

COVID-19 Vaccination

What is COVID-19?

It is an illness caused by a new virus known as SARS-CoV-2 and it was identified in late 2019. It is very infectious and can lead to severe respiratory disease. Overall fewer than 1 in 100 infected people will die from COVID-19 but in those over 75 years of age this rises to 1 in 10. There is no cure so prevention of infection is our best solution.

What are the different types of vaccine available?

In the UK there are two types of vaccine that will be used and the UK Government has negotiated supply from 6 different vaccine producers. As of 8th December 2020 only one vaccine has regulatory approval for use. Both types of vaccine require two doses, 3-4 weeks apart, to provide adequate protection.

(i) Messenger RNA vaccine eg Pfizer-BioNtech. The vaccine is taken up by cells in the body and they are instructed to produce a spike protein on their surface. This then triggers the body's immune system to produce antibodies and cells that recognise this protein on the surface of the coronavirus and then destroys it when someone is infected.

(ii) Virus vector vaccine eg AstraZeneca-Oxford. A modified cold virus is programmed to trigger cells to produce a protein that is present on the surface of corona virus. The Body's immune system produces antibodies against this and then if it ever encounters the SARS-CoV-2 virus it is primed to attack it.

Who cannot have the vaccine?

The vaccines do not contain live replicating virus and so are safe for people with disorders of the immune system. This includes people who have HIV or who are immunocompromised from medication. But these people may not respond as well to the vaccine.

The vaccines are not recommended to pregnant and breastfeeding women. There is no known risk associated with giving inactivated or recombinant viral vaccines during pregnancy or whilst breast feeding. The MHRA advice is based on the absence of evidence of safety and not on the presence of evidence of toxicity.

The vaccines are not suitable for children under age of 16yrs until more data on safety in this group emerges from trials.

Who should have the vaccine?

The Joint Committee on Vaccination and Immunisation (JCVI), an independent expert group, has recommended that the NHS offers these vaccines first to those at highest risk of catching the infection and then experiencing serious complications. This includes older adults, health and social care workers, care home residents and staff and those with certain long term chronic health conditions. When more vaccine becomes available then vaccine will be offered to lower risk groups. ALL adults will eventually be offered the vaccine but widespread vaccination might not be complete until the spring of 2021.

Who will be invited to have the vaccine first?

The residents of care homes and over-80's will be in the first wave. This will be followed by all those over 75 years of age, then those who are clinically extremely vulnerable and all those over 70 years of age. For a complete list of the different vaccine waves as recommended by the JCVI then use this link:

<https://www.gov.uk/government/publications/priority-groups-for-coronavirus-covid-19-vaccination-advice-from-the-jcvi-2-december-2020/priority-groups-for-coronavirus-covid-19-vaccination-advice-from-the-jcvi-2-december-2020>

When will the vaccine be available In Putney and Roehampton?

West Wandsworth GP's are setting up a community vaccination hub that will start vaccinating from early January 2021. Due to complexity of the cold chain (how long the vaccine can be kept out of cold storage), the Pfizer-BioNtech vaccine cannot be given at GP surgeries. It has not been confirmed by NHS England which vaccine will be offered to patients through the community vaccination clinics.

How will the vaccine be administered?

Vaccines are routinely given by intramuscular injection into the upper arm or thigh.

What side effects might some experience after their vaccine?

Common (approximately 1 in 10): pain or redness at injection site, headache, tiredness, muscle ache, chills or mild fever for up to 48 hours, nausea

Side effects are much less likely after the second dose. If you have a side effect that is not listed then please report this to the MHRA using this link: <https://coronavirus-yellowcard.mhra.gov.uk/>

How likely is a severe reaction to a vaccine?

Anaphylaxis is an extremely rare but recognised side effect of vaccines. There are 1-2 cases per million doses of vaccine administered. There will be medical staff and medicine on site to mitigate against such a rare occurrence.

What are the ingredients of the vaccines?

The MHRA have released a list of ingredients and excipients (compounds used to create the vaccine and they are found under point 6 of this document: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/940566/Information_for_UK_recipients_on_Pfizer_BioNTech_COVID-19_vaccine.pdf

How effective are the vaccines?

Pfizer-BioNtech vaccine is 94.5% effective at preventing COVID-19 infection. This was from a trial of 43,538 subjects. AstraZeneca-Oxford vaccine was 70% effective at preventing COVID-19 infection. This was from a trial of approximately 20,000 subjects. These figures will change over time as more trials are conducted and the volume of subjects vaccinated increases. 70% efficacy across the population is enough to prevent the spread of the virus.