

**Pediatric Inflammatory Multisystem Syndrome (PIMS):
a Rare Emerging Condition Linked to COVID-19**
Information for Caregivers – May 11th, 2020



A rare but serious illness has been identified in recent weeks in children and adolescents with prior exposure or infection with SARS-CoV-2, the virus that causes COVID-19. These youth may have had asymptomatic infection or mild symptoms of COVID-19 and recovered from the acute illness. They go on to present, sometimes weeks later, with high fever (102 degrees and above) for four or more days, associated with a combination of the following symptoms:

- skin rash
- red/cracked lips
- red “strawberry” tongue
- eye redness
- abdominal pain
- swelling or redness of hands & feet
- swollen lymph node in the neck
- shock (low blood pressure, rapid heart rate, decreased blood flow to vital organs)

These symptoms are similar to other known inflammatory conditions such as Kawasaki disease and Toxic Shock Syndrome. Scientists suspect it is caused by an over-reaction of the patient’s immune system to the COVID-19 virus that results in massive inflammation and damage to the body’s tissues. It is believed that some of the early cases of PIMS were incorrectly diagnosed as Kawasaki Disease. The treatments used for Kawasaki Disease that focus on decreasing inflammation and reducing the body’s immune response appear to be effective in PIMS as well. If left untreated, PIMS can result in damage to the heart or other vital organs, progressive shock and possibly death. With appropriate detection and treatment, most youth will fully recover from this illness.

Only a small number of children and adolescents who are infected with SARS-CoV-2 will go on to develop PIMS. It is believed that only youth who are predisposed to developing an overactive immune response will develop PIMS following COVID-19. The Illinois Department of Public Health, along with other state health departments, have mandated that health providers report suspected cases of PIMS in order to gather data on this newly recognized illness.

During the COVID-19 outbreak, caregivers should be aware of the symptoms of PIMS and contact the child’s healthcare provider immediately if such an illness develops. It is important to keep a working thermometer at home, as the duration and peak measurements of fever are important in making the diagnosis. While Telehealth visits are a useful tool in accessing care during the COVID-19 pandemic, it is important that children with persistent high fevers be evaluated directly by a medical professional who will measure the youth’s vital signs, perform a complete physical exam and initiate prompt medical treatment if needed.

Pediatric Inflammatory Multisystem Syndrome is a newly recognized condition; therefore we are likely to learn much more about the disease and effective treatments in the coming weeks and months. Updates to this notification will be provided as new information becomes available.

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FAQs:

What is PIMS?

PIMS is believed to be an abnormal immune response to coronavirus that causes high levels of inflammation in the body that result in persistent fever and injury to vital organs. It can develop weeks after the coronavirus symptoms have resolved. Since many young people do not develop symptoms when they have infection with COVID-19, children may develop PIMS without knowing they had COVID-19.

Will all children with COVID-19 develop PIMS?

No, only a small number of children with COVID-19 infection will go on to develop PIMS. Most youth with coronavirus will have no symptoms or mild cold-like symptoms that will resolve without medical treatment.

Can PIMS be prevented in young people who contract COVID-19?

There is currently no preventive treatment for PIMS. If a child has had exposure, symptoms or a positive test for COVID-19, caregivers should observe for symptoms of PIMS.

What are the symptoms of PIMS?

- **high fever** (102 degrees or above) for four or more days, associated with a combination of the following:
 - **skin rash**
 - **red/cracked lips**
- **red tongue with enlarged taste buds** (looks like a strawberry)
- **eye redness**
- **abdominal pain** (may include vomiting or diarrhea)
- **swelling or redness of hands and feet**
- **swollen lymph node in the neck**
- **shock** (low blood pressure, rapid heart rate, weakness, lethargy)

If my child develops symptoms of PIMS what should I do?

Call your child's medical provider immediately. Your child should be evaluated directly by a medical professional who will measure the youth's vital signs, perform a complete physical exam and initiate prompt medical testing and treatment if needed.

How is PIMS treated?

Current treatments include medication to reduce inflammation and infusion of blood proteins that block the overactive immune response. Children with PIMS require hospital admission for close monitoring and supportive care. With timely treatment, most youth will fully recover from PIMS.

For more information and updates, see the CDC website here:
<https://emergency.cdc.gov/han/2020/han00432.asp>