Post Vaccine Symptom Check report: 2021-2022 COVID-19 adult vaccine survey

Health New Zealand | Te Whatu Ora and Medsafe advises people NOT to make any decisions about vaccination based only on the information contained in this report. If you have questions or concerns about receiving a vaccine, please speak to a health care professional.

Introduction

The information from the Post Vaccine Symptom Check (PVSC) survey supports ongoing safety monitoring of the Comirnaty COVID-19 vaccine used in Aotearoa New Zealand.

The 2021-2022 Comirnaty COVID-19 adult vaccine PVSC campaign was conducted from 27 August 2021 through 5 October 2021. On 29 November 2021, a booster dose of the Comirnaty COVID-19 vaccine became available to those aged 18 years and over. On 2 July 2022, a second booster became available for eligible individuals. From 14 December 2021 through 31 October 2022, Health New Zealand | Te Whatu Ora sent text messages to a random sample of consumers who had received the Comirnaty COVID-19 adult vaccine. The text messages asked consumers if they had experienced an adverse reaction after their vaccination, and if they would like to participate in the survey. Consumers could reply STOP to this text message if they wished to opt out of the survey. Consumers who chose to participate completed a day 7 survey to provide more information about their vaccination experience or adverse reactions.

The information presented below is limited to those aged 18 years and older that were vaccinated with the Comirnaty COVID-19 adult vaccine and participated in the 2021-2022 Comirnaty COVID-19 adult PVSC survey. It does not represent the total number of people who were vaccinated nor the total number of people who experienced an adverse reaction after their vaccination. Not everyone will report an adverse reaction to the vaccine through the PVSC survey, some might submit a report to the Centre for Adverse Reactions Monitoring (CARM).

The number of vaccine adverse reaction reports in a PVSC campaign can be influenced by; the number of participants, the nature of the symptoms (e.g., how painful the vaccination was), and other factors (e.g., concurrent viral infection or other medicines taken), which vary over time.

PVSC survey answers may come from one person, but that person may report more than one adverse reaction. As with any adverse reaction, some may be associated with the vaccine or may be coincidental and due to other reasons.

PVSC surveys do not specifically ask for the reason why a person sought medical care in the days following vaccination. Therefore, medical attendance reported may or may not be related to any reported adverse reactions.

Based on data collected from the 2021-2022 Comirnaty COVID-19 adult PVSC campaign, we have not identified any new safety concerns for the Comirnaty COVID-19 adult vaccine. Collected data is in line with data collected from clinical trials and from other post-marketing surveillance in New Zealand and overseas.

Survey results

From 27 August 2021 through 31 October 2022, text messages were sent to consumers 7 days following their Comirnaty COVID-19 adult vaccination, asking if they had experienced any adverse reactions, to which they could respond 'Yes' if they had or 'No' if they had not. They could reply 'Stop' if they did not wish to participate. The number of 'Yes' and 'No' responses received for the Dose 1 and 2, Booster 1 and Booster 2 PVSC campaigns varied by campaign (Table 1). The number of STOP responses received for the Dose 1 and 2, Booster 1 and Booster 2 PVSC campaigns were 1879, 2762, and 5985 respectively. The response rate varied between 25 - 59%.

The percentage of respondents that experienced at least one adverse reaction was highest in the dose 2 campaign and lowest in the booster 2 campaign (Table 2). Across ethnicity, the percentage of respondents that experienced at least one adverse reaction varied after dose 1 but was similar for the other campaigns (Table 3).

The five most frequently reported adverse reactions were injection site reaction, headache and muscle/body aches, fatigue or tiredness, fever/high temperature, and stomach symptoms (Table 4). These are common adverse reactions linked to the immune response following immunisation with many vaccines.

Of the 98,698 people who participated in the booster 1 campaign, 10% of people reported missing work and other daily activities. Of the 170,180 people who participated in the booster 2 campaign, 4% of people reported missing work or other daily activities. Of these, the majority were reported to have missed one day or less. Less than 1% of people visited a doctor after any dose (Figure 1).

Table 1: Summary of text message responses, 27 August 2021 through 31 October 2022

Campaign	Text messages sent	Responses received	Percentage of responses received
Dose 1 and 2	94,417	50,258	53%
Booster 1	391,665	98,698	25%
Booster 2	289,575	170,180	59%

Table 2: Responses by vaccine dose and adverse reaction, 27 August 2021 through 31 October 2022

Dose	Did not report an adverse reaction		Reported at least one adverse reaction	
	Number	%	Number	%
Dose 1 (n = 22,713)	15,029	66%	7,684	34%
Dose 2 (n = 27,545)	16,021	58%	11,524	42%
Booster 1 (n = 98,698)	58,740	60%	39,958	40%
Booster 2 (n = 170,180	128,350	75%	41,830	25%
Total (n =319,136)	218,140	68%	100,996	32%

Table 3: Number and percentage of participants that reported an adverse reaction, within ethnicity, by dose, 27 August 2021 through 31 October 2022

Ethnicity	Dose 1		Dose 2		Booster 1		Booster 2	
	Reported reaction/ Responded	%	Reported reaction/ Responded	%	Reported reaction/ Responded	%	Reported reaction/ Responded	%
Māori	768/ 2,139	36%	850/ 2,095	41%	8,707/ 21,914	40%	4,475/ 17,918	25%
Pacific Peoples	309/ 1,022	30%	405/ 1,037	39%	4,105/ 10,657	39%	1,738/ 7,123	24%
Asian	942/ 3,572	26%	1,687/ 4,189	40%	6,035/ 13,823	44%	4,486/ 16,300	28%
European or other	5,665/ 15,980	35%	8,582/ 20,224	42%	21,111/ 52,304	40%	31,131/ 128,839	24%

Table 4: Most frequently reported adverse reactions, number and percentage by dose, 27 August 2021 through 31 October 2022

Adverse reaction	Dose 1 (n=22,713)		Dose 2 (n=27,545)		Booster 1 (n=98,698)		Booster 2 (n=170,180)	
	Number	%	Number	%	Number	%	Number	%
Injection site reaction (pain, redness, swelling, itching at or near the injection site)	3,310	15%	5,057	18%	15,364	16%	16,913	10%
Headache, muscle/body aches, joint aches/pain, or chills (shivering and feeling cold)	2,626	12%	5,271	19%	15,636	16%	14,015	8%
Fatigue or tiredness	2,567	11%	4,946	18%	15,388	16%	13,559	8%
Fever/high temperature	377	2%	1,202	4%	4,811	5%	2569	2%
Stomach symptoms (nausea, vomiting, diarrhoea, stomach pain)	496	2%	872	3%	2,601	3%	2105	1%
Rash (not at injection site)	88	<1%	107	<1%	381	<1%	266	<1%

Figure 1: People that visited a doctor after vaccination, 27 August 2021 through 31 October 2022

Dose 1	**Dose 2**	**Booster Dose 1**	**Booster Dose 2**
Less than 1 in 100 people (0.4%) reported visiting a doctor in the days after the first dose	Less than 1 in 100 people (0.6%) reported visiting a doctor in the days after the second dose	Less than 1 in 100 people (0.7%) reported visiting a doctor in the days after the first booster dose	Less than 1 in 100 people (0.2%) reported visiting a doctor in the days after the second booster dose