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

December 16, 2020 to December 31, 2021

Summary of Adverse Events Following Immunization

- Since December 16, 2020, the province has administered 1,667,524 doses of COVID-19 vaccine.
- There have been 662 Adverse Events Following Immunization.
  - 550 (83.1%) were non-serious
  - 112 (16.9%) were serious.
- The rate of adverse event reports was highest among 30-49 year olds and lowest among 5-17 year olds, and higher among females than males
- 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 December 31, 2021 Nova Scotia has administered 1,667,524 doses of COVID 19 vaccine and has received a total 662 reports of adverse events following immunization.

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

	Number	Percentage of Total Doses Administered
Total AEFIs	662	0.040%
Non-serious AEFIs	550	0.033%
Serious AEFIs	112	0.007%

All COVID-19 AEFI reports received by COVID-19 vaccine product between December 16, 2020 to December 31, 2021

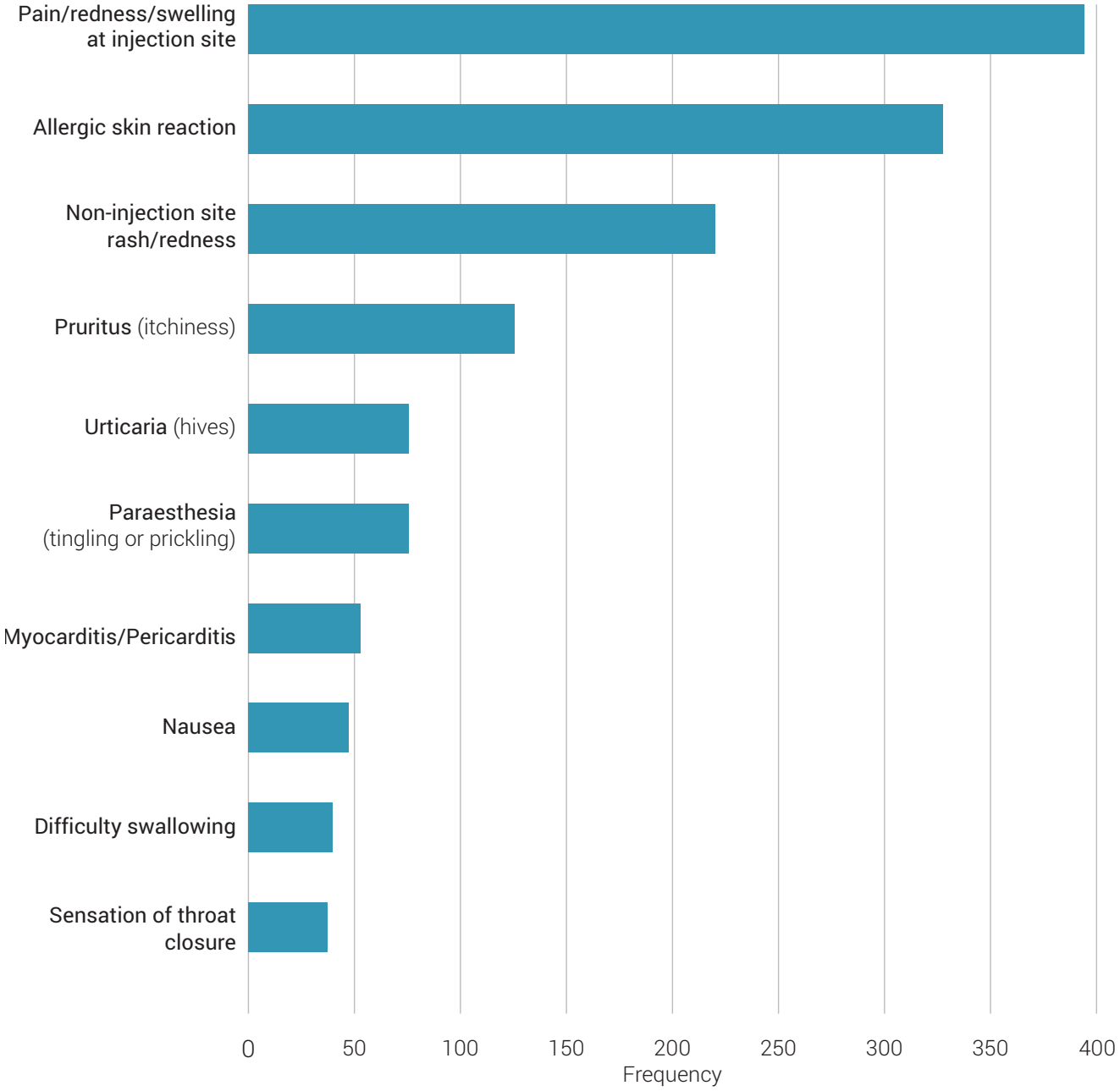
	Pfizer	Moderna	COVISHIELD/ AZ	Unknown/ Other	Total
Total Number of AEFIs Reported	398	203	60	1	662
Number of non-serious AEFIs	342	153	54	1	550
Number of Serious AEFIs	56	50	6	0	112
Total Number of Doses Administered	1136301	465897	59971	5355	1667524
Total AEFI reporting rate per 100,000 doses	35.0	43.6	100.0	NA	39.7
Serious AEFI reporting rate per 100,000 doses	4.9	10.7	10.0	NA	6.7

Number of cases and rate of COVID-19 AEFI reports by age group and gender between December 16, 2020 to December 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
5-17*	13	23.3	10	17.4	23	20.3
18-29	55	42.7	35	27.8	90	35.3
30-49	172	74.2	43	20.5	215	48.7
50-64	144	66.2	44	22.2	188	45.2
65-79	71	40.5	42	26.3	113	33.7
80+	23	36.0	10	23.3	33	30.9
Total	478	54.7	184	23.2	662	39.7

*1 AEFI report in children 5-11 years of age

Number of the most frequently reported adverse events related to COVID-19 vaccines between December 16, 2020 to December 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 December 31, 2021, there have been a total 112 serious Adverse Events Following Immunization 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.

Myocarditis/Pericarditis

- 52 cases in people 18 to 71 years of age
- 69% (n=36) cases among adolescents/young adults under 30 years of age
- 90% (n=47) occurred after Dose 2; no cases reported 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.