

COVID-19 Vaccinations and Allergies FAQ

Do you have questions about the COVID-19 vaccines, including boosters, and your allergy? We have compiled a list of the most frequently asked questions with answers compiled with the assistance of our clinical panel and members of the British Society for Allergy and Clinical Immunology.

There are six vaccines currently authorised for supply in the UK, The **Pfizer/BioNTech vaccine (Comirnaty)**, **AstraZeneca vaccine (Covishield)**, **Moderna vaccine (Spikevax)**, **Janssen Vaccine, Novovax (Nuvaxovid)**, and **Valneva Vaccine**.

You can access the **Pfizer/BioNTech COVID-19** vaccination Patient Information Leaflet [here](#)
The Information for Healthcare Professionals is available [here](#)

You can access the **Vaccine AstraZeneca** Patient Information Leaflet [here](#)
The Information for Healthcare Professionals is available [here](#)

You can access the **Moderna** Patient Information Leaflet [here](#)
The Information for Healthcare Professionals is available [here](#)

You can access the **Janssen** Patient Information Leaflet [here](#)
The Information for Healthcare Professionals is available [here](#)

You can access the **Novovax** Patient Information Leaflet [here](#)
The information for Healthcare Professionals is available [here](#)

You can access the **Valneva** Patient Information Leaflet [here](#)
The Information for Healthcare Professionals is available [here](#)

The **Green Book** has the latest information on vaccines and vaccination procedures, for vaccine preventable infectious diseases in the UK. The latest update on COVID-19 vaccinations was released on 28th February 2022 and can be found [here](#).

FREQUENTLY ASKED QUESTIONS

- 1) I was advised I couldn't have the Pfizer or Moderna vaccine because of my allergies but now am being offered the Pfizer/Moderna vaccine as a booster. Is it safe for me to have?**

The guidance relating to allergies has been updated since the initial covid-19 vaccination roll out. The latest guidance in the Green Book says you can have any vaccine, including Pfizer or Moderna, if you have a history of previous allergic reaction (including anaphylaxis) to:

- food
- insect sting
- most medicines (where trigger has been identified)
- family history of allergies
- previous non-systemic reaction to a vaccine

- hypersensitivity to non-steroidal anti-inflammatory drugs e.g. aspirin, ibuprofen
- mastocytosis

If you have a history of immediate onset anaphylaxis to *multiple classes of drugs or unexplained anaphylaxis* – please also refer to the additional information at the end of these FAQs.

2) I am allergic to penicillin. Can I have a COVID-19 vaccination?

Yes, you can. Allergy to penicillins is not a contraindication to any of the currently available COVID-19 vaccines.

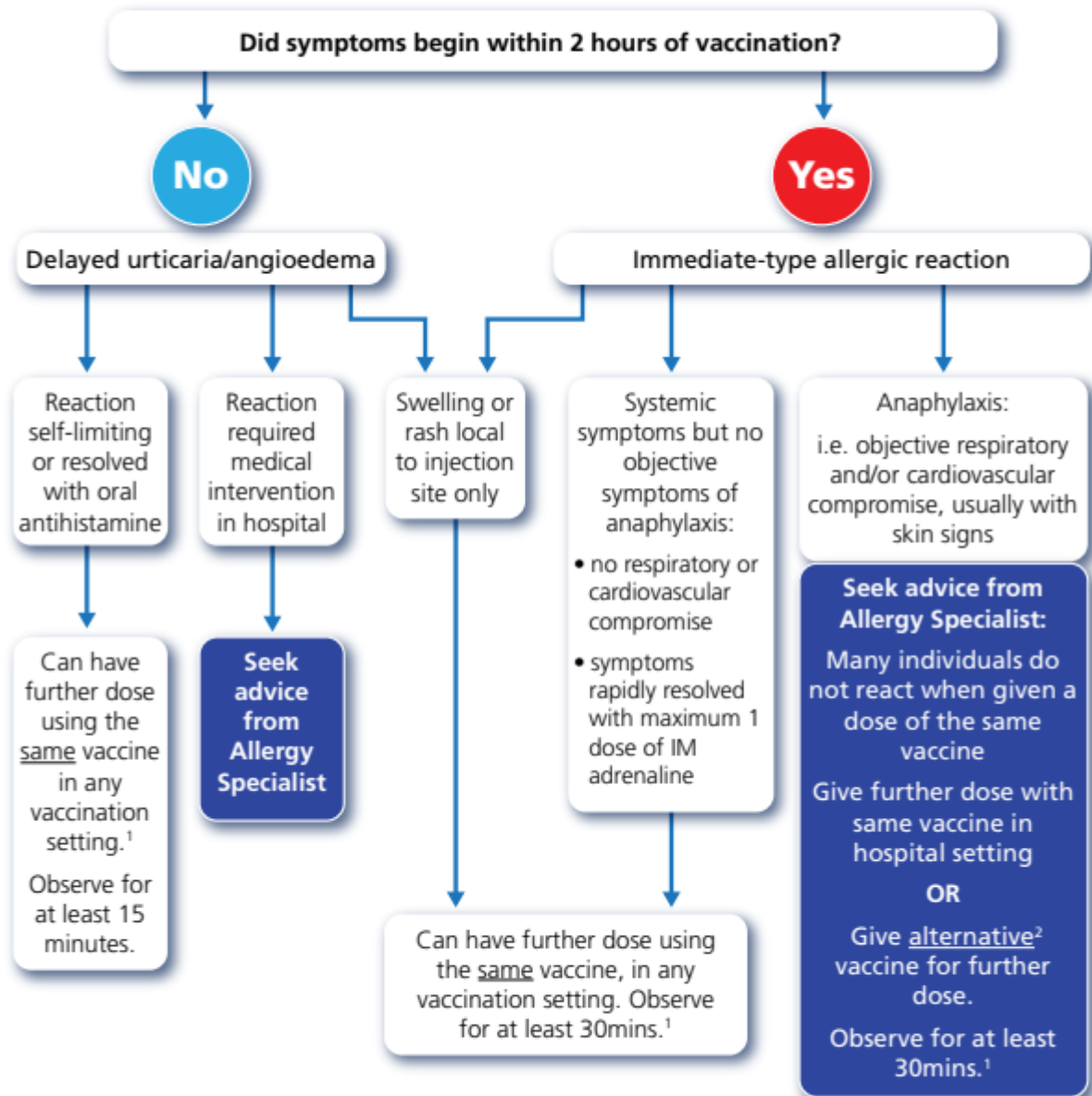
If you have a history of immediate onset anaphylaxis to *multiple classes of drugs or unexplained anaphylaxis* – please also refer to the additional information at the end of these FAQs.

3) I had an allergic reaction to my first dose of COVID-19 vaccination. Should I still get my second dose?

The British Society for Allergy and Clinical Immunology (BSACI) has advised that individuals who have a reaction to the first dose of a COVID-19 vaccine may be able to receive a second dose of vaccine, as in the flowchart below. Many individuals have tolerated subsequent doses of the same vaccine, and this is preferred as it avoids an individual being wrongly labelled as allergic for life.

In the [Green Book](#) there is a table (table 5) and flow chart for managing patients who have had an allergic reaction to the first dose of COVID-19 vaccine.

Flowchart for managing patients who have allergic reactions to a previous dose of COVID-19 vaccine



1 Consider pre-treatment with non-sedating antihistamine, at least 30mins prior to vaccination.

2 If reaction was to AstraZeneca vaccination, complete or boost with an mRNA vaccine. If reaction was to an mRNA vaccine, give the same or alternative mRNA vaccine in hospital setting.

4) I have a latex allergy. Will the vaccine syringe contain latex?

No, according to the manufacturers, none of the currently available COVID-19 vaccines are supplied in vials that have stoppers containing latex.

The Pfizer/BioNtech vaccination is supplied in vials that have a stopper made from bromobutyl. This is a synthetic form of rubber which does not contain any dry natural rubber (latex). Pfizer have confirmed that latex is not used at all in the raw materials used to produce the vaccine.

The AstraZeneca vaccination is supplied in vials that have a stopper made from halobutyl, which is also a synthetic form of rubber which does not contain any dry natural rubber (latex).

The Moderna vaccination is supplied in vials that do not contain any dry natural rubber (latex).

The Janssen vaccine is supplied in vials that have a stopper made from a synthetic form of rubber called chorobutyl with fluoropolymer coated surface, which does not contain dry natural rubber (latex).

The Novovax vaccination is supplied in vials that have a stopper made from bromobutyl. This is a synthetic form of rubber which does not contain any dry natural rubber (latex).

The Valneva vaccination is supplied in vials that have a stopper made from bromobutyl. This is a synthetic form of rubber which does not contain any dry natural rubber (latex).

It is important to let your Healthcare Provider know about your latex allergy so they can ensure they do not use any latex containing products whilst treating you.

5) I have a severe food allergy. Does this mean I am unable to have a COVID-19 vaccine?

The latest information in the [Green Book](#) states:-

A very small number of individuals have experienced anaphylaxis when receiving a COVID-19 vaccine. Anyone with a history of allergic reaction to an excipient in the COVID-19 vaccine should not receive that vaccine (except with expert advice), **but those with any other allergies (such as a food allergy) – including those with prior anaphylaxis** – can have the vaccine.

If you have a history of immediate onset anaphylaxis to *multiple classes of drugs or unexplained anaphylaxis* – please also refer to the additional information at the end of these FAQs.

6) I have an egg allergy. Do the COVID-19 vaccines contain egg and are they safe to have?

None of the currently available COVID-19 vaccines contain any egg proteins and none of the vaccines are contraindicated in egg allergy.

7) I have previously experienced immediate onset anaphylaxis to a food/identified medicine. Can I have a COVID-19 vaccination?

The latest information in the [Green Book](#) states vaccination can proceed as normal in individuals who have had:-

- previous allergic reaction (including anaphylaxis) to a food, insect sting and most medicines (where the trigger has been identified)
- family history of allergies
- previous non-systemic reaction to a vaccine
- hypersensitivity to nonsteroidal anti-inflammatory drugs e.g. aspirin, ibuprofen
- mastocytosis

If you have a history of immediate-onset anaphylaxis to *multiple classes of drugs* or *unexplained anaphylaxis* – please also refer to the additional information at the end of these FAQs.

8) I have Alpha-gal allergy and react to medicines containing gelatine. Is there any gelatine in the COVID-19 Vaccinations?

No. The ingredients for each vaccine are listed in the patient information sheet which you should be given to read prior to having your vaccination. There is no gelatine in any of the currently available COVID-19 vaccines.

9) I am allergic to all fish and have read that squalene, which comes from shark liver oil is used in some vaccines. Do the COVID-19 vaccines contain squalene and does it pose a risk to me?

You are correct that squalene is used in some vaccines. It is highly purified fat that does not contain the proteins which cause the allergic reaction. It is not considered to pose any risk for patients with fish allergy.

None of the currently available COVID-19 vaccines contain any squalene and there is no reason to suspect that they would cause any problems for someone allergic to fish.

10) I am allergic to house dust mites. Can I have a COVID-19 vaccine?

Yes, you can. Allergy to aeroallergens such as house dust mites, pollen or animal allergens is not a contraindication to any of the currently available COVID-19 vaccines.

11) What percentage of the population usually have a severe allergic reaction to a vaccine?

Many common side effects of vaccination such as localised pain and swelling at the site of injection or flu-like symptoms can be mistaken for allergy. They are not a reason to avoid any of the currently available COVID-19 vaccines.

Severe allergic reactions to COVID-19 vaccines are very rare. The MHRA constantly monitors reports of adverse reactions to vaccines through the [yellow card scheme](#) and publishes a regularly updated report on COVID-19 vaccine reactions which you can find [here](#)

12) I've read that the ingredients polyethylene glycol (PEG) and Polysorbate 80 are in some vaccines. How rare is it to have an allergy to them and are they contained in all COVID-19 vaccines?

The [Green Book](#) states:-

‘The Pfizer BioNTech and Moderna mRNA vaccines contain polyethylene glycol (PEG). PEGs (also known as macrogols) are a group of known allergens commonly found in medicines, many household products and cosmetics. Medicines containing PEG include some tablets, laxatives, depot steroid injections, and some bowel preparations used before colonoscopy. Known allergy

to PEG is rare but has been implicated in only a small minority of allergic reactions **reported after COVID-19 vaccines.**

The AstraZeneca, Janssen, Novovax and Valneva vaccines do not contain PEG but do contain a related compound called polysorbate 80. Rarely, people with PEG allergy may also be allergic to polysorbate 80. However, polysorbate 80 is widely used in medicines and foods, and is present in many medicines including monoclonal antibody preparations. Recent research shows that even individuals with severe allergy to PEG tolerate the polysorbate 80-containing vaccines such as the AstraZeneca, Janssen, Novovax or Valneva vaccine

13) Can patients who do not carry adrenaline and have had previous mild to moderate reactions to foods or drugs still have a COVID-19 vaccine?

Yes, there is no need to avoid any of the currently available COVID-19 vaccines if you have had a mild to moderate reaction to a food or an identified drug.

If you have a history of immediate-onset anaphylaxis to *multiple classes of drugs* or *unexplained anaphylaxis* – please also refer to the additional information at the end of these FAQs.

14) Is there an increased risk for patients with asthma in having a COVID-19 vaccine?

No, there is not. However good asthma control in the weeks before vaccination is important (just like with all other vaccines).

15) Can individuals with a history of venom anaphylaxis have a COVID 19 vaccine?

Yes, they can. Allergy to venom is not a contraindication to any of the currently available COVID-19 vaccines.

16) I have previously experienced anaphylaxis to a vaccine. Can I have a COVID-19 vaccination?

The latest information in the Green Book recommends special precautions be taken in individuals who have a history of anaphylaxis to a vaccine, injected antibody preparation or a medicine likely to contain PEG (e.g., depot steroid injection, laxative). However, before the Covid vaccines, there were none that contained PEG.

Patients with undiagnosed PEG allergy often have a history of immediate onset-unexplained anaphylaxis or anaphylaxis to multiple classes of drugs. Such individuals should not be vaccinated with the Pfizer BioNTech or Moderna vaccine, except on the expert advice of an allergy specialist. The AstraZeneca, Janssen, Novovax or Valneva vaccine can be used as an alternative (unless otherwise contraindicated). The vaccine should be administered in a setting with full resuscitation facilities (e.g. a hospital), and a 30- minute observation period is recommended.

17) I have a food allergy and carry adrenaline auto injectors. Should I bring them to my immunisation appointment just in case?

All people who carry adrenaline should take their two auto injectors with them everywhere they go. Anaphylaxis to a vaccine is extremely rare. Public Health guidelines require anyone responsible for giving a vaccine to receive training on the management of anaphylaxis.

A protocol for the management of anaphylaxis and an anaphylaxis pack which includes adrenaline must always be available whenever vaccines are given.

18) With other new COVID-19 vaccines in development, is there any reason to wait for a different vaccine? Will the other vaccines be suitable for people with allergies?

There are many COVID-19 vaccines in development with several in the final stages of trials and likely to become available over the coming months. Each vaccine is different, and they use a variety of different technologies. Until a vaccine is approved, we will not know exactly what the ingredients are, so it is impossible to comment on their safety or otherwise for people with particular allergies.

Before having any vaccination, it is important that you are given the patient information leaflet to read. This contains vital information about who should receive the vaccine along with a complete list of ingredients.

19) The local vaccine centre refused to vaccinate me as I told them I have previously experienced anaphylaxis to my flu vaccine. How do I access further advice?

The Green Book states that if you have: -

- prior non-anaphylaxis allergic reaction to COVID-19 vaccine
- history of immediate anaphylaxis to multiple, different drug classes, with the trigger unidentified (this may indicate PEG allergy)
- history of anaphylaxis to a vaccine, injected antibody preparation or a medicine likely to contain PEG (e.g., depot steroid injection, laxative)
- history of idiopathic anaphylaxis

You may need special precautions for your vaccination which should be discussed with an allergy specialist.

The local pathway to access advice from an allergy specialist can vary depending on your area of the country, but in most areas your GP can put in what is known as an 'advice and guidance' request via their online e-referral system to receive specialist advice for you. Your GP will need to provide full details of which flu vaccine you received and your allergy history, and in some areas, this must be submitted on a dedicated form for COVID-19 vaccine and allergy requests.

20) I have a diagnosed allergy to one of the COVID-19 vaccine ingredients and have been advised against vaccination by my allergy specialist. I'm worried about plans to make vaccination compulsory as I am a care worker. Will I be able to get an exemption?

The Department of Health and Social care have announced that the process for applying for official proof that you're unable to be vaccinated is now live.

One of the possible reasons for medical exemption listed is if you are '***a person with severe allergies to all currently available vaccines***'

There are very few people who cannot be vaccinated against COVID-19 due to a previous allergic reaction. In the vast majority of cases, people with a history of severe allergies can safely receive a COVID-19 vaccination.

Applications can only be made by requesting an **NHS COVID Pass medical exemptions application form** by phoning 119. If you are eligible, the form will be sent in the post and must then be given to your GP or specialist clinician to complete.

For full details on the new process click [HERE](#)

Additional Information

In the [Green Book](#) the British Society for Allergy and Clinical Immunology (BSACI) has advised special precautions for individuals who have a:

- prior non-anaphylaxis allergic reaction to COVID-19 vaccine
- history of immediate anaphylaxis to multiple, different drug classes, with the trigger unidentified (this may indicate PEG allergy)
- history of anaphylaxis to a vaccine, injected antibody preparation or a medicine likely to contain PEG (e.g., depot steroid injection, laxative)
- history of idiopathic anaphylaxis - because this may indicate PEG allergy

Patients with undiagnosed PEG allergy often have a history of immediate-onset unexplained anaphylaxis or anaphylaxis to multiple classes of drugs. Such individuals should not be vaccinated with the Pfizer BioNTech or Moderna vaccine, except on the expert advice of an allergy specialist. The AstraZeneca, Janssen, Novovax or Valneva vaccine can be used as an alternative (unless otherwise contraindicated), particularly if they previously tolerated the adjuvanted influenza vaccine. The vaccine should be administered in a setting with full resuscitation facilities (e.g., a hospital), and a 30-minute observation period is recommended.

References

Green Book Chapter 14a. 2021. [online] Available at: <
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1057798/Greenbook-chapter-14a-28Feb22.pdf>