

# STATE OF MAINE DEPARTMENT OF PUBLIC SAFETY MAINE EMERGENCY MEDICAL SERVICES 152 STATE HOUSE STATION AUGUSTA, MAINE 04333





J. SAM HURLEY DIRECTOR



June 24, 2021

The Maine EMS for Children (EMS-C) program is happy to share with you the results of the 2021 EMS Agency National Pediatric Survey. This survey conducted from January 7 through March 19, 2021 and was sent to 15,768 EMS agencies across every state in the United States, Washington DC, Puerto Rico, and 7 freely associated states (such as Guam, Palau, Virgin Islands, and American Samoa). It represents self-reported data covering a variety of metrics, including:

- Pediatric EMS responses
- Number, and level, of EMS providers per service
- Frequency, and type, of EMS pediatric skill evaluations
- Availability, and roles, of departmental Pediatric Emergency Care Coordinator (PECC)

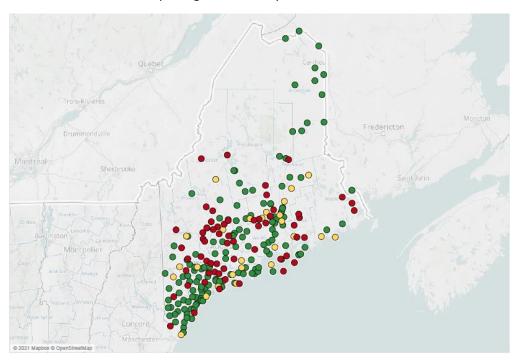
Our hope is that this survey will assist EMS agencies, EMS regions, training centers and other stakeholders identify opportunities to improve pediatric education and resources throughout Maine.

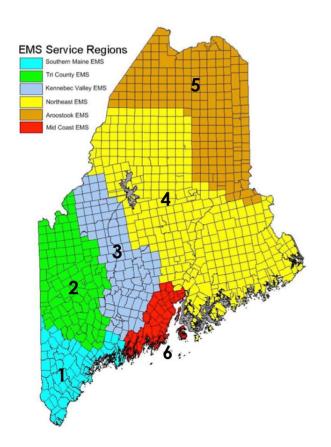
In Maine, surveys were sent to service leaders for 259 Maine EMS licensed services. Per nationally determined guidelines, some services were excluded from this survey, including aeromedical services, non 24/7 services, Indian/tribal services, federal services, and services that do not respond to 911 calls (see page 18 for list). Initial invites, and based upon response, 4 additional reminder messages, and direct phone calls were placed to services. We received a 91.9% response rate (compared to a 44.6% national return rate) and would like to thank the 238 agencies in Maine who took the time to complete this survey and help ensure we had the best overall picture of pediatric data. A list of the agencies completing the survey can be found on pages 15-18. Two of the services completing the survey were excluded as they indicated they did not respond to 911 calls (see page 18 for list).

Pages 2 through 5 summarize the results of the survey and provide some recommendations. Pages 6 to 12 detail the specifics to the answers (in aggregate form). If a specific service would like the results from their own survey, the service leader or authorized service representative can contact Maine EMS and receive a copy of the answers they provided. We hope you find this data informative and helpful, and please feel free to reach out with questions at any time.

Marc Minkler, BS, NRP Program Manager Maine EMS-C Rachel Williams, MD, ACEP Medical Director Maine EMS-C

Maine EMS Services Completing EMSC Survey, 2021





# Region 1 (Southern Maine)

• Cumberland, Sagadahoc, & York County

# Region 2 (Tri-County)

 Androscoggin, Franklin, & Oxford County

# Region 3 (Kennebec Valley)

• Kennebec & Somerset County

# Region 4 (Northeast)

Hancock, Penobscot, Piscataquis, & Washington County

# Region 5 (Aroostook)

Aroostook County

# Region 6 (Mid-Coast)

Knox, Lincoln, & Waldo county

## **Survey Findings and Maine EMS-C Recommendations**

Question numbers referenced begin on page 6

The 2021 Survey asked questions regarding the overall call volume of 911 EMS responses, as well as the specific number of pediatric (under 18 years old) 911 EMS responses. Findings, and recommendations from the Maine EMS-C program, specific to Maine, are:

Finding #1: (Related to questions 1 & 2) Pediatric patients represented 5.3 % of all 911 calls statewide, which is approximately 10,000 pediatric patient contacts. This is a decrease from 2019 of approximately 2,500 pediatric patient contacts, and likely is due to the COVID pandemic. Regionally, the six Maine EMS regions had a low of 4.4% (Kennebec Valley region) to a high of 5.6% (Southern Maine region).

Additionally, we can look at annual and monthly call volume specific to each service. Maine EMS services have the task of covering a diverse geography, and call volumes can vary greatly. In 2018, 52% of all Maine EMS licensed services had less than 250 total, annual, EMS responses, for all ages, and half of those services

had less than 50 total annual responses. This is reflected in 2020 pediatric call volumes as well:

• 8.9% of services had zero pediatric patient contacts

- 61% of EMS services had fewer than 12 pediatric responses for the year
- 5.9% of EMS services had more than 100 pediatric responses

**Recommendation #1:** Although pediatric patients represent a small percentage of overall 911 EMS responses, they represent an extremely fragile population. Many EMS providers report discomfort and anxiety when managing care for this population, largely due to lack of exposure, experience, ability to communicate, and specialized/smaller sized equipment. One possible solution to this is to increase education opportunities related to pediatric care. Please see pages 13-14 for a list of suggestions.

21 services had no pediatric patients in 2020

5.3% of all 911

EMS calls were

for pediatric patients

Finding #2: (Related to questions 4 & 9) Pediatric assessments and interventions can be quite different than in the adult population. As previously mentioned, equipment may be smaller or different than for adult patients. Coupled with infrequent use, pediatric skill stations can help prepare providers for

improved pediatric care and comfort. In Maine, 41.9% of EMS services report not having any requirement for pediatric skill stations (e.g. static stations that focus on a particular skill, such as ventilation with a BVM, or IV/IO practice). Although first thoughts must consider that this may be largely influenced by the COVID pandemic, and the inability to gather in groups for skills practice, however this question is aimed not at if a service did any skills stations, but rather does the service have a policy or requirement for demonstrating skill competency. Nationally, 28.8% of EMS services also do not have a policy requiring this. What may be even more striking is that

56.7% of services required pediatric skills demonstration less than once every 2 years

amongst survey respondents, 56.7% of all services required pediatric skills competency demonstration less than once every 2 years.

**Recommendation #2:** Similar to recommendation #1, and using possible education solutions found on pages 13-14, EMS services should consider implementing a policy requiring frequent pediatric skills competency evaluation. A hindrance to this, as reported by services on pages 11-12, is the cost of pediatric mannikins for use during skills demonstration. One possible solution is a shared equipment cache of pediatric mannikins. Utilizing the strength of smaller services and joining together, services may be able to pay a significantly reduced amount per department to purchase a shared mannikin(s). Often services may fund the purchase of a mannikin and use it for 1-2 educational offerings per year, but the remainder of the year, the mannikin is largely unused. By sharing the equipment, and thus the cost, these devices may be more approachable, utilized, and thus cost effective. This may also be able to be accomplished through regional EMS offices, who may be unable to completely fund such a purchase, but instead serve as the "library" to sign the equipment out for usage.

**Finding #3:** (Related to questions 5 & 9) In addition to skills stations that focus on individual interventions, pediatric scenarios can help providers put the whole call together.

By incorporating scenarios into education, a more natural flow of overall scene, patient, and transport management may occur, and improve the dynamics of crew resource management as well as treatment and operational considerations. Maine EMS services report that 36.5% require a pediatric scenario at least once every year (nationally, 51.6%), whereas 44.1% have no requirement for pediatric scenarios at all (nationally, 29.7%).

Nationally, 51.6% of services, compared to 36.5% of Maine services, require annual pediatric scenario education.

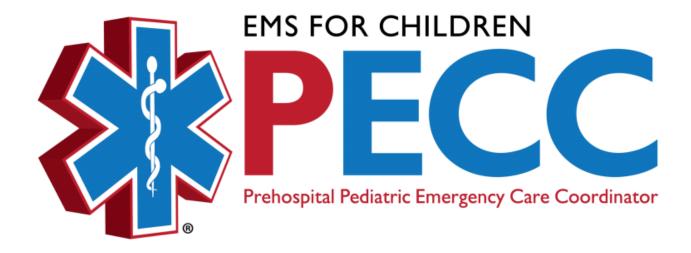
**Recommendation #3:** Again, the increased use of educational offerings may help improve comfort assessing, treating, and managing pediatric emergencies. Some suggestions can be found on pages 13-14.

**Finding #4:** (Related to questions 6 & 9) As the saying goes, "You don't know what you don't know". The opportunity to have real-time evaluation and observation of pediatric skills is an advantage that is not often seen once initial classroom clinical experiences have been completed. Some services also conduct orientation and new employee field training orientation. In Maine, 85.2% of services do not require any direct observation of pediatric skills during actual incidents (nationally this is 71.1%). There are many reasons for this, the most likely being staffing limitations. Survey participants offered comments related to this, found on pages 11-12.

**Recommendation #4:** Services should strive to have continuous mechanisms to regularly evaluate skill performance on EMS responses by qualified individuals, such as service level supervisors/officers, instructors, and medical directors.

**Finding #5:** (Related to questions 7 & 8) Many studies have shown benefits for EMS services that have a Pediatric Emergency Care Coordinator (PECC) in place. Survey responses indicate that 9.3% of EMS services in Maine have a PECC. Comparatively, 35.7% of EMS services nationally have a PECC in place. Survey responses indicate that 30.1% of EMS services that do not currently have a PECC are interested in exploring options for establishing a PECC at their service.

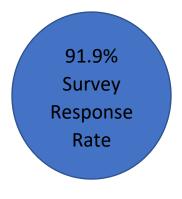
**Recommendation #5:** The Maine EMS-C program needs to connect with services seeking information about establishing a PECC within their service. We have found that the title of "PECC" can be a challenge. Some services are concerned about new positions and budgetary costs or overtaxing current overloaded staff and officers. Services may already have the personnel and tools in place for PECC roles, but have different labels, such as training officers, equipment managers, and similar. Ensuring these roles have useful resources is the overall goal, so regardless of name or title, the Maine EMSC program would like to help. Resources can be provided regarding roles, job description templates, and other aspects of PECC usage by EMS services. Maine EMS-C will compile a list of those services and provide information, and at the same time, assist those with existing PECCs with necessary resources to continue utilization of current PECCs. The information provided by survey respondents about roles of current PECCs will help shape future resources.



2021 EMS Agency National Pediatric Survey Questions, selected Maine responses and national metrics are:

Survey Responses By EMS Region

| EMS Region      | Responses* | Non-Respondents** |
|-----------------|------------|-------------------|
| Aroostook       | 12         | 1                 |
| Kennebec Valley | 33         | 1                 |
| Mid-Coast       | 26         | 3                 |
| Northeast       | 69         | 7                 |
| Southern Maine  | 61         | 6                 |
| Tri-County      | 37         | 3                 |
| Maine Total     | 238        | 21                |



<sup>\*</sup>Note: 2 services completed the survey, but were excluded as they indicated they do not respond to 911 calls

\*\*Note: Some services were excluded nationally from the survey, including aeromedical, non 24/7 services,
Indian/tribal services, federal services, and services that do not respond to 911 calls. This column does not include
those that were excluded nationally.

# Survey Responses By County

| County       | Responses* | Non-Respondents** |
|--------------|------------|-------------------|
| Androscoggin | 14         | 1                 |
| Aroostook    | 11         | 1                 |
| Cumberland   | 28         | 2                 |
| Franklin     | 9          | 1                 |
| Hancock      | 19         | 2                 |
| Kennebec     | 16         | 1                 |
| Knox         | 9          | 1                 |
| Lincoln      | 11         | 1                 |
| Oxford       | 13         | 1                 |
| Penobscot    | 35         | 2                 |
| Piscataquis  | 6          | 2                 |
| Sagadahoc    | 7          | 2                 |
| Somerset     | 16         | 0                 |
| Waldo        | 9          | 1                 |
| Washington   | 9          | 1                 |
| York         | 26         | 2                 |
| Maine Total  | 238        | 21                |



<sup>\*</sup>Note: 2 services completed the survey, but were excluded as they indicated they do not respond to 911 calls

<sup>\*\*</sup>Note: Some services were excluded nationally from the survey, including aeromedical, non 24/7 services, Indian/tribal services, federal services, and services that do not respond to 911 calls. This column does not include those excluded nationally.

1. Approximately how many 911 calls (both adult and pediatric) did your EMS agency respond to in the last year?

Total 911 Responses, All Ages, by EMS Region

| EMS Region      | Services<br>Reporting | Sum of Total 911 Calls | % that were pediatric |
|-----------------|-----------------------|------------------------|-----------------------|
| Aroostook       | 12                    | 9,280                  | 5.2%                  |
| Kennebec Valley | 33                    | 36,578                 | 4.4%                  |
| Mid-Coast       | 26                    | 10,616                 | 5.4%                  |
| Northeast       | 68                    | 35,017                 | 5.4%                  |
| Southern Maine  | 61                    | 66,502                 | 5.6%                  |
| Tri-County      | 36                    | 30,773                 | 5.4%                  |
| Maine Total     | 236                   | 188,766                | 5.3%                  |

- 2. Which one of the categories below approximates the number of 911 calls your EMS agency responded to for <u>pediatric patients</u> (under 18 years old) in the last year?
  - a. None
  - b. Low = Twelve (12) or fewer (1 or fewer per month)
  - c. Medium = Between 13-100 (1 8 per month)
  - d. Medium High = Between 101-600 (8 50 per month)
  - e. High = More than 600 (more than 50 per month)

# Pediatric Response Volume by EMS Region

|                  | None | Low<br>(<12)           | Medium<br>(13-100) | Medium High<br>(101-600) |
|------------------|------|------------------------|--------------------|--------------------------|
|                  | 0    | 1 or less per<br>month | 1-8 per<br>month   | 8-50 per month           |
| Aroostook        | 1    | 7                      | 4                  | 0                        |
| Kennebec Valley  | 3    | 18                     | 10                 | 2                        |
| Mid-Coast        | 0    | 16                     | 10                 | 0                        |
| Northeast        | 8    | 42                     | 16                 | 2                        |
| Southern Maine   | 1    | 25                     | 30                 | 5                        |
| Tri-County       | 8    | 15                     | 8                  | 5                        |
| Maine Total      | 21   | 123                    | 78                 | 14                       |
| Maine Average    | 8.9% | 52.1%                  | 33.1%              | 5.9%                     |
| National Average | 3.4% | 42.5%                  | 37.6%              | 12.5%                    |

Note: No Maine service reported "High (601+ responses annually)". The national average was 3.8%

3. Approximately, how many EMS providers currently work at your agency for each of the following level(s) of licensure (EMR, EMT, AEMT, Paramedic)?

Providers Affiliated With a Service, by Level, by EMS Region (\*) (\*\*)

| EMS Region      | Services | EMR | EMT   | AEMT  | Paramedic | Total |
|-----------------|----------|-----|-------|-------|-----------|-------|
| Aroostook       | 12       | 10  | 65    | 22    | 74        | 171   |
| Kennebec Valley | 33       | 19  | 235   | 139   | 255       | 648   |
| Mid-Coast       | 26       | 12  | 235   | 94    | 117       | 458   |
| Northeast       | 68       | 33  | 497   | 155   | 309       | 994   |
| Southern Maine  | 61       | 13  | 844   | 516   | 881       | 2,254 |
| Tri-County      | 36       | 18  | 271   | 155   | 246       | 690   |
| Maine Total     | 236      | 105 | 2,147 | 1,081 | 1,882     | 5,215 |

<sup>\*</sup>Note: Providers may be affiliated with multiple agencies and regions

4. At a skill station (not part of a simulated event), does your agency have a process which requires your EMS providers to physically demonstrate the correct use of pediatric specific equipment?

Frequency of Pediatric Skill Station, by EMS Region

| EMS Region       | None  | Yes,<br>Twice, or<br>more, per<br>year | Yes,<br>Once<br>per year | Yes, Once<br>every 2<br>years | Yes, Less<br>than once<br>every 2<br>years |
|------------------|-------|--|--------------------------|-------------------------------|--|
| Aroostook        | 4     | 3                                      | 5                        |                               |  |
| Kennebec Valley  | 11    | 9                                      | 13                       |                               |  |
| Mid-Coast        | 11    |  | 5                        | 8                             | 2  |
| Northeast        | 27    | 7                                      | 24                       | 9                             | 1  |
| Southern Maine   | 32    | 6                                      | 15                       | 8                             |  |
| Tri-County       | 14    | 5                                      | 10                       | 6                             | 1  |
| Maine Total      | 99    | 30                                     | 72                       | 31                            | 4  |
| Maine Average    | 41.9% | 12.7%                                  | 30.5%                    | 13.1%                         | 1.7%                                       |
| National Average | 28.8% | 14.0%                                  | 41.2%                    | 14.3%                         | 1.8%                                       |

<sup>\*\*</sup>Note: This only includes services who responded to the survey

5. Within a simulated event (such as a case scenario or a mock incident), does your agency have a process which requires your EMS providers to physically demonstrate the correct use of pediatric specific equipment?

Frequency of Pediatric Scenario Stations, by EMS Region

| EMS Region       | None  | Yes,<br>Twice, or<br>more, per<br>year | Yes,<br>Once<br>per year | Yes, Once<br>every 2<br>years | Yes, Less<br>than once<br>every 2<br>years |
|------------------|-------|--|--------------------------|-------------------------------|--|
| Aroostook        | 4     |  | 5                        | 3                             |  |
| Kennebec Valley  | 15    | 2                                      | 9                        | 6                             | 1  |
| Mid-Coast        | 14    |  | 4                        | 4                             | 4  |
| Northeast        | 25    | 7                                      | 24                       | 11                            | 1  |
| Southern Maine   | 27    | 3                                      | 19                       | 10                            | 2  |
| Tri-County       | 19    | 3                                      | 10                       | 2                             | 2  |
| Maine Total      | 104   | 15                                     | 71                       | 36                            | 10   |
| Maine Average    | 44.1% | 6.4%                                   | 30.1%                    | 15.3%                         | 4.2%                                       |
| National Average | 29.7% | 11.3%                                  | 40.3%                    | 16.1%                         | 2.6%                                       |

6. During an actual pediatric patient encounter, does your agency have a process which requires your EMS providers to be observed by a field training officer, medical director, or supervisor to ensure the correct use of pediatric specific equipment?

Frequency of Actual Direct Pediatric Skill Observation, by EMS Region

| EMS Region       | None  | Yes,<br>Twice, or<br>more, per<br>year | Yes,<br>Once<br>per year | Yes, Once<br>every 2<br>years | Yes, Less<br>than once<br>every 2<br>years |
|------------------|-------|--|--------------------------|-------------------------------|--|
| Aroostook        | 10    |  | 1                        | 1                             |  |
| Kennebec Valley  | 29    |  | 2                        | 2                             |  |
| Mid-Coast        | 25    |  |                          |                               | 1  |
| Northeast        | 57    | 3                                      | 4                        | 1                             | 3  |
| Southern Maine   | 53    | 1                                      | 7                        |                               |  |
| Tri-County       | 27    | 1                                      | 5                        | 1                             | 2  |
| Maine Total      | 201   | 5                                      | 19                       | 5                             | 6  |
| Maine Average    | 85.2% | 2.1%                                   | 8.1%                     | 2.1%                          | 2.5%                                       |
| National Average | 71.1% | 6.3%                                   | 14.3%                    | 5.0%                          | 3.4%                                       |

7. Regarding the use of a Pediatric Emergency Care Coordinator (PECC), which one of the following statements best describes your EMS agency?

PECC Use by Services, by EMS Region

| EMS Region       | Have a PECC | Interested in a PECC | Do Not Have a PECC /<br>Not interested at this<br>time |
|------------------|-------------|----------------------|--|
| Aroostook        | 3           | 3                    | 6  |
| Kennebec Valley  | 4           | 9                    | 20   |
| Mid-Coast        | 0           | 13                   | 13   |
| Northeast        | 6           | 15                   | 47   |
| Southern Maine   | 4           | 20                   | 37   |
| Tri-County       | 5           | 11                   | 20   |
| Maine Total      | 22          | 71                   | 143  |
| Maine Average    | 9.3%        | 30.1%                | 60.6%  |
| National Average | 35.7%       | 22.5%                | 41.8%  |

8. If you have a PECC, what roles do they undertake?

| Maine  | National | Role   |
|--------|----------|--|
| 22.7%  | 19.2%    | Our PECC supports multiple agencies  |
| 77.2%  | 80.8%    | Our PECC supports only our agency  |
| 68.2%  | 83.2%    | Ensure pediatric perspective is included in development of EMS protocols   |
| 100.0% | 95.6%    | Helps ensure providers follow pediatric clinical guidelines/protocols      |
| 100.0% | 97.1%    | Promotes pediatric continuing education opportunities                      |
| 81.8%  | 87.9%    | Oversees pediatric process improvement initiatives                         |
| 90.9%  | 92.2%    | Ensures the availability of pediatric medications, equipment, and supplies |
| 77.3%  | 76.3%    | Promotes agency participation in pediatric prevention programs             |
| 45.5%  | 54.5%    | Coordinates with ED pediatric emergency care coordinator(s)                |
| 50.0%  | 61.4%    | Promotes family-centered care  |
| 40.9%  | 48.8%    | Promotes agency participation in pediatric research efforts                |

# Other activities of PECCs

- All aspects of pediatric care including being an AHA PALS Instructor- given to all licensed providers and an NAEMT EPC instructor- Given to all licensed providers
- In addition to our in-house training, we offer infant and child CPR and First Aid. In addition, we provide bicycle safety, provide helmets to our residents/children and do fittings. We also partner with the Michael Goulet foundation to provide education on traumatic brain injury and importance of wearing a helmet.
- Placing Stop the Bleed kits in each classroom in local schools. Going into classrooms and educating children on CPR.
- Teaches classes for pediatric care at a college level

- We use Continuous Quality Improvement to be sure we have the correct equipment for Pediatric Care which involves all staff.
- In terms of pediatric skills, survey respondents had additional comments. These comments seemed to center on 4 main topics: Source of pediatric education, challenges with staffing, challenges with equipment resources, and quality improvement processes.
  - a. Source of education
    - i. All advanced providers are offered (paid) pediatric-specific training such as PALS, PEARS, or PEEP. Over 2/3 of our providers are per diem and may have specific requirements for their "home" agency. Direct monitoring of pediatric calls typically has paramedic level supervision dependent on the acuity.
    - ii. Most of the providers take PEPP or other hands on Pediatric courses.
    - iii. Our advanced and paramedic providers are required to have PALS.
    - iv. All staff are required to maintain license status through the Maine EMS process.
    - v. Our training is completed during CEU refresher trainings. We don't have any specific training for medical care.
    - vi. Skill checks completed as part of their licensure training. Currently training is suspended due to pandemic.
    - vii. Skills checking is completed during CEH classes
    - viii. There are annual requirements for relicensure, but no mandatory skills for peds
    - ix. We do not require annual skills verification for our staff. We provide several opportunities throughout the year for training in a hands-on manner, and many of our staff receive outside training.
    - x. We have classes every so often.
    - xi. We hold an annual competency evaluation for our staff, which includes a number of pediatric specific equipment, protocols, and/or medical/trauma scenarios.
    - xii. We offer several Skills trainings annually.
    - xiii. We participate in regional training with other services.
    - xiv. We run annual airway lab with on Station specifically focusing on pediatric airway management.
    - xv. We try to have a full 8 hour training every-other year for all pedi equipment and scenario's this year was difficult because of COVID but look forward to making it yearly event in the future as our training program improves.
    - xvi. We do require pediatric skills to be reviewed in orientation process.
  - b. Staffing challenges
    - i. While I definitely see the benefit of these questions, they really aren't possible when we have too few personnel to field a team of more than 1 person. If we had these resources, certainly we would adopt these processes.
    - ii. We do not have the staffing to allow for a supervisor on every call COVID has restricted in person training
    - iii. Pediatric calls are so rare that it would be hard to make all employees have to be visually observed by an FTO.

## c. Equipment challenges

- i. Service could improve use of pedi manikins during skills checks, adult equipment is generally used. Medical director provides annual pedi training and pedi scenarios where pedi manikins, live patients, and equipment are used.
- ii. One of the issues that we face is that we don't have equipment for simulation such as a pediatric dummy We have an IO leg and a CPR manikin we utilize but its typically one training a year. The cost for that type of equipment is cost prohibitive.
- iii. Skill checks are great, but they are only so productive. Demonstrating skills on a plastic patient the providers do not gain the skills needed to build rapport with pediatrics. I feel that is a bigger asset than if a provider can manipulate pediatric equipment.
- iv. We are a small service with limited resources. We cannot evaluate pediatric skills with our providers. We do not have pediatric manikins or staff to observe field pediatric calls.
- v. We are licensed at the Basic EMT level for our service, so we do not have a lot of special equipment

## d. Quality Improvement

- i. Pedi emergencies are a relatively small part of our responses
- ii. QA and QI are used from run reports
- iii. Should be reviewed once a year.
- iv. These are valuable questions and skills, but honestly, we just don't focus on them. Not that we shouldn't, or I have a better excuse, except we don't
- v. We use a CQI process and rely on the more experienced providers to give guidance. We are a first responder agency that responds to assist the local transport agency if additional providers are required and when they are not available to respond we first respond to stabilize a patient while awaiting an out of town transport agency
- vi. I feel that we have a fairly solid program for ensuring quality care in all patients.

#### **Pediatric Education Suggestions & Possible Opportunities**

## **Regional Offices and Training Centers**

Regional EMS offices and training centers can be an excellent source of training resources, supplies, and ideas for your organization. We encourage you to reach out and learn what opportunities may exist in your area.

A list of Regional EMS offices in Maine can be found at <a href="https://www.maine.gov/ems/about/partners">https://www.maine.gov/ems/about/partners</a>
A list of Maine licensed training centers can be found at <a href="https://www.maine.gov/ems/education-ceh/training-centers">https://www.maine.gov/ems/education-ceh/training-centers</a>

## Standardized courses

These courses are often conducted with the assistance of a training center, your local hospital, or other educational facility. A list of Maine licensed training centers can be found at <a href="https://www.maine.gov/ems/education-ceh/training-centers">https://www.maine.gov/ems/education-ceh/training-centers</a>

- PALS Pediatric Advanced Life Support Typical EMS audience is paramedics
- PEPP Pediatric Education for Prehospital Professionals Typical EMS audience is all levels
- CPR At the health care provider level, includes assessment and skills for pediatric resuscitation
- NRP Neonatal Resuscitation Program Although typically aimed at NICU staff, updated
  education being released this summer will include NRP-Essentials, aimed at clinicians outside of
  the NICU environment.

### **MEMSEd**

Currently 3 courses exist on MEMSEd surrounding pediatrics – a course on pediatric seizures,
 Brief Resolved Unexplained Events (BRUE), and Infant Safe Sleep.

# **Design a CEH course**

- Utilize resources at a local level to develop courses. This might include parents bringing children to a training class. Clinicians who do not have children may not know how to interact, or the "norms" of an age group How to ask questions, what is normal behavior, using parents for info, how to distract children, etc.
- Use midwives to teach a class on assessing pregnant patients, as well as the birth process.
   Midwives are often more "in-tune" with deliveries in homes than hospital staff and may bring very realistic scenarios and experiences
- Scavenger hunt Make a list of the pediatric specific equipment located on your ambulance/response vehicle and have clinicians locate it. What is different about? How do you use it?
- Use a doll or teddy bear (or similar) to simulate a pediatric patient. Do a physical assessment.
   Place them on your stretcher. How will you secure the child? How to immobilize a fracture or bandage a wound?
- Partner with local school sports coaches to train on protective gear (helmets, etc) and operations around sports type injury. Utilize local athletic trainers for additional insights.
- Work with local scouting organizations, drama clubs, or other groups to volunteer as simulated patients for scenarios.

## **Conduct Run Report Review Trainings**

- Use service level run reports to review care, findings, operations, and methods of documentation for pediatric care. Use HIPAA guidelines (which allow for QI and learning activities after protected health information is removed).
- Reach out to regional EMS offices for sample run reports for further diversity of actual incidents and use

# Manikins

• Consider purchase by department, or group of departments, of mannikins to conduct individual skill stations or scenarios. Maine EMS-C can provide suggestions of various sources to explore.

## **Maine EMS-C Resources**

- Maine EMS for Children has a variety of pediatric transport devices to loan to agencies for training and evaluation. Contact Maine EMS-C for details.
- Maine EMS for Children program can conduct virtual reality pediatric assessment training for your department. Contact Maine EMS-C for details.
- Maine EMS for Children can help brainstorm other possibilities based on your specific needs and resources. Contact Maine EMS-C for assistance.

## Maine EMS Licensed Services Completing the 2021 EMSC Survey

**Aroostook Region 5** 

Ambulance Service Inc Ashland Ambulance Service Caribou Fire - Ambulance

Central Aroostook Ambulance Service

Fort Fairfield Fire Rescue **Houlton Ambulance Service** Island Falls Ambulance Service Madawaska Ambulance Service

Oakfield Fire Department Patten Ambulance Service Presque Isle Fire Department Van Buren Ambulance Service

**Kennebec Valley Region 3** 

Albion Fire - Rescue

Anson Madison Starks Ambulance Service

Augusta Fire Department Belgrade Fire Department

Canaan Municipal Fire and Rescue

China Rescue Squad

Clinton Fire Dept Ambulance Service

Delta Ambulance **Detroit Fire and Rescue** Fairfield Fire Rescue

Gardiner Fire and Ambulance Department

Harmony Regional Ambulance Service

Jefferson Fire and Rescue Litchfield Fire and Rescue

Mercer Rescue

Mount Vernon Rescue **Newport Fire Department** Oakland Fire - Rescue Plymouth Fire Department **Redington Fairview EMS** Rome Fire and Rescue

Sebasticook Valley Hospital Ambulance

Sidney Rescue

Skowhegan Fire Department Smithfield Fire Department

**Unity Volunteer Ambulance Corps** Upper Kennebec Valley Ambulance

Vassalboro First Responders

Waterville Fire Department

West Forks Volunteer Fire Department Whitefield Fire Department Rescue Winslow Fire Department Rescue Winthrop Ambulance Service

Mid-Coast Region 6

Belfast Ambulance and Rescue Service

**Boothbay Region Ambulance** Bremen Rescue First Responders

Bristol Fire and Rescue

Central Lincoln County Ambulance

**Cushing Rescue Squad** 

Edgecomb Fire Department Islesboro Ambulance Service

Jackman-Moose River Fire and Rescue

Department

Liberty Volunteer Ambulance Service

**Nobleboro First Responders** 

North Haven EMS

Northport First Responders Richmond Fire Department Rockland Fire and EMS Searsmont Rescue

Searsport Ambulance Service

South Bristol Volunteer Fire Department South Thomaston Ambulance Service

St George Ambulance

Stockton Springs Ambulance Service

**Thomaston Ambulance** Union Ambulance Service Vinalhaven Ambulance

Waldoboro Emergency Medical Services

Wiscasset Ambulance Service

**Northeast Region 4** 

Alexander VFD First Responder Unit

Aurora Volunteer Fire Dept.

Bar Harbor Fire Dept

Bradford Fire Department Brewer Fire Department

Brooklin Volunteer Fire Dept Inc

**Bucksport Fire Department** 

Northeast Region 4 (continued)

Calais Fire-EMS

Carmel Fire and Rescue Castine Fire and Rescue

Charles A Dean Ambulance Service Charlotte Volunteer Fire Department

Corinth Fire Department Cranberry Isles Rescue Dedham Fire Department

Denny River Volunteer Fire and Ambulance

Dixmont Fire Rescue
Downeast EMS

East Millinocket Fire Department

Eddington Fire Dept

Ellsworth Fire Department
Etna Volunteer Fire and Rescue
G and H Ambulance Service
Glenburn Fire Department
Gouldsboro Fire Department

Greenbush Fire Dept
Greenville Fire and Rescue
Guilford Fire First Responders
Hampden Fire Department
Hancock Vol Fire Department
Hermon Fire Department

Hermon Volunteer Rescue Holden Fire Rescue Howland Fire and EMS Hudson Fire Department Isle au Haut Rescue Lee Fire Rescue

Levant Fire Department Lincoln Fire Department

Lowell Fire and Rescue Department

Machias Ambulance Service

Mariaville Volunteer Fire Department

Medway Fire Department Memorial Ambulance Corps Milford Fire Department

Millinocket Fire Department Ambulance Service

Milo Fire Department

Monson Fire Dept First Responders

Moosabec Ambulance Newburgh Rescue Northeast Harbor Ambulance Service Inc.

Northern Light Mayo Hospital Northern Light Medical Transport

Old Town Fire Dept Orono Fire - Rescue Orrington Fire Dept.

Osborn Municipal Volunteer Fire Department

Peninsula Ambulance Corps Petit Manan Ambulance

Pleasant River Ambulance Service

Rockwood Fire - EMS Springfield (Town of)

Southwest Harbor - Tremont Ambulance Service

Southwest Harbor Fire Dept

Sullivan Fire Rescue Swan's Island Ambulance

University Volunteer Ambulance Corps

Veazie Fire Department

Winterport Volunteer Ambulance Service

**Southern Maine Region 1** 

Acton Fire - Rescue
Alfred Rescue Squad
Arundel Fire - Rescue
Bath Fire Department
Berwick Fire Department
Bowdoin First Responders
Bowdoinham Fire and Rescue
Brunswick Fire Department EMS

Buxton Fire and Rescue
Cape Elizabeth Fire Rescue
Casco Fire and Rescue
Chebeague Island Rescue
Cumberland Fire Department
Cundy's Harbor Fire Dept

Denmark Fire Dept 1st Responders

Durham Fire and Rescue Falmouth Fire - EMS Freeport Fire Department Frye Island Rescue Service

Fryeburg Rescue

Goodwins Mills Fire-Rescue
Gorham Fire Department

Gray Fire - Rescue

**Southern Maine Region 1 (continued)** 

Harpswell Neck Fire and Rescue

Hollis Fire - Rescue Kennebunk Fire Rescue Kennebunkport EMS Lebanon Fire-EMS

Limerick Rescue

Limington Fire and EMS Long Island Volunteer Rescue

**MEDCU** 

Mid Coast Hospital Interceptor

Naples Fire Department Newfield Rescue Squad

North Berwick Rescue Squad Inc North Yarmouth Fire Rescue Northeast Mobile Health Services

Ogunquit Fire Rescue Old Orchard Beach EMS

Phippsburg Fire and Rescue Department

Pownal Fire Dept First Responders

Raymond Rescue Saco Fire Department Sacopee Rescue Inc

Sanford Fire Dept Ambulance Service

Scarborough Fire Department

Sebago EMS

Shapleigh Rescue Squad South Portland Fire Rescue

Topsham Fire - EMS

University of New England Waterboro Fire Dept Rescue

Wells Emergency Medical Services Westbrook Fire Rescue

Windham Fire Rescue Woolwich Fire Department Yarmouth Fire Rescue

York Ambulance Association Inc York Beach Volunteer Fire Department

York Village Fire Department

**Tri-County Region 2** 

Andover Fire Dept Auburn Fire Department

**Bates EMS** 

**Bethel Ambulance Service** Buckfield Rescue Dept.

Carrabassett Valley Fire - Rescue

**Eustis First Responders** Farmington Fire Rescue Greene Fire Dept Rescue

Harrison Fire - Rescue First Responder Service

**Industry Fire Department** Jay Fire and Rescue Kingfield Fire - Rescue Lisbon Emergency Inc. Lisbon Fire Service

Livermore Falls Fire Dept.

Mechanic Falls Fire Department Med-Care Ambulance Service

Minot Fire Department

New Gloucester Fire and Rescue New Portland Fire - Rescue New Sharon Fire Rescue

Norridgewock Fire Department

NorthStar

Otisfield Fire Department Oxford Fire Rescue PACE Paramedic Service Paris Fire Department

Poland Fire Rescue

Rumford Fire Department Sabattus Fire Rescue Stoneham Rescue Service

**Turner Rescue** 

United Ambulance Service

Wales Rescue

Wilton Fire and Rescue **Woodstock First Responders** 

## Services excluded as they answered within the survey that they do not respond to 911 calls

Carrabassett Valley Fire-Rescue (Tri-County Region 2, Franklin County) Gouldsboro Fire Department (Northeast Region 4, Hancock County)

## Services that began, but did not finish the survey

Dover-Foxcroft Fire Department Kenduskeag Fire-Rescue Livermore Fire Rescue Three Rivers Ambulance Service Warren Rescue

## Maine EMS Licensed Services Excluded (per EMSC National Survey Guidelines)

American Medical Response (Reported through another state)

Bath Iron Works Rescue (non-911)

Beech Ridge Speedway Ambulance (not 24/7)

CarePlus Ambulance Service dba North Conway Ambulance Service (Reported through another state)

County Regional Emergency Services Unit (non-911)

Cutler Fire Dept NCTAMS LANT Detachment Cutler (Federal)

LifeFlight of Maine (Aeromedical)

Maine Medical Center (non-911)

Maine State Police Medical Unit (non-911)

Passamaquoddy Fire & Rescue (Indian/Tribal)

Scarborough Downs EMS (not 24/7)

Sipayik Ambulance Corps (Indian/Tribal)

Stewarts Ambulance (Reported through another state)

Trackside Ambulance Service (not 24/7)

U.S. Border Patrol Medical Response Team (Federal)