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- **TO:** Hospital Operators, Health Care Providers, Health Care Facilities, Clinical Laboratories, and Local Health Departments
- **FROM:** New York State Department of Health (NYS DOH) Bureau of Communicable Disease Control (BCDC)

## HEALTH ADVISORY: PEDIATRIC MULTI-SYSTEM INFLAMMATORY SYNDROME POTENTIALLY ASSOCIATED WITH CORONAVIRUS DISEASE (COVID-19) IN CHILDREN

#### SUMMARY

- Recently, the Novel Coronavirus (COVID-19) has been reported as possibly linked with a pediatric multi-system inflammatory syndrome disease – "Pediatric Multi-System Inflammatory Syndrome Potentially Associated with COVID-19."
- As of May 5, 2020, sixty-four (64) suspected pediatric clinical cases compatible with multi-system inflammatory syndrome associated with COVID-19 have been reported in children in New York State hospitals, including New York City.
- Hospitals must immediately report cases of pediatric multi-system inflammatory syndrome potentially associated with COVID-19 in patients who are under 21 years of age to NYS DOH through the Health Emergency Response Data System (HERDS) application on the health commerce system (HCS) and perform a diagnostic and serological test to detect the presence of SARS-COV-2, the virus that causes COVID-19, or corresponding antibodies in the patient.

## ADVISORY

- The purpose of this health advisory is to (1) ensure providers are aware of the pediatric multisystem inflammatory syndrome potentially associated with COVID-19 and (2) provide guidance on reporting of cases to NYS DOH and testing of patients who present with this disease.
- Please note that while older adults are at risk for severe COVID-19 illness, children can still get sick with COVID-19, most often presenting with mild symptoms, but rarely becoming severely ill.

# PEDIATRIC MULTI-SYSTEM INFLAMMATORY SYNDROME POTENTIALLY ASSOCIATED WITH COVID-19

- In the United Kingdom and Europe, a possible link has been reported between COVID-19 and a serious inflammatory disease recently termed "Pediatric Multi-System Inflammatory Syndrome Temporally Associated with COVID-19."
- As of May 5, 2020, sixty-four (64) suspected pediatric clinical cases compatible with multisystem inflammatory syndrome have been reported in children in New York State hospitals, including New York City.
- This syndrome has features which overlap with Kawasaki Disease and Toxic Shock Syndrome. Inflammatory markers may be elevated, and fever and abdominal symptoms may be prominent. Rash also may be present. Myocarditis and other cardiovascular changes may be seen.

Additionally, some patients have developed cardiogenic or vasogenic shock and required intensive care. This inflammatory syndrome may occur days to weeks after acute COVID-19 illness.

- The syndrome may include:
  - A child presenting with persistent fever, inflammation (e.g. neutrophilia, elevated C-reactive protein and lymphopenia) and evidence of single or multi-organ dysfunction (shock, cardiac, respiratory, renal, gastrointestinal or neurological disorder). This may include children meeting full or partial criteria for Kawasaki disease.
  - Exclusion of any other microbial cause, including bacterial sepsis, staphylococcal or streptococcal shock syndromes, and infections associated with myocarditis such as enterovirus. Clinicians should not delay seeking expert advice while waiting for results of these investigations.
- Early recognition by pediatricians and prompt referral to an in-patient specialist, including to critical care is essential.
- This syndrome should be considered by pediatricians and specialists, particularly when other microbial etiologies have not been identified.
- Pediatricians and specialists should elicit any recent history of illness with COVID-19 or close contact with individuals who are known to have COVID-19 in children presenting with symptoms that are compatible with pediatric multi-system inflammatory syndrome potentially associated with COVID-19.
- The majority of patients who have presented with this syndrome have tested positive for SARS-COV-2 or corresponding antibodies. Some tested positive on diagnostic, molecular testing for SARS-COV-2, others were positive on serological testing for corresponding antibodies.

## **REPORTING AND TESTING**

- Hospitals must immediately report cases of pediatric multi-system inflammatory syndrome potentially associated with COVID-19 in patients who are under 21 years of age to NYS DOH through the Health Emergency Response Data System (HERDS) application on the health commerce system (HCS)
- Hospitals must **perform a diagnostic and serological test** to detect the presence of SARS-COV-2, the virus that causes COVID-19, or corresponding antibodies in patients who are under 21 years of age and present with symptoms compatible with pediatric multi-system inflammatory syndrome potentially associated with COVID-19.

For questions about HERDS, providers can send an e-mail to hospinfo@health.ny.gov.

For other questions, providers can contact their local health department (LHD) at the link below or NYS DOH BCDC at 518-473-4439 during business hours or 1-866-881-2809 during evenings, weekends, and holidays.

## RESOURCES

- <u>NYS DOH COVID-19 Website</u>
- <u>NYS Local Health Department Directory</u>
- <u>Centers for Disease Control and Prevention (CDC) COVID-19 Website</u>
- <u>Royal College of Paediatrics and Child Health Guidance: Paediatric Multisystem Inflammatory</u> <u>Syndrome Temporally Associated with COVID-19</u>