

Multisystem Inflammatory Syndrome in Children (MIS-C) Associated with Coronavirus Disease 2019 (COVID-19) June 12, 2020

Background

The Centers for Disease Control and Prevention (CDC) issued a health advisory on 5/14/20 regarding multisystem inflammatory syndrome in children (MIS-C), which is now a reportable condition. MIS-C is a condition in which different parts of the body become inflamed. Children with MIS-C may present with persistent fever, fatigue, and a variety of signs and symptoms including multi-organ (e.g., cardiac, gastrointestinal, renal, hematologic, dermatologic, neurological) involvement, and elevated inflammatory markers. Children with MIS-C may currently have or recently had COVID-19 or been exposed to someone with COVID-19. Most children with MIS-C have recovered with medical care but for some it can be serious and even deadly.

Actions Requested of All Clinicians:

1. **Report immediately** all suspected cases (see case definition below) to Sacramento County Public Health by phone at (916) 875-5881. Complete [Case Report Form](#). Provide medical records (e.g., history and physical, discharge summary, laboratory results).
2. **Inquire** about exposures to suspected or confirmed COVID-19 cases within the 4 weeks prior to symptom onset.
3. **Collect** specimens (e.g., NP, OP, or serum) for COVID-19 testing.
4. **Perform** other evaluations as appropriate, including baseline cardiac tests.
5. **Provide** supportive care.

Case Definition

- An individual aged <21 years presenting with fever*, laboratory evidence of inflammation**, and evidence of clinically severe illness requiring hospitalization, with multisystem (≥ 2) organ involvement (cardiac, renal, respiratory, hematologic, gastrointestinal, dermatologic, or neurological); AND
- No alternative plausible diagnosis; AND
- Positive for current or recent SARS-CoV-2 infection by RT-PCR, serology, or antigen test; or exposure to a suspected or confirmed COVID-19 case within the 4 weeks prior to the onset of symptoms.

*Fever $\geq 38.0^{\circ}\text{C}$ for ≥ 24 hours, or report of subjective fever lasting ≥ 24 hours

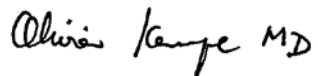
**Including, but not limited to, one or more of the following: an elevated C-reactive protein (CRP), erythrocyte sedimentation rate (ESR), fibrinogen, procalcitonin, d-dimer, ferritin, lactic dehydrogenase (LDH), or interleukin 6 (IL-6), elevated neutrophils, reduced lymphocytes and low albumin.

Additional Comments: Some individuals may fulfill full or partial criteria for Kawasaki disease but should be reported if they meet the case definition for MIS-C. Consider MIS-C in any pediatric death with evidence of SARS-CoV-2 infection.

Resources

- CDC Health Advisory (CDCHAN-00432): <https://emergency.cdc.gov/han/2020/han00432.asp>
- Information for Healthcare Providers about Multisystem Inflammatory Syndrome in Children (MIS-C) (CDC): <https://www.cdc.gov/mis-c/hcp/>
- Multisystem Inflammatory Syndrome Associated with COVID-19 Case Report Form: <https://www.cdc.gov/mis-c/pdfs/hcp/mis-c-form-fillable.pdf>

Sincerely,



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Public Health Officer