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Topic: Multisystem Inflammatory Syndrome in Children (MIS-C) and Required Reporting for MIS-C

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To: Health Care Providers, Medical Facilities and Laboratories

Background

What is MIS-C?
Multisystem inflammatory syndrome in children (MIS-C) is a condition where different body parts can become inflamed, including the heart, lungs, kidneys, brain, skin, eyes, or gastrointestinal organs. Children with MIS-C may have a fever and various symptoms, including abdominal (gut) pain, vomiting, diarrhea, neck pain, rash, bloodshot eyes, or feeling extra tired. We do not yet know what causes MIS-C. However, many children with MIS-C had the virus that causes COVID-19 or had been around someone with COVID-19.

Case Definition for MIS-C
As described in the Health Advisory, “Multisystem Inflammatory Syndrome in Children (MIS-C) Associated with Coronavirus Disease 2019 (COVID-19),” the case definition for MIS-C is:

- An individual aged <21 years presenting with fever*, laboratory evidence of inflammation**, 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 exposure to a suspected or confirmed COVID-19 case within the 4 weeks prior to the onset of symptoms.

*Fever >38.0°C for ≥24 hours, or report of subjective fever lasting ≥24 hours

**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.

Clinical Presentation
Patients with MIS-C have presented with a persistent fever, fatigue, and a variety of signs and symptoms including multiorgan (e.g., cardiac, gastrointestinal, renal, hematologic, dermatologic, neurologic) involvement, and elevated inflammatory markers. Not all children will have the same signs and symptoms, and some children may have symptoms not listed here. MIS-C may begin weeks after a child is infected with SARS-CoV-2. The child may have been infected from an asymptomatic contact and, in some cases, the child and their caregivers may not even know they had been infected.

Please note, this must be reported immediately for confirmed and suspected cases of MIS-C.
Required Reporting

Reporting of MIS-C is required under NRS 441A.120 and NAC 441A.108, subsection 2, c. NAC 441A.085 “Extraordinary occurrence of illness” defined. (NRS 441A.120) “Extraordinary occurrence of illness” means:

1. A disease which is not endemic to this State, is unlikely but has the potential to be introduced into this State, is readily transmitted and is likely to be fatal, including, but not limited to, typhus fever.
2. An outbreak of a communicable disease which is a risk to the public health because it may affect large numbers of persons or because the illness is a newly described communicable disease, including, but not limited to:
   a. An outbreak of an illness related to a contaminated medical device or product.
   b. An outbreak of an illness suspected to be related to environmental contamination by any infectious or toxic agent.
   c. An outbreak of a newly emerging disease, including, but not limited to, avian influenza.
3. A case of an illness that is known or suspected to be related to an act of intentional transmission or biological terrorism.

As more is learned about MIS-C, the case definition may change. Please visit the CDC website for the most updated criteria: https://www.cdc.gov/mis-c/hcp/

Reporting

Health care providers should immediately notify both infection control personnel at their health care facility and their local/state health department in the event of a probable or confirmed case of Multisystem inflammatory syndrome in children (MIS-C).

- Nevada Division of Public and Behavioral Health (DPBH): (775)-684-5911 (M-F 8:00 AM to 5:00 PM); (775)-400-0333 (after hours)
- Southern Nevada Health District (SNHD): (702)-759-1300 (24 hours)
- Washoe County Health District (WCHD): (775)-328-2447 (24 hours)
- Carson City Health and Human Services (CCHS): (775)-887-2190 (24 hours)

For More Information: Please contact DPBH M-F 8:00 AM to 5:00 PM at (775)-684-5911. The after-hours line can be contacted at (775)-400-0333.

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