Background

On Jan. 21, 2020, officials announced the first COVID-19 United States (U.S.) case with 14 additional confirmed cases since then, and another 14 added within the last couple of days as passengers from a cruise ship were evacuated from Japan. COVID-19, formerly known as 2019-nCoV, emerged in 2019 and is spreading in a growing number of countries. On January 30, 2020, the World Health Organization (WHO) declared the outbreak of a COVID-19 a global health emergency. The Centers for Disease Control and Prevention (CDC) is closely monitoring, and collaborating with WHO on the outbreak, which was first identified in Wuhan, Hubei Province, China.

As of Feb. 19, 2020, WHO has reported more than 74,000 confirmed cases globally and more than 2000 deaths, the majority of which are in China. Effective Jan. 27, 2020, the U.S. Department of Health and Human Services (HHS) declared a public health emergency for the entire U.S. to aid the nation’s health care community in responding to COVID-19. The CDC is working closely with state health departments on disease surveillance, contact tracing, and providing interim guidance for clinicians on identifying and treating coronavirus infections.

Human coronaviruses are common throughout the world. Human coronaviruses commonly cause mild to moderate illness. Two newer human coronaviruses, MERS-CoV and SARS-CoV, have been known to cause severe illness. COVID-19 is the newest coronavirus that is causing concern.

What is 2019 Novel Coronavirus (COVID-19)?

- In confirmed cases, clinical signs and symptoms range from mild symptoms to severe illness and death. Symptoms can include fever, cough and shortness of breath. CDC believes at this time that symptoms of COVID-19 may appear in as few as two days or as long as 14 days after exposure.

- The situation with COVID-19 is still unclear and evolving rapidly. Person-to-person transmission has been reported in health care workers who were caring for patients in China. In the U.S., cases in health care settings, like hospitals, could also occur.

What are the health care infection control precautions for COVID-19 as it relates to environmental hygiene and hand hygiene?

CDC currently recommends a cautious approach to patients under investigation for COVID-19:
- Meticulous hand hygiene and environmental hygiene play a key role in these isolation precautions.
- Health care professionals should perform hand hygiene before and after all patient contact, contact with potentially infectious material, and before putting on and upon removal of personal protective equipment (PPE), including gloves. If hands are visibly soiled, use soap and water before returning to alcohol-based hand sanitizer.
• Health care facilities should ensure that hand hygiene supplies are readily available in every care location.

• Health care professionals must be cleared, trained and fit tested for respiratory protection device use. They must also be educated, trained and have practiced appropriate PPE use, including correct use to prevent contamination of skin, clothing or the environment, prior to caring for a patient with known or suspected cases of COVID-19.

• Health care professionals entering a patient’s room should use standard precautions, contact precautions, airborne precautions, and eye protection (e.g., goggles or a face shield).

• The Environmental Protection Agency (EPA) and the CDC recognize environmental surfaces as a vector for transmission of coronaviruses. The CDC has developed a hospital preparedness checklist which recommends that hospitals assess the effectiveness of environmental cleaning and consider providing refresher training on environmental hygiene best practices as outlined in the CDC Toolkit: Options for Evaluating Environmental Cleaning.

• The CDC strengthened recommendations to state that facilities must ensure that health care professionals receive job or task-specific education and training on transmission of infectious agents, including refresher training.

• Routine cleaning and disinfection are appropriate for COVID-19 in health care settings, including those patient-care areas in which aerosol-generating procedures are performed.

What hand hygiene products are effective against COVID-19?

Washing your hands often with soap and water is one of the best ways to avoid transmission of emerging pathogens. If soap and water aren’t available, use an alcohol-based hand sanitizer. The Food and Drug Administration regulates claims on both medicated, antimicrobial soaps and on alcohol-based hand sanitizers. Claims related to efficacy against viruses are not allowed on any medicated, antimicrobial soaps nor on any alcohol-based hand sanitizers in the U.S.

What disinfectants are effective against COVID-19?

The EPA recognizes environmental surfaces as a vector for transmission of coronaviruses. The EPA has developed the “Guidance to Registrants: Process for making claims against emerging viral pathogens not on EPA-registered disinfectant labels”. This document provides general guidance to disinfectant manufacturers and addresses public concerns on a process that can be used to identify effective disinfectants for use against emerging viral pathogens. It permits manufacturers to make limited claims about their product’s efficacy against such pathogens. The criteria required to make such claims is outlined in the table below.

The American Chemistry Council’s Center for Biocide Chemistries has compiled a list of products that have been pre-approved by the EPA for use against emerging enveloped viral pathogens and can be used during the COVID-19 outbreak. This product list is not exhaustive
but can be used by business owners, health professionals, and the public to identify products suitable for use against COVID-19.

### Guidance to Registrants: Process for making claims against emerging viral pathogens not on EPA-Registered disinfectant labels

An eligible product should meet both of the following criteria:

1. The product is an EPA-registered, hospital/health care or broad-spectrum disinfectant with directions for use on hard, porous or non-porous surfaces.*

2. The currently accepted product label from an EPA registered product should have disinfectant efficacy claims against at least one of the following viral pathogen groupings:

   a) A product should be approved by EPA to inactivate at least one large or one small non-enveloped virus to be eligible for use against an enveloped emerging viral pathogen.

   b) A product should be approved by EPA to inactivate at least one small, nonenveloped virus to be eligible for use against a large, non-enveloped emerging viral pathogen.

   c) A product should be approved by EPA to inactivate at least two small, nonenveloped viruses with each from a different viral family to be eligible for use against a small, non-enveloped emerging viral pathogen.


### What work is still ongoing?

- The U.S. is temporarily prohibiting entry to Chinese foreign nationals who visited China in the 14 days prior to their arrival to the United States. Restrictions also apply to U.S. citizens who have been in China’s Hubei province, the epicenter of the COVID-19 outbreak, in the two weeks prior to their return to the U.S. Upon their return, those citizens will be placed under a mandatory quarantine of up to 14 days. U.S. citizens returning from the rest of mainland China in the 14 days prior will undergo health screenings at selected ports of entry and be under self-monitored quarantine for 14 days.

- Identifying the origin of the virus, which could lead to recommended guidance related to transmission from animals.

- Disease progression among ill people and how they may have acquired the infection, including the frequency and likelihood of person-to-person transmission. Current knowledge about COVID-19 transmission is based on what is known about similar
coronaviruses. Based on this, it is believed that spread from person-to-person occurs most often among close contacts. Person-to-person spread is thought to occur mainly via respiratory droplets produced when an infected person coughs or sneezes, similar to how influenza and other respiratory pathogens spread. It is currently unclear if a person can get COVID-19 by touching a contaminated surface or object and then touching their own mouth, nose, or eyes. Typically, with most respiratory viruses, people are thought to be most contagious when they are most symptomatic (the sickest).

**For More Information**

[Centers for Disease Control and Prevention, Coronavirus Summary](https://www.cdc.gov/coronavirus/2019-ncov/index.html)

[Food and Drug Administration Landing Page](https://www.fda.gov/coronavirus)


[Occupational Safety and Health Administration, 2019 Novel Coronavirus](https://www.osha.gov/sga/ncov)