

MANAGING PEOPLE WITH **KIDNEY DISEASE** DURING **COVID-19**

CONSIDERATIONS FOR HEALTH PROVIDERS



INTRODUCTION

Individuals with chronic kidney disease (CKD) are three times more likely to develop severe symptoms of COVID-19 than others.¹ Individuals with CKD also have a higher prevalence of hypertension and diabetes, which are both independently associated with higher mortality with COVID-19.^{2,3}

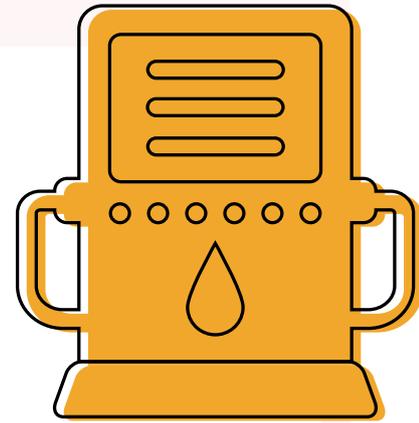
Individuals with stage V CKD (eGFR < 15 ml/min/1.73 m²) have end-stage renal disease (ESRD) and require dialysis. These persons are not only at higher risk if they acquire COVID-19 but they also need to be able to continue their dialysis treatment. It is therefore critical that providers are aware of recommendations on how to continue dialysis services for this population while keeping dialysis patients as safe as possible. It is critical to understand that patients on dialysis face new challenges in the management of their disease in the setting of COVID-19. These include reduced access to a variety of foods, including fresh fruits and vegetables, which may hinder their ability to adhere to a renal diet. Furthermore, transportation limitations resulting from the COVID-19 pandemic may limit their ability to reach dialysis centers.⁴

Given the high burden of CKD, with more than 50 million people affected in Latin America and the Caribbean, the impact of COVID-19 on individuals with CKD will be severe.⁵ Providers who care for individuals with CKD and centers that provide dialysis services need to continue services for this vulnerable population during the COVID-19 pandemic. The following are considerations for the management of people with CKD in the era of COVID-19.



MITIGATING THE RISK OF COVID-19 AT DIALYSIS CENTERS

Screening: patients with COVID-19 may be asymptomatic, or symptoms can appear 2-14 days after exposure. Dialysis patients who have one of the following criteria: symptoms of COVID-19, known exposure to COVID-19, or travel to an endemic area, should call ahead of their dialysis session so that providers anticipate their arrival and can prepare appropriately. Upon arrival, these patients should be treated as if they have COVID-19 until definitive testing can be obtained.



All patients should have the same screening questions asked at entry (symptoms of COVID-19, travel to endemic area, exposure to someone with known COVID-19). If community spread exists, then temperature monitoring at entry should be considered. Patients who are suspected of having COVID-19 must still receive their dialysis in a timely manner. As such, these patients should:

- Have a surgical face mask immediately placed and instruction on proper use provided;
- Be moved to a separate area away from the waiting room (or if stable, wait in the car); and
- Practice physical distancing from any others in the area.

Signage and posters outside of the center should emphasize the need that if anyone is exhibiting any symptoms of COVID-19 they need to make that known to the triage staff immediately.^{6,7}

Patient placement: When possible, people with suspected or confirmed COVID-19 should be kept in separate rooms from others. If a separate room is not possible, then the patient should be placed in a corner of the health center, away from the usual traffic and apart from others. Another option would be scheduling those with COVID-19 to receive dialysis at a given time of the day, such as at the end of the day.^{6,7} Patient placement: When possible, people with suspected or confirmed COVID-19 should be kept in separate rooms from others. If a separate room is not possible, then the patient should be placed in a corner of the health center, away from the usual traffic and apart from others. Another option would be scheduling those with COVID-19 to receive dialysis at a given time of the day, such as at the end of the day.^{6,7}

Personal protective equipment (PPE) for staff/providers: For contact with confirmed/suspected COVID-19: a face mask is recommended for all staff in contact with a case of suspected COVID-19 at the dialysis center. An N95 mask should be used if available. A face shield and gown are further requirements to keep the staff/provider safe from COVID-19. For contact with patients without COVID-19: surgical face mask and/or gloves should be worn.^{6,7}

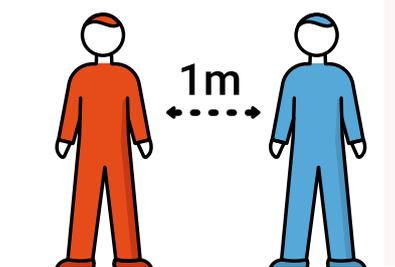
Environmental disinfection: routine disinfection practices should continue with thoroughly wiping down of all equipment, machines, and chairs. Personnel who conduct disinfection should use the same PPE as caregivers for patients infected with COVID-19.^{6,7}

Ensuring practicing providers and staff are COVID-free: this is critical, so that the dialysis center does not become a source for spreading coronavirus.

- If a provider or clinic staff tests positive for COVID-19, they can only return to work if: at least 3 days (72 hours) have passed since recovery, defined as resolution of fever without the use of fever-reducing medications and improvement in respiratory symptoms (e.g., cough, shortness of breath), and at least 10 days have passed since symptoms first appeared.
- If a provider or clinic staff has had “contact” with a person infected with COVID-19, then the following recommendations may be considered if feasible: self-quarantine for 14 days; when self-quarantine for all potential contacts is not possible, then providers/staff should check their temperature twice a day and self-isolate if any temperature or symptoms develop.

A significant contact is:

- Face-to-face contact with a probable or confirmed case within 1 meter and for more than 15 minutes;
- Direct physical contact with a probable or confirmed case;
- Direct care for a patient with probable or confirmed COVID-19 disease without using proper PPE;
- Other situations as indicated by local risk assessments.



HOME DIALYSIS PATIENTS

Some patients with CKD receive dialysis at home. These patients must be able to receive their dialysis supplies on a continual basis. Any supply shortages or disruptions in delivery could be catastrophic. Patients should try to have at least 2 weeks’ worth of supplies at a time to avoid disruptions. Community health workers can help with delivery of these supplies.

COUNSELING OF DIALYSIS PATIENTS TO STAY WELL DURING THE COVID-19 PANDEMIC⁸

Reassurance needs to be given to dialysis patients that several precautions are in place to ensure their safety at the time of the pandemic. The importance of continued access to dialysis for their survival is critical. In addition, the following guidance should be provided to all patients:

- Continue all medication as prescribed. To ensure no interruption in medication access, patients should obtain a 90-day supply of medication.
- Not miss any dialysis session.
- Maintain their restricted diet as much as possible. Frozen fruit and vegetables may help mitigate difficulties in obtaining fresh fruit and vegetables.

- If they are not feeling well, they need to contact their provider right away. This can be their primary care provider or their nephrologist if available. Some providers have telehealth services that allow the patient to discuss the problem with their provider and determine next best steps.
- Understand the signs and symptoms of COVID-19 and know that given their CKD they may get sicker than others.

To help keep CKD patients safe and well, provider should ensure:

- They can provide telehealth or phone-based services for patients. This allows patients to reach a provider to seek medical advice when needed. The phone number to reach a provider needs to be made readily available to patients.
- If there is a community health worker network available, this can be leveraged to deliver medication, supplies, and guidance to patients with CKD.

ADDRESSING THE MENTAL HEALTH NEEDS OF PEOPLE WITH CKD



Stress and anxiety imposed by the uncertainty and the social isolation of the COVID-19 may affect people with CKD. Social distancing regulations have kept people away from family and loved ones that often form a critical support group. It is important that providers continue to ask about and address mental health problems. Discussing the importance of emotional well-being opens the space for candid conversation.

REFERENCES

1. Henry BM, Lippi G. **Chronic kidney disease is associated with severe coronavirus disease 2019 (COVID-19) infection.** *International Urology and Nephrology*. 2020;1–2.
2. Clerkin Kevin J, Fried Justin A, Raikhelkar J, et al. **Coronavirus disease 2019 (COVID-19) and cardiovascular disease.** *Circulation*. 2020;141:1648–55.
3. Schiffrin EL, Flack JM, Ito S, Muntner P, Webb RC. **Hypertension and COVID-19.** *American Journal of Hypertension*. 2020;33(5):373–4.
4. World Health Organization. **Information note on COVID-19 and NCDs.** <https://www.who.int/who-documents-detail/covid-19-and-ncds>. Published 2020. Accessed May 15, 2020.
5. Bikbov B, Purcell CA, Levey AS, et al. **Global, regional, and national burden of chronic kidney disease, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017.** *The Lancet*. 2020;395(10225):709–33.
6. Centers for Disease Control. **Screening and triage at intake: screening dialysis patients for COVID-19.** https://www.cdc.gov/coronavirus/2019-ncov/hcp/dialysis/screening.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fhealthcare-facilities%2Fdialysis%2Fscreening.html#staff-considerations. Updated 2020-04-16.
7. Klinger AS, Silberzweig J. **Mitigating risk of COVID-19 in dialysis facilities.** *Clinical Journal of the American Society of Nephrology*. 2020;15(5):707.
8. Foundation NK. **COVID-19: Dialysis patient information page.** <https://www.kidney.org/coronavirus/dialysis-covid-19>. Updated 2020-03-27. Accessed May 15, 2020.
9. American Society of Nephrology. **Recommendations on the care of hospitalized patients with covid-19 and kidney failure requiring renal replacement therapy.** 2020. https://www.asn-online.org/g/blast/files/AKI_COVID-19_Recommendations_Document_03.21.2020.pdf. Accessed May 15, 2020.
10. American Heart Association. **Patients taking ACE-i and ARBs who contract COVID-19 should continue treatment, unless otherwise advised by their physician.** <https://newsroom.heart.org/news/patients-taking-ace-i-and-arbs-who-contract-covid-19-should-continue-treatment-unless-otherwise-advised-by-their-physician>. Accessed May 15, 2020.
11. World Health Organization. **COVID-19 and the use of angiotensin-converting enzyme inhibitors and receptor blockers.** <https://www.who.int/news-room/commentaries/detail/covid-19-and-the-use-of-angiotensin-converting-enzyme-inhibitors-and-receptor-blockers>. Accessed May 15, 2020.
12. Kroenke K, Spitzer RL, Williams JB. **The patient health questionnaire-2: validity of a two-item depression screener.** *Med Care*. 2003;41(11):1284–92.

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