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

December 16, 2020 to October 31, 2021

Summary of Adverse Events Following Immunization

- Since December 16, 2020, the province has administered 1,576,613 doses of COVID-19 vaccine.
- There have been 596 reported Adverse Events Following Immunization.
  - 493 (82.7%) were non-serious
  - 103 (17.3%) 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 October 31, 2021 Nova Scotia has administered 1,576,613 doses of COVID 19 vaccine and has received a total 596 reports of adverse events following immunization.

All COVID-19 AEFI reports received in relation to total doses administered, December 16, 2020 to October 31, 2021

	Number	Percentage of Total Doses Administered
Total AEFIs	596	0.038%
Non-serious AEFIs	493	0.031%
Serious AEFIs	103	0.007%

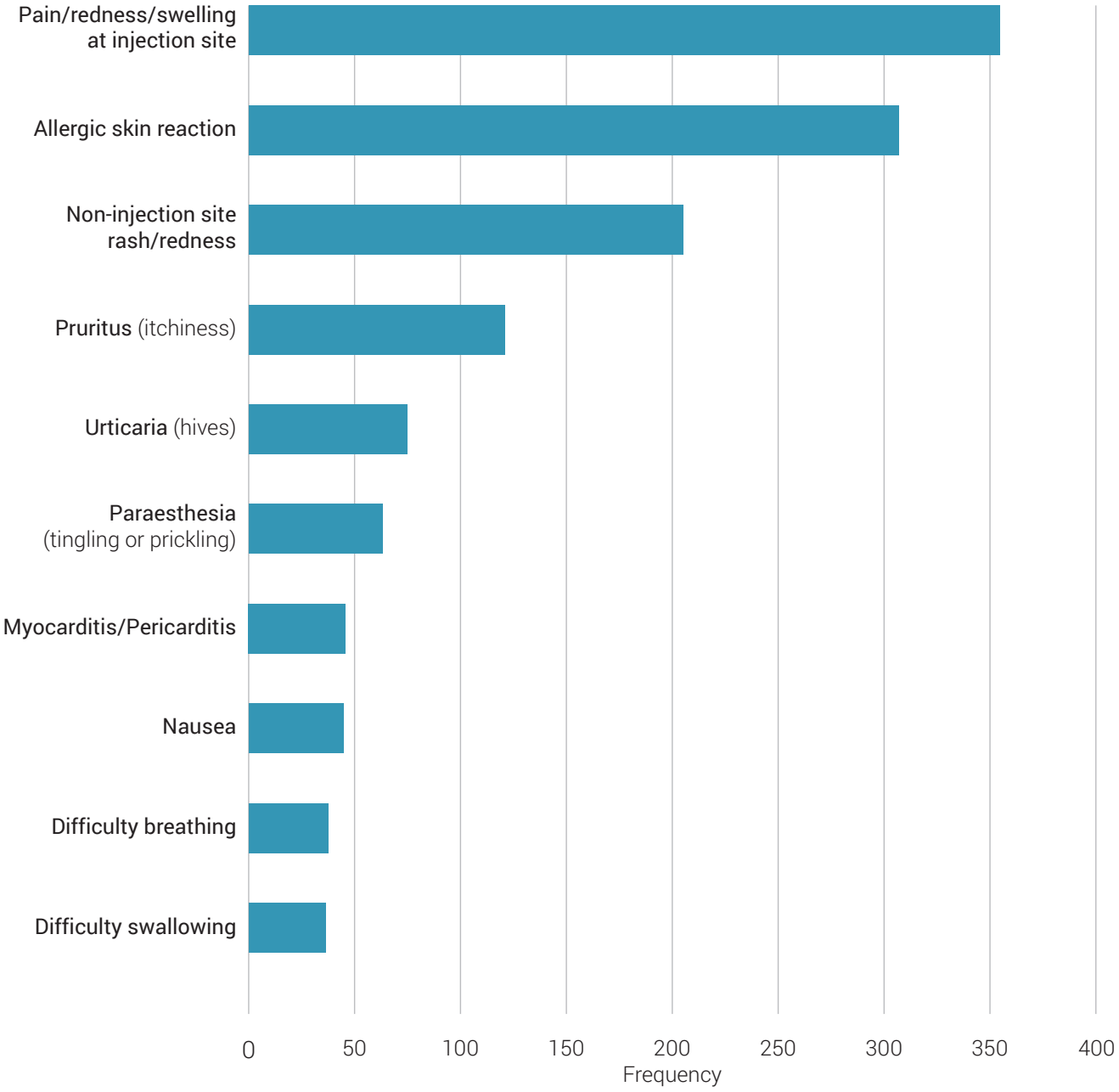
All COVID-19 AEFI reports received in relation to total doses administered, December 16, 2020 to October 31, 2021

	Pfizer	Moderna	COVISHIELD/ AZ	Unknown/ Other	Total
Total Number of AEFIs Reported	349	185	60	2	596
Number of non-serious AEFIs	298	140	54	1	493
Number of Serious AEFIs	51	45	6	1	103
Total Number of Doses Administered	1069288	447034	59897	494	1576713
Total AEFI reporting rate per 100,000 doses	32.6	41.4	100.2	NA	37.8
Serious AEFI reporting rate per 100,000 doses	4.8	10.1	10.0	NA	6.5

Number of cases and rate of COVID-19 AEFI reports by age group and gender between December 16, 2020 to October 31, 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	64	37.6	38	22.7	102	30.2
30-49	157	71.3	36	18.3	193	46.3
50-64	129	61.4	39	20.3	168	41.8
65-79	62	36.7	41	26.6	103	31.9
80+	23	39.8	7	17.8	30	30.9
Total	435	52.6	161	21.5	596	37.8

Number of the most frequently reported adverse events related to COVID-19 vaccines between December 16, 2020 to October 31, 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 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 October 31 2021, there have been a total 103 serious Adverse Events Following Immunization reported in Nova Scotia.

92 of these adverse events reports required hospitalization

1 of these adverse events 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 vaccine safety signals. Nova Scotia has reported 51 cases of adverse events of interest.

Pericarditis/Myocarditis

- 46 cases in adolescent/adults (age range 19 to 71 years)
- 33 (72%) cases among adolescents/young adults under 30 years
- 91% (n=42) occurred after Dose 2
- 78% (n=36) required hospitalization
- 93% (n=43) occurred within 7 days of vaccination
- 76% (n=35) occurred after vaccination with Moderna; 24% (n=11) 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): An unwanted or unexpected health effect that happens after someone receives a vaccine, which may or may not be caused by the vaccine.

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 Adverse Event Following Immunization occurs at greater than expected frequency for a specific vaccine type or within a specific population group.