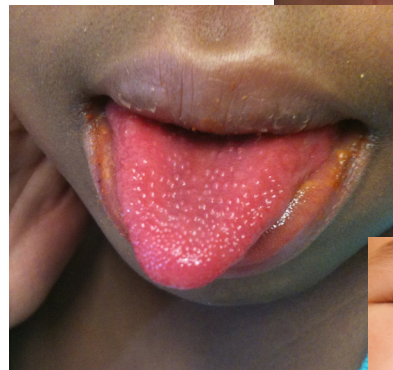


What is Kawasaki Disease?

Kawasaki disease (KD), also known as Kawasaki syndrome or mucocutaneous lymph node syndrome, is an illness that affects children. It causes inflammation of the blood vessels, particularly the coronary arteries. The average age of those affected is 2, 75% are younger than 5 and boys are 1.5 times more likely than girls to get KD. The remaining 25% of cases are older children, adolescents and teens.

KD is seen in all races and ethnicities but it's more common among Asian children, regardless of where they live.



Kawasaki disease has five classic symptoms: rash, swollen hands and feet, red eyes, red tongue and mouth and swollen neck glands. (Photos courtesy of the Kawasaki Disease Foundation)

What are the classic signs of Kawasaki disease?

Kawasaki disease is diagnosed when a patient runs a fever of 101°F – 104°F and above for five days or longer. The fever is accompanied by at least four of these five symptoms:

- A rash over the torso, especially in the groin area.
- Swollen, red hands and feet. Light peeling of the skin on the fingers and toes occurs in the second and third weeks of the illness.
- Bloodshot eyes.
- Swollen lymph glands in the neck. One lymph node measuring more than 1.5 centimeters.
- Redness and swelling of the mouth, lips, throat and tongue. "Strawberry" tongue – the tongue is bumpy and red with enlarged taste buds.

There are cases of "incomplete KD." In these instances, children have fever and inflammation, but don't have all the symptoms.

What causes it?

We don't know what causes KD, but there are many theories. It is not spread from person to person. Sometimes more than one child in a family can develop it. This may suggest a genetic predisposition for KD.

How does Kawasaki disease affect the heart?

Without prompt treatment, KD can damage the coronary arteries and the heart muscle in as many as 1 in 4 children.

Over the first few weeks, a weakening of a coronary artery can result in enlargement of the vessel wall (an aneurysm). A blood clot can form in this weakened area and block the artery. If this happens, the patient can have a heart attack.

When the illness begins, the heart muscle can be inflamed, affecting the heart's ability to squeeze. Heart rhythm and heart valve problems may occur, but they're rare. All these issues usually resolve. But damage to the coronary arteries and aneurysms are long-term concerns.

(continued)



How is it diagnosed?

Since we don't know what causes KD, a single test can't diagnose it. A health care provider must examine the child, observe the signs and symptoms, and review blood and urine tests to rule out other illnesses.

An ultrasound of the heart (echocardiogram) gives a clear picture of the coronary arteries and how the heart is functioning. This may aid in making a diagnosis.

How is Kawasaki disease treated?

Kawasaki disease is treated in the hospital, usually with intravenous immunoglobulin and aspirin. When given early in the illness, IVIG has been shown to reduce the risk of developing coronary artery abnormalities.

An additional dose of IVIG or other medications, such as steroids or infliximab, may be used in children who don't respond to IVIG.

Aspirin in moderate doses is used in the acute phase to help control fever. After the fever is gone, aspirin is given in lower doses to help prevent blood clots. Aspirin is stopped after 4 to 6 weeks if the child has normal coronary dimensions.

Can COVID-19 cause Kawasaki disease?

While children were initially thought to be largely spared from the COVID-19 illness, a few children around the world are presenting with symptoms. These include fever, significant abdominal pain, and some features of Kawasaki disease (red eyes, red tongue, swollen hands/feet, rash). This new syndrome has been named multisystem inflammatory syndrome in children (**MIS-C**). These children may or may not test positive for SARS-CoV-2, the virus that causes COVID-19, from a swab of their nasopharynx or from an antibody blood test.

Since some children have become very ill extremely quickly and cardiac complications can develop, children with these symptoms should be swiftly evaluated and cared for in hospitals with pediatric intensive care units, as needed.

Further research is needed on the full spectrum of inflammatory disorders that appear to be related to COVID-19.

HOW CAN I LEARN MORE?

- 1 Call 1-800-AHA-USA1 (1-800-242-8721), or visit [heart.org](https://www.heart.org) to learn more about heart disease and stroke.
- 2 Sign up to get *Heart Insight*, a free e-newsletter for heart patients and their families, at [HeartInsight.org](https://www.heartinsight.org).
- 3 Connect with others sharing similar journeys with heart disease and stroke by joining our Support Network at [heart.org/SupportNetwork](https://www.heart.org/SupportNetwork).
- 4 Contact the Kawasaki Disease Foundation at [kdfoundation.org](https://www.kdfoundation.org).

Do you have questions for your doctor or nurse?

Take a few minutes to write down your questions for the next time you see your health care provider.

For example:

What can I do to help my child deal with Kawasaki disease?

MY QUESTIONS:

We have many other fact sheets to help you make healthier choices to reduce your risk, manage your condition or care for a loved one. Visit [heart.org/AnswersByHeart](https://www.heart.org/AnswersByHeart) to learn more.