

# Multisystem Inflammatory Syndrome in Children (MIS-C) Associated with COVID

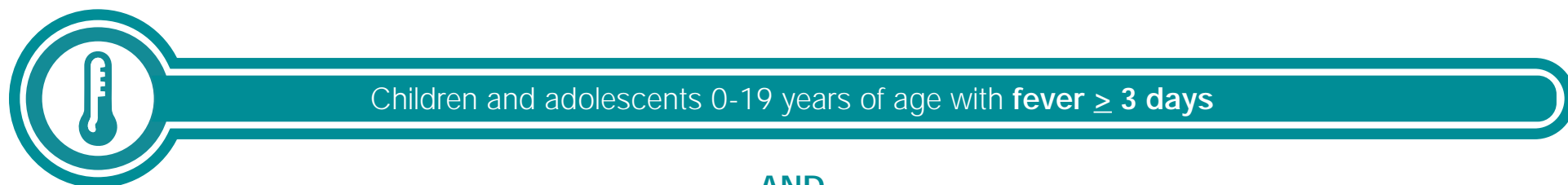
Children and adolescents can develop a severe inflammatory syndrome thought to follow exposure to COVID which has features similar to Kawasaki Disease and/or Toxic Shock Syndrome (TSS).

Children and adolescents can present in a wide variety of ways and ranging severity, including fever and shock.

**Vigilance for this uncommon but serious disease is critically important.**

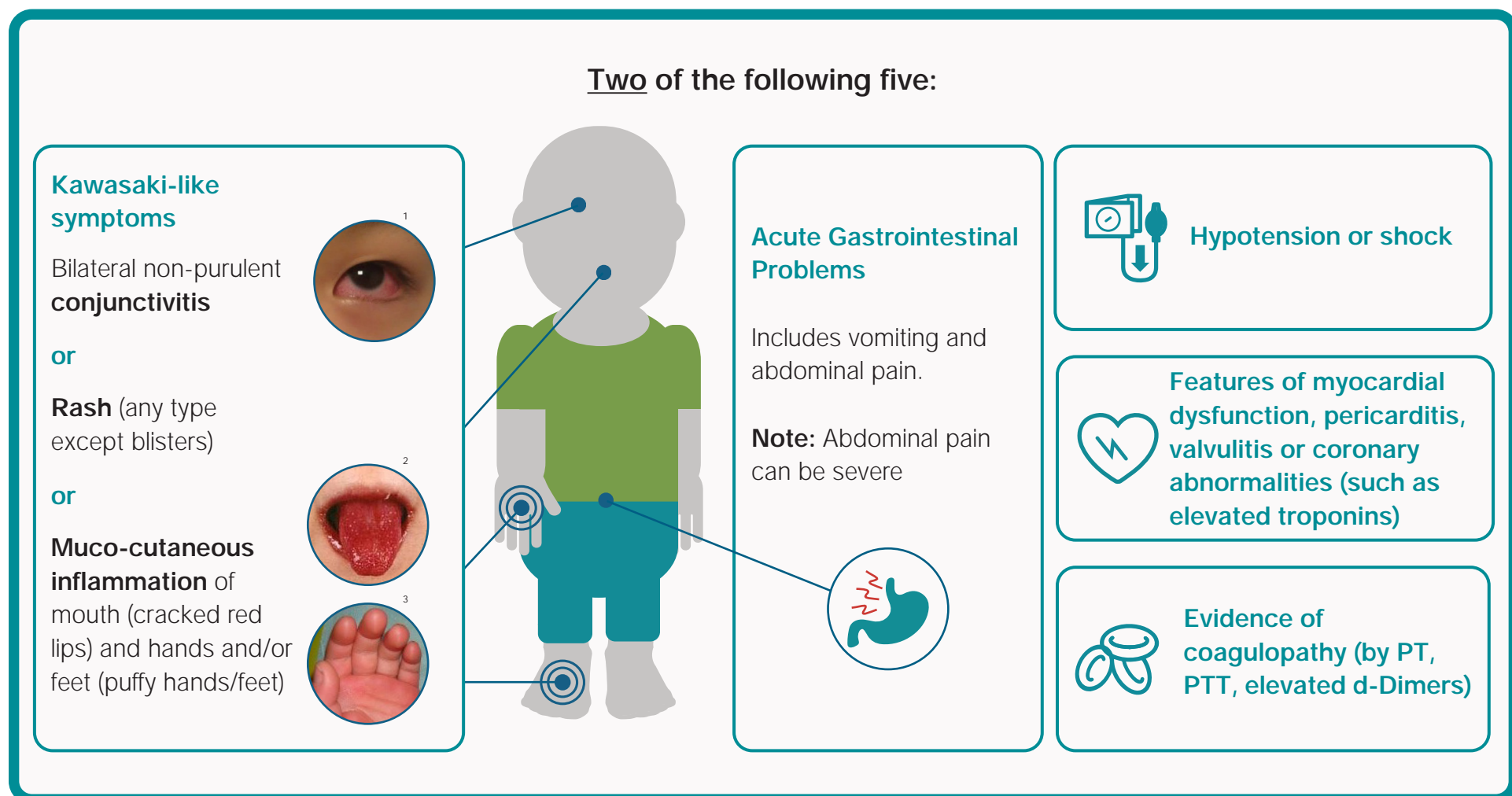
**Note:** Patient may not have known COVID exposure or positive COVID testing.

## Criteria of MIS-C:



AND

### Two of the following five:



AND

Elevated markers of inflammation (e.g. CRP and others)

AND

No other obvious microbial cause of inflammation, including bacterial sepsis, staphylococcal or streptococcal shock syndromes.

**Note:** Full pediatric cardiac and laboratory evaluation is available only at ACH/Stollery

**For any child or adolescent who appears to meet the criteria above, consult Stollery/Alberta Children's Hospital via RAAPID North/South (Consult even if patient is clinically well but MIS-C suspected)**

While awaiting disposition decision, continue to provide supportive care and watch for adverse response to fluid resuscitation.  
**Do not delay anti-microbial therapy because of suspected MIS-C.**

<sup>1</sup>Phend, C. (May 08, 2020) Kawasaki Disease From COVID-19 in Kids: How Common? Medpage Today, Retrieved from: <https://www.medpagetoday.com/infectiousdisease/covid19/86393>

<sup>2</sup>Yeter D, Deth R, Kuo HC. Mercury promotes catecholamines which potentiate mercurial autoimmunity and vasodilation: implications for inositol 1,4,5-triphosphate 3-kinase C susceptibility in Kawasaki syndrome. Korean Circ J. 2013;43(9):581-591.

<sup>3</sup>Rodriguez, T. (May 16, 2017) Kawasaki Disease: Updated AHA Guidelines. The Cardiology Advisor. Retrieved from: <https://www.thecardiologyadvisor.com/home/topics/pediatric-cardiology/kawasaki-disease-updated-aha-guidelines/>