

Weekly Summary

Adverse Events Following Immunization (AEFIs) for COVID-19 in Ontario: December 13, 2020 to April 3, 2021

This report provides a summary of adverse events following immunization (AEFIs) that are temporally associated (i.e., occur after receiving the vaccine) with receipt of COVID-19 vaccine and meet the [provincial surveillance definitions](#) (i.e., confirmed).¹ It is important to note that AEFIs described in this report are defined as any untoward medical occurrences that followed immunization and do not necessarily have a causal relationship with the vaccine.

This weekly summary includes reports of AEFIs reported in the Public Health Case and Contact Management Solution (CCM) as of **April 3, 2021**. Doses administered up to and including April 3, 2021 are extracted from the COVaxON application (see [technical notes](#) for details on data sources).

Background

In Ontario, AEFIs are primarily reported to local public health units (PHUs) by health care providers and vaccine recipients.² PHUs then investigate and assess all AEFI reports and enter into the provincial electronic reporting system according to [provincial surveillance guidelines](#).¹ Please see the following resources for more information:

- Public Health Ontario's (PHO) [overview of vaccine safety surveillance](#) for more information on vaccine safety surveillance in Ontario³
- The [technical annex](#) of PHO's annual vaccine safety report for technical details on vaccine safety surveillance data analysis in Ontario⁴
- The government of Canada's COVID-19 vaccine safety [webpage](#) for national data on COVID-19 vaccine safety⁵
- The [COVID-19 vaccine webpage](#) for resources and data on Ontario's COVID-19 vaccine program

Highlights

- There are a total of 1,191 AEFI reports received following 2,493,391 doses of COVID-19 vaccines administered in Ontario to date (Dec 13, 2020 – Apr 3, 2021) with a reporting rate of 47.8 per 100,000 doses administered
 - 133 new AEFI reports were received this week (Mar 28 – Apr 3, 2021)
- Of the total 1,191 AEFI reports received to date (Dec 13, 2020 – Apr 3, 2021):

- 1,163 AEFI reports are non-serious (97.6% of total AEFI reports)
- 28 AEFI reports meet the serious definition (2.4% of total AEFI reports)
- The most commonly reported adverse events are allergic skin reactions and pain/redness/swelling at the injection site, reported in 29.6% and 27.1% of the total AEFI reports respectively
- 49 reports of events managed as anaphylaxis are reported, in which six reports also meet the serious definition (see [Adverse Event Descriptions](#) for description of events)
- 11 reports include a COVID-19 vaccine-specific adverse event of special interest, in which six reports also meet the serious definition (see [Adverse Event Descriptions](#) for description of event)

In Ontario, AEFIs that meet the serious definition are events that required hospital admission and reports of death. Please see the [technical notes](#) for a full definition of serious AEFIs.

Several adverse events have been identified as COVID-19 vaccine-specific adverse events of special interest (AESIs). The list of COVID-19 specific AESIs are listed in the [technical notes](#).

AEFI Report Characteristics

An AEFI report refers to a report received by the PHU, which pertains to one individual vaccine recipient who reported at least one adverse event after receiving the COVID-19 vaccine (i.e., temporally associated with the vaccine).

Table 1. Summary of all AEFI reports received to date by COVID-19 vaccine in Ontario, December 13, 2020 to April 3, 2021

	Pfizer-BioNTech COVID-19 vaccine	Moderna COVID-19 vaccine	COVISHIELD COVID-19 vaccine	AstraZeneca COVID-19 vaccine	All vaccine products combined
Total number of AEFI reports	780	364	38	0	1,191
Number of non-serious reports	764	354	36	0	1,163
Number of serious reports	16	10	2	0	28
Proportion of total AEFI reports that are serious	2.1%	2.7%	5.3%	0.0%	2.4%

	Pfizer-BioNTech COVID-19 vaccine	Moderna COVID-19 vaccine	COVISHIELD COVID-19 vaccine	AstraZeneca COVID-19 vaccine	All vaccine products combined
Doses administered	1,944,923	348,809	196,792	2,867	2,493,391
Total reporting rate per 100,000 doses administered	40.1	104.4	19.3	0.0	47.8
Serious reporting rate per 100,000 doses administered	0.8	2.9	1.0	0.0	1.1

Note: Nine AEFI reports did not specify vaccine product received. Data corrections or updates can result in AEFI reports being removed and/or updated from past reports and may result in counts differing from past publicly reported AEFIs. Doses administered data are subject to reporting delays.

Data Source: CCM, COVaxON (see [technical notes](#) for details on data sources)

Table 2. Summary of all AEFI reports received to date by age group and gender in Ontario, December 13, 2020 to April 3, 2021

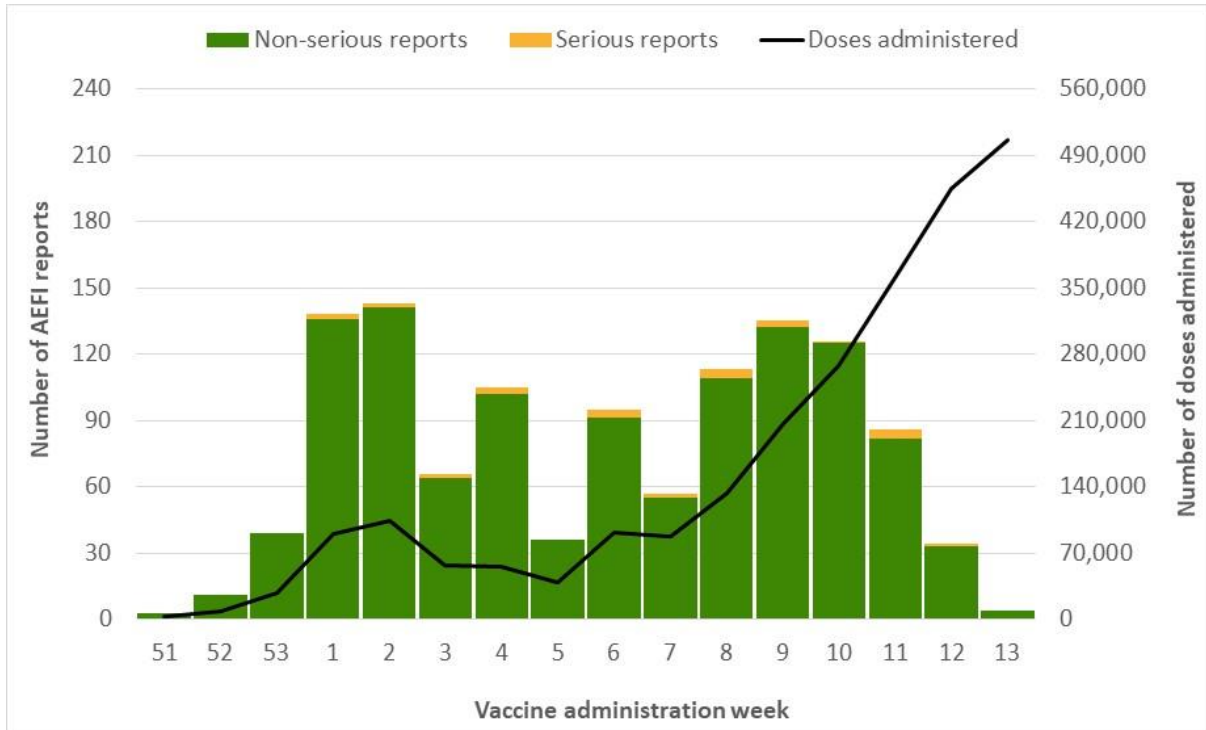
	Number of AEFI reports received to date	Reporting rate per 100,000 doses administered
Gender: Female	1,038	67.3
Gender: Male	142	15.2
Ages: 18-49 years	564	93.2
Ages: 50-64 years	331	62.9
Ages: 65 years and over	291	21.5

Note: Age represents age at time of immunization. Some AEFI reports and doses administered records have unknown gender or age; these reports are excluded from gender and age-specific counts and reporting rate. Age group of 17 years and under has been excluded due to low number of reports and doses administered in this age group. Data corrections or updates can result in AEFI reports being removed and/or updated from past reports and may result in counts differing from past publicly reported AEFIs. Doses administered data are subject to reporting delays.

Data Source: CCM, COVaxON (see [technical notes](#) for details on data sources)

Time

Figure 1. Number of AEFI reports and doses administered by week of COVID-19 vaccine administration in Ontario, December 13, 2020 to April 3, 2021



Note: AEFI reports are assessed based on date of vaccine administration. The administration week ranges from week 51 (Dec 13 to 19, 2020) to week 13 (March 28 to April 3, 2021). The number of AEFI reports for the recent reporting weeks are subject to reporting delays and/or delayed data entry (i.e., reports are likely to be still under investigation and yet to be reported as a confirmed AEFI report). Data corrections or updates can result in AEFI reports being removed and/or updated from past reports and may result in counts differing from past publicly reported AEFIs. Doses administered data are subject to reporting delays.

Data Source: CCM, COVaxON (see [technical notes](#) for details on data sources)

Adverse Event Descriptions

The most commonly reported adverse events for all vaccine products combined are allergic skin reactions and pain/redness/swelling at the injection site, reported in 29.6% and 27.1% of the total AEFI reports respectively. Allergic skin reaction was the most frequently reported adverse event for the Pfizer-BioNTech vaccine (13.9 per 100,000 doses administered) while pain/redness/swelling at the injection site was the most frequently reported adverse event for the Moderna vaccine (51.3 per 100,000 doses administered). The ‘other severe or unusual events’ category was the fourth most frequently reported event for all vaccine products combined, which includes reports of adverse events that do not meet any other pre-defined events outlined in the [Infectious Diseases Protocol: Appendix B](#).¹ These events do not necessarily meet the serious AEFI definition. Of the 182 reports of other severe or unusual events received to date, eight reports met the definition of a serious AEFI (described in the Serious AEFIs [below](#)). The number of AEFI reports and reporting rate for each adverse event are presented in [Appendix A](#).

There were also 17 reports of Bell’s Palsy with symptom onset ranging from 18 hours to 34 days post-immunization. At the time of reporting, one individual was fully recovered after 15 days, fifteen individuals were still symptomatic and one report had an unknown outcome. The outcome for AEFI reports is determined at the time the PHU completes the case investigation and may not reflect the current status of the client’s symptoms.

Medically important events and adverse events of special interest

Some selected adverse events are defined as “medically important,” based on the World Health Organization’s (WHO) guidance, regardless of whether they meet the serious AEFI definition. These types of events may jeopardize the patient or may require intervention to prevent an outcome described in the serious definition. The list of medically important events are listed in the [technical notes](#).

There were 51 AEFIs reported that were classified as medically important events, representing 4.3% of all reports. Among these, there was one report of myelitis/transverse myelitis following the Pfizer-BioNTech vaccine and one report of thrombocytopenia following the Moderna vaccine. Both events met the definition of a serious AEFI. The remaining 49 medically important events were reports of events managed as anaphylaxis; six of these 49 events also met the definition of a serious AEFI (described in the Serious AEFIs [below](#)). Of all 49 reports of events managed as anaphylaxis: 42 received epinephrine, 42 were seen in the emergency department and 43 were fully recovered at the time of reporting. A preliminary assessment using the Brighton Collaboration standard definition of anaphylaxis was applied to cases which include clinical information required to conduct an assessment.⁶ Fifteen met Brighton definition at level I of diagnostic certainty, seven met Brighton definition at level II of diagnostic certainty and 24 reports did not have sufficient documented evidence to meet levels I, II or III of diagnostic certainty. Three reports are still under investigation and have not yet been assigned a level of diagnostic certainty.

There were 11 reports with COVID-19 vaccine-specific adverse events of special interest (AESI), in which six reports also met the definition of a serious AEFI (described in the Serious AEFIs [below](#)). The five reports that did not meet the definition of a serious AEFI were:

- one report of “Chilblain-like lesions” which were diagnosed prior to immunization and reported as an exacerbation temporally associated with receipt of COVID-19 vaccine. (Pfizer-BioNTech)

- one report of “acute cardiovascular injury” in an individual that developed chest pain 21 days following receipt of COVID-19 vaccine and was subsequently diagnosed with pericarditis. (Pfizer-BioNTech)
- one report of “acute cardiovascular injury” in an individual who developed shortness of breath and chest pain shortly after receiving COVID-19 vaccine, that was subsequently diagnosed with a cardiac conduction disorder. (Pfizer-BioNTech)
- one report of physician-diagnosed “erythema multiforme” in an individual who developed erythematous macules three days following receipt of COVID-19 vaccine. (Moderna)
- one report of “coagulation disorder” in an individual who developed internal jugular vein thrombosis ten days after receiving their first dose of COVID-19 vaccine. (COVISHIELD)

Serious AEFIs

There were 28 AEFI reports classified as serious, representing 2.4% of all AEFI reports and a serious AEFI reporting rate of 1.1 per 100,000 doses administered for all vaccine products combined. The serious reporting rate was 0.8 and 2.9 per 100,000 doses administered for the Pfizer-BioNTech vaccine and the Moderna vaccine, respectively. Two serious reports were received for the COVISHIELD vaccine (reporting rate of 1.0 per 100,000 doses administered). Twenty-seven of the 28 clients were hospitalized related to the reported events. Of the 27 reports with hospitalization, there were six reports of events managed as anaphylaxis, seven other severe or unusual events, six reports of COVID-19 AESI, three reports of severe vomiting/diarrhea and one each of myelitis/transverse myelitis, arthritis/arthralgia, anaesthesia/paraesthesia, convulsion/seizure, and thrombocytopenia. Of the 27 clients, fifteen were reported to be recovered, nine were still symptomatic at the time of reporting and three had unknown outcome.

The six reported AESIs that were classified as serious include:

- one report of “acute kidney injury” in an individual who received COVID-19 vaccine but subsequently tested positive for COVID-19. The individual had risk factors for renal disease prior to vaccination. (Pfizer-BioNTech)
- one report of “acute cardiovascular injury” in an individual who developed myocarditis following their second dose of COVID-19 vaccine. (Pfizer-BioNTech)
- one report of “coagulation disorder” in an individual with multiple co-morbidities including cardiovascular disease who tested positive for COVID-19 prior to receipt of a mRNA COVID-19 vaccine. The individual subsequently developed pulmonary embolisms following their first dose of COVID-19 vaccine. (Moderna)
- one report of “acute cardiovascular injury” in an individual with underlying cardiovascular risk factors diagnosed with a myocardial infarction the day after receiving their first dose of COVID-19 vaccine. (COVISHIELD)
- one report of “coagulation disorder” in an individual who suffered a stroke one day following their first dose of COVID-19 vaccine. (COVISHIELD)

- one report of “coagulation disorder” in an individual who developed shortness of breath the day after receiving their first dose of COVID-19 vaccine and two days later was diagnosed with pulmonary embolisms. (Pfizer-BioNTech)

The remaining serious AEFI was a report of death following receipt of COVID-19 vaccine that met the provincial surveillance definition (i.e., other severe/unusual event). The individual was a resident of a health-care institution with significant co-morbidities. The cause of death was not attributed to the vaccine.

As a comparison, the proportion of AEFIs defined as serious for all vaccines administered in Ontario ranged from 2.8% and 5.0% between 2012 and 2018.⁷

Reports of death temporally associated with receipt of vaccine

In Ontario, all deaths temporally associated with receipt of vaccines reported to public health units are thoroughly investigated and reported to PHO. Those that meet the provincial AEFI case definition (e.g., events temporally associated with vaccine that have not been clearly attributed to other causes) are included in provincial AEFI surveillance reporting (see the Serious AEFIs [above](#)); however these reports should not be interpreted as causally related with vaccine.

As of April 3, 2021, PHO has received five reports of death following COVID-19 vaccine that are currently classified as ‘persons under investigation’ as they do not currently meet the provincial surveillance definition. Four of the five reports of deaths are in LTCH/retirement home residents. These investigations are ongoing and additional information including a cause of death (e.g., autopsy or Coroner’s report) is expected. Preliminary information suggests that these events occurred in individuals with multiple co-morbidities which may be related to the cause of death. There has been no association with vaccine identified at this time.

An ongoing ICES study (“Estimating background rates of adverse events of special interest for COVID-19 vaccine safety assessment in Ontario [draft]”; unreferenced) reports that over the six years preceding the pandemic (i.e., 2015-2020), there were an average of 550 and 531 deaths in LTCH residents each week during the months of January and February, respectively. As LTCH and retirement home residents have been a focus for COVID-19 vaccination efforts, it is expected that deaths occurring close to the time of vaccination may occur. These events are related in time, but may not be caused by vaccination, and require further evaluation to determine the cause of death. In addition, the Global Advisory Committee on Vaccine Safety (GACVS) COVID-19 Vaccine Safety subcommittee recently reviewed reports of deaths of very frail elderly individuals vaccinated with Pfizer-BioNTech COVID-19 vaccine. Based on a careful scientific review of the available information, the subcommittee concluded that “the current reports do not suggest any unexpected or untoward increase in fatalities in frail, elderly individuals or any unusual characteristics of adverse events following administration of Pfizer-BioNTech COVID-19 vaccine”.⁸ At the January 27, 2021 meeting of the Advisory Committee on Immunization Practices (ACIP) in the United States, the Centres for Disease Control (CDC) compared the expected numbers of deaths among LTCH residents based on historical trends in mortality, with reports of death in LTCH residents submitted to the Vaccine Adverse Event Reporting System (VAERS) that were temporally, but not necessarily causally related to COVID-19 vaccine.⁹ Over the time period examined (December 21-January 18), 11,440 deaths would be expected among LTCH residents, as compared to 129 reports of death in VAERS. As noted by the CDC in their assessment, mortality in LTCH residents is high and substantial numbers of deaths in this population are expected, unrelated to vaccination. The CDC vaccine safety update summarized

additional analyses using a variety of data sources demonstrating the safety of COVID-19 vaccines in the US population overall and among LTCH residents, specifically.

PHO continues to conduct continuous monitoring of the safety of COVID-19 vaccines in collaboration with its partners, including individual case review, daily analysis of surveillance data for vaccine safety signals and weekly reporting on the PHO website and to the Public Health Agency of Canada.

Geography

Table 3. Number of AEFI reports received to date by public health unit and region in Ontario, December 13, 2020 to April 3, 2021

Public Health Unit Name	Number of AEFI reports received to date
Northwestern Health Unit	29
Thunder Bay District Health Unit	10
TOTAL NORTH WEST	39
Algoma Public Health	16
North Bay Parry Sound District Health Unit	14
Porcupine Health Unit	22
Public Health Sudbury & Districts	32
Timiskaming Health Unit	12
TOTAL NORTH EAST	96
Eastern Ontario Health Unit	16
Hastings Prince Edward Public Health	17
Kingston, Frontenac and Lennox & Addington Public Health	26
Leeds, Grenville & Lanark District Health Unit	24
Ottawa Public Health	9
Renfrew County and District Health Unit	18
TOTAL EASTERN	110
Durham Region Health Department	98
Haliburton, Kawartha, Pine Ridge District Health Unit	41
Peel Public Health	108
Peterborough Public Health	30

Public Health Unit Name	Number of AEFI reports received to date
Simcoe Muskoka District Health Unit	35
York Region Public Health	51
TOTAL CENTRAL EAST	363
Toronto Public Health	200
TOTAL TORONTO	200
Chatham-Kent Public Health	11
Grey Bruce Health Unit	11
Huron Perth Public Health	17
Lambton Public Health	53
Middlesex-London Health Unit	22
Southwestern Public Health	20
Windsor-Essex County Health Unit	55
TOTAL SOUTH WEST	189
Brant County Health Unit	19
City of Hamilton Public Health Services	49
Haldimand-Norfolk Health Unit	3
Halton Region Public Health	27
Niagara Region Public Health	19
Region of Waterloo Public Health and Emergency Services	56
Wellington-Dufferin-Guelph Public Health	21
TOTAL CENTRAL WEST	194
TOTAL ONTARIO	1,191

Data Note: Orientation of AEFI reports by geography is based the case's public health unit of residence at the time of adverse event. This does not represent the location of vaccine administration.

Data Source: CCM

Technical Notes

Data Sources

- The data for this report were based on:
 - AEFI information from the Public Health Case and Contact Management Solution (CCM) extracted on **April 5, 2021 at 9:00 a.m.**
 - Doses administered data from the COVax_{ON} application extracted on **April 5 at approximately 9:45 a.m.** Methodology used to calculate the number of doses administered are documented in PHO's [COVID-19 Vaccine Uptake in Ontario report](#).¹⁰

Data Caveats

- Data presented in this report only represent AEFIs reported to public health units and recorded in CCM. As a result, all counts will be subject to varying degrees of reporting bias. Including underreporting, particularly for mild or common reportable events, as well as stimulated (elevated) reporting, which can occur in response to media coverage and increased public awareness.
- CCM and COVax_{ON} are dynamic reporting systems which allow ongoing updates to data previous entered. As a result, data extracted from CCM and COVax_{ON} represent a snapshot at the time of data extraction and may differ from previous or subsequent reports.

Methods

- For provincial surveillance reporting, an adverse event must occur after receiving the vaccine and meet the MOH [AEFI case definition](#).¹ Data presented in this report only includes AEFI reports with a confirmed case classification and an association with a COVID-19 vaccine in CCM at the time of data extraction.
- AEFI reports from CCM where the Disposition was reported as ENTERED IN ERROR, DOES NOT MEET DEFINITION, EXPOSURE RULED OUT or DUPLICATE – DO NOT USE, or any variation on these values have been excluded. AEFI reports from CCM where the Status was reported as MERGED-OBSOLETE have also been excluded.
- AEFI reports with a missing date of vaccine administration have been excluded.
- Each AEFI report refers to an individual who reported an adverse event after receiving a dose of COVID-19 vaccine. An AEFI report may contain multiple adverse events. Therefore, the total number of adverse events can exceed the number of individual AEFI reports reported in a given time frame. AEFI reports that did not have an adverse event reported at the time of data extraction have been excluded.
- AEFI reporting rates are calculated using the number of COVID-19 vaccine-specific AEFIs reported in a given time period in Ontario divided by doses of COVID-19 vaccines administered in the same time period in Ontario.
- Serious AEFIs are defined using the [World Health Organization \(WHO\) standard definition](#).¹¹ an AEFI that results in death, is life-threatening, requires in-patient hospitalization or prolongs an

existing hospitalization, results in persistent or significant disability/incapacity, or in a congenital anomaly/birth defect. Due to data limitations and the relatively brief follow-up period of AEFIs reported in Ontario, AEFI reports that meet the serious definition typically have an in-patient hospitalization or death reported. In-patient hospitalization is defined as having a hospital admission date recorded in CCM. Deaths are defined as reporting 'fatal' in the outcome field in CCM.

- Some selected adverse events can be defined as “medically important,” based on the World Health Organization’s (WHO) guidance, regardless of whether they meet the serious AEFI definition. These types of events may jeopardize the patient or may require intervention to prevent an outcome described in the serious definition (e.g., hospitalization); “medically important” events may be defined after applying medical and scientific judgement. In Ontario, the specific events under surveillance that align with this definition include: acute disseminated encephalomyelitis (ADEM), events managed as anaphylaxis, encephalitis/encephalopathy, Guillain-Barré syndrome (GBS), intussusception, meningitis, myelitis and thrombocytopenia.
- All reports of events managed as anaphylaxis are further assessed using the internationally recognized case definition for anaphylaxis following vaccination from the Brighton Collaboration.⁶ An independent review of these cases is completed and a preliminary score is assigned based on this case definition. This score is not a measure of severity but rather reflects the level of diagnostic certainty, with level I being the most highly specific for the condition.
- Several [adverse events of special interest \(AESI\) following administration of COVID-19 vaccine\(s\)](#) were selected for surveillance.¹² These are: vaccine-associated enhanced disease, multisystem inflammatory syndrome in children, acute respiratory distress syndrome, acute cardiovascular injury, coagulation disorder, acute kidney injury, acute liver injury, anosmia and/or ageusia, chilblain like lesions, single organ cutaneous vasculitis, and erythema multiforme.
- Orientation of case counts by geography is based on the Permanent Health Unit in CCM. Permanent Health Unit refers to the case's public health unit of residence at the time of adverse event. Cases for which the Permanent Health Unit was reported as MOH-PHO (to signify a case that is not a resident of Ontario) have been excluded from the analyses.

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Appendix A

Table A1. Number of adverse events reported to date by COVID-19 vaccine in Ontario, December 13, 2020 to April 3, 2021

Adverse event	Pfizer-BioNTech COVID-19 vaccine	Moderna COVID-19 vaccine	COVISHIELD COVID-19 vaccine	Astra-Zeneca COVID-19 vaccine	All vaccine products combined
Allergic skin reactions	270	69	10	0	352
Pain/redness/swelling at the injection site	136	179	6	0	323
Rash	111	68	5	0	185
Other severe or unusual events	138	34	10	0	182
Fever in conjunction with another reportable event	62	30	3	0	96
Adenopathy/lymphadenopathy	62	14	1	0	77
Severe vomiting/diarrhea	51	20	3	0	76
Anaesthesia/paraesthesia	55	12	1	0	68
Cellulitis	14	35	0	0	49
Event managed as anaphylaxis	42	7	0	0	49
Arthritis/arthralgia	42	4	2	0	48
Bell's Palsy	10	6	0	0	17
Convulsions/seizure	5	5	1	0	11
Nodule	1	8	0	0	9
AESI – Acute cardiovascular injury	3	0	1	0	4
AESI – Coagulation disorder	1	1	2	0	4
Oculorespiratory syndrome (ORS)	2	2	0	0	4

Adverse event	Pfizer-BioNTech COVID-19 vaccine	Moderna COVID-19 vaccine	COVISHIELD COVID-19 vaccine	Astra-Zeneca COVID-19 vaccine	All vaccine products combined
Syncope (fainting) with injury	2	0	0	0	2
AESI – Acute kidney injury	1	0	0	0	1
AESI – Chilblain-like lesions	1	0	0	0	1
AESI – erythema multiforme	0	1	0	0	1
Myelitis/transverse myelitis	1	0	0	0	1
Thrombocytopenia	0	1	0	0	1

Note: An AEFI report may contain multiple adverse events. Thus the sum of all adverse event-specific counts may not equal to the total number of AEFI reports. Some AEFI reports did not specify vaccine product received; these are included in the counts for all vaccine products combined.

Data Source: CCM

Table A2. Reporting rate per 100,000 doses administered for adverse events reported to date by COVID-19 vaccine in Ontario, December 13, 2020 to April 3, 2021

Adverse event	Pfizer-BioNTech COVID-19 vaccine	Moderna COVID-19 vaccine	COVISHIELD COVID-19 vaccine	Astra-Zeneca COVID-19 vaccine	All vaccine products combined
Allergic skin reactions	13.9	19.8	5.1	0.0	14.1
Pain/redness/swelling at the injection site	7.0	51.3	3.0	0.0	13.0
Rash	5.7	19.5	2.5	0.0	7.4
Other severe or unusual events	7.1	9.7	5.1	0.0	7.3
Fever in conjunction with another reportable event	3.2	8.6	1.5	0.0	3.9
Adenopathy/lymphadenopathy	3.2	4.0	0.5	0.0	3.1
Severe vomiting/diarrhea	2.6	5.7	1.5	0.0	3.0
Anaesthesia/paraesthesia	2.8	3.4	0.5	0.0	2.7
Cellulitis	0.7	10.0	0.0	0.0	2.0
Event managed as anaphylaxis	2.2	2.0	0.0	0.0	2.0
Arthritis/arthralgia	2.2	1.1	1.0	0.0	1.9
Bell's Palsy	0.5	1.7	0.0	0.0	0.7
Convulsions/seizure	0.3	1.4	0.5	0.0	0.4
Nodule	0.1	2.3	0.0	0.0	0.4
AESI – Acute cardiovascular injury	0.2	0.0	0.5	0.0	0.2
AESI – Coagulation disorder	0.1	0.3	1.0	0.0	0.2
Oculorespiratory syndrome (ORS)	0.1	0.6	0.0	0.0	0.2
Syncope (fainting) with injury	0.1	0.0	0.0	0.0	0.1
AESI – Acute kidney injury	0.1	0.0	0.0	0.0	0.0

Adverse event	Pfizer-BioNTech COVID-19 vaccine	Moderna COVID-19 vaccine	COVISHIELD COVID-19 vaccine	Astra-Zeneca COVID-19 vaccine	All vaccine products combined
AESI – Chilblain-like lesions	0.1	0.0	0.0	0.0	0.0
AESI – erythema multiforme	0.0	0.3	0.0	0.0	0.0
Myelitis/transverse myelitis	0.1	0.0	0.0	0.0	0.0
Thrombocytopenia	0.0	0.3	0.0	0.0	0.0

Note: An AEFI report may contain multiple adverse events. Thus the sum of all adverse event-specific counts may not equal to the total number of AEFI reports. Some AEFI reports did not specify vaccine product received; these are included in the counts for all vaccine products combined.

Data Source: CCM, COVaxON (see [technical notes](#) for details on data sources)

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For Further Information

For more information, email ivpd@oahpp.ca.

Public Health Ontario

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