

Half of Initial Coronavirus (COVID-19) Infections Were Spread Inside a Wuhan Hospital

Immediate risk of transmission to the American public is still low, according to experts.

February 13, 2020 By [Alicia Green](#)

A new [study](#) published in the medical journal JAMA reveals that nearly half of the novel coronavirus (COVID-19) infections confirmed in one Chinese hospital appear to have occurred within the hospital, reported Tom Frieden, MD, MPH, former director of the Centers for Disease Control and Prevention (CDC) and former commissioner of the New York City Health Department on [CNN](#).

At the Zhongnan Hospital of Wuhan University, 138 patients were hospitalized with confirmed novel coronavirus pneumonia from January 1 to 28. Most of these individuals (54%) were men with a median age of 56 years.

Of these patients, 102 were placed in isolation wards, and 36 were admitted and transferred to the intensive care unit (ICU). Patients who received care in the ICU were significantly older and more likely to have underlying health conditions.

Scientists believe that 57 of the 138 patients (41%) caught the virus in the hospital, which is called nosocomial transmission. Of these, 40 were health care professionals, and 17 were hospitalized patients.

The most common symptoms at the start of the illness were fever, fatigue, dry cough, muscle pain and difficulty breathing. Less common symptoms included headache, dizziness, abdominal pain, diarrhea, nausea and vomiting.

The virus doesn't appear to have spread from one single patient to others. Many health care workers and patients were infected in different parts of the hospital. Additionally, because only sick patients were tested, it's possible that even more people within the facility contracted the virus.

"This virus appears to be quite infectious, health care workers are at especially high risk and we urgently need more information about just how infectious the virus is," wrote Frieden. "The virus

might well be impossible to contain—just as the common cold and influenza can't be stopped, but the health and societal impacts can be blunted.”

Health care workers and others who care for sick people must be protected, Frieden advised. Medical professionals can help keep themselves safe by requiring all people who are ill to wear face masks; placing partitions in triage areas; separating patients from others by at least several feet until they are more thoroughly assessed; washing the hands; and observing respiratory hygiene by using personal air-purifying devices and wearing elastomeric respirators, which are tight-fitting, specially designed masks that cover half the face.

Frieden noted there is still a lot to learn about the novel coronavirus, which the World Health Organization (WHO) officially named COVID-19 on February 11. Researchers lack knowledge about how many exposed people have been tested, what proportion of people have tested positive, how lethal the virus is, how the virus is changing over time and what the positivity rates are by location, week of testing and patient age, among many other factors.

Globally, COVID-19 has infected more than 60,000 people—the vast majority of them in China—and killed more than 1,000, [CBS News](#) reports. In the United States, the [CDC](#) has confirmed 15 cases of coronavirus in Arizona, California, Illinois, Massachusetts, Texas, Washington and Wisconsin. More than 400 people have been tested for the virus.

Still, the agency says that although COVID-19 poses a potentially high threat to public health in the United States, the good news is that the immediate risk to the general population is still low.

For more coronavirus updates, [click here](#). For related coverage, read “[Was the New Coronavirus Created in a Lab Using HIV Genes?](#),” “[New Coronavirus in China Is Treated With HIV Meds](#)” and “[Fifth Case of Coronavirus Confirmed in the United States](#).”