Current criteria for testing vary by location of care and are subject to frequent change. Ongoing limitations in testing supplies require prioritization of based on risk for severe COVID-19 with complications and potential for transmission to vulnerable populations.

Preliminary data suggest high sensitivity of the COVID-19 PCR from a nasopharyngeal swab. In most cases, a single negative test will be sufficient to rule out COVID-19. In cases of high clinical suspicion and an initial negative test, a second COVID-19 PCR should be performed. Please see the COVID-19 de-escalation document for guidance on discontinuing Special Pathogens Precautions.

Testing guidance can be found below for the following patient populations:
   A. Hospitalized patients
   B. Emergency department
   C. University of Michigan employees
   D. Ambulatory patients
   E. Asymptomatic special populations
A. **INDICATIONS FOR COVID-19 TESTING IN HOSPITALIZED PATIENTS** (updated 4/7/20)

Testing should be considered in any hospitalized patient with any one of the following:
- unexplained fever
- new respiratory symptoms (cough, SOB, worsened hypoxia or oxygen requirement)

B. **INDICATIONS FOR COVID-19 TESTING FOR PATIENTS IN THE EMERGENCY DEPARTMENT** (updated 4/11/20)

Patients who qualify for testing through this algorithm will have a single nasopharyngeal swab obtained and sent for COVID-19 PCR. Flu/RSV PCR or RPAN can also be sent per provider discretion.

Patients must meet criteria 1 and 2 to qualify for COVID-19 testing:
1. Patients need to have at least 2 of the following symptoms in order to qualify for testing:
   - Fever (T >100.4°F or 38°C) or chills
   - New cough
   - New shortness of breath or hypoxia
   - New URI symptoms (rhinorrhea, nasal congestion, sore throat)
   - Myalgias
   - New anosmia
   - New diarrhea
2. At least one of the following risk factors for COVID-19 infection or severe outcomes or risk of transmission:
   - Plan for admission to hospital
   - Clinical factors:
     - Age <2 months or ≥65 years
     - Compromised immune system (HIV, organ or HSC transplant, immunosuppressive therapy)
     - Hemodialysis patients
   - Sociodemographic factors:
     - Resident of nursing home, long-term care facility, or other congregate living settings
     - Homeless/inability to self-isolate/no access to outpatient testing
     - Household member of someone who is at clinical risk (e.g., immunocompromised, age ≥65)
     - Health care worker/household contact of a healthcare worker
     - First responder
     - Close contact with a patient who has tested positive for COVID-19*

*Close contact is defined by CDC as:
1. within six feet of a COVID-19 case for a prolonged period of time; close contact can occur while caring for, living with, or sharing a healthcare waiting area or room of a COVID-19 case
2. having direct contact with infectious secretions of a COVID-19 case (e.g., being coughed on)
C. INDICATIONS FOR COVID-19 TESTING THROUGH OCCUPATIONAL HEALTH SERVICES (updated 4/12/20)

The diagnosis of COVID-19 requires a combination of clinical symptoms, epidemiologic features, and supportive laboratory findings. The following outlines the current process for testing at OHS.

Patients who qualify for testing through this algorithm will have a single nasopharyngeal swab obtained and sent for COVID-19 PCR.

To MEET criteria for testing – must have 2 symptoms and be a University of Michigan employee.

1. Patients need to have at least 2 of the following symptoms in order to qualify for testing:
   - Fever (T >100°F or 38°C) or chills
   - New cough
   - New shortness of breath
   - New URI symptoms (runny nose, nasal congestion, sore throat)
   - Myalgias/muscle aches
   - New loss of sense of smell/anosmia
   - Diarrhea
D. INDICATIONS FOR COVID-19 TESTING FOR AMBULATORY PATIENTS (updated 4/20/20)

This document supersedes prior documents regarding diagnostic criteria in the ambulatory setting. This guidance is based on significant current testing supply constraints. These criteria are subject to change based on changes to our supply chain.

The diagnosis of COVID-19 requires a combination of clinical symptoms, epidemiologic features, and supportive laboratory findings. The following outlines the current process for testing ambulatory patients at Michigan.

Patients who qualify for testing through this algorithm will have a single nasopharyngeal swab obtained and sent for COVID-19 PCR. Immunocompromised patients may have a single swab sent for RPAN followed by COVID-19 PCR.

1. Patients need to have at least 2 of the following symptoms in order to qualify for testing:
   - Fever (T >100.4°F or 38°C) or chills
   - New cough
   - New shortness of breath or hypoxia
   - New URI symptoms (rhinorrhea, nasal congestion, sore throat)
   - Myalgias
   - New anosmia
   - New diarrhea

2. At least one of the following risk factors for COVID-19 severe outcomes or outbreaks:
   - **Clinical factors:**
     - Age <2 months or ≥65 years
     - Compromised immune system (HIV, organ or HSC transplant, immunosuppressive therapy)
     - Hemodialysis patients
   - **Sociodemographic factors:**
     - Resident of nursing home, long-term care facility, or other congregate living settings
     - Homeless/inability to self-isolate/no access to outpatient testing
     - Household member of someone who is at clinical risk (e.g., immunocompromised, age ≥65)
     - Health care worker/household contact of a healthcare worker
     - First responder
     - Close contact with a patient who has tested positive for COVID-19*

*Close contact is defined by CDC as:
   - within six feet of a COVID-19 case for a prolonged period of time; close contact can occur while caring for, living with, or sharing a healthcare waiting area or room of a COVID-19 case
   - having direct contact with infectious secretions of a COVID-19 case (e.g., being coughed on)

Younger, healthy individuals with mild illness do not need to be tested. They should stay home for 7 days or 72 hours after symptom resolution, whichever is longer. Additionally, testing is not recommended in persons who are asymptomatic. A negative test result does not rule out an infection.
E. **INDICATIONS FOR COVID-19 SCREENING OF ASYMPTOMATIC PATIENTS** (updated 4/12/20)

Testing asymptomatic patients for COVID-19 is generally **not recommended**. The following allowable exceptions are listed below:

1. Adult and pediatric patients with planned hematopoietic stem cell transplantation conditioning therapy within the following 48 hours
2. Adult and pediatric patients with planned imminent solid organ transplantation
3. Adult and pediatric patients in need of non-emergent surgery that is deemed intermediate risk for potential intraoperative aerosolization*
4. Laboring pregnant women
5. Neonates born to COVID positive mothers (see newborn testing guidelines)
6. Adult patients who live in a residential facility and are being admitted

*Surgeries/procedures considered intermediate risk for aerosol generation include: intrathoracic surgery, intra-abdominal surgery, and lower GI endoscopy (see pre-op testing guidelines)