





# **COVID-19 UPDATE**

**DATE:** January 11, 2021

TO: Our Akron Children's Hospital Physician/Provider Colleagues

**FROM:** Akron Children's Hospital COVID-19 Incident Command

## Multi-system Inflammatory Syndrome cases seen locally

This update provides an alert about the recognition of Multi-system Inflammatory Syndrome in Children (MIS-C) related to COVID-19. This is a relatively rare complication of SARS-CoV-2 infection that is generally seen a few weeks after an initial Covid-19 infection which could have been mild or even asymptomatic. Though rare, it has been common enough to have been identified in all areas of significant SARS-CoV-2 transmission, including in our region.

Almost all the children identified had positive results of RT-PCR testing for SARS-CoV-2, positive serology indicating past infection or known exposure to SARS-CoV-2. Deaths have been reported. Respiratory symptoms have been notably lacking in some cases. Many cases may meet partial or full criteria for Kawasaki Disease. Damage to the heart has been a worrisome aspect of this disease.

## CDC Case Definition for Multisystem Inflammatory Syndrome in Children (MIS-C)

- An individual aged <21 years presenting with fever<sup>i</sup>, laboratory evidence of inflammation<sup>ii</sup>, 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 COVID-19
  exposure within the 4 weeks prior to the onset of symptoms

#### **Additional comments**

- Patients with MIS-C usually present with persistent fever, abdominal pain, vomiting, diarrhea, skin rash, mucocutaneous lesions and, in severe cases, with hypotension and shock.
- 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.

This is a serious and sometimes fatal disease. The most life-threatening aspect is the inflammatory effect on the heart and associated coronary vascular system. If you recognize a child with this constellation of symptoms, it is appropriate to seek specialty care quickly.

#### For consults/referrals

Please do not hesitate to call our Communication Center at 330-543-4567 to begin the process of referral and transport, if needed, to our emergency departments in Akron or Boardman. Our Infectious Disease team along with our Cardiology and Critical Care specialists are prepared to help by telephone consultation. You can reach Infectious Disease at 330-543-8395 or through the operator at 330-543-1000.

<sup>&</sup>lt;sup>i</sup> 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.

## **Viral Epidemiology Snapshot**

Attached is the Viral Epidemiology Snapshot produced by our Molecular Diagnostics/Virology labs. It is included to share the results of local viral testing from our inpatient and outpatient settings from the past month. RSV and Influenza remained at very low levels through December. SARS-CoV-2 infection remains widespread throughout our communities. The other viral activity in children in our area is represented by adenovirus and rhino/enterovirus infections. The SARS-CoV-2 data is from both inpatient and outpatient sources. The remainder of testing represents mostly a hospitalized population. Please let us know if you find this information useful.

The **Pediatric COVID-19 Exposure Scenarios** flyer distributed in September was recently updated to reflect the CDC's revised 14-day/10-day optional quarantine information. Ask your liaison for a new pdf file or visit <u>akronchildrens.org/providers</u>, click on the 'Coronavirus Update' feature at the top of the page and select the 'Resources' tab.

#### **Your Health Care Partner**

We are committed to providing high-quality pediatric care, and we appreciate the opportunity to collaborate with you in managing your patients. Here are new specialty care providers who recently joined our hospital, as well as newly opened specialty care locations:

- Adrian Araya, MD, FAAP, Pediatric Endocrinologist, Center for Diabetes and Endocrinology
- Kristi Bogan, MD, DABR, Pediatric Radiologist, Interventional Radiology
- Bruna Schneider, PsyD, Neuropsychology, NeuroDevelopmental Science Center
- Kathleen Hassara, PsyD, Neuropsychology, NeuroDevelopmental Science Center
- Mallary St. John, DDS, Pediatric Dentistry, Celeste Myers Dental Clinic
- Laura Hlavaty, PhD, Pediatric Psychologist, Lois and John Orr Family Behavioral Health Center
- Amanda Abou-Fadel, MD, Pediatric Gastroenterologist, Department of Gastroenterology
- New services in Lorain County Akron Children's Hospital Specialty Care, Amherst located in the Bitar Medical Center, 5940 Oak Point Road, Suite E, Lorain, OH 44053
  - o Cardiology December 2020
  - Gastroenterology, Neurology January 2021
  - Nephrology April 2021

## How to Refer to Akron Children's Hospital

- 1. Outpatient Specialty Care:
  - Use **EpicCare Link** for direct, streamlined referrals into our system. To sign up, call 330-543-6248 or email <u>epiccarelink@akronchildrens.org</u>.
  - Contact the **Appointment Center** by Phone 330-543-2778 or Fax 330-543-6071.
  - Complete the Ambulatory Referral Order form at akronchildrens.org/referral and click 'Send Request.'
- 2. Admissions/Emergencies: Call 800-221-5437 to arrange an admission or transport.
- 3. COVID-19 Questions/Concerns: Call our COVID-19 hotline at 330-543-COVD (2683).

### **Contact our Physician Liaisons**

Our team is always available to help with any questions or concerns you have about our health care system.

Lori Carsey (East) 330-606-6657
 Lynn Matzules (South) 330-715-5690

• Susan Manly (North) 330-697-1666 • Jennifer Stuart (West) 330-543-3453

• Pat Shallahamer (Central) 330-805-1764





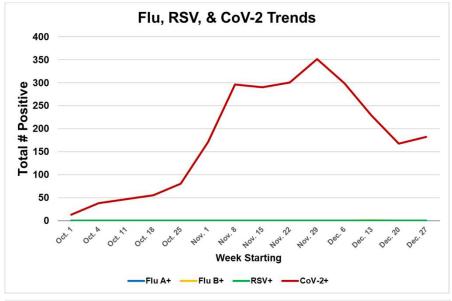
# Viral Epidemiology Snapshot: December 2020

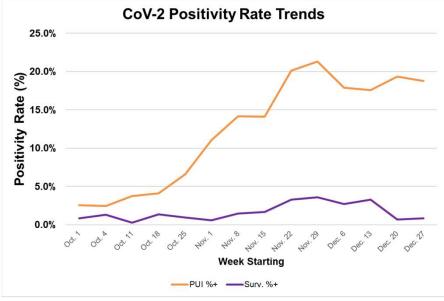
Prepared by Anne Hall, Ph.D. Molecular Diagnostics/Virology Labs, Akron Children's Hospital

CoV-2, Flu, & RSV					
<u>Virus</u>	#Tested	#Positive	% Positive		
Flu A	857	0	0.0%		
Flu B	857	1	0.1%		
RSV	847	0	0.0%		
CoV-2 PUI	6289	1197	19.0%		
CoV-2 Surveilance	1221	33	2.7%		

Flu A Subtyping				
2009 H1N1	0			
Seasonal H1	0			
Seasonal H3	0			
Unable to subtype	0			
Pending subtype	0			

Other Respiratory Viruses					
<u>Virus</u>	#Tested	#Positive	% Positive		
Adenovirus	882	50	5.7%		
Coronavirus 229E	847	0	0.0%		
Coronavirus HKU1	847	0	0.0%		
Coronavirus NL63	847	3	0.4%		
Coronavirus OC63	847	0	0.0%		
hMPV	847	0	0.0%		
Rhinovirus/Enterovirus	847	244	28.8%		
Parainfluenza 1	847	0	0.0%		
Parainfluenza 2	847	0	0.0%		
Parainfluenza 3	847	1	0.1%		
Parainfluenza 4	847	0	0.0%		





This report contains results for molecular and antigen tests performed between November 29-January 2 at the Akron and Mahoning Valley campuses, as well as testing ordered by Akron Children's Hospital Pediatrics and performed by the main campus laboratories.

When SARS-CoV-2 testing exceeds the capacity of the Akron Campus laboratories, testing may also be performed by reference laboratories including Mayo Clinic, Cleveland Clinic, Viracor, ARUP Labs, and/or the Ohio Department of Health. Results from these tests are included in the above totals.

This report does not include any Point-of-Care tests (POCT) performed within physicians' offices (Flu/RSV only).

Notes on SARS-CoV-2 data: In the top chart, the red CoV-2 line traces the total number of patients testing positive each week. In the bottom chart, the orange line ("PUI") shows data for all patients with symptoms or known exposures ("Patient Under Investigation") while the purple line ("Surv.") shows surveillance data for asymptomatic patients undergoing preprocedure testing.