

# Health Advisory: Multisystem Inflammatory Syndrome in Children (MIS-C)

Minnesota Department of Health, Fri, May 15 09:00 CDT 2020

## Action Steps

***Local and tribal health department***: Please forward to hospitals, clinics, urgent care centers, emergency departments, and convenience clinics in your jurisdiction.  
***Hospitals, clinics and other facilities***: Please forward to physicians, nurse practitioners, RNs, LPN, physician assistants, clinical support staff, and pharmacists.  
***Health care providers***: For providers who have cared or are caring for patients under 21 years of age.

* Watch for patients presenting with features of **Multi-system Inflammatory Syndrome in Children (MIS-C)** as defined below.
* Immediately refer patients for specialty care in pediatric infectious disease, rheumatology and/or critical care as indicated.
* Report suspected cases who meet the above criteria to MDH at (651) 201-5414.

## Background

MDH in association with the CDC is interested in receiving reports of a recently reported multisystem inflammatory syndrome in children (MIS-C) associated with COVID-19. New York State and the United Kingdom have reported increasing numbers of children presenting with this syndrome. Cases have occurred in children positive for SARS-CoV-2 by PCR, or serology, or with an epidemiological link to a COVID-19 case. The clinical presentation has varied but includes fever and a constellation of symptoms including shock, multi-organ involvement and elevated inflammatory markers. Some cases have had features of typical or atypical Kawasaki disease and/or features of toxic shock syndrome.

## Features of Multi-system Inflammatory Syndrome in Children (MIS-C)

Patients under 21 years of age presenting with:

* **Fever**: more than 100.4o F for more than 24 hours, or report of subjective fever lasting more than 24 hours.
* Laboratory evidence of **inflammation**, 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 acid dehydrogenase (LDH), or interleukin 6 (IL-6), elevated neutrophils, reduced lymphocytes and low albumin.
* Evidence of clinically severe hospitalized illness with **multisystem** (more than two) **organ involvement** (cardiac, renal, respiratory, hematological, gastrointestinal, dermatologic or neurological)

AND

* No evidence of alternative plausible diagnoses

AND

* Positive for SARS-CoV-2 by RT-PCR, serology or antigen test **OR** COVID-19 exposure within the 4 weeks prior to the onset of symptoms

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

A copy of this HAN is available at: [MDH Health Alert Network](http://www.health.state.mn.us/han)   
The content of this message is intended for public health and health care personnel and response partners who have a need to know the information to perform their duties.