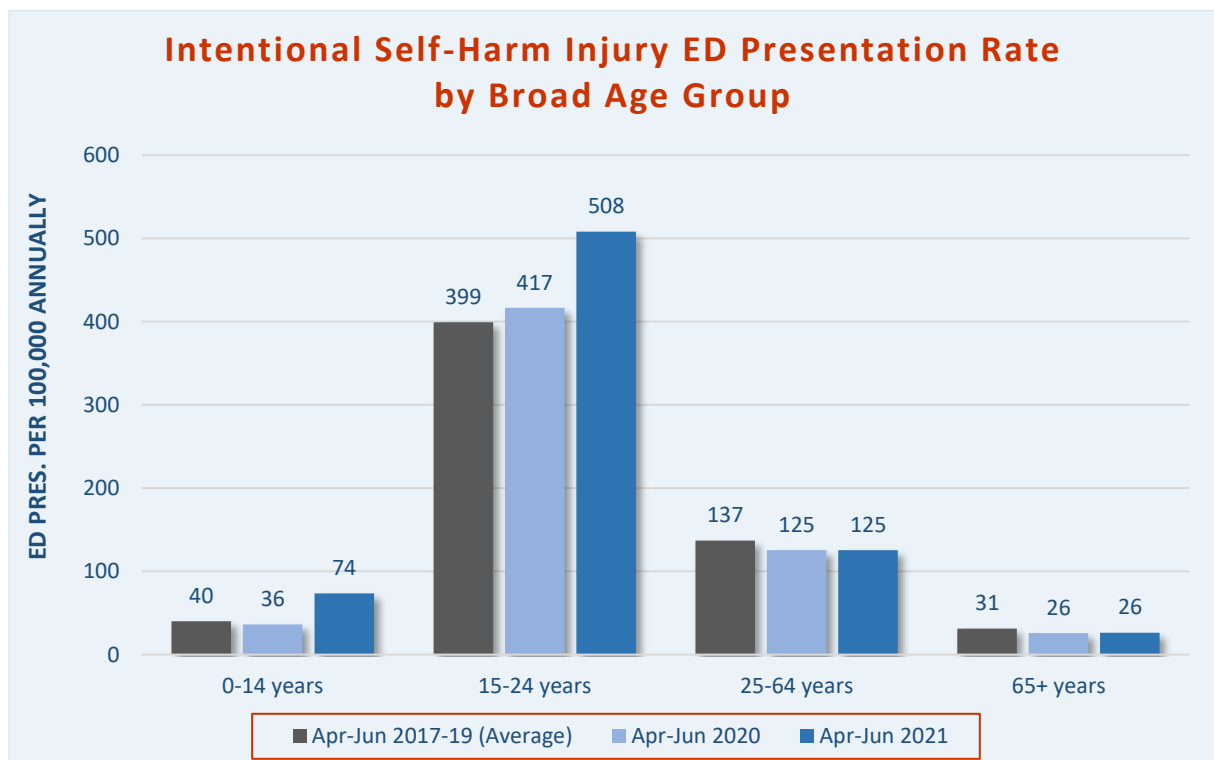
In the second quarter (April to June) of 2021, there were 2473 ED presentations for self-harm and 419 for assault (home) injuries recorded in the VEMD: the annual rates were, respectively, 148 and 25 presentations for self-harm and assault (home) injury presentations per 100,000 population. In the comparison period of April to June of 2017 – 2019 (averaged), 2194 presentations for self-harm and 441 for assault (home) injury were recorded, and the rates were, respectively, 138 and 28 per 100,000 population.

These patterns are shown in the figure below; population-based rates of self-harm injury were 7% higher in the second quarter of 2021 compared to the comparison period in 2017-2019, while assault (home) injury presentation rates did not differ significantly statistically. In April to June 2021, 1215 (49%) of ED presentations for self-harm injury were subsequently admitted; this admission rate is similar to the 52% observed in the comparison period of April to June 2017 to 2019 (1150 subsequent admissions, on average). Admission rates for assault (home) injury ED presentations were 37% (n=153) and 34% (n=148) in the second quarter of 2021 and comparison period, respectively.



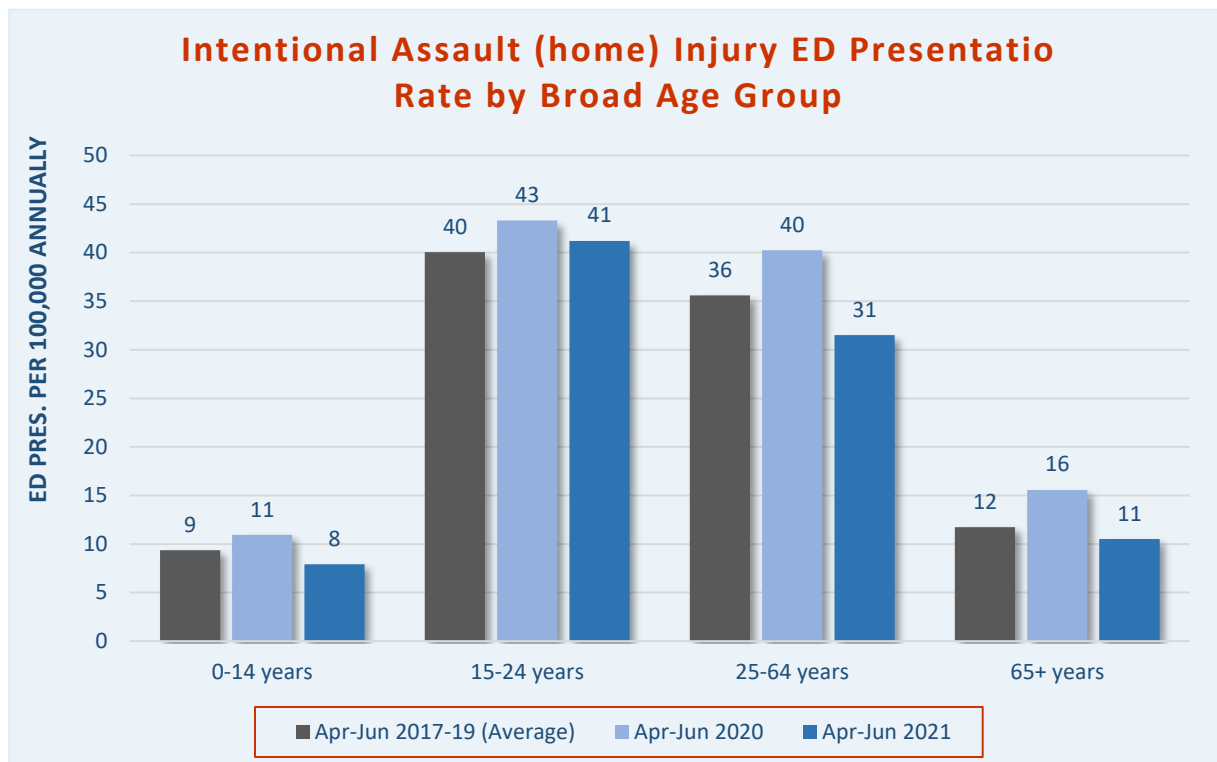


Self-harm and assault (home) injury rates by broad age group are shown below. The figures show the rates per 100,000 population in the second quarter of 2021 (dark blue bars), in the second quarter of 2017-2019 (averaged; light blue bars) as comparison, and the second quarter of 2020 (grey bars). The latter are included for completeness, but this time period is the focus of earlier editions of this bulletin<sup>7</sup>. Self-harm injury ED presentations were most common in the broad age group 15-24 years, in each of the time periods. Assault (home) injuries were most common across a wider age range, spanning the broad age groups 15-24 years and 25-64 years.

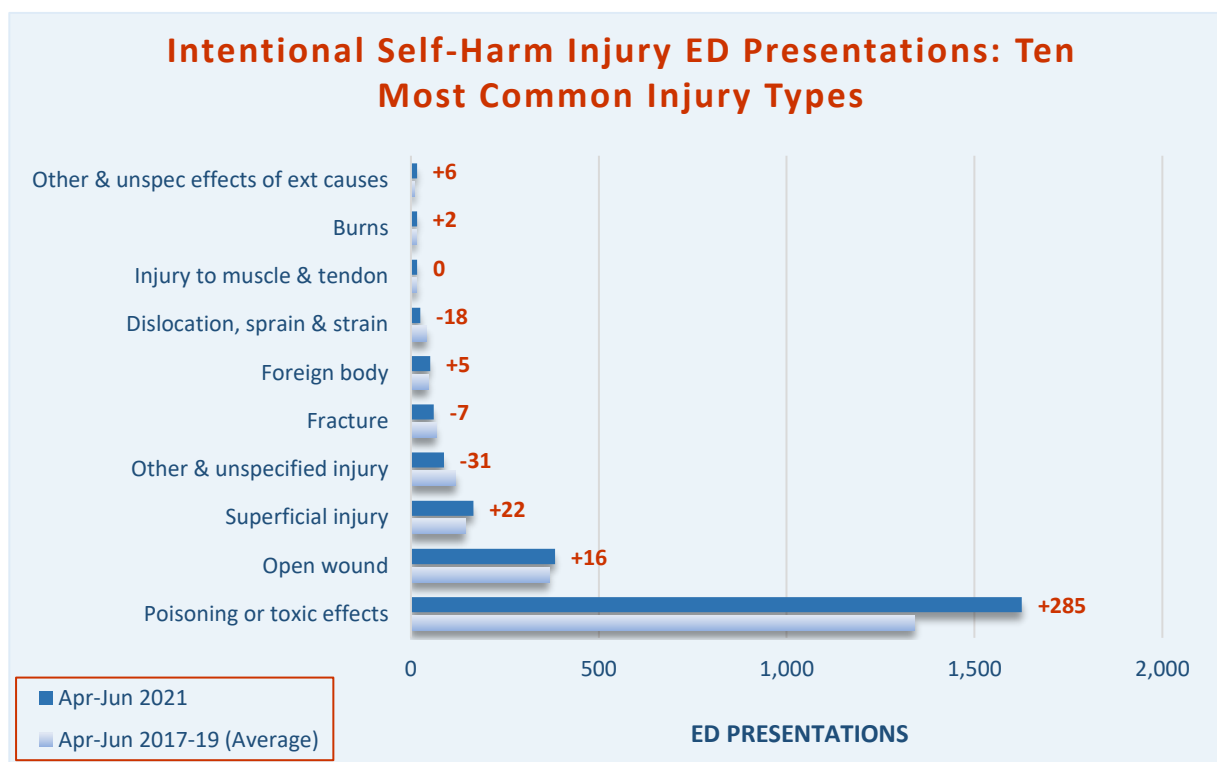


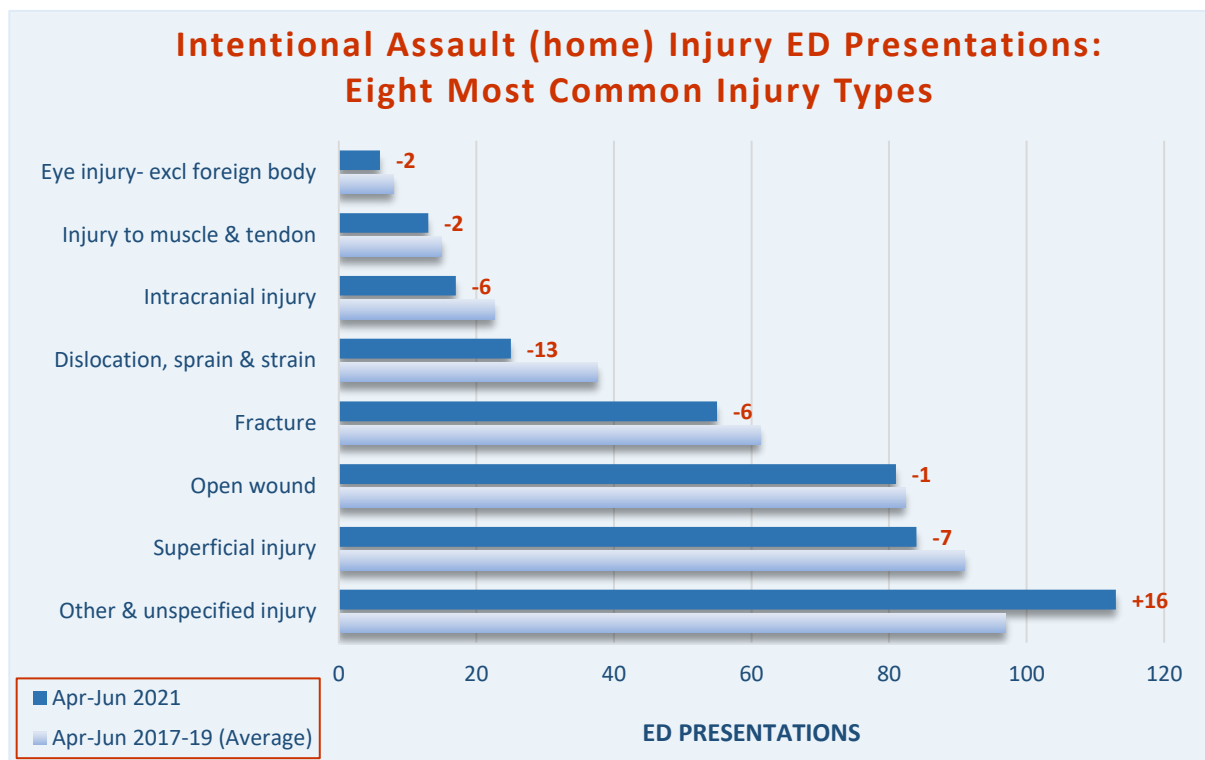
<sup>7</sup> <https://www.monash.edu/muarc/research/research-areas/home-and-community/visu/injuries-during-the-covid-19-pandemic>



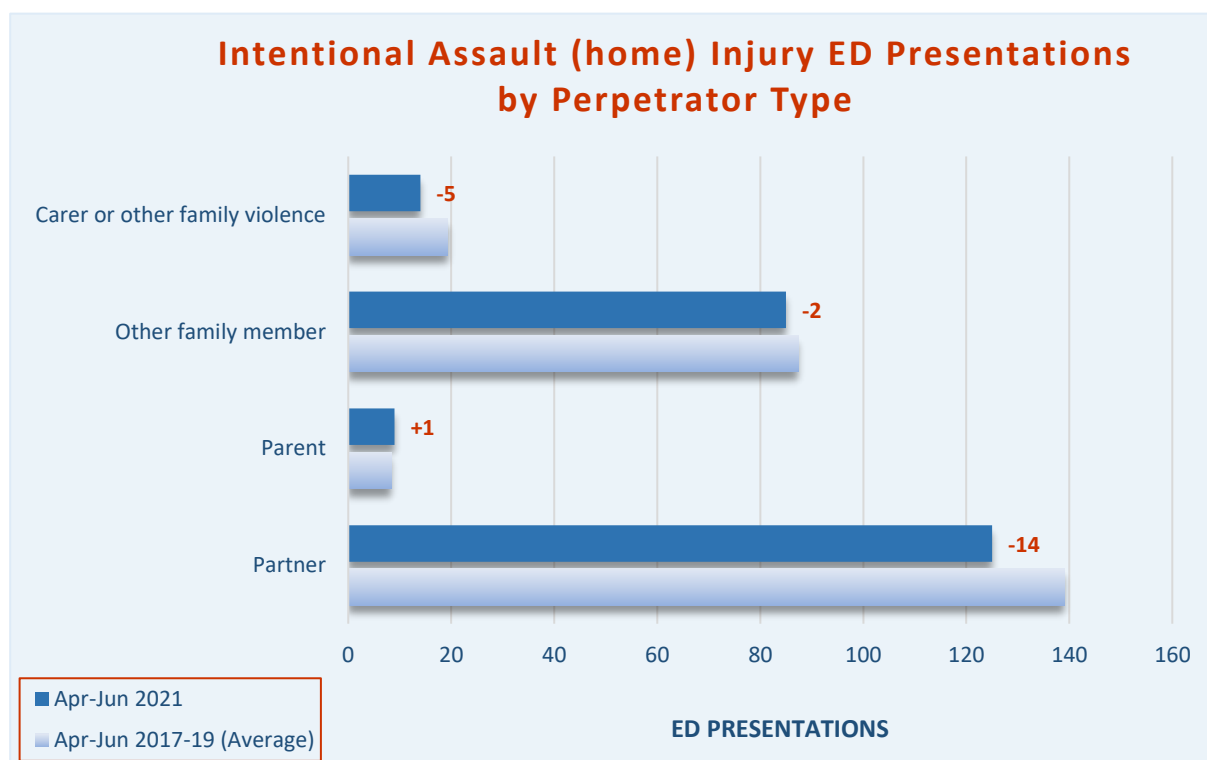


The most common main injury types of self-harm injuries and assault (home) injuries, as recorded in the VEMD, are summarised in the graphs below. Both in the second quarter of 2021 and in the comparison period (the second quarter of 2017 to 2019, averaged), the most common self-harm injury type was poisoning or toxic effects. For assault (home) injuries, the most common injury types were: other and unspecified injury, followed by superficial injury.





The perpetrator recorded for assault (home) injury presentations to the Emergency Department is shown in the figure below. In both time periods (April to June 2021 and April to June in the 2017-2019), the most commonly reported perpetrator was 'partner', followed by 'other family member'.

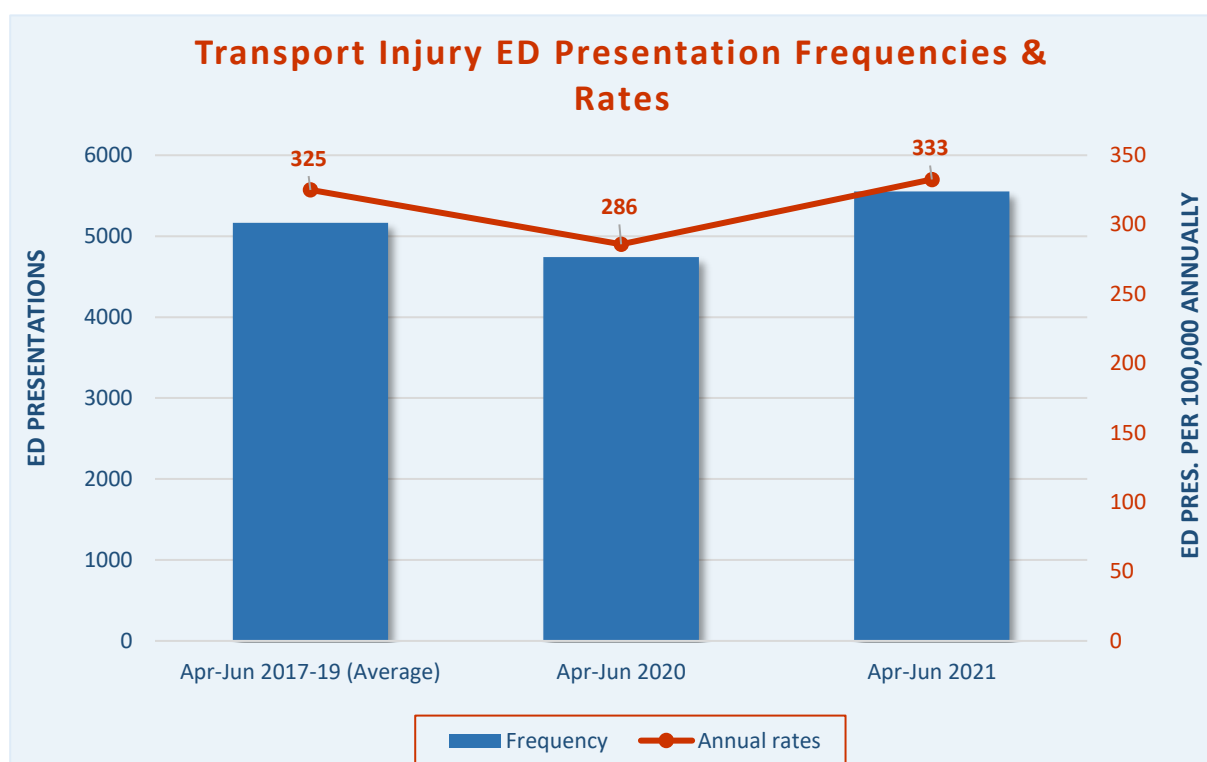


## SUMMARY: ED PRESENTATIONS FOR INTENTIONAL INJURY (VIC)

- ❑ The rate of ED presentations for self-harm injury in Victoria was 7% higher in April-June 2021 compared to the control period in 2017 to 2019: respectively, 148 vs. 138 ED presentations per 100,000 population annually. Assault (home) injury rates in these time periods were not statistically different (respectively, 25 and 28 ED presentations per 100,000 population annually).
- ❑ The rate of admission subsequent to ED presentation for self-harm injury was similar at both time points (49% and 52% for the second quarter of 2021 and the comparison period, respectively). For assaults (home), admissions subsequent to ED presentation occurred in 37% of cases in the second quarter of 2021 and 34% in the comparison period in 2017-2019.
- ❑ Self-harm injury resulting in ED presentation was most common in the age group 15-24 years, while assault (home) injuries were relatively common across broad age groups 15-24 and 25-64 years; this pattern was observed at both time points (April-June 2021 and April-June in 2017-2019).
- ❑ The two most common injury types in self-harm injury was poisoning or toxic effects. For assault (home) injuries, the most commonly recorded injury types were other and unspecified injury and superficial injury.
- ❑ In assault (home) injury, the most commonly recorded perpetrator was 'partner', at both time points (April-June 2021 and April-June in 2017-2019).

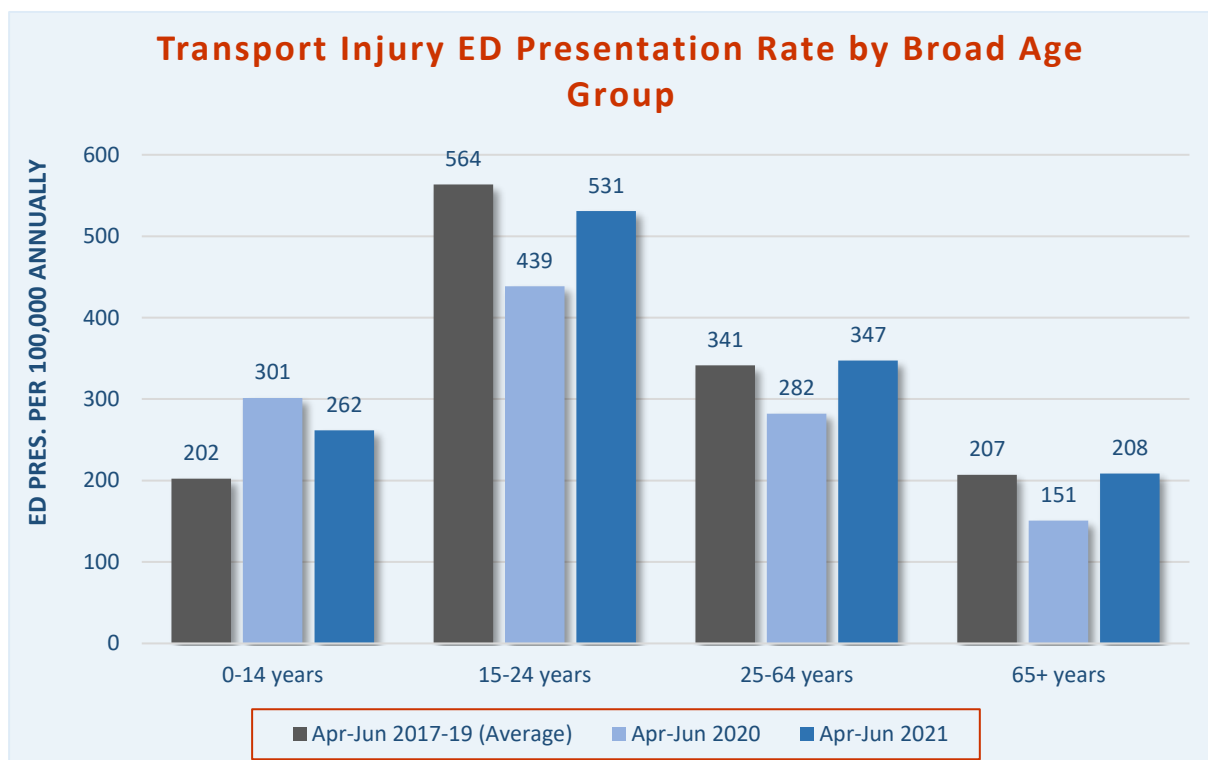
## 8. TRANSPORT INJURY

In the second quarter (April to June) of 2021, there were 5554 ED presentations for transport injuries recorded in the VEMD: the annual rate was 333 transport injury presentations per 100,000 population. In the comparison period of April to June of 2017 – 2019 (averaged), 5163 presentations were recorded, and the rate was 325 per 100,000 population. These patterns are shown in the figure below; population-based rates of transport injury were statistically significantly different in the second quarter of 2021 compared to the comparison period in 2017-2019. In April to June 2021, 2451 (44%) of ED presentations for transport injury were subsequently admitted; this rate is similar to the 44% in the comparison period of April to June 2017 to 2019 (2266 subsequent admissions, on average).

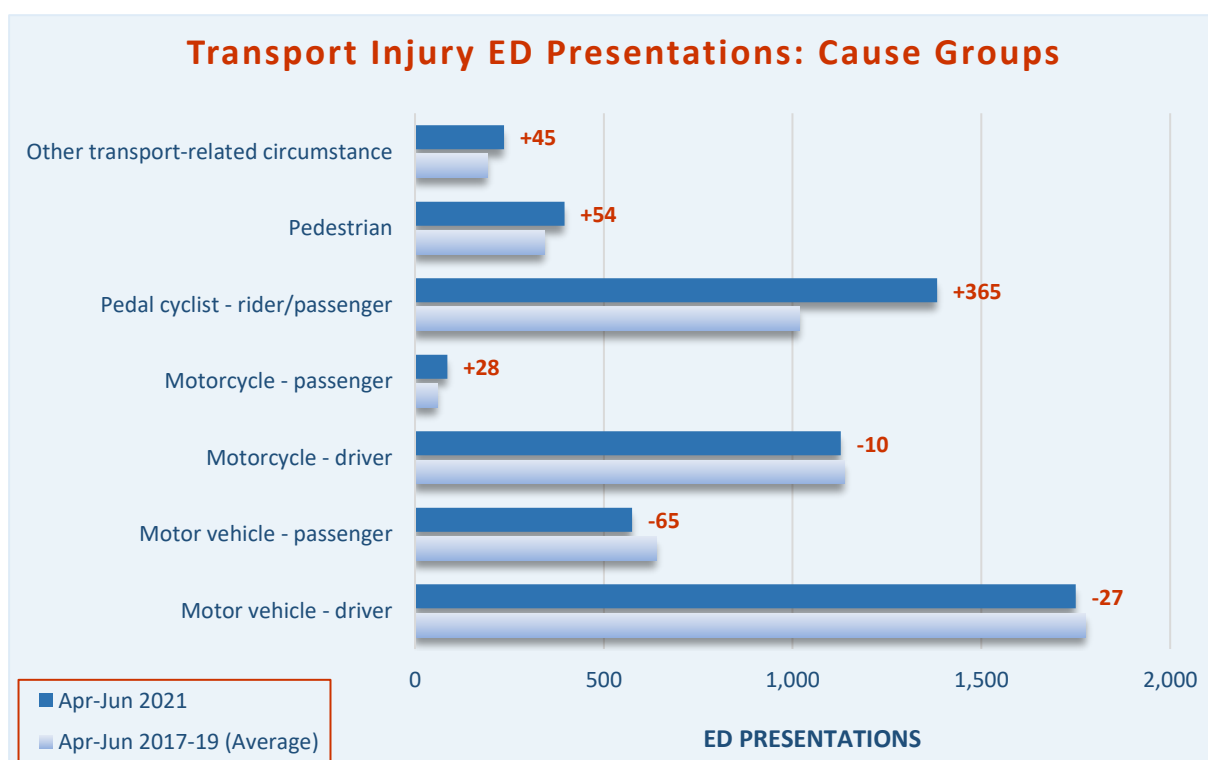


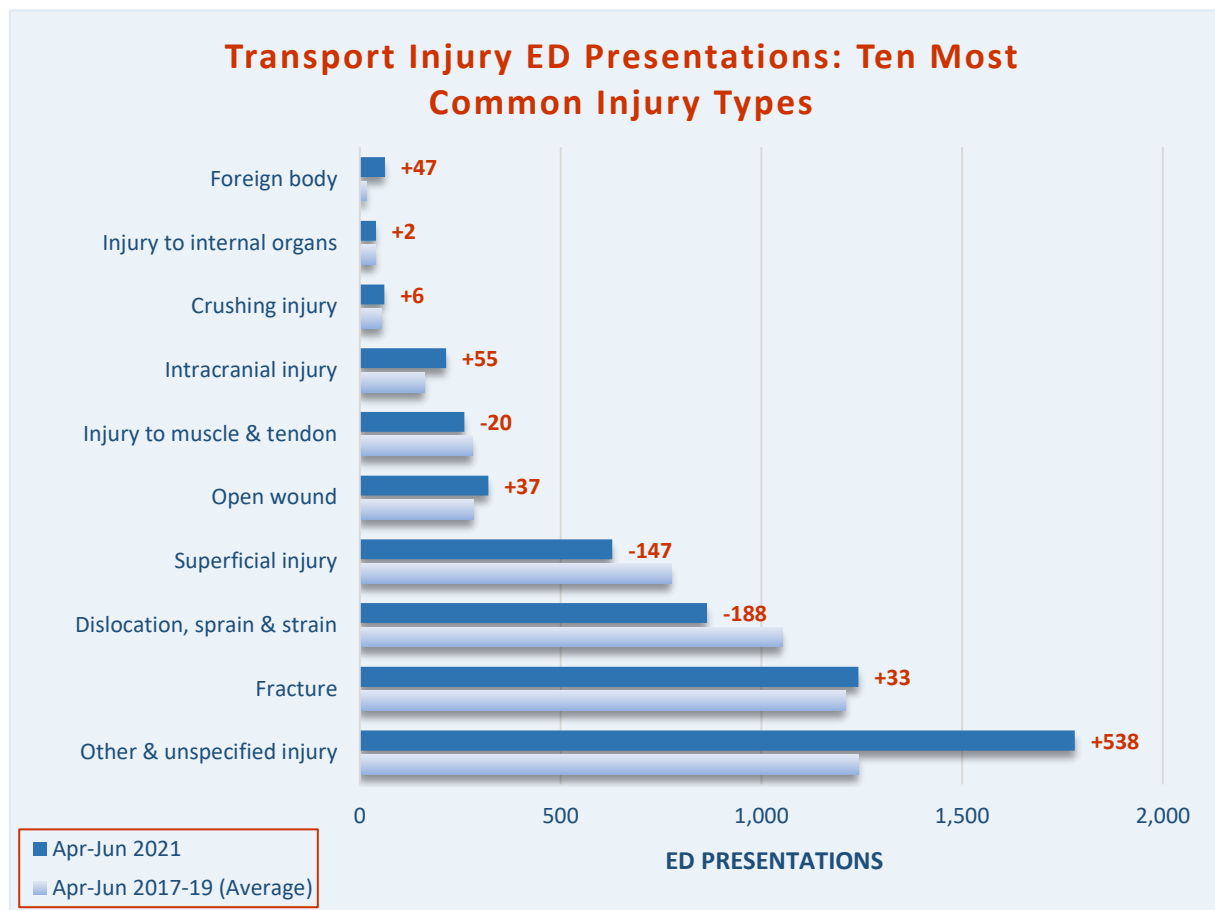
Transport injury rates by broad age group are shown below. The figure shows the rates per 100,000 population in the second quarter of 2021 (dark blue bars), in the second quarter of 2017-2019 (averaged; light blue bars) as comparison, and the second quarter of 2020 (grey bars). The latter are included for completeness, but this time period is the focus of earlier editions of this bulletin<sup>8</sup>. In each of the time periods, transport injury rates were highest in the 15-24 years age group.

<sup>8</sup> <https://www.monash.edu/muarc/research/research-areas/home-and-community/visu/injuries-during-the-covid-19-pandemic>



The road user type in transport injury ED presentations, and the main injury type, as recorded in the VEMD, are summarised in the graphs below. In the second quarter of 2021 and in the comparison period, the most commonly recorded road user type was motor vehicle (driver). In April to June 2021, the second most common road user type was pedal cyclist rider or passenger; in the comparison period, the second most common road user type was motorcycle (rider). Both in the second quarter of 2021 and in the comparison period (the second quarter of 2017 to 2019, averaged), the most commonly reported injury types were: other and unspecified injuries, followed by fractures.





## SUMMARY: ED PRESENTATIONS FOR TRANSPORT INJURY (VIC)

- ❑ The rate of ED presentations for transport injury in Victoria was 333 ED presentations per 100,000 population annually in April-June 2021 and 325 in the comparison period in 2017 to 2019.
- ❑ The rate of admission subsequent to ED presentation for transport injury was 44% at both time points.
- ❑ Transport injury resulting in ED presentation was most common in the age group 15-24 years, at both time points (April-June 2021 and April-June in 2017-2019).
- ❑ The most commonly reported road user type in transport injury was motor vehicle driver in the second quarter of 2021 as well as in the comparison period in 2017-2019.
- ❑ In transport injury ED presentations, the most common injury types were: other and unspecified injury, followed by fracture, at both time points.

## 9. INJURY PREVENTION RESOURCES & SUPPORT SERVICES

### 7.1 INJURY PREVENTION RESOURCES

#### FAMILY VIOLENCE

- <https://www.vic.gov.au/free-violence-victorias-strategy-prevent-family-violence>

#### MENTAL HEALTH AND SUICIDE PREVENTION

- <https://www2.health.vic.gov.au/mental-health>
- <https://www2.health.vic.gov.au/mental-health/prevention-and-promotion/suicide-prevention-in-victoria>

#### CHILD INJURY PREVENTION

- <https://www.kidsafevic.com.au/>

#### FALLS PREVENTION

- <https://www2.health.vic.gov.au/ageing-and-aged-care/wellbeing-and-participation/healthy-ageing/falls-prevention>

#### FARM SAFETY

- <https://www.farmsafe.org.au/>
- <https://www.worksafe.vic.gov.au/agriculture>
- <https://agriculture.vic.gov.au/about/agriculture-in-victoria/smarter-safer-farms>

#### SAFE CYCLING

- <https://www.vicroads.vic.gov.au/safety-and-road-rules/cyclist-safety/bike-rider-safety>

### 7.2 SUPPORT SERVICES

#### MENTAL HEALTH AND SUICIDE SUPPORT

*Victoria has a range of mental health support services that are available 24 hours a day, seven days a week. These services can provide treatment, information, tools and advice on how to deal with a range of mental health issues ([Better Health Channel](#)).*

- Call [Lifeline](#) to anonymously and confidentially discuss any personal difficulties, including suicidal thoughts at any time. **Phone 13 11 14 (24/7)**, Lifeline text 0477 131 114 (6pm-midnight AEST, 7 days) and online chat service <https://www.lifeline.org.au/crisis-chat/> (7pm-midnight AEST, 7 days).
- [Suicide Call Back Service](#) is a confidential 24-hour crisis support line available 24 hours a day, 7 days a week. **Phone 1300 659 467 (24 hours)**.
- [SuicideLine Victoria](#) is a free 24/7 telephone, video and online counselling service offering professional support to people at risk of suicide, people concerned about someone else's risk of suicide, and people bereaved by suicide. **Phone 1300 651 251 (24 hours)**.
- [SANE Australia](#) helps people affected by mental illness to lead a better life. **Phone 1800 187 263 (Monday to Friday, 10am - 10pm AEST)**.
- [Beyond Blue](#) provides information and support to help everyone achieve their best possible mental health, whatever their age and wherever they live. **Phone 1300 224 636 (24/7)**, chat online 3pm to 12am (AEST) 7 days a week, or online forums (24/7).

- [GriefLine](#) is a free national counselling and support telephone, SMS and video service, offering confidential 7 days a week phone and telehealth counselling and support to people experiencing grief, loss and/or trauma. In Victoria: **Phone 03 9935 7400 (6am – 2am, 7 days)**.
- [Kids Helpline](#) is 24-hour service is available for young people (aged five to 25) who need advice, counselling or just someone to talk to – no problem is too big or too small. **Phone 1800 551 800 (24/7)**.
- [ReachOut](#) is an online mental health service for young people. It provides practical support to help young people manage any issues they might face, from everyday struggles to much tougher situations.
- [Conversations Matter](#) is an online resource that encourages and guides the user through conducting a safe and effective discussion about suicide both in a one-on-one situation and in the community.

## FAMILY VIOLENCE SUPPORT SERVICES

- [Safe Steps](#) is Victoria's state-wide access point for those who need support or access emergency crisis accommodation. **Phone 1800 015 188 (24/7)**.
- [1800RESPECT](#) is the national sexual assault, domestic and family violence confidential counselling service available 24 hours a day, seven days a week. **Phone 1800 737 732 (24/7)**, or through [online chat service](#) (24/7).
- The [Men's Referral Service](#) is a free, confidential telephone helpline that offers counselling, advice and support to men who have anger, relationship or parenting issues. The service also provides help to women (or other family members) who are experiencing violence or controlling behaviour by men. **Phone 1300 766 491 (24/7)**.
- [MensLine](#) Australia offers telephone, online chat and video counselling for men with family and relationship concerns. **Phone 1300 789 978 (24/7)**.
- [Sexual Assault Crisis Line](#) is a Victorian state-wide, after-hours, confidential, telephone crisis counselling service for people who have experienced both past and recent sexual assault. **Phone 1800 806 292 (24/7)**.
- [WithRespect](#) provides resources, support and advice for LGBTIQ+ people of all ages and their families experiencing difficulty in their relationships, including family violence. Phone 1800 542 847 (9am to 5pm Monday to Friday, and after hours support until 11pm each Wednesday. 10am to 10pm on Saturday and Sundays).
- [InTouch](#) is a state-wide specialist family violence service that works with women from migrant and refugee backgrounds, their families and their communities in Victoria. **Phone 1800 755 988 (9am to 5pm Monday to Friday)**.
- [Yarning SafeNStrong](#) is a free and confidential phone crisis line for Aboriginal people and families who need to have a yarn with someone about their wellbeing. **Phone 1800 959 563 (24/7)**.
- [Djirra](#) provides both telephone and face to face legal and non-legal support to Aboriginal people who are experiencing or have experienced family violence. **Phone 1800 105 303 (Mon-Friday, 9am-5pm)**.



## 10. APPENDIX

### METHODS

Data from April 2017 to June 2021 from the Victorian Emergency Minimum Dataset (VEMD), which holds de-identified clinical records of presentations at Victorian public hospitals with designated 24-hour emergency departments, were used to compile this bulletin.

The focus of this quarterly bulletin is on the latest available three months of data (April to June 2021) to show the changes in injury profiles since the coronavirus pandemic; data from the same three-month period averaged over 2017, 2018 and 2019 are used as comparison. The April to June period in 2020 is also shown, but not used in statistical comparisons.

The changes in injury-related ED presentations are no longer presented *relative to ED service use* (as in previous Bulletins), as ED service use is no longer below expected levels for the time of year.

### EMERGENCY DEPARTMENT HEALTH SERVICE UTILISATION

ED presentations overall (not limited to injury) were selected to generate statistics on health service use overall during the April 2017 to June 2021 period. Only ED presentations that were ‘emergency presentations’ were included: this excludes planned return visits, pre-arranged admissions and those who were dead on arrival. Rates per 100,000 population were calculated; the denominators used for calculating rates were based on 2016 - 2020 population estimates from the Australian Bureau of Statistics (ABS).

### INJURY CASE SELECTION

ED presentations related to injury were selected only if the first occurring diagnosis code was a community injury (i.e., an ICD-10-AM code in the range of “S00” - “T75” or “T79”); this does not include medical injuries. Episode selection was limited to incidents (i.e., excludes return visits, pre-arranged admissions). For more information on methods used by the Victorian Injury Surveillance Unit see [here](#) and background information and pre-COVID statistics see [here](#).

- **Unintentional injury** cases were those with a ‘Human intent’ code “1” (non-intentional harm).
- **Unintentional home injury** cases were unintentional injury cases with a ‘Place where injury occurred’ code “H” (home).
- **Work injury** cases were unintentional injury cases (aged 15 years and above) with an ‘activity when injured’ code “W” (working for income) or a ‘compensable status’ code 3 (WorkCover/WorkSafe).
- **Unintentional farm injury** were unintentional injury cases with a ‘Place where injury occurred’ code “F” (Farm).
- **Sports injury** cases were aged 5 years and above and identified using sport-related ‘activity when injured’ codes and ‘place where injury occurred’ codes, as well as the ‘description of injury event’ text narrative. Utilising multiple fields allows for the comprehensive capture of sports-related presentations in the VEMD.

- **Transport injury** cases were those with 'Injury cause' codes "1" through "8" (related to motor vehicle occupants, motor cyclists, pedal cyclists, pedestrians and other transport related circumstances), excluding "7" (Horse related (fall from, struck or bitten by)).
- **Self-harm injury** cases were those with a 'Human intent' code "2" (intentional self-harm code for ED presentations in the 2016/17, 2018/19 financial years) and "18" through "20" (intentional self-harm codes for ED presentations in the 2019/20 financial year). In 2019/20, Human Intent coding was amended to distinguish *intentional self-harm with no intent to die* and *suicide attempt*. In some hospitals, this coding change led to incomplete coding of the Human Intent variable; this may have resulted in an overall underestimation of self-harm in the VEMD, starting July 2019.
- **Assault (home) injury** cases were those with 'Human intent' codes "12" through "17" (codes related to sexual assaults, and neglect/maltreatment/assaults, by a current or former intimate partner, other family member or other/unknown persons). Additional cases were selected if the 'Description of injury event' text field contained terms such as "domestic", "home" appearing with terms such as "violence", "hit" etc., and "assault", "hit", "struck", "punch" and other similar terms appearing with terms such as "partner", "spouse" and other terms for family members. Cases selected using text searches were manually checked for relevance. Assault cases were contained to those with a 'Place where injury occurred' code "H" (Home).

## COVID-19 MITIGATION MEASURES AND THEIR TIMELINES, MARCH 2020 TO JUNE 2021, VICTORIA\*

Timeline	Mitigation Measures
<b>2020</b>	
Mid-March	<ul style="list-style-type: none"> <li>• Border closure to arrivals of non-citizens/non-permanent residents</li> <li>• Mandatory 14-day quarantine for international arrivals</li> <li>• Restrictions on visitation to aged care facilities</li> </ul>
Mid-Late March	<ul style="list-style-type: none"> <li>• Auction houses, real estate auctions, eating in shopping centre food courts amusement parks, play centres, beauty parlours, tattoo parlours banned</li> <li>• Gatherings restricted to groups of 10 when outdoors, including funerals.</li> <li>• Weddings limited to 5 people</li> <li>• Implementation of physical distancing rules</li> <li>• Non-essential services and schools closed to non-essential workers</li> </ul>
31 March (Lockdown 1)	Stage 3 restrictions imposed with only 4 reasons to leave home: food and necessary supplies, medical care, daily exercise, work or education
13 May	Easing of restrictions
20 June	Reinstatement of restrictions
30 June	Local lockdowns on ten Melbourne postcodes
4 July	Two additional postcodes are added to the Melbourne lockdown, along with nine public housing towers
8 July (Lockdown 2)	Second period of lockdown with Stage 3 restrictions introduced for metropolitan Melbourne and Mitchell Shire - stay at home directions with limited exemptions including for permitted work or education, necessary goods or services, care or other compassionate reasons, exercise and in emergencies
23 July	Mandatory face coverings outside of home for all those aged 12 years and over, including when at school

Timeline	Mitigation Measures
2 August	Imposition of Stage 4 restrictions including a nightly curfew (8pm to 5 am), closing of schools and businesses; limit of one hour of exercise within a 5km radius of their place of residence; no private gatherings indoors, except for visits from intimate partners; limits on number of people who could attend funerals; places of worship were essentially closed
13 September	Roadmap for reducing restrictions in Victoria commences
From 28 October (Lockdown 2 ends)	<ul style="list-style-type: none"> <li>Easing of restrictions</li> <li>First step: Introduction of a social “bubble” to reduce isolation for people who lived alone; easing of the curfew to 9pm to 5am</li> <li>Second step: Relaxation of restrictions on outdoor work, including increasing of manufacturing and construction; removal of the curfew, re-opening of schools and childcare</li> <li>Third step: Easing of 5 km movement to 25 km; return to work for most industries; re-opening of retail, indoor physical recreation and entertainment facilities including cinemas and nightclubs, all with careful hygiene and physical distancing measures in place; increase in indoor dining numbers, indoor gatherings; mandatory face masks indoors in public</li> </ul>
8 November	Further easing of some travel and social restrictions
22 November	Victoria moves to last step of roadmap
6 December	Victoria moves to COVID Safe Summer settings
31 December	Limits regarding the number of visitors to your home reduced to 15 per day, mask-wearing mandatory when in public indoor spaces.
<b>2021</b>	
18 January	Victorian Public Service will be able to return to on-site work at 25% capacity and all other office workplaces will be able to increase to 50% capacity. Mandatory mask-wearing eased and only required on domestic flights, at airports, in hospitals, on public transport, in commercial passenger vehicles, at supermarkets and other indoor shopping locations.
8 February	Office-based workplaces allowed to return to 75% capacity
12 February (Lockdown 3)	6-day circuit breaker (Stage 4) lockdown begins in Victoria – only four reasons to leave home, movement restricted to within 5kms of home, facemasks to be worn whenever you leave home, no visitors or public gatherings, school students to switch to remote learning, workers to work from home unless they are deemed essential workers.
18 February	Lockdown ends, no longer restricted to only four reasons to leave home, the five-kilometre rule no longer applies, students can go back to school and workers can return to work. No more than five visitors allowed to visit your home, public gatherings restricted to 20 people.
27 February	Victoria to return to its previous COVIDSafe settings allowing for more visitors in the home, reduced mask wearing and increasing the number of workers heading back to the office.
26 March	Relaxing of COVIDSafe settings allowing more visitors in the home (up to 100), reduced face mask wearing and an increase in the number of people allowed in live music venues and other settings.
25 May	Reintroduction of several COVID-19 restrictions following 5 cases in Melbourne’s north. Effective from 6pm: masks mandatory indoors & outdoors, maximum of 5 visitors per day to people’s homes, public gatherings limited to 30 people, bars and restaurants remain open.

Timeline	Mitigation Measures
27 May (Lockdown 4)	<p>7-Day snap lockdown begins from midnight tonight with the following restrictions:</p> <ul style="list-style-type: none"> <li>• 5 reasons to leave home (exercise, shopping for essentials, work or education, caregiving and essential care, and to get vaccinated)</li> <li>• Shopping and exercise limited to within 5km of home unless the closest shops are further than 5km</li> <li>• Hospitality to close, except for takeaway; retail to close</li> <li>• Masks mandatory indoors &amp; outdoors</li> <li>• No home visitors except for intimate partners</li> <li>• Single people living alone can nominate one person for their 'bubble'</li> <li>• Funerals limited to 10 people, no weddings</li> <li>• Most education to be online only</li> </ul>
2 June	<p>Lockdown extended by another 7 days until 10 June for metropolitan Melbourne; 5 reasons to leave home continues, shopping and exercise now limited to 10km of your home.</p> <p>Restrictions for regional Victoria to ease from 3 June.</p>
11 June	<p>Melbourne lockdown lifted with some restrictions remaining in place:</p> <ul style="list-style-type: none"> <li>• Shopping and exercise limited to within 25km of home</li> <li>• No visitors allowed in the home</li> <li>• Outdoor gatherings limited to 10 people</li> <li>• Retail, hospitality, indoor entertainment to reopen with density limits</li> <li>• Masks to be worn indoors</li> <li>• Metropolitan Melbourne residents can only travel to regional Victoria for work, essential care or education</li> </ul>
18 June	<p>Further easing of restrictions: no regional border, no travel restrictions, people recommended to work from home, outdoor gatherings limited to 20 people, limit of 2 adult visitors to your home per day, masks to be worn indoors.</p>
25 June	<p>Further easing of restrictions: outdoor gatherings limited to 50 people, up to 15 visitors allowed to visit your home per day, return to office (limited to X%), masks to be worn indoors.</p>
9 July	<p>Further easing of restrictions: masks required indoors at public places, retail and hospitality density limits eased,</p>
14 July	<p>Reintroduction of mask wearing in workplaces, schools, outdoors</p>
16 July (Lockdown 5)	<p>5-Day snap lockdown starts, extended by another 7 days (ended 27 July) with the following restrictions:</p> <ul style="list-style-type: none"> <li>• to get the Covid-19 vaccine; for medical/care purposes; for essential goods/shopping; for exercise; for permitted work reasons</li> </ul>
5 August (Lockdown 6)	<p>7-Day snap lockdown starts (from 8pm), extended by another 7 days to 19 August with the following restrictions:</p> <ul style="list-style-type: none"> <li>• to get the Covid-19 vaccine; for medical/care purposes; for essential goods/shopping; for exercise; for permitted work reasons</li> </ul>

\*For more details visit:

<https://www.vic.gov.au/coronavirus-covid-19-restrictions-victoria>

<https://www.dhhs.vic.gov.au/coronavirus/updates>

<https://www.parliament.vic.gov.au/publications/research-papers/download/36-research-papers/13962-emergency-powers-public-health-and-covid-19>

<https://www.health.gov.au/resources/collections/coronavirus-covid-19-at-a-glance-infographic-collection>

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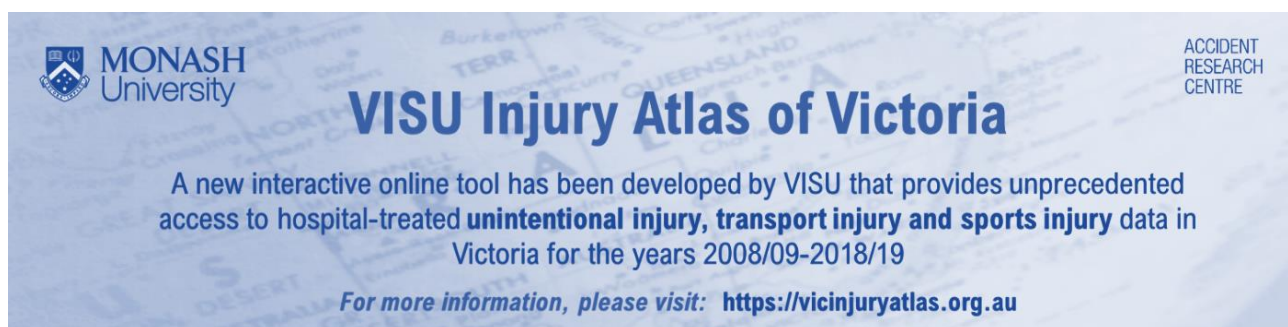
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## HOW TO ACCESS VISU DATA

VISU collects and analyses information on injury problems to underpin the development of prevention strategies and their implementation. VISU analyses are publicly available for teaching, research and prevention purposes. Requests for information can be lodged via the data request form on the VISU website (<https://www.monash.edu/muarc/research/research-areas/home-and-community/visu>) or by contacting the VISU office by phone (03 9905 1805).



**MONASH** University

**VISU Injury Atlas of Victoria**

A new interactive online tool has been developed by VISU that provides unprecedented access to hospital-treated **unintentional injury, transport injury and sports injury** data in Victoria for the years 2008/09-2018/19

For more information, please visit: <https://vicinjuryatlas.org.au>

ACCIDENT RESEARCH CENTRE

**The Injury Atlas of Victoria** web-based application can be accessed at this address:  
<https://vicinjuryatlas.org.au/>

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Other information regarding VISU, all E-bulletins and other VISU  
Publications can be found on our Internet home page:

Web: [www.monash.edu/muarc/visu](http://www.monash.edu/muarc/visu)



Department  
of Health

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