Healthcare Professionals: Frequently Asked Questions and Answers

https://www.cdc.gov/coronavirus/2019-ncov/hcp/faq.html

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See also the general COVID-19 Novel Coronavirus FAQ.

Q: What are the clinical features of COVID-19?

A: The clinical spectrum of COVID-19 ranges from mild disease with non-specific signs and symptoms of acute respiratory illness, to severe pneumonia with respiratory failure and septic shock. There have also been reports of asymptomatic infection with COVID-19. See also Interim Clinical Guidance for Management of Patients with Confirmed Coronavirus Disease 2019 (COVID-19).

Q: Who is at risk for COVID-19?

A: Currently, those at greatest risk of infection are persons who have had prolonged, unprotected close contact with a patient with symptomatic, confirmed COVID-19 and those who live in or have recently been to areas with sustained transmission.

Q: Who is at risk for severe disease from COVID-19?

The available data are currently insufficient to identify risk factors for severe clinical outcomes. From the limited data that are available for COVID-19 infected patients, and for data from related coronaviruses such as SARS-CoV and MERS-CoV, it is possible that older adults, and persons who have underlying chronic medical conditions, such as immunocompromising conditions, may be at risk for more severe outcomes. See also See also Interim Clinical Guidance for Management of Patients with Confirmed Coronavirus Disease 2019 (COVID-19).

Q: When is someone infectious?

A: The onset and duration of viral shedding and period of infectiousness for COVID-19 are not yet known. It is possible that SARS-CoV-2 RNA may be

detectable in the upper or lower respiratory tract for weeks after illness onset, similar to infection with MERS-CoV and SARS-CoV. However, detection of viral RNA does not necessarily mean that infectious virus is present. Asymptomatic infection with SARS-CoV-2 has been reported, but it is not yet known what role asymptomatic infection plays in transmission. Similarly, the role of pre-symptomatic transmission (infection detection during the incubation period prior to illness onset) is unknown. Existing literature regarding SARS-CoV-2 and other coronaviruses (e.g. MERS-CoV, SARS-CoV) suggest that the incubation period may range from 2–14 days.

Q: Which body fluids can spread infection?

A: Very limited data are available about detection of SARS-CoV-2 and infectious virus in clinical specimens. SARS-CoV-2 RNA has been detected from upper and lower respiratory tract specimens, and SARS-CoV-2 has been isolated from upper respiratory tract specimens and bronchoalveolar lavage fluid. SARS-CoV-2 RNA has been detected in blood and stool specimens, but whether infectious virus is present in extrapulmonary specimens is currently unknown. The duration of SARS-CoV-2 RNA detection in upper and lower respiratory tract specimens and in extrapulmonary specimens is not yet known but may be several weeks or longer, which has been observed in cases of MERS-CoV or SARS-CoV infection. While viable, infectious SARS-CoV has been isolated from respiratory, blood, urine, and stool specimens, in contrast – viable, infectious MERS-CoV has only been isolated from respiratory tract specimens. It is not yet known whether other non-respiratory body fluids from an infected person including vomit, urine, breast milk, or semen can contain viable, infectious SARS-CoV-2.

Q: Can people who recover from COVID-19 be infected again?

A: The immune response to COVID-19 is not yet understood. Patients with MERS-CoV infection are unlikely to be re-infected shortly after they recover, but it is not yet known whether similar immune protection will be observed for patients with COVID-19.

Q: How should healthcare personnel protect themselves when evaluating a patient who may have COVID-19?

A: Although the transmission dynamics have yet to be determined, CDC currently recommends a cautious approach to persons under investigation (PUI) for

COVID-19. Healthcare personnel evaluating PUI or providing care for patients with confirmed COVID-19 should use Standard Precautions, Contact Precautions, Airborne Precautions, and use eye protection (e.g., goggles or a face shield). See the Interim Infection Prevention and Control Recommendations for Patients with Known or Patients Under Investigation for Coronavirus Disease 2019 (COVID-19) in Healthcare Settings.

Q: Should any diagnostic or therapeutic interventions be withheld due to concerns about transmission of COVID-19?

A: Patients should receive any interventions they would normally receive as standard of care. Patients with suspected or confirmed COVID-19 should be asked to wear a surgical mask as soon as they are identified and be evaluated in a private room with the door closed, ideally an airborne infection isolation room, if available. Healthcare personnel entering the room should use Standard Precautions, Contact Precautions, Airborne Precautions, and use eye protection (e.g., goggles or a face shield).

Q: How do you test a patient for SARS-CoV-2, the virus that causes COVID-19?

A: See recommendations for reporting, testing, and specimen collection at Interim Guidance for Healthcare Professionals.

Q: Will existing respiratory virus panels, such as those manufactured by Biofire or Genmark, detect SARS-CoV-2, the virus that causes COVID-19?

A: No. These multi-pathogen molecular assays can detect a number of human respiratory viruses, including other coronaviruses that can cause acute respiratory illness, but they do not detect COVID-19.

Q: How is COVID-19 treated?

Not all patients with COVID-19 will require medical supportive care. Clinical management for hospitalized patients with COVID-19 is focused on supportive care of complications, including advanced organ support for respiratory failure, septic shock, and multi-organ failure. Empiric testing and treatment for other viral or bacterial etiologies may be warranted.

Corticosteroids are not routinely recommended for viral pneumonia or ARDS and should be avoided unless they are indicated for another reason (e.g., COPD exacerbation, refractory septic shock following Surviving Sepsis Campaign Guidelines).

There are currently no antiviral drugs licensed by the U.S. Food and Drug Administration (FDA) to treat COVID-19. Some *in-vitro* or *in-vivo* studies suggest potential therapeutic activity of some agents against related coronaviruses, but there are no available data from observational studies or randomized controlled trials in humans to support recommending any investigational therapeutics for patients with confirmed or suspected COVID-19 at this time. Remdesivir, an investigational antiviral drug, was reported to have in-vitro activity against COVID-19. A small number of patients with COVID-19 have received intravenous remdesivir for compassionate use outside of a clinical trial setting. A randomized placebo-controlled clinical trial of remdesivirexternal icon for treatment of hospitalized patients with COVID-19 respiratory disease has been implemented in China. A randomized open label trialexternal icon of combination lopinavir-ritonavir treatment has been also been conducted in patients with COVID-19 in China, but no results are available to date. trials of other potential therapeutics for COVID-19 are being planned. For information on specific clinical trials underway for treatment of patients with COVID-19 infection, see clinicaltrials.govexternal icon.

See Interim Clinical Guidance for Management of Patients with Confirmed Coronavirus Disease 2019 (COVID-19)

Q: Should post-exposure prophylaxis be used for people who may have been exposed to COVID-19?

A: There is currently no FDA-approved post-exposure prophylaxis for people who may have been exposed to COVID-19. For more information on movement restrictions, monitoring for symptoms, and evaluation after possible exposure to COVID-19 See Interim US Guidance for Risk Assessment and Public Health Management of Persons with Potential Coronavirus Disease 2019 (COVID-19) Exposure in Travel-associated or Community Settings and Interim U.S Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in a Healthcare Setting to Patients with Coronavirus Disease 2019 (COVID-19).

Q: Whom should healthcare providers notify if they suspect a patient has COVID-19?

A: Healthcare providers should consult with local or state health departments to determine whether patients meet criteria for a Persons Under Investigation (PUI). Providers should immediately notify infection control personnel at their facility if they suspect COVID-19 in a patient.

Q: Do patients with confirmed or suspected COVID-19 need to be admitted to the hospital?

A: Not all patients with COVID-19 require hospital admission. Patients whose clinical presentation warrants in-patient clinical management for supportive medical care should be admitted to the hospital under appropriate isolation precautions. Some patients with an initial mild clinical presentation may worsen in the second week of illness. The decision to monitor these patients in the inpatient or outpatient setting should be made on a case-by-case basis. This decision will depend not only on the clinical presentation, but also on the patient's ability to engage in monitoring, the ability for safe isolation at home, and the risk of transmission in the patient's home environment. For more information, see Interim Infection Prevention and Control Recommendations for Patients with Known or Patients Under Investigation for Coronavirus Disease 2019 (COVID-19) in a Healthcare Setting and Interim Guidance for Implementing Home Care of People Not Requiring Hospitalization for Coronavirus Disease 2019 (COVID-19).

Q: When can patients with confirmed COVID-19 be discharged from the hospital?

A: Patients can be discharged from the healthcare facility whenever clinically indicated. Isolation should be maintained at home if the patient returns home before the time period recommended for discontinuation of hospital Transmission-Based Precautions described below.

Decisions to discontinue Transmission-Based Precautions or in-home isolation can be made on a case-by-case basis in consultation with clinicians, infection prevention and control specialists, and public health based upon multiple factors, including disease severity, illness signs and symptoms, and results of laboratory testing for COVID-19 in respiratory specimens.

Criteria to discontinue Transmission-Based Precautions can be found in: Interim Considerations for Disposition of Hospitalized Patients with COVID-19

Q: What do I need to know if a patient with confirmed or suspected COVID-19 asks about having a pet or other animal in the home?

A: See COVID-19 and Animals.

Gloves

Q: What type of glove is recommended to care for suspected or confirmed COVID-19 patients in healthcare settings?

A: Nonsterile disposable patient examination gloves, which are used for routine patient care in healthcare settings, are appropriate for the care of patients with suspected or confirmed COVID-19.

Q: What standards should be considered when choosing gloves?

A. The American Society for Testing and Materials (ASTM)external icon has developed standards for patient examination gloves. Standard specifications for nitrile gloves, natural rubber gloves, and polychloroprene gloves indicate higher minimum tensile strength and elongation requirements compared to vinyl gloves. The ASTM has developed standards for patient examination gloves. Length requirements for patient exam gloves must be a minimum of 220mm-230mm depending on glove size and material type.

Q: Is double gloving necessary when caring for suspected or confirmed CoVID-19 patients in healthcare settings?

A. CDC Guidance does not recommend double gloves when providing care to suspected or confirmed 2019-COVID patients.

Q: Are extended length gloves necessary when caring for suspected or confirmed COVID-19 patients in healthcare settings?

A. According to CDC Guidance, extended length gloves are not necessary when providing care to suspected or confirmed COVID-19 patients. Extended length gloves can be used, but CDC is not specifically recommending them at this time.

Q: How I do put on (don) and take off (doff) my gloves?

A: Check to see if your facility has guidance on how to don and doff PPE. The procedure to don and doff should be tailored to the specific type of PPE that you have available at your facility. If your facility does not have specific guidance, the CDC has recommended sequences for donning and doffing of PPEpdf icon. It is important for HCP to perform hand hygiene after removing PPE. Hand hygiene should be performed by using an alcohol-based hand sanitizer that contains 60-95% alcohol or washing hands with soap and water for at least 20 seconds. If hands are visibly soiled, soap and water should be used before returning to alcohol-based hand sanitizer.

Respirators

Q: Should I wear a respirator in public?

A: CDC does not recommend the routine use of respirators outside of workplace settings (in the community). Most often, spread of respiratory viruses from person-to-person happens among close contacts (within 6 feet). CDC recommends everyday preventive actions to prevent the spread of respiratory viruses, such as avoiding people who are sick, avoiding touching your eyes or nose, and covering your cough or sneeze with a tissue. People who are sick should stay home and not go into crowded public places or visit people in hospitals. Workers who are sick should follow CDC guidelines and stay home when they are sick.

Q: What is a respirator?

A: A respirator is a personal protective device that is worn on the face or head and covers at least the nose and mouth. A respirator is used to reduce the wearer's risk of inhaling hazardous airborne particles (including infectious agents), gases or vapors. Respirators, including those intended for use in healthcare settings, are certified by the CDC/NIOSH.

Q: What is an N95 filtering facepiece respirator (FFR)?

A: An N95 FFR is a type of respirator which removes particles from the air that are breathed through it. These respirators filter out at least 95% of very small (0.3

micron) particles. N95 FFRs are capable of filtering out all types of particles, including bacteria and viruses.

Q: What makes N95 respirators different from facemasks (sometimes called a surgical mask)?

A: Infographic: Understanding the difference between surgical masks and N95 respiratorspdf icon

N95 respirators reduce the wearer's exposure to airborne particles, from small particle aerosols to large droplets. N95 respirators are tight-fitting respirators that filter out at least 95% of particles in the air, including large and small particles.

Not everyone is able to wear a respirator due to medical conditions that may be made worse when breathing through a respirator. Before using a respirator or getting fit-tested, workers must have a medical evaluation to make sure that they are able to wear a respirator safely.

Achieving an adequate seal to the face is essential. United States regulations require that workers undergo an annual fit test and conduct a user seal check each time the respirator is used. Workers must pass a fit test to confirm a proper seal before using a respirator in the workplace.

When properly fitted and worn, minimal leakage occurs around edges of the respirator when the user inhales. This means almost all of the air is directed through the filter media.

Unlike NIOSH-approved N95s, facemasks are loose-fitting and provide only barrier protection against droplets, including large respiratory particles. No fit testing or seal check is necessary with facemasks. Most facemasks do not effectively filter small particles from the air and do not prevent leakage around the edge of the mask when the user inhales.

The role of facemasks is for patient source control, to prevent contamination of the surrounding area when a person coughs or sneezes. Patients with confirmed or suspected COVID-19 should wear a facemask until they are isolated in a hospital or at home. The patient does not need to wear a facemask while isolated.

Q: What is a Surgical N95 respirator and who needs to wear it?

A: A surgical N95 (also referred as a medical respirator) is recommended only for use by healthcare personnel (HCP) who need protection from both airborne and fluid hazards (e.g., splashes, sprays). These respirators are not used or needed outside of healthcare settings. In times of shortage, only HCP who are working in a sterile field or who may be exposed to high velocity splashes, sprays, or splatters of blood or body fluids should wear these respirators, such as in operative or procedural settings. Most HCP caring for confirmed or suspected COVID-19 patients should not need to use surgical N95 respirators and can use standard N95 respirators.

If a surgical N95 is not available for use in operative or procedural settings, then an unvalved N95 respirator may be used with a faceshield to help block high velocity streams of blood and body fluids.

Q: My employees complain that Surgical N95 respirators are hot and uncomfortable – what can I do?

A: The requirements for surgical N95 respirators that make them resistant to high velocity streams of body fluids and help protect the sterile field can result in a design that has a higher breathing resistance (makes it more difficult to breath) than a typical N95 respirator. Also, surgical N95 respirators are designed without exhalation valves which are sometimes perceived as warmer inside the mask than typical N95 respirators. If you are receiving complaints, you may consider having employees who are not doing surgery, not working in a sterile field, or not potentially exposed to high velocity streams of body fluids wear a standard N95 with an exhalation valve.

Q: My N95 respirator has an exhalation valve, is that okay?

A: An N95 respirator with an exhalation valve does provide the same level of protection to the wearer as one that does not have a valve. The presence of an exhalation valve reduces exhalation resistance, which makes it easier to breathe (exhale). Some users feel that a respirator with an exhalation valve keeps the face cooler and reduces moisture build up inside the facepiece. However, respirators with exhalation valves should not be used in situations where a sterile field must be maintained (e.g., during an invasive procedure in an operating or procedure

room) because the exhalation valve allows unfiltered exhaled air to escape into the sterile field.

Q: How can I tell if a respirator is NIOSH-approved?

A: The NIOSH approval number and approval label are key to identifying NIOSH-approved respirators. The NIOSH approval label can be found on or within the packaging of the respirator or sometimes on the respirator itself. The required labeling of NIOSH-Approved N95 filtering facepiece respiratorspdf icon includes the NIOSH name, the approval number, filter designations, lot number, and model number to be printed on the respirator. You can verify that your respirator approvals are valid by checking the NIOSH Certified Equipment List (CEL).

Q: How do I know if my respirator is expired?

A: NIOSH does not require approved N95 filtering facepiece respirators (FFRs) be marked with an expiration date. If an FFR does not have an assigned expiration date, you should refer to the user instructions or seek guidance from the specific manufacturer on whether time and storage conditions (such as temperature or humidity) are expected to have an effect on the respirator's performance and if the respirators are nearing the end of their shelf life.

Q: What do I do with an expired respirator?

A: In times of increased demand and decreased supply, consideration can be made to use N95 respirators past their intended shelf life. However, the potential exists that the respirator will not perform to the requirements for which it was certified. Over time, components such as the strap and nose bridge may degrade, which can affect the quality of the fit and seal. Prior to use of N95 respirators, the HCP should inspect the respirator and perform a seal check. Additionally, expired respirators may potentially no longer meet the certification requirements set by NIOSH. For further guidance, visit *Release of Stockpiled N95 Filtering Facepiece Respirators Beyond the Manufacturer-Designated Shelf Life: Considerations for the COVID-19 Response*.

Q: What methods should healthcare facilities consider in order to avoid unintentional loss of PPE during COVID-19?

A: Monitoring PPE supply inventory and maintaining control over PPE supplies may help prevent unintentional product losses that may occur due to theft,

damage, or accidental loss. Inventory systems should be employed to track daily usage and identify areas of higher than expected use. This information can be used to implement additional conservation strategies tailored to specific patient care areas such as hospital units or outpatient facilities. Inventory tracking within a health system may also assist in confirming PPE deliveries and optimizing distribution of PPE supplies to specific facilities.