

Services for Children

Data Analysis Resource Center

To better understand the EMS system's ability to care for pediatric patients, the EMS for Children Program conducted a national survey of EMS agencies. The following are the results of this quality improvement effort. EMS agencies can learn more about their state efforts by contacting their state EMS for Children Program Manager shown in the Resources sections of this 3-page report.

2021 National EMS for Children Survey Results



15,768
EMS agencies
were sent survey

Who took the survey?



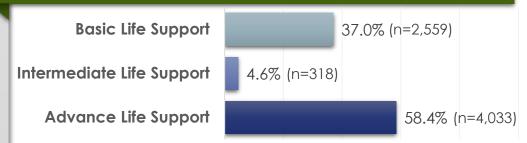
6,910 EMS agencies



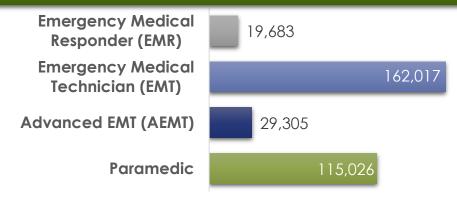


Prepared by the National EMS for Children Data Analysis Resource Center (NEDARC), located at the University of Utah School of Medicine. July 2021 www.nedarc.org

Agencies by Highest Licensure



Type of Providers Reported



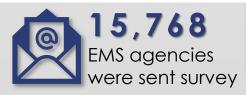
Pediatric Call Volume by Number and % of Agencies

Call Volume	#	%
NONE: No pediatric calls in the last year	235	3.4%
LOW: Twelve (12) or fewer pediatric calls in the last year (1 or fewer pediatric calls per month)	2,937	42.5%
MEDIUM: Between 13-100 pediatric calls in the last year (1-8 pediatric calls per month)	2,595	37.6%
MEDIUM HIGH: Between 101-600 pediatric calls in the last year (8-50 pediatric calls per month)	864	12.5%
HIGH: More than 600 pediatric calls in the last year (more than 50 pediatric calls per month)	260	3.8%
No Response	19	0.3%
Grand Total	6,910	100%



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Types of Methods for Physically Demonstrating Correct Use of PEDIATRIC-SPECIFIC Equipment



Demonstration Skill



Simulation Observation



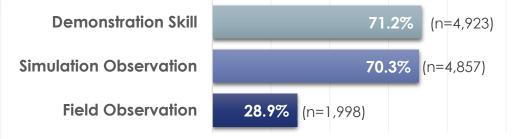
Field Observation

Resources

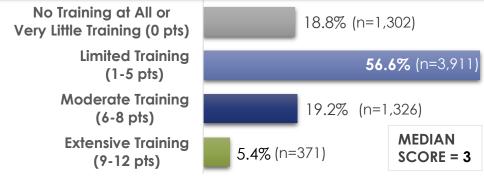
- <u>Pediatric Readiness in EMS</u>
 <u>Systems</u> (joint policy statement)
- <u>Prehospital Pediatric</u>
 <u>Readiness Toolkit</u>
- <u>Simulation-based assessment</u> of paramedic pediatric resuscitation skills (abstract)
- <u>Use of Pediatric-Specific</u>
 <u>Equipment</u> (video)
- State EMS for Children Program Manager List (online database)

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Frequency of Skill-Checking on Pediatric Equipment



<u>Click here</u> and go to page 35 to see how the skill-checking points were calculated.

Significance

The processes & frequency of skill-checking evaluations for EMS providers has long been established as important for the maintenance of skills when treating patients for improved patient outcomes.¹⁻³

Miller's Model of Clinical Competence provides a framework for clinical evaluation that theorizes that competency for clinical skills can be demonstrated for EMS through a combination of skill stations, case scenarios & simulations, & real-life field observations with a frequency of at least twice a year.³⁻⁴

- 1. Lammers, R. L., Byrwa, M. J., Fales, W. D., & Hale, R. A. (2009). <u>Simulation-based Assessment of Paramedic Pediatric Resuscitation Skills</u>. *Prehospital Emergency Care*, 13(3), 345–356.
- Su, E., Schmidt, T. A., Mann, N. C., & Zechnich, A. D. (2000). <u>A Randomized Controlled Trial to Assess Decay in Acquired Knowledge Among Paramedics Completing a Pediatric Resuscitation Course</u>. Academic Emergency Medicine, 7(7), 779-786.
- 3. Miller GE. The Assessment of Clinical Skills/Competence/Performance. Acad Med 1990; 65:S63-67.
- National EMS for Children Data Analysis Resource Center (NEDARC). <u>EMS for Children Performance Measures</u>: <u>Implementation Manual for State Partnership Grantees</u>. Salt Lake City, UT: NEDARC; 2017.

This report is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of the Emergency Medical Services for Children Data Center award totaling \$3,000,000 with 0% financed with non-governmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS, or the U.S. Government. For more information, please visit HRSA.gov.



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What is a PECC?



A designated individual(s), often called a **Pediatric**

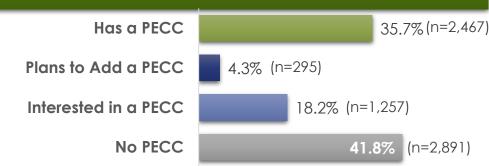
Emergency Care
Coordinator or PECC, who is responsible for coordinating and championing PEDIATRIC-SPECIFIC activities for an EMS agency. This individual(s) could serve as the PECC for one or more EMS agencies.

Resources

- <u>Pediatric Readiness in EMS</u>
 <u>Systems</u> (joint policy statement)
- <u>Pediatric Emergency Care</u>
 <u>Coordinator Learning</u>
 <u>Collaborative</u> (webpage)
- <u>Pediatric Emergency Care</u>
 <u>Coordinator</u> (video)
- <u>Prehospital Pediatric</u>
 Readiness Toolkit
- <u>State EMS for Children Program</u>
 <u>Manager List</u> (online database)

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PECC at Agencies



Agencies who Have a PECC – Top 5 Reported PECC Duties

Promote pediatric continuing education opportunities	97.1%
Ensure that fellow providers follow pediatric clinical practice guidelines and/or protocols	95.6%
Ensure the availability of pediatric medications, equipment, and supplies	92.2%
Oversee pediatric process improvement initiatives	87.9%
Ensure the pediatric perspective is included in the development of EMS protocols	83.2%

Significance

A study of the readiness of hospital emergency departments (EDs) to care for children has shown that EDs are more prepared to care for children when there is a PECC who is responsible for championing & making recommendations for policies, training, & resources pertinent to the emergency care of children. While this study was conducted in EDs, the 2020 joint policy statement, Pediatric Readiness in EMS Systems, states the importance of EMS physicians, administrators, & personnel to collaborate with pediatric acute care experts to optimize EMS care for children to improve outcomes. In further support of the importance of EMS agency PECCs, a recent study "found that the availability of a PECC in an agency is associated with increased frequency of pediatric psychomotor skills evaluations."

- Gausche-Hill, M., Ely, M., Schmuhl, P., Telford, R., Remick, K. E., Edgerton, E. A., & Olson, L. M. (2015). <u>A National Assessment of Pediatric Readiness of Emergency Departments</u>. JAMA Pediatrics, 169(6), 527–534.
- 2. Moore, B., Shah, M. I., Owusu-Ansah, S., Gross, T., Brown, K., Gausche-Hill, M., Remick, K., Adelgais, K., Lyng, J., Rappaport, L., & Snow, S. (2020). <u>Pediatric Readiness in Emergency Medical Services Systems</u>. *Prehospital Emergency Care*, 24(2), 175-179.
- Hewes, H. A., Ely, M., Richards, R., Shah, M. I., Busch, S., Pilkey, D., Dixon Hert, K., & Olson, L. M. (2018). Ready for Children: Assessing Pediatric Care Coordination and Psychomotor Skills Evaluation in the Prehospital Setting. Prehospital Emergency Care, DOI: p10.1080/10903127.2018.1542472.

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