

The National EMS Information System

Exploring NEMSIS: Syndromic Tools and Collaborative Opportunities for Disaster Data Science Integration and Interoperability

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The Office of EMS Mission



Reduce death & disability on our roadways



Provide leadership & coordination to the EMS and 911 communities



Assess, plan, develop, & promote comprehensive, evidence-based EMS & 911 systems

NHTSA's Office of EMS



Advancing a **People-Centered** EMS System

What is NEMSIS?

The National EMS Information System provides standardized EMS documentation and data collection practices to facilitate the sharing of EMS data at local, state and national levels.



COLLECT – CLEAN – STORE – SHARE

 **NEMSIS**
BETTER DATA. BETTER CARE.

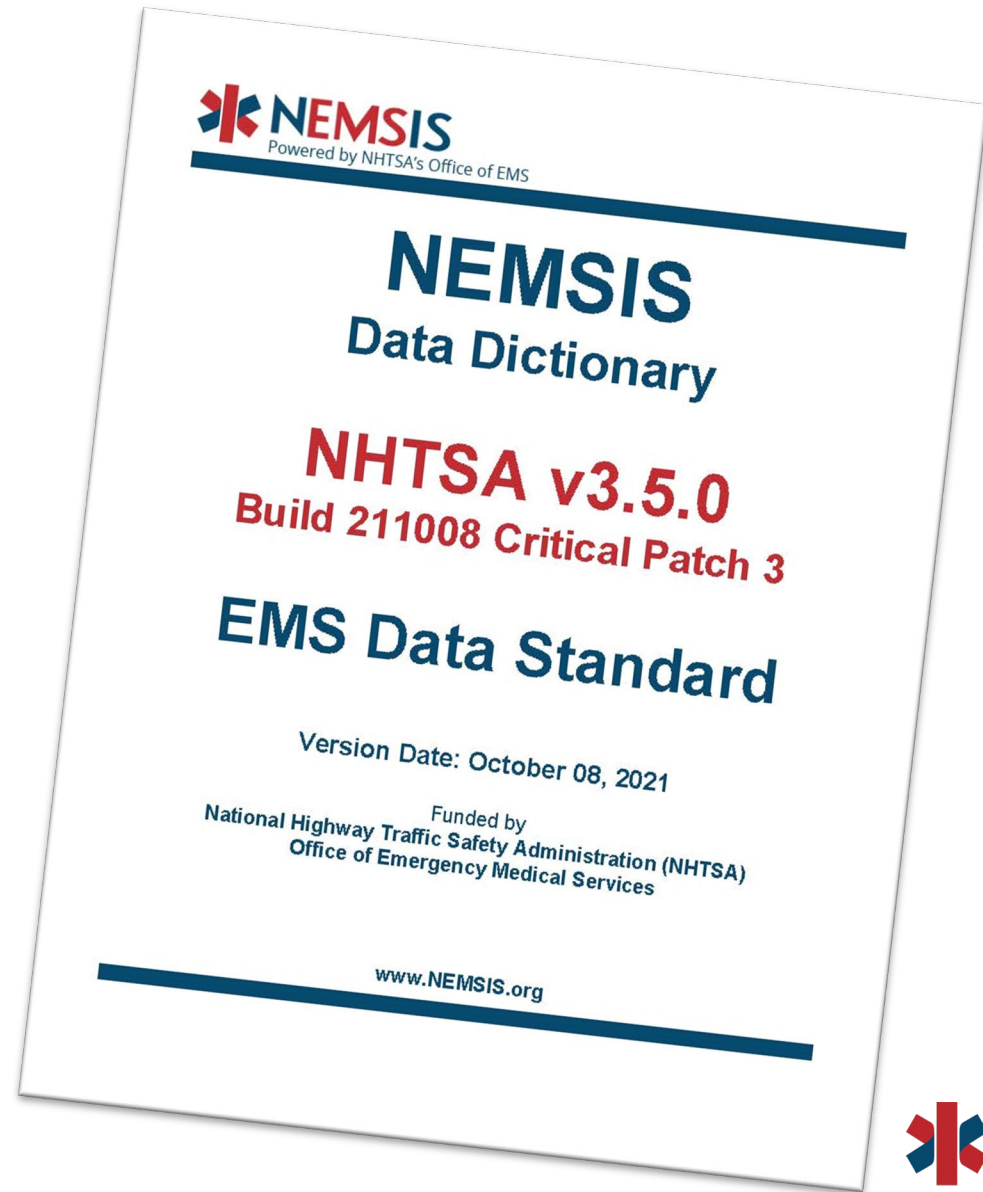
Core Components of NEMSIS

- **Documentation standard** for EMS response and care
- **Data definitions** for point of care data collection
- **Compliance testing** for EMS ePCR software
- **Interoperability** and exchange standards
- **National EMS Database**



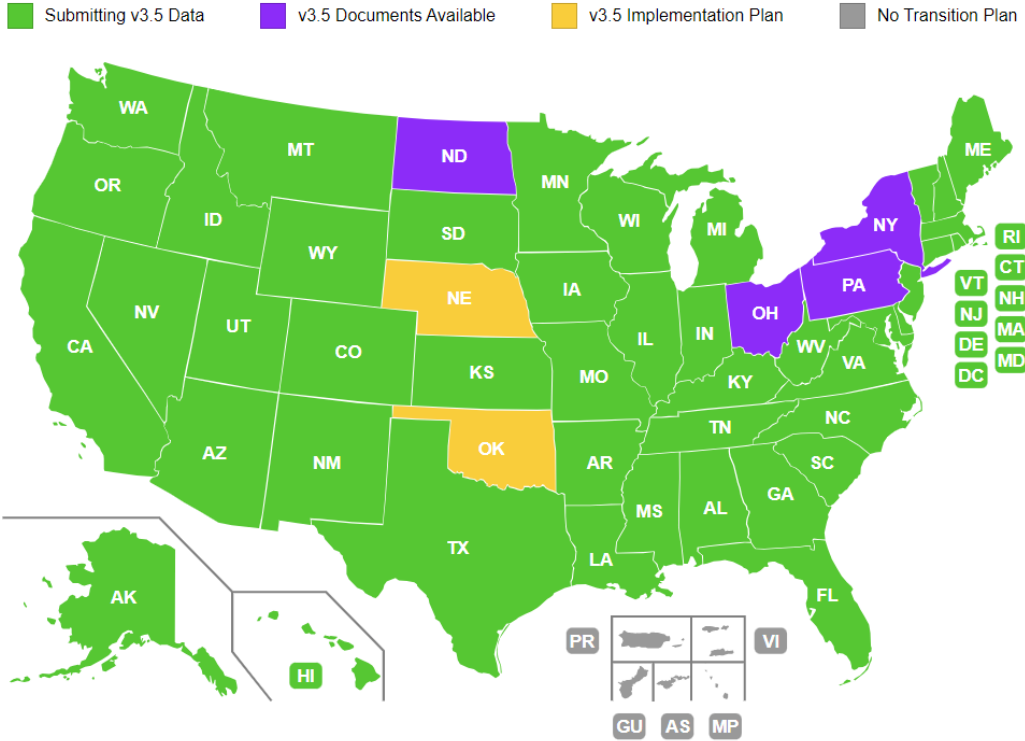
Data Elements

- Includes **640** data elements that can be implemented by an EMS system
- **155** of those are national elements

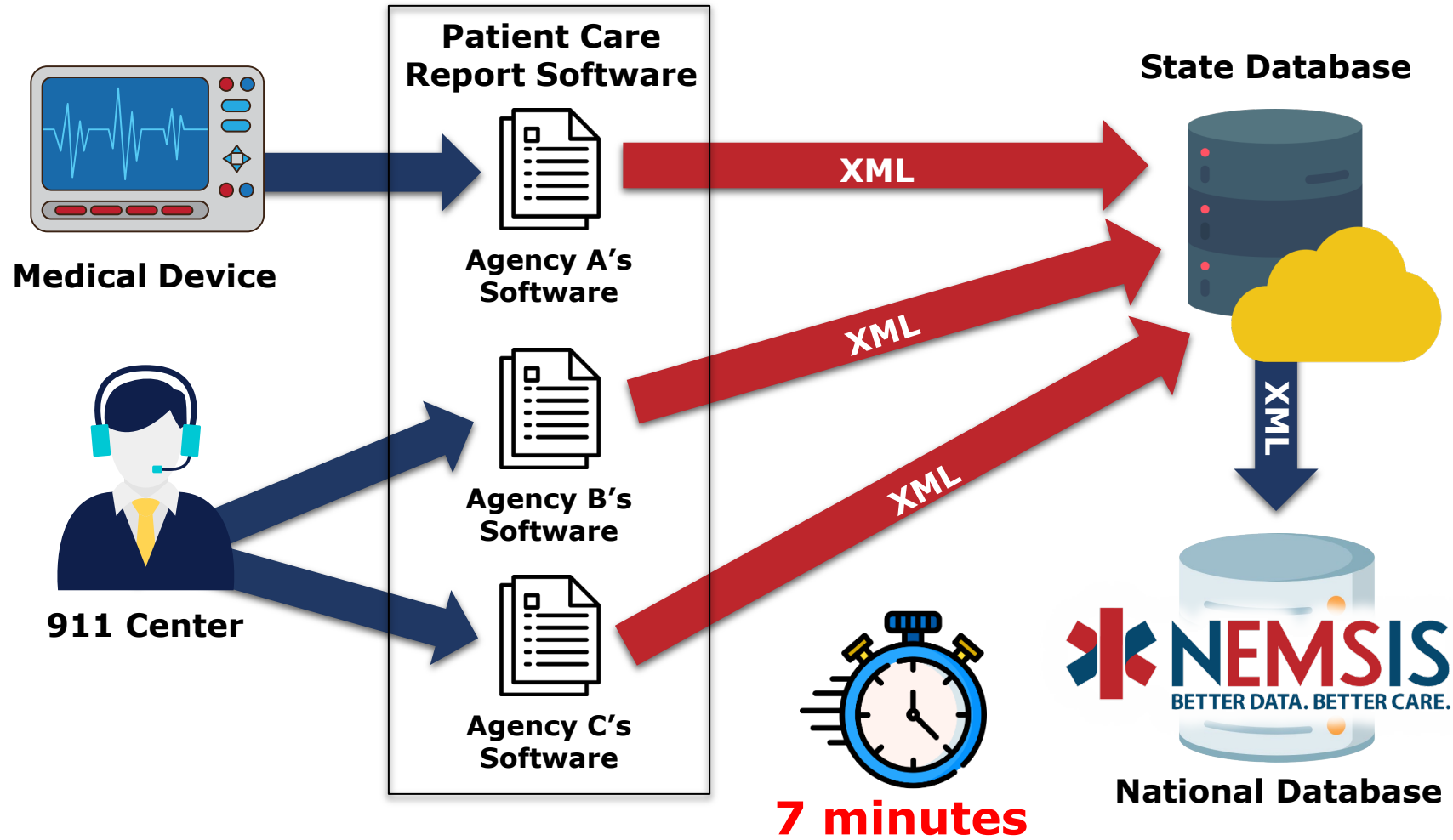


Participating States and Territories

Statistical Year	Reporting States ¹	Reporting Agencies	Number of Events
2009	26	2,112	5,767,090
2010	31	4,874	9,874,748
2011	35	7,180	14,371,941
2012	43	8,439	19,831,189
2013	45	9,025	23,835,729
2014	48	9,653	25,835,729
2015	49	8,785	30,206,450
2016	49	10,137	29,919,652
2017	35	4,016	7,907,829
2018	43	9,599	22,532,890
2019	47	10,062	34,203,087
2020	50	12,319	43,488,767
2021	53	13,949	48,982,990
2022	54	13,946	51,379,493
TOTALS			368,137,584



The Portability of EMS Data

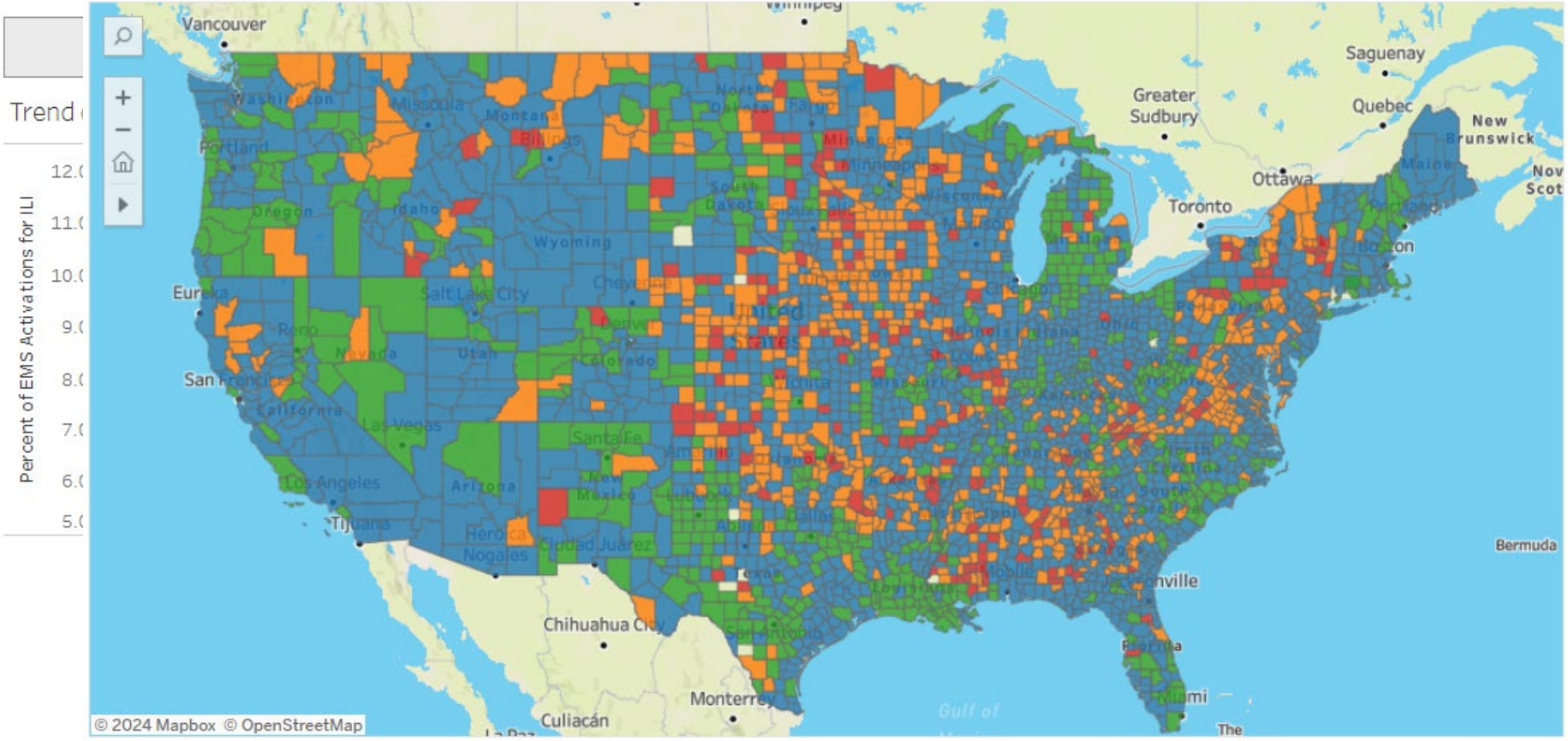


Influenza-Like Illness Tracking

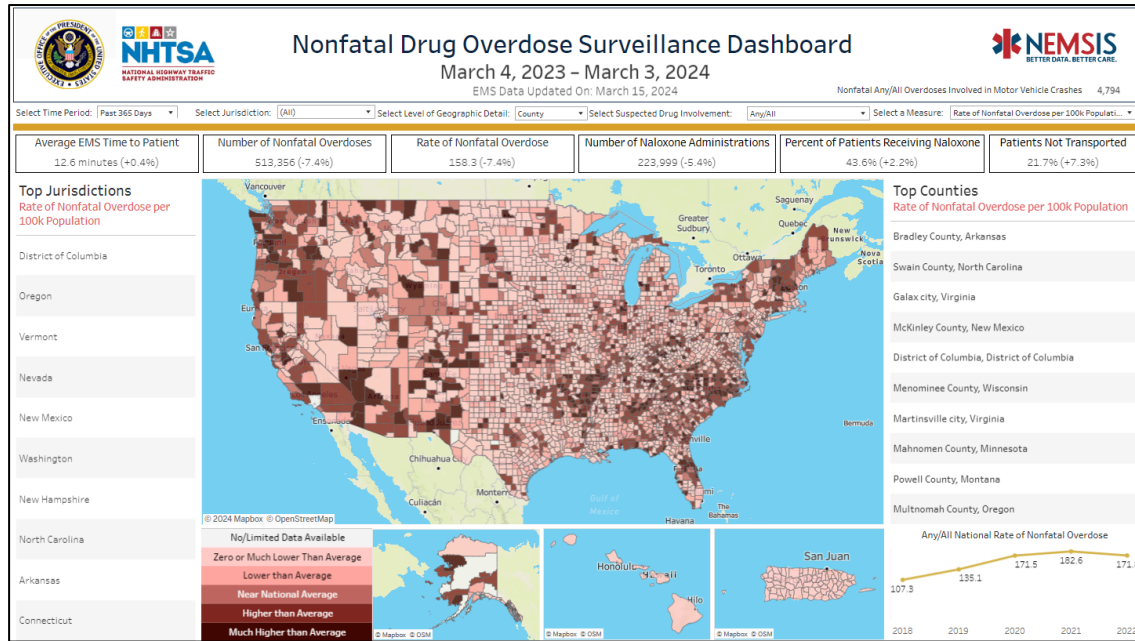
Geography

Heat Map of ILI-Related Activations over the Total Number of EMS Activations

- Less than 6%
- Between 6% and 11%
- Between 11.1% and 15%
- Greater than 15%



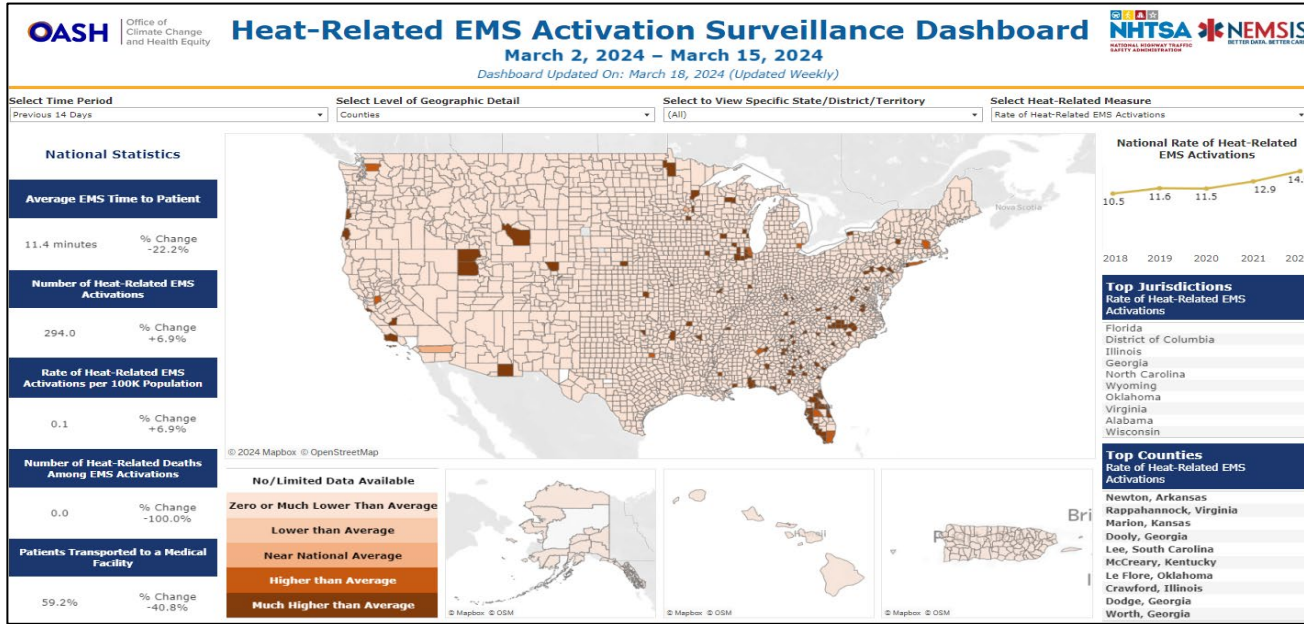
Nonfatal Drug Overdose Dashboard



Incident Location Type	Overdose Count
Single-family non-institutional (private) house	105,293
Non-institutional (private) residence	87,642
Street and highway	49,327
Unspecified non-institutional (private) residence	38,379
Apartment; Co-op apartment; Condominium	28,349
Private commercial establishments	22,581
Street , highway and other paved roadways	18,107
Trade and service area	17,888
Hospital	16,654
Other paved roadways	10,772

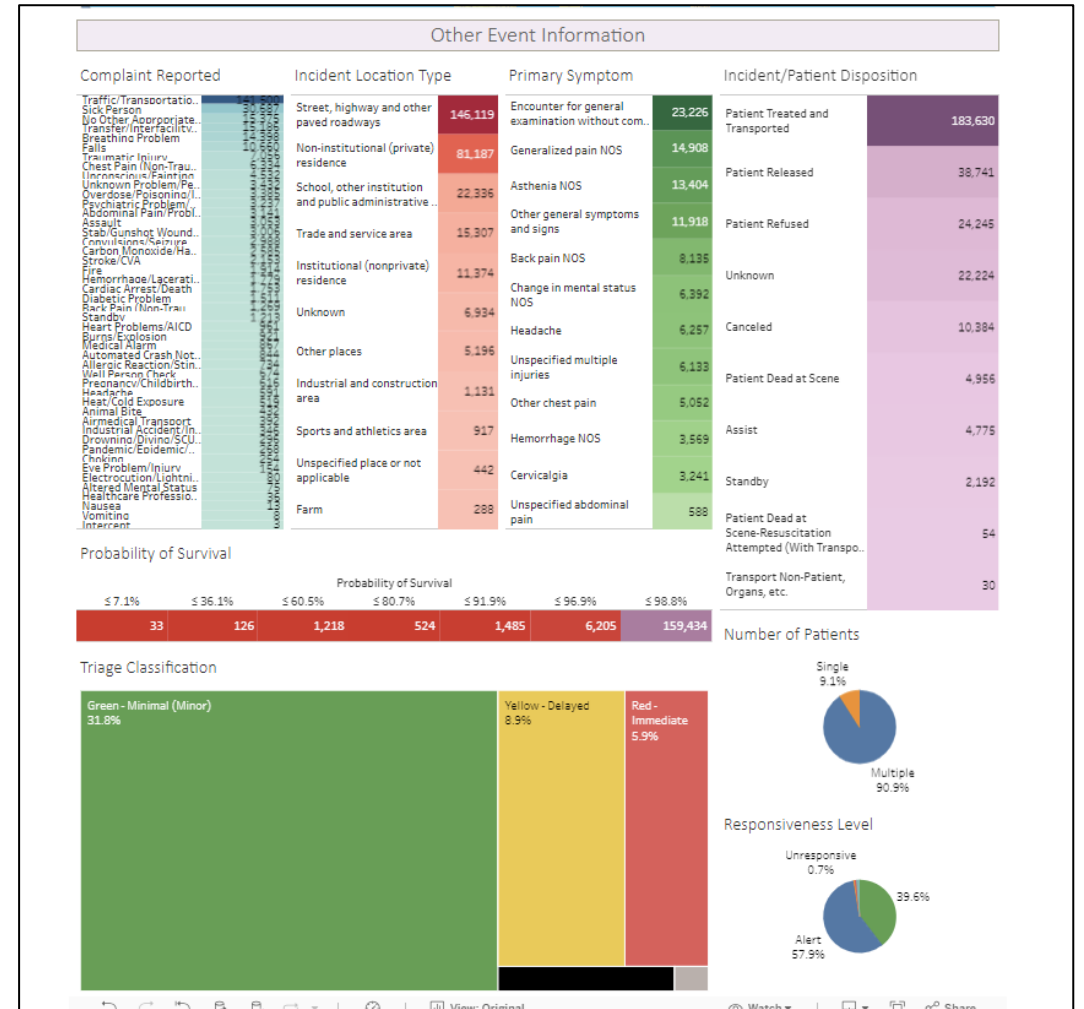
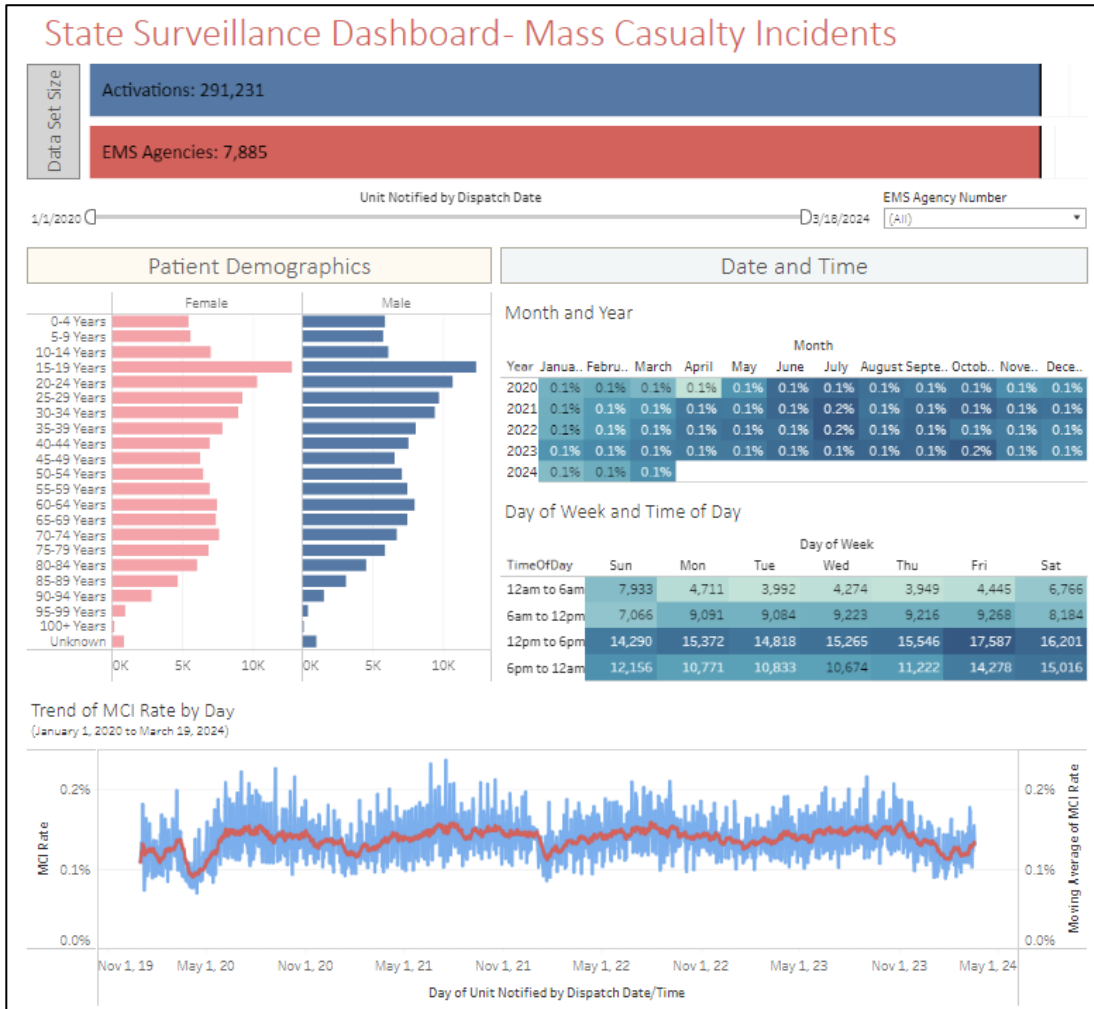


Heat-Related Illness Dashboard



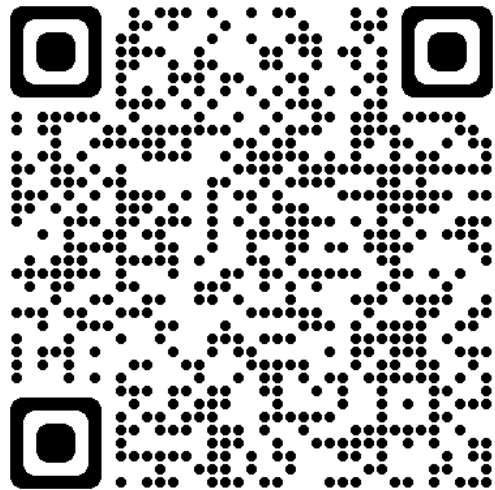
Incident Location Type	Heat-Related Events
Single-family non-institutional (private) house	18,420,581
Non-institutional (private) residence	15,335,192
Hospital	15,205,735
Unspecified non-institutional (private) residence	8,466,935
Home for the sick	6,559,326
Street and highway	6,352,130
Condominium	5,531,337
Street , highway and other paved roadways	3,316,264
Physician office	3,315,285
Trade and service area	1,767,452
Private commercial establishments	1,734,283

Mass Casualty Incident Dashboard



NEMESIS Interoperability

- Ongoing Interoperability and HIE work
- Bidirectional data sharing
 - Implications for medical history during disaster operations
- Patient outcomes for research post incident



[Global Edition](#) [Interoperability](#)

Tapping into the trove of standardized EMS data

Emergency medical response information isn't used enough in healthcare. Agencies are looking to align with TEFCO, seeking partners to improve interoperability with state EMS systems and to build out technical resources for bidirectional exchange.

By [Andrea Fox](#) | March 22, 2024 | 01:19 PM

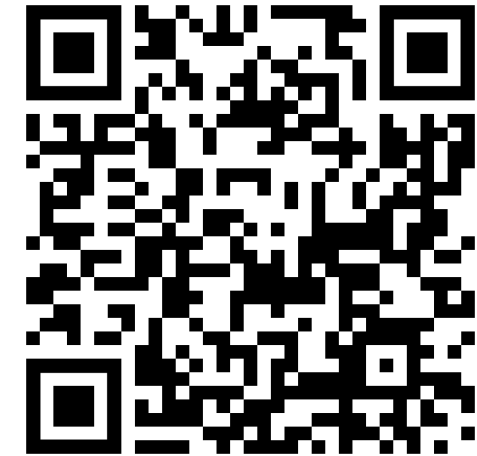
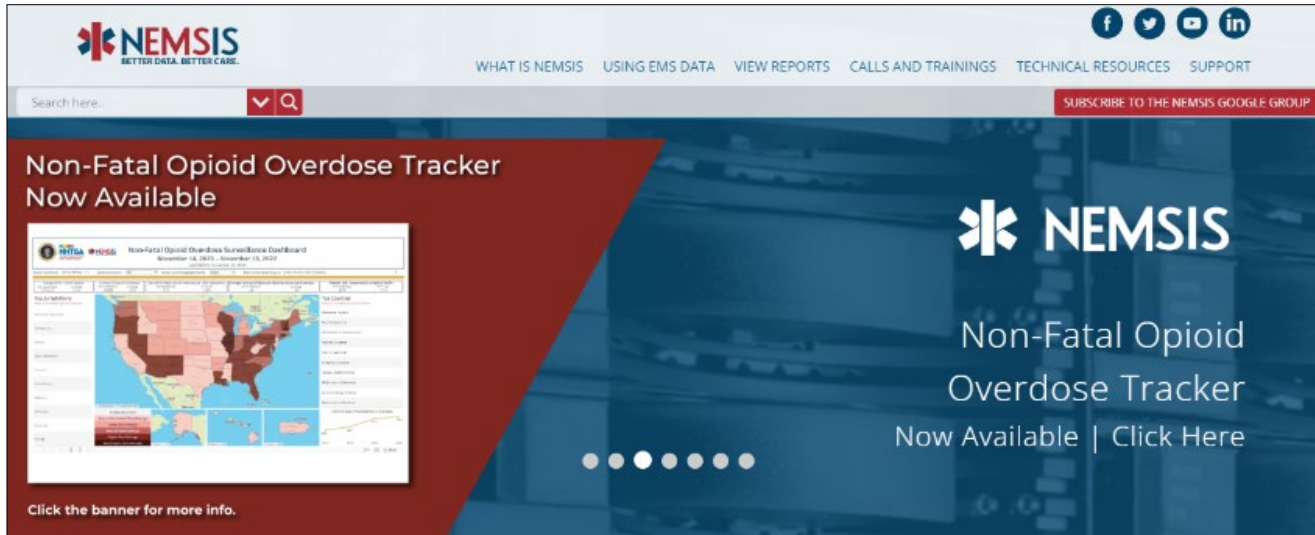


From left to right, Erica Matti and Joshua Legler presenting at HIMSS24.

Photo: HIMSS Media



For More Information



NEMESIS Help Desk

[NEMESIS.org](https://nemsis.org)

Help Desk

<https://nemsis.atlassian.net/servicedesk/customer/portals>

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