



NEMSIS Version 2.2.1 → NEMSIS Version 3.4



WELCOME



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Director, EMSA

Introductory Comments

- Overview
- Data Directions and Strategy

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Webinar Speakers

- Tom McGinnis
Chief, EMS Systems Division, EMSA
- Mark Roberts
Technical Consultant and Data Manager,
CEMSIS
- Joe Barger
Technical Data Consultant CEMSIS

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AGENDA



- Changes in NEMSIS
- CEMSIS Data Submission
- NEMSIS 3.4 Compliance
- Data Considerations and Challenges
- Data Dictionary and Pick Lists
- Resources and Technical Assistance
- Questions and Answers

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CHANGES IN NEMSIS 3.4

Usage Profile:

Mandatory	-	37	National
Required	-	129	National
Recommended	-	82	National
Optional	-	326	All
	-	21	State Optional
	-	0	National

Optional

Change of Elements:

Retired Elements	-	79
New Elements	-	228

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Highlights of NEMSIS 3 Changes

- EMS and Response and Transport modes have been enhanced
- Hospital Outcome Data have been expanded
- EMS Agency Location and GIS information has been enhanced
- Compliant, Diagnosis, Injury Cause, and Procedures are now based on ICD-10.
- Automated Collision Notification Information has been included



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CEMSIS Submission

Data generated **PRIOR** to January 1, 2017 in NEMSIS 2.2 will be accepted.

However, data generated **ON** or **AFTER** January 1, 2017 in NEMSIS 2.2 will not be accepted.

CEMSIS data using NEMSIS 3.4 will be the accepted standard beginning January 1, 2017.

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CEMSIS Submission

- **Timeliness** impacts data for use in EMSA reporting
- **Optimal submission** is at least monthly
- Files with more than 1 record in them **will be rejected**
- Data must pass **Validation Tool** for CEMSIS submission

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Compliance Vs. Compatibility:

Compatible Software is **NOT** Compliant

- Compliance is determined by NEMSIS
- No software will be deemed compatible
- Data using not compliant software cannot be submitted.

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Compliant Software:

- Ensures Standardization
- Increases Data Quality
- Defined by NEMSIS
- Compliance with CEMSIS

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NEMSIS Compliant EMS ePCR / Data Systems

The following have software deemed compliant for version 3.4

Action Ambulance
AngelTrack LLC
Application Data Systems Inc.
American Ambulance
American Medical Response
Beyond Lucid Technologies, Inc.
Center for Advanced Public Safety
Emergidata
EMS Consultants Ltd.
EMS Data Systems
Eos Logic Inc.
ePCR
ESO Solutions

FIREHOUSE Software, A Xerox Solution
Fore Holdings Inc.
Golden Hour Data Systems
ImageTrend, Inc.
MedaPoint, Inc.
OCI Software
Physio-Control
Prestige
RAM Software Systems, Inc.
Simon
Starwest Tech
TnTech Software Systems
World Advancement of Technology for EMS and Rescue

For a complete list of NEMSIS 3.4 compliant vendors, go to:
<http://www.nemsis.org/v3/compliantSoftware.html>

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NEMSIS 3: Compliance Process

NEMSIS version 3 Compliance Process requires that a data system be able to collect, receive, and process data. The documents below are available to assist in your compliance process at the following URL:
<http://nemsis.org/v3/becomingCompliant/complianceProcess.html>

Compliance Process & Check List
NEMSIS V3 Compliance Application Form

Pre-Testing Package v3.4.0
NEMSIS v3 Compliance Document
NEMSIS v3.4.0 Pre-Testing Package

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Compliance Testing Schedule

There is no official schedule for compliance testing of EMS software products.

NEMSIS provides free **compliance testing**. Contact Jorge Rojas at 801.213.3822 or Jorge.Rojas@hsc.utah.edu

More information on NEMSIS compliance is available at: <http://nemsis.org/v3/becomingCompliant/complianceTestingSchedule.html>

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Considerations

➤ Potential Issues

- Capability of provider software to collect 3.4 data
- Successful data transfer: Provider to LEMSA
- Successful data transfer: LEMSA to CEMSI

➤ Additional Funding

- EMSA expects to provide local assistance funds to help LEMSAs support providers who have the greatest need

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Data Challenges

- Input: Null Values
- Mapping impacts degradation of data
- Destination/Facilities list: uniformity and maintenance

CEMSIS Data Entry

- Input: Null Values
- Mapping impacts degradation of data
- Destination/Facilities list: uniformity and maintenance

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Usage Value Descriptions

- **Mandatory:** These elements are always required and must be filled out in every record and "Not Values" are not allowed
- **Required:** These elements are always required and they do allow "Not Values" to be used
- **Recommended:** These elements are state elements and allow the use of "Not Values"
- **Optional:** These elements are optional and do not address "Not Values"

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Negative or Null Values

Use of Null and Negative Values reduces the data quality and should be used accordingly

More information on NEMSIS 3 "NOT" Values can be found:

http://nemsis.org/media/nemsis_v3/master/UsageGuides/NEMSIS_v3_NOT_Values_Use_Guidance.pdf

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Data Dictionary 3.4

- All Data Elements that have a Usage Definition of National Mandatory or Required are included
- Data Elements with Version 3.4 Usage of Optional are not included but may be utilized for local purposes. This includes elements that are State Recommended but have a Version 3.4 Usage Definition of Optional
- Data Elements with a Usage Definition of Optional are not included but may be utilized by the LEMSAs and providers for local purposes
- Modified Pick Lists make field staff data entry easier

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Primary Impression List

The **Primary Impression** should be the **most significant** condition which led to the management of the patient (treatments, medications, procedures)

Is not necessarily be related to the first complaint of the patient if a more significant condition is encountered

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Primary and Secondary Pick Lists

The pick lists are designed to allow field personnel to allow documentation of many key impressions that have discrete treatments or presentations

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Importance of Primary Impression

- **Crucial in Quality Improvement efforts**
It gives the best idea of what the field personnel were thinking when they delivered treatments to patients
- **Feedback to crews to improve future care**
Intent is to link to hospital diagnosis data

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Uniformity for Primary Impressions

- **Improve Data Quality**
Promotes a common data understanding
As of 2017, a uniform set of values to be used across the state

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Secondary Impression

More than one Secondary Impression may be chosen

- **Represent a second condition for treatment**
- **May add further definition to Primary Impression**

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What is Missing for Primary and Secondary

The listed impressions should suffice for most conditions encountered by 9-1-1 responders.

“Other” can be chosen as a secondary impression. Use of this needs to be sparing and the details should always be documented in the narrative

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Other Pick Lists

Other Pick Lists that are have been modified include:

Location
Cause or Injury
Symptoms

AS other pick lists are modified, they will be made available to LEMSAs and providers

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Downloadable Resources (1 of 2)

The following tools, XSDs, dataset dictionaries, and other helpful resources to help you when developing NEMSIS compliant software:

Dataset Dictionaries

<http://nemsis.org/v3/downloads/datasetDictionaries.html>

Demographic (Agency) Dataset Schema

<http://nemsis.org/v3/downloads/demographicDataset.html>

EMS (PCR/Event) Dataset Schema

<http://nemsis.org/v3/downloads/emsDataset.html>

Medical Device Dataset Schema

<http://nemsis.org/v3/downloads/medicalDevice.html>

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Downloadable Resources (2 of 2)

CAD Dataset Schema

<http://nemsis.org/v3/downloads/CAD.html>

Schematron

<http://nemsis.org/v3/downloads/schematron.html>

HL7 Products

<http://nemsis.org/v3/downloads/hl7Products.html>

Web Services

<http://nemsis.org/v3/downloads/webServices.html>

XML File Samples

<http://nemsis.org/v3/downloads/testCasesXMLSamples.html>

NEMSIS Archive

<http://nemsis.org/v3/downloads/v3Archive.html>

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Additional Documents and Support

Data Memo

<http://www.emsa.ca.gov/CEMSIS#documents>

Data Strategy Memo

<http://www.emsa.ca.gov/CEMSIS#documents>

Direct CEMSIS Support

SysDivData@emsa.ca.gov or EMSDData@emsa.ca.gov

Pick Lists

<http://www.emsa.ca.gov/CEMSIS#documents>

Phone Numbers:

Kathleen Bissell – 916-431-3687

EMSA Data Unit – 916-322-4336 ext. 742

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Upcoming Data Workshops

- Two in-person, all-day meetings
- September 2016
- One Northern CA, one Southern CA
- Invitees: LEMSAs, EMS Provider Agencies and Vendors

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Or send questions you think of later to either:

SysDivData@emsa.ca.gov or EMSDData@emsa.ca.gov

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