

GP Covid-19 Vaccine Q&A Sheet

How long does the vaccine last?

We don't yet know exactly how long protection will last, because the vaccines haven't been around for long enough.

The second dose is more important for longer-lasting protection, so it's really important to go back for your second dose when you are invited for it.

The length of protection may vary between different vaccines. It is likely to be at least several months, but it may be that repeat vaccinations are needed. Researchers are studying this closely.

How quickly does the vaccine work?

Generally the protection from the virus starts after 12-14 days. This is because your immune system needs to generate a response, and people's immune systems can vary.

The Pfizer/BioNTech and Oxford vaccines both need to be given in two doses. The second dose will be given three to 12 weeks after the first (for the Pfizer/BioNTech vaccine) or four to 12 weeks after the first dose (for the Oxford vaccine). You will still have a good level of protection after the first dose, so don't worry if you are not invited for the second dose as quickly as you might have hoped.

Will I be able to pass on the virus to others if I've had the vaccine?

We don't yet know for sure, but it may be possible for you to pass the virus on even if you've been vaccinated. The vaccines work by causing your body to create a rapid immune response to the virus so it doesn't make you ill, but may not stop you from passing the virus on. So even if you've been vaccinated, it's really important to follow guidelines around social distancing, hand washing and other guidance to stop the spread of coronavirus. You'll still need to self-isolate if you have symptoms or have been in contact with someone who has.

Does the vaccine work against the new strains of the virus?

It's likely that the vaccine will still protect you against the new strains.

All the Covid-19 vaccines are based on generating an immune response to the Covid-19 spike protein. Helpfully, the spike protein is quite large (in virus terms), consisting of around 1,270 amino acids. That means the immune system generates many different antibodies to different parts of the spike. So a few changes in the spike protein shouldn't mean that the vaccine won't work. The recent UK Covid-19 variant has nine mutations to the spike gene, but 99 per cent of the spike is still identical to the version the vaccines were designed to target.

Scientists are studying the new strains of the virus, including the Kent strain, the South African strain) understand more about how effective the vaccine is against these strains.

Do I still need to shield if I've had the vaccine?

Yes, if you are classed as clinically extremely vulnerable and shielding guidance is in place where you live. Even if you've been vaccinated, you are recommended to continue to shield until advised that you don't need to. This is because you are one of the people at greatest risk of getting seriously ill from coronavirus. So whilst we continue to learn more about how well the vaccine works in different people and how long its protection lasts for, the safest thing for you is to continue to shield.

I've already had Covid-19, do I still need to get vaccinated?

Yes, it's really important to get the vaccine, even if you've already had Covid-19. You may have some level of immunity if you've had the disease, but this varies and may not last long. The MHRA has considered the issue and decided that getting vaccinated is just as important for those who have already had Covid-19 as it is for those who haven't.

How effective is the Pfizer vaccine?

Trials in 44,000 people found that after two doses the Pfizer/BioNTech vaccine is 95% effective at preventing Covid-19 symptoms and illness in those aged 16 and over. The short-term effectiveness after one dose is estimated at 89%, although this has not been measured long term.

How effective is the Oxford vaccine?

Trials in 11,000 people found that after two doses the Oxford/AstraZeneca vaccine is 70% effective at preventing Covid-19 symptoms. None of those who did develop Covid-19 despite getting the vaccine needed hospital treatment, which suggests that it gives very high protection against severe disease. The short-term effectiveness after one dose is estimated at 73%, although this has not been measured long term.

Can women who are pregnant or breastfeeding have the vaccine?

Although pregnant and breastfeeding women were at first not eligible for the vaccine, the Joint Committee on Vaccination and Immunisation and the UK's Chief Medical Officers have reviewed the evidence and say that the benefits of vaccine outweigh the risks for pregnant women whose the risk of exposure to the virus is high and cannot be avoided, or where the woman has underlying conditions that place her at very high risk of serious complications of Covid-19. For women trying to become pregnant, the vaccine doesn't mean they should delay that, and it's also ok to have the vaccine if you are breastfeeding.

Can I still have the vaccines if I have allergies?

The latest information in the Green Book states:-

'Following close surveillance of the initial roll-out, the MHRA has advised that individuals with a history of anaphylaxis to food, an identified drug or vaccine, or an insect sting CAN receive any COVID-19 vaccine, as long as they are not known to be allergic to any component (excipient) of the vaccine. All recipients of the Pfizer BioNTech COVID-19 vaccine should be kept for observation and monitored for a

minimum of 15 minutes. Facilities for management of anaphylaxis should be available at all vaccination sites.'

'The Pfizer BioNTech COVID-19 mRNA Vaccine BNT162b2 contains polyethylene glycol (PEG), which is from a group of known allergens commonly found in medicines and also in household goods and cosmetics. Known allergy to PEG is extremely rare but would contraindicate receipt of this vaccine. (Sellaturay P et al, 2020). Patients with undiagnosed PEG allergy may have a history of unexplained anaphylaxis or of anaphylaxis to multiple classes of drugs. The AstraZeneca vaccine does not contain PEG and is a suitable alternative.

PEG is also an excipient in the Moderna mRNA COVID-19 vaccine; individuals who have a systemic allergic reaction to the Pfizer-BioNTech vaccine should not be given a dose of the Moderna vaccine, and vice versa.'

The Astra Zeneca COVID-19 vaccine contains Polysorbate 80; this additive is found in many vaccines including the influenza vaccine. Although Polysorbate 80 is quite similar in structure to PEG, there are no reports of PEG allergic patients reacting to it e.g. when receiving other vaccines and therefore the Astra Zeneca vaccine is recommended as a suitable alternative.

Allergy to Polysorbate 80 is extremely rare but would contraindicate receipt of the Astra Zeneca vaccine. Polysorbate 80 allergic patients should discuss their allergy with an allergist/ immunologist before receiving the Pfizer/BioNTech or Moderna COVID-19 vaccine.

Is the vaccine safe for people taking blood thinners like warfarin or other anticoagulants?

In general, yes, but you should let the person giving you the vaccine know that you are taking an anticoagulant. As with any injection, there is some risk of bleeding.

Like most vaccines, the coronavirus vaccine is injected into the muscle of your upper arm. Injections into your muscle may bleed a little more than injections that are given under the skin, but less than those that are given into a vein. If you are taking a blood

thinner such as warfarin, or a new anticoagulant, the bleeding may take a little longer to stop and you may get more bruising on your upper arm.

Public Health England and the Department of Health have said that you can have the vaccine if your anticoagulant treatment is stable. That generally means that you will have been taking the same dose for a while and that if you are on warfarin, that your INR checks are up to date and that your latest INR level was in the right range.

What side effects does the Oxford vaccine have?

Like all medicines, vaccines can cause side effects. Many people don't get any side effects. For the Oxford/AstraZeneca vaccine (like the other vaccines), the vast majority of side effects that do occur are mild and short-term. The most common are discomfort at the injection site, or feeling generally unwell, tired, or feverish, or a headache, feeling sick or having joint or muscle pain. You can take paracetamol to treat any of these side effects.

Often side effects are a sign that the vaccine is doing its job: it can happen with many vaccines that some people might feel slightly unwell because their immune system is responding to the protein, but this is not a Covid-19 illness and the vaccine can't give you coronavirus.

What side effects does the Pfizer vaccine have?

Like all medicines, vaccines can cause side effects, although many people don't get any side effects at all. For the Pfizer vaccine (like the other vaccines), the vast majority of side effects are mild and short-term. The most common are pain at the injection site, tiredness, headache, muscle pain or chills. Don't worry if your arm starts to hurt the next day, this isn't a cause for concern and is usually gone within a day or two. You can take paracetamol to treat any of these side effects.

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What's in the vaccine?

The Pfizer vaccine contains highly purified single-stranded, 5'-capped messenger RNA (mRNA) as its active ingredient.

The inactive ingredients are chemicals to make up the vaccine solution. They are: ALC-0315 = (4-hydroxybutyl) azanediyl)bis (hexane-6,1-diyl)bis(2-hexyldecanoate); ALC-0159 = 2-[(polyethylene glycol)-2000]-N,N-ditetradecylacetamide; 1,2-Distearoyl-sn-glycero-3-phosphocholine; cholesterol; potassium chloride; potassium dihydrogen phosphate; sodium chloride; disodium hydrogen phosphate dihydrate; sucrose; and water. It contains polyethylene glycol/macrogol (PEG) as part of ALC-0159.

The Oxford vaccine contains a modified harmless form of a different virus as its active ingredient. It contains genetically modified cells.

The inactive ingredients are chemicals to make up the vaccine solution. They are: L-Histidine; L-Histidine hydrochloride monohydrate; magnesium chloride hexahydrate; polysorbate 80; ethanol; sucrose; sodium chloride; disodium edetate dihydrate; and water.

Does the vaccine contain animal products?

None of the approved vaccines contain any ingredients derived from pigs, cows or other animals.

The Oxford/AstraZeneca uses harmless, weakened form of an adenovirus (a different virus that also has the 'spike' protein on its surface). The virus was grown in human embryonic stem cells. These stem cells weren't taken directly from a human embryo – they are copies of stem cells which originally date from the 1970s. The vaccine itself does not contain any embryonic cells.

Is the vaccine compatible with my religion?

The British Islamic Medical Association has considered all varieties of the vaccine and recommends that Muslims have the vaccine. The Muslim Council of Britain is also recommending the vaccine, and Imams across the UK have confirmed that all the varieties of the vaccine are halal.

The British Sikh community has also supported the vaccine, as have Hindu leaders.

The Church of England says that all clinically recommended vaccinations can be used with a clear conscience.

The Catholic church has said that the vaccine, including the Oxford/AstraZeneca vaccine, is acceptable and can be morally justified.

More than 80 Jewish doctors in the UK have signed a letter to confirm that the Pfizer vaccine does not contain any ingredients that are not kosher. The Pfizer, Oxford and Moderna vaccines have all been purchased by the Israeli government. Orthodox Jewish groups including the Orthodox Union and the Rabbinical Council of America have also encouraged their community members to get vaccinated.

If I've had Covid-19 can I have the vaccine?

If you've had a confirmed case of COVID-19 you should wait until at least 4 weeks after you had symptoms, or 4 weeks since your positive test if you didn't have any symptoms, and until you have recovered from your COVID-19 infection, before having the vaccine.

If you have symptoms that could be coronavirus you should get a test and not get your vaccine until your period of self-isolation has ended.

I'm a carer under the age of 65 – when will I be offered the vaccine?

Unpaid carers who get [Carer's Allowance](#) or who are the main carer of an elderly or disabled person (adult or child) will be in priority group 6. This is to help prevent the person's care being interrupted, should the carer become ill.

If you fall into this category, it's important your GP practice knows you are a carer so they can invite you for your vaccine along with priority group 6.

If you are a carer over the age of 65, you should be offered the vaccine earlier in the initial priority groups.

Can I get the coronavirus vaccine at the same time as the flu vaccine?

It's recommended you leave at least 7 days between getting your flu (or any other) vaccine and your COVID-19 vaccine. It's very important that you get your flu vaccine, especially if you're in the clinically extremely vulnerable group, as catching coronavirus and flu this winter could be very dangerous.

Works Cited

<https://www.bhf.org.uk/information-support/heart-matters-magazine/news/coronavirus-and-your-health/coronavirus-vaccine-your-questions-answered>

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

<https://www.blf.org.uk/support-for-you/coronavirus/coronavirus-vaccine>

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/951769/PHE_COVID-19_vaccination_guide_what_to_expect_after_your_vaccination_English_v2.pdf

https://www.nhs.uk/conditions/coronavirus-covid-19/coronavirus-vaccination/coronavirus-vaccine/?gclid=CjwKCAiAu8SABhAxEiwAsodSZCusm35ObbyQ-pcdf5SLENYAug9jDi_7GIUpuw_1RGShzcOqE8tkJBoC8dsQAvD_BwE

<https://www.cdc.gov/coronavirus/2019-ncov/vaccines/faq.html>

<https://www.ulh.nhs.uk/content/uploads/2020/12/PHE-vaccine-leaflet.pdf>

<https://www.gov.uk/government/publications/covid-19-vaccination-what-to-expect-after-vaccination/what-to-expect-after-your-covid-19-vaccination>

<https://www.immunology.org/coronavirus/connect-coronavirus-public-engagement-resources/covid-19-vaccine-qa>

<https://www.england.nhs.uk/coronavirus/join-the-nhs-covid-19-vaccine-team/faqs/>

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