



#### **Advancing EMS Systems**

Supporting the importance of developing EMS as a coordinated system of care



#### **Education**

Supporting a nationwide systems approach to EMS education



#### Research

Analyzing data and measuring performance to enable improvements in EMS systems



#### Workforce

Supporting efforts to strengthen and prepare the EMS workforce nationwide



#### Safety

Protecting the health and safety of EMS clinicians and their patients



#### **EMS Data**

Collecting and sharing standardized EMS data to support improvements in patient care and EMS systems



#### **Preparedness**

Fostering collaboration to enhance readiness for catastrophic incidents



#### 911 Systems

Providing leadership and coordination to support and promote optimal 911 services



NHTSA OFFICE OF EMS
The Office of EMS is housed within the National Highway Traffic Safety Administration in the U.S. Department of Transportation

#### **HIGHLIGHTS**



CPR LifeLinks – The goal of this national initiative is to help communities save lives through the implementation of telecommunicator and high-performance CPR programs. The NHTSA Office of EMS and National 911 Program convened a group of 20 public safety leaders to create the CPR LifeLinks Implementation Toolkit: a how-to guide for EMS and 911 agencies interested in implementing programs to improve cardiac arrest survival rates in communities across the nation. The implementation toolkit and a host of additional resources, including a staff training presentation, success stories and case studies, are available on the CPR LifeLinks site. 911.gov/project\_cprlifelinks/index.html



**EMS Agenda 2050** – Over a two-year period, EMS professionals, stakeholders and members of the public came together to share ideas and create EMS Agenda 2050. The document outlines a vision for the next thirty years of EMS advancement and innovation. Read EMS Agenda 2050 and learn more about how you can be a part of turning its vision for a people-centered EMS system into a reality. Visit ems.gov to download EMS Agenda 2050 as well as other materials, including a video and an infographic that summarizes the vision's six guiding principles:

- Adaptable and Innovative
- Inherently Safe and Effective
- Integrated and Seamless
- Sustainable and Efficient
- Socially Equitable
- Reliable and Prepared

ems.gov/projects/ems-agenda-2050.html



**National EMS Scope of Practice Model** – Developed to identify the knowledge and skills necessary to achieve competence for the four levels of EMS clinicians, a newly revised version of the National EMS Scope of Practice Model was published in 2019. Supported by NHTSA's Office of EMS and the Health Resources & Services Administration's EMS for Children Program, the updated model reflects recent evidence, best practices and consensus opinion regarding the practice levels of EMS clinicians. While an individual's scope of practice is determined by state and local laws and regulations, the national model aims to facilitate reciprocity, standardize professional recognition and decrease the necessity of each state developing its own education and certification materials.

ems.gov/pdf/National\_EMS\_Scope\_of\_Practice\_Model\_2019.pdf

# **NG911**

**NG911 for Public Safety Leaders** – Most 911 systems were built with analog technology; in order to improve and build more resilient systems capable of handling call overload, natural disasters, and the flow of text, voice and video from the public to the 911 network, those systems require an upgrade. Next Generation 911 (NG911) systems use digital technology such as an Internet Protocol (IP)-based system. The NG911 for Public Safety Leaders website and publications provide non-technical resources for EMS, fire service and law enforcement leaders, as well as state and local authorities, to help them understand the benefits of NG911 in their local system. 911.gov/project\_ng911publicsafety.html





## **Advancing EMS Systems**

**State EMS Assessments** – Several times a year, at the request of a state EMS office, the NHTSA Office of EMS brings together a team of experts from around the country to evaluate a state's EMS system. Through meetings with state and local officials, reviews of data and observations of systems and infrastructure, the group develops a report to help the state EMS office evaluate and improve its EMS system.

**Nomenclature of the EMS Profession** – Following recommendations by the National EMS Advisory Council that the EMS profession consider new nomenclature, EMS stakeholder representatives met several times to discuss topics ranging from the future of EMS to whether or not the term "EMS" is even the most appropriate description of the profession. A white paper is being developed to summarize the conversation. ems.gov/projects/nomenclature.html

**National EMS Assessment 2020** – This cooperative effort between NHTSA and the National Association of State EMS Officials aims to use state and national data to obtain a clear picture of the current state of EMS across the country.



### **Promoting Education**

**National EMS Education Standards** – With support from NHTSA and HRSA, the National Association of EMS Educators was tapped to lead a collaborative effort to update the National EMS Education Standards, which have helped ensure that EMS clinicians receive an education preparing them to perform their roles. The revision will align the standards with the new National EMS Scope of Practice Model and the latest evidence and current EMS practice. ems.gov/projects/ems-education-standards.html



# **Supporting Research**

**Field Trauma Triage Guidelines** – The field trauma triage guidelines are being updated to provide EMS clinicians across the country with evidence-based tools to use when deciding which patients will benefit from transport to a trauma center. The project, led by the American College of Surgeons through a cooperative agreement with NHTSA, will use the results of a systematic literature review supported by NHTSA and the Agency for Healthcare Research and Quality, published in 2017.

**Prehospital Management of Suspected Opioid Overdose** – The administration of naloxone by EMS clinicians is a critical component in the effort to prevent deaths from opioid overdoses. In 2019, the National Association of State EMS Officials, in cooperation with the National Association of EMS Physicians and the American College of Emergency Physicians, published an evidence-based guideline and sample protocol for the administration of naloxone by EMS personnel. Find the new EBG along with other resources related to the opioid crisis at: ems.gov/projects/opioid-crisis.html

**Evidence-Based Guidelines for EMS Management of Acute Pain** – After a systematic review of available research was published by the Agency for Healthcare Research and Quality and NHTSA in the fall of 2019, NHTSA is supporting the development of an evidence-based guideline for the prehospital pharmacologic management of acute pain, as well as related education and implementation guidance for EMS services. More information about this project and other EMS evidence-based guidelines is available at: ems.gov/projects/evidence-based-guidelines.html



# **Enhancing the EMS Workforce**

**Fatigue Risk Management in EMS** – After a recommendation by the National EMS Advisory Council, NHTSA partnered with the National Association of State EMS Officials in February 2016 to identify challenges associated with managing and mitigating the effects of fatigue among EMS personnel. In 2018, the team released its evidence-based guidelines for fatigue risk management after reviewing more than 30,000 published research articles. They continue with the remaining phases of the project, which include the development of educational materials for EMS clinicians. ems.gov/projects/fatigue-in-ems.html





#### **Promoting Safety**

**Characterizing EMS Driver Training** – The primary objective of this project is to characterize ambulance operator education, training and supervision across the United States through an Internet-based survey of local EMS agencies. The study also examines a sample of current ambulance Emergency Vehicle Operator Course (EVOC) training programs to determine their content and consistency.



### **Using EMS Data to Improve Care**

**NEMSIS** – The National EMS Information System (NEMSIS) creates a standard for the collection of patient care and EMS system operational data and also collects portions of that data in a National EMS Database. The NEMSIS uniform dataset and database help local, state and national EMS stakeholders more accurately assess EMS needs and performance, as well as support better strategic planning for the EMS systems of tomorrow. The 2018 NEMSIS public release dataset contained information from more than 22.5 million EMS activations from 43 states and territories. As of September 2019, 46 states and territories are collecting and submitting NEMSIS Version 3 data, with several others in the planning and implementation stages. ems.gov/projects/nemsis.html

**EMS-Hospital Data Linkage** – NHTSA provided funding to the American College of Surgeons and National Association of State EMS Officials to develop a policy statement for improving data sharing between hospitals and EMS. The statement calls for development of a Universal Unique Identifier (UUID) to link EMS and trauma center records.

**Development of EMS Quality Measures** – EMS Compass engaged the EMS community and designed a process for the development, testing and evaluation of EMS performance measures. That work is now being continued through the National EMS Quality Alliance (NEMSQA), a coalition of EMS organizations created with support from NHTSA to create, evaluate and publish EMS performance measures. nemsqa.org



# **Enabling Preparedness**

**Stop the Bleed** – Stop the Bleed has brought together government agencies, not-for-profit organizations and corporations to provide resources and teach the public how to control major bleeding prior to the arrival of professional responders. NHTSA and its federal partners continue to support these efforts through a variety of activities, including participation in National Stop the Bleed Day. ems.gov/projects/stop-the-bleed.html



# Assisting the 911 System

**911 Grant Program** – The 911 Grant Program provides funding to support state and local efforts to deliver optimal 911 services. Since opening the application process in August 2018, the U.S. Departments of Transportation and Commerce announced more than \$109 million in grants to 33 states, the District of Columbia and two tribal nations. 911.gov/project\_911grantprogram.html

**Strategic Plan for Collection and Use of Nationwide 911 Data** – Released in June 2019, 911 Data & Information Sharing: A Strategic Plan outlines a vision that includes the automated collection, use and sharing of 911 data through the creation of a standardized system. This nationwide data collection would assist local, state and national efforts to support efficient, effective and evidence-based 911 decision making. 911.gov/project\_strategicplanningfor911data.html





**Ebola Preparedness and Guidance** – FICEMS provides awareness and guidance on potential risks and diseases facing the EMS community. Following the World Health Organization's July 2019 declaration of the Ebola outbreak in central Africa as a public health emergency of international concern, FICEMS has been collaborating with the CDC to update guidance for emergency medical dispatchers and EMS clinicians. ems.gov/ficems.html

**Opioid Overdose Epidemic** – EMS continues to play a critical role in the nationwide opioid epidemic. NHTSA has worked closely with its federal partners, including the Office of National Drug Control Policy, the National Security Council and the Department of Justice, on issues related to EMS and the opioid crisis. In addition, NHTSA recently launched a new resource on ems.gov with more information on the topic. ems.gov/projects/opioid-crisis.html

**ET3** – The Centers for Medicare & Medicaid Services (CMS) is trialing a new Emergency Triage, Treat, and Transport (ET3) model. NHTSA is working closely with CMS and other federal partners to support several aspects of the initiative, including the use of NEMSIS data to measure and evaluate program effectiveness. innovation.cms.gov/initiatives/et3/



The National EMS Advisory Council is Authorized by Congress to advise the Department of Transportation and FICEMS on EMS issues. The Council, whose members are appointed by the secretary of transportation, reorganized its committee structure in 2019 to align with the guiding principles underlying EMS Agenda 2050. You can learn more about the 2018-2020 NEMSAC members and find other resources, including council advisories and recommendations, by visiting the NEMSAC website. ems.gov/nemsac.html

## **About NHTSA's Office of EMS**

Consensus building, collaboration and supporting significant national projects are the hallmarks of NHTSA's contribution to EMS system development. The mission of the NHTSA Office of EMS is to reduce death and disability by providing leadership and coordination to the EMS community in assessing, planning, developing and promoting comprehensive, evidence-based emergency medical services and 911 systems.

For more information about the Office's programs and initiatives, visit ems.gov. There, you can sign up to receive EMS Update, the Office's official newsletter, and find out more about EMS Focus, the Office's webinar series.

