Adverse Events Following Immunization (AEFI) with COVID-19 Vaccines in Nova Scotia

December 16, 2020 to November 30, 2021

Summary of Adverse Events Following Immunization

- Since December 16, 2020, the province has administered 1,644,945 doses of COVID-19 vaccine.
- There have been 634 reported Adverse Events Following Immunization.
  - 522 (82.3%) were non-serious
  - 112 (17.7%) were serious.
- The type and frequency of AEFIs reported in Nova Scotia are consistent with those being reported in the rest of Canada

Overall Summary of Adverse Events Following Immunization

Between December 16, 2020 and November 30, 2021 Nova Scotia has administered 1,644,945 doses of COVID 19 vaccine and has received a total 634 reports of adverse events following immunization.

All COVID-19 AEFI reports received in relation to total doses administered, December 16, 2020 to November 30, 2021

	Number	Percentage of Total Doses Administered
Total AEFIs	634	0.039%
Non-serious AEFIs	522	0.032%
Serious AEFIs	112	0.007%

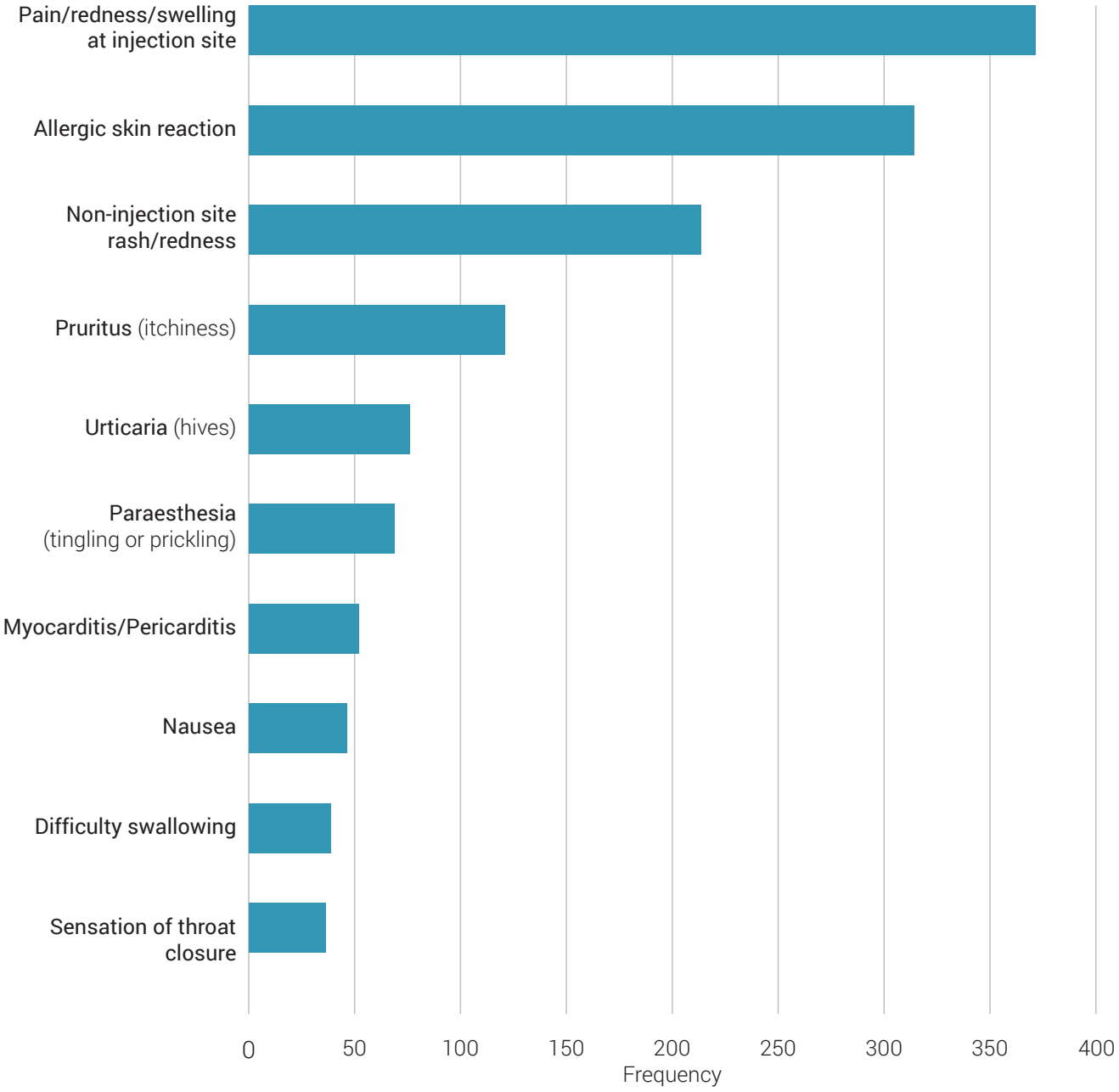
All COVID-19 AEFI reports received in relation to total doses administered, December 16, 2020 to November 30, 2021

	Pfizer	Moderna	COVISHIELD/ AZ	Unknown/ Other	Total
Total Number of AEFIs Reported	377	197	59	1	634
Number of non-serious AEFIs	322	146	53	1	522
Number of Serious AEFIs	55	51	6	0	112
Total Number of Doses Administered	1115692	463898	59971	5384	1644945
Total AEFI reporting rate per 100,000 doses	33.8	42.5	98.4	NA	38.5
Serious AEFI reporting rate per 100,000 doses	4.9	11.0	10.0	NA	6.8

Number of cases and rate of COVID-19 AEFI reports by age group and gender between December 16, 2020 to November 30, 2021

Age Group	Female		Male		Total	
	N	Rate per 100,000 doses	N	Rate per 100,000 doses	N	Rate per 100,000 doses
12-29	66	37.0	46	25.9	112	31.5
30-49	168	72.9	38	18.2	206	46.9
50-64	136	62.9	42	21.2	178	43.0
65-79	65	37.5	40	25.3	105	31.7
80+	23	36.8	10	23.9	33	31.6
Total	458	53.2	176	22.5	634	38.5

Number of the most frequently reported adverse events related to COVID-19 vaccines between December 16, 2020 to November 30, 2021*



*An AEFI report may contain multiple adverse events. The total adverse event-specific counts may not equal the total number of AEFI reports. This does not include AEFIs classified in the composite "Other" category.

Serious Adverse Events Following Immunization Summary

An event is serious if it occurs within a specified time period after vaccination and it results in hospitalization, is life threatening or results in death. These reports do not necessarily imply a causal relationship between the vaccine and the adverse event. Some unrelated medical events occur by chance after immunization, especially when thousands of people are being vaccinated.

Between December 16, 2020 and November 30, 2021, there have been a total 112 serious AEFIs reported in Nova Scotia.

101 of these adverse event reports required hospitalization

1 of these adverse event reports resulted in permanent disability

There were 10 reports of death within 30 days of vaccination. Reports of death are events temporally associated with vaccine that have not been clearly attributed to other causes. A preliminary review of these events indicated that none were clearly attributable to the vaccine.

Adverse Events of Interest Following Immunization

There are three adverse events of interest following immunization which are being actively monitored in Canada as safety signals. Nova Scotia has reported 57 cases of adverse events of interest.

Pericarditis/Myocarditis

- 52 cases in people 18 to 71 years of age
- 69% (n=36) of cases among adolescents/young adults under 30 years of age
- 90% (n=47) occurred after Dose 2; no cases after Dose 3
- 73% (n=38) required hospitalization
- 90% (n=47) occurred within 7 days of vaccination
- 69% (n=36) occurred after vaccination with Moderna;
  31% (n=16) occurred after vaccination with Pfizer

Guillain-Barre Syndrome

- 3 cases; these 3 events occurred after Moderna Pfizer and COVISHIELD/AstraZeneca vaccine

Vaccine-Induced Immune Thrombotic Thrombocytopenia (VITT)

- 2 cases; these 2 events all occurred after vaccination with COVISHIELD/AstraZeneca

DATA NOTES

Data Sources:

Nova Scotia data: Panorama and CanImmunize

Definitions

Adverse Events Following Immunization (AEFI): A serious or non-serious reaction experienced by a patient following immunization..

The numbers included in the report reflect the number of AEFIs with a status of “Review complete”, “Review complete, follow-up required” or “Follow-up complete” AND a Public Health Agency of Canada report date entered into Panorama

Serious AEFI: An adverse event following immunization that has resulted in at least one of the following:

- hospitalization or prolongation of existing hospitalization
- permanent disability
- death

Non-Serious AEFI: An adverse event following immunization that has resulted in at least one of the following:

- a reaction that did not require hospitalization or prolongation of existing hospitalization
- a reaction that did not result in permanent disability
- a reaction that did not result in death

Adverse Events of Special Interest (AESI): Adverse Events of Special Interest are reactions that are of special interest because they are monitored at a national and international level.

Safety Signal: When an AEFI occurs at greater than expected frequency for a specific vaccine type or within a specific population group.