



# Multisystem Inflammatory Syndrome (MIS-C)

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

As of October 1, the number of cases meeting the case definition for multisystem inflammatory syndrome in children (MIS-C) in the United States surpassed 1,000. As of February 1, this number surpassed 2,000.

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. Many questions remain about why some children and adolescents develop MIS-C after a COVID-19 illness or contact with someone with COVID-19, while others do not.

Last updated with cases reported to CDC on or before March 1, 2021:

<div>TOTAL MIS-C CASES MEETING CASE DEFINITION*</div> <div>2617</div>	<div>TOTAL MIS-C DEATHS MEETING CASE DEFINITION</div> <div>33</div>
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\*Cases were reported in 48 states, New York City, Puerto Rico, and Washington, DC. Additional cases are under investigation.

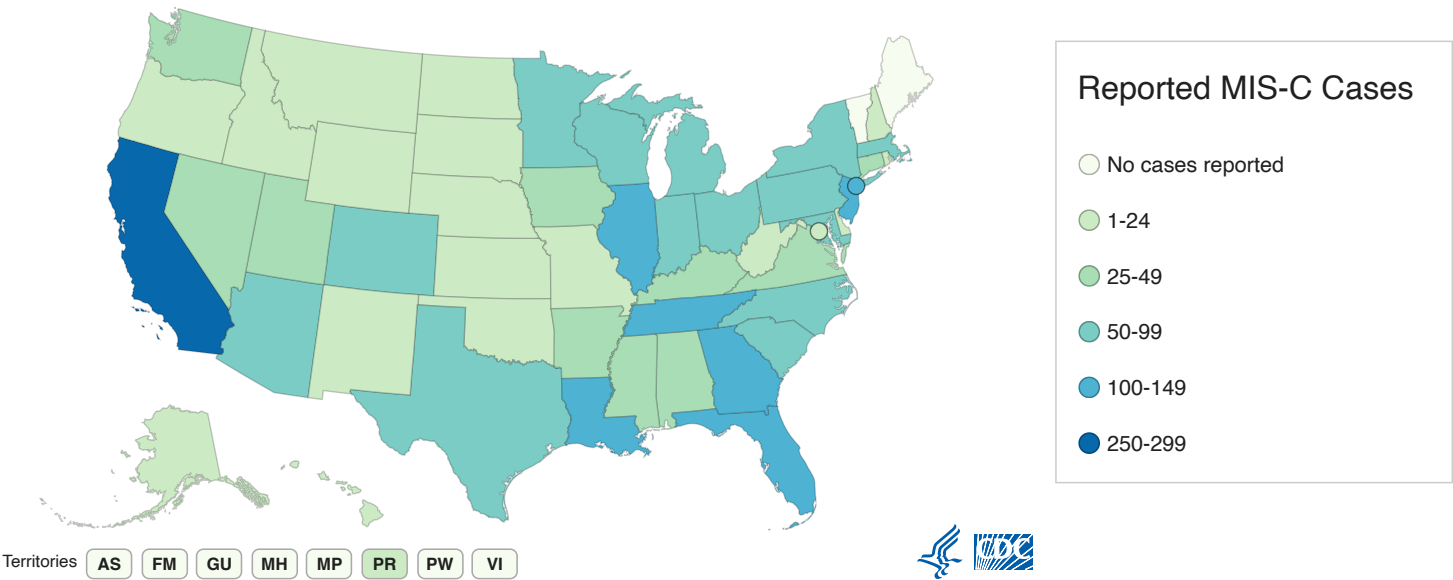
### Summary

- Most cases were in children and adolescents between the ages of 1 and 14 years, with a median age of 9 years.
- Cases have occurred in children and adolescents from <1 year old to 20 years old.
- 66% of reported cases have occurred in children who are Hispanic or Latino (842 cases) or Black, Non-Hispanic (746 cases).
- 99% of cases (2,591) tested positive for SARS CoV-2, the virus that causes COVID-19. The remaining 1% were around someone with COVID-19.
- More than half (59%) of reported cases were male.

## MIS-C Cases by Jurisdiction










Since reporting began in mid-May, 48 states, New York City, Puerto Rico, and Washington, DC, have reported at least one case of MIS-C to CDC. Because of the small number of cases in some states and to protect the privacy of patients and their families, CDC is not reporting individual states' case counts.

### MIS-C Case Ranges by Territory, State, New York City, and Washington, DC on or before March 1, 2021\*



#### Reported Cases

Location	Cases
Alabama	25-49
Alaska	1-24
American Samoa	No cases reported
Arizona	50-99

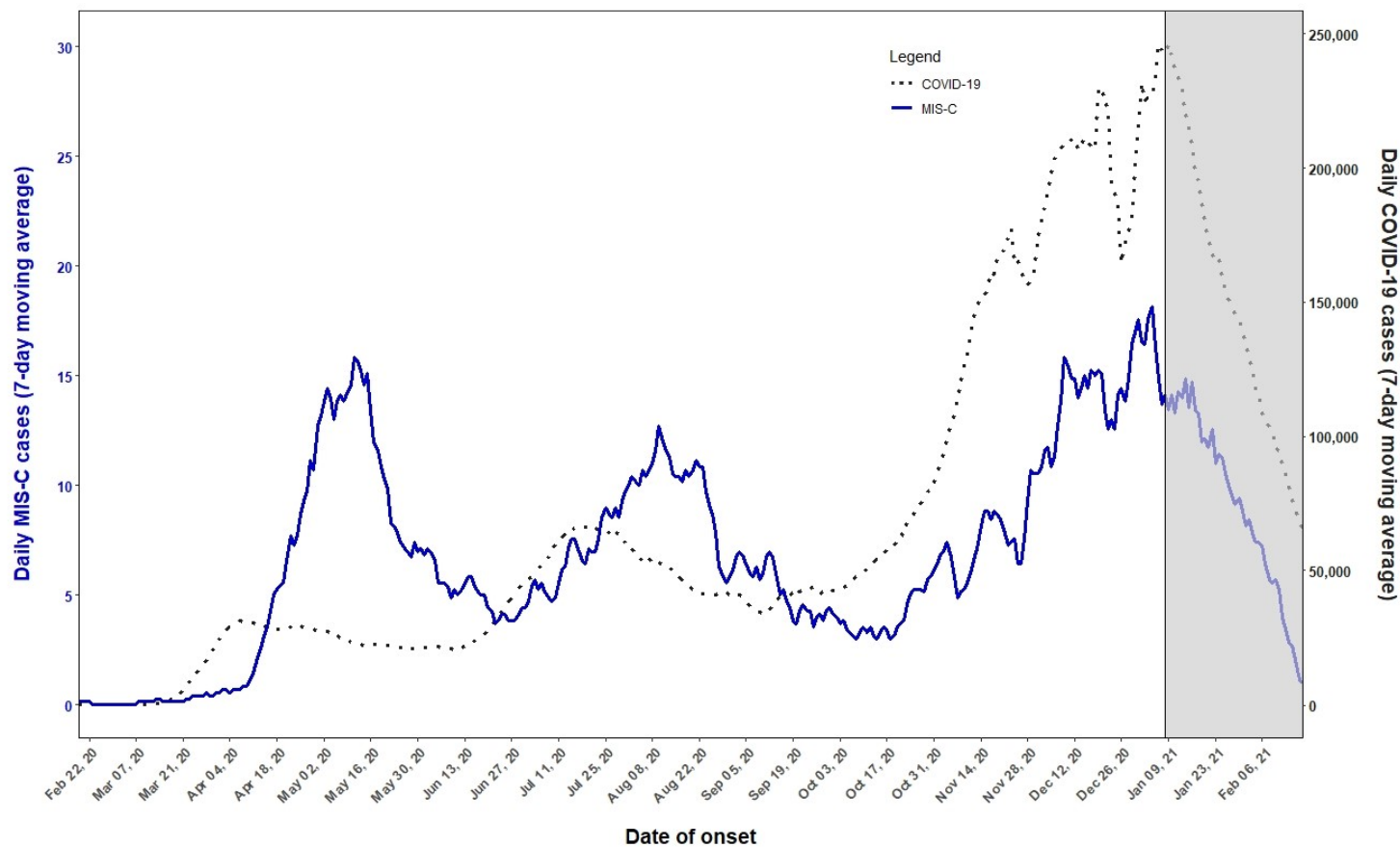
 Arkansas	25-49
 California	250-299
 Colorado	50-99
 Connecticut	25-49
 Delaware	1-24
 Florida	100-149
 Georgia	100-149
 Guam	No cases reported
 Hawaii	1-24
 Idaho	1-24
 Illinois	100-149
 Indiana	50-99
 Iowa	25-49
 Kansas	1-24
 Kentucky	25-49
 Louisiana	100-149
 Maine	No cases reported
 Marshall Islands	No cases reported
 Maryland	50-99
 Massachusetts	50-99
 Michigan	50-99
 Micronesia	No cases reported
 Minnesota	50-99
 Mississippi	25-49
 Missouri	1-24
 Montana	1-24
 Nebraska	1-24
 Nevada	25-49
 New Hampshire	1-24
 New Jersey	100-149
 New Mexico	1-24
 New York	50-99
 New York City	100-149
 North Carolina	50-99
 North Dakota	1-24
 Northern Marianas	No cases reported
 Ohio	50-99
 Oklahoma	1-24

 Oregon	1-24
 Palau	No cases reported
 Pennsylvania	50-99
 Puerto Rico	1-24
 Rhode Island	1-24
 South Carolina	50-99
 South Dakota	1-24
 Tennessee	100-149
 Texas	50-99
 Utah	25-49
 Vermont	No cases reported
 Virgin Islands	No cases reported
 Virginia	25-49
 Washington	25-49
 Washington D.C.	1-24
 West Virginia	1-24
 Wisconsin	50-99
 Wyoming	1-24

[Download Data \(CSV\)](#)

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

## Daily MIS-C Cases and COVID-19 Cases (Seven-Day Moving Average)



The graph shows the seven-day average number of MIS-C and COVID-19 cases with MIS-C date of onset between February 19, 2020 and February 21, 2021. The cases meeting case definition are reported nationally on a monthly interval.

The grayed-out area on the right side of the figure represents the most recent six weeks of data, for which reporting of MIS-C cases is still incomplete. The actual number of MIS-C cases during this period is likely larger and these numbers will increase as additional case reports are incorporated. The left Y-axis defines the number of daily average MIS-C cases and is marked in units of 5 with a scale of 0 to 30; the right Y-axis defines the number of daily average COVID-19 cases and is marked in units of 50,000 with a scale from 0 to 250,000.

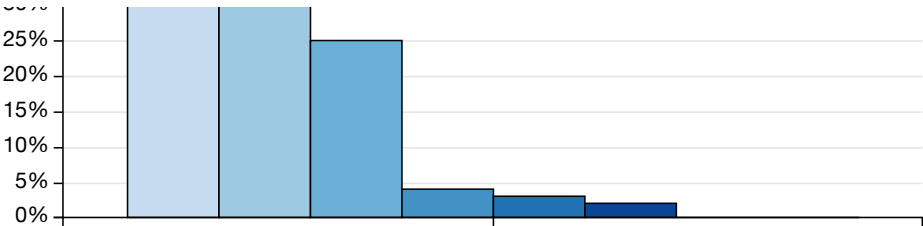
5 of the 2,617 cases were missing dates.

## 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 by race and ethnicity and age. To date, the majority of MIS-C patients have been Hispanic/Latino and 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.

### Cases by Race & Ethnicity





Race/Ethnicity

- ☒ Hispanic/Latino
- ☒ Black, Non Hispanic
- ☒ White, Non Hispanic
- ☒ Other
- ☒ Multiple
- ☒ Asian, Non Hispanic
- ☐ American Indian/Alaska Native, Non Hispanic
- ☐ Native Hawaiian/ Other Pacific Islander, Non Hispanic
- Reset

Race and Ethnic Groups

Hispanic/Latino	35%
Black, Non Hispanic	31%
White, Non Hispanic	25%
Other	4%
Multiple	3%
Asian, Non Hispanic	2%
American Indian/Alaska Native, Non Hispanic	0%
Native Hawaiian/ Other Pacific Islander, Non Hispanic	0%

Download Table Data (csv)

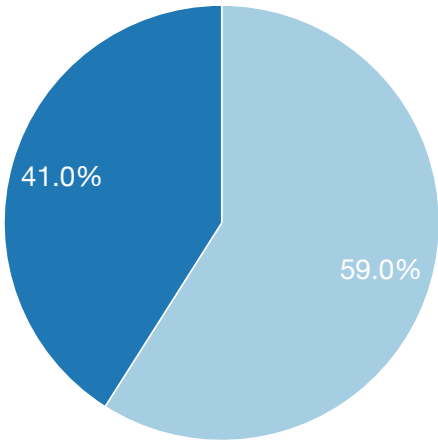
198 of the 2,617 cases did not report race/ethnicity data.

## Cases by Sex

☐ Male

☐ Female

Reset



Data

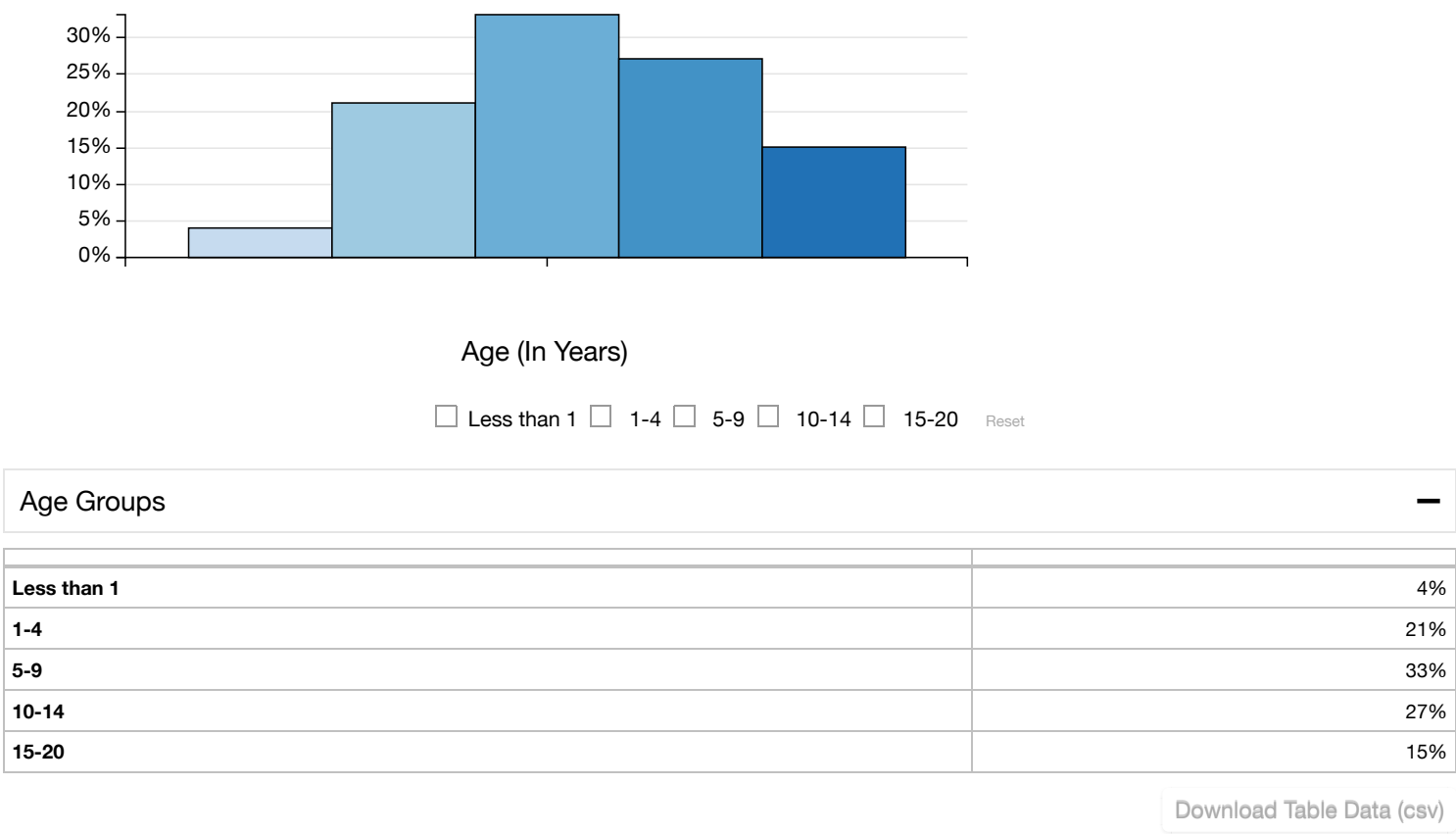
	data
Male	59%
Female	41%

Download Table Data (csv)

## Age of MIS-C Reported Cases

Early in the pandemic, it appeared that children and adolescents 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 and adolescents weeks after they had COVID-19, and sometimes even when a child or adolescent had no known prior SARS-CoV-2 infection. Current data indicate the median age of children with MIS-C is 9 years.

## Cases by Age Group



### Next steps

Children and adolescents appeared to be less likely than adults to be infected or to have severe illness early in the COVID-19 pandemic and may have asymptomatic or mildly symptomatic COVID-19. However, as the outbreak has progressed, larger numbers of children and adolescents are getting infected. 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 and adolescent’s health outcomes to try to learn more about specific risk factors for MIS-C, progression of the illness in children and adolescents, 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<sup>i</sup>, laboratory evidence of inflammation<sup>ii</sup>, 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 RT-PCR, serology, or antigen test; or COVID-19 exposure within the 4 weeks prior to the onset of symptoms

<sup>i</sup>Fever  $>38.0^{\circ}\text{C}$  for  $\geq 24$  hours, or report of subjective fever lasting  $\geq 24$  hours

<sup>ii</sup>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

- 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.

Page last reviewed: March 4, 2021

Content source: [National Center for Immunization and Respiratory Diseases \(NCIRD\)](#)