

## FAQ: Omicron COVID-19 Variant

### What is the Omicron (B.1.1.529) COVID-19 variant?

On Nov. 25, scientists in South Africa identified a new COVID-19 variant, which has been named the Omicron (AH-muh-kraan) variant. It displays more than 30 genetic mutations to the spike protein that the coronavirus uses to attach to human cells. So far this variant has been detected in a number of countries around the globe, including the U.S., Britain, Italy, Belgium and the Netherlands.

### Is there reason to worry about the Omicron variant?

While news of the Omicron variant sparked swift action by several countries to limit travel, public health experts in general have expressed caution in drawing conclusions. Much remains unknown about Omicron including whether it is more transmissible and capable of causing more severe illness. The emergence of this variant is so recent that it may be a while before experts know whether it is more pathogenic. For example, COVID hospitalizations lag new infections by two weeks or more.

### Why is there concern about Omicron?

The number of genetic mutations on the spike protein of the Omicron variant have raised concerns about the *potential* for it to somewhat evade antibodies produced by either vaccination or previous infection. There is also concern of reduced efficacy of monoclonal antibody treatments.

It will take time for the scientific community to understand whether these potential concerns are valid. For example, earlier variants such as Beta and Mu developed the ability to partially evade the body's immune response. However, they ultimately never became a serious threat because they proved poor at transmitting.

### Will vaccines be effective against Omicron?

Vaccines are expected to provide at least some protection against Omicron because they stimulate additional immune cells beyond antibodies to attack virus-infected cells. Mutations to the coronavirus spike protein should not blunt the broad immune response that is thought to prevent severe illness and death.

All three manufacturers of vaccines approved in the U.S. have indicated they are studying the effects of the Omicron variant on vaccine effectiveness. They have expressed confidence that if a decrease in effectiveness is detected, they can modify their vaccine formulation to improve performance against the variant.

### **What action should I take based on what is known about Omicron?**

In a statement on Nov. 26, CDC pledged to vigilantly monitor for Omicron activity within the U.S. variant surveillance system. Until more information is known regarding pathogenicity, individuals should continue to use proven mitigation strategies including:

- Unvaccinated individuals 5+ should receive an approved COVID vaccine
- Eligible individuals should receive a COVID vaccine booster dose
  - Eligible individuals include those 18+ and:
    - It has been at least 6 months since a Pfizer or Moderna primary series was completed
    - It has been at least 2 months since a single dose of the J&J vaccine
- Wear a mask in indoor settings in areas of substantial community transmission of COVID-19
- Wash hands frequently and physically distance from others