

Data Manager's Forum

August 22, 2023
Park City, Utah



QUALITY BY DESIGN - NEMESIS ANNUAL MEETING 2023



Welcome and Introduction to NEMESIS

N. Clay Mann, PhD, MS, MBA
NEMESIS TAC Principal Investigator



Introductions

Lauri Lunde, MEd
Business Data Analyst
State Support, NEMESIS TAC



Introductions

- Share your name, state, and # of years in role
- We will then break into groups of 2-3 to briefly discuss a challenge you are facing in your state currently.
- Choose one person from your group to share.



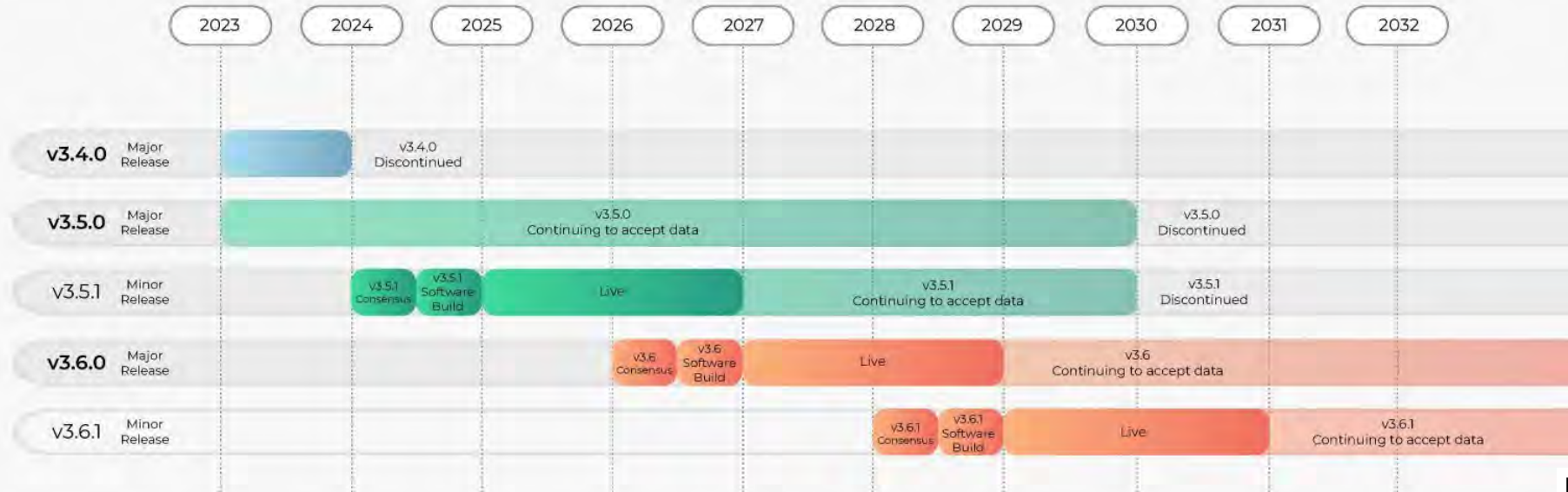
v3.5.0 Implementation

Lauri Lunde and Monet Iheanacho
Business Data Analysts
NEMSIS TAC





EMS Data Standard Version Timeline



Legend

Consensus: Stakeholders review and reach agreement on revisions.

Software Build: Software developers create and release tools for the new version.

Live: Version is complete, software is available, and data can be submitted to the TAC.

Continuing to accept data: Records in this version are accepted by the TAC.

Discontinued: Records in this version are no longer accepted by the TAC.

Type of Release

Informational Release: Includes corrections to the dictionary (e.g., typos, comments, update links). The release is "backwards compatible" (e.g., ePCR record generated in v3.5.0 is valid in v3.5.1).

Minor Release: Includes changes that are more permissive to the data standard (e.g., new optional elements or changing an error to a warning). The release is "backwards compatible".

Major Release: Includes changes that may be more restrictive (e.g., upgrading an element from state or optional to national). This release is NOT "backwards compatible" to the previous version.

Critical Patch: Corrects security or functionality that seriously compromises the daily function of the standard. Released as needed.

December 2022. Current proposal supersedes previous drafts.



v3.5.0 Resources Available

- [nemsis.org/ Using EMS Data/ v3.5.0 Revision](https://nemsis.org/Using-EMS-Data/v3.5.0-Revision)



Data Use Agreements & IRBs

Monet Iheanacho
NEMESIS TAC





Going for Gold

1. Going for Gold with the NEMESIS v3.5 DUA
2. The DUA is a user friendly document
3. Execution can be Timely

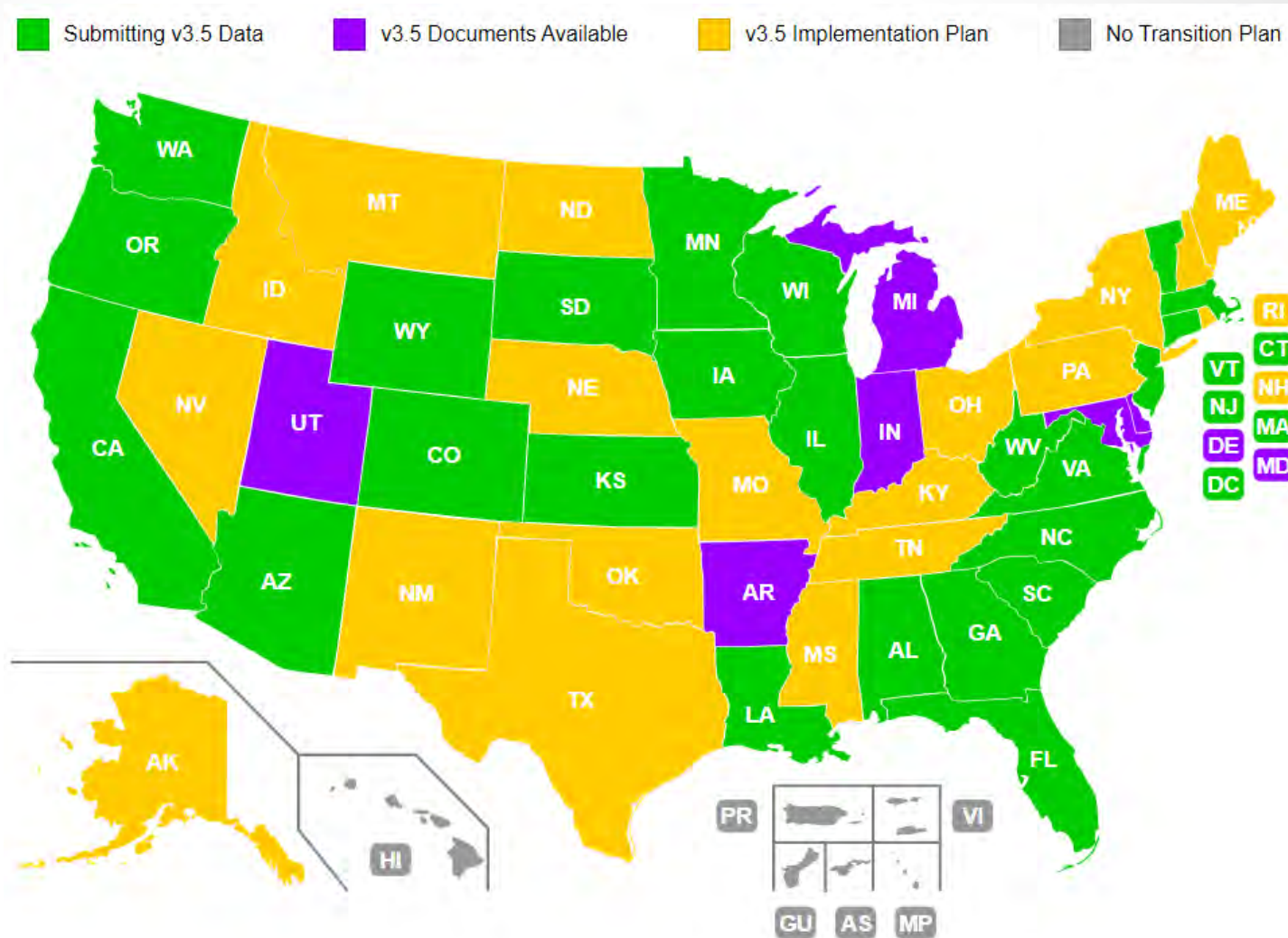


Benefits

1. First NEMESIS Data Use Agreement (DUA)?
2. NHTSA authorization of NEMESIS TAC to execute DUA.
3. The NEMESIS DUA is the only formal agreement needed when there is exchange of research data.



The Goal



The Goal

- Assist states and territories with the execution of the Data Use Agreements (DUA), Data Sharing Agreements (DSA), and Internal Review Board (IRB) applications.
- Compliance with the execution of the User Friendly document and process.



Data Use Agreement

NEMESIS DATA USE AGREEMENT

This Data Use Agreement (hereinafter, the “Agreement”) is entered into this ____ day of _____ 20__ between the National Emergency Medical Services Information System Technical Assistance Center (hereinafter, “NEMESIS” or “Data Recipient”) in the Department of Pediatrics at the University of Utah School of Medicine, acting as an agent of National Highway Traffic Safety Administration (Office of EMS) under contract number DTNH2215C00030, and (State or Territory EMS Authority)(“EMS Authority”) for purposes of compliance with the Health Insurance Portability and Accountability Act of 1996 (“HIPAA”), the Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009, and the Paperwork Reduction Act OMB Control Number: 2127-0717.

1. Recitals
2. Definitions
3. Disclosure of Data to Data Recipient
4. Obligations of Data Recipient
5. Terms and Termination
6. General Provisions



Data Use Agreement

Page 7 of the v3.5 DUA is the start of **Appendix A – National DataSet** listing the requisite variables/elements sent from the state to populate the national database.

Appendix A – National NEMSIS DataSet

The NEMSIS Version 3.5.0 National EMS Elements To Be Collected from the EMS Authority (State or Territory)

The NHTSA / NEMSIS Version 3.5.0 standard consists of three DataSets; the Demographic (EMS Agency Information) (DEM DataSet) and EMS (ePCR/Event) (EMS DataSet) and the State requirements (SDS) StateDataSet. The national subsets of requisite data are the only elements that are sent from a State or Territory (EMS Authority) to populate the NEMSIS Database at the NEMSIS Technical Assistance Center. The elements included in this appendix represent the national subset of requisite elements. The DEM DataSet represents information regarding the EMS Agency. The EMS DataSet represents information regarding the EMS activation / response. The State DataSet represents information regarding state-specific certifications/licensures, medications, procedures, protocols, facilities, and custom configurations. This may or may not include detailed incident, scene, patient, assessment, and treatment information depending on the disposition of the incident and/or patient.

NHTSA / NEMSIS Version 3.5.0 – Requisite National Elements - Demographic DataSet -

The NHTSA / NEMSIS Version 3.5.0 National Subset of data elements for the Demographic (EMS Agency) submission is listed below. Twenty-two elements comprise the Demographic DataSet (DEM DataSet).

Blue typeface indicates the elements that are removed from public reporting.

	NHTSA / NEMSIS V3 Element Number	NHTSA / NEMSIS V3 Element Name	Elements Removed from Public Reporting
DEMOGRAPHIC (EMS Agency) REPORT Information			
dAgency Information			
1	dAgency.01	EMS Agency Unique State ID	Removed
2	dAgency.02	EMS Agency Number	Removed
3	dAgency.04	EMS Agency State	Removed
4	dAgency.05	EMS Agency Service Area States	Removed
5	dAgency.06	EMS Agency Service Area County(ies)	Removed
6	dAgency.07	EMS Agency Census Tracts	Removed
7	dAgency.08	EMS Agency Service Area ZIP Codes	Removed



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V3.5 DUA Changes to the DEM DataSet Section

List of DEM variables changes in **Appendix A** from the v3.4 DUA to v3.5 DUA

Elements in the **RED font have been removed from the NEMESIS standard, and elements in the **GREEN** font have been added to the standard.*

#	Data Item Name	Comment/Justification (Listed changes only from v3.4 to v3.5)
	dAgency.15 - Statistical Calendar Year	Removed from NEMESIS
	dAgency.16 - Total Primary Service Area Size	Removed from NEMESIS
	dAgency.17 - Total Service Area Population	Removed from NEMESIS
	dAgency.18 - 911 EMS Call Center Volume	Removed from NEMESIS
	dAgency.19 - EMS Dispatch Volume per Year	Removed from NEMESIS
	dAgency.20 - EMS Patient Transport Volume per Year	Removed from NEMESIS
	dAgency.21 - EMS Patient Contact Volume per Year	Removed from NEMESIS
	dConfiguration.02 - State Certification/Licensure Levels	Removed from NEMESIS
	dConfiguration.03 - Procedures Permitted by the State	Removed from NEMESIS
	dConfiguration.04 - Medications Permitted by the State	Removed from NEMESIS
	dConfiguration.05 - Protocols Permitted by the State	Removed from NEMESIS
	dConfiguration.11 - EMS Agency Specialty Service Capability	Removed from NEMESIS
	dConfiguration.15 - Patient Monitoring Capability(ies)	Removed from NEMESIS



V3.5 DUA Changes to the EMS DataSet Section

List of EMS variables changes in **Appendix A** from the v3.4 DUA to v3.5 DUA

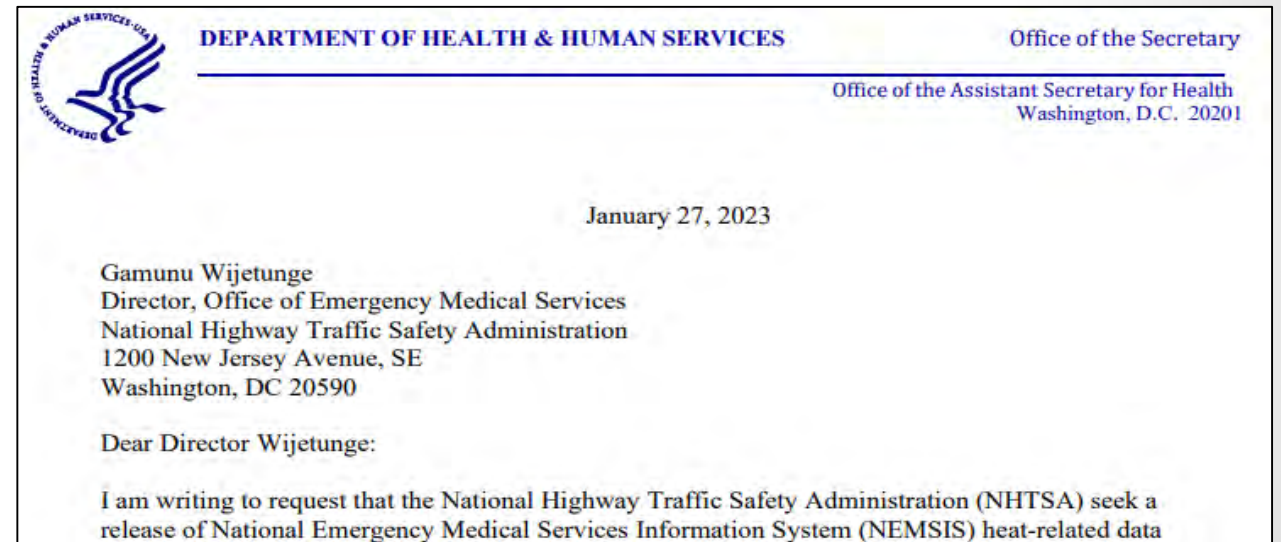
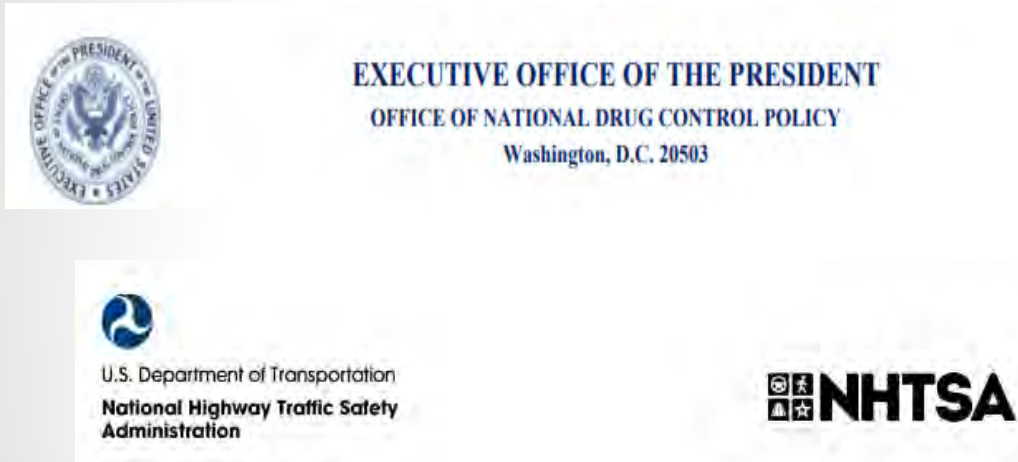
Elements in the **RED font have been removed from the NEMSIS standard, and elements in the **GREEN** font have been added to the standard.*

#	Data Item Name	Comment/Justification (Listed changes only from v3.4 to v3.5)
	eResponse.15 - Level of Care of This Unit	Removed from NEMSIS
66	eScene.18 - Incident State	Public Data
68	eScene.21 - Incident County	Public Data
78	eSituation.18 - Date/Time Last Known Well	Public Data
79	eSituation.20 – Reason for Interfacility Transfer/Medical Transport	Public Data
	eArrest.05 - CPR Care Provided Prior to EMS Arrival	Removed from NEMSIS
95	eArrest.20 - Who First Initiated CPR	Public Data
96	eArrest.21 - Who First Applied the AED	Public Data
97	eArrest.22 - Who First Defibrillated the Patient	Public Data
	eVitals.08 - Method of Blood Pressure Measurement	Removed from NEMSIS
	eProtocols.02 - Protocol Age Category	Removed from NEMSIS
124	eMedications.04 - Medication Administered Route	Public Data
	eDisposition.12 - Incident/Patient Disposition	Removed from NEMSIS
151	eDisposition.27 - Unit Disposition	Public Data
152	eDisposition.28 - Patient Evaluation/Care	Public Data
153	eDisposition.29 - Crew Disposition	Public Data
154	eDisposition.30 - Transportation Disposition	Public Data
155	eDisposition.32 - Level of Care Provided per Protocol	Public Data
158	eOutcome.09 - Emergency Department Procedures	Public Data
159	eOutcome.10 - Emergency Department Diagnosis	Public Data
160	eOutcome.11 - Date/Time of Hospital Admission	Public Data
161	eOutcome.12 - Hospital Procedures	Public Data
162	eOutcome.13 - Hospital Diagnosis	Public Data
163	eOutcome.16 – Date/Time Hospital Discharge	Public Data
164	eOutcome.18 - Date/Time of Emergency Department	Public Data
165	eOutcome.19 – Date/Time Emergency Department Procedure	Public Data
166	eOutcome.20 – Date/Time Hospital Procedure Performed	Public Data
	eOther.05 - Suspected EMS Work Related Exposure, Injury, or Death	Removed from NEMSIS



Successes

- Continue to execute DUAs daily and in a timely manner.
- NEMSIS is the largest public repository of real-time EMS data.



Challenges

- Some of the returned DUAs are on hold due to changes in the standard template.
- Resist the temptation to manage multiple versions of the DUA.



Next Steps

Steps to Execute the DUA:

1. Request that your EMS Director or legal counsel review the template DUA.
2. If terms are agreeable, sign and resend to Monet at the NEMESIS TAC.
3. If concerns are identified or there is suggested language modifications, turn track changes on, and resend to Monet at the NEMESIS TAC. We will consult with the University of Utah Privacy Office and either accept or decline the revisions.
4. If there are substantive modifications and additions, the UofU will require a state drafted addendum to be reviewed by legal counsel.



V3.5.0 Updated Data Use Agreement

- [nemsis.org/ Using EMS Data/ State Data Use Agreements](https://nemsis.org/Using-EMS-Data/State-Data-Use-Agreements)





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Dashboards Changing

- State Data Submission- currently displaying v3.4 and v3.5 data combined
- All other dashboards are displaying v3.4 until switched over to v3.5 data, by the end of the year
- Once switched they will display v3.4 and v3.5 data combined



What is the Master Branch Switch?

- And when should I make the change?
- Vendors can auto-pull from your master branch
- Switch once collecting data, or once the majority of agencies switch?
- Let us know when to change it



Best Practices

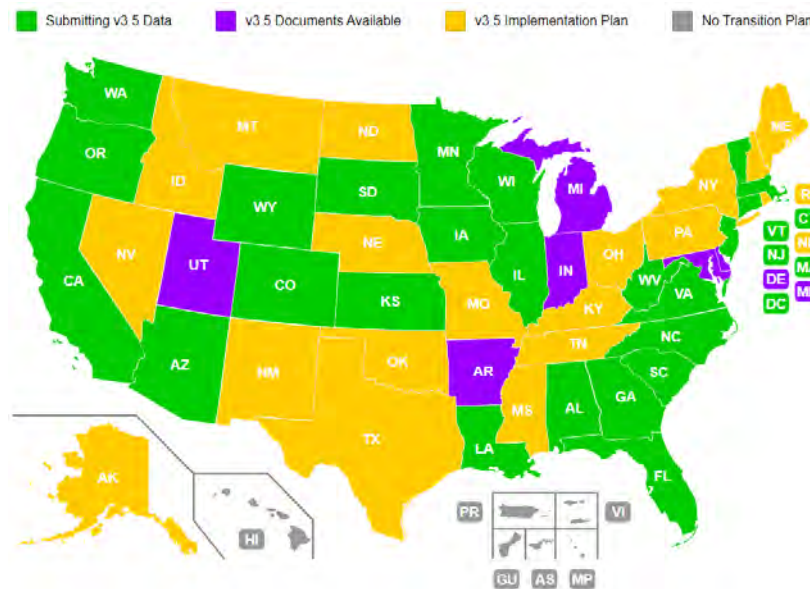
- Communicate plans with vendor and agencies
- Update DEMs, State Data Set, and Schematron
- Be sure your v3.5.0 DUA is executed
- Moving forward- State Data Set updated in software, no need to email to us (still email Schematron)

UPDATE



Advice From the Other Side?

- What are you glad you did?
- What would you do differently next time?
- Any resources we could create to help with the process?



Continually Evolving

- Submit suggestions for new elements or changes to elements
- Past cut off for v3.5.1
- Build consensus for changes from Stakeholders



Pathways to Post-Crash Care Funding

State and National Resources Updates for August 08-14, 2023

Eric Chaney
EMS Specialist
NHTSA Office of EMS



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POST-CRASH CARE



Provide
Expedient Access
to Emergency
Medical Care



Seamless Care Transitions Improve Patient Outcomes



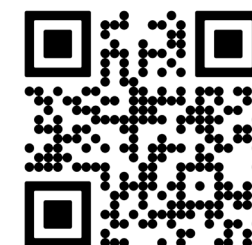
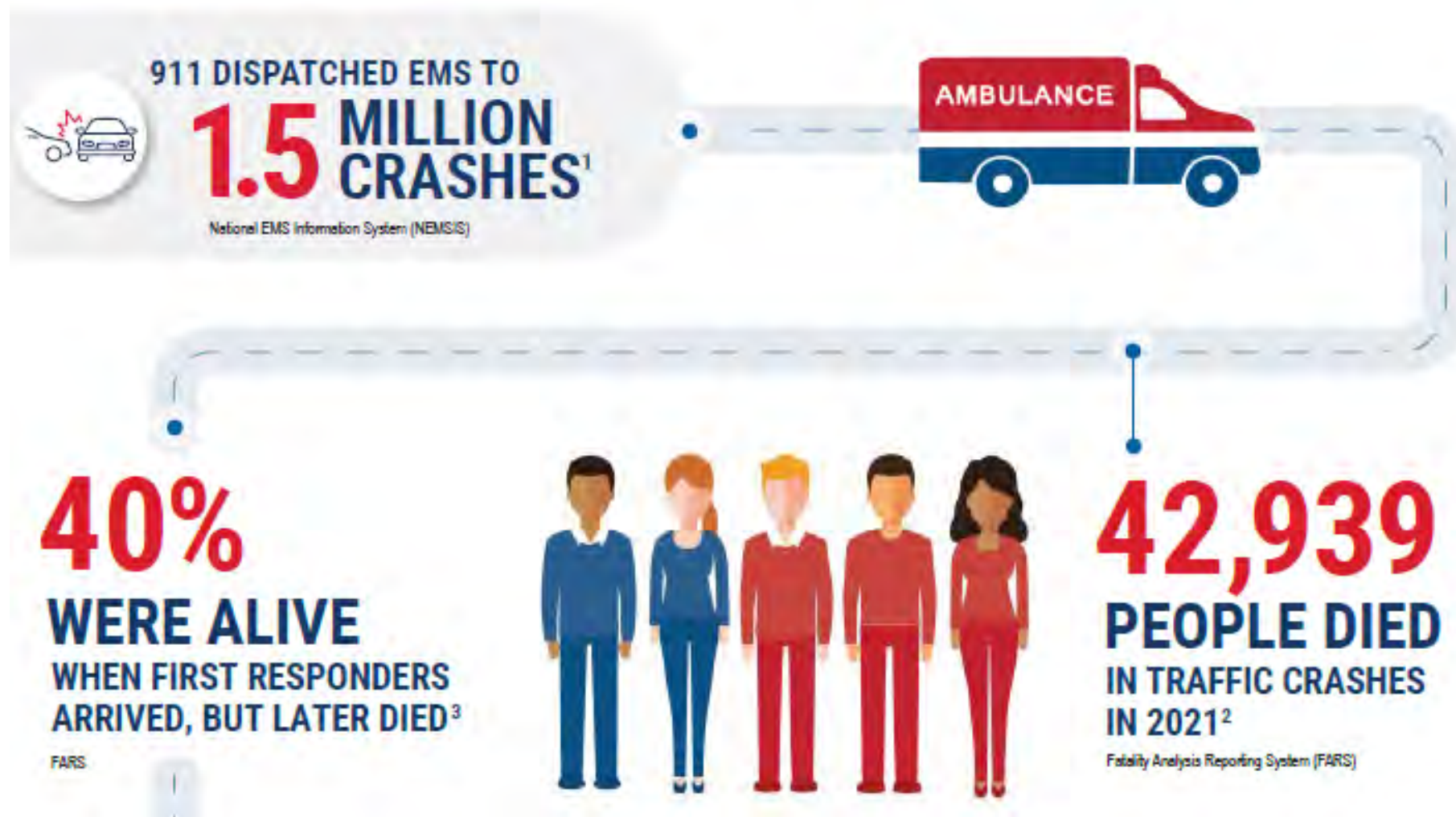
911, Emergency Medical Dispatch, & Bystander Care

Timely On-Scene Care

Triage & Transport

Definitive Care at a Trauma Center

PROBLEM IDENTIFICATION



PROBLEM IDENTIFICATION



8,747

**EMS RESPONSES TO
CRASHES IN WHICH A VEHICLE
OCCUPANT WAS PARTIALLY OR
COMPLETELY EJECTED⁴**

NEMESIS



48,517

**INCIDENTS
INVOLVED VEHICLE
EXTRICATION⁵**

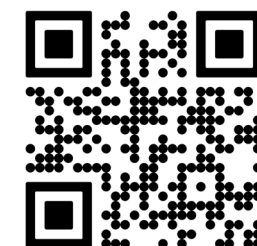
National Fire Incident Reporting System (NFIRS)



169,462

**EMS RESPONSES
TO SERIOUSLY INJURED
CRASH PATIENTS⁴**

NEMESIS



COUNTERMEASURES



**EMERGENCY
MEDICAL
DISPATCH**
(EMD) 911 PROTOCOLS



**TIMELY
ON-SCENE CARE**
USING MODEL EMS
CLINICAL GUIDELINES



**TRANSPORTATION
TO A TRAUMA CENTER**
BASED ON NATIONAL FIELD TRAUMA
TRIAGE GUIDELINES



**PERFORMANCE
MEASUREMENT**
FOR CONTINUOUS QUALITY
IMPROVEMENT AND SEAMLESS,
LINKED AND DATA-DRIVEN CARE

