



COVID-19

Patient and Healthcare Worker Testing Guidelines

August 11, 2020

The Children’s Minnesota COVID-19 patient and healthcare worker testing guidelines were developed to provide a cohesive organizational approach with defined priorities for COVID-19 testing. These guidelines apply to patients and staff within Children’s Minnesota and Children’s Health Network patients.

1. Patients

Diagnostic testing for COVID-19 is recommended for:

- a. Symptomatic patients
- b. Asymptomatic patients about to undergo a surgical procedure or medical intervention
- c. Patients with a known exposure to a confirmed COVID-19-positive case
- d. Patients undergoing aerosol-generating procedures (AGPs)
- e. Patients in certain risk categories, such as:
 - i. those admitted to or living in congregate living settings
 - ii. medical specialty patients such as heme/onc patients
 - iii. newborns of mothers with confirmed COVID-19
- f. Admissions outlined below

2. Healthcare Workers

Diagnostic testing for COVID-19 is determined by Employee Health Services and performed using a nasopharyngeal specimen and either in-house 24-hour test or 48hour send-out PCR testing.

	Admissions			
		Non-ED Admissions		ED
	Planned (Scheduled)	Unplanned (“Direct”)	Transfers	ED Admit
Definition	Primary or specialty care provider requests procedural admission from clinic/home on future date	Primary or specialty care provider requests procedural or nonprocedural admission from clinic/home on day of admission	Referring hospital, ED or urgent care requests admission on day of admission	Admitted after Children’s Minnesota ED evaluation
Location of patient arrival	All inpatient areas (incl pre-op)	All inpatient areas, CVOR Op (incl pre-op)	All inpatient areas (incl pre-op)	ED
SARS-CoV-2 PCR Test Type	SARS-CoV-2 RNA Detection (MML) TAT 24H for in house or 48H MML	SARS-CoV-2 RNA Detection (rapid) TAT 60 minutes from receipt in lab	SARS-CoV-2 RNA Detection (rapid) TAT 60 minutes from receipt in lab	SARS-CoV-2 RNA Detection (rapid) TAT 60 minutes from receipt in lab
Specimen Type	Anterior nares	Nasopharyngeal (NP). Anterior nares accepted	Nasopharyngeal (NP). Anterior nares accepted	Nasopharyngeal (NP), Anterior nares accepted
Collection Swab	Flocked regular	Flocked flexible mini-tip	Flocked flexible mini-tip	Flocked flexible mini-tip
SARS-CoV-2 PCR Test Timing	48-72H prior to admission	On Admission	On Admission	On Admission
Test Location	Children’s Swab Center, primary care provider or outside facility	Patient’s room	Patient’s room	ED
If unable to be performed prior to admission	Reschedule	N/A	N/A	Patient’s room



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Notes:

- Consider COVID-19 retesting in patients who have previously tested negative and have developed new or worsening symptoms of illness.
- Review [CDC Pediatric Healthcare Professionals COVID-19](#) page for signs and symptoms of COVID-19.
- Patients undergoing continuous or multiple AGPs should be tested for COVID-19 prior to initiation of the first AGP. Periodic testing or retesting prior to additional AGPs is not required, unless the patient develops new symptoms of illness, has a significant clinical change, or has a significant change to their exposure risk. For a full list of aerosol-generating procedures and related information, refer to [Aerosol-Generating Procedures](#).
- Newborns admitted to a neonatal unit should undergo COVID-19 testing according to the [neonatal testing algorithm](#). Infants admitted to neonatal units directly from birth do not require COVID-19 testing for AGPs, unless infant's mother is a confirmed COVID-19 case. Newborns discharged with mother after delivery should undergo one diagnostic test for COVID-19 when mother's COVID-19 test is resulted as positive or at the first newborn well-child clinic visit, whichever is later.
- Exposure is defined as being within 6 feet for more than 15 minutes to persons with confirmed COVID-19.

Frequently asked questions

Q: Parents are under the impression we have lots of ability to test anyone whenever they want it, is that true?

A: Unfortunately, this is a misperception. Across the U.S., Minnesota and at Children's Minnesota our test supply is limited and we must balance our limited use of in-house one hour turn-around time for urgent inpatient needs. However, we will work with each family to get the right testing.

Q: What do we do if a parent or patient refuses a COVID-19 test?

A: This should be managed on a case-by-case basis and well-documented in the chart. Try to explain the rationale for testing, that it is clinically important to know if the patient has an asymptomatic infection that might complicate their care, to know what type of room to admit them to and for our staff to know what PPE to wear. It is not mandatory to test and we cannot force a test on a patient, but explaining the reason is important. If they refuse, we treat the patient as if they are positive for COVID-19 and move them to the appropriate unit/room.

Q: When can testing be done before surgery?

A: Pre-op history and physical visits in primary care and testing for COVID-19 can be done in primary care at the same visit as long as the visit is as close to surgery as possible. The Swab Center is available for testing pre-procedure as well. Testing is recommended within 3 days before surgery with families limiting their social interactions to their own household given the short 2 day incubation period of COVID-19 after exposure.

Q: What if a patient has had a COVID-19 test and it is 96 or more hours before surgery, can we accept that test?

A: Since the incubation period (time from exposure to symptoms) is as short as 2 days with COVID-19, the clinician should ask the family if they have limited their contact with their own household and if so, may use that test. If not, they can either retest or treat the patient as a positive in which case the procedure could possibly be canceled.



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Q: Can CHN clinics send their swabs to Children’s Minnesota lab for pre-op testing or if the child is symptomatic and needs a test for diagnosis?

A: Yes, we are able to test patients who are from Children’s Minnesota and clinics in the Children’s Health Network. The details of this process are currently being worked out.

Q: If a patient who has had COVID-19 is being discharged to a behavioral health facility and they require a negative COVID-19 test, what test should be used?

A: Test negative for clearance is best run at the MDH lab. Our in-house test is highly sensitive and has no upper limit negative cut off so it can detect viral fragments making the patient persistently positive. These tests after day 14-21 are generally not considered viable or infectious and can be read as positive as long as 80 days after symptom onset. Do not do serial tests on behavior health patients using the rapid in-house test.

Q: What is the non-test or a time and symptom based approach for clearance mean?

A: A non-test strategy of 10 days since symptom onset with 3 consecutive days of fever free can also be used to consider the patient no longer infectious. It is what is used for employee return to work as well.

Q: If a test is ordered and the result is not back yet, should the surgery proceed without the test?

A: No. Clinicians must wait for the test result to return prior to starting the procedure unless it is an emergency.

Q: What happens if a pre-procedure test is positive?

A: The proceduralist who ordered the test must decide how to proceed. If it is an elective surgery, the procedure will be rescheduled with a minimum interval of 21 days until the procedure; if no new symptoms develop, repeat testing is not necessary at that time of rescheduling.

Q: How long is a negative test good for such as after a patient has a negative on admission?

A: There is no timeframe during which inpatients who initially test negative need to be retested. Clinicians could consider retesting inpatients after a negative on admission if they develop new symptoms consistent with COVID-19 or develop worsening conditions such as unexplained increase in seizures, etc.

Q: Why do patients undergoing cardiac surgery have a two test strategy—4 days before in their pre-surgery cardiology visit and again the day of surgery?

A: Doing heart surgery on a child with a new COVID-19 infection could be life-threatening. Inflammation of the heart occurs in children with COVID-19 and recovery from surgery and COVID-19 would be extremely difficult. Canceling heart surgery if they are positive 4 days in advance prevents the wasting of expensive materials such as heart valves and setting up equipment and supplies that would not be able to be used.

Q: For patients who come for frequent infusions or therapies, must they be tested every time before each treatment?

A: This gets difficult and is a clinical judgement of the provider as there is no clear science yet. It is recommended that these patients have a baseline COVID-19 antibody test to see if they have had asymptomatic infection in the past. If positive, they would not need nasal swab PCR testing at each infusion. If the baseline antibody test is negative, it is advised to have a nasal swab in the 24 hours prior to the planned encounter, or on the day of the procedure if testing in advance is not feasible. Understanding exposure risks between therapies will be an important part of the decision to retest.



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Q: How are antibody tests to be used?

A: Children's Minnesota has an in-house IgG antibody test for SARS-CoV-2 the virus that causes COVID-19. This test should not be done before day 14 after symptom onset as it may be too early to detect the immune response to the infection. The blood test is especially useful in patients to diagnose severe post-viral multisystem inflammatory syndrome (MIS) associated with COVID-19 when the PCR test is negative and the serology is positive. Duration of antibodies and their level of protectiveness is still not well-understood.

Q: If someone tests positive who is completely asymptomatic, do they need to do anything special?

A: Yes, they should be considered potentially contagious for 10 days from the day of the test and limit social interaction especially with people at high risk for severe disease such as the elderly or those with chronic conditions.

Q: What are the hours of the Swab Centers?

A: The Minneapolis Swab Center located as a drive through site in the tent outside MDB is open Monday – Friday 0730-1600 and Saturday 0800-1200. The St. Paul Swab Center is in the new beautiful bus parked next to the Red Ramp off Thompson at Smith. Their hours are Monday -- Friday 0730-1600.

Q: How does an employee make an appointment for testing at the Swab Center?

A: Employees are referred for testing after an assessment by calling the Employee Health Services line. One of the Nurse Practitioners will make a plan appropriate for you. Their number is 952-992-5372.

NEW Q: If a patient's COVID-19 test is negative, do they still need to isolate for 14 days after an exposure?

A: Yes, all patients who are exposed to a person with confirmed COVID-19 should follow a 14-day quarantine period after the last date of exposure even if the result is negative. Infection could develop at any time during the quarantine period.

References:

- Centers for Disease Control and Prevention. Coronavirus Disease 2019 (COVID-19) Information for Pediatric Healthcare Workers: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/pediatric-hcp.html>.
- Minnesota Department of Health. Evaluating and Testing for Coronavirus Disease 2019 (COVID-19): <https://www.health.state.mn.us/diseases/coronavirus/hcp/eval.html>.

Reviewer: Stinchfield, Johnson, Garton, Kalaskar, Szniewajs

Revised 8/11/20