

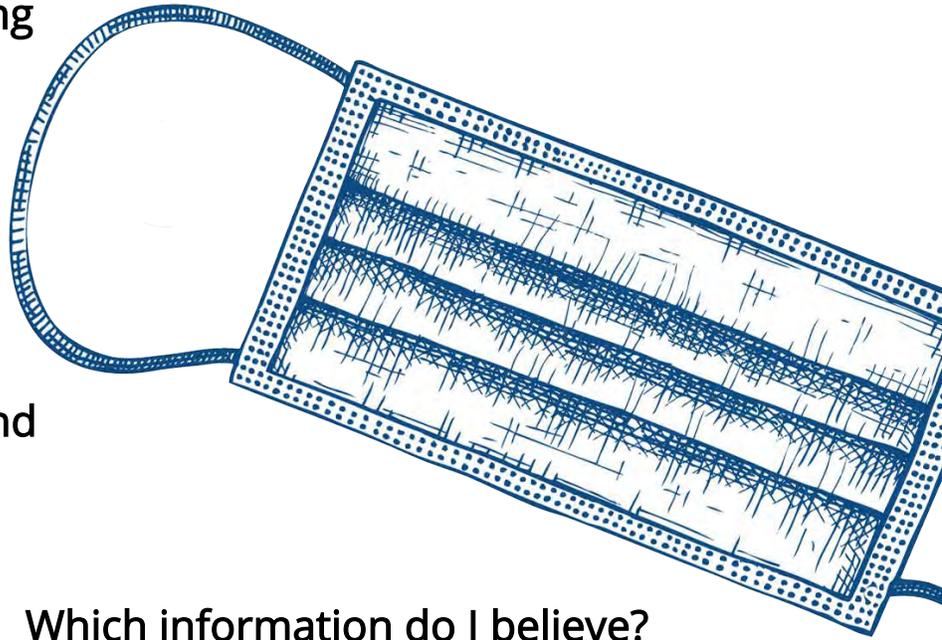
# Recovery College Greenwich

Covid-19  
vaccination  
information



# Covid-19 vaccine

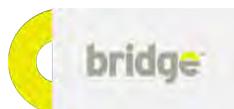
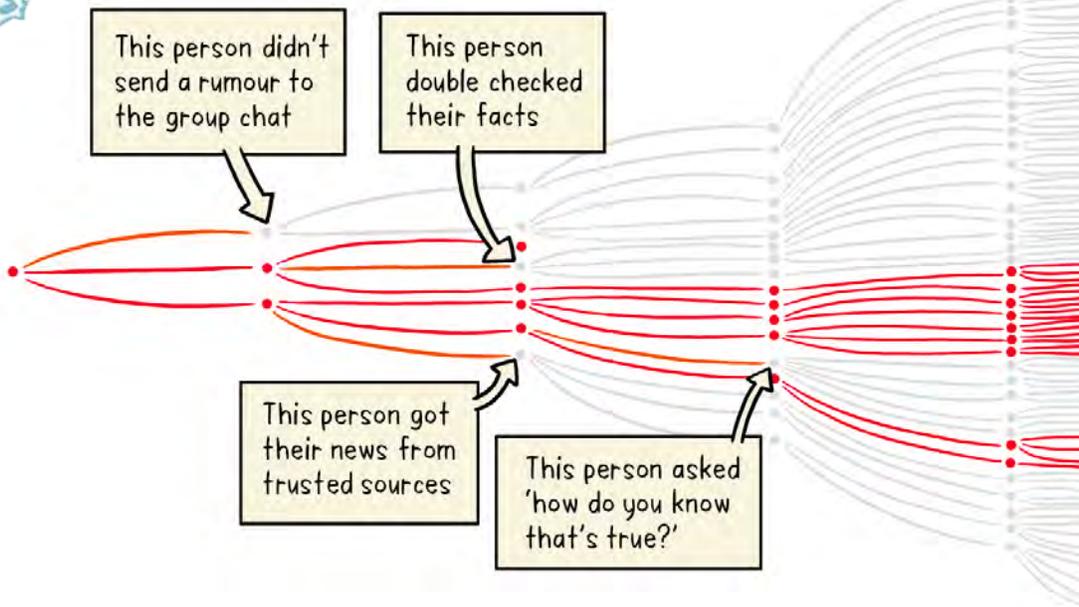
Many people have been asking questions since the Pfizer/ BioNTech COVID-19 vaccine and now the Oxford/ AstraZeneca vaccine have both been given approval to be rolled out. Some people are not sure where to get information that is correct, and we hope to answer some of your questions in this piece.

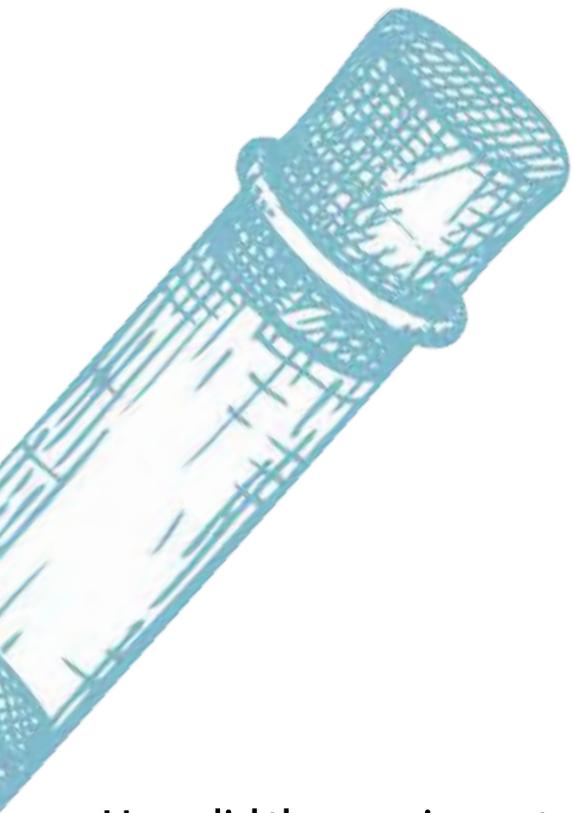


## Which information do I believe?

There is information flying about all over social media and a large percentage of it is inaccurate. So, we would recommend that you don't take these articles at face value and that includes articles that pop

up in your timeline or are shared by friends or groups you belong to.

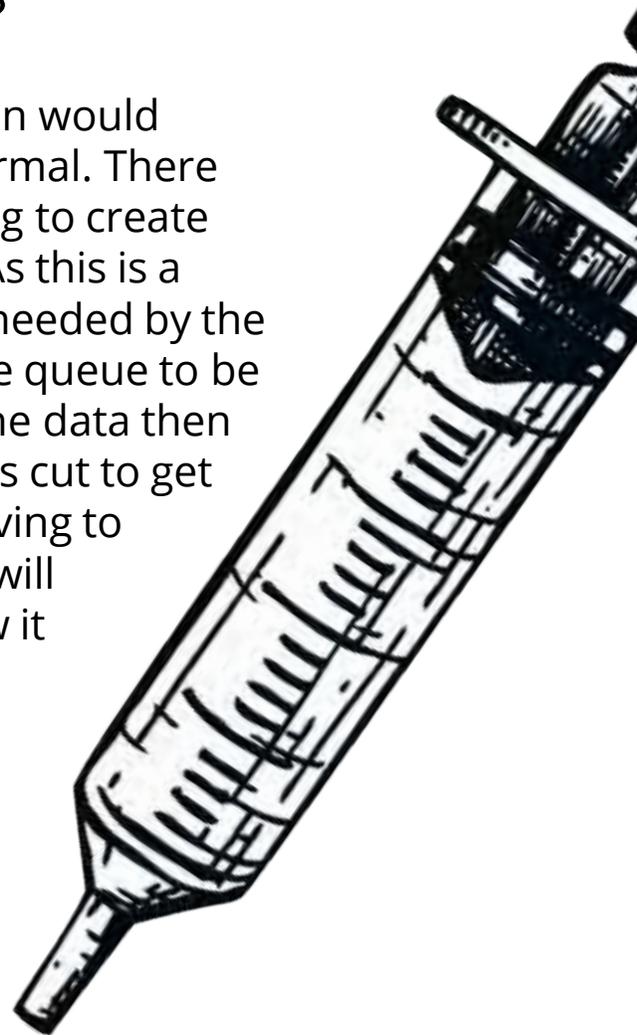




All information regarding the vaccine is available to the general public and if you can surf the net you can find this information yourself. There will be links in this article that will lead you to information published by, NHS, The Medicines and Healthcare products Regulatory Agency (MHRA) and The Joint Committee on Vaccination and Immunisation (JCVI) who advise the Government about ALL vaccines in the UK.

### How did the vaccine get given approval so fast?

Yes, the vaccine was approved a lot faster than would normally be the case, but this event is not normal. There are also a huge number of companies working to create vaccines the support ending this pandemic. As this is a Pandemic every time there was an approval needed by the MHRA the data was pushed to the front of the queue to be reviewed and if the MHRA were happy with the data then they approved it. In essence the Red Tape was cut to get the vaccine information reviewed without having to wait. The information provided to the MHRA will have included what the vaccine contains, how it works in the body, how well it works and its side-effects, and who it is meant to be used for.



This data must include the results of all animal studies and clinical trials in humans, manufacturing and quality controls, consistency in batch production, and testing of the final product specification.

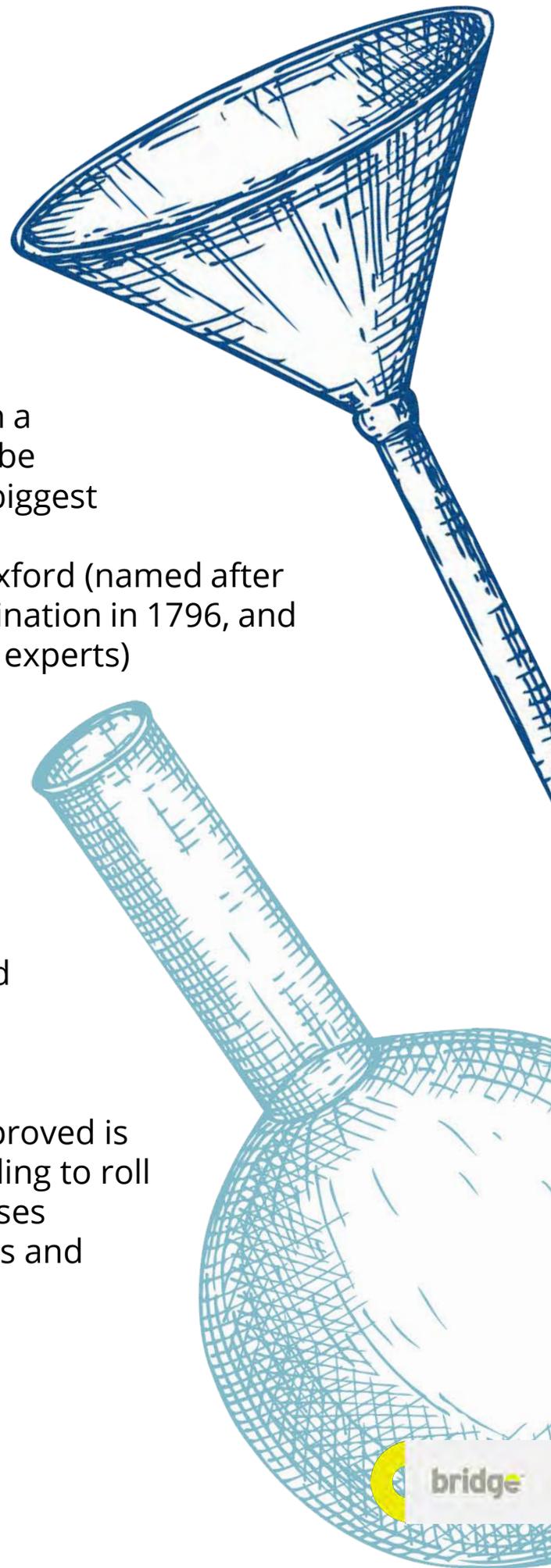
Oxford/AstraZeneca had been working on a framework for a vaccine that could easily be adapted and rolled out since the world's biggest Ebola outbreak in 2014-2016.

The Jenner Institute at the University of Oxford (named after the scientist that performed the first vaccination in 1796, and now home to some of the world's leading experts) designed a strategy for defeating an unknown enemy disease X.

So they were ready with the framework of a vaccine before Covid -19 came about.

The technology that Pfizer/BioNTech used to create their vaccine had been worked on for the past 10 years.

The main delay in getting any vaccine approved is the time it takes to apply for and get funding to roll out trials of new vaccines, and in most cases funding can take a number of applications and refusals before someone will agree to fund a trial and this can take years.



## How does a vaccine work?

Vaccines contain weakened or inactive parts of the target virus (actually it's antigen) that triggers an immune response within the body. Newer vaccines contain the blueprint for producing antigens rather than the antigen itself. This weakened version will not cause the disease in the person receiving the vaccine, but it will prompt their immune system to respond much as it would have on its first reaction to the actual disease. For an excellent explanation that doesn't require a degree in biology to understand, **follow this link to the WHO**



## How do they know it is safe?

The vaccine progress and data has been over seen and reviewed by the JCVI since May 7th 2020 and each new batch of data has been reviewed on going through to Dec 1st 2020. If at any point the JCVI or **Pfizer/BioNTech or Oxford/AstraZeneca** themselves saw evidence of serious side effects or the percentage of protection in people who had received the vaccine in trails, then they would have been stopped.

Before a clinical trial of a new medicine can begin 3 agencies have to approve them. A government agency called the Medicines and Healthcare products Regulatory Agency (MHRA) needs to review and authorise it. The Health Research Authority (HRA) works to protect and promote the interests of patients and the public in health research. All medical research involving people in the UK, whether in the NHS or the private sector, first must be approved by an independent research ethics committee. The committee protects the rights and interests of the people who will be in the trial. JCVI met to consider COVID-19 vaccination Data 7 times between 7th May and 1st December.

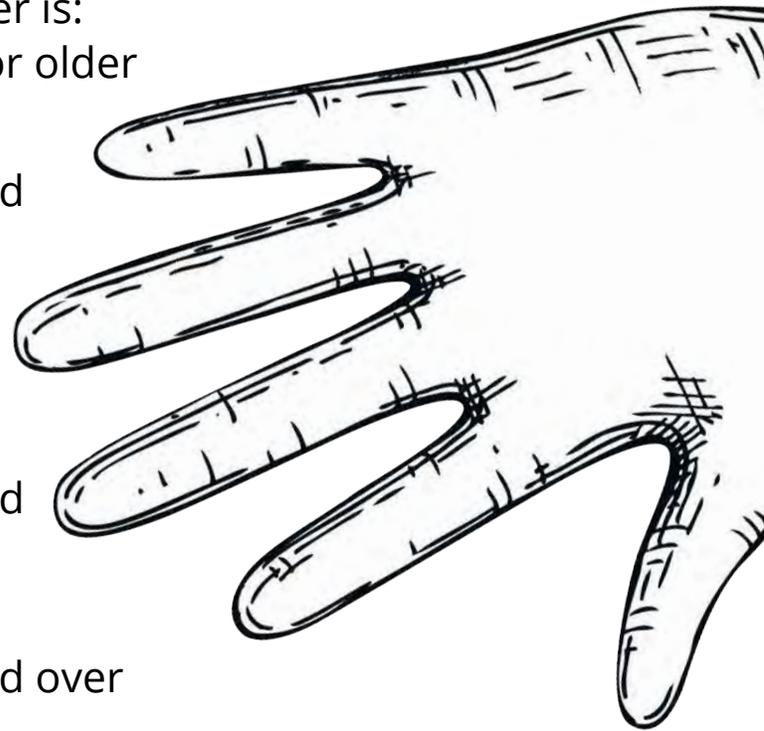


## When and where will I get the vaccine?

The JCVI have put together a priority list of who should get the vaccine first, and you can see the full explanation by following [this link](#).

However, in summary the priority order is:

1. Residents in a care home for older adults and their carers
2. All those 80 years of age and over & frontline health and social care workers
3. All those 75 years of age and over
4. All those 70 years of age and over & **clinically extremely vulnerable individuals**
5. All those 65 years of age and over
6. All individuals aged 16 years to 64 years with underlying health conditions which put them at higher risk of serious disease and mortality
7. All those 60 years of age and over
8. All those 55 years of age and over
9. All those 50 years of age and over



This advice on vaccination does not include pregnant women and those under the age of 16 years.

You will be contacted via phone, text, email or letter by the **NHS** with an invitation to attend for the first of two injections of the vaccine. All the possible vaccines are delivered using two doses up to 12 weeks apart.



The place you receive your vaccine may not be your GP's. If you are going to have difficulty getting to the site, you are offered then follow the instructions given to arrange to attend another site that is easier for you to attend.

DO NOT call your GP's to ask when you are having this vaccination or to try and book an appointment before you have been contacted by the NHS with your invitation to receive the vaccine.

We now have both the Pfizer/BioNTech and Oxford/AstraZeneca being rolled out to vaccine centres. This will allow more sites to be set up due to the Oxford/AstraZeneca vaccine being able to be stored at 2-5 degrees in a normal fridge environment. While the Pfizer/BioNTech has to be stored at minus 70 or colder so this is limiting where this vaccine can be stored. It is mostly stored in hospitals as they already have the cold storage facilities for this. There are nearly a thousand sites actively giving vaccines to the vulnerable groups in the JCVI listings.

### What happens in the meantime?

While you wait for your turn to receive the vaccine nothing particularly changes. You should continue to wash your hands more regularly, wear a mask that covers your nose and mouth on public transport and inside any building other than your own home, maintain two metre social distancing and follow the appropriate **tier guidance for the area in which you live.**

### How many Vaccines have been given so far?

As of Thursday 21st January 2021, there have been 5,383,103 people who have received the first dose of the COVID-19 vaccine.



## Groups currently being vaccinated

1. Residents in a care home for older adults and their carers
2. All those 80 years of age and over & frontline health and social care workers

### To be started later this month (January)

3. All those 75 years of age and over
4. All those 70 years of age and over and clinically extremely vulnerable individuals, those required to shield

NHS teams are working to keep the delivery to the different groups level so that there that all groups get the vaccines delivered at the same time across the country.



### Will there be a delay in delivering the vaccine to the UK and Vaccination sites?

The Batch test Approval is the point of production and transport that takes the longest and is one of upmost importance, why? This process is to ensure that all vaccines which have been bottled are safe to be injected into a human and that the vaccine has not damaged and is sterile at this point. In the chain of supply this is the only point that could deal delivery but as, yet it has NOT delayed delivery to either the UK or any sites. This part of the process takes 2 weeks with no short cuts allowed.



## Who is doing the Batch testing?

The National Institute for Biological Standards and Control, part of MHRA are conducting the Batch testing on ALL vaccines used in the UK

## Where does the vaccine get made?

Pfizer-BioNTech

Produced in Puurs, Belgium and transported to UK in cold storage at - 70 degrees.

Oxford/AstraZeneca

Produced at Oxford BioMedica, based in Oxford and Keele Science Park, Staffs and Put into the vials and packages them for use at a site based in Wrexham - transported at regular fridge temp.

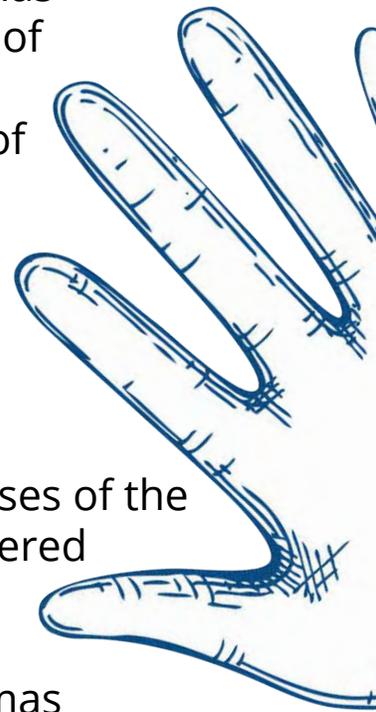
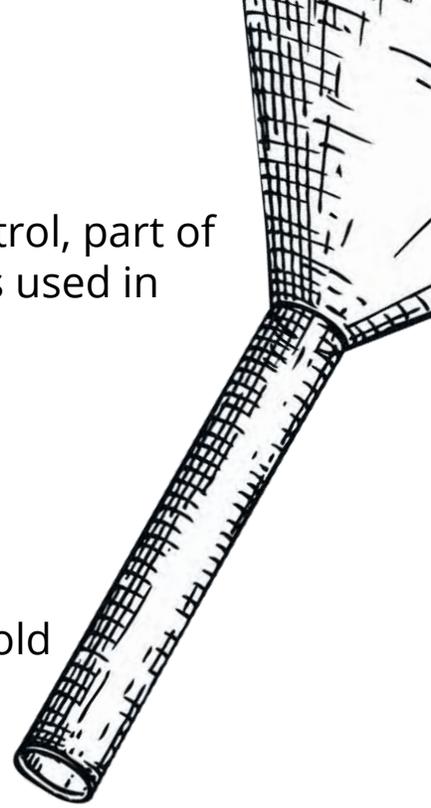
One challenge facing pharmaceutical companies globally has been a shortage of glass vials for the "fill and finish" stage of manufacture - when a vaccine is packaged for despatch. Although, unlike elsewhere, the UK currently has enough of this glassware in storage.

## Is there enough Vaccine for everyone?

**The simple answer is Yes!**

As of 12th January 2021 the UK had received 40 million doses of the Pfizer/BioNTech vaccine. The UK government has also ordered 100 million doses of the Oxford/AstraZeneca vaccine.

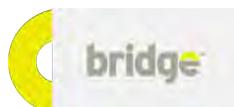
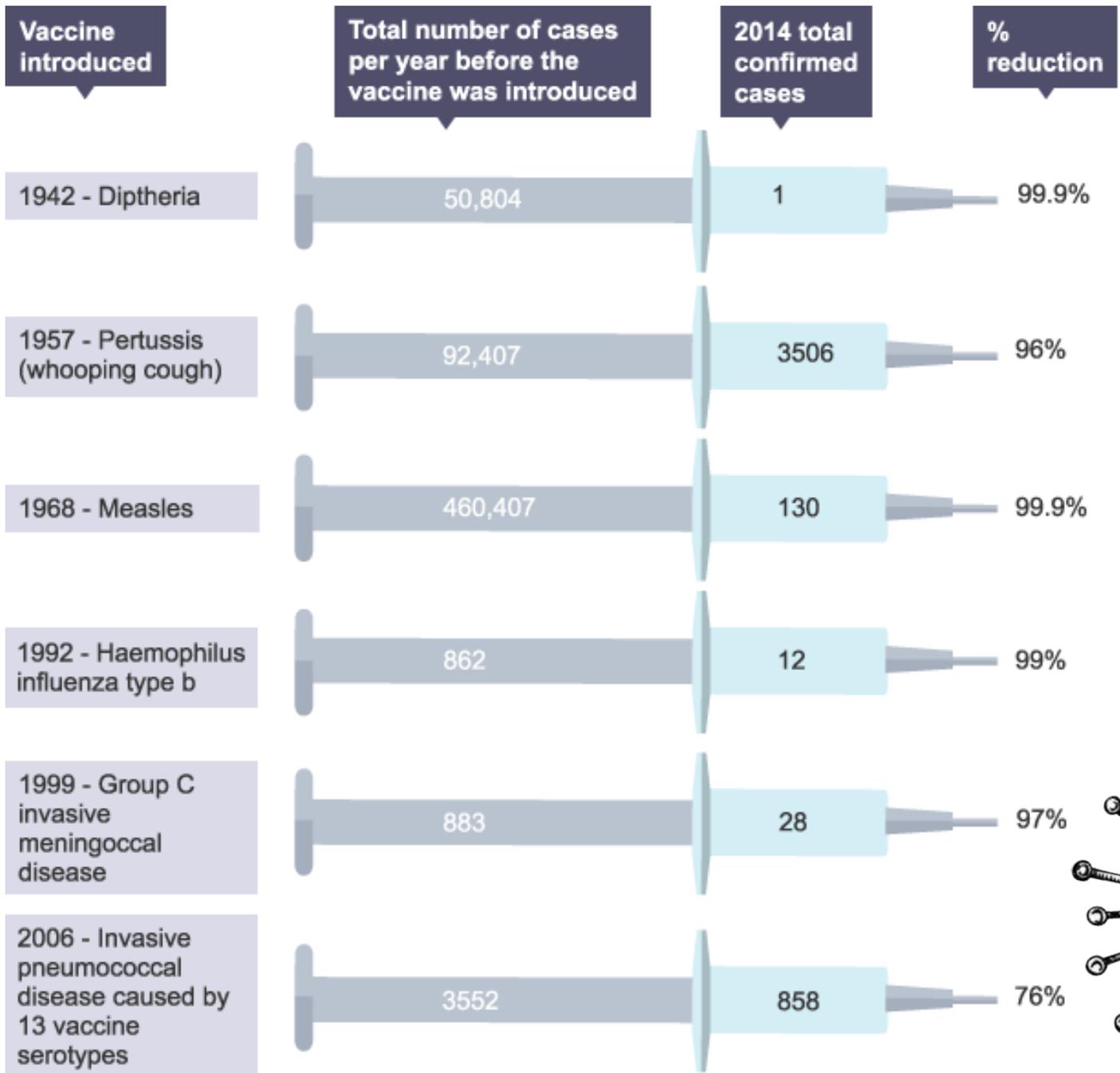
An extra 10 million doses have been ordered since Christmas 2020 by the UK Government taking the order to 17 million doses of Moderna vaccine.





# Are vaccines effective?

Vaccines save millions of lives every year, making them one of the biggest enhancers of global health. Here are a few examples of how much of an impact vaccines have had in reducing disease cases.



# Herd immunity

Herd immunity is a term that is being used quite a lot at the moment by politicians and scientists in respect of the vaccine. It's also being mis-used quite a bit on social media so here is our attempt to explain how we can achieve herd immunity with a simple example.



To understand how a virus moves through people (the human herd) imagine you receive a birthday card which is covered in glitter. You open the card and some of the glitter transfers to you, sticking to your skin; now you are also coated with glitter. You have become a host for the glitter and will unwittingly transfer it to every surface and person you come into contact with.

Now imagine you could spray your hands with a substance that while harmless to you, will dissolve glitter on contact. When you open the birthday card the glitter will still transfer to you but is instantly dissolved by the spray you've coated your hands with. The spray has prevented the glitter becoming established in you as its new host. The risk of you transferring glitter to every surface and person you meet is reduced.

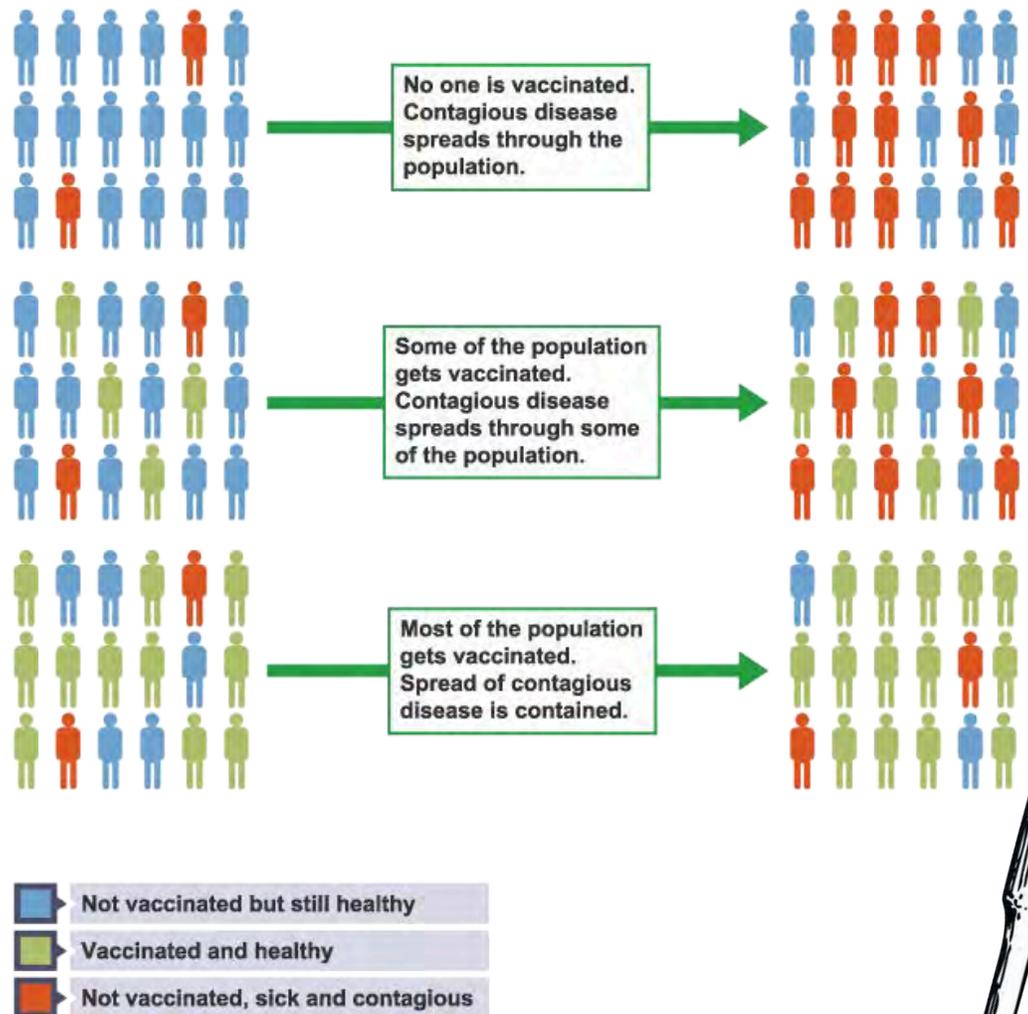
Vaccines teach your body to attack the virus when you are exposed to it. The vaccine will prevent the virus becoming established in you as its new host. The risk of you transferring the virus to every surface and person you meet is reduced. As more people in the human herd have the vaccine the virus will find it increasingly difficult to find new hosts. When the virus runs out of hosts it will die.



## First group

Without the population having a vaccine the virus/disease can spread easily from one person to another.

Lockdowns and Tier enforcement nationally continue. NHS services reaching capacity and normal services being cut across all NHS services. All face to face services stopped.



## Second group

With less than 65% of the population having the vaccines the virus/disease continues to spread in areas where the vaccine has not been taken. This could lead to continued local lockdowns and Tier enforcements and local NHS services being stretched leading to delays in NHS services locally and face to face services suspended until outbreak under control.

## Third group

With 70% plus of population having the vaccines the virus/disease is contained and the ability for the virus to spread has been denied to the virus. And with the vaccines preventing serious illness there is normal NHS services available across all services and Face to face services resume.

