THE FOLLOWING HAS BEEN PREPARED BY THE VICTORIAN INJURY **SURVEILLANCE UNIT (VISU)**

MONASH UNIVERSITY ACCIDENT RESEARCH CENTRE (MUARC)

MONTHLY BULLETIN – EDITION 8: OCTOBER SUMMARY











ACCIDENT

ED presentations overall were 12% *lower* in October 2020 compared to October 2019

Population-based ED presentation rates *decreased* by 17% in metro VIC and only by 3% in regional VIC, comparing October 2020 to October 2019

Injury & poisoningrelated ED presentations overall were **12% lower** in October 2020 vs October 2019

Large ED reductions noted for injuries in athletics/sports areas (**↓**66%)

Unintentional home injuries in Victoria *increased* from 10,793 ED presentations in October 2019 to 13,348 in October 2020 (†24%)

DIY (Do-ityourself) injury ED presentations increased by 48% from 231 cases in October 2019 to 342 cases in October 2020











Unintentional farm injuries *increased* from 248 ED presentations in October 2019 to 318 in October 2020

Proportional to ED caseload (including only cases that were not directly or indirectly related to viral or respiratory illness), the increase was significant

Transport injuries in Victoria did not change significantly; there were 2012 ED presentations in October 2019 and 1921 in October 2020

Pedal cycle injuries *increased* from 504 ED presentations in October 2019 to 815 in October 2020 (†62%)

Child (<15 years) cycling injuries increased from 119 to 291 ED presentations (144%)

Self-harm injuries *increased* from 795 in October 2019 to 919 October 2020 (†16%)

Proportional to ED caseload (including only cases that were not directly or indirectly related to viral or respiratory illness), the increase was significant

Assault (in the home) injuries increased from 157 ED presentations in October 2019 to 211 in October 2020 (†34%)

Proportional to ED caseload (including only cases that were not directly or indirectly related to viral or respiratory illness), the increase was significant

Injury-related ED presentations are a subset of all injuries in Victoria. In October 2020, there was an October 2019, the number of injury-related ED presentations in October 2020 are therefore likely to represent a smaller proportion of total injuries in Victoria.



Health and Human Services

BACKGROUND

In response to the global COVID-19 pandemic, Australia (including Victoria) has implemented physical distancing along with several other measures to limit transmission of the coronavirus. This monthly bulletin monitors injury rates related to the home (including DIY injuries), farm, transport, self-harm and assault during the COVID-19 pandemic. This bulletin is a special VISU initiative, in addition to the usual annual reporting; VISU intends to produce these reports throughout the duration of the pandemic. This eighth edition of the bulletin examines injury rates in Victoria during October 2020 relative to the same time last year.

In October, restrictions for metropolitan and regional Victoria differed in terms of implementation date and level; therefore, in this bulletin ED presentation rates have been provided by *regionality*. In order to provide context for this issue of the bulletin, an overview of restrictions imposed on Australians and Victorians, with key dates in chronological order, is provided in the Appendix section.

METHOD

Data used to compile this bulletin were extracted from the Victorian Emergency Minimum Dataset (VEMD), which holds deidentified clinical records of presentations at Victorian public hospitals with designated 24-hour emergency departments (EDs) (currently 38 hospitals). ED presentations from 1 March 2019 to 31 October 2020 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. Further information on geographical differences in injury ED presentations in Victoria can be found in VISU's Hazard Edition No. 85.

KEY INJURY GROUPS













HOME

DIY

FARM

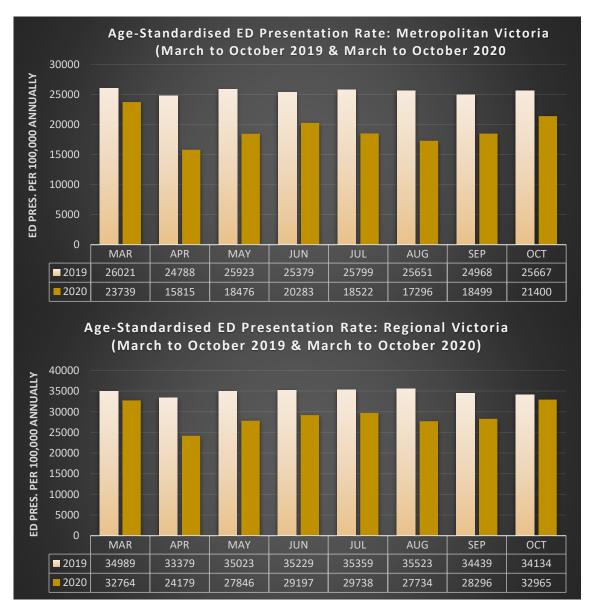
TRANSPORT SELF-HARM

ASSAULT (home)

1. CONTEXT: OVERALL EMERGENCY DEPARTMENT PRESENTATIONS (MARCH 2019 – OCTOBER 2020)

1.1 ED HEALTH SERVICE UTILISATION BEFORE THE CORONAVIRUS PANDEMIC AND DURING OCTOBER 2020: THE EIGHTH MONTH SINCE THE START OF RESTRICTIONS

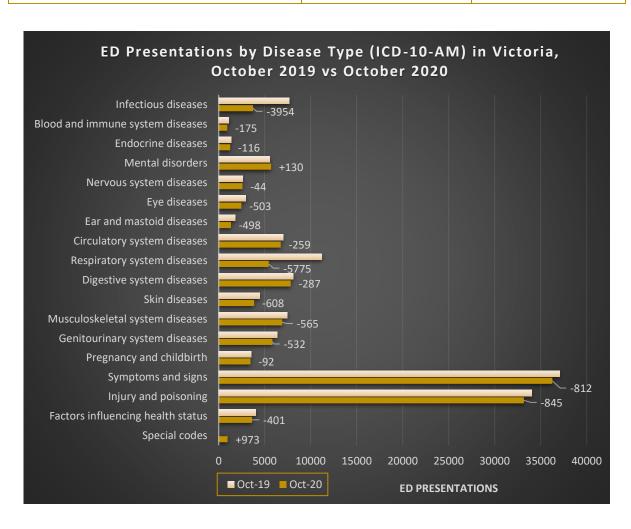
Emergency Department (ED) presentations in Victoria decreased from **156,067** ED presentations in October 2019 to **137,333** in October 2020: a 12% reduction. This should be seen in context of a steady growth in ED presentations (3.6% per year), which was observed in recent years in Victoria. In metropolitan Victoria, age-standardised rates were **25,667 per 100,000** population per year in October 2019 vs **21,400 per 100,000** population per year in October 2020. In regional Victoria, age-standardised rates were **34,134 per 100,000** population per year in October 2019 vs **32,965 per 100,000** population per year in October 2020. Age-standardised ED presentation rates from previous months are included in the graph below for comparison purposes.



Data selection methods are explained in the Appendix section. [Note: ED presentation numbers reflect the recently received consolidated ED data for the period July 2019 to June 2020. Therefore, ED data in previous bulletins (editions 1-6) for the months of July to August 2019 and March to June 2020 will differ slightly in comparison.]

1.2 EMERGENCY DEPARTMENT HEALTH SERVICE UTILISATION, VICTORIA, OCTOBER 2019 COMPARED WITH OCTOBER 2020

Category	October 2019	October 2020			
Respiratory illness or virus-related ED presentations:					
Viral infection, unspecified	3508	1422			
Upper respiratory infection, unspecified	1116	541			
Pneumonia (broncho- or lobar)	1646	744			
Asthma	1558	973			
Common ED presentations not related to viral or respiratory illness:					
Syncope/collapse	1824	1510			
Urinary tract infection	1767	1526			
Abdominal pain, unspecified	5994	6520			
Potentially life-threatening presentation	ns not related to viral or	respiratory illness:			
Myocardial infarction	670	670			
Angina pectoris	345	327			
Stroke	796	776			
Pulmonary embolism	181	208			
Appendicitis	687	630			



SUMMARY: EMERGENCY DEPARTMENT HEALTH SERVICE USE FINDINGS (VIC)



ED presentations overall decreased by **12**% from 156,067 in October 2019 to 137,333 in October 2020

In *metropolitan Victoria*, age-standardised ED presentation rates **decreased by 17**%: 25,667 per 100,000 (October 2019) to 21,400 per 100,000 (October 2020)

In *regional Victoria*, age-standardised ED presentation rates **decreased by 3%**: 34,134 per 100,000 (October 2019) to 32,965 per 100,000 (October 2020)





In October 2020, ED service use for **respiratory diseases** overall was **51% lower** compared to October 2019: upper respiratory infection (↓51%), asthma (↓38%) and pneumonia (↓55%)

In October 2020, ED presentations for potentially life-threatening conditions such as myocardial infarction/heart attack, stroke and appendicitis were not statistically significantly different to the numbers in October 2019





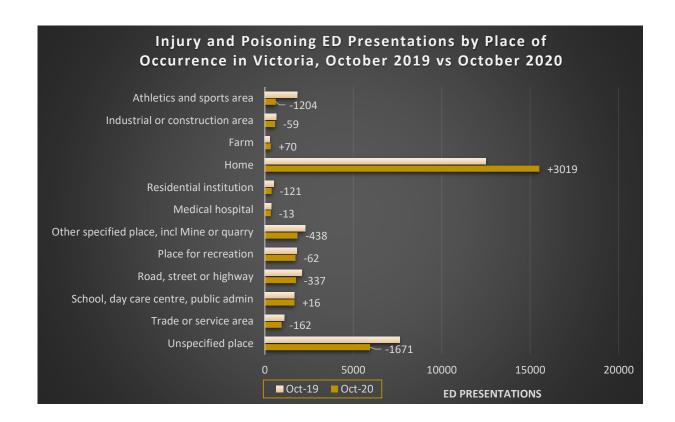
ED presentations for **injury and poisoning** (overall, not limited to injury in the home) were fairly similar (↓2%) in October 2020 compared to October 2019

Major reductions in injury and poisoning cases occurred in athletics & sports areas (₹66%)





Increases in injury and poisoning cases occurred in home locations (†24%)



THIS SUGGESTS THAT IN OCTOBER 2020:



The reduction in ED presentations, observed in both metropolitan and regional Victoria, potentially indicates missed opportunities for early treatment and intervention. ED presentations of potentionally life-threatening conditions such as myocardial infarction and stroke, which are unlikely to be directly affected by COVID-19, were not statistically significantly different to the numbers seen this time last year.



The profile of ED presentations may have been affected indirectly by the physical distancing measures: these may have reduced transmission of common cold and flu viruses. The pronounced reduction in respiratory illness-related ED presentations in October 2020 (as well as those reported in previous bulletins from July onwards) supports this. Further research into cold and flu transmission during lockdown is required to confirm this and to determine to what extent this has affected rates of respiratory illness in Victoria.



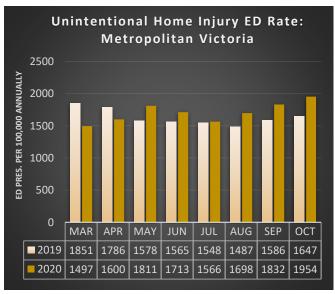
Non-urgent health issues may have been presented to the GP or Nurse on Call instead of the ED; this needs to be investigated further to identify potential gaps in service utilisation during the pandemic.

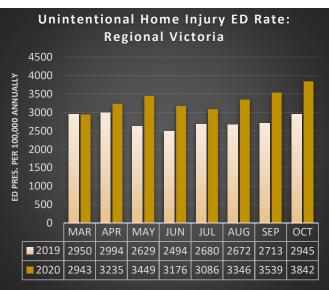


Differences in exposure in October 2020 compared to this period in 2019, in particular more time spent at home and less time spent sporting and recreation areas, as well as changes in transport use, have had a pronounced effect on the profile of injuries presented to the ED. The number of injuries that occurred in school areas was similar in Octobe 2020 compared to October 2019; this was expected as schools in Victoria reopened for onsite learning.

2. Unintentional Home Injury

- The total number of unintentional home injuries overall increased in October 2020 compared to
 October 2019; this increase was observed in the number of ED presentations as well as in the
 number of cases proportional to ED caseload (only including cases that were not directly or
 indirectly related to viral or respiratory illness).
- Age-standardised unintentional home injury rates in metropolitan Victoria were 1647 and 1954
 ED presentations annually per 100,000 population, in October 2019 and October 2020,
 respectively. In regional Victoria, age-standardised unintentional home injury rates were 2945
 and 3842 ED presentations annually per 100,000 population, in October 2019 and October 2020,
 respectively.
- Both in October 2019 and in October 2020, **falls** were the most common cause of unintentional home injury and **fractures and open wounds** were the most common injury types.
- Injury-related ED presentations are a subset of all injuries in Victoria. In October 2020, there was
 an overall reduction in health service use through the ED, compared to October 2019. Compared
 to October 2019, the number of injury-related ED presentations in October 2020 are therefore
 likely to represent a smaller proportion of total injuries in Victoria.

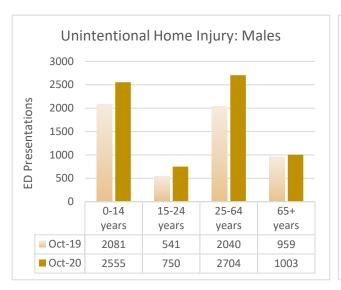


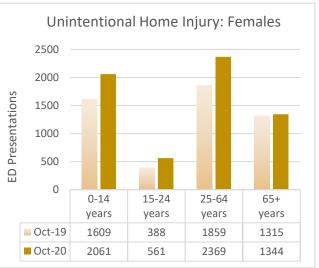


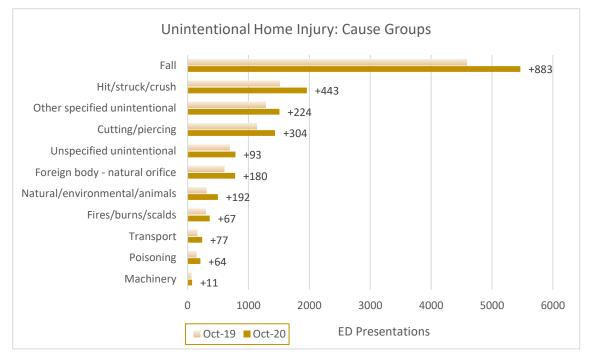
Rates from previous months are included in the graph for comparison purposes. Data selection methods are explained in the Appendix section.

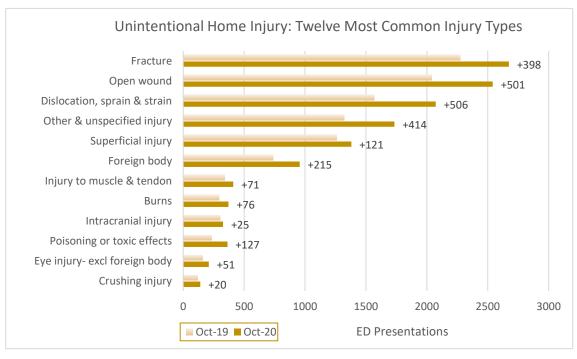
	October 2019				October 2020			Changes	
Triage status	Injury cases	ED Presentations*	Ratio	Injury cases	ED Presentations*	Ratio	Change in case numbers	Change in ratios	
Resuscitation	27	432	0.063	30	403	0.074	+11%	+19%	
Emergency	668	7800	0.086	908	7264	0.125	+36%	+46%	
Urgent	3077	26542	0.116	3827	23680	0.162	+24%	+39%	
Semi-urgent	5764	26283	0.219	7045	21146	0.333	+22%	+52%	
Non-urgent	1257	4377	0.287	1538	3360	0.458	+22%	+59%	
Total	10793	65434	0.165	13348	55853	0.239	+24%	+45%	

^{*}For VEMD caseload calculations, only ED presentations that were considered unlikely to be directly or indirectly related to the pandemic were included. (See Appendix for details).



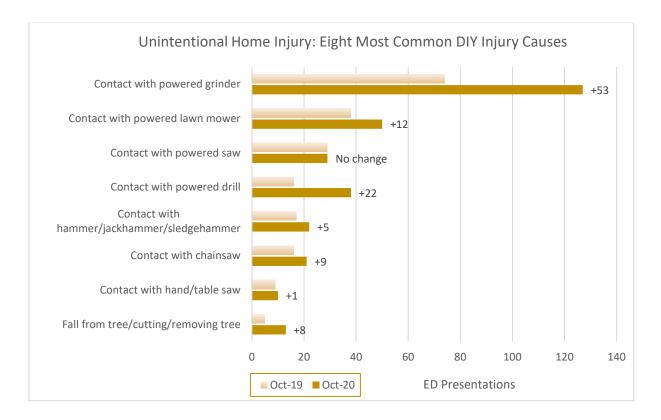






2.1 DO-IT-YOURSELF (DIY) INJURY PRESENTATIONS TO THE ED

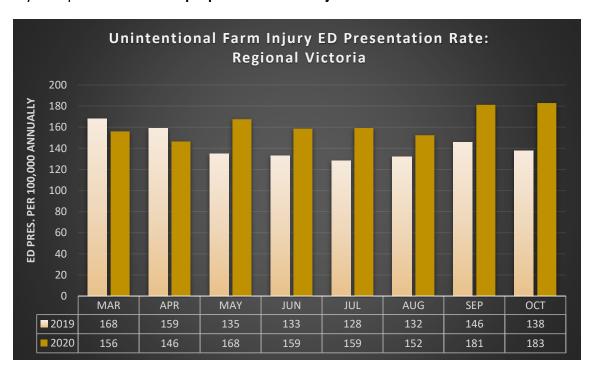
- Do-it-yourself injury case selection is based on text analysis of ED narrative information, and subject to data completeness and interpretation. Given these methodological limitations, the number of DIY injuries are likely to be underestimated by these statistics.
- The figure below lists the range of DIY injuries presenting to the ED in October 2020 compared with October 2019. There was an **increase** in DIY injuries presenting to the ED from 231 cases in October 2019 to 342 cases in October 2020 (48% increase).
- The most common DIY injury types in October 2020 were open wounds, foreign body injuries, superficial injuries, eye injuries and fractures. DIY injuries were commonly caused by powered tools such as grinders, powered saws and drills, as well as powered lawnmowers.
- The majority (63%) were males aged 25-64 years.



DIY case selection methods are explained in the Appendix section. Ladder falls (specifically) are not included as they were not in the top ten most common DIY injury causes.

3. Unintentional Farm Injury

- The total number of unintentional farm injuries in Victoria overall was marginally higher in October 2020 than in October 2019. Proportional to ED caseload (including only cases that were not directly or indirectly related to viral or respiratory illness), ED presentations for unintentional farm injury increased significantly.
- Age-standardised farm injury rates in regional Victoria were 138 and 183 ED presentations annually per 100,000 population, in October 2019 and October 2020, respectively. Metropolitan rates of unintentional farm injury are not presented as these were relatively low, both in October 2019 and October 2020.
- Injury-related ED presentations are a subset of all injuries in Victoria. In October 2020, there was an overall reduction in health service use through the ED, compared to October 2019. Compared to October 2019, the number of injury-related ED presentations in October 2020 are therefore likely to represent a smaller proportion of total injuries Victoria.



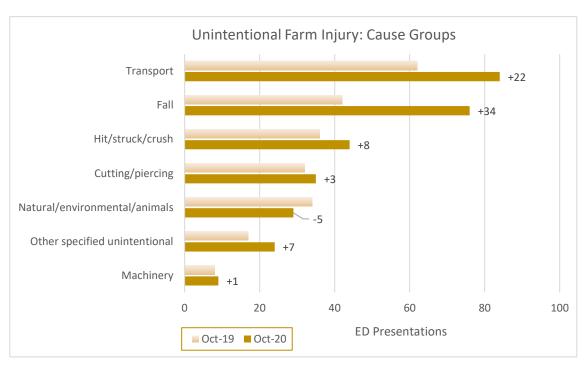
Rates from previous months are included in the graph for comparison purposes. Data selection methods are explained in the Appendix section.

		October 2019		October 2020			Changes	
Triage status	Injury cases	ED Presentations*	Ratio	Injury cases	ED Presentations*	Ratio	Change in case numbers	Change in ratios
Resuscitation, Emergency	42	8232	0.005	54	7667	0.007	+29%	+38%
Urgent	66	26542	0.002	154	23680	0.007	+55%	+73%
Semi-urgent	118	26283	0.004	242	21146	0.011	+19%	+47%
Non-urgent	22	4377	0.005	162	3360	0.048	+0%	+30%
Total	248	65434	0.004	318	55853	0.006	+28%	+50%

^{*}For VEMD caseload calculations, only ED presentations that were considered unlikely to be directly or indirectly related to the pandemic were included. (See Appendix for details).

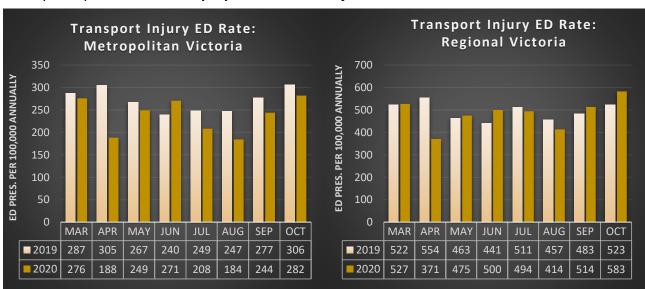






4. Transport Injury

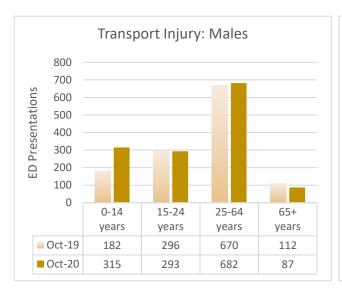
- The total number of ED presentations for transport injury in Victoria overall was lower in October 2020 than in October 2019. However, a slight increase was observed in transport injury cases proportional to ED caseload (including only cases that were not directly or indirectly related to viral or respiratory illness issues).
- Age-standardised transport injury ED rates in metropolitan Victoria were 306 and 282 ED presentations annually per 100,000 population, in October 2019 and October 2020, respectively.
 In regional Victoria, age-standardised rates were 523 and 583 ED presentations annually per 100,000 population, in October 2019 and October 2020, respectively.
- In Victoria overall, ED presentations for **pedal cycle injuries** increased from 504 in October 2019 to 815 in October 2020 (†85%) while motor vehicle injuries decreased from 900 in October 2019 to 535 in October 2020 (↓40%).
- An increase in transport injuries was observed in children aged 0-14 years, from 252 cases in October 2019 to 402 cases in October 2020 (†60%). Specifically, cycling injuries in this age group increased from 119 to 291 cases, in October 2019 vs October 2020, respectively (†145%).
- Injury-related ED presentations are a subset of all injuries in Victoria. In October 2020, there was
 an overall reduction in health service use through the ED, compared to October 2019. Compared
 to October 2019, the number of injury-related ED presentations in October 2020 are therefore
 likely to represent a smaller proportion of total injuries Victoria.

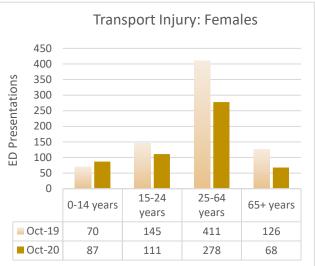


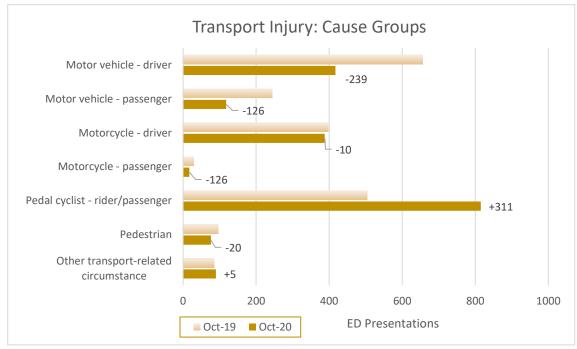
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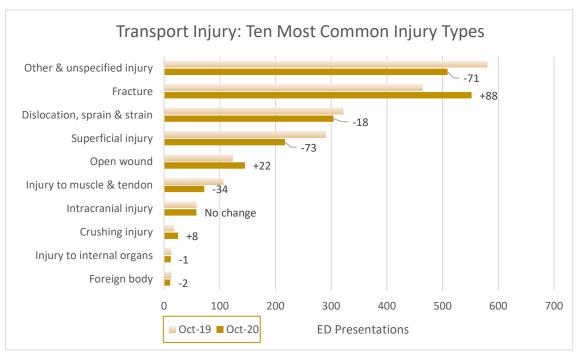
		October 2019		October 2020			Changes	
Triage status	Injury cases	ED Presentations*	Ratio	Injury cases	ED Presentations*	Ratio	Change in case numbers	Change in ratios
Resuscitation	30	432	0.069	29	403	0.072	-3%	+4%
Emergency	521	7800	0.067	517	7264	0.071	-1%	+7%
Urgent	886	26542	0.033	737	23680	0.031	-17%	-7%
Semi-urgent	520	26283	0.020	576	21146	0.027	+11%	+38%
Non-urgent	55	4377	0.013	62	3360	0.018	+13%	+47%
Total	2012	65434	0.031	1921	55853	0.034	-5%	+12%

^{*}For VEMD caseload calculations, only ED presentations that were considered unlikely to be directly or indirectly related to the pandemic were included. (See Appendix for details).



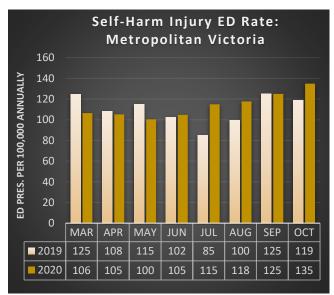


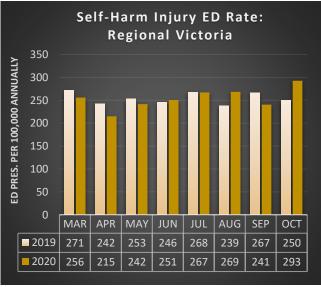




5. Self-Harm Injury

- All self-harm injury presentations to the ED were included; this analysis was not limited to those that occurred in the home.
- The total number of ED presentations for self-harm injury in Victoria overall was marginally higher in October 2020 compared with October 2019; proportional to ED caseload (including only cases that were not directly or indirectly related to viral or respiratory illness), ED presentations for self-harm had increased significantly.
- Age-standardised self-harm injury rates in metropolitan Victoria were 119 ED presentations annually per 100,000 population in October 2019 and 135 per 100,000 in October 2020. In regional Victoria, age-standardised rates were 250 and 293 ED presentations annually per 100,000 population, in October 2019 and October 2020, respectively.
- At both timepoints, the most common injury type was poisoning or toxic effects.
- Injury-related ED presentations are a subset of all injuries in Victoria. In October 2020, there was
 an overall reduction in health service use through the ED, compared to October 2019. Compared
 to October 2019, the number of injury-related ED presentations in October 2020 are therefore
 likely to represent a smaller proportion of total injuries Victoria.

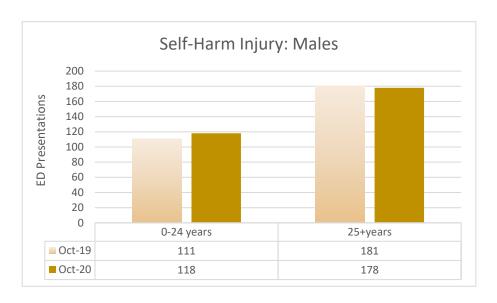


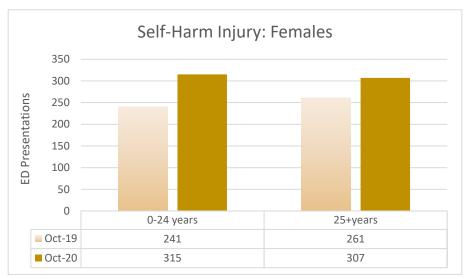


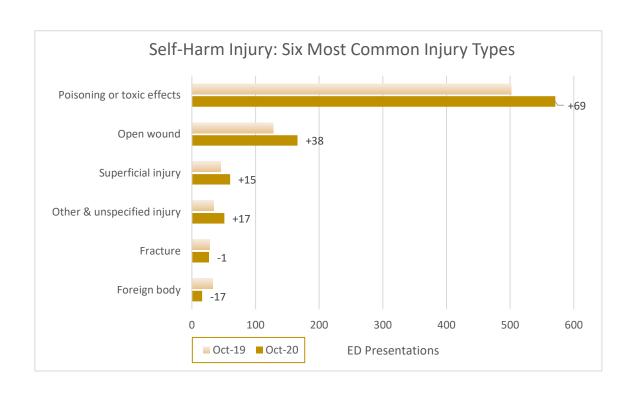
Rates from previous months are included in the graph for comparison purposes. Data selection methods are explained in the Appendix section.

	October 2019			October 2020			Changes	
Triage status	Injury cases	ED Presentations*	Ratio	Injury cases	ED Presentations*	Ratio	Change in case numbers	Change in ratios
Resuscitation	45	432	0.104	39	403	0.097	-13%	-7%
Emergency	201	7800	0.026	264	7264	0.036	+31%	+41%
Urgent	400	26542	0.015	461	23680	0.019	+15%	+29%
Semi-urgent	138	26283	0.005	142	21146	0.007	+3%	+28%
Non-urgent	11	4377	0.003	13	3360	0.004	+18%	+54%
Total	795	65434	0.012	919	55853	0.016	+16%	+35%

^{*}For VEMD caseload calculations, only ED presentations that were considered unlikely to be directly or indirectly related to the pandemic were included. (See Appendix for details).

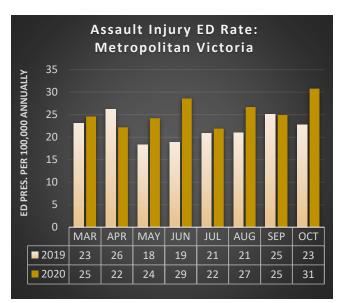


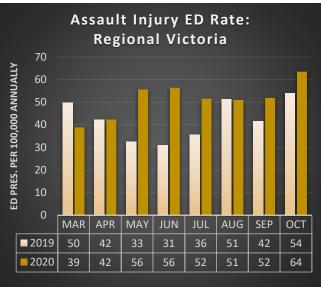




6. Assault Injury (Home only)

- In Victoria overall, the total number of ED presentations for assault-related injury that occurred
 in the home was marginally higher in October 2020 than in October 2019. A statistically
 significant increase was also observed in the number of cases proportional to ED caseload
 (including only cases that were not directly or indirectly related to viral or respiratory illness).
- In October 2019 and October 2020, age-standardised assault (in the home) injury rates in **metropolitan Victoria** were 23 and 31 ED presentations annually per 100,000 population, respectively. In **regional Victoria**, in October 2019 and October 2020, age-standardised rates were 54 and 64 ED presentations annually per 100,000 population, respectively.
- Injury-related ED presentations are a subset of all injuries in Victoria. In October 2020, there was
 an overall reduction in health service use through the ED, compared to October 2019. Compared
 to October 2019, the number of injury-related ED presentations in October 2020 are therefore
 likely to represent a smaller proportion of total injuries Victoria.

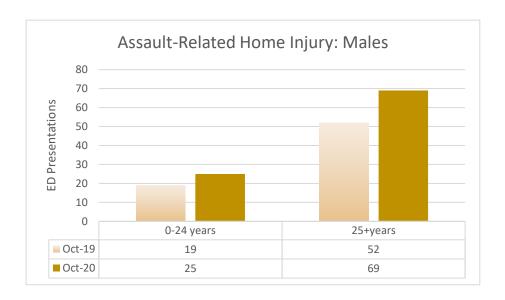


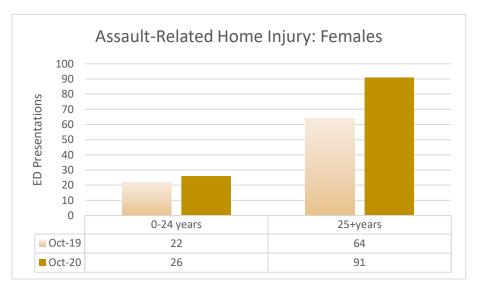


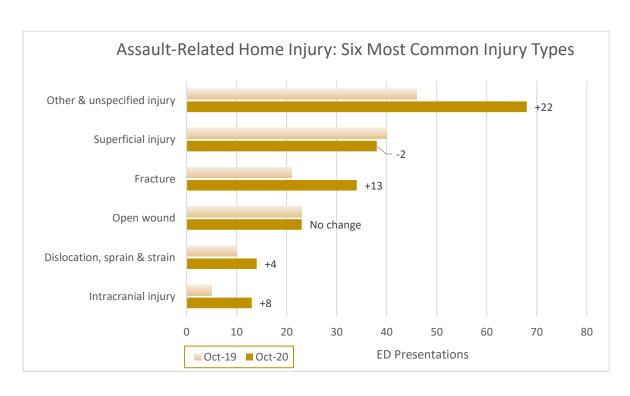
Rates from previous months are included in the graph for comparison purposes. Data selection methods are explained in the Appendix section.

	October 2019			October 2020			Changes	
Triage status	Injury cases	ED Presentations*	Ratio	Injury cases	ED Presentations*	Ratio	Change in case numbers	Change in ratios
Resuscitation, Emergency	14	8232	0.0017	27	7667	0.0035	+93%	+107%
Urgent	68	26542	0.0026	93	23680	0.0039	+37%	+53%
Semi-urgent, non-urgent	75	30660	0.0024	91	24506	0.0037	+21%	+52%
Total	157	65434	0.0024	211	55853	0.0038	+34%	+57%

^{*}For VEMD caseload calculations, only ED presentations that were considered unlikely to be directly or indirectly related to the pandemic were included. (See Appendix for details).







7. 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).

Appendix

METHODS

Data from March 2019 to October 2020 from the Victorian Emergency Minimum Dataset (VEMD), which holds deidentified clinical records of presentations at Victorian public hospitals with designated 24-hour emergency departments, were used to compile this bulletin.

The focus of this Ebulletin is on the latest available data (October 2020) to show the changes in injury profiles since the start of the coronavirus pandemic; data from the same month last year (October 2019) are used for comparison.

The changes in injury-related ED presentations are calculated proportional to other ED presentations that are unlikely to be directly affected by the pandemic. This is to account for health service attendance level changes.

EMERGENCY DEPARTMENT HEALTH SERVICE UTILISATION

ED presentations overall (not limited to injury) were selected to generate statistics on health service use overall during the March 2019 to October 2020 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 2018 – 2019 population estimates from the Australian Bureau of Statistics (ABS). Metropolitan and regional areas were determined based on Local Government Area (LGA) of the patients' residence, and these were matched with ABS population data stratified by LGA and similarly grouped into metropolitan and regional areas. Age-standardisation of rates was carried out using 5-year age groups and the direct method. The standard population used was the Victorian resident population in 2001.

For VEMD caseload calculations, only ED presentations that were considered unlikely to be directly or indirectly related to the pandemic were included.

ED presentations with a first diagnosis code in:

- Certain infectious and parasitic diseases (a00-a99; all b codes excluded)
- Neoplasms (c00–d48);
- Diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism (d50–d89);
- Endocrine, nutritional and metabolic diseases (e00–e89);
- Mental and behavioural disorders (f00–f99);
- Diseases of the nervous system (g00–g99);
- Diseases of the eye and adnexa (h00–h59);
- Diseases of the ear and mastoid process (h60–h95);
- Diseases of the circulatory system (i00–i99);
- Diseases of the digestive system (k00–k93);
- Diseases of the skin and subcutaneous tissue (I00–I99);
- Diseases of the musculoskeletal system and connective tissue (m00–m99);
- Diseases of the genitourinary system (n00–n99);
- Pregnancy, childbirth and the puerperium (o00–o99);
- Certain conditions originating in the perinatal period (p00–p96);
- Congenital malformations, deformations and chromosomal abnormalities (q00–q99).

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). Do-It-Yourself (DIY) injuries were extracted from unintentional home injury cases if the 'Description of injury event' variable, which is a short narrative of the incident, mentioned terms relevant to DIY injuries. Examples of terms were those related to the use of power tools (grinders, saws, drills), lawn mowers, hand or table saws, ladders, welding equipment, nail guns or phrase indicating falls from roofs and trees. Cases with an "Activity when injured" code "W" (Working for income) were excluded. Unintentional farm injuries were unintentional injury cases with a 'Place where injury occurred' code "F" (Farm).

Transport injury cases were those with 'Injury cause' codes "1" through "8" (related to motor vehicle occupants, motor cyclists, pedal cycli

Self-harm injury cases were those with a 'Human intent' code "2" (intentional self-harm code for ED presentations in the 2018/19 financial year) 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 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).

KEY DATES REGARDING RESTRICTIONS IN VICTORIA*

Starting date	Area affected	Level	Implications
20 March	Australia	Travel ban	A general travel ban, with limited exceptions, on non-citizens and non-residents travelling to Australia and Australians travelling overseas was introduced
22 March	Victoria	Restriction on non-essential services	Mandatory closure of non-essential services
23 March	Australia	Restrictions on gathering	Closure of places of social gathering, including registered and licensed clubs, licensed premises in hotels and bars, entertainment venues
29 March	Australia	Restrictions on gathering and movement	Public gatherings will be limited to two people Four acceptable reasons for Australians to leave their houses: shopping for essentials; for medical or compassionate needs; exercise in compliance with the public gathering restriction of two people; and for work or education purposes
22 June	Victoria	Restrictions on gathering	Households can once again only have five visitors; and most easing of restrictions that were to take place were postponed
1 July	Victorian postcodes: 3012, 3021, 3032, 3038, 3042, 3046, 3047, 3055, 3060, 3064	Stage 3 Stay at Home restrictions	If you live in one of the listed suburbs, there are only 4 reasons to leave home: shopping for food and supplies; care and caregiving; exercise; study and work – if you can't do it from home
4 July	A further two Victorian postcodes: 3031, 3051	Stage 3 Stay at Home restrictions	If you live in one of the listed suburbs, there are only 4 reasons to leave home: shopping for food and supplies; care and caregiving; exercise; study and work – if you can't do it from home

Starting date	Area affected	Level	Implications
8 July	Metropolitan Melbourne and Mitchell Shire	Stage 3 Stay at Home restrictions	If you live in the affected areas, there are only 4 reasons to leave home: shopping for food and supplies; medical care and caregiving; exercise and recreation; study and work – if you can't do it from home
22 July	Metropolitan Melbourne and Mitchell Shire	Face covering	You must wear a face covering when you leave your home
30 July	Greater Geelong, Surf Coast, Moorabool, Golden Plains, Colac Otway, Borough of Queenscliffe	Restrictions on gathering	You will no longer be able to have visitors at home or visit other people's homes
2 August	Metropolitan Melbourne and Mitchell Shire	Stage 4 Stay at Home restrictions	People residing in these areas subject to overnight curfew for 6 weeks (between 8pm-5am) and only able to leave their homes for essential work, medical care and caregiving. People only allowed to leave their homes once a day for essential supplies and food, and once for one hour of exercise, all within a 5km radius.
5 August	Regional Victoria	Stage 3 Stay at Home restrictions	There are only 4 reasons to leave home: shopping for food and supplies; medical care and caregiving; exercise and recreation; study and work – if you can't do it from home
13 September	Metropolitan Melbourne	Move to First Step of reopening	Creation of a "bubble" for people living alone and single parents, allowing a friend/family member to visit them in their home. Exercise expanded to 2 hours per day. People can continue to exercise with one other person outside the household or those they live with. Curfew eased to 9pm-5am. Playgrounds reopen. Other Stage 4 restrictions still apply.
13 September	Regional Victoria	Move to Second Step of reopening	People living alone and single parents will be able to have a bubble. Up to five people will be able to gather together in outdoor public places (park, beach) up to a maximum of two households. Outdoor pools and playgrounds will open; religious services can be conducted outside with a maximum of five people, plus a faith leader.
16 September	Regional Victoria	Move to Third Step of reopening	There are no restrictions on the reasons you can leave home There are no restrictions on how far you can travel within regional Victoria If you can work from home you must work from home You must wear a fitted face mask when you leave home. Creation of "household bubbles" — one household can choose another household to be in a bubble, with visits between homes allowed, with up to a total of five visitors. People can gather in groups of ten in outdoor public spaces, without a limit on the number of households. Outdoor contact and non-contact sport will begin for regional Victorians aged 18 and under, as well as outdoor non-contact sport for adults. The numbers for weddings and funerals will increase, and religious gatherings can take place outdoors with up to 10 people. Hospitality businesses will be able to serve patrons outdoors, with a cap of 50 seated patrons. Indoor venues can open with a cap of 10 seated customers per space.
28 September	Metropolitan Melbourne	Moved to Second Step restrictions	

Starting date	Area affected	Level	Implications
12 October	Metropolitan Melbourne		Primary school students, Year 7, VCE and VCAL, students attending specialist schools will return to face-to-face learning.
12 October	Regional Victoria		Students in regional Victoria return to face-to-face learning in a staggered approach, depending on their year level and local circumstances.
18 October	Metropolitan Melbourne	Remains in Second Step restrictions with some restrictions easing	You can travel up 25km from your home or permitted workplace within metropolitan Melbourne. Travel to regional Victoria for exercise or recreation is not permitted. People can leave home for any period of time to exercise or to see friends/family outdoors. You can meet in a group of up to 10 people from a maximum of 2 households outdoors to socialise. More people who work outdoors will be able to return to work; hairdressers and barbers can resume work, allied health providers can deliver routine care, maximum of 30 people allowed to use outdoor swimming pools for exercise.
18 October	Regional Victoria	Remains in Third Step restrictions with some restrictions easing	You can have up to two people visit you at home each day from different households. The limits of people in restaurants an cafes increases. You can have up to 70 people outdoors and up to 10 people per indoor space with a maximum of 40 people per venue indoors.
26 October	Metropolitan Melbourne		Year 8-10 students will resume face-to-face learning.
27 October	Regional Victoria	Remains in Third Step restrictions with further easing of restrictions	Indoor gyms and fitness spaces will be allowed to open for up to 20 people, indoor pools will open to 20, indoor sport will begin for those 18 and under. Food courts can open, live music can resume for outdoor hospitality venues, and religious celebrations can be conducted with 20 people indoors or 50 outdoors.

*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

COVID-19 Monthly Bulletins are prepared by the team at VISU



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