

Clinical Evaluation Algorithm of Multisystem Inflammatory Syndrome in Children (MIS-C) in the Emergency Department

Also known as Pediatric Multi-System Inflammatory Syndrome (PMIS)

Definition: fever over 3 days, elevated inflammatory markers, greater than two system involvement (GI, cardiac, renal, dermatology, neuro, hematology) **PLUS evidence of COVID-19 infection or strong suspicion for COVID-19 infection.**

Clinical Symptoms may include:

Prolonged high fever ($T \geq 38.0$ C),
Hemodynamic instability (tachycardia, hypotension, tachypnea),
GI symptoms (abdominal pain, vomiting, diarrhea)
Conjunctivitis
Rash
Mucous membrane involvement

Consider referral to the ED (if not in ED):

- 1) Fever >5 days without source
- 2) Dehydration
- 3) Hemodynamic instability
- 4) Altered mental status & confusion
- 5) Severe abdominal pain
- 6) Hypoxia

* COVID-19 RT PCR +/- serologies

**Additional consultation may include:

- Infectious disease
- Nephrology
- Gastroenterology
- Rheumatology
- Hematology-Oncology

^a Lab abnormalities suggestive of MIS-C include,

- CRP ≥ 30 mg/L
- ESR ≥ 40 mm/hr and,
- Lymphopenia ($<1k$),
Thrombocytopenia ($<150k$)
- Hyponatremia (<135)
- Elevated creatinine
- Elevated BNP/Troponin

