

Pfizer/BioNtech COVID-19 (BNT162b2) Vaccination and Allergies FAQ

Do you have questions about the Pfizer/BioNTech COVID-19 vaccine 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.

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

Disclaimer

The UK Medicines and Healthcare Regulatory Agency (MHRA) recommends that anyone with a history of anaphylaxis to a food/vaccine/medicine should not be given the Pfizer/BioNTech vaccine. This is a precautionary measure whilst further investigations take place.

1) I am allergic to penicillin and other medications. Can I have the vaccine?

(SEE DISCLAIMER)

Yes, allergy (except anaphylaxis) to penicillins and other drugs is not a contraindication to the Pfizer/BioNTech COVID-19 vaccine (unless you are allergic to PEG – see question 11)

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

No, according to the manufacturer, the Pfizer/BioNTech COVID-19 vaccine vial does not contain 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.

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. If you have a history of anaphylaxis you are not currently eligible to receive the vaccine.

3) I have a severe food allergy. Does this mean I am unable to have the vaccine?

(SEE DISCLAIMER)

Following three reports of possible allergic reaction (and anaphylaxis) following vaccination at the start of the Pfizer/BioNtech vaccine roll-out, the Medicines and Healthcare Regulatory Agency (MHRA) are recommending anyone with a history of anaphylaxis to a f

food/vaccine/medicine should NOT be given the Pfizer/BioNTech vaccine. This is a precautionary measure whilst further investigations take place.

4) I am allergic to penicillin and other medications. Will the vaccine be suitable?

See question 1 and 8

5) I have an egg allergy does the vaccine contain egg and is it safe to have?

The Pfizer/BioNTech COVID-19 vaccine does not contain any egg proteins and is not contraindicated in egg allergy.

6) I am worried about the fact many travel companies and travel countries are going to ask for a valid certificate for the COVID vaccine. I am allergic to the flu vaccine along with lots of other drug allergies. I don't know if it will be safe to have the COVID vaccine and if not, how can I travel?

(SEE DISCLAIMER)

If you have had anaphylaxis to the flu vaccine and other drugs, then the advice from the MHRA is to avoid Pfizer/BioNTech COVID-19 vaccine. However, if it is a mild reaction then the Pfizer/BioNTech COVID-19 vaccine is **not** contraindicated.

7) I have just seen the news regarding MHRA recommendation for people NOT to have the vaccine if they have food or drug allergy. I am allergic to house dust mites. Can I have the vaccine?

Yes, allergy to aeroallergens such as house dust mites, pollen or animal allergens is not a contraindication to the Pfizer/BioNTech COVID-19 vaccine.

8) I have previously experienced a bad reaction to wasp stings requiring treatment with steroids (but I do not have anaphylaxis). Can I safely have the vaccine?

Yes, venom allergy is not a contraindication to the Pfizer/BioNTech COVID-19 vaccine.

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

The number of true allergic reaction to vaccines is very low. In the United Kingdom, only 1 case of anaphylaxis per million vaccine doses was reported between 1997 and 2003 (with no fatalities).

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 the Pfizer/BioNTech COVID-19 vaccine.

10) Although limited data available, would the number of severe allergic reactions for this vaccine be in keeping with other vaccines?

It is likely to be the case, but we need to wait for more real-life data.

11) The ingredient polyethylene glycol (PEG) has been identified as a possible cause. How rare is it to have an allergy to this and is it contained in all other vaccines?

Polyethylene glycol (PEG) allergy is rare but it can be severe. PEG is present in the Pfizer/BioNTech COVID-19 vaccine and PEG allergic patients should be reviewed by an allergist/immunologist and undergo the relevant tests.

Some PEG allergic patients might still be able to receive the Pfizer/BioNTech COVID-19 vaccine under the supervision of an allergist/immunologist experienced in the management of PEG allergy. However, patients with the most severe form of PEG allergy might need to wait for the new COVID vaccines to become available as they might not contain PEG (this data not yet available).

The Pfizer/BioNTech COVID-19 vaccine is a messenger RNA (mRNA) vaccine. The mRNA vaccines (Pfizer and Moderna) contain PEG (polyethylene glycol). Messenger RNA is a large hydrophilic molecule. It doesn't naturally enter cells by itself, and so these vaccines are wrapped up in PEG nanoparticles that facilitate their delivery inside of cells. PEG (also known as macrogol) is a hydrophilic polymer used widely in medications. PEG allergy can cause severe reactions including anaphylaxis and patients allergic to PEG normally report immediate systemic reactions on exposure to the medication containing PEG. As it is an excipient, patients often report allergy to multiple medications containing PEG.

Polysorbate 80 is found in many vaccines. It is quite similar to PEG and it might 'cross react' with PEG. Polysorbate 80 allergic patients should discuss their allergy with an allergist/immunologist before receiving the Pfizer/BioNTech COVID-19 vaccine.

12) For patients who do not carry adrenaline and have had previous mild to moderate reactions to foods or drugs, would you recommend to still have the vaccine?

Yes, there is no need to avoid the Pfizer/BioNTech COVID-19 vaccine if you have mild to moderate reactions to foods/drugs unless you are known to be allergic to PEG (question 8).

13) Is there an increased risk for patients with asthma in having the vaccine?

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

14) Is there any information about venom allergy anaphylaxis as there was no mention on this in the information the MHRA published or if individuals with a history of venom anaphylaxis are also advised not to have the vaccine?

The MHRA only advised patients with anaphylaxis to drugs, vaccine or food to avoid the Pfizer/BioNTech COVID-19 vaccine. There is no evidence to suggest individuals with venom anaphylaxis are at increased risk of having an allergic reaction to the Pfizer/BioNTech COVID-19 vaccine. Therefore venom anaphylaxis individuals can have the Pfizer/BioNTech COVID-19 vaccine. However if you have a raised baseline tryptase you should discuss the Pfizer/BioNTech COVID-19 vaccine with your allergist/immunologist or haematologist. This is because those with a raised baseline tryptase may have reactions to others allergens such as drugs.

(SEE DISCLAIMER)

15) I have previously experienced immediate onset anaphylaxis to a food/medicine/vaccine. Can I have this vaccine?

Following three reports of possible allergic reaction (and anaphylaxis) following vaccination at the start of the Pfizer/BioNtech vaccine roll-out, the Medicines and Healthcare Regulatory Agency (MHRA) are recommending anyone with a history of anaphylaxis to a food/vaccine/medicine should **NOT** be given the Pfizer/BioNtech vaccine. This is a precautionary measure whilst further investigations take place.

16) I have had a mild reaction to an antibiotic in the past which I now completely avoid. Is the Pfizer/BioNtech vaccine safe for me?

Antibiotics are sometimes used to control bacterial growth when producing the viruses to make vaccinations. Pfizer have told us that the antibiotic Kanamycin is used during the manufacturing process of one of the raw materials used in the production of their COVID-19 vaccine, but that it is not detectable in the final product. Therefore, this should not pose any risk of reaction in individuals allergic to kanamycin or related antibiotics.

No other antibiotics (such as penicillins, sulphonamides and neomycin) are used during the manufacturing process.

17) I have Alpha-gal allergy and react to medicines containing gelatine. Is there any gelatine in the Pfizer/BioNtech Vaccination?

No. The ingredients are listed in the patient information sheet which you should be given to read prior to having your vaccination. There is no gelatine in this vaccine. If you have a history of anaphylaxis you will not currently be able to receive the vaccine.

18) I am allergic to all fish and have read that squalene, which comes from shark liver oil is used in some vaccines. Does the Pfizer/BioNTech 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.

The Pfizer/BioNTech vaccination does not contain any squalene and there is no reason to suspect that it would cause any problems for someone allergic to fish. However, if you have a history of anaphylaxis you are not currently eligible to receive the vaccine.

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

If you have a history of anaphylaxis you are not currently eligible to receive the vaccine (see Q1.) 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.

20) With other new COVID-19 vaccines due to be released soon, is there any reason to wait for a different vaccine? Will the other vaccines be better 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.