



Prehospital Pediatric Partners



January 17, 2025 Volume 1

Coordinator's Corner

2025 education

Contact Sarah Pearson
pearsons@childrensdayton.org
to schedule your 2025
EMS education

Pediatric protocol reminders

Airway management

The supraglottic airway is recommended as the PRIMARY AIRWAY for pediatric patients. Additionally, bagging only has been proven just as effective in pediatric patients when compared to advanced airway options.

[Advanced airway management 1008](#)

IO needle selection

Reach for the BLUE needle for your pediatric patients (3-45kg). The pink needle is reserved for patients less than 3kg – think preterm and spontaneous deliveries!



[IO infusion 1012](#)

What even is this?

This newsletter is not only a communication tool between prehospital and Dayton Children's Hospital, but also a CE opportunity! Read the content, take the quiz, get 0.5 hours of pediatric CE!

ACE Alert



Beginning January 7, 2025, Dayton Children's main campus started using an ACE (Acute Crisis Evaluation) Alert for behavioral health patients needing immediate intervention. This is a proactive approach to managing patients experiencing an acute crisis involving mental health, substance use, behavioral disturbances, or medical conditions impacting behavior or thought processes. EMS and police can activate this alert. EMS, please call the Communication Center at 937-641-4444, police radio public safety. Upon activation, if you can safely enter the building, proceed to the room to the immediate right labeled "EMS" – if you pass the EMS lounge you have gone too far. The ACE Alert will activate a highly specialized team including a provider, nurse, pharmacist (if within working hours), Behavioral Action Team, and Public Safety. If you feel you cannot safely enter the building, please advise the Communication Center. The ACE Alert has been designed to provide safety for yourselves, ED staff, and the patient. Initiation of similar processes at other facilities have shown a dramatic decrease in injuries to prehospital and ED staff.





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Upcoming Events

Ohio EMSC Conference

March 7, 2025
7 a.m. - 4:30 p.m.
Columbus, Ohio

[Register here](#)

6.5 hours of EMS CE
Priority 1 funding eligible

Pediatric Disaster and Emergency Preparedness sponsored by FEMA

April 2-3, 2025
DCH Inspiration Center
241 Taylor Street
Free

[Register here](#)

3rd annual DCH Pediatric EMS Symposium

November 3, 2025
Full-day in person and
virtual options
DCH Inspiration Center
241 Taylor Street
More information coming
soon!

Coming Summer 2025

The Mathile Center for Mental Health and Wellness is set to open mid-year. This will be a comprehensive center which will include an emergency department that can accept medically stable mental health patients 8 a.m. to midnight. More information to come closer to opening in a later edition of *Prehospital Pediatric Partners*. ACE Alerts also can be called to this facility when opened.



Respiratory update



It's respiratory season! In the pediatric world, this is our busy season due to respiratory illnesses. RSV positivity rates began to rise in December with about 30% of all tests coming back positive for the virus that can be incredibly difficult for young pediatric patients. Influenza rates are also on the rise.

RSV causes an increase in mucous production and can lead to respiratory distress and failure. In young pediatric patients and in those with chronic lung disease and history of prematurity, it is difficult for them to clear mucous from their airways and they can decompensate quickly. The increase of mucous production and inflammation causes the small airways called the bronchioles to become inflamed. This can lead to bronchiolitis, which can progress to small airways collapsing and preventing oxygen exchange in the alveoli. Increased work of breathing can be very fatiguing for infants and young children due to their faster metabolism and greater oxygen demand.

Respiratory distress is characterized by tachypnea, increased work of breathing, retractions, nasal flaring, wheezing, grunting, irritability, and poor oral intake. If left untreated, the patient can experience hypoxia, apnea, and



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COMING SOON Ohio EMS for Children online education with CE credit!

Ohio EMSC currently has recorded training sessions on its website for your review. In collaboration with Ohio EMSC, Dayton Children's will be giving CE credit for these recorded offerings! Check in February for these free, on-demand credits!

[Link](#)

Claim CE for this newsletter



[Newsletter evaluation link](#)

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respiratory failure. Severe bronchiolitis requires high flow oxygen, up to and including positive pressure ventilation to prevent the bronchioles from collapsing and impeding oxygen exchange. Bronchiolitis can also be caused by other respiratory viruses such as influenza, coronaviruses, rhinovirus (the most common respiratory virus), and adenovirus.

What about the wheezing? Wheezing with bronchiolitis is normally caused by clogging of the airways due to the increased mucous production and swelling. Typically, an albuterol treatment is not effective and thus not recommended. If the patient is age 2 and under, with no history of reactive airway disease, wheezing, or breathing treatments, it is not advised to administer albuterol per protocol.

Protocol management of bronchiolitis

- Deep nasopharyngeal suctioning
- Oxygen administration
- Positive pressure ventilation (BVM)
- Supraglottic airway
- Glucose check – treat accordingly
- Check temperature for fever. Fever can increase a patient's respiratory rate, causing them to breathe faster than normal.



Remember your **supraglottic airway** is the preferred airway management method over intubation due to the intricacies of the pediatric airway. Additionally, using uncuffed ETT does not provide the needed pressure to help open the bronchioles. If you need a refresher and practice inserting rescue airways in the pediatric patient, please reach out to [Sarah Pearson](#) to set up an in-service training. *Contraindication to using a supraglottic airway is extreme airway edema such as croup, epiglottitis, and smoke inhalation/burns. Please remember it also is not advised to intubate croup or epiglottitis in the field.

