



## CDC details COVID-19-related inflammatory syndrome in children

by Melissa Jenco, News Content Editor

Health officials are advising clinicians about a rare but serious inflammatory condition seen in children and linked to COVID-19.

The Centers for Disease Control and Prevention (CDC) is calling the condition multisystem inflammatory syndrome in children (MIS-C) and is urging clinicians to report suspected cases so officials can learn more.

### Criteria

The CDC provided a case definition for MIS-C in a [health advisory](#) today:

- An individual under 21 years presenting with fever, laboratory evidence of inflammation and evidence of clinically severe illness requiring hospitalization with multisystem ( $\geq 2$ ) organ involvement (cardiac, renal, respiratory, hematologic, gastrointestinal, dermatologic or neurological); **and**
- No alternative plausible diagnoses; **and**
- Positive for current or recent SARS-CoV-2 infection by reverse-transcriptase polymerase chain reaction, serology or antigen test; or COVID-19 exposure within the four weeks prior to the onset of symptoms.

The CDC noted the fever should be at least 38 degrees Celsius for at least 24 hours or a subjective fever lasting 24 hours. Evidence of inflammation could include but is not limited to an elevated C-reactive protein, erythrocyte sedimentation rate, fibrinogen, procalcitonin, d-dimer, ferritin, lactic acid dehydrogenase, or interleukin 6, elevated neutrophils, reduced lymphocytes and low albumin.

### Reporting

Clinicians should report suspected cases to their state, local or territorial health departments even if the patient also fulfills all or part of the criteria for Kawasaki disease. MIS-C also should be considered in pediatric deaths with evidence of SARS-CoV-2. Health officials and specialists are monitoring the condition closely to learn more about risk factors and clinical course.

### Treatment

While the CDC did not provide guidance on treatment, Sean T. O'Leary, M.D., M.P.H., FAAP, a member of the AAP Committee on Infectious Diseases, said intravenous immunoglobulin and supportive care have been common approaches.

"I think right now the most important thing is supportive care in an intensive care setting," he said. "Pediatric intensive care doctors know how to take care of sick children very well and they know how to manage the things that are happening with these kids like low blood pressure and in some cases difficulty breathing, (and) in some cases kidney failure. They're used to managing those types of conditions even though this is a new phenomenon."

### History and connection to COVID-19

In late April, the United Kingdom found increasing reports of children with a severe inflammatory syndrome similar to Kawasaki disease. The children tested positive for SARS-CoV-2 or had been exposed to the virus, according to the CDC.



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New York City, which has been hit especially hard by the virus, documented 15 similar cases that occurred between April 16 and May 4. New York state health officials were investigating 102 cases as of May 12.

"The timing of this syndrome suggests that it's some kind of immune phenomenon. ... The cases of this seem to appear about a month after a community is hit hard with COVID-19," Dr. O'Leary said.

While potentially serious, he emphasized MIS-C appears to be rare, and most cases of COVID-19 in children are asymptomatic or mild.

## Advice for parents

Dr. O'Leary said his advice for parents has not changed. They should watch for persistent fever in their children and contact their pediatrician if the child appears especially ill.

"Parents really shouldn't be afraid to take their child to their pediatrician if they're worried they're sick," Dr. O'Leary said. "They should also, of course, make sure they are keeping up on their well-child care and their vaccinations. The diseases we prevent with vaccines are actually much more severe in children than COVID-19, so we want to make sure to protect children from those diseases."

**Editor's note:** For the latest news on COVID-19, visit <https://www.aapublications.org/news/2020/01/28/coronavirus>.

## Resources

- [CDC 24-hour Emergency Operations Center, 770-488-7100, and COVID-19 website for health care professionals, http://bit.ly/2VMAxi6](#)
- [After-hours phone numbers for health departments](#)
- [Information about COVID-19 from the AAP Red Book](#)
- [Information about COVID-19 from the AAP](#)
- [Information for parents from HealthyChildren.org on COVID-19](#)