Multisystem Inflammatory Syndrome (MIS-C)

Health Department-Reported Cases of Multisystem Inflammatory Syndrome in Children (MIS-C) in the United States

Since mid-May 2020, CDC has been tracking reports of multisystem inflammatory syndrome in children (MIS-C), a rare but serious condition associated with COVID-19. MIS-C is a new syndrome, and many questions remain about why some children develop it after a COVID-19 illness or contact with someone with COVID-19, while others do not.

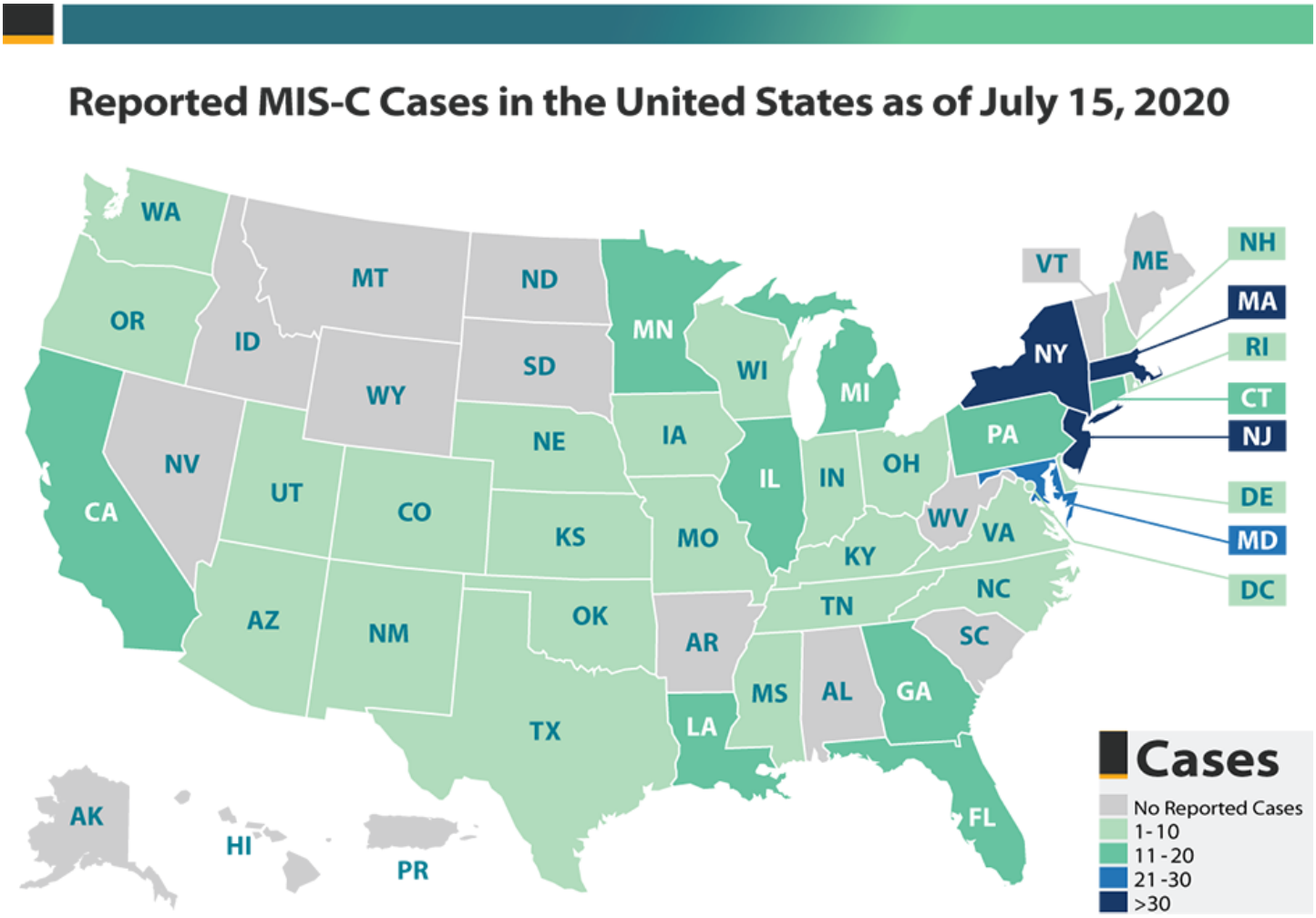
As of 7/15/2020, CDC has received reports of **342 cases** and **6 deaths** in **37 jurisdictions**.

- Most cases are in children between the ages of 1 and 14 years, with an average age of 8 years.
- Cases have occurred in children from <1 year old to 20 years old.
- About 70% of reported cases have occurred in children who are Hispanic/Latino (120 cases) or Non-Hispanic Black (104 cases).
- 96% of cases (329) tested positive for SARS CoV-2, the virus that causes COVID-19. The remaining 4% were around someone with COVID-19.
- Most children developed MIS-C 2-4 weeks after infection with SARS-CoV-2.
- Slightly more than half (55%) of reported cases were male.

MIS-C Cases by Jurisdiction

Since reporting began in mid-May, 36 states plus Washington, DC, have reported at least one case of MIS-C to CDC. Most of those jurisdictions have ten or fewer reported cases. Because of the small number of cases in most states and to protect the privacy of patients and their families, CDC is not reporting individual states' case counts.

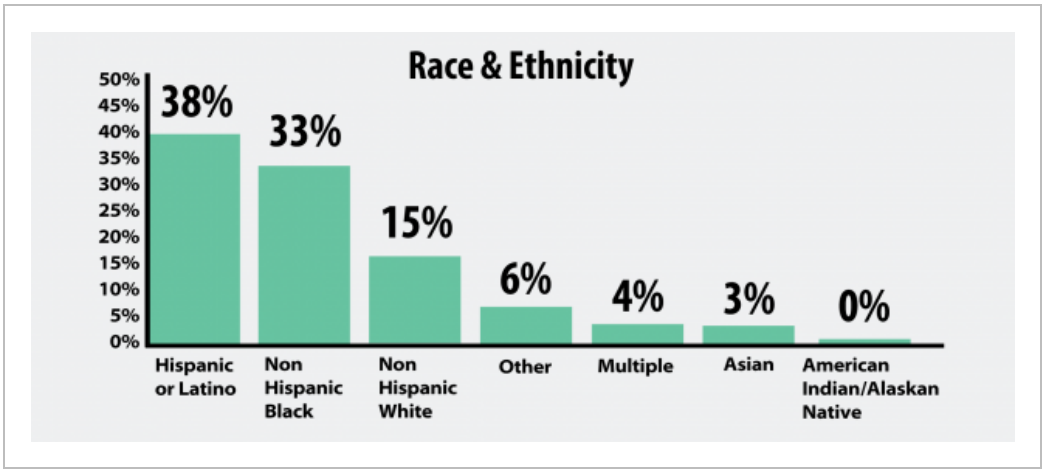
MIS-C Case Ranges by State and Washington, DC*



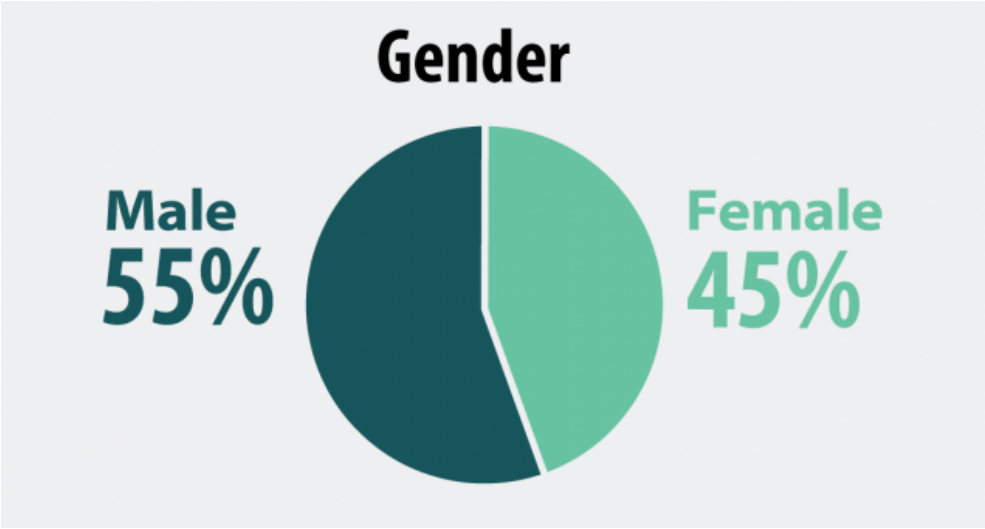
*We defer to states to release additional information on cases as they choose.

Race and Ethnicity of Reported MIS-C Cases

In addition to location of MIS-C cases, CDC is closely monitoring characteristics of MIS-C patients such as race, ethnicity and age. To date, the majority of MIS-C patients have been Hispanic/Latino or Non-Hispanic Black. Hispanic/Latino and Non-Hispanic Black populations are also disproportionately affected by COVID-19 overall. Additional studies into MIS-C are needed to learn why certain racial or ethnic groups may be affected in greater numbers and what risk factors may contribute to this phenomenon.



28 of the 342 cases did not report race/ethnicity data.



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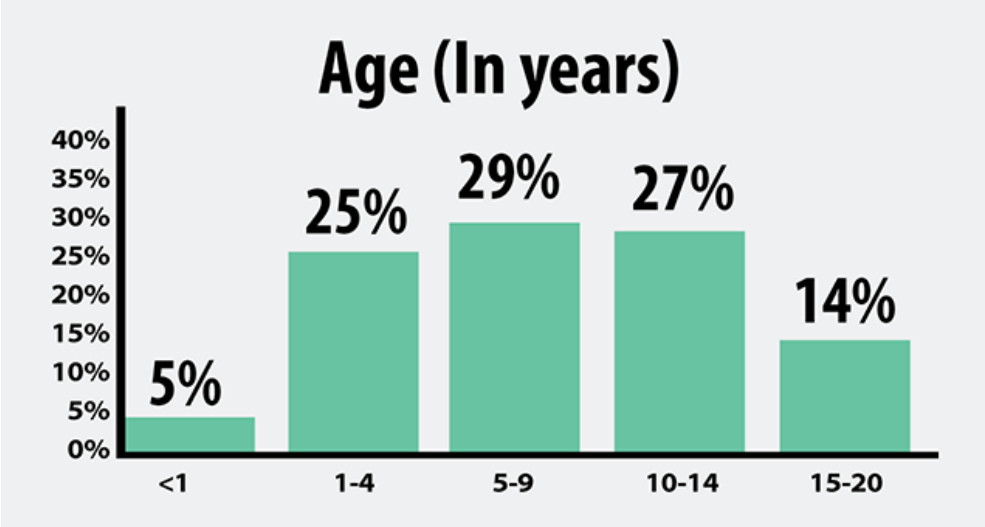
Age of MIS-C Reported Cases

Early in the pandemic, it appeared that children were less likely than adults to be infected with SARS-CoV-2 and, if infected, most had mild to moderate illness. Then, MIS-C cases began to appear in children weeks after they had COVID-19, and sometimes when a child had no known prior SARS-CoV-2 infection. Current data indicate the average age of children with MIS-C is 8 years.



Next steps

Children appeared to be less likely than adults to be infected or to have severe illness early in the COVID-19 pandemic; however, as the outbreak has progressed, larger numbers of children are getting infected. It's unknown whether this increase in COVID-19 cases among children will also increase cases of MIS-C. CDC and state partners will be monitoring for additional cases and will adapt MIS-C recommendations as needed.

CDC investigators are assessing reported cases and children's health outcomes to try to learn more about specific risk factors for MIS-C, how the illness progresses in children, and how to better identify MIS-C and distinguish it from similar illnesses.

About the data

This page is updated on the first Friday of each month.

Reported by Jurisdiction's Health Department

Data on this page are reported voluntarily to CDC by each jurisdiction's health department. CDC encourages all jurisdictions to report the most complete and accurate information that best represents the data available in their jurisdiction.

Case definition

Case Definition for Multisystem Inflammatory Syndrome in Children (MIS-C)

- An individual aged <21 years presenting with fever[i], laboratory evidence of inflammation[ii], 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 diagnoses; AND
- Positive for current or recent SARS-CoV-2 infection by RT-PCR, serology, or antigen test; or COVID-19 exposure within the 4 weeks prior to the onset of symptoms

[i]Fever >38.0°C for ≥24 hours, or report of subjective fever lasting ≥24 hours
[ii]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

Additional comments

Page last reviewed: July 15, 2020
Content source: National Center for Immunization and Respiratory Diseases (NCIRD)

- 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

Timing of reporting

Case reporting may be delayed due to limited capacity at local/state health departments and as CDC assesses data to ensure cases meet the MIS-C case definition.