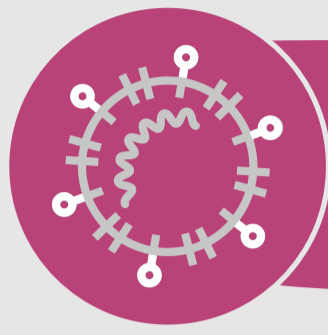


Immunity to COVID-19



Natural infection with SARS-CoV-2

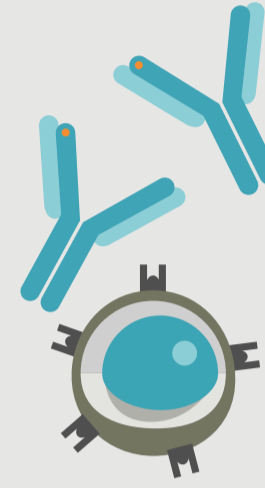


Vaccination

What it means for you



- May become **very unwell** with COVID-19.
- Potential to develop long-term complications (long COVID).
- Can spread virus to others.



- Significantly reduces chance of developing COVID-19 & how unwell you become.
- Induces an immune response in a **safe & controlled way**.
- Reduces chance of spreading virus to others.
- Vaccine cannot give you COVID-19.

Immune response



- **Varies hugely** between people. Many factors impact on immune response effectiveness e.g. age. Some people do not have a detectable long-term immune response.
- May be linked with disease severity; people who experience more severe illness are more likely to have a stronger long-term immune response.

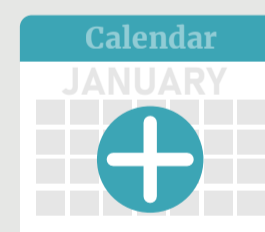


- Varies but most (even older people) produce a strong immune response.
- May produce a **more robust immune response**.
- Immunity to the virus from natural infection is boosted after vaccination.

Length of protection

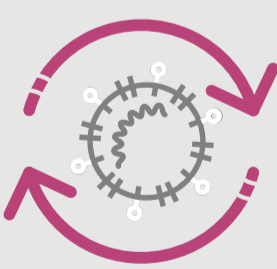


- Variable & not fully known.
- **Reduces over time** & protection tends to be lower in people who were mildly ill.



- Still to be learnt but two doses (of Pfizer, Moderna or AstraZeneca) produce **long-term protection** so far.
- Booster vaccines could maintain a strong immune response.

Variants



- Reinfection possible but uncommon.
- As response to natural infection is variable, **immune system may not be able to recognise a viral variant**.



- **Two doses of some vaccines provide strong protection** against many currently identified variants.
- High antibody levels produced are more likely to cross-protect against new variants.
- Vaccines can be adapted to boost immunity against new variants.

Information in this infographic is accurate at the time of publishing in June 2021



Likely that for most people vaccination will induce more effective & longer lasting immunity compared to natural infection.

Even if you've had COVID-19, vaccination will boost whatever immunity you have from natural infection.

