

FAQs for Expanded Pediatric COVID-19 Screening

All asymptomatic patients who are currently in the hospital or being admitted will be screened for COVID-19. The goal is to diagnose COVID-19 positive patients:

- who are ASYMPTOMATIC and would not have been otherwise detected
- who are PRESYMPTOMATIC, to ensure early diagnosis

This approach is safer than the current state because it may identify infected patients earlier and allow for prompt isolation, contact tracing, and prevent spread.

Why are we doing this?

- A subset of patients with COVID-19 will not manifest obvious symptoms or may remain asymptomatic; another subset of patients may be in the presymptomatic phase for the 1-2 days before symptoms begin.
- Screening for COVID-19 (i.e., testing patients before they become symptomatic), will help us to:
 - increase the safety of our inpatient healthcare workers
 - trace, test and isolate contacts promptly, thereby preventing further spread of SARS-CoV-2,
 - monitor for complications and postpone surgery in asymptomatic and presymptomatic patients whose surgeries can safely be delayed
 - better define our local population prevalence, which will help inform where we are “on the curve.”

How do you define symptomatic or suspected COVID-19?

Symptomatic or suspected COVID-19 patients
- Fever (objective or subjective)
- Myalgias, chills
- Respiratory symptoms (dyspnea, cough)
- URI symptoms (rhinorrhea, sore throat, sinus symptoms)
- GI symptoms (nausea, vomiting, diarrhea)
- ENT symptoms (loss of taste or smell)
- Eye symptoms (conjunctivitis)
OR
-Other clinical concern for COVID-19 including:
- Suggestive chest imaging (B peripheral groundglass opacities)
- Rash (acral vasculitic changes)
- Newborn born to mothers with COVID-19 who are still in isolation
- Unable to provide/obtain history
- COVID-19 exposure (e.g. hospital, household, community) and has not had COVID-19 in the last ≤90 days even if

asymptomatic (contact HEIP to add 'COVID exposed' flag)

How do you define asymptomatic patients for the purposes of testing?

- Meets none of the above criteria for symptoms or suspected COVID-19
- Asymptomatic COVID-19 exposed patients should be tested for COVID-19 on the schedules and sample sites noted below for asymptomatic patients, though isolation recommendations differ for this population

Which asymptomatic patients require testing?

- Outpatient testing:
 - Anyone with a planned admission or procedure/anesthesia/procedural sedation and have not had a test within 4 days
 - Specific additional outpatient procedures requiring anesthesia, including but not limited to procedures of the upper respiratory/GI tracts with potential for aerosol generation and specific clinic visits
- Inpatient/pending admission testing:
 - All asymptomatic patients being admitted to the hospital except those that are within ≤ 90 days since first positive COVID-19 test collected (“COVID recovered”) and have not had a test within 4 days. Transfer patients must also have a test within 4 days of transfer; if no test was performed, the test should be done on arrival to UCSF Health.
 - Inpatients should have repeat COVID testing on day #4
 - Exceptions:
 - Day #4 is the day of discharge
 - Patient has a current COVID-19 infection
 - Patient is in the ≤ 90 days since first positive COVID-19 test collected and thus is in the ‘COVID-recovered’ period
 - Patient is ≤ 28 weeks gestational age in the first week of life
 - Inpatients undergoing frequent (at least one AGP per day) or continuous aerosol-generating procedures (AGPs) and/or admitted to the ICN, PICU, PCICU, test weekly:
 - For a list of AGPs refer to this [guidance](#).
 - Test weekly (qTuesday) even if the patient was tested on hospital day #4
 - Exceptions:
 - Patient is ≤ 28 weeks gestational age in the first week of life
 - Day of discharge
 - Patient has a current COVID-19 infection
 - Patient is in the ≤ 90 days since first positive COVID-19 test collected and thus is in the ‘COVID-recovered’ period
 - Patients getting anesthesia/procedural sedation if > 7 days since the last COVID PCR
 - In select circumstances, some inpatients may also require testing before discharge to congregate living situations

Note: Any inpatient who develops signs/symptoms concerning for COVID-19 should be placed into Novel Respiratory Isolation and tested as a symptomatic patient.

Population	Admission	Hospital Day #4	Weekly (qTuesday)	Subsequent
Asymptomatic, no AGPs and not admitted to ICN, PICU, or PCICU	<p>✓</p> <p>Exceptions: patient with active COVID-19 infection or ≤90 days since first positive COVID-19 test collected (“COVID recovered”) and others as noted below</p>	<p>✓</p> <p>Exceptions are listed below¹</p>		Retest if needing anesthesia/procedural sedation and last test > 7 days prior
Asymptomatic and admitted to the ICN, PICU, or PCICU AND/OR receiving frequent (at least once daily)/continuous AGPs ²	<p>✓</p>	<p>✓</p> <p>Exceptions are listed below¹</p>	<p>✓</p> <p>Exceptions are listed below¹</p>	Weekly. Retest if needing anesthesia/procedural sedation and last test > 7 days prior
COVID-19 recovered and ≤90 days since first positive COVID-19 test collected	If asymptomatic, no repeat test recommended			

1. Exceptions include:
 - a. Day of discharge, baby ≤28 weeks gestational age in the first week of life, has active COVID-19 infection, is ≤90 days since first positive COVID-19 test collected (“COVID recovered”)
2. For a list of AGPs refer to this [guidance](#). This would also include patients with tracheostomies and laryngostomas given their need for suctioning and possibility of other AGPs.

Are any populations excluded in asymptomatic COVID testing?

Exclusions include, for:

All situations including at admission or inpatient asymptomatic testing

- Testing can be deferred for patients needing emergent procedures. Emergent procedures should proceed even if testing is not completed.
- Patient with active COVID-19 infection

-Patient \leq 90 days since first positive COVID-19 test collected (“COVID recovered”)

At admission

-Asymptomatic patients being admitted or having anesthesia/procedural sedation/other select clinic visit and test done within 4 days

-BCH-SF born newborns born to an asymptomatic mother with

i) a negative/pending COVID test within 4 days prior to admission or

ii) if existing inpatient/antepartum with a negative/pending COVID test within the 7 days prior to birth or

iii) a positive COVID test in the last 90 days and has finished isolation and the baby has not any COVID exposures (family/household contacts, healthcare workers, etc.)

-Outborn neonates not previously discharged with asymptomatic mother with a negative COVID-19 test within 4 days of birth

-Asymptomatic newborn readmitted and within \leq 4 days of initial discharge with no sick contacts or COVID exposures

Inpatient asymptomatic testing

-Day of discharge

-Baby \leq 28 weeks gestational age in the first week of life

What about vaccinated patients?

At the present time, given that breakthrough infections can occur and increased risks of transmission in the healthcare setting exist, asymptomatic testing will continue in both vaccinated and unvaccinated patients.

How should physicians and APPs order an asymptomatic COVID-19 screen?

There will be revisions to the COVID-19 RNA order to reflect expanded testing of asymptomatic patients including on hospital day #4.

- For outpatients with planned admissions or procedures or specific visits requiring testing, providers should refer to the ambulatory pediatric Prepare [algorithm](#) and for the pediatric non-Prepare ambulatory clinics requiring COVID-19 testing this [algorithm](#) for instructions on how to refer the patient for testing.
- For inpatients, the ‘COVID-19 RNA Screening for Asymptomatic Patients’ order panel will be part of core admission order sets and will include an order for Droplet Isolation. Patients tested within 4 days before admission do not need repeat testing.

What COVID-19 sampling sites are required for patients?

For symptomatic patients, clinician-collected bilateral anterior nares (AN), nasopharyngeal (NP), or mid nasal turbinate (MNT), all ideally combined with oropharyngeal (OP) swab, is acceptable. Only NP and MNT +/- OP tests may also be sent for influenza/RSV or respiratory viral panel testing, so these swab types should be used for patients in whom additional viral testing will be ordered.

For all asymptomatic patients including at admission, for serial inpatient testing, for pre-procedural/anesthesia testing, and for those who are COVID-19 exposed a bilateral anterior nares +/- OP

COVID-19 test collected by a healthcare worker is recommended. This sample site testing maintains excellent sensitivity and causes less discomfort for the recipient.

Although a combined bilateral anterior nares plus OP sample is preferred, anterior nares samples without OP (including those not specified as being from the bilateral nares) are acceptable including those labeled 'anterior nares' or 'nasal swabs.'

If the anterior nares sample is not collected by a healthcare worker it is not an acceptable test.

Preferred type of test	Recommended sampling site
All symptomatic testing¹	Bilateral anterior nares (AN) +/-OP ^{2,3} , NP+/- OP, mid-turbinate +/- OP
Initial asymptomatic admission screen, repeat inpatient testing (hospital day #4, recurring due to frequent/continuous AGP, admitted to ICU, or pre-anesthesia/procedural sedation testing)¹	Bilateral anterior nares (AN) +/- OP ³ , alternative NP +/- OP, mid-turbinate +/- OP
Outpatient pre-anesthesia or procedural sedation	Bilateral anterior nares (AN) +/-OP ³ , alternative NP +/- OP, mid-turbinate +/- OP
Select severely immunocompromised COVID-19 positive patients that require repeat testing to determine discontinuation of isolation⁴	Bilateral anterior nares (AN) +/- OP ³ , alternative NP +/- OP, mid-turbinate +/- OP

1. For intubated patients, tracheal aspirate samples also have excellent sensitivity
2. Only NP and MNT +/- OP tests may also be sent for rapid influenza/RSV or respiratory viral panel (RVP) testing, so these swab types should be used for patients in whom additional viral testing will be ordered.
3. Bilateral anterior nares +/- OP test collected by a healthcare worker are preferred. Anterior nares samples without OP (including those not specified as being from the bilateral nares) are acceptable including those labeled 'anterior nares' or 'nasal swabs.' If the anterior nares sample is not collected by a healthcare worker it is not an acceptable test.
4. The populations included in the select severely immunocompromised category and the criteria to discontinue isolation for these COVID-19 positive patients can be found [here](#).

What type of platform is acceptable?

The following tests from outside labs are acceptable **if collected by a healthcare worker** and resulted within the recommended time frame:

- Reverse-transcriptase PCR (RT-PCR)
- PCR
- Nucleic acid amplification (NAA)
- Non-Abbott ID Now nucleic acid amplification test (NAAT)
- Transcription-mediated amplification (TMA)
- Loop-mediated amplification (LAMP)

Because of lower performance any healthcare worker collected test, antigen, Abbott ID now NAAT test, pooled PCR, point of care, or “presumptive” tests should not be accepted. Serology and antibody tests are not accepted for decision-making around infection control practices. If the type of test is unclear and you are unable to obtain the information, you should repeat the testing at UCSF.

How should physicians and APPs order an asymptomatic COVID-19 screen?

All updated algorithms should be found by referring to the HEIP website [here](#). For outpatients with planned admissions or procedures, providers should refer to the ambulatory [algorithms](#) for instructions on how to refer the patient for testing. For inpatients, the “COVID-19 RNA Screening for Asymptomatic Patients” order panel will be part of core admission order sets and will include an order for droplet isolation. Patients tested within 4 days before admission do not need repeat testing. Details of the workflow can be found in the inpatient [algorithms](#).

What type of Isolation and PPE are needed?

COVID signs or symptoms/suspicion?	PPE and signage	COVID test collection	No AGP	AGP	Responsible for discontinuing isolation
Yes (on admission or anytime during admission)	Novel Respiratory Isolation	N95 + eye protection (or PAPR) + gown/gloves	N95 + face shield (or PAPR) + gown/gloves	N95 + face shield (or PAPR) + gown/gloves	Ordering provider
No; initial admission test	Droplet isolation	N95 + eye protection (or PAPR) + gown/gloves	Surgical mask/eye protection	N95 + face shield (or PAPR) + gown/gloves	Bedside nurse
No; subsequent hospital day #4 test or weekly testing for existing inpatients receiving frequent/continuous AGPs or admitted to an ICU	Standard isolation (including universal surgical mask and eye protection). If patient receiving AGP also use ‘AGP in Progress Sign.’	N95 + eye protection (or PAPR) + gown/gloves	Surgical mask/eye protection	N95 with eye protection (or PAPR) recommended	Not applicable

*AGP = aerosol-generating procedure. For a list of AGPs refer to this [guidance](#).

What if my asymptomatic patient had a test before admission?

Scenario assuming patient remains asymptomatic	Test?	Isolate?
Negative test within 4 days	No	Standard precautions
No test	Yes	Droplet precautions
Pending test on admission	No additional test	Droplet precautions
≤90 days since first positive COVID-19 test collected (COVID-19 recovered)	No (unless symptomatic)	See guidance here

What is the current test turnaround time?

Test turnaround time is 6-24 hours for inpatients and up to 72 hours for outpatients.

How do I collect the COVID-19 test?

Please refer to the tip sheet below for different swabs that can be used for COVID-19 testing.

For collection of an anterior nares swab, swab both nares using the kit that is used for mid-turbinate swabs. For nasal sampling, a mid-turbinate swab is acceptable with all swabs (including the single flock swab), instead of an NP swab.

https://infectioncontrol.ucsfmedicalcenter.org/sites/g/files/tkssra4681/f/PracticeUpdate_Test_Kits_040320.pdf

This is a video for sample collection:

<https://player.vimeo.com/video/410212041>

Nasal washes can also be done in select patient populations

https://infectioncontrol.ucsfmedicalcenter.org/sites/g/files/tkssra4681/f/BCH_Practice_Update_Nasal_Wash.pdf

What if my patient does not tolerate a nasal swab or is at risk for severe epistaxis?

If patients are at risk of severe epistaxis due to platelets <50K, severe mucositis, anticoagulation therapy, certain ENT issues, or other reasons, the provider can select the best site to swab including in order of preference mid-turbinate/OP, anterior nares/OP, if appropriate NP wash, or OP only. Of note, an OP swab alone has lower sensitivity than a combined OP/nasal sampling swab.

What does a negative COVID-19 test mean?

As with all diagnostic testing, COVID-19 testing should be interpreted in the context of the clinical scenario and prevalence of infection in the relevant population. Because there is an incubation period for this virus and infection could be acquired later, if the patient subsequently develops symptoms of respiratory infection, a repeat test should be obtained and the patient placed on Novel Respiratory Isolation.

What if the patient/caretaker refuses the test?

Review the rationale for COVID-19 test screening and that it is the UCSF standard of care during the pandemic. The COVID PCR can be compared to the MRSA screen that some of our patients get on admission. If the COVID-19 test is refused, place the patient on 'Droplet Isolation' and if they are receiving an intermittent or continuous Aerosol Generating Procedure (AGP) place the AGP in progress sign and wear N95/face shield (or PAPR), gown/gloves until the test is done and resulted.

What if my patient has a pending COVID-19 test but needs an emergency procedure?

Pending tests should not delay needed care. The procedural PPE guidance reflects the possibility of unknown infection and is intended to protect health care workers regardless of whether a patient is later found to be infected. Urgent or emergent procedures should proceed even if the COVID test is pending or has not been collected.

What if I am asked to consult on or perform a study for a patient with a pending COVID-19 test?

The care of patients with a pending COVID-19 test should not be affected by the fact that this test was sent. Consultants should continue their usual practices and should not delay seeing a patient due to a pending COVID-19 test.

What happens if the patient is not initially isolated and then develops or discovered to have symptoms concerning for COVID-19 after admission?

If a patient develops symptoms suggestive of COVID-19 you should place the patient in appropriate isolation (Novel Respiratory Isolation versus Respiratory Illness Evaluation) pending testing.

What happens if my asymptomatic patient tests positive for COVID-19?

For patient care:

- A positive or indeterminate test is considered a critical value and messaged to the inpatient team
- Order Novel Respiratory Isolation
- If indicated, may need to transfer to TCUP or PICU. Many patients may remain on their unit (including C5 med-surgery, TCUP, ICN, CTCU, PCICU, PICU etc.)

For exposed healthcare workers:

- Look [here](#) for further details about exposures