Welcome!
The Maine EMS for Children (EMS-C) Program is happy to share with you this monthly newsletter designed to share info, topics, education and events to better the care we all deliver to the pediatric population in Maine!

Did you Know?
You can receive a free digital and/or print edition of EMSWORLD. Navigate to https://hmp.dragonforms.com/loading.do?omedasite=EMS_new Fill out the info and enjoy!

Have you visited the Maine EMS for Children webpage? Find information about the EMS-C committee, resources about the EMS-C performance measures, links to our many state and national partners, and other resources. Visit https://www.maine.gov/ems/EMSC%20Resources/index.html

PEDIATRIC DATA FOR QUARTER 1, 2019 RELEASED
A summary of EMS responses across Maine for the first quarter of 2019 (Jan 1 to Mar 31) has been published and is available on the Maine EMS website. Find it on the home page of maine.gov/ems under EMS-C Resources.
Respiratory Syncytial Virus (RSV) is an infection that affects nearly every child in the United States by the age of 2, with 60% infected within their first year of life. According to the CDC, approximately 57,000 pediatric patients under age 5 are hospitalized for RSV. It is most common in winter and spring, and patients can be re-infected at any point in life. Those most at risk for severe infections include:

- Premature infants
- Very young infants, especially those 6 months and younger
- Children younger than 2 years old with chronic lung disease
- Children younger than 2 years old with chronic heart disease
- Children with weakened immune systems
- Children who have neuromuscular disorders, including those who have difficulty swallowing or clearing mucus secretions

Incubation time for RSV is approximately 4-8 days, peaking in days 3-5. The CDC states that RSV is the most common cause of bronchiolitis and pneumonia in patients under the age of 1 in the U.S. Symptoms may last for several weeks, but generally resolve within the first week. RSV may produce copious edema in the lungs, but generally does not constrict airways.

RSV is spread through direct contact, and can survive for 30+ minutes on hands, and 6 hours on surfaces.

**Signs and Symptoms of RSV**

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Description</th>
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<tbody>
<tr>
<td>Runny nose</td>
<td>Decreased activity/appetite</td>
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<tr>
<td>Rapid breathing</td>
<td>Apneic pauses in breathing</td>
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<tr>
<td>Cough, wheezing</td>
<td>Fever (possibly)</td>
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<tr>
<td>Head bobbing with breathing</td>
<td>Nasal flaring</td>
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**WHAT DO OUR PROTOCOLS SAY?**

The pediatric patient suffering from RSV can fall under many Maine EMS protocols. Successful management depends on a thorough physical assessment and obtaining complete history from parent(s) or guardian(s). Determination of mental status, respiratory and heart rate, temperature, fluid input and output and blood glucose are important considerations. Assess the chest wall for retractions, occurring when a patient must use muscles between the ribs or in the neck to breathe. It is a sign that the patient is having to work harder than normal to breathe. Assess the child's rib cage during inhalation. If you see it "caving in" and forming an upside-down "V" shape under the neck, then they are working too hard to breathe.

*Maine EMS Pink 10 (Pediatric Respiratory Distress with Wheezing)* may be one protocol used. Of note, the protocol states “Wheezing in the child less than 2-years-old is very commonly due to bronchiolitis. Bronchiolitis is a self-limited viral illness of the bronchioles, marked by edema but not smooth muscle contraction. Bronchiolitis is the most common cause of wheezing in children under the age of 2. The treatment goals are to maintain oxygenation and hydration and to monitor for apnea and respiratory distress. Because the etiology is different than asthma, the treatment options are also very different. **Patients suffering from bronchiolitis should not receive inhaled albuterol or intravenous steroids. Instead, provide oxygen to ensure O2 saturation greater than or equal to 90% and nasal suctioning with bulb syringe.** Patients who fail these measures or decompensate may benefit from nebulized epinephrine”.

Special thanks to Dr. Matthew Morgan, DO, an ED attending at Adirondack Medical Center (NY). For further information, visit [https://www.healthychildren.org/English/health-issues/conditions/chest-lungs/Pages/RSV-When-Its-More-Than-Just-a-Cold.aspx](https://www.healthychildren.org/English/health-issues/conditions/chest-lungs/Pages/RSV-When-Its-More-Than-Just-a-Cold.aspx)
Pediatric Educational Opportunities

Atlantic Partners EMS is offering a variety of Pediatric Advanced Life Support (PALS), Pediatric Emergency Assessment, Recognition & Stabilization (PEARS) and Emergency Pediatric Care (EPC) courses. For more info and to sign up, visit www.apems.org, or contact APEMS at 207-877-0936, or by e-mail at staylor@apems.org

PEARS - Thursday, May 16 at Northern Light Medical Transport
PALS Provider - Thursday, May 22 & Friday, May 23 at St. Mary’s Regional Medical Center
PALS Refresher - Friday, May 23 at St. Mary's Regional Medical Center
PEARS - Tuesday, June 11 at St. Mary's Regional Medical Center
EPC - Tuesday, June 25 & Wednesday, June 26 Location TBD

United Training Center in Lewiston is offering the following pediatric education programs:

<table>
<thead>
<tr>
<th>Program</th>
<th>Date</th>
<th>Location</th>
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<tr>
<td>PALS Refresher</td>
<td>Apr 26</td>
<td>Lewiston</td>
</tr>
<tr>
<td>PEPP ALS/BLS Hybrid</td>
<td>May 18</td>
<td>Stoneham</td>
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<tr>
<td>PEPP ALS/BLS Hybrid</td>
<td>Jun 11</td>
<td>Lewiston</td>
</tr>
<tr>
<td>PALS Refresher</td>
<td>Aug 13</td>
<td>Lewiston</td>
</tr>
<tr>
<td>PALS Refresher</td>
<td>Oct 22</td>
<td>Lewiston</td>
</tr>
<tr>
<td>PALS Refresher</td>
<td>Nov 12</td>
<td>Lewiston</td>
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To register for the above programs, please visit www.unitedambulance.com

Save the Date!

Hot Topics in Cardiac Resuscitation

Loon Resort & Spa - Lincoln, NH

Hear the leading experts discuss current topics/debates in resuscitative medicine.
For: EMS Providers, Emergency Medical Dispatchers, Nurses,
Medical Direction and EMS Leadership
Price: $25, which includes breakfast & lunch.

Sponsored by: Resuscitation Academy, Seattle, WA
Coordinated by: Maine, New Hampshire and Vermont EMS

To see the brochure and register, visit https://mmcemso.org/
Pediatric Shortness of Breath
Safe Transport of the Pediatric Patient

We are happy to share your pediatric related education opportunities. Contact marc.a.minkler@maine.gov

For the full brochure and registration information, visit the Maine EMS website, under latest news.

https://www.maine.gov/ems/

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This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by HRSA, HHS or the U.S. Government.