

The NHTSA Office of EMS



Advancing a People-Centered EMS System



Today's NHTSA Office of EMS

Our Mission

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.



The National Roadway Safety Strategy

*The Role of Post Crash Care in the
Safe System Approach*

<https://www.transportation.gov/NRSS>

The Problem

Between 2011-2020, over 370,000 people died in transportation incidents in the U.S.—and more than 94% of them died on our roads.

National Roadway Safety Strategy

United States Department of Transportation | January 2022

The Vision

We must strive for zero roadway fatalities—no other number is acceptable.

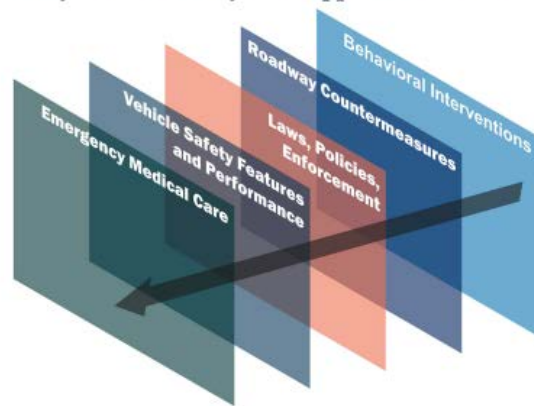
National Roadway Safety Strategy

United States Department of Transportation | January 2022

The Objectives

- Safer People
- Safer Roads
- Safer Vehicles
- Safer Speeds
- Post-Crash Care

All layers of a Safe System Approach are critical.

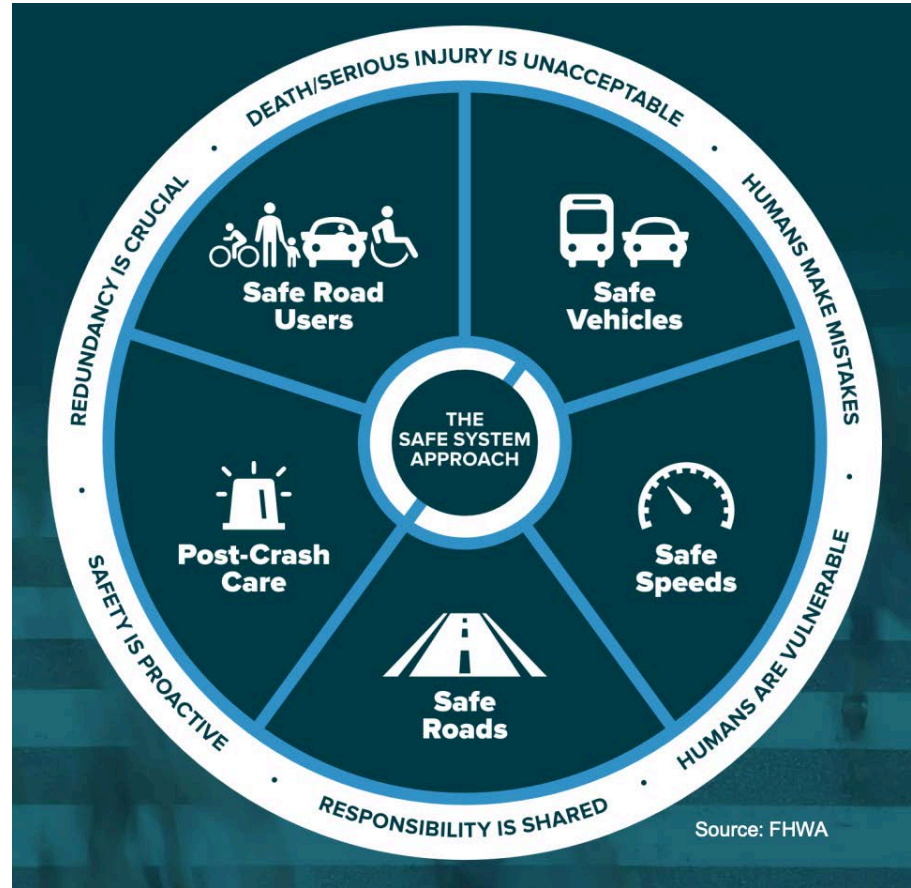


National Roadway Safety Strategy

United States Department of Transportation | January 2022

Safe System Approach

EMS = 4th “E”
of Highway Safety



Improving Emergency & Trauma Care Saves Lives



35,092

PEOPLE DIED IN TRAFFIC
CRASHES IN THE U.S. IN 2015¹



**MORE THAN ONE THIRD OF SERIOUSLY
INJURED CRASH VICTIMS ARE NOT TAKEN
TO A LEVEL I OR II TRAUMA CENTER³**

20% OF TRAUMA
DEATHS

are preventable with optimal emergency
and trauma care¹

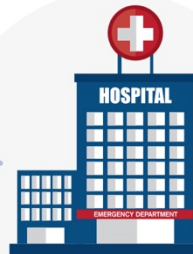
**2 OUT
OF 5**



**WERE ALIVE WHEN FIRST RESPONDERS
ARRIVED, BUT LATER DIED²**

THERE IS A
25% INCREASE IN THE
ODDS OF SURVIVAL

for severely injured patients if treated in a hospital
that is a level I or II trauma center⁴



Improving Emergency & Trauma Care Saves Lives

40%

2 OUT OF 5



WERE ALIVE WHEN FIRST RESPONDERS
ARRIVED, BUT LATER DIED²

911

- Public Safety Answering Points (PSAPs)
- Telecommunicators
- Dispatch & EMS Activation
- Linking 911 & DOT data

The screenshot shows the 911.gov website with a navigation bar containing 'About the Program', 'Current Projects', 'National 911 Coordination', and '911 System'. The main content area is titled 'GIS Assessment Project' and includes a breadcrumb trail 'Home / Project - GIS Assessment Project'. The text describes a project to implement a nationwide GIS data sharing system. A section titled 'What's Happening Now' discusses the challenges of implementing NG911 and lists three objectives, with the first being to identify current GIS status.

911.gov

About the Program Current Projects National 911 Coordination 911 System

GIS Assessment Project

[Home / Project - GIS Assessment Project](#)

To understand how geographic information systems are functioning today in the 911 community, a recently-awarded contract has initiated a new project to determine how to implement a nationwide GIS data sharing system. These findings will be necessary in establishing the Next Generation 911 (NG911) system that is fully interconnected and interoperable across the country.

What's Happening Now

Successful implementation of NG911 relies heavily on highly accurate, robust GIS data that is constantly maintained to NG911 standards and freely shared locally, regionally and nationally; currently there is not a universal GIS-sharing system in place for 911 centers in the U.S. While some states have made the transition to NG911, many have not. Once every 911 center has the capability to share local GIS data, a universal NG911 system can be implemented, and the GIS data will help inform evidence-based practices in telecommunication. The National Highway Traffic Safety Administration's (NHTSA) 2019 reports, [National NG911 Roadmap](#) and [Strategic Plan for 911 Data and Information Sharing](#), highlighted the need to develop uniform standards and best practices for data-sharing.

This GIS effort will undertake three objectives:

1. **Identify current GIS status:** Many technical issues exist in communities that have implemented NG911. Problems with developing, sharing, and storing GIS data among 911 centers act as barriers to use NG911 efficiently and effectively. These barriers will be addressed to ease 911 centers' transitions to NG911.

National EMS Information System

Post Crash Care Facts (2021)



- >5,300 Public Safety Answering Points answer 200 Million requests for emergency assistance
- 12,000 EMS agencies responded to >1,430,00 motor vehicle crashes (MVCs)
- Death rates increase by 3% for every minute first responders are delayed
- 10,660 patients were severely injured in MVCs



Motor Vehicle Crash Dashboard

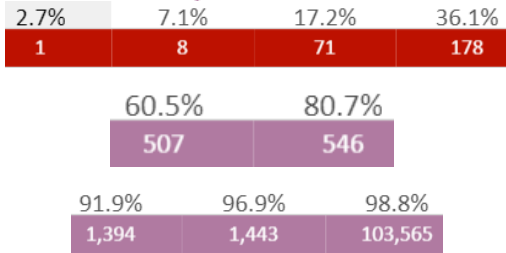
Incident Details

Motor Vehicle Crashes: 132,296

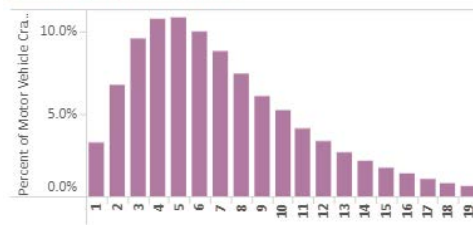
EMS Agencies: 837

NHTSA Region ▼ Unit Dispatch Date
 Region 3 ▼ 4/24/2021 ↔ 4/22/2022

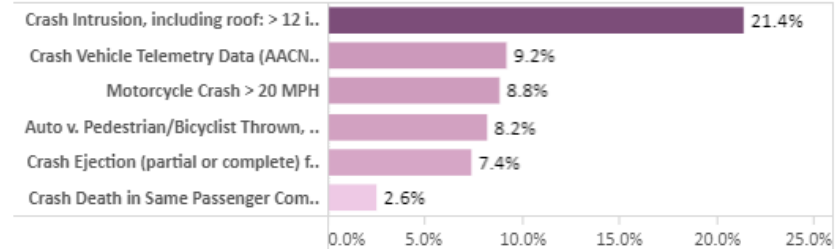
Probability of Survival



Scene Response Time

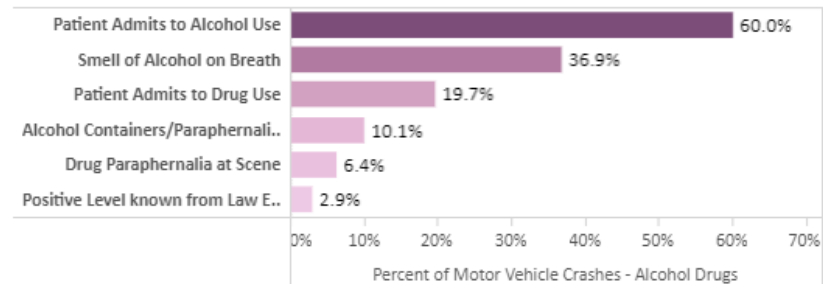


Injury Risk Factor



Type of Drug/Alcohol Indication (Percent of Total)

9.4%



<https://nemsis.org/view-reports/public-reports/version-3-public-dashboards/v3-public-motor-vehicle-crash-dashboard/>

BIPARTISAN INFRASTRUCTURE LAW



Section 405 - NEMSIS as core highway safety database

- collect, report EMS data & enter into core databases
- compatibility & interoperability of databases with NEMSIS
- supporting traffic records improvement training & expenditures for emergency medical professionals

* Graphic credit: FHWA



2022 BUDGET



**BIPARTISAN
INFRASTRUCTURE
LAW**

National Association of State EMS Officials

- **Linkage** between EMS, trauma registry, crash data, roadway inventory.
- Improve outcomes via **triage** and **destination guidelines** for EMS.
- Bypass **protocols** or **transfer agreements** to ensure highest and most appropriate level of care.
- Rapid EMS transportation of MVC patients (“**pit crew**” approach)
- **NG9-1-1**...greatly enhancing discovery of, and response to, MVCs
- All communities should have access to **emergency medical dispatch**
- EMS infrastructure in **rural areas** deteriorating...**unfunded** system that suffers from being **considered a non-essential service**”



NASEMSO Responses, June 2018 to NHTSA Request for Information on Improving Prehospital Trauma Care

Field Trauma Triage Guidelines Update

- American College of Surgeons Committee on Trauma - “National Guideline for the Field Triage of Injured Patients: Recommendations of the National Expert Panel on Field Triage, 2021” *
- EMS determines injury severity, initiates injury management, & decides appropriate destination via “field triage”
- *Right Patient to Right Place at Right Time = **Saves Lives***

* Journal of Trauma & Acute Care Surgery - Publish Ahead of Print. Accessed 4-27-22.

Field Trauma Triage Guidelines Update

National Guideline for the Field Triage of Injured Patients

RED CRITERIA High Risk for Serious Injury

Injury Patterns	Mental Status & Vital Signs
<ul style="list-style-type: none"> • Presenting injuries to head, neck, torso, and proximal extremities • Skull deformity, suspected skull fracture • Suspected spinal injury with new motor or sensory loss • Chest wall instability, deformity, or suspected flail chest • Suspected pelvic fracture • Suspected fracture of two or more proximal long bones • Crushed, displaced, mangled, or pulseless extremity • Amputation proximal to wrist or ankle • Active bleeding requiring a tourniquet or wound packing with continuous pressure 	<p>All Patients</p> <ul style="list-style-type: none"> • Unable to follow commands (motor or GCS < 6) • RR < 10 or > 20 breaths/min • Respiratory distress or need for respiratory support • Room-air pulse oximetry < 90% <p>Age 0-9 years</p> <ul style="list-style-type: none"> • SBP < 70mm Hg + (2 x age years) <p>Age 10-64 years</p> <ul style="list-style-type: none"> • SBP < 90 mmHg or • HR > SBP <p>Age > 65 years</p> <ul style="list-style-type: none"> • SBP < 110 mmHg or • HR > SBP

Patients meeting any one of the above RED criteria should be transported to the highest-level trauma center available within the geographic constraints of the regional trauma system

YELLOW CRITERIA Moderate Risk for Serious Injury

Mechanism of Injury	EMS Judgment
<ul style="list-style-type: none"> • High-Risk Auto Crash <ul style="list-style-type: none"> - Partial or complete ejection - Significant intrusion (including roof) <ul style="list-style-type: none"> • >12 inches occupant side OR • >18 inches any side OR - Need for extrication for airtrapped patient • Death in passenger compartment • Child (Age 0-9) unrestrained or in unsecured child safety seat • Variable telemetry data consistent with severe injury • Rider separated from transport vehicle with significant impact (eg motorcycle, ATV, horse, etc.) • Pedestrian/bicycle rider thrown, run over, or with significant impact • Fall from height > 10 feet (all ages) 	<p>Consider risk factors, including:</p> <ul style="list-style-type: none"> • Low-level falls to ground or other adults (children < 2 years old) with significant head impact • Child abuse • Special, high-resource healthcare needs • Pregnancy > 20 weeks • Burns in conjunction with trauma • Children should be triaged preferentially to pediatric capable centers <p>If concerned, take to a trauma center</p>

Patients meeting any one of the YELLOW CRITERIA WHO DO NOT MEET RED CRITERIA should be preferentially transported to a trauma center, as available within the geographic constraints of the regional trauma system (need not be the highest-level trauma center)

YELLOW CRITERIA

Moderate Risk for Serious Injury

- High-Risk Auto Crash
 - Partial or complete ejection
 - Significant intrusion (including roof)
 - Death in passenger compartment
 - Child unrestrained/in unsecured child safety seat
 - Vehicle telemetry data consistent with severe injury
- Rider separated from transport vehicle w/ significant impact
- Pedestrian/bicycle rider thrown, run over, or w/ significant impact

shortened
excerpt

*Journal of Trauma & Acute Care Surgery - Publish Ahead of Print 4-27-2022



911.gov

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