### Multisystem Inflammatory Syndrome in Children (MIS-C)

#### Clinical Presentation
- Inflammatory illness associated with COVID-19 infection occurring up to 2-4 weeks post-infection
- Typically presents as refractory vasodilatory shock with fevers (for at least 4 days), GI complaints, and Kawasaki disease/toxic shock-like signs and symptoms; respiratory symptoms uncommon
- Progression of symptoms can be rapid
- SARS-CoV-2 IgG frequently positive

#### Diagnostic Criteria (Must Have All 6)
- Age <21 years, AND
- Fever >38°C (100.4°F) for >24 hours, AND
- Laboratory markers of inflammation
  - Elevated CRP, ESR, fibrinogen, procalcitonin, D-dimer ferritin, LDH, IL-6, or neutrophils, AND
- Evidence of clinically severe illness requiring hospitalization with multisystem (≥2) organ involvement, including
  - Cardiac (eg, shock, elevated troponin, BNP, abnormal echocardiogram, arrhythmia)
  - Respiratory (eg, pneumonia, ARDS, pulmonary embolism)
  - Renal (eg, acute kidney injury or renal failure)
  - Gastrointestinal (eg, elevated bilirubin or elevated liver enzymes)
  - Neurologic (eg, stroke, aseptic meningitis, encephalopathy)
  - Dermatologic (eg, rash, dry cracked lips, strawberry tongue)
  - Fulfill full or partial criteria for typical or atypical Kawasaki disease
- Positive for current or recent SARS-CoV-2 infection by PCR, serology, or antigen testing or COVID-19 exposure within 4 weeks prior, AND
- No alternative plausible diagnoses

#### Commonly Used Treatments
- Inotropic support for shock
- Anti-inflammatory medications
  - Methylprednisolone of 1 mg/kg q12H (51-94%) or high-dose methylprednisolone 30 mg/kg/day
  - IVig 2 g/kg (18-62%)
  - Anakinra 1 mg/kg/day (8-24%)
  - Prophylactic anticoagulation (65%)
  - High-dose aspirin (6%)
  - Consultations
  - Rheumatology, hematology, cardiology, infectious disease

[https://emergency.cdc.gov/han/2020/han00432.asp](https://emergency.cdc.gov/han/2020/han00432.asp)