

American Society of Nephrology
Information for Screening and Management of COVID-19 in the Outpatient Dialysis Facility
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Please note: Due to rapidly changing information and guidance from the CDC, updates will be provided as new information becomes available.

ASN continues to receive questions about the management of patients with confirmed or suspected COVID-19. The Centers for Disease Control and Prevention has posted guidance for healthcare settings, [Interim Infection Prevention and Control Recommendations for Patients with Confirmed Coronavirus Disease 2019 \(COVID-19\) or Persons Under Investigation for COVID-19 in Healthcare Settings](#) . These FAQs were drafted for dialysis facilities based on current CDC guidance. Our intent is to relay information based on the current state of knowledge, but the global situation is evolving rapidly. The information below is current as of guidance posted March 2, 2020 and we will update these FAQs as more information becomes available. However, for the most up-to-date information, visit <https://www.cdc.gov/coronavirus/2019-ncov/index.html>.

When transmission in the community is identified, the local medical system's capacity to accept hemodialysis patients for treatment might be exceeded. Public health authorities should refer to pandemic plans to help determine alternatives, which might include the need to dialyze patients with COVID-19 in outpatient hemodialysis facilities.

If a hemodialysis facility is dialyzing more than one patient with suspected or confirmed COVID-19, consideration should be given to cohorting these patients and the healthcare personnel (HCP) caring for them together in the unit and/or on the same shift (e.g., consider the last shift of the day). This tiered approach will be different in each community and will be dependent on the resources available and the number of cases within the community. Facilities are encouraged to work with their local health authorities to develop plans for care.

What are symptoms of COVID-19?

Reports to date suggest that patients with COVID-19 can have a spectrum of symptoms, ranging from asymptomatic infection to fever, cough, shortness of breath to severe respiratory illness and respiratory distress with failure. CDC guidance suggests that symptoms may appear in as few as 2 days or as long as 14 days after exposure.

How is COVID-19 treated?

Currently, treatment is supportive. Potential antiviral candidates are undergoing testing and vaccine candidates are under development. However, it is unknown when these will be available.

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How is COVID-19 diagnosed?

Testing includes samples from the upper respiratory tract (i.e. nasopharyngeal and oropharyngeal swab) and lower respiratory tract (i.e., sputum). At this point in time, diagnostics are available at the CDC and some local health departments. Shared decision making between health departments and clinicians should occur when testing is considered. The “Person Under Investigation” (PUI) definition can be used to help inform testing decisions but reliance on the PUI definition should never impede or override clinical judgment. The PUI definition can change over time as more is learned so check here for the current definition.

<https://www.cdc.gov/coronavirus/2019-nCoV/hcp/clinical-criteria.html>

Dialysis patients who require testing generally will need to be referred to a facility with the following capabilities. Samples should be taken in an airborne isolation room or examination room with a door closed by a healthcare provider wearing appropriate PPE (gown, gloves, eye protection, and a fit-tested N-95 mask or higher-level respirator). Notify and discuss with the health department prior to referral to determine appropriate disposition. In addition, notify the receiving facility before referring a patient who meets PUI criteria.

Early Recognition of Individuals with Respiratory Infection

- Facilities should implement measures to identify patients with signs and symptoms of respiratory infections at or prior to arrival at the facility (i.e., before they enter the treatment area)
 - Have patients call ahead to report fever or respiratory symptoms so the facility staff can be prepared for their arrival or triage them to a more appropriate setting (e.g. hospital)
 - Medically stable patients might opt to wait in a personal vehicle or outside the healthcare facility where they can be contacted by mobile phone when it is their turn to be evaluated.
 - Patients with symptoms of a respiratory infection should put on a face mask at check-in
 - Ensure patients with symptoms of suspected COVID-19 are not allowed to wait among other patients seeking care. Identify a separate, well-ventilated space that allows waiting patients to be separated by 6 or more feet, with easy access to respiratory hygiene supplies.
 - Patients with respiratory symptoms should be brought back for evaluation as soon as possible in order to minimize time in waiting areas.

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- Facilities should implement sick leave policies that are non-punitive, flexible and consistent with public health policies that allow ill HCP to stay home. HCP should be reminded to not report to work when they are ill.

Patient Placement

- Facilities should maintain at least 6 feet of separation between symptomatic patients and other patients and stations during dialysis treatment. Ideally, they would be dialyzed in a separate room (if available) with the door closed.
- Hepatitis B isolation rooms used to dialyze hepatitis B surface antigen positive patients should only be used for patients suspected to have COVID-19 if: 1) the patient with suspected or confirmed COVID-19 is hepatitis B surface antigen positive or 2) the facility has no hepatitis B surface antigen positive patients who would require treatment in the isolation room.
- If a separate room is not available, the patient should wear a face mask and should be treated at a corner or end-of-row station, away from the main flow of traffic (if available). The patient should be separated by at least 6 feet from the nearest patient stations (in all directions).
- Limit individuals entering the room to only necessary clinical staff; limit time in the room.
- Maintain a list of all healthcare personnel entering the room.
- Use dedicated or disposable noncritical patient-care equipment (e.g., blood pressure cuffs). If equipment must be used for more than one patient, clean and disinfect such equipment before use on another patient according to manufacturer's instructions.
- Contact your local health department for additional instructions.

Facility Preparation

- Post signs at entrances with instructions to patients with fever or symptoms of respiratory infection to alert facility staff so appropriate precautions can be implemented.
 - Facilities should provide patients and HCPs with instructions (in appropriate languages) about hand hygiene, respiratory hygiene, and cough etiquette.
 - Instructions should include how to use facemasks or tissues to cover nose and mouth when coughing or sneezing, to dispose of tissues and contaminated items in waste receptacles, and how and when to perform hand hygiene
- Provide supplies for respiratory hygiene and cough etiquette, including 60%-95% alcohol-based hand sanitizer (ABHS), tissues, no touch receptacles for disposal, and facemasks at dialysis facility entrances, waiting rooms, patient check-ins, etc.

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Personal Protective Equipment

In general, HCP caring for patients with patients with undiagnosed respiratory infections should follow Standard, Contact, and Droplet Precautions with eye protection unless the suspected diagnosis requires Airborne Precautions (e.g., tuberculosis). This includes the use of:

- Isolation gown
 - The isolation gown should be worn over or instead of the laboratory coat that is normally worn by hemodialysis personnel. This is particularly important when accessing vascular access, connecting and disconnecting, helping the patient into and out of the station, and cleaning the station. The same isolation gown should not be used for the care of more than one patient.
- Gloves
- Facemask
- Eye protection (e.g., goggles, a disposable face shield that covers the front and sides of the face). Personal glasses and contact lenses are NOT considered adequate eye protection.

What do we do when COVID-19 is suspected or confirmed in a patient receiving hemodialysis at the facility?

- Notify the health department about the patient
- Follow the [Interim Infection Prevention and Control Recommendations for Patients with Confirmed Coronavirus Disease 2019 \(COVID-19\) or Persons Under Investigation for COVID-19 in Healthcare Settings](#). This includes use of Standard, Contact, and Airborne Precautions with eye protection.
- Per current CDC guidance, an airborne infection isolation room (AIIR) is not required for the evaluation or care of patients with suspected or confirmed COVID-19. If available, AIIRs should be prioritized for patients who are critically ill or receiving aerosol-generating procedures. As of March 3, 2020, the CDC recommends use of an N-95 mask, in addition to gown, gloves, and eye protection for the care of a COVID-19 patient. However, in communities with widespread transmission, this may not be possible. Use of surgical masks for the care of the COVID-19 patient in the dialysis center may be recommended in consultation with public health authorities.
- If the facility cannot fully implement these precautions, the patient should be transferred to another facility that is capable of implementation. Transport personnel and the receiving facility should be notified about the suspected diagnosis prior to transfer.

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- While awaiting transfer, patients should wear a surgical mask and be separated from other patients. If stable, patients can be asked to wait in their vehicles or return home. If that is not possible, then they should be placed in a separate room with the door closed. Contact with patient should be minimized. Appropriate PPE including isolation gown, gloves, eye protection (goggles or face shield), and fit-tested N-95 or higher respirator should be used by healthcare personnel when coming within 6 feet of patients with known or suspected COVID-19. If staff have not been fit-tested or a respirator is not available, a surgical mask (instead of a respirator) should be worn in addition to the other recommended PPE for necessary interactions with the patient.

Environmental Disinfection

- The room should undergo appropriate cleaning and surface disinfection after the appropriate time period has elapsed and before it is returned to routine use. If the time period for the facility is unknown, wait 207 minutes.
- Personnel who perform the terminal clean should wear a gown and gloves. A facemask and eye protection should be added if splashes or sprays during cleaning and disinfection activities are anticipated or otherwise required based on the selected cleaning products.
- Routine cleaning and disinfection procedures (e.g., using cleaners and water to pre-clean surfaces prior to applying an EPA-registered, hospital-grade disinfectant to frequently touched surfaces or objects for appropriate contact times as indicated on the product's label) are appropriate for COVID-19 in healthcare settings.
- Products with EPA-approved emerging viral pathogens claims are recommended for use against COVID-19. If there are no available EPA-registered products that have an approved emerging viral pathogen claim for COVID-19, products with label claims against human coronaviruses should be used according to label instructions.

What should the dialysis facility do now, to prepare for spread of COVID-19 in the United States?

- Post signs in the waiting area asking about symptoms and exposures. Examples can be found [here](#).
- Ask patients about their travel and exposure history.
- Identify your chain of command at the dialysis facility. Who will be notified if a patient is suspected of meeting PUI criteria? Know the phone number for local health authorities who will help you decide if a patient meets PUI criteria.

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- Assess available supplies of personal protective equipment, including surgical masks and eye protection. Eye protection can include a surgical mask with an eye shield or goggles. Remember that eye protection should be worn as a part of standard precautions whenever there is a risk of splashing or sprays of body fluid and should be readily available in the dialysis facility.
 - Reusable eye protection (e.g., goggles) must be cleaned and disinfected according to manufacturer's reprocessing instructions prior to re-use. Disposable eye protection should be discarded after use.
- Identify a room in the facility that could be used to isolate a PUI patient for further assessment and while awaiting transfer.
- Review plan with all staff in the facility.

How should we advise our patients to protect themselves against COVID-19 and other respiratory illnesses?

CDC advises that people follow these tips to help prevent respiratory illnesses:

- Receive influenza vaccine annually
- Wash your hands often with soap and water for at least 20 seconds. If soap and water are not available, use an alcohol-based hand sanitizer.
- Avoid touching your eyes, nose, and mouth with unwashed hands.
- Avoid close contact with people who are sick with respiratory symptoms.
- Stay home when you are sick.
- Cover your cough or sneeze with a tissue, then throw the tissue in the trash.
- Clean and disinfect frequently touched objects and surfaces.

What else do practicing nephrologists need to know?

On February 27, 2020, the CDC updated the COVID-19 PUI definition to include a person with fever with severe acute lower respiratory illness (e.g., pneumonia, ARDS) requiring hospitalization and without alternative explanatory diagnosis (e.g., influenza). Maintain a high index of suspicion and contact your health department or hospital's infection prevention team with concerns.