

Update | COVID variants

What are virus variants?

- When viruses reproduce, they naturally change and gain new information, resulting in variants
- Sometimes variants are harmless and other times the resultant disease is more dangerous
- SARS-CoV-2 demonstrating several different and distinct variants causing more significant disease.
- These variants are better able to attach to human cells, get inside cells, and reproduce inside the cells
- Vaccination helps recognize the virus, but rapid reproduction may move faster than our immune system—at first

What are the COVID-19 variants of concern?

- Variants of concern are changed viruses resulting in increased disease but with limited impact on tests or vaccine
 - Alpha - United Kingdom
 - Beta - South Africa
 - Delta - India
 - Gamma - Japan/Brazil

Are the vaccines effective against the variants?

- With original COVID-19 strain, Pfizer and Moderna were 94% and 93% effective after two doses; both had similar effectiveness after 6 months
- Vaccine (mRNA) effectiveness diminished slightly against Delta variant
- At present, >97% of hospitalized cases for COVID-19 are among the unvaccinated

Are the variants more transmissible?

- Variants are more easily transmitted because the virus is able to infect more efficiently
- Respiratory viruses are transmitted through breathing, so wearing a mask to prevent direct movement of the virus from an infected person to an uninfected person is important
- Diluting the air so there are fewer viral particles to move from infected person to uninfected person makes ventilation a big point of emphasis

What is the best way to prevent the spread of COVID-19 and the variants?

- Vaccination is the single most important preventive strategy
- Wear masks to prevent contact between virus and respiratory system
- Remove viral particles from the environment so they cannot be transmitted
- Dilute viral particles in the air so there are fewer particles
- Improve ventilation so more outside air enters an environment to dilute the proportion of infectious particles in the air
- Stay home when ill
- Seek testing if symptomatic or if known exposure occurred