

Anaphylaxis and COVID-19 vaccination

Vaccination with Pfizer/BioNTech mRNA-CV (Comirnaty) is contraindicated in individuals who have a history of [anaphylaxis](#) to a previous dose of the mRNA-CV vaccine or to any component of the vaccine that can cause allergy, including polyethylene glycol (PEG).

Comirnaty vaccine excipients that can cause allergy

- Polyethylene glycol (PEG)
- ((4-hydroxybutyl)azanediyl)bis(hexane-6,1-diyl)bis(2-hexyldecanoate) (ALC-0315)
- 2-[(polyethylene glycol)-2000]-N,N-ditetradecylacetamide (ALC-0159)
- Distearoylphosphatidylcholine (DSPC)

[Comirnaty](#) does not contain eggs, preservatives, or latex.

Polyethylene glycol (PEG)

- Also known as macrogol.
- Can be found in tablets, laxatives, hand sanitiser gels, injectable corticosteroids, medicines, cosmetics, bathroom products, and colonoscopy preparation products.
- May cause dermatitis in some people.
- Rarely, can trigger anaphylaxis to multiple classes of drugs.
- There may be cross-sensitivity between PEG and polysorbates.

Risk of anaphylaxis to mRNA-CV vaccine is rare (5 cases per 1 million doses) and slightly increases with a history of anaphylaxis to other products, most commonly a medication.

Advise patients with a previous history of anaphylaxis to another medication or other products that they can be vaccinated in a standard vaccination clinic. Increase observation time to at least 30 mins and do a verbal handover to observation staff. The patient should be given clear advice on leaving the clinic.

Do not give a second dose of Comirnaty vaccine to a patient that experienced confirmed anaphylaxis with their first doses of mRNA-CV vaccine, before receiving specialist immunology advice.

Advise patients who experience anaphylaxis at a vaccination site, not to have a second dose of the same vaccine without clinical advice. The vaccination site lead should email canvax@cdhb.health.nz to have their future booking removed from the system. The patient will be referred to the Immunology for guidance regarding further vaccination.

Referral

Patients with a history of anaphylaxis to **two or more** medications or patients who experienced an anaphylactic reaction to their first dose of the Pfizer vaccine can be referred to Immunology to be considered for the hospital based COVID-19 vaccination clinic. This clinic will be held at Christchurch hospital with increased supervision and prolonged observation. This clinic will be strictly limited to those meeting these criteria for referral. Please refer to ERMS: Immunology > CDHB > include "COVID-19 vaccination" in reason for referral and include clinical details.

Referrals will be considered by the Immunology team and the outcomes will be

- 1) Patient should not have another dose of the Pfizer vaccine and should wait until another vaccine is available
- 2) Patient will be contacted and invited to the Immunology Clinic at Christchurch hospital, and will have an extended specialist observation period
- 3) Patient is safe to be vaccinated in a regular clinic.