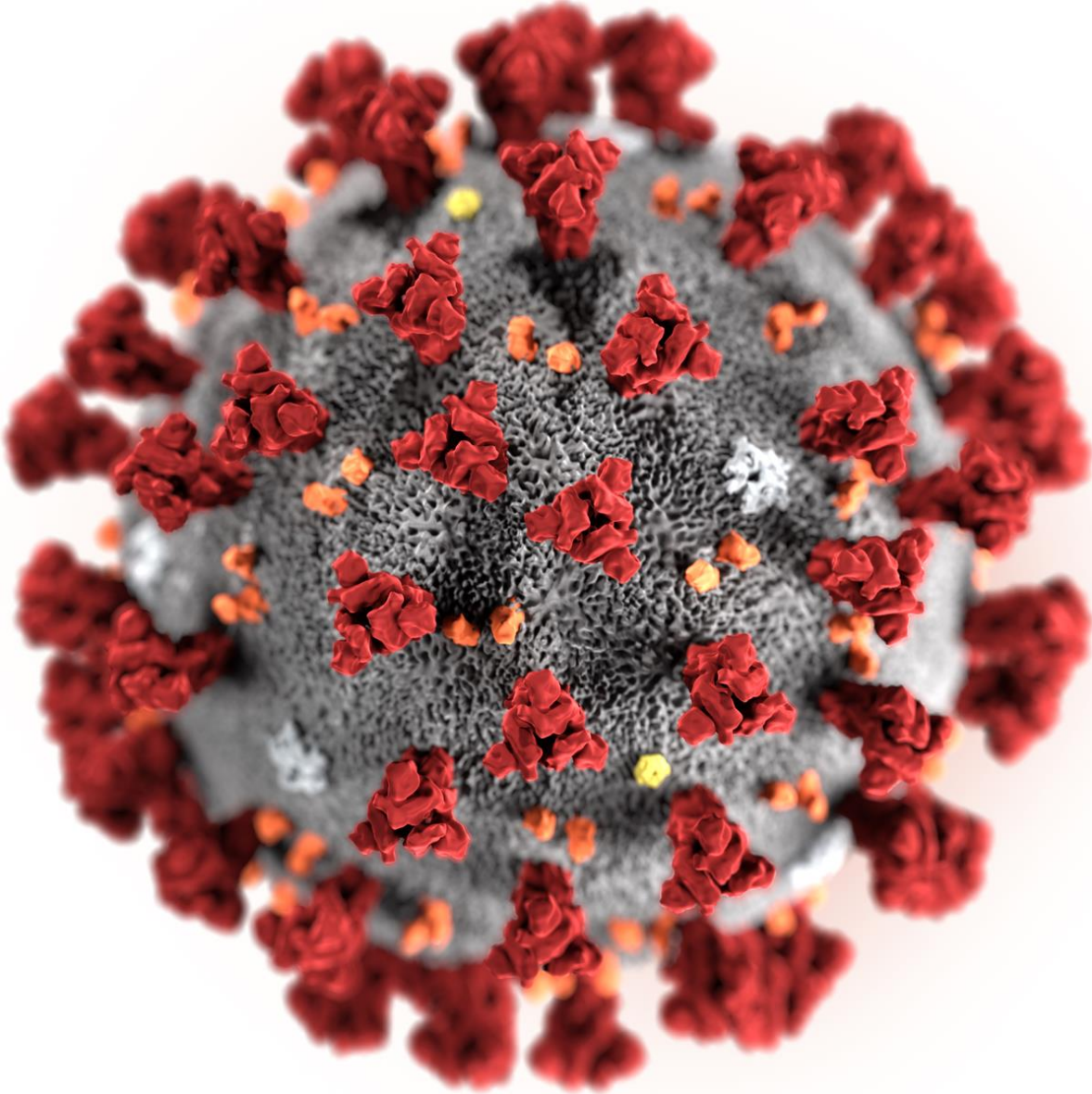


The COVID-19 Explosion, Lessons Learned from NY

This webinar will start at 4 pm Eastern. The slides and the webinar recording will be added to our COVID-19 resources available at www.dpcedcenter.org



Update on COVID-19 Dialysis Patients

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Update on COVID-19 Dialysis Patients

ALAN KLIGER, MD

*Clinical Professor
Yale School of Medicine*

*Co-Chair
ASN COVID-19 Response Team*



Robert Redfield, MD- CDC

- COVID-19 is probably about 3x as infectious as flu
- 25% of infected patients may have no symptoms
- Up to 60% of infected patients have no symptoms or very mild symptoms
- Patient who have symptoms may shed virus into their mouth and nose up to 48 hours before showing any symptoms
- Early case finding and contact mapping, isolation stops spread
- Social Distancing is most powerful method to mitigate outbreak

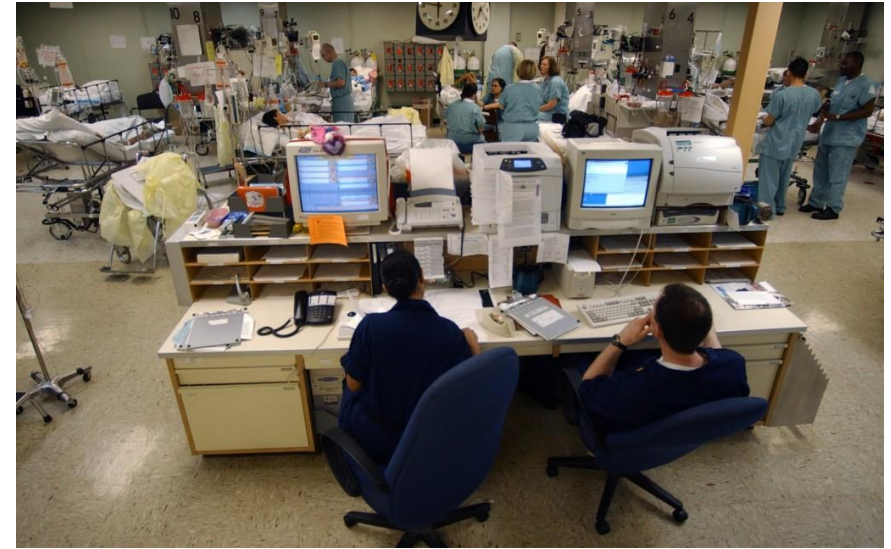


How Do People Catch Coronavirus?

- Most common: You touch a person or a surface that has virus on it, then touch your face. The virus gets into your mouth, nose or eyes and infects you
- Someone infected with coronavirus coughs or sneezes or even breathes on you, and the virus gets in through your mouth, nose or eyes.

Risk of Infection is Higher for Dialysis Patients

- Older age is associated with higher risk
- Diabetes, High Blood Pressure, Chronic Lung Disease, Chronic Kidney Disease Increase Risk
- In-Center hemodialysis patients cannot stay at home - - risk of contact is present for transportation and for in-center care



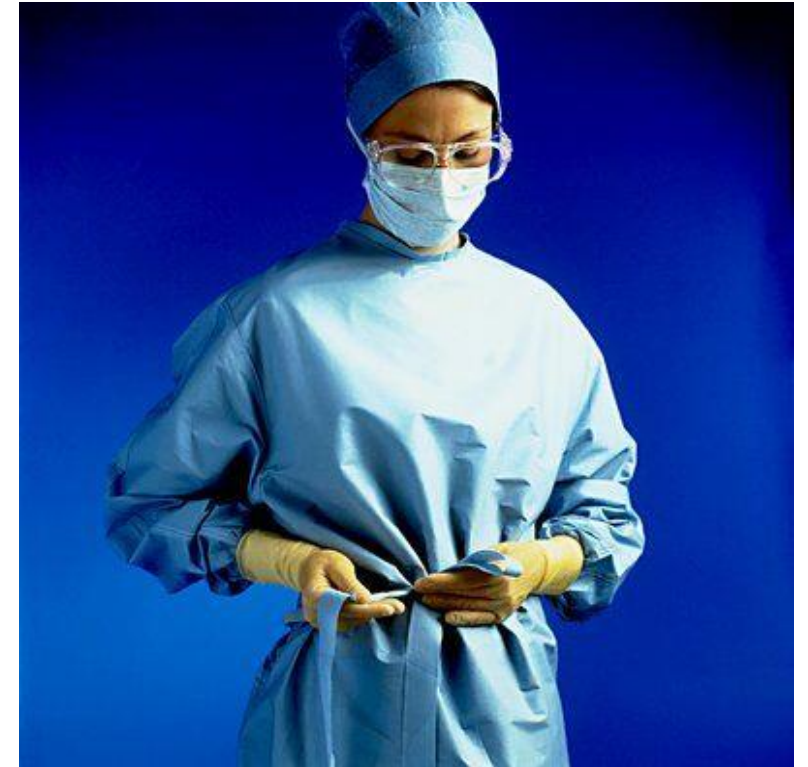
What Dialysis Facilities are Doing

- **Screening all patients every day**
 - Call ahead if you have temperature > 100, new cough, sore throat
 - Screening at entry to waiting room
- **Isolation of Patients with symptoms**
 - Separate shift or facility
 - Separate room in facility
 - Separate area of the dialysis room
- **Testing patients with symptoms**
- **Hospital care for patients requiring in-hospital care**



Personal Protective Equipment (PPE)

- All patients with cough, fever, sore throat wear face mask
- All staff caring for patients with infection wear face masks, gowns, eye protection
- Separation of infected patients by at least 6 feet
- Because dialysis facilities require many people close together, most facilities now require all patients and personnel to wear face masks



What Do Face Masks Do?

- **For patients who have infections**
 - Helps prevent spread of that infection to others
- **For healthy people near infected patients**
 - Helps prevent acquiring infection by droplets
- **For people not near sick patients – unclear if they are useful**
 - When a sick person coughs or sneezes, virus goes into the air in droplets and maybe aerosols. Virus can stay alive in the air up to 3 hours.
- **N95 Masks**
 - Best to protect. Must be individually fitted
 - Surgical masks probably just as effective



Can I catch Coronavirus from my dialysis machine?

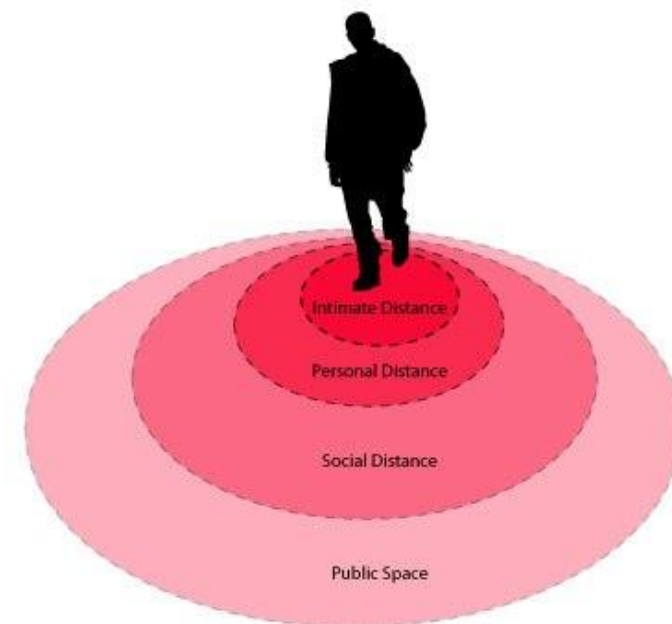
- Virus on surfaces is easily killed with routine cleansers
- Before you are put onto the machine, a technician thoroughly wipes all surfaces of your machine, your chair, your table, blood pressure cuff, stethoscope, with cleaning agent that kills the virus
- The standard cleaning that is routine does not need to be changed – it will kill any virus



How Do I protect Myself?

- **Avoid contact with infected people: “Social Distancing”**
- **Avoid transferring virus from your hands to your face**
 - Virus can live on surfaces for hours or days
- **Wash hands frequently**
- **Avoid touching your face (as much as you can...)**
- **Gloves - - when they work and when they don’t**
- **During a pandemic - - presume everyone you meet has the infection**
 - People with no symptoms may have early infection and can shed virus
 - After infection stay in isolate 72 hours after all symptoms end

Body Contact and Personal Space in US.





What are Dialysis Facilities and Staff Doing to Protect Our Patients During This COVID-19 Pandemic?

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Professor of Medicine

Division of Nephrology

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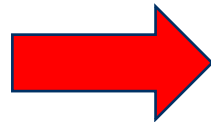
Bronx, New York

Reducing the spread of COVID19 in your hemodialysis facility: Targeting multiple areas

- ✓ Before your arrival
- ✓ Upon arrival
- ✓ Waiting room area
- ✓ Treatment area
- ✓ Staff training

Before your arrival to hemodialysis

- If you think you have been exposed to COVID-19
- If you have flu like symptoms
 - Fever
 - Cough
 - Difficulty breathing
 - Muscle aches
 - Worsening fatigue
 - Loss of appetite



- Call ahead if you have fever, cough, or shortness of breath
- This allows the hemodialysis unit to plan for your arrival and take infection prevention steps to keep you safe



Upon arrival to the hemodialysis unit



- If you have already arrived to the facility
 - Immediately inform staff of any fever or respiratory symptoms
 - Hemodialysis units are prepared to quickly identify and separate patients with respiratory symptoms 6 feet away from others
 - All patients are asked to wear a facemask
 - Provided to you at check-in and you will be asked to keep it on until you leave the facility



Stop the spread of germs that make you and others sick!

Cover your Cough



Minnesota Department of Health
717 St. Catherine Street
St. Paul, MN 55103
612-297-3414 or 1-877-476-3414
www.health.state.mn.us



APIC
American Public Health Association
1000 17th Street, NW
Washington, DC 20036

IN THE WAITING ROOM

- Posters, handouts and other education for patients about the importance of hand hygiene, respiratory hygiene, and cough etiquette
- Tissues, alcohol-based hand sanitizer, and trash cans with covers are be provided in the waiting area and treatment area
- Soap and water will continue to be available at all handwashing sinks and in the restrooms

IN THE WAITING ROOM



- Increased frequency of cleaning and disinfection with agents that are effective against COVID-19
 - Surfaces
 - Door handles
 - Arms of chairs
 - Light switches
 - Table tops



Essential visitors only



- Restrict visitors to protect patients
- Essential visitors will be screened
 - Temperature taken
 - Asked about symptoms of respiratory infection
- Asked to wear a mask upon entry to hemodialysis facility

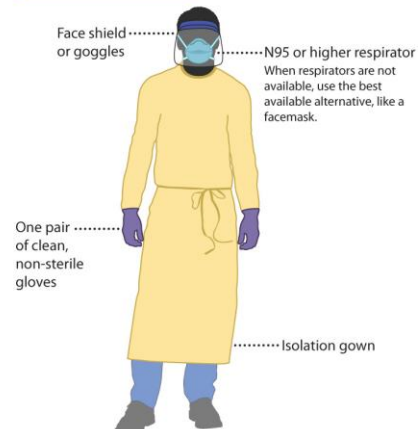
Hemodialysis equipment and chair

- Routine cleaning of all surfaces, supplies, or equipment located within each patient station
- All surfaces, supplies or equipment located within 6 feet of an ill patient are disinfected or discarded

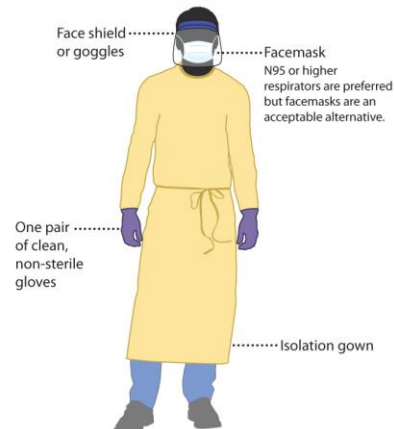


COVID-19 Personal Protective Equipment (PPE) for Healthcare Personnel

Preferred PPE – Use N95 or Higher Respirator



Acceptable Alternative PPE – Use Facemask



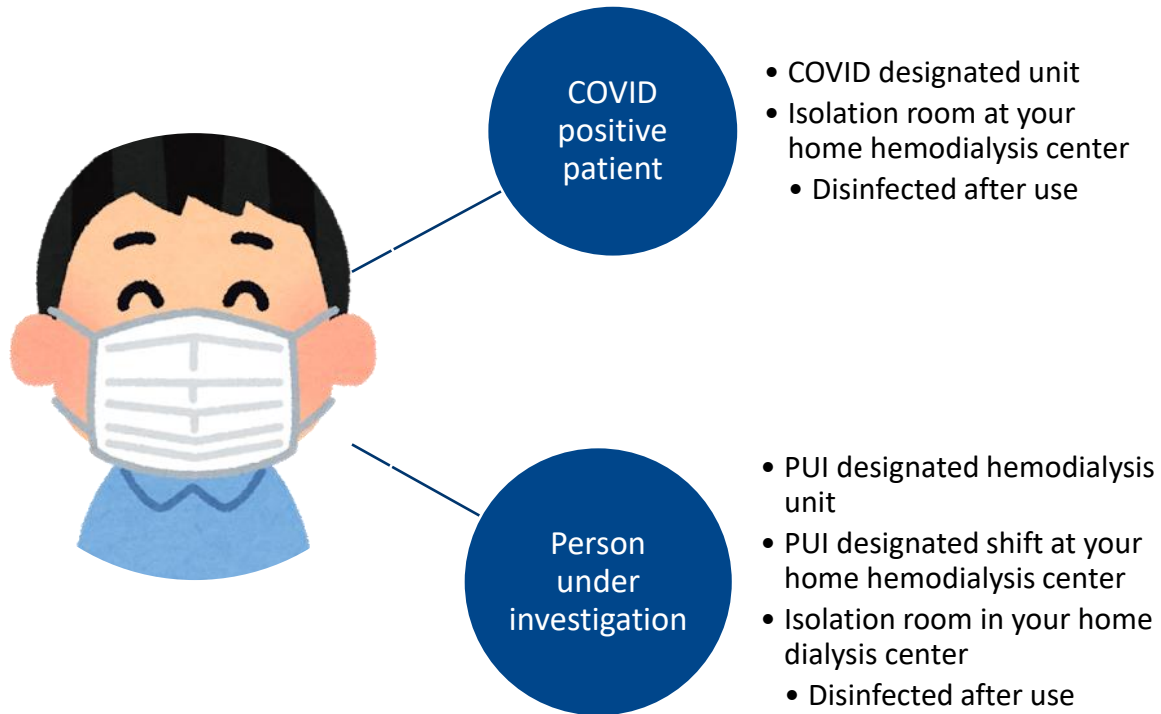
cdc.gov/COVID19

- Staff have been trained about proper use of personal protective equipment for COVID-19

Hemodialysis staff are prepared to quickly identify and separate patients with fever and/or respiratory symptoms

- Patients with respiratory symptoms will be treated in a separate area or at a corner or end-of-row station, 6 feet away from the main flow of traffic.
- This may affect your
 - chair location, treatment time or day
 - Where you receive hemodialysis

To protect the other patients and staff you may need to be temporarily transferred to another facility based on symptoms or if you are diagnosed with COVID-19



Special precautions are needed for transport to and from the hemodialysis unit to protect other patients and drivers

Once you have recovered you may return to your home hemodialysis facility

NYC Department of Health:
“7 days following onset of illness and 72 hours after being fever free (without medications) with resolving respiratory symptoms”

COVID-19 testing

- May be performed at local test sites
 - Ask your physician for assistance
 - Call your local department of health
- Many mildly ill patients who do not require hospitalization, and are suspected to have COVID19 infection, are not tested but are treated as such
- No effective treatment available at this time



Ensuring staff are healthy to protect patients

- Personnel are monitored for symptoms of respiratory infection
- Staff temperatures are taken when they report to work
- Staff who have fever, cough, or shortness of breath to stay home and not come to work



COVID suspected or confirmed patients at 2 outpatient hemodialysis units

Bronx HD Unit “A”

- Patient census: 145 patients
- COVID+
 - 5 patients sent to hospital
 - 3 discharged
 - 2 recovering in hospital
 - After discharge, sent to a COVID designated HD unit with appropriate transportation arranged
 - Received HD there for 14 days
 - Then sent back to home HD unit with mask
- Suspected COVID (PUI)
 - 5 patients
 - Sent to PUI designated unit where received HD on last shift

Bronx HD Unit “B”

- Patient census: 136 patients
- COVID+
 - 1 patient sent to hospital from her nursing home
 - Pt was in home HD facility 1 day prior and screened negative, wore a mask and received dialysis
 - This patient was admitted to the ICU for respiratory failure and died in the hospital
 - Staff and patients who came in direct contact with this patient were monitored for 2 weeks and none became COVID+
- Suspected COVID (PUI)
 - 3 patients
 - 1 sent to PUI designated unit for 2 weeks
 - 2 patients continued to receive HD at home unit in the isolation room*
 - There are no Hepatitis B patients in our unit and the isolation room was not being used

Personal experience of the management of suspected COVID (PUIs)

- Nursing staff
 - Low threshold for considering a patient PUI
 - Most PUI patients were low risk
 - Mild cough
 - Sore throat
 - Low grade fever
 - Diarrhea
 - Unable to perform rapid testing put us at a disadvantage
- Nursing staff call Medical Director directly
 - Initially there was anxiety about the novelty of the disease treatment pathway
 - Multiple phone calls for each case
 - With time, the process becomes more streamlined and organized
 - The dialysis organization's protocols and administrative staff have been extremely helpful, supportive and responsive
- Patient response
 - Most understood the need to protect all other patients and staff
 - Accepting transfer to another facility
 - 2 patients or family members of patients became upset and refused to relocate to a PUI unit temporarily
 - These patients were dialyzed in their home facility in the isolation room for 14 days

How has COVID affected the hemodialysis staff directly?

- Many hemodialysis staff have confirmed COVID+
 - 2 Facility administrators
 - 1 Physician assistant
 - 5 PCTs
- Symptomatic PUI
 - 2 Physicians (subsequently tested negative)
 - ~ 4-5 RNs or PCTs
- Many staff asymptomatic PUI
 - Quarantined for known COVID exposure or recent travel to endemic area
 - 1 Physician
 - 1 dietician
 - 1 social worker
 - ~5 RNs or PCTs

In the 5 boroughs of NYC
~ 40 Hemodialysis staff
have tested COVID-19
positive*

*One dialysis chain's experience for
March 2020



Supplies

- In the early part of the COVID-19 epidemic
 - Patients and staff were fearful of not having enough supplies
 - This led to loss of masks, tissue boxes and hand sanitizers from the facility
 - Monitoring and storing supplies to prevent excess loss
 - Having the AA distribute masks individually
- To the credit of our dialysis chain...
 - Early implementation of handing out masks for all patients, essential visitors, and non-clinical staff
 - Early use of full personal protective equipment for clinical staff
 - No PPE or supply shortages to date



What should we expect over next month?

- The peak of the COVID-19 pandemic in NYC is projected for ~April 9
- The projection for the course for other parts of the U.S. is later
 - Texas May 7
 - Virginia May 21
 - This will likely be dependent upon the success of self-quarantining measures
- More COVID-19 testing capability
 - Will help with patient and staff diagnosis
 - Improve relocation to the appropriate dialysis setting
 - Improve determination of when safe for staff to return to work
 - Improve ability to decide when a patient may return to home HD facility
- Increased use of telehealth visits for rounding during COVID-19 period
- Remote review of patient lab results and medication refills



COVID-19 Experience, In-center Hemodialysis Unit, Bronx

DEEP SHARMA, MBBS

Assistant Professor of Medicine

Division of Nephrology

Montefiore Medical Center and Albert Einstein College of Medicine

Bronx, New York



COVID-19 Experience, In-center Hemodialysis Unit, Bronx

- 235 patients
- 4 shifts each day for 6 days of the week
- 36 stations for dialysis with one isolation station for Hep B positive patients-have 6 Hep B patients, so could not be used for COVID positive patients
- 11 confirmed positive, 4 in the hospital and 7 discharged
- Among the discharged, 3 back to our unit and 3 getting treated at a designated COVID unit
- 6 patients that had some symptoms of COVID-19 (low grade fever and shortness of breath) but tested negative
- Fever has been the most common symptom followed by shortness of breath and cough. One patient had fever and vomiting due to COVID.



COVID-19 Experience, In-center Hemodialysis Unit, Bronx

- Primary goal over the last 2 weeks
 1. Try to avoid sending patients to the ED, unless hospitalization needed
 2. Try to separate COVID positive and patients with suspected infections from other patients to prevent spread
- All patients and staff are screened each day for temperature, symptoms and contact with positive cases
- Patients are asked to call prior to coming to the unit, if they have symptoms, so that contact can be minimized with other patients
- Once in the unit and if they have symptoms of illness, they are placed in a specially designated room to avoid contact with other patients.
- The nurse then calls their doctor to determine if the patient is sick enough to go to the hospital or if they can be treated in the unit
- All physicians are covering their own patients all days of the week
- Dialysis organization have been very supportive with excellent protocols in a timely manner



COVID-19 Experience, In-center Hemodialysis Unit, Bronx

- Early on a COVID dialysis unit was designated but it was located in another borough, so was inconvenient. It also filled up very quickly, so we had to improvise and make a plan to treat patients in our own unit
- We decreased treatment time for all patients and “created” a fifth shift of dialysis, one each day. On one of the days, we treated the suspected positive patients and on another day the confirmed positive
- This week, the dialysis organization was able to get expedited approval to open an upcoming unit. This dialysis unit will run 2 shifts a day, 6 days a week. It will allow us to resume a regular schedule for the other patients
- This new unit also has testing ability with a 24-48 hr turnaround time to allow us to know where patients need to go for their next treatment
- Dialysis staff needed to get trained to take swabs for COVID testing



COVID-19 Experience, In-center Hemodialysis Unit, Bronx

Challenges

- Inability to get test results in a timely manner, making it difficult to know when and where patients need to be placed.
- Transportation of confirmed positive patients. Need specialized transport vans and also need to transport patients to an unfamiliar location
- Staff illness. 2 nurses and 4 PCT are out with the illness. PPE has been key to avoid staff from getting ill and also help their anxiety. They have shown amazing dedication and bravery in all of this
- Space logistics of our unit-isolation station not available and no additional room/space to keep suspected positive patients.
- Patients have been very understanding and patient with the process
- Decisions made could cause patients to get admitted for non COVID-related illness
- Interest in home therapy among patients has increased



COVID-19 Experience, In-center Hemodialysis Unit, Bronx

Home Therapy

- Minimize visits and exposure to patients on home therapies, PD and HHD
- We have done monthly visits, lab draws and medication administration on the same day to avoid additional trips
- Used telemedicine to minimize exposure for patients and staff as much as possible

Questions?

Please type into the chat box if you have any questions.



Thank You for Attending Today!

**Please complete the
Feedback Form**

**Join us on May 28th for a
webinar with the American
Psychological Association**

