Q&A: National EMS Dashboard: Traffic Crashes

Introduction

While law enforcement professionals provide police reports informing before-crash data, EMS practitioners provide clinical information in patient care reports informing after-crash data. This human focus fills the second half of the equation for traffic safety professionals. EMS data specific to traffic crash victims is invaluable to the traffic safety community in understanding post-crash activities, which in turn help save lives and prevent disabilities.

What is the National EMS Dashboard: Traffic Crashes?

The National EMS Dashboard presents post-crash data from the National EMS Database in a visually interactive, easily accessible way. It is populated with millions of EMS activations dispatched in response to traffic crashes. Included are unique and valuable data elements that describe:

- demographics of crash victims,
- distributions of traffic crashes by region and time,
- method of EMS response to the traffic crash scene,
- patient care provided by EMS personnel, and
- patient disposition immediately following the pre-hospital care setting.

What data does the Dashboard provide?

Data presented on the dashboard is drawn from the publicly available portion of the National EMS Database accessible at NEMSIS.org. The dashboard includes standard records of EMS activations in response to 9-1-1 requests dispatched to traffic accidents.

What data does the Dashboard exclude?

The dashboard excludes EMS activations with the following type-of-service requests: Intercept, Interfacility Transfer, Medical Transport, Mutual Aid, and Standby; and the following type-of-patient dispositions: Cancelled and No Patient Found.

See the NEMSIS Version 2 and Version 3 Data Dictionaries for definitions of these standards and other data elements.

Does the Dashboard’s distribution of EMS activations between NHTSA regions correlate with traffic crash risk and regional performance?

The NHTSA Region data element should NOT be viewed as a comparison measure of traffic crash risk or regional performance between regions. The National EMS Database is a convenience sample of EMS activations that receives data from States and their local agencies on a voluntary basis. Also, the distribution does not take into the account the total population of each region. The NHTSA Region data element does provide an understanding of the proportion of the Dashboard that is represented by each region. For example, Region 4 may represent the highest proportion of the total number of 9-1-1 EMS activations responding to a traffic crash on the Dashboard, but this does not indicate that Region 4 has the highest count, proportion, or rate of traffic crashes compared to the other regions.

What are the NHTSA Regions? Which states and territories are included in each NHTSA region?

NHTSA has 10 regional offices that work on the agency’s mission to save lives, prevent injuries, and reduce traffic-related healthcare and other economic costs. Each regional office provides numerous services to its States, as well as other public and private sector customers.
How is Agency Level of Service defined?

Agency Level of Service indicates “the highest credentialed personnel’s level of service which the agency provides for every EMS encounter if requested. In a tiered response system, this is the highest level of service that could be sent to any specific call.” Therefore, the Dashboard’s Agency Level of Service does not represent an exact distribution of the service provider (e.g., EMT-Paramedic, EMT-Basic, Nurse, etc.) that responded to the crash scene or provided patient care.

How is National Average Time calculated?

National Average Time—presented in the sections on EMS Activation & Response, Patient Condition & Care, and Patient Transport sections—is calculated from data within the National EMS Database.

How often is the Dashboard updated?

The Dashboard is updated every Sunday evening with records that were submitted by States and territories during the previous week.

Where can I find definitions and other information for the data elements on the Dashboard?

A full description of each data element, including its definition, data type, and data domain, can be found in the Version 2 and Version 3 Data Dictionaries. It is important to note that some of the data element titles used on the Dashboard may be slightly different from the titles that appear in the Data Dictionaries.

Is the National EMS Database a valuable tool for original research and analysis? How can I access the National EMS Database?

With an average of more than 25 million EMS activations submitted per year by 49 States and territories, the National EMS Database provides a unique and robust source of pre-hospital emergency care data that is publicly available for original research and analysis. In addition to the traffic crash data presented on the Dashboard, the National EMS Database contains information related to all types of medical and trauma emergencies.

The publicly available portion of the National EMS Database is accessible through the EMS Data Explorer. Users will find a direct link along with the public-use username and password that are needed to access the database. For years of data not available through the EMS Data Explorer, follow the request process located here.

I accessed the NEMSIS National Event Cube and noticed there are some disparities between the figures I generated using the Cube and the figures shown on the Dashboard. Why do these disparities exist? Which figures should I cite?

Users should first ensure that when generating figures with the Cube they are using the same inclusion and exclusion criteria that are described on the web page that contains the Dashboard. These criteria are described in the answers to the following two questions: “What data is included on the Dashboard?” and “What data is excluded from the Dashboard?”

While the Dashboard and the Cube are both populated with data from the National EMS Database and are updated weekly, it is important to note that the Cube is updated in advance of the Dashboard. Therefore, the Cube will have the most current figures. In terms of referencing, users may cite figures from either the NEMSIS National Event Cube or the Dashboard, but should indicate which of the sources they utilized and should include an accessed date and time in their citation.