



## CCHMC Community Practice Advisory Council/Infectious Disease/Gen Peds

### Pediatric provider COVID-19 preliminary considerations for testing, contact testing, isolation and quarantine during community transmission of COVID 19

As daycares and schools reopen, pediatric providers will be the initial point of contact for children with illness symptoms and exposures. Pediatric providers may also be advising schools on policies for school reopening. The intent of this document is to provide definitions, testing guides, and resources. It is based on current CDC guidelines and informed by our CCHMC ID partners and local public health authorities.

Our understanding is that **COVID-19 symptoms** range from asymptomatic to a combination of one or more of the following symptoms: Fever or chills; cough; shortness of breath or difficulty breathing; fatigue; muscle or body aches; headache; new loss of taste or smell; sore throat; congestion or runny nose; nausea or vomiting; and diarrhea.

All patients and families should be encouraged to be monitoring for symptoms daily.

Decisions about **contact exposures** in school or childcare or activities will be guided by the local public health department working with each organization. Families can expect contact from their school or local health department if their child needs to be quarantined due to an exposure at school.

The following definitions are used for this document and to inform families and schools:

**Fever** is defined as a temperature of  $\geq 100.4$  F (38 C)

**Close contact** is defined by the CDC as greater than 15 minutes within 6 feet of another person.

A person with COVID-19 is considered **infectious** from 48 hours before he/she first develops symptoms (or tests positive if asymptomatic) and until at least 10 days after diagnosis or positive test.

**Confirmed COVID-19** is based on lab or clinically confirmed illness. A viral nasopharyngeal sample PCR for SARS-CoV-2 is currently the most sensitive lab test for current infection (PCR sensitivity high 90s). Sensitivity is reduced currently available antigen tests (70% in published reports, may be closer to 80% in newer machines); therefore negative antigen tests should be interpreted with caution.

**PUI (Patient under investigation)** is someone with clinical symptoms consistent with COVID-19 awaiting testing

**Isolation** is used to separate people infected with the virus from people who are not infected. **Quarantine** keeps someone who was or may have been exposed to the virus away from others, in case they become symptomatic. Patients who are in close contact with a case who is confirmed or under investigation are advised to **quarantine** at home for 14 days from the time of exposure to capture the most likely period they may develop symptoms to prevent further spread. Patients need to be quarantined if they were in close contact with a source 48 hours before symptom onset or a positive test.

In contrast, if a patient is suspected or confirmed to have SARS-CoV-2, home **isolation** is recommended until the individual is recovered. The individual is recovered when it has been ten days since the first symptom appeared or tested positive, is fever free for 24 hours and improving clinically. **Testing to clear patients for return can be problematic; SARS-Cov-2 can be detected by PCR testing for 6 weeks or longer after infection, thus a test-based strategy for ending isolation is not preferred and is no longer recommended by CDC.**

The following two pages provide a guide to testing considerations for a source case as well as for contacts of a source case in schools. *Consultation with your local public health authorities is recommended in all cases of a confirmed SARS-CoV-19 infection.*

## When do I test, isolate, or quarantine a patient based on their exposures and symptoms?

What <b>symptoms</b> does your patient have  ↓	What was your patient's <b>exposure</b> to SARS-CoV-2?	
	<b>Known Close Contact Exposure</b>  (close contact from 48 hours prior to source initial symptoms or first positive test until 10 days later)	<b>No Close Contact Exposure</b>
<b>Asymptomatic</b>	<ul style="list-style-type: none"> <li>• Quarantine 14 days* &amp; monitor for symptoms</li> <li>• Test on initial identification if supplies are adequate; alternative is to test if symptoms develop</li> </ul>	<ul style="list-style-type: none"> <li>• Monitor for symptoms</li> </ul>
<b>Symptoms of COVID-19</b>	<ul style="list-style-type: none"> <li>• Isolate patient</li> <li>• Consider alternative diagnoses</li> <li>• Test for SARS-CoV-2;               <ul style="list-style-type: none"> <li>• If Negative - continue quarantine 14 days from last exposure to positive source*</li> <li>• If Positive – isolate at least 24hours fever free and 10 days after the onset of symptoms</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Stay home from school/childcare while ill and consider alternative diagnoses</li> <li>• Test for SARS-CoV-2 if no alternative diagnosis               <ul style="list-style-type: none"> <li>• If Negative – return per HCP **</li> <li>• If Positive – isolate at least 24 hours fever free and 10 days after the onset of symptoms</li> </ul> </li> <li>• If NOT tested and symptoms are consistent with SARS-CoV-2, isolate 10 days from symptom onset and 24hours fever free</li> </ul>

\*Note that if an asymptomatic QUARANTINED patient develops symptoms c/w COVID 19 at any time during QUARANTINE, the patient should then begin the 10 days of ISOLATION.

\*\*Return to school criteria for non-COVID-19 illnesses may be guided by state and local health departments and schools. Clinical considerations: 1. Definitive alternative diagnoses (eg. Flu/strep) would use typical return criteria of being 24hrs fever-free and clinical improvement (HCP visit/note suggested for return). 2. If there is no definitive alternative diagnosis but negative PCR test, recommend return criteria based on healthcare provider clinical judgment (24 hours fever free and resolving symptoms at a minimum), taking into account sensitivity of test used (HCP visit/note suggested for return). 3. If clinical illness consistent with COVID-19, or if not tested and possibly consistent with COVID-19, return criteria is the same as a positive test (10 days from symptom onset and 24hours fever-free and symptoms improving).

## Contact testing for schools and daycares:

If a patient was exposed to someone with COVID-19, inform the family that the **local health department will work with the school or daycare to provide recommendations for any close contacts.**

What kind of exposure did your patient have? ↓	What symptoms does your patient currently have?	
	Your patient has no symptoms concerning for COVID-19	Your patient has symptoms c/w possible COVID-19
<p><b>CLOSE CONTACT EXPOSURE</b> Source and/or contact closer than 6 feet greater than 15 min (e.g. sibling/household contact, same daycare/preschool class, dorm roommate)</p>	<ul style="list-style-type: none"> <li>Quarantine 14 days* &amp; monitor for symptoms</li> <li>Test on initial identification if supplies are adequate; alternative is to test if symptoms develop</li> </ul>	<ul style="list-style-type: none"> <li>Isolate patient</li> <li>Consider alternative diagnoses</li> <li>Test for SARS-CoV-2;               <ul style="list-style-type: none"> <li>If Negative - continue quarantine 14 days from last exposure to positive source*</li> <li>If Positive – isolate at least 24hours fever free and 10 days after the onset of symptoms</li> </ul> </li> </ul>
<p><b>NO CLOSE CONTACT EXPOSURES KNOWN</b> Source and/or contact closer than 6 feet away or less than 15 min close contact (e.g. passed in hallway, not in same classroom, well distanced classroom, relative with brief contact)</p>	<ul style="list-style-type: none"> <li>Monitor for symptoms</li> <li>No testing indicated unless symptoms develop</li> </ul>	<ul style="list-style-type: none"> <li>Stay home from school/childcare while ill and consider alternative diagnosis</li> <li>Test for SARS-CoV-2 if no alternative diagnosis               <ul style="list-style-type: none"> <li>If Negative – return per HCP **</li> <li>If Positive – isolate at least 24 hours fever free and 10 days after the onset of symptoms</li> </ul> </li> <li>If NOT tested and symptoms are consistent with SARS-CoV-2, isolate 10 days from symptom onset and 24hours fever free</li> </ul>

### Additional resources:

**WHO COVID transmission guidance:** <https://www.who.int/publications/i/item/modes-of-transmission-of-virus-causing-covid-19-implications-for-ipc-precaution-recommendations>

**CDC criteria to end isolation** in patients with symptoms c/w COVID 19 or a positive test:

For families: [cdc.gov/coronavirus/2019-ncov/if-you-are-sick/end-home-isolation.html](https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/end-home-isolation.html)

For HCP: [cdc.gov/coronavirus/2019-ncov/hcp/disposition-in-home-patients.html](https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-in-home-patients.html).

**State educational guidance:** Johns Hopkins has a school policy tracker site you can access here: <https://coronavirus.jhu.edu/>

COVID-19 **School and Community Resource Library** from Mass General:

[https://www.massgeneral.org/assets/MGH/pdf/medicine/infectious-diseases/COVID-19%20School%20and%20Community%20Resource%20Library\\_July%206%202020.pdf](https://www.massgeneral.org/assets/MGH/pdf/medicine/infectious-diseases/COVID-19%20School%20and%20Community%20Resource%20Library_July%206%202020.pdf)