



NATIONAL REGISTRY OF EMTs RESEARCH KEY INITIATIVE

Protecting Patients, Strengthening EMS

As a core component of the National Registry's mission, research advances our vision of a safer, healthier world by ensuring that every patient is served by competent, certified EMS Clinicians. The National Registry's Research Team safeguards the public by generating evidence across three critical domains:

- ✱ Education and Clinician Competency
- ✱ Clinical Care
- ✱ Workforce

Through rigorous, peer-reviewed, and replicable methods, this work contributes to the broader scientific knowledge base supporting EMS Clinicians and systems nationwide.

Transforming EMS Through Research

The National Registry's Research Team was established to advance scientific evidence, generate actionable insights, and guide improvements in EMS education, clinical practice, workforce development, and patient care, both nationally and globally.

In 2001, the National EMS Research Agenda highlighted a shortage of career EMS researchers needed to strengthen the profession and its systems. In response, the National Registry launched the [EMS Research Fellowship](#), partnering with The Ohio State University College of Public Health to train doctoral-level researchers. Fellows gain hands-on experience, develop advanced research skills, and conduct studies that generate new knowledge, inform evidence-based decisions, and support the ongoing growth of EMS.

Since its founding, the Research Team has become a national leader, publishing in high-impact journals such as JAMA Network, CDC's Morbidity and Mortality Weekly Report, JACEP Open, Prehospital Emergency Care, and Resuscitation. Their work generates actionable insights that guide national efforts to enhance EMS workforce, education, and clinical care.



Inside EMS Research at the National Registry

The National Registry's Research Team and EMS Research Fellowship were created to promote responsible research and advance the EMS profession. The team is led by Dr. Ashish Panchal, a board-certified physician in emergency medicine and EMS, and supported by Shea van den Bergh, EMT and public health-trained epidemiologist.

A key part of the team are the EMS Research Fellows pursuing funded PhDs at The Ohio State University, gaining advanced research skills and contributing to studies that inform EMS practice, education, and workforce development. The team also partners with the U.S. Army through the Training With Industry program, hosting a rotating Army Officer every other year to bring an operational perspective and support research initiatives.

Focus Areas and Highlighted Work

The [National Registry's Research Team](#) provides evidence-based rigor to support the organization's work. Key focus areas include:

* Clinical Care

Understanding EMS clinical care is critical for developing valid and reliable competency assessments. The team analyzes national practice data to identify trends, evaluate current practices, and highlight areas for improvement. This work supports the development of evidence-based guidelines for naloxone, pain management, and airway care that inform EMS protocols.

* Education and Clinician Judgment

Establishing a strong foundation for EMS clinicians begins with rigorous, evidence-based education and assessment. The team defines the essential knowledge, skills, and abilities for safe practice, contributes to national practice analyses, and studies EMS educational programs. Using the EMS clinical judgment framework, the team develops assessment items that reflect current standards and continuously refines the certification process to ensure examinations measure professional readiness.

* Workforce

Research on EMS Clinicians examines trends, retention, and career progression. The team uses national data and replicable methods to provide insights that inform policy, workforce planning, and strategies to support Clinicians and strengthen EMS systems.



Featured Initiative: LIFE Study

The Longitudinal Inquiry into Fire and EMS Health (LIFE) Study, launched in 2023, examines the long-term health risks faced by first responders. By collecting ongoing data, the study provides critical insights to improve workforce health, safety, and retention. Learn more [here](#).

From Science to the Scene (Audio & Video Podcast)

Produced by the National Registry's Research Team, [From Science to the Scene](#) translates complex research into practical insights for EMS Clinicians and leaders. Drawing from sources such as the Prehospital Guidelines Consortium (PGC), the American Heart Association (AHA), and peer-reviewed research, the podcast makes evidence more accessible and actionable.

Questions

Q- How can I work with the Research Team?

A- Reach out to us at research@nremt.org. We welcome inquiries from researchers, educators, EMS agencies, and other stakeholders who share our mission of advancing evidence-based practices in EMS. Our team is happy to discuss collaboration opportunities, provide resources, and answer questions about our work.

Q- Is your data publicly available?

A- Data is not publicly shared due to participant protections and data use agreements. However, methodologies and tools are available to support replication.

Q- Where can I find your latest work?

A- Follow #ResearchFridays on social media for weekly updates, including research highlights, videos, and podcasts. We also have a [dedicated page](#) on the National Registry website.

Q- Where can I find past research?

A- Available on the [Research Page](#) of the National Registry website.

Q- How are you addressing workforce challenges?

A- By defining and measuring workforce trends using consistent, replicable methods to support informed decision-making. See our published [research articles](#) for detailed evidence and results.

Q- What is the LIFE Study?

A- A national, longitudinal study evaluating occupational risks and health outcomes for EMS Clinicians and firefighters to guide future improvements in workforce health and safety. Learn more [here](#).