

The UK Coronavirus Immunology Consortium (CIC) which offers expertise on the immune system and COVID-19, has put together a table comparing the immunity from natural infection and the immunity obtained from vaccination.

WHAT IT MEANS TO YOU

Natural infection with COVID-19

- May become very ill with COVID-19
- There is a potential to develop long-term complications (long COVID)
- Can spread virus to others

Vaccination

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



IMMUNE RESPONSE

Natural infection with COVID-19

- Varies hugely between people. Many factors impact on immune response effectiveness for e.g. age. Some people don't have a detectable immune response
- People who have the disease severely are more likely to have a stronger long-term immune response

Vaccination

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

LENGTH OF PROTECTION

Natural infection with COVID-19

- Variable and not fully known
- Reduces over time

Vaccination

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



VARIANTS

Natural infection with COVID-19

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

Vaccination

- Two doses of the same 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