DATE: 3/9/2021
TO: Health Alert Network
FROM: Allison V. Beam, JD, Acting Secretary of Health
SUBJECT: Call for Cases: Multisystem Inflammatory Syndrome in Adults (MIS-A)
DISTRIBUTION: Statewide
LOCATION: n/a
STREET ADDRESS: n/a
COUNTY: n/a
MUNICIPALITY: n/a
ZIP CODE: n/a

This transmission is a Health Advisory: Provides important information for a specific incident or situation; may require immediate action.

HOSPITALS: PLEASE SHARE WITH ALL MEDICAL, PEDIATRIC, NURSING, AND LABORATORY STAFF IN YOUR HOSPITAL; EMS COUNCILS: PLEASE DISTRIBUTE AS APPROPRIATE; FQHCs: PLEASE DISTRIBUTE AS APPROPRIATE
LOCAL HEALTH JURISDICTIONS: PLEASE DISTRIBUTE AS APPROPRIATE; PROFESSIONAL ORGANIZATIONS: PLEASE DISTRIBUTE TO YOUR MEMBERSHIP

- Multisystem inflammatory syndrome in children (MIS-C) is a rare but severe complication in children and young adults infected with SARS-CoV-2, the virus that causes COVID-19. Since June 2020, several case reports describe a similar multisystem inflammatory syndrome in adults (MIS-A).
- MIS-A is usually severe, with patients requiring intensive care; outcomes can be fatal.
- Clinicians should consider MIS-A in adults with compatible signs and symptoms. These patients might not have positive SARS-CoV-2 PCR or antigen test results, and antibody testing might be needed to confirm previous SARS-CoV-2 infection.
- Case definition criteria should be thoroughly reviewed, as MIS-A can be difficult to distinguish from severe COVID-19 infections.
- Healthcare providers should report suspect cases of MIS-A by faxing the attached case report form to 717-772-6975 or your local health department or by emailing the form to ra-dhcovidcontact@pa.gov

This guidance is based on available information about COVID-19 and subject to change as additional information becomes available.

Throughout the COVID-19 pandemic, reports of multisystem inflammatory syndrome in children (MIS-C) continue to increase in the United States with 2,617 total cases and 33 deaths reported from 48 states, New York City, Puerto Rico, and Washington, DC. As of March 8, Pennsylvania has reported 107 confirmed cases of MIS-C. Clinical features in children and young adults (aged 18-20 years) have varied but predominantly include shock, cardiac dysfunction, abdominal pain, and elevated inflammatory markers, including C-reactive protein (CRP), ferritin, D-dimer, and interleukin-6.
Since June 2020, several case reports have described a similar syndrome in adults (aged ≥ 21 years). These reports suggest that the presentation of the syndrome in adults may be more complicated than in children, with heterogeneity of clinical signs and symptoms. Patients with MIS-A typically require intensive care and can have fatal outcomes. Initial reports suggest that racial and ethnic minority groups might be disproportionately impacted by MIS-A.

Clinicians should consider MIS-A in adults with compatible signs and symptoms. These patients might not have positive SARS-CoV-2 PCR or antigen test results; therefore, antibody testing might be needed to confirm previous SARS-CoV-2 infection. Because of the temporal association between MIS-A and SARS-CoV-2 infections, interventions that prevent COVID-19 might prevent MIS-A. Further research is needed to understand the pathogenesis and long-term effects of this newly described condition.

Currently, there is not a standard, national case definition for MIS-A. Information collected from case reports will be used to help inform syndrome characteristics and case definition planning. In the interim, the MIS-C case definition is the working case definition for MIS-A. Case definition criteria should be thoroughly reviewed as MIS-A can be difficult to distinguish from severe COVID-19 infections.

**MIS-A working case definition**

- 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: elevated C-reactive protein (CRP), erythrocyte sedimentation rate (ESR), fibrinogen, procalcitonin, d-dimer, ferritin, lactic acid dehydrogenase (LDH), interleukin 6 (IL-6), or neutrophils; reduced lymphocytes; or low albumin.

**Reporting**

Healthcare providers must report suspect cases of MIS-A which meet all of the case definition criteria and with onsets on or after Jan 1, 2021, by faxing the attached case report form to 717-772-6975 or your local health department or by emailing the form to ra-dhcovidcontact@pa.gov. Race and ethnicity information should be collected and reported. Vaccination information should also be included, as appropriate.

Categories of Health Alert messages:
- **Health Alert**: conveys the highest level of importance; warrants immediate action or attention.
- **Health Advisory**: provides important information for a specific incident or situation; may not require immediate action.
- **Health Update**: provides updated information regarding an incident or situation; unlikely to require immediate action.

This information is current as of 3/9/21 but may be modified in the future. We will continue to post updated information regarding the most common questions about this subject.