# 2023 **North Carolina EMS** for Children Survey Results

To better understand the EMS system's ability to care for pediatric patients, the North Carolina EMS for Children Program conducted a 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.



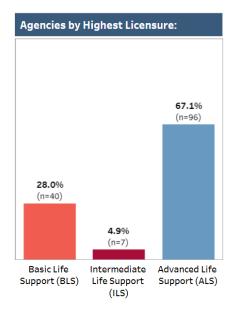


public 911 transporting & NONtransporting EMS agencies

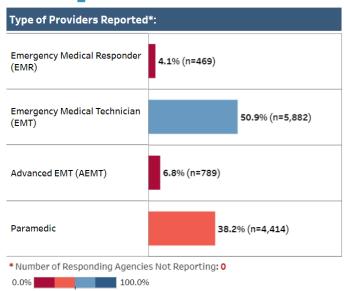


From across the state

# Agencies by Highest Licensure



# Type of Providers Reported



### **Pediatric Call Volume by Number and % of Agencies**

Pediatric Call Volume by Number of Agencies and Association with PECCs:				
	Total Agencies	Num of PECCs by Volume	% of PECCs (ALL)	
HIGH: More than 600 pediatric calls in the last year (more than 50 pediatric calls per month)	13	7	53.8%	
MEDIUM HIGH: Between 101-600 pediatric calls in the last year (8-50 pediatric calls per month)	31	17	54.8%	
MEDIUM: Between 13-100 pediatric calls in the last year (1-8 pediatric calls per month)	55	15	27.3%	
LOW: Twelve (12) or fewer pediatric calls in the last year (1 or fewer pediatric calls per month)	42	10	23.8%	
Reported None	2	0	0.0%	
Grand Total	143	49	34.3%	

Prepared by the EMSC Data Center (EDC), located at the University of Utah School of Medicine. Oct 2022

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**424** EMS agencies sent survey

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

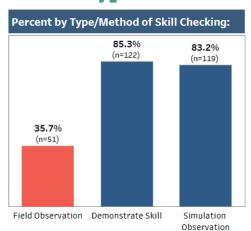




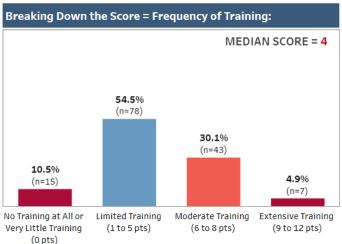


# **Use of Pediatric-Specific Equipment Results**

### Percent & Type/Method Skill







## **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.<sup>1-3</sup>

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.<sup>3-4</sup>

- 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.
- 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</u>
  Performance Measures: Implementation Manual for State Partnership Grantees. Salt Lake City,
  IJT: NEDARC: 2017

### Resources

- Pediatric Readiness in EMS Systems
  - Joint Policy Statement
  - Technical Report
- Prehospital Pediatric Readiness
  - <u>Toolkit</u> (Education and Competencies for Providers)
  - Checklist
- Pediatric Education and Advocacy Kits (PEAK)
- Use of Pediatric-Specific Equipment (video)
- Your NC EMS for Children Program Manager:

Greg Edwards, Office: 919.701.2656, dhsr.emsc@dhhs.nc.gov

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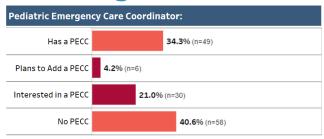
# <u>Pediatric Emergency Care Coordinator (PECC) Results</u>

#### What is a PECC?

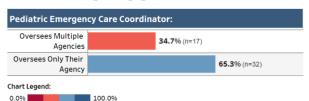


A designated individual(s), often called a Pediatric Emergency Care Coordinator or PECC, who is responsible for coordinating and championing pediatric-specific activities for an EMS agency. This individual(s) could serve as the PECC for one or more EMS agencies.

### **PECC** at Agencies



#### **PECC Oversees**



## **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.¹ While this study was conducted in EDs, the 2020 joint policy statement,² 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.
- 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 <u>Evaluation in the Prehospital Setting</u>. Prehospital Emergency Care, DOI:

### **Agencies Who Have a PECC**

Agencies who Have a PECC - Reported PECC Duties:	
Promotes pediatric continuing education opportunities	98.0% (48/49)
Ensures that fellow providers follow pediatric clinical practice guidelines and/or protocols	<b>98.0%</b> (48/49)
Ensures that the pediatric perspective is included in the development of EMS protocols	89.8% (44/49)
Ensures the availability of pediatric medications, equipment, and supplies	<b>87.8%</b> (43/49)
Oversees pediatric process improvement initiatives	85.7% (42/49)
Promotes agency participation in pediatric prevention programs	<b>79.6</b> % (39/49)
Promotes family-centered care	<b>67.3%</b> (33/49)
Coordinates with the emergency department pediatric emergency care coordinator	<b>59.2%</b> (29/49)
Promotes agency participation in pediatric research efforts	53.1% (26/49)
Other Activities	22.4% (11/49)

### Resources

- Pediatric Readiness in EMS Systems
  - Joint Policy Statement
  - Technical Report
- Prehospital Pediatric Readiness
  - Toolkit
  - Checklist
- Quality Improvement
- Additional PECC Resources
- Pediatric Emergency Care Coordinator (video)
- Your NC EMS for Children Program Manager:

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