Updated 3/4/2024

Acute COVID-19 Treatment Pathway

SARS-CoV-2 PCR +
or high clinical suspicion for COVID-19

Review illness severity, consider **acute COVID-19** v. **MIS-C**

Acute COVID-19 infection

If suspicion for MIS-C: follow MIS-C pathway; consider pediatric ID, rheumatology, and cardiology consults

Inclusion Criteria
- Patients seen/admitted to a pediatric unit
- Positive SARS-CoV-2 PCR/antigen testing

Exclusion Criteria
- Newborns born to mothers with positive SARS-CoV-2 testing (follow asymptomatic term and late preterm newborn guidelines or ICN management guidelines)

Isolation Precautions (IP)
- Patients with positive SARS-CoV-2 testing may require special airborne and contact precautions, follow current IP guidelines
- Contact Pediatric Infection Prevention with questions: 970-9721

Asymptomatic

No hypoxia
Well appearing, no symptoms
(i.e. + test done for admission screening, community exposure)

Outpatient management

- No additional labs indicated
- Supportive care, consider discharge
- Anticoagulation not recommended
- Antivirals not recommended
- Steroids not recommended (except as indicated for asthma or other existing conditions)
- Consider monoclonal antibody therapy in high risk patients

Outpatient therapeutics
- Existing monoclonal antibodies are not effective against circulating variants.
- Paxlovid is available under EUA for high risk patients ≥12 years of age and ≥40 kg.
- Molnupiravir is not available for use in patients < 18 years of age.

Mild/Moderate Illness

No hypoxia or respiratory distress
- Upper respiratory symptoms (mild; sore throat, congestion)
- Lower respiratory tract symptoms (moderate; tachypnea, cough)
- Fever, diarrhea/vomiting, myalgias
Adequate hydration

- Consider CMP and CBCd
- Anticoagulation not recommended
- Antivirals not recommended
- Steroids not recommended (except as indicated for asthma or other existing conditions)
- Monoclonal antibody therapy not recommended
- Tocilizumab, baricitinib not recommended

Severe Illness

New or increased oxygen requirement, nasal cannula
(not rapidly escalating, not requiring high flow nasal cannula, positive pressure ventilation, or intubation)
- $SpO_2 \leq 93\%$ on room air
- Lower respiratory tract symptoms (tachypnea, cough)

- Recommend CMP and CBCd
- Consider prophylactic anti-coagulation and hematology consult
- Recommend remdesivir: **ID telephone approval required**
- Steroids not routinely indicated
- Monoclonal antibody therapy not recommended
- Tocilizumab, baricitinib not recommended

Critical Illness

Need for higher level respiratory support (high flow nasal cannula, positive pressure ventilation, intubation) or escalating nasal cannula requirement
- Lower respiratory tract symptoms (tachypnea, cough, grunting)
- Acute respiratory distress syndrome or septic shock

- Recommend CMP and CBCd
- Consider prophylactic anti-coagulation and hematology consult
- Recommend remdesivir and ID consult
- Recommend steroids
- Monoclonal antibody therapy not indicated
- If hyperinflammatory state, rheumatology consult to consider additional anti-inflammatories (eg tocilizumab, baricitinib) on case-by-case basis

Inpatient management

Remdesivir
FDA approved for ≥28 days and ≥3 kg; available on case-by-base basis for younger or smaller infants
- <40 kg: 5 mg/kg IV x1, then 2.5 mg/kg IV daily
- ≥40 kg: 200mg IV x1, then 100mg IV daily
- Duration of therapy is 5 days, **requires Pediatric ID telephone approval**
- Consult Pediatric ID for neonatal dosing if infant is < 3 kg
- Daily CMP required; ALT must be <5x upper limit of normal to start therapy; therapy must be discontinued if ALT rises >5x

Steroids

Dexamethasone (preferred)
- <40 kg: 0.15 mg/kg PO/IV daily
- >40 kg: 6 mg PO/IV daily
- Duration of therapy is 10 days

Alternatives:
- Prednisolone 1 mg/kg daily (40 mg max)
- Methylprednisolone 0.8 mg/kg daily (32 mg max)