

Ambulatory Negative Covid Test Algorithm—Symptomatic Pediatric Patient (< 18 years old)

Estimates of the sensitivity of COVID-19 PCR testing vary widely but may be in the 70-90% range in ambulatory patients. Sensitivity highest within 48 hours before and 48 hours after symptom onset due to high viral loads.

Factors that may increase false negatives:

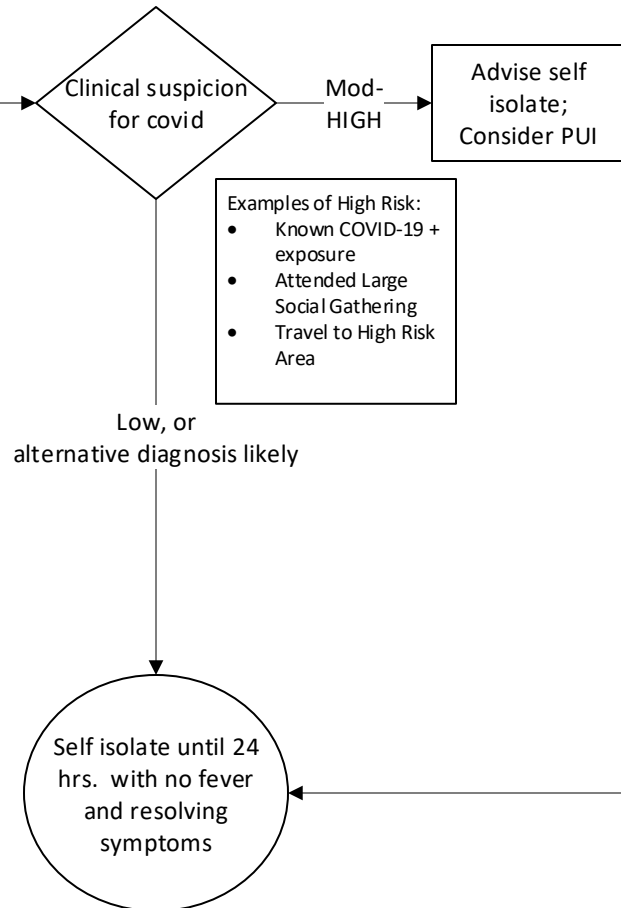
Assay used:

- Lab-based PCR (e.g. YNH, Mayo, Quest) estimated at 85-90% sensitive
- POC tests (e.g. Abbott ID now and others) predicted to be 10% lower (currently not being done in < 18 years old)

Other factors:

- Poor sample quality or sampling technique
- Advanced disease stage—viral loads are highest EARLY in disease
- Variable viral shedding, including patient-specific factors
- Disease severity

NEGATIVE test result in a **SYMPTOMATIC** patient
Consider Flu Testing in Season



- Examples of High Risk:
- Known COVID-19 + exposure
 - Attended Large Social Gathering
 - Travel to High Risk Area

Worsening symptoms or failure to improve
OR
High risk patient* with persistent symptoms
OR
high risk household**
OR
Known COVID-19 + patient in the household/known exposure

- **Retest for covid in 2-3d**
- Ensure high quality sample
- Consider additional diagnostic testing (e.g. labs, CXR) if can be done safely
- Consider home O2 sat monitoring if available
- **Refer to ED if clinically warranted**

Labs to consider: CBC, CRP, ferritin, procalcitonin, complete metabolic panel
(Lymphopenia, elevated inflammatory markers, hepatitis, examples of labs consistent with COVID-19)

CDC Quarantine Guidelines December 2, 2020
Lowest Risk for spread: 14 days
Acceptable Alternatives: 10 days with no symptoms OR 7 days no symptoms with negative test at day 5 or later
All Patients continue to monitor for symptoms, wear a mask and socially distance x14 days

If repeat COVID-19 test is **Positive** then home isolation 10 days with resolving symptoms and no fever x24 hrs.

If repeat COVID-19 test is **NEGATIVE** and known exposure then home quarantine per CDC.

No known exposure, self isolate until 24 hrs. with no fever and resolving symptoms.

Explore Alternative Diagnosis.

- *For symptomatic children with risk factors for disease progression: Examples include not limited to:**
- Asthma that requires daily medication
 - Diabetes
 - Immunosuppression or immunodeficiency
 - Obesity or BMI >95% for age
 - Congenital or chronic heart, kidney, liver or lung disease
 - Teenager
 - Black or Hispanic Persons

- **High risk household member with high risk condition**
- Age > 60
 - BMI > 30
 - Diabetes
 - Chronic heart, kidney, liver or lung disease
 - Asthma that requires daily medications
 - Malignancy and undergoing treatment
 - Immunosuppressive illness or medication
 - Smoker