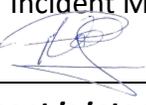


Guidance Document for COVID-19



Title: COVID-19 testing rationale and interpretation and patient accommodation	Version #: 2
Pre-Approved for IMT: Operations Approved: Incident Manager Signature: 	Approval Date: April 30, 2021
<i>This document is intended to provide guidance to staff/professional staff during COVID-19</i>	

1. PURPOSE

To clarify expectations during the COVID-19 pandemic, related to when a patient should be tested for COVID-19, how to interpret a test result when COVID-19 is not detected, how to accommodate patients in the ED and to the COVID-19 unit, how to cohort COVID-19 patients and what clinical and epidemiological information is documented at the time of admission and at the time of testing.

2. GUIDELINES (e.g. background, definitions, procedure, etc.)

Definitions

CIR: Weekly community COVID-19 incidence rate as reported by Thunder Bay District Health Unit (see <https://www.tbdhu.com/coviddata>).

High risk exposure: High risk exposure with a confirmed case of COVID-19 or exposure to a known COVID-19 outbreak

Immunocompromised Any of the following: currently receiving chemotherapy for cancer, within 1 year out from receiving hematopoietic stem cell or solid organ transplant, untreated HIV infection with CD4 T lymphocyte count <200, combined primary immunodeficiency disorder and receipt of prednisone >20mg/day for more than 14 days, other factor as determined by MRP)

Severity of COVID:

- Mild:** Fever, cough, sore throat, malaise, headache, muscle pain without SOB, dyspnea or abnormal chest imaging
- Moderate:** Evidence of lower respiratory disease by clinical assessment or imaging and a SpO₂ of ≥94% on room air at sea level
- Severe:** Respiratory frequency >30 breaths per minute, SpO₂ <94% on room air (or if patient has chronic hypoxia, a decrease from baseline of >3%, PaO₂/FiO₂ <300 mgHg, or lung infiltrates >50%)
- Critical:** Requires ICU level care, respiratory failure, septic shock, and or multiple organ dysfunction

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Symptoms of COVID: Includes fever (37.8 or greater), Cough (new or worsening), Sore throat, Rhinorrhea (runny nose), Nasal congestion, Loss of taste/smell, Nausea and or vomiting, Diarrhea, Abdominal pain, Chills, Conjunctivitis, Decreased or lack of appetite, Myalgia (muscle ache/pain), Malaise / Fatigue / Lethargy, Headache Muscle pain, SOB/dyspnea, Abnormal chest imaging, Respiratory failure, Septic shock, Multiple organ dysfunction, New or unusual exacerbation of chronic condition, Tachycardia, Low blood pressure for age, Hypoxia, Difficulty feeding in infants, Delirium, Increased number of falls, Acute functional decline

Testing Patients for COVID: Rationale, additional precaution requirements and negative test interpretation

1. Determine if the patient has ever been diagnosed with COVID-19 (i.e., test result in the EMR or OLIS indicating that COVID-19 was detected):

YES - If the patient has ever been diagnosed with COVID-19, determine if the initial positive test date was more than 20 days ago.

NO - If the initial positive test date was fewer than 20 days ago accommodate to the COVID-19 unit if it is open. The patient requires a minimum of droplet/contact (green) precautions. Do not re-test the patient for COVID-19. Any retesting will be specifically requested by IPAC or Public Health. STOP HERE

YES - If the initial positive date was >20 days ago, determine if the initial COVID-19 infection was deemed resolved by public health and/or infection prevention and control.

NO- If not deemed resolved / unable to determine because after hours, accommodate to the COVID-19 as applicable. The patient requires a minimum of droplet/contact (green) precautions. Do not re-test the patient for COVID-19. Any retesting will be specifically requested by IPAC or Public Health. STOP HERE

YES - If deemed resolved, determine if the patient has experienced a new exposure to a COVID-19 case or outbreak that was unrelated to their initial infection and /or if they are experiencing new or worsening COVID-19 symptoms that are unlikely to be associated with the initial infection.

YES – If there is a new risk of exposure or symptoms that could represent a new infection, accommodate to the COVID-19 unit as applicable. The patient requires a minimum of droplet/contact (green) precautions. Do not re-test the patient for COVID-19. Any retesting will be specifically requested by IPAC or Public Health. STOP HERE.

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NO- If there is no new risk of exposure and no symptoms that could represent a new infection, determine if the patient's onset of infection was more than 90 days ago.

YES- If the patient's onset of infection was more than 90 days ago, proceed to Step 3. Retesting of the patient may be appropriate as outlined in the subsequent steps. The patient is treated with additional precautions and accommodated in accordance with routine protocols.

NO- If the patient's onset of infection was within the past 90 days, do not re-test the patient for COVID-19. Any retesting will be specifically requested by IPAC or Public Health. The patient is treated with additional precautions and accommodated in accordance with routine protocols. STOP HERE

NO- If the patient has not been diagnosed with COVID-19, proceed to Step 2.

2. Determine if in the past 14 days, the patient has had a high risk exposure to a COVID-19 case or is associated with a COVID-19 outbreak.

YES – If the patient has had a high risk exposure or is associated with a COVID-19 outbreak, the patient requires a minimum of droplet/contact (green) precautions for 14 days. Test the patient prior to admission or if they meet any other special circumstance for COVID-19 testing unless you intend to use the test to rule out the need to use droplet/contact (green) precautions (e.g., pre-surgery). If tested within the 14 days since last exposure, a test that does not detect COVID-19 cannot be interpreted to mean the patient does not require a minimum of droplet/contact (green) precautions. Precautions are maintained until discontinued by IPAC. This will be for 14 days following their last exposure regardless of a negative test result collected within 14 days of their last exposure. STOP.

NO – proceed to Step 3.

3. Determine if in the past 14 days, the patient has travelled outside Canada.

YES – If the patient has travelled outside of Canada, the patient requires a minimum of droplet/contact (green) precautions for 14 days. Test the patient prior to admission or if they meet any other special circumstance for COVID-19 testing unless you intend to use the test to rule out the need to use droplet/contact (green) precautions (e.g., pre-surgery). If a tested within 14 days since return, a test that does not detect COVID-19 cannot be interpreted to mean the patient does not require a minimum of droplet/contact (green) precautions. Precautions are maintained until discontinued by IPAC. This will be for 14 days following their last exposure regardless of a negative test result collected within 14 days of their last exposure. STOP.

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NO – proceed to Step 4.

4. Determine if in the past 14 days, the patient has travelled outside of Northwestern Ontario but within Canada

YES – If the patient has travelled outside of NWO but within Canada, the patient requires a minimum of droplet/contact (green) precautions until discontinued by IPAC once 14 days has passed since their return to NWO. Test the patient prior to admission or if they meet any other special circumstance for COVID-19 testing unless you are only using the test to try and rule out the need to use droplet/contact (green) precautions (e.g., pre-surgery). If tested before precautions for COVID-19 are discontinued by IPAC, a test that does not detect COVID-19 cannot be interpreted to mean the patient does not require a minimum of droplet/contact (green) precautions. IPAC may request additional testing of this patient to aid in discontinuing precautions prior to 14 days. STOP.

NO – proceed to Step 5.

5. Determine if the patient has symptoms consistent with COVID-19

YES- If the patient has symptoms consistent with COVID-19, determine if the symptoms are new/or worsening or different from the individual's baseline health status/ not chronic /not reasonably attributed to another known cause or condition.

YES- If the patient has new or worsening symptoms that are not reasonably attributable to another known cause/condition, the patient requires a minimum of droplet/contact (green) precautions. Test the patient for COVID-19. Precautions are maintained until discontinued by IPAC.

NO – If the patient's symptoms are not new/ worsening or are reasonably attributable to another known cause/condition, follow normal protocols to initiate precautions. Only test the patient for COVID-19 if the physician deems it as necessary to rule out COVID-19 or rule in another cause. If they are tested for COVID-19, the patient requires a minimum of droplet/contact (green) precautions while awaiting the test result. If the results are available prior to the patient being admitted, the MRP can discontinue droplet/contact (green) precautions so long as these precautions are not required for another reason and the weekly community incidence rate of COVID-19 is <20 per 100,000. If the weekly community incidence rate of COVID-19 is ≥ 20 per 100,000, these precautions are maintained until discontinued by IPAC. This value is posted here:
<https://www.tbdhu.com/coviddata>

NO- If the patient does not have symptoms consistent with COVID-19 proceed to Step 6.

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6. If none of the above can be determined because the patient is unresponsive / uncooperative and the physician has reason to believe the patient may be at risk of being infected with or exposed to COVID-19, initiate a minimum of droplet/contact (green) precautions and test the patient for COVID-19. Additional precautions are maintained until discontinued by IPAC. If this is not the case, proceed to Step 7.
7. Review the list of Special Circumstances for COVID-19 testing in Table 1 to determine if the asymptomatic patient with no exposure or travel risk for COVID-19 meets any of these criteria for COVID-19 testing.

Asymptomatic patients of the Regional Cancer Centre Northwest	PCS-MD-267
Asymptomatic patients Northwest Regional Renal Program	PCS-MD-267
Scheduled for a surgical procedure including but not limited to ECT, upper GI endoscopy, bronchoscopy, or any accepted Aerosol Generating Medical Procedure (AGMP)	PCS-MD-267
Having a general or spinal anesthetic, or procedures completed using a local anesthetic where a patient is unable to wear a mask throughout the procedure	PCS-MD-267
Is being discharged and is a resident of long term care/ nursing home	PCS-MD-268
Is being discharged and is a resident of a congregate living setting or institution (i.e., retirement home, shelter, detention center or correctional facility, group home)	PCS-MD-268
Is being discharged and is a resident of a remote/ isolated/ rural indigenous community	PCS-MD-268
Is being discharged and is being transferred to St. Joseph's Care Group	PCS-MD-268
Is being admitted and their Primary residence is, or patient has come from: any hospital, long term care home, retirement home, homeless shelter, group home, supported living area, disability specific community, short term rehab centre, hospice or regional tertiary/quaternary centre	PCS-MD-271
Is admitted and scheduled to undergo a surgical procedure	PCS-MD-271
Is a renal dialysis patient and is being admitted to any area of the hospital	PCS-MD-271
Patient has a diagnosis of cancer being admitted to 1A-Oncology or 1B-Paediatrics	PCS-MD-271
Is a Labour and Delivery patient and the incidence of COVID-19 in the community is ≥ 20 per 100 000.	PCS-MD-271
*A minimum of droplet/ contact (green) precautions is not required if a patient is only being tested in relation to a special circumstance listed above. If the patient being tested had an exposure or travel history or was symptomatic, the steps outlined earlier in this guidance document identify the appropriate instructions for testing, additional precautions, and negative test interpretation. For example, the instructions outlined in Step 3 are followed for a patient admitted through Labour and Delivery if the patient had a high risk exposure and in this case, a minimum of droplet/contact (green) precautions would be necessary and could not be discontinued with a negative test result.	

8. If the patient is a newborn born to a mother who is a confirmed COVID-19 case at the time of birth, isolate under a minimum of droplet/contact (green) precautions. Test under MRP order within 24 hours of delivery. If in NICU, retest at 48 hours regardless of symptoms. If a newborn tests positive, consult a Paediatric Infectious Disease Specialist.
9. If a symptomatic mother has a pending COVID test at the time of discharge, follow up to ensure that baby is tested in timely manner if mother's test is positive. If bringing baby back for testing is impractical, obtain MRP order to test baby prior to discharge.
10. If a patient is currently an inpatient and develops new or worsening symptoms of COVID-19, isolate the patient under a minimum of droplet/contact (green) precautions and test for COVID-19 (PCS-MD-271)

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11. If a patient is currently an inpatient and experiences a new high risk exposure to COVID or is associated with a COVID-19 outbreak, isolate the patient under a minimum of droplet/contact (green) precautions and test for COVID-19 (PCS-MD-272). Maintain additional precautions until discontinued by IPAC.
12. For a diagrammatic summary of the decision making process of when to test for COVID-19, refer to IMT-approved document, "COVID-19: When to test and when to isolate".

Quick Reference guide: Clinical and epidemiological information and the rationale for COVID-19 testing, additional precaution requirements and negative test interpretation

Patient factors including COVID-19 infection history, COVID-19 exposure history and COVID-19 symptomology defines the rationale for testing a patient for COVID-19, whether a minimum of droplet/contact (green) precautions are needed for that patient prior to testing, how/when additional precautions can be discontinued and how to interpret a COVID-19 test result where COVID-19 is not detected. See Table 2 for a quick reference on how patient factors relate to testing rational, test interpretation and additional precautions.

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Table 2: Quick Reference guide for COVID-19 testing, additional precaution requirements and negative test interpretation

COVID-19 Infection History	COVID-19 Exposure History within the past 14 days	COVID-19 Symptomology	Minimum of droplet/ contact (green)	Rationale for testing	Negative test result
No positive test result within the past 90 days	No	New or worsening or different from baseline or not attributable to a chronic condition	Yes	Differential diagnosis	<ul style="list-style-type: none"> CIR <20 / 100,000: MRP can rule out COVID-19 and discontinue droplet/contact (green) while in ED unless precautions are required for another reason. CIR is ≥20 / 100,000: COVID-19 cannot be ruled out. Precautions are maintained until IPAC discontinues.
	No	Not new or worsening or different from baseline or attributable to a chronic condition	Yes	Differential diagnosis	<ul style="list-style-type: none"> CIR <20 / 100,000: MRP can rule out COVID-19 and discontinue droplet/contact (green) while in ED unless precautions are required for another reason. CIR ≥20 / 100,000: COVID-19 cannot be ruled out. Precautions are maintained until IPAC discontinues.
	No	No	No	See Table 1 (e.g. prior to an AGMP)	A minimum of droplet/contact (precautions) is not needed unless required for another reason.
	No high risk exposure but traveled outside of Northwestern Ontario (within Canada)	Yes or No	Yes	Upon admission (e.g., to determine if patient goes to COVID-19 unit)	COVID-19 cannot be ruled out. Precautions are maintained until IPAC discontinues. Under severe bed pressures, IPAC may retest on Day 7 post return to NWO to reassess the need for precautions.
	High risk exposure and/or traveled outside of Canada	Yes or No	Yes	Upon admission (e.g., to determine if patient goes to COVID-19 unit)	COVID-19 cannot be ruled out. Precautions are maintained until discontinued by IPAC (will not occur before 14 days following return)

CIR: Weekly community COVID-19 incidence rate

High risk exposure: High risk exposure with a confirmed case of COVID-19 or exposure to a known COVID-19 outbreak

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Table 2 (continued) Quick Reference guide for COVID-19 testing, additional precaution requirements and negative test interpretation

COVID-19 Infection History	COVID-19 Exposure History within the past 14 days	COVID-19 Symptomology	Minimum of droplet/ contact (green)	Rationale for testing	Negative test result
COVID-19 detected initially within the past 20 days.			Yes. Precautions are maintained until IPAC discontinues. If admitted, admit to the COVID-19 unit if appropriate.	Do not retest unless instructed to by IPAC or public health	
COVID-19 initially detected more than 20 but ≤90 days ago.	No	New or worsening or different from baseline or not attributable to a chronic condition or the previous COVID-10 infection	Yes. Precautions are maintained until IPAC discontinues. If admitted, admit to the COVID-19 unit if appropriate.		
	No	Not new or worsening or different from baseline or is attributable to a chronic condition or the previous COVID-10 infection	No - as long as the initial COVID-19 infection was resolved.		
	No	No	No		
	Within the past 14 days, no high risk exposure but traveled outside of Northwestern Ontario within or outside of Canada	Yes or no	Yes. Precautions are maintained until IPAC discontinues. If admitted, do not admit to the COVID-19 unit.		
	Within the past 14 days, high risk exposure that is unrelated to the initial infection.	Yes or no	Yes. Precautions are maintained until IPAC discontinues. If admitted, admit to the COVID-19 unit if appropriate.		

CIR: Weekly community COVID-19 incidence rate

High risk exposure: High risk exposure with a confirmed case of COVID-19 or exposure to a known COVID-19 outbreak

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Documenting relevant clinical and epidemiological information (admission, inpatient visit, COVID-19 testing)

1. Document answers to COVID-19 screening questions whenever the patient is screened
2. Any time a patient is tested for COVID-19, document the information identified in Table 3 on the requisition and ensure this information is consistent with other medical record documentation
3. If admitting a patient who is known to be infected with COVID-19, or who failed any of the COVID-19 screening questions, include in the admission notes the details identified in Table 4.
4. Complete the inpatient COVID-19 intervention twice daily for inpatients. If an inpatient experiences a high risk exposure, is exposed to an outbreak or has new or worsening symptoms, document the details in the medical record.

Information	Time period considered	Data entered
COVID-19 Case History:	At or around the time of testing	Select one of the following: <ul style="list-style-type: none"> • Unable to determine • No previous positive • Tested positive ≤90 days ago and initial infection unresolved • Tested positive ≤90 days ago and initial infection resolved • Initially tested positive only >90 days ago
COVID-19 Exposure History:	Within the past 14 days	Select one of the following <ul style="list-style-type: none"> • None • Unable to determine OR All that apply: <ul style="list-style-type: none"> • High risk contact – Date of last contact: dd/mmm/yyyy • Outbreak – Outbreak # • Travel outside of Canada – Last day outside NWO: dd/mmm/yyyy • Travel outside of NWO – Last day outside NWO: dd/mmm/yyyy
COVID-19 Symptomology:	At or around the time of testing	Select one of the following: <ul style="list-style-type: none"> • Unable to determine • Asymptomatic: Never symptomatic • Asymptomatic – Previous symptoms have resolved. Symptom resolution: dd/mmm/yyyy • Symptomatic - New/worsening/cannot be attributed to chronic or baseline condition. Symptom onset: dd/mmm/yyyy • Symptomatic - Not new/worsening/can be attributed to chronic or baseline condition. Symptom onset: dd/mmm/yyyy
Reason for testing:		Select one of the following: <ul style="list-style-type: none"> • Admission • Discharge • Prior to a procedure • Prevalence Testing: <i>Enter a description</i> • Outbreak Investigation • Diagnose disease • As directed by IPAC or Public Health

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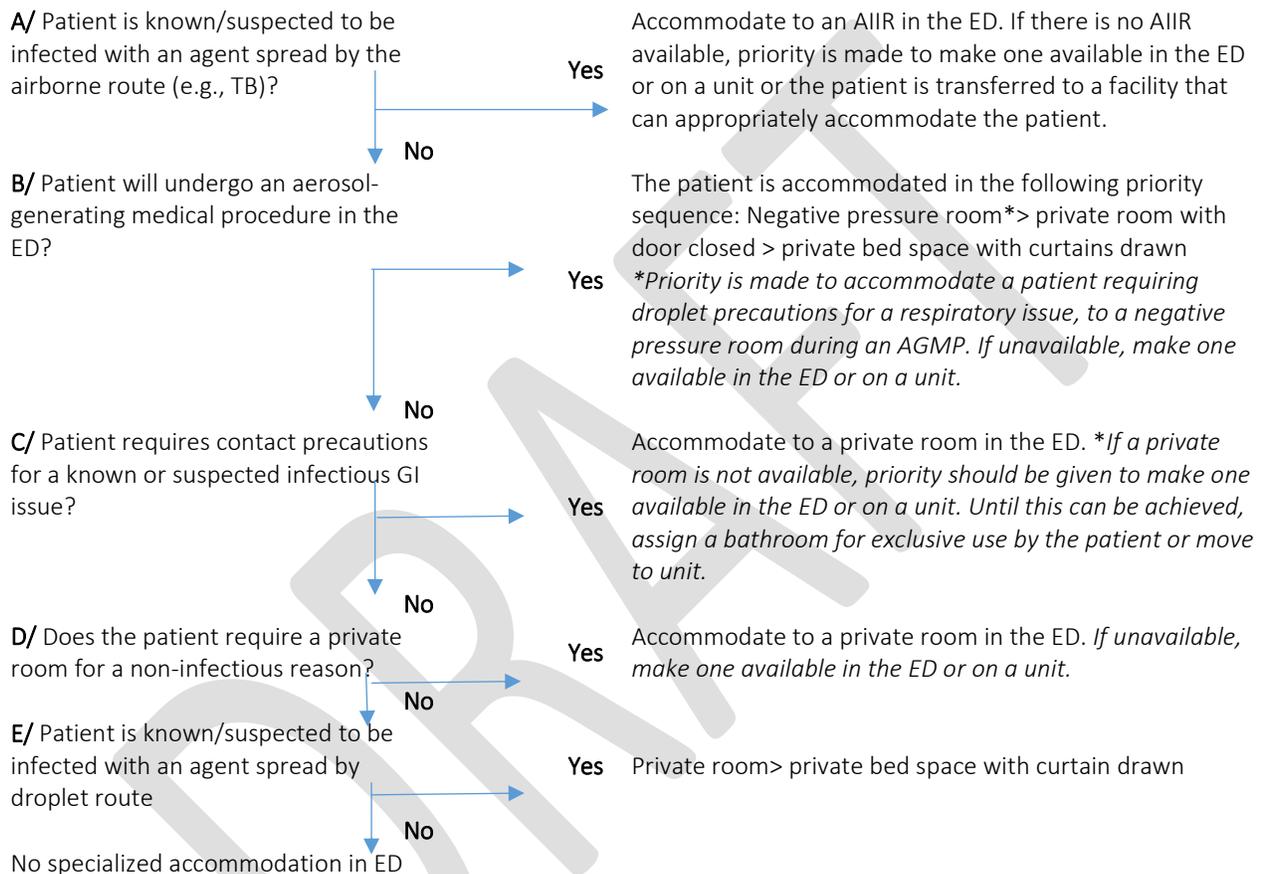


COVID-19 Case History:	<p>Has the patient ever previously tested positive?</p> <ul style="list-style-type: none"> • If so, when and was the initial infection deemed resolved by Public Health? If so, when?
COVID-19 Exposure History:	<p>In the past 14 days, has the patient experienced a high risk exposure to a COVID-19 case or been associated with COVID-19 outbreak?</p> <ul style="list-style-type: none"> • If so, when and what was the nature of the exposure • If they have and were previously positive and cleared, is it unrelated to the previous infection? <p>In the past 14 days, has the patient traveled outside of NWO?</p> <ul style="list-style-type: none"> • If so, when did they return and did they travel outside of Canada or to a location where COVID-19 is prevalent?
COVID-19 Symptomology:	<p>In the past 20 days, has the patient experienced new or worsening symptoms of COVID-19?</p> <ul style="list-style-type: none"> • What are the symptoms, when did they start (and resolve if resolved) and can any be reasonably attributed to a chronic/ baseline condition or diagnosed condition? • If they were previously positive and cleared, are symptoms unlikely to be related to the previous infection?

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1. Ensure the patient wears a mask unless they are exempt from wearing one.
2. Ensure the patient socially distances from all other patients (i.e., maintain >2m distance).
3. Follow Algorithm 1 to accommodate the patient in the ED prior to transfer to another service or unit.

Algorithm 1 – Accommodating Patients in the ED



Determining if a patient can be admitted to the COVID-19 unit

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The following applies to all patients, with the exception of those who require specialized accommodations that cannot be provided on the unit (e.g., requires an airborne infection isolation room and one is not available on the COVID unit, requires NICU, ICU, PICU, etc.):

A patient is admitted to the COVID-19 unit only if the COVID-19 unit is open and one of the following are true about the patient.

Initially tested positive for COVID-19 within the past 20 days and their case has not been deemed as resolved by Infection Prevention and Control

OR

Initially tested positive for COVID-19 more than 20 days ago but within the past 90 days, their case has been resolved by either IPAC and/or Public Health, but has experienced a new exposure to a COVID-19 case or outbreak that was unrelated to their initial infection

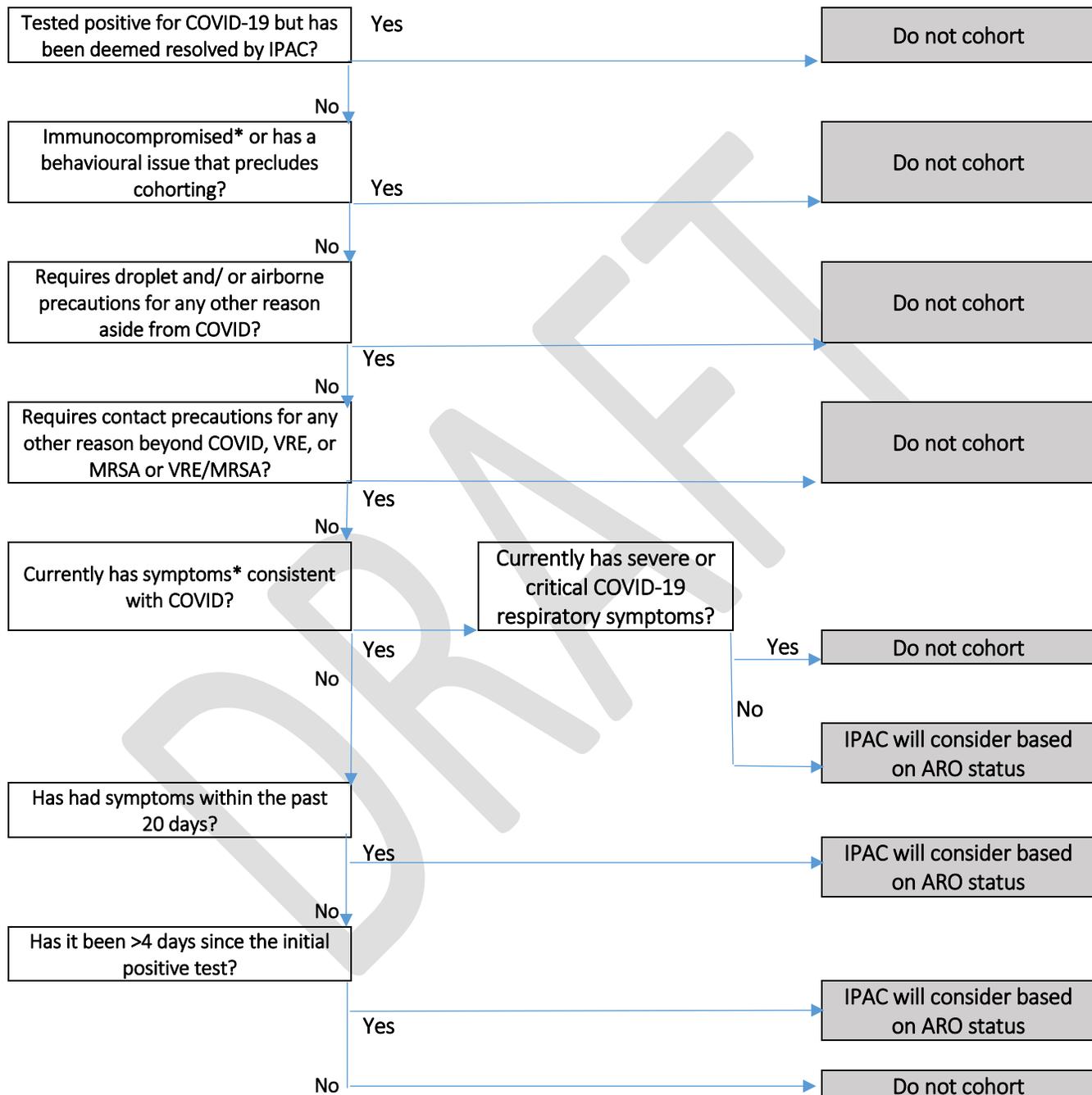
OR

Initially tested positive for COVID-19 more than 20 days ago but within the past 90 days, their case has been resolved by either IPAC and/or Public Health, but are experiencing new or worsening COVID-19 symptoms that are unlikely to be associated with the initial infection.

***If a patient meets the above criteria but the physician working the COVID-19 opposes accepting the admission, admission to the COVID-19 unit proceeds and is maintained until reviewed by IPAC and IMT.**

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Algorithm 2: Cohorting Active COVID-19 Cases with other Active COVID-19 Cases



3. RELATED POLICIES, PRACTICES AND/OR LEGISLATIONS

Guidance Document for COVID-19



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Thunder Bay Regional
Health Sciences
Centre

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