What EMS Needs to Know About Multisystem Inflammatory Syndrome in Children (MIS-C)

WHAT IS MIS-C
Multi-system inflammatory Syndrome in Children (MIS-C) occurs as multiple organ systems become inflamed, including the heart, lungs, kidneys, brain, skin, eyes or gastrointestinal organs. Information on this syndrome is rapidly evolving. Many signs of MIS-C seem mild or vague, but the illness can progress rapidly. The presentation varies widely among patients. MIS-C is currently associated with COVID-19, and cases are on the rise in areas where COVID-19 has been most prevalent. It typically appears a few weeks after exposure. Note that caregivers may not be aware that the child had or was exposed to COVID-19. MIS-C can be serious, even deadly, but most children diagnosed with this condition have gotten better with medical care.

Remember - Vital signs are VITAL for any child seen, especially those with fever and concern for MIS-C. Acquire a full set of accurate vital signs – BP, HR, RR, and Pulse-ox. Be sure to repeat these measures.

SIGNS OF MIS-C WITH SHOCK AND/OR IMPENDING DECOMPENSATION
- Fever $>100.4^\circ$ for $>24$ hours
- Trouble breathing or very rapid breathing
- Pain or pressure in the chest that does not go away
- Tachycardia
- Hypotension
- New confusion
- Inability to wake or stay awake
- Bluish lips or face
- Severe abdominal pain

INCREASED SUSPICION FOR MIS-C OR LIKELY SERIOUS SYNDROME PROGRESSION IF:
- Fever lasting several days
- Known COVID exposure – symptoms typically appear a few weeks after exposure
- Pre-teens and teens with MIS-C signs/symptoms
- Tachycardia, hypotension, or elevated respiratory rate
- Chest pain with MIS-C signs/symptoms
  - Increased concern for serious consequences of MIS-C and cardiac involvement

TREATMENT
- Obtain initial full set of vital signs and repeat
- IV fluids
- Oxygen
- Obtain EKG – if available
- Continuous cardiac monitoring