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# When Does an Epidemic Become a Pandemic?

By: [Sarah Gleim](#)



The Centers for Disease Control activated its Emergency Operations Center (EOC) to assist public health partners respond to the novel coronavirus outbreak. [CENTERS FOR DISEASE CONTROL](#)

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The virus that causes [novel coronavirus](#) (SARS-CoV-2) is continuing to spread across the globe. To date more than 4,290 people have died and more than 118,162 people have been infected with COVID-19 worldwide, [according to the World Health Organization](#) (WHO). China was home to more than 80,000 of the cases. The Chinese government took unprecedented steps to curb the virus by placing almost [60 million people on lockdown](#), and banning travel to and from 15 cities in the Chinese province of

Hubei. Italy's Prime Minister Giuseppe Conte also put the entire country, which includes 60 million residents, [on lockdown](#) on Tuesday, March 10, 2020, to contain the spread of the virus.

At least 11 European countries, including Italy, Spain, France and Switzerland, as well as the United States, now have confirmed cases. One of Iran's top clerics, Hadi Khosroshahi, died Feb. 27, 2020, from the virus and [two members of Iran's parliament](#) announced on social media that they, too, had been infected.

The Centers for Disease Control and Prevention (CDC) in Atlanta confirmed on Feb. 26, 2020, that the United States had its first patient affected with coronavirus via what's known as "[community spread](#)." Community spread [means spread of an illness](#) for which the source of infection is unknown, and it's also one of two factors that meet the CDC's criteria of a pandemic, Dr. Nancy Messonnier, director of the CDC's National Center for Immunization and Respiratory Diseases, [said in a news conference](#) Feb. 26. But by March 10, New York Gov. Andrew Cuomo had to call out the National Guard to help create a [1-mile containment area](#) in New Rochelle, New York, to help stop what is being called a "cluster" of COVID-19 cases there.

This rapid spread of the coronavirus across the globe prompted WHO to officially declare the outbreak a pandemic during its daily news conference on March 11. [From WHO Director-General Dr. Tedros Adhanom Ghebreyesus](#):

*In the past two weeks, the number of cases of COVID-19 outside China has increased 13-fold, and the number of affected countries has tripled. There are now more than 118,000 cases in 114 countries, and 4,291 people have lost their lives. In the days and weeks ahead, we expect to see the number of cases, the number of deaths, and the number of affected countries climb even higher. WHO has been assessing this outbreak around the clock and we are deeply concerned both by the alarming levels of spread and severity, and by the alarming levels of inaction. We have therefore made the assessment that COVID-19 can be*

*characterized as a pandemic. Pandemic is not a word to use lightly or carelessly. It is a word that, if misused, can cause unreasonable fear, or unjustified acceptance that the fight is over, leading to unnecessary suffering and death.*

## What's the Difference Between an Epidemic and a Pandemic?

So what does that mean? "Pandemics are different from epidemics as [they] signify most areas of the world and most human populations are at risk," [Dr. Aneesh Mehta](#), associate professor in the division of infectious diseases at Emory University School of Medicine in Atlanta, explains via email. "In general, a pandemic is an outbreak of an [infectious disease](#) that is demonstrating sustained human-to-human spread in multiple regions of the world, and is occurring in most, if not all, populations."

Epidemics are usually localized to one specific region of the world. Some transmission of the disease may jump to other regions but spread outside the area where the disease initially developed is small. Epidemics are generally declared and defined by national public health agencies, such as the CDC and/or the WHO, Mehta says. "An epidemic usually refers to a disease that demonstrates a rapid increase in cases over a short period of time. The disease could be occurring in the general population or in specific populations."

## Who Declares a Virus a Pandemic?

WHO defines a pandemic as the worldwide spread of a new disease. Until this March 11 announcement, the last time it declared a worldwide pandemic was on June 9, 2009, for H1N1 swine flu. The [CDC estimates](#) that there were 274,304 hospitalizations and 12,469 deaths from H1N1 — in the United States alone — between April 12, 2009, and April 10, 2010.

"The 1918 H1N1 pandemic is a classic example of a high-impact pandemic," Mehta says. Better known as "[the Spanish Flu](#)," it was the [most severe pandemic in recent](#)

**history**, killing an estimated 50 million people worldwide, and infecting nearly one-third of the world's population.

Currently, WHO uses a six-phase approach to determine when a virus reaches the level of a pandemic. Phases one through three relate to preparedness, while phases four through six signal the need for immediate response and mitigation.

"Describing the situation as a pandemic does not change WHO's assessment of the threat posed by this virus. It doesn't change what WHO is doing, and it doesn't change what countries should do," **Ghebreyesus said**. "We have never before seen a pandemic sparked by a coronavirus. This is the first pandemic caused by a coronavirus. And we have never before seen a pandemic that can be controlled, at the same time. WHO has been in full response mode since we were notified of the first cases.

The World Health Organization uses a six-phase approach to determine when a virus reaches the level of a pandemic.

WORLD HEALTH ORGANIZATION

## How Will Local Public Health Agencies Respond?

The CDC's Messonnier stopped short of declaring coronavirus a pandemic in a news conference Feb. 26, 2020, [but said the U.S.](#) "has been implementing an aggressive containment strategy that requires detecting, tracking and isolating all cases."

Mehta says most states and local public health agencies have their own pandemic preparedness and response plans. "In addition, the [Office of the Assistant Secretary for Preparedness and Response](#) (ASPR) has developed Hospital Preparedness Programs (HPP) that helps hospitals and health care systems develop pandemic preparedness plans," he says. "ASPR has also funded the [National Ebola Training and Education Center](#) (NETEC) to develop educational programs and on-site training to help hospitals and public health agencies prepare together for infectious diseases outbreaks."

During the March 11 WHO news conference, Ghebreyesus implored countries to activate and scale up their emergency response mechanisms, and to prepare and be ready. "Communicate with your people about the risks and how they can protect themselves — this is everybody's business," [he said](#).

He also outlined ways for countries to prepare:

- Find, isolate, test and treat every case and trace every contact
- ready the hospitals and health care facilities
- scale up emergency response mechanisms
- protect and train health workers

Ghebreyesus ended his portion of the news conference [by saying](#): "Let me give you some other words that matter much more, and that are much more actionable: Prevention. Preparedness. Public health. Political leadership. And most of all, people. We're in this together, to do the right things with calm and protect the citizens of the world. It's doable."

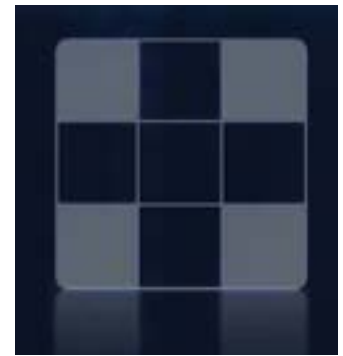
## Now That's Crazy

Hundreds of colleges, universities and employers are insisting students and employees stay home due to the coronavirus. Yale, Harvard, Syracuse University, The Ohio State, the University of Maryland system and Rice University are [just a few of the colleges](#) and universities canceling in-person classes and opting for online classes for the foreseeable future. [Major tech companies](#), including Google, Facebook and Amazon, also are insisting employees stay home to do their jobs.

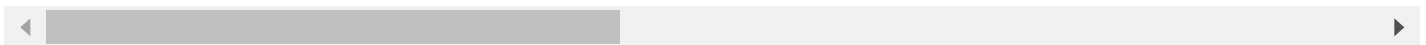
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