

What happens if the virus mutates and the vaccine no longer proves effective?

All viruses **mutate**, but the current COVID-19 vaccines are still effective against most variants of the COVID-19 virus. For some variants, the spike protein which is targeted by the vaccines has mutated so much that they are less effective.

Scientists are closely **monitoring** any changes to the virus so that we can predict whether an alternative vaccine might be needed.

A benefit of the **new types of vaccines** is that it is relatively quick and easy to change the genetic code so that it incorporates these mutations, if this was necessary.

