

# COVID-19 Pediatric Clinical Evaluation Guide

## Consider COVID-19 in a patient with any of the following:

- Fever
- New Cough
- Dyspnea

Children can have mild non-specific symptoms

## Clinical Signs/Symptoms<sup>1-5</sup>

- Fever (40-65%)
- Cough (45-65%)
- Tachypnea (10-28%)
- URI symptoms (sore throat, rhinorrhea, sneezing) are common (19-51%) but without other signs of LRTI are not very specific for COVID-19<sup>1</sup>
- GI symptoms (diarrhea, N/V) (6-15%)
- Asymptomatic in 4-16%

## Labs

- Consider labs such as CBC with diff, CMP, CRP, and procalcitonin per clinical suspicion

Clues to severe COVID-19:

Leukopenia, transaminitis, elevated CRP/procalcitonin

## Labs and biomarkers<sup>2,3,5-9</sup>

- Leukopenia (15-38%)
- Lymphopenia (~ 20%)
- CRP increased (~ 13-18%)
- ALT/AST elevated (14-25%)
- Procalcitonin elevated in 10% overall, but up to 80% in hospitalized patients

## Microbiology

- Consider rapid flu/RSV, RVP and other workup per clinical suspicion

Presence of another pathogen does not rule out COVID-19

## Microbiology<sup>5</sup>

- Coinfection rate with other viruses/bacteria will vary age and setting, but appears more common in children than adults and may be as high as 40%

## Imaging

- Consider CXR
- Consider chest CT as needed for alternative diagnosis

Clues to COVID-19: bilateral, ground glass opacities, peripheral distribution, halo sign

## Imaging<sup>2,5,7,8,9</sup>

- Asymptomatic children can still have abnormal imaging
- CT findings variable, 14% no CT abnormality, 47% no radiographic abnormality on first presentation (CXR and/or CT)
- CT can be c/w viral pneumonia prior to first positive RT-PCR (34%)
- Abnormal CT findings are ground glass opacity (67%) followed by local patchy opacity with sub pleural and lower lobe predominance
- Some studies show increased predominance of halo sign similar to adult studies (50%)

# References

*References are based on the few reports of pediatric COVID-19 disease available as of 3/25/20 and may be updated as we learn more about COVID-19 in children*

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