What are variants?

Many viruses frequently change through mutation. These mutations add up and create slightly different versions of the virus, called “variants.” Sometimes new variants appear and then disappear. Other times, new variants stay around. They are called variants of concern if there is evidence that they spread more easily, cause more serious illness, are harder to detect, treat or prevent with vaccines. Scientists continue to study and track these variants as they evolve.

Many variants of COVID-19 have emerged in the United States. At this point, the original version of the virus that was spreading in January 2020 is no longer circulating.

Which variants of the COVID-19 virus have been found in the United States?

The CDC is tracking several variants of concern in the United States:

<table>
<thead>
<tr>
<th>Variant name:</th>
<th>First detected:</th>
<th>First found in the US:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha (B.1.1.7)</td>
<td>United Kingdom</td>
<td>December 2020</td>
</tr>
<tr>
<td>Beta (B.1.351)</td>
<td>South Africa</td>
<td>January 2021</td>
</tr>
<tr>
<td>Gamma (P.1)</td>
<td>In travelers from Brazil</td>
<td>January 2021</td>
</tr>
<tr>
<td>Delta (B.1.617.2)</td>
<td>India</td>
<td>March 2021</td>
</tr>
</tbody>
</table>

The Delta variant is currently the most common form of the virus in Los Angeles County. Visit the CDC What You Need to Know about Variants page for more information.

Are these new variants more dangerous?

It depends. Some of these variants are a serious threat, especially to people who are not fully vaccinated and those who are at higher risk of severe COVID-19 disease. The Delta variant is concerning because it spreads much more easily than the original virus and other variants. It might also cause more severe illness in unvaccinated persons.

Do COVID-19 vaccines protect against variants, including the Delta variant?

Yes, they do. The CDC and other experts continue to study how well the vaccines work to protect people from COVID-19. The CDC has found that all 3 vaccines available in the US are highly effective at preventing serious illness and death from infection with Delta variant. But it is critical that you are fully vaccinated to be protected.

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1 You are considered fully vaccinated against COVID-19 two (2) weeks after: the second dose of a Pfizer or Moderna COVID-19 vaccine series, a single dose of Johnson & Johnson COVID-19 vaccine or you finished the series of a COVID-19 vaccine that has been listed for emergency use by the World Health Organization. See fully vaccinated web page for more information.
from getting very sick and dying from the Delta variant as well as other known variants. People who are fully vaccinated are also less likely to become infected with COVID-19 compared with people who are unvaccinated.

**What is a breakthrough infection?**
COVID-19 vaccines reduce the risk of getting COVID-19 infection but since vaccines are not 100% effective, a small percent of people who are fully vaccinated will get infected. This is called a “breakthrough infection”. Breakthrough infections usually cause mild disease. If you are fully vaccinated, your risk of getting infected, getting sick, being hospitalized or dying is much lower than if you are not vaccinated. Some people who are fully vaccinated and are infected with the Delta variant can spread the virus to others. This appears to only be a small part of the spread of the virus.

**How do I protect myself against variants?**

- **Get vaccinated** if you are 12 years of age or older (see below). The three COVID-19 vaccines available in the US offer the best protection against the variants currently spreading here. If you have concerns or questions about COVID-19 vaccines, talk with your doctor. If you are already vaccinated, encourage your family, friends, and neighbors to get the vaccine. Vaccination will slow the spread of variants and lower the chances that new, even more dangerous variants arise.

- **Wear a mask.** Masks remain a powerful tool to protect yourself and others. Because the Delta variant spreads more easily, **everyone** is required to wear a mask indoors in public places and at outdoor Mega Events. Your mask should fit snugly over your nose and mouth and be made with at least two layers so that it filters well. If you are in a setting where you are in close contact with other people who may not be fully vaccinated, consider “**double masking**” (wearing a cloth face mask over a surgical mask) or wearing an N95 respirator. These offer a higher level of protection. This is especially important if you are not fully vaccinated and are indoors or in a crowded outdoor place. Some exceptions apply - learn more at [ph.lacounty.gov/masks](http://ph.lacounty.gov/masks).

- **Wash your hands and/or use hand sanitizer often** - especially after being in public spaces where surfaces are touched by many people.

Visit the Public Health [COVID-19: Reducing Risk](http://www.publichealth.lacounty.gov) webpage to learn more.

**How do I get a COVID-19 vaccine?**

Vaccines are available across LA County and free to everyone, regardless of immigration status. Many vaccination sites take walk-ins, or you can choose to make an appointment.

- Visit [www.VaccinateLACounty.com](http://www.VaccinateLACounty.com) to find a location near you.

- Call [1-833-540-0473](http://1-833-540-0473) if you need help making an appointment, need transportation to a vaccination site, or are homebound. Phone lines are open from 8am to 8:30pm 7 days a week. Information is also available in many languages 24/7 by calling 2-1-1.

To learn more about COVID-19 variants, visit CDC [Variants of the Virus](https://www.cdc.gov) webpage.