

Motor Vehicle Crash (MVC) Case Definition Public Use Dataset (PUD) Documentation

The MVC Case Definition PUD contains EMS activation records for motor vehicle crashes.

Motor vehicle crash case definitions and explanations are found here:

https://nemsis.org/media/nemsis_v3/master/CaseDefinitions/MotorVehicleCrashCarTruckBus.pdf

https://nemsis.org/media/nemsis_v3/master/CaseDefinitions/MotorVehicleCrashMotorcycle.pdf

https://nemsis.org/media/nemsis_v3/master/CaseDefinitions/MotorVehicleCrashPedalCycle.pdf

https://nemsis.org/media/nemsis_v3/master/CaseDefinitions/MotorVehicleCrashPedestrian.pdf

Two data sets are included in the MVC Case Definition PUD:

1. mvc_activations is a dataset of EMS activation records that met the definition of **at least one** of the MVC Case definitions.
 - a. Data set structure: One row per EMS activation record
 - i. All data elements have a 1:1 relationship with the activation records
 - b. Data elements derived for this public use dataset
 - i. pcrKey – EMS activation ID
 - ii. carTruckBus_mvc – 1 if the record met the definition of a car, truck, or bus motor vehicle crash; 0 if not
 - iii. motorcycle_mvc – 1 if the record met the definition of a motorcycle motor vehicle crash; 0 if not
 - iv. PedalCycle_mvc – 1 if the record met the definition of a pedal cycle motor vehicle crash; 0 if not
 - v. pedestrian_mvc – 1 if the record met the definition of a pedestrian motor vehicle crash; 0 if not
 - c. Data elements copied from research dataset, including computed elements. See the User Manual for more information: https://nemsis.org/wp-content/uploads/2021/05/2020-NEMESIS-RDS-340-User-Manual_v3-FINAL.pdf
 - i. USCensusDivision – US Census Bureau Divisions
 - ii. USCensusRegion – US Census Bureau Regions
 - iii. Urbanicity – Based on 2013 USDA Urban Influence Codes
 - iv. EMSDispatchCenterTimeSec – Time in seconds between eTimes.01 (PSAP Call Date/Time) and eTimes.03 (Unit Notified by Dispatch Date/Time)
 - v. EMSSceneResponseTimeMin – Time in minutes between eTimes.05 (Unit En Route Date/Time) and eTimes.06 (Unit Arrived on Scene Date/Time)
 - vi. EMSSceneTimeMin – Time in minutes between eTimes.06 (Unit Arrived on Scene Date/Time) and eTimes.09 (Unit Left Scene Date/Time)
 - vii. EMSSceneToPatientTimeMin – Time in minutes between eTimes.06 (Unit Arrived on Scene Date/Time) and eTimes.07 (Arrived at Patient Date/Time)
 - viii. EMSSystemResponseTimeMin – Time in minutes between eTimes.03 (Unit Notified by Dispatch Date/Time) and eTimes.06 (Unit Arrived on Scene Date/Time)

- ix. EMSTotalCallTimeMin – Time in minutes between eTimes.03 (Unit Notified by Dispatch Date/Time) and eTimes.13 (Unit Back in Service Date/Time)
 - x. EMSTransportTimeMin – Time in minutes between eTimes.09 (Unit Left Scene Date/Time) and eTimes.11 (Patient Arrived at Destination Date/Time)
 - xi. EMSChuteTimeMin – Time in minutes between eTimes.03 (Unit Notified by Dispatch Date/Time) and eTimes.05 (Unit En Route Date/Time)
 - xii. eSituation_09 – Primary Symptom
 - xiii. eSituation_11 – Provider’s Primary Impression
 - xiv. eDisposition_12 – Incident/Patient Disposition
 - xv. eDisposition_16 – EMS Transport Method
 - xvi. eDisposition_17 – Transport Mode from Scene
 - xvii. eDisposition_19 – Final Patient Acuity
 - xviii. eDisposition_21 – Type of Destination
 - xix. eOutcome_01 – Emergency Department Disposition
 - xx. eOutcome_02 – Hospital Disposition
 - xxi. ePatient_13 – Gender
 - xxii. ePatient_15 – Age
 - xxiii. ePatient_16 – Age Units
 - xxiv. eResponse_05 – Type of Service Requested
 - xxv. eResponse_07 – Primary Role of the Unit
 - xxvi. eScene_09 – Incident Location Type
 - xxvii. eSituation_02 – Possible Injury
 - xxviii. eSituation_07 – Chief Complaint Anatomic Location
 - xxix. eSituation_08 – Chief Complaint Organ System
 - xxx. eSituation_13 – Initial Patient Acuity
2. mvc_1M is a supplemental dataset with additional information about EMS activation records identified by MVC case definitions. This dataset contains variables with 1-to-many relationships and is arranged in a long format with element_name indicating the data element.
- a. Data set structure: One row per data element value per data element per activation record
 - i. All data elements have a 1:many relationship with the activation records. These data elements are stacked in a long-format data sets.
 - b. Data elements
 - i. pcrKey – EMS activation ID
 - ii. element_name – name of the NEMESIS data element.
 - 1. Included data elements:
 - a. eHistory_17 – Alcohol/Drug Use Indicators
 - b. eInjury_01 – Cause of Injury
 - c. eInjury_04 – Vehicular, Pedestrian, or Other Injury risk Factor
 - d. eProcedures_03 – Procedure
 - e. eResponse_24 – Additional Response Mode Descriptors



- f. eSituation_10 – Other Associated Symptoms
- g. eSituation_12 – Provider’s Secondary Impressions
- iii. value – value of the NEMESIS data element

Details about each data element included in the NEMESIS EMS data standard are found here:

https://nemsis.org/media/nemsis_v3/release-3.4.0/DataDictionary/PDFHTML/DEMEMS/NEMESISDataDictionary.pdf