Guidance for Documenting Overdose-related EMS Incidents

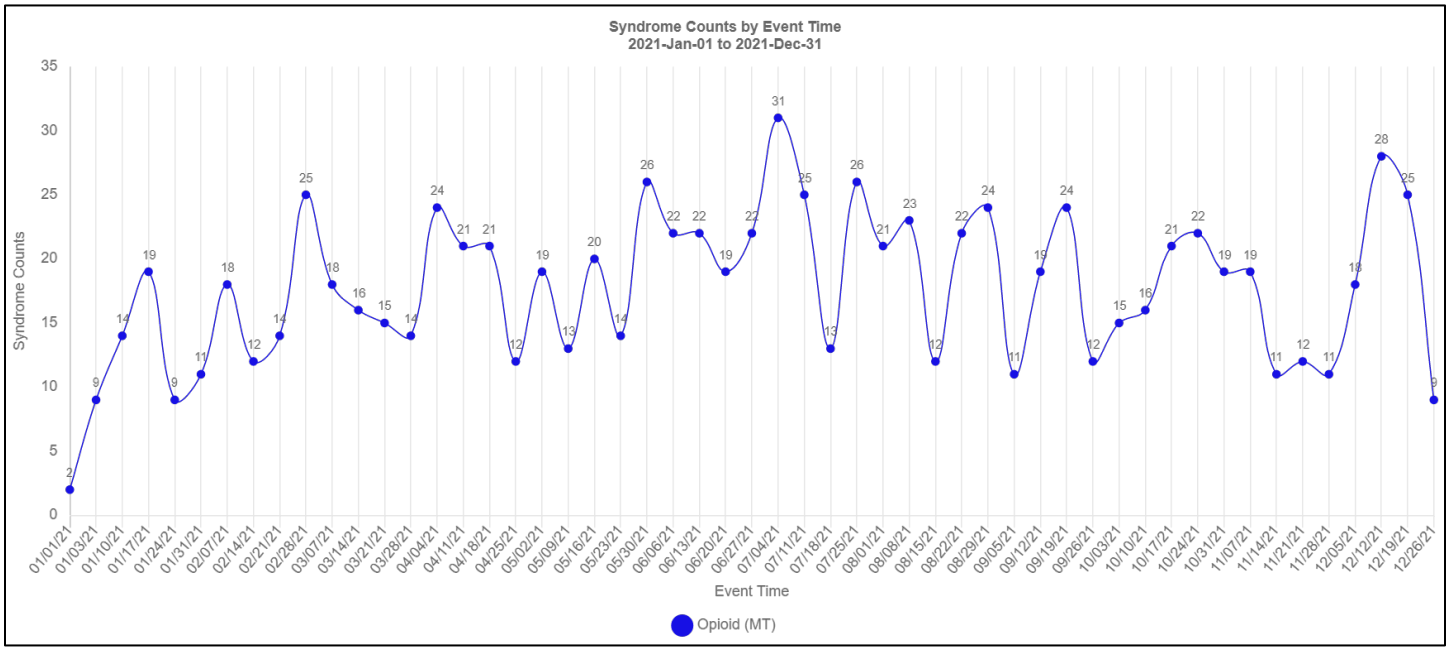
Introduction

EMS data is one of the most timely and informative data sources available to monitor opioid and other drug overdose trends in Montana. The EMS & Trauma System Section (EMSTS) of Montana Department of Public Health and Human Services (DPHHS) uses the data collected by emergency care providers (ECPs) across the state to identify increases in overdose-related EMS calls and identify any potential overdose clusters in nearly real-time. **Rapid detection is essential for a timely and effective public health response, which could help prevent overdoses and lead to better patient outcomes.**

Reading the EMS narrative is the gold standard for determining whether an EMS call was overdose related. However, this is impractical to do at a statewide level. Therefore, to identify overdose-related calls, EMSTS relies on what is documented in 4 coded variables (eSituation.11, eSituation.12, eMedications.03, eMedications.07), as well searching the free-text narrative for key words.[1]

This guide explains best practices for EMS agencies and providers to follow when documenting drug overdose related calls, in order to ensure that the data complete and consistent. Without a standardized approach to documentation, a public health response to the ever-increasing problem of overdoses becomes very difficult. Your efforts to align EMS documentation using this guidance are very appreciated.

Figure 1. Opioid overdose related 911 calls in Montana, by week, 2021



For more information about the EMS dataset, please visit **NEMSIS v3.4 data dictionary**.

[1] See **Montana EMS suspected opioid overdose syndrome definition**

eSituation.11 (provider's primary impression) and eSituation.12 (secondary impressions)

Provider's primary impression: The EMS personnel's impression of the patient's primary problem or most significant condition which led to the management given to the patient (treatments, medications, or procedures).

Provider's secondary impressions: The EMS personnel's impression of the patient's secondary problem or most significant condition which led to the management given to the patient (treatments, medications, or procedures).

The provider primary/secondary impression pick lists consist of an underlying **ICD-10-CM code** paired with an EMS label. Often the underlying code is never seen by the provider who is doing the documentation. For EMS agencies that use the Montana Elite PCR, EMSTS controls the availability of code/label pairings. Agencies that use other PCR vendors may need to contact their vendor to find out what code/label pairings are being used.

Table 1 shows which ICD-10-CM codes are appropriate for use in the provider primary/secondary impression pick lists. Table 1 also shows the code/label pairings currently used in Montana's Elite ePCR.

When documenting a drug overdose, providers should use the most fitting provider impression based on the specific substance involved (if known or suspected). Document at least one code from the Table below, in addition to any other appropriate impressions such as cardiac or respiratory arrest, altered level of consciousness, etc. This will allow for better surveillance of overdoses in our state.

Table 1. Drug Overdose Provider Impressions

Provider Impression Category	**Appropriate ICD-10-CM Codes** *(sub-codes included)**	**Examples from Montana Elite ePCR** *(EMS label with ICD-10-CM code)*
Opioid	F11, T40.1-T40.4, T40.6	Behavioral- Opioid overdose (intentional self-harm) – T40.602A Substance- Opioid use/intoxication – F11.92 Substance- Opioid withdrawal – F11.23 Substance- Opioid overdose – T40.601A
Cannabis	F12, T40.7	Substance- Cannabis use/intoxication – F12.92
Sedative (Anti-anxiety)	F13, T42.3, T42.4	Substance- Sedative, hypnotic, anti-anxiety/anti-depressant use/intoxication - F13.92
Cocaine	F14, T40.5	Substance- Cocaine use/intoxication - F14.92
Stimulants (Methamphetamine)	F15, T43.6	Substance- Methamphetamine or other stimulant use/intoxication – F15.92 Substance- Methamphetamine or other stimulant overdose – T43.601A
Hallucinogen	F16, T40.8, T40.9	
Inhalant/Huffing	F18	
Nicotine	T65.2	Substance- Effect of tobacco and nicotine – T65.2
Unspecified Drug	F19, T50.9, T65.9	Behavioral - Drug overdose (intentional self-harm) – T50.902 Substance- Other psychoactive substance use/intoxication – F19.92 Substance- Other drug overdose- unintentional – T50.901

**Any sub-codes of the listed ICD-10-CM codes are acceptable to use as underlying codes. ie, for opioid related impressions, F11.92 or T40.602A would be accepted because they are sub-codes of F11 and T40.6*

eMedications Group

Naloxone administration **MUST** be documented under the eMedications group of variables. Each dose of naloxone should be documented individually with its dosage and route- including doses given prior to EMS arrival (ie- by law enforcement, bystanders, or first responders). DO NOT document naloxone administration in the narrative only.

eMedications.03 (medication given)

Similar to provider impression, the medication pick list consists of an underlying **RxNorm code** paired with an EMS label. Often the underlying code is never seen by the provider who is doing the documentation. For EMS agencies that use the Montana Elite PCR, EMSTS controls the availability of code/label pairings. Agencies that use other PCR vendors may need to contact their vendor to find out what code/label pairings are being used.

When documenting Naloxone administration, use the RxNorm generic code "7242", rather than using the code for a specific brand like Narcan or Evzio.

Table 2. Documenting Naloxone Administration

EMS Label	Appropriate RxNorm Code
Naloxone/Narcan	7242

eMedications.07 (patient response to medication)

Patient's response to the dose of Naloxone. This variable is **VERY IMPORTANT** for identifying opioid overdoses.

- Improved
- Unchanged
- Worse

eMedications.02 (medication administered prior to this unit's EMS care)

Was the dose of Naloxone was administered prior to EMS arrival?

- No
- Yes → *Select this option if the dose of naloxone was given by law enforcement, bystanders, or first responders*

eMedications.10 (role/type of person administering medication)

Who administered naloxone? This is especially important when documenting a naloxone dose given prior to EMS arrival.

eNarrative

EMSTS queries the narrative for certain key words when trying to identify an overdose. When writing the narrative for an overdose patient, include as many overdose-related key terms as possible in the narrative field. Specifically:

- "OD", "overdose"
- Type or class of drug: "heroin", "cocaine, "opioid", "fentanyl" etc.
- Naloxone use, if relevant: "Naloxone", "Narcan"
- Physiological signs related to overdose (ie- altered LOC, pinpoint pupils, track marks, cyanosis)
- Any drugs and/or drug paraphernalia found at the scene, or witness reports of drug use
- Any relevant medical history
- Resuscitation measures
- Patient disposition

NOTE: **When a patient is unresponsive or overdosing on an unknown substance, naloxone can be given to a rule out an opioid overdose. If this occurs and you DO NOT ultimately suspect it was an opioid overdose, document as follows:**

- Provider Impression (eSituation.11/eSituation.12): “F19”, “T50.9”, “T65.9” for unspecified overdose, “Unresponsive”, etc.
- Medication given (eMedications.03)= “Naloxone/7242”
- Response to Medication (eMedications.07)= “Unchanged” or “Worse”
- Write in Narrative, “**Naloxone given to rule out opioid overdose**”. The abbreviation “R/O” is also acceptable.

This will ensure that the patient is NOT included as an opioid overdose patient for surveillance purposes.