Guideline: Novel coronavirus (COVID-19) for Hemodialysis Outpatients
WORKING COPY Feb 13, 2021

Contents
1.0 Scope of Guideline .................................................................................................................. 1
2.0 Recommendations .................................................................................................................... 1
3.0 References ............................................................................................................................... 7
4.0 Sponsors .................................................................................................................................. 7

1.0 Scope of Guideline

Applicability: In centre and community hemodialysis (HD) units in BC.

This guideline provides recommendations on the screening, assessment and management of patients in outpatient hemodialysis units for COVID-19. It also provides guidance for protecting physicians and staff who provide hemodialysis care.

2.0 Recommendations


Recommendation #2: Allied health professionals (e.g., Dietitians, Social Workers, Pharmacists) are advised to limit their physical presence in the patient care area of an HD unit:

- Virtual or remote patient care (e.g., telephone, video, email, mail) is encouraged, whenever possible.
- Physical presence in the patient care area of an HD unit should be kept for specific patient interactions where virtual care is less optimal or not possible.
- While in the patient care area of an HD unit, a mask and eye protection is required. Clothes worn while working in the HD unit should be removed before leaving work and cleaned, before using again (refer to recommendation #1).

Recommendation #3: Implement the recommendations on Table 1 and Algorithm 1 for the screening, assessment and management of hemodialysis outpatients for COVID-19.
Table 1: Recommendations for the Screening, Assessment & Follow-Up of COVID-19

<table>
<thead>
<tr>
<th>Topic</th>
<th>Specifics</th>
<th>COVID-19</th>
</tr>
</thead>
</table>
| | | 2. If patient contacts the HD unit to report they are symptomatic:  
| | | • If feasible, suggest patient contact their primary care provider, local public health office or 8-1-1 for assessment and testing.  
| | | • If not feasible, follow the screening procedure below. |
| | | 3. BEFORE setting patient up at the HD station (every patient and every hemodialysis (HD) run), identify patients with risk factors for COVID-19 (refer to Algorithm 1). |
| | | 4. If patient has symptoms (including a fever >37.5°C) or any of the risk factors listed in Algorithm 1, provide patient with a mask, and notify MD or follow established HA protocol to identify infection control precautions and whether a swab is needed. For guidance on who to swab, refer to the BC Centre for Disease Control website at www.bccdc.ca/health-professionals/clinical-resources/covid-19-care/covid-19-testing/viral-testing). |
| | | 5. Refer to Algorithm 1 for recommended swabbing and isolation protocols. |
| | | 6. If a patient with symptoms tests negative and after 5 days:  
| | | • Symptoms have resolved, discontinue precautions (precautions for 5 days). A repeat swab is not needed.  
<p>| | | • Symptoms persist, repeat the COVID-19 swab. Assume COVID-19 positive until symptoms resolve or two negative swabs have been received. |
| | | 7. For patients in the waiting room, attempt to separate as much as possible. Where physically possible, patients might opt to wait in a personal vehicle or outside the facility where they can be contacted by phone when it is their turn to be seen. To the extent possible, minimize the time patients spending in the waiting room. |
| What to order? | COVID-19 screen. |
| | NOTE: If COVID-19 is suspected, please indicate this on the requisition even if the requisition also includes testing for flu/RSV. |
| What to screen? | Nasopharyngeal swab |
| | Utilize personal protective equipment while collecting the swab (gloves, gown, surgical/procedure mask and visor/goggles). |</p>
<table>
<thead>
<tr>
<th>Topic</th>
<th>Specifics</th>
<th>COVID-19 While Awaiting Results of Swab</th>
<th>COVID-19 Positive Patients</th>
</tr>
</thead>
</table>
| Prevention of disease transmission | Precautions & segregation | • Refer to Algorithm 1.  
• Contact local Infection Control Practitioner (ICP).  
• Assume COVID+ until proven otherwise (see right hand column for precautions).  
• Provide patients with the Provincial Patient Handout¹ and mask prior leaving the HD unit.  
• Contact family members to notify them of the testing & recommended precautions.  
• Encourage patient to arrange alternate forms of transportation to and from dialysis if they use HandyDART.  
• Tests results are generally available within 24-48 hrs (prior to next HD run). | • Refer to Algorithm 1.  
• Contact local ICP.  
• Implement droplet & contact precautions² as per Algorithm 2 including:  
  • Personal protective equipment (mask, eye protection, gown and gloves) is worn on each contact with the patient or their environment.  
  • Private room is preferred if available. If not possible, keep 2 metres between patients (minimum). Discharge cleaning is done after patient leaves the unit. Non-sporicidal cleaning products can be used.  
  • Implement toileting precautions as per Algorithm 2.  
  • Encourage patient to arrange alternate forms of transportation home (or to long term care) from dialysis if they use HandyDART.  
  • Public health will perform contact tracing on positive cases with involvement of workplace health for staff members deemed to be at risk as needed.  
  • Droplet, contact and toileting precautions are continued until deemed safe by ICP to return to usual care. |

**Note about patients in Community Dialysis Units (CDUs):** Most patients awaiting COVID-19 test results can be accommodated in their “home unit” using these guidelines. Some units, however, will not have physical capacity to manage the droplet, contact and toileting precautions. In these cases, alternative arrangements will need to be made for patients to be tested and to receive dialysis in an in-centre or another CDU that can accommodate the infection control requirements. This relocation will be in effect until deemed safe by ICP to return to usual care.

**Note about patients in CDUs:** Most patients who are COVID-19+ can be accommodated in their “home unit” using these guidelines. Some units, however, will not have physical capacity to manage droplet, contact and toileting precautions. In these cases, arrangements will need to be made for patients to receive dialysis in an in-centre unit or another CDU that can accommodate the infection control requirements. This relocation will be in effect until deemed safe by ICP to return to usual care.


<table>
<thead>
<tr>
<th>Topic</th>
<th>Specifics</th>
<th>COVID-19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevention of disease</td>
<td>Surface disinfection of HD station &amp; equipment post dialysis</td>
<td>Usual procedure:</td>
</tr>
</tbody>
</table>
| transmission cont’d       |                                                                           | • Refer to BCR guideline Prevention of Disease Transmission in HD Units³  
• In-centre units: Disinfection of the HD machine/supplies is usually done by dialysis-trained staff. Preparation for cleaning/disinfection of the HD station is also done by dialysis-trained staff but the actual cleaning/disinfection of the HD station is usually done by housekeeping staff.  
• Community-dialysis units: All cleaning/disinfection between patients is usually done by dialysis-trained staff.  
• Non-sporicidal cleaning products can be used for post-dialysis cleaning.                                                                                                                                                                                                 |
|                           |                                                                           | <br>                                                                                              | <br>                                                                                              | <br>                                                                                              |<br>                                                                                              |
| Housekeeping cleaning     | Additional Precaution Discharge Clean.                                    | • Refer to PICNet guideline "BC Best Practices for Environmental Cleaning for Prevention and Control of Infections in All Healthcare Settings and Programs⁴                                                                                                                      |
|                           |                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                   |

**Algorithms attached:**
1. Algorithm: Screening and Assessment of Hemodialysis Outpatients for COVID-19  
2. Algorithm: Infection Control Precautions for Patients who Test Positive for COVID-19 OR are Awaiting Test Results

³ [www.bcrenalagency.ca/resource-gallery/Documents/Prevention%20of%20Disease%20Transmission%20in%20HD%20Units.pdf](http://www.bcrenalagency.ca/resource-gallery/Documents/Prevention%20of%20Disease%20Transmission%20in%20HD%20Units.pdf) (pages 3 and 4).  
Algorithm 1: Screening and Assessment of HD Outpatients for COVID-19

Before setting patient up at the HD station, identify patients who:

Category #1: Require COVID-19 test & COVID-19+ protections for dialysis:
- Report flu/COVID-19 symptoms or have a fever (BCR screening questionnaire http://www.bcranetalency.ca/health-professionals/clinical-resources/novel-coronavirus-(covid-19))
- Were in close contact with known/suspected COVID-19 positive person within the past 14 days (BCR screening questionnaire).
- Are currently admitted to an inpatient/rehab unit (come to outpatient HD for HD) or recently discharged from an inpatient/rehab unit AND the unit is under investigation for ongoing COVID-19 transmission
- Recently discharged from an outpatient HD unit in Canada (including BC) AND the unit is under investigation for ongoing COVID-19 transmission
- Live in an assisted living/long-term care facility AND the facility has an active outbreak (refer to BCCDC website)

Category #2: May require COVID-19 test & COVID-19+ protections for dialysis (consult with public health on a case-by-case basis):
- Live in a community or geographic area in BC which is under extraordinary COVID-19 restrictions or instructions

Category #3: Require COVID-19+ protections for dialysis:
- Returned from travel within the past 14 days from outside BC
- Moved into assisted living/long-term care within the past 14 days

Patient arrives for HD

Category #1, #2 or #3 risk factors present?

Yes
No

Provide patient with mask
Notify MD (or follow established HA protocol)

Can COVID-19+ precautions be met on this unit? (refer to algorithm 2)

Yes
No

If symptoms present, advise patient to have swab for COVID-19 collected at alternative location

Arrange for dialysis at an HD unit which can accommodate the COVID-19+ precautions

Category #1 risk factors present?

Yes
No

Category #2 risk factors present?

Yes
No

Category #3 risk factors present?

Yes
No

Consult with public health

Swab for COVID-19 required?

Yes
No

Droplet/contact/toileting precautions required?

Yes
No

Usual care

Swab for COVID-19

Culture results?

Positive
Negative

COVID-19+
- Contact ICP
- Maintain infection control precautions until deemed safe by ICP to return to usual care

- Provide dialysis
- Keep on droplet/contact/toileting precautions for:
  - Minimum of 5 days or until symptoms resolve ( whichever is longer)
  - If close contact with COVID positive person, minimum of 14 days or until symptoms resolve (whichever is longer)
  - If remains admitted/living in an inpatient/rehab unit or AL/LTC facility with an active outbreak, consider repeating COVID-19 testing at regular intervals (consult with ICP, weekly is common)

Symptoms resolved?

Yes
No

- Provide dialysis
- Keep on droplet/contact/toileting precautions
- Repeat swab. Maintain precautions until receive 2 negative swabs
Algorithm 2: Infection Control Precautions for Patients who Test Positive for COVID-19 OR are Awaiting Test Results OR At Higher Risk

1. Pt tests positive for COVID-19 OR is awaiting test results OR meets >1 of the risk factors identified in algorithm #1

2. Implement contact & droplet precautions

3. Private room available?
   - Yes: Assign to private room
   - No: Assign space which allows for as much separation as possible from other patients – MINIMUM 2 meters between patients

4. Dedicated toilet or commode available?
   - Yes: Assign to dedicated toilet or commode
   - No: Bedpan washer/disinfector or macerator available?
     - Yes: Use (1) reusable bedpan/urinal & bedpan washer/disinfector OR (2) disposable bedpan/urinal & macerator
     - No: Consult ICP

5. Housekeeping available to clean washroom after each use?
   - Yes: Use (1) reusable bedpan/urinal & bedpan washer/disinfector OR (2) disposable bedpan/urinal & macerator
   - No: Shared patient washroom. Dialysis-trained staff to clean “high touch” areas using disinfectant wipes (1 wipe per area): toilet seat, flusher handle, toilet lid, sink (taps, spout and sink), light switch and door handle

NOTE: If these infection control requirements cannot be met, alternative arrangements will need to be made for patients to be tested and to receive dialysis in an in-centre or CDU that can accommodate the requirements. This relocation will be in effect until deemed safe by the ICP to return to usual care.
3.0  References


4.0  Sponsors

This BCPRA guideline/resource was developed to support equitable, best practice care for patients with chronic kidney disease living in BC. The guideline/resource promotes standardized practices and is intended to assist renal programs in providing care that is reflected in quality patient outcome measurements. Based on the best information available at the time of publication, this guideline/resource relies on evidence and avoids opinion-based statements where possible; refer to www.bcrenalagency.ca for the most recent version.

Developed by:
- A working group of multidisciplinary renal care providers and infection control practitioners/medical microbiologists from across BC (Mar 27, 2020, May 2020, Feb 2021)

Approved by:
- BC Clinical Guidelines Review Committee (Medical Health Officers of BC and PICNet) (March 16, 2020)
- BC Renal Hemodialysis Committee (March 18, 2020, May 13, 2020, January 13, 2021)
- BC Renal Medical Directors (May 28, 2020)

For information about the use and referencing of BCPRA provincial guidelines/resources, refer to www.bcrenal.ca.