

This document accompanies the “Algorithm for Review of Children & Young People with History of Allergy or Anaphylaxis”

BACKGROUND

A number of vaccines against Covid19 have been approved for use in the UK. All vaccines carry a small risk of an allergic reaction. Shortly after the introduction of the first available Covid19 vaccine from Pfizer/BioNTech, there were reports of a small number of patients with a prior history of anaphylaxis who developed a serious allergic reaction following administration of the Pfizer/BioNTech vaccine. Although further, reassuring, evidence of safe vaccine administration has emerged, guidance has been issued on administering Covid19 vaccines to patients with a history of allergic reactions.

On current data, the risk of a serious allergic reaction/anaphylaxis to the currently available vaccines is estimated at between 1 to 2 episodes per 100,000 vaccinations. This is similar to rates for other vaccines programmes administered in the UK, such as the influenza vaccine. The risk of a serious reaction is therefore low, and should be balanced with the risk of Covid19 infection in vulnerable groups that include patients with a history of allergy.

The Pfizer/BioNTech vaccine, which has been licensed for children from 12 years onwards, contains polyethylene glycol (PEG). This is a known allergen, and can be responsible for allergic reactions to other medicines such as biologic monoclonal antibodies. Although PEG has not been established as the cause of the serious reactions to the Pfizer/BioNTech vaccine, the accompanying algorithm recognises the potential for PEG to cause allergy in patients with history of unexplained anaphylaxis, or anaphylaxis to multiple drugs. PEG containing drug/compounds can include oral drug solutions, methylprednisolone; contraceptive injections; laxatives; biologics; cosmetics.

KEY PRINCIPLES

- The majority of patients with previous allergy **can be safely vaccinated in a routine vaccination setting**
- Patients with a history of anaphylaxis to food, an identified drug, or an insect sting **can be safely vaccinated in a routine setting**
- Patients with history of fainting/panic attacks or localised reactions with previous vaccines **can be safely vaccinated in in a routine setting**
- For other patients with a history of allergic reactions, please follow the algorithm

REFERRAL CRITERIA

For 1st dose: Unexplained anaphylaxis or anaphylaxis to multiple drug classes
Systemic reaction/anaphylaxis to vaccine excipients

For 2nd dose: Immediate (within 2 hours) Systemic allergic reaction/anaphylaxis to 1st dose
Immediate (within 2 hours) Localised urticarial reaction to 1st dose
Persistent, delayed reaction requiring medical attention

Please do not refer patients with mild or non-specific symptoms such as tingling, headache, fatigue; or localised symptoms such as arm pain. Concerns regarding non-allergic symptoms, including blood clots should not be directed to the allergy service.

REFERRAL PROCESS

For patients who meet the criteria please send an urgent SCI Gateway Referral (**Advice Only**) to the Paediatric Respiratory Department, **marked for the attention of Dr Helen Rhodes**. Please provide as much information as possible, ideally to include timing of reaction and previous vaccine history.

OUTCOME

Some patients may require a telephone consultation. After review of the referral, possible outcomes are:

1. Vaccinate in hospital environment under the paediatric allergy service. Paediatric allergy will refer directly to RHCYP.
2. Vaccinate in a routine setting. Paediatric allergy will refer to Enquiries at NHS Lothian online form (located [here](#)) to book an appointment.
3. No vaccination. Paediatric Allergy will write to GP.

The Paediatric Allergy service is unable to deal with queries from patients

ADDITIONAL INFORMATION

Anaphylaxis Campaign FAQs: <https://www.anaphylaxis.org.uk/covid-19-advice/pfizer-covid-19-vaccine-and-allergies/>

Urticaria: <https://apps.nhslothian.scot/refhelp/Dermatology/Urticaria>

Green Book Chapter 14a:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/955548/Greenbook_chapter_14a_v6.pdf