

## Suspected Opioid Overdose in Emergency Medical Services (EMS) Data, 2024 Q1

### Background

This report describes suspected opioid overdoses documented by EMS providers during 2024 Q1. The data comes from the Montana EMS incident dataset. (PLEASE NOTE: This report includes both NEMSIS 3.4 and NEMSIS 3.5 records. Montana began transitioning to NEMSIS 3.5 in Sept 2023. When interpreting this data, please keep in mind that there may be some data quality issues due to the transition.)<sup>1</sup> Montana statute requires that licensed ground and air transporting EMS agencies submit a patient care report (PCR) to the dataset for each patient they encounter. Non-transporting agencies may also submit data. Therefore, the dataset may contain multiple records (EMS activations) that pertain to the same patient or incident.

In order to zero-in on a single record per overdose event, this report is restricted to 911 responses by ground transporting agencies (N=30 records excluded). It includes records with an incident date between January 1, 2024, and March 31, 2024, and scene location in Montana. EMS activations are considered opioid-related if they meet the [Montana opioid overdose syndrome criteria](#).<sup>2</sup>

### Data Limitations

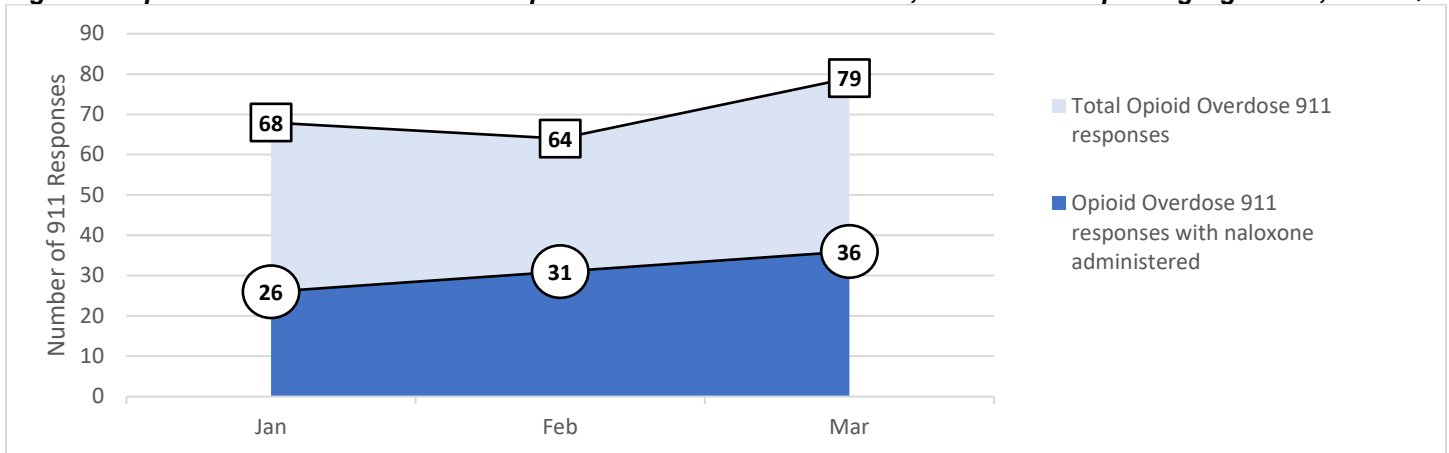
- Numbers in this report are provisional and subject to change due to latent record submissions or updates
- Data quality issues
- Does not capture overdoses where EMS did not make patient contact
- Does not capture most naloxone administrations by law enforcement or the public

Visit our [Opioid Data FAQ](#) for more information.

### Results

There were **211** opioid overdose-related 911 responses by ground transporting EMS agencies in 2024 Q1 – an average of 70 per month (the 2023 monthly average was 81, & 87 in 2022). March had the highest number of opioid overdose-related 911 responses (Figure 1). Naloxone, a medication used for the emergency treatment of a known or suspected overdose, was documented in **93** of 211 cases (**44.1%**)<sup>3</sup>. There were an additional 76 cases where naloxone was mentioned in the patient care narrative but not documented in the medication fields.

**Figure 1. Opioid-overdose related 911 responses with/without naloxone, Ground Transporting Agencies, 2024 Q1**



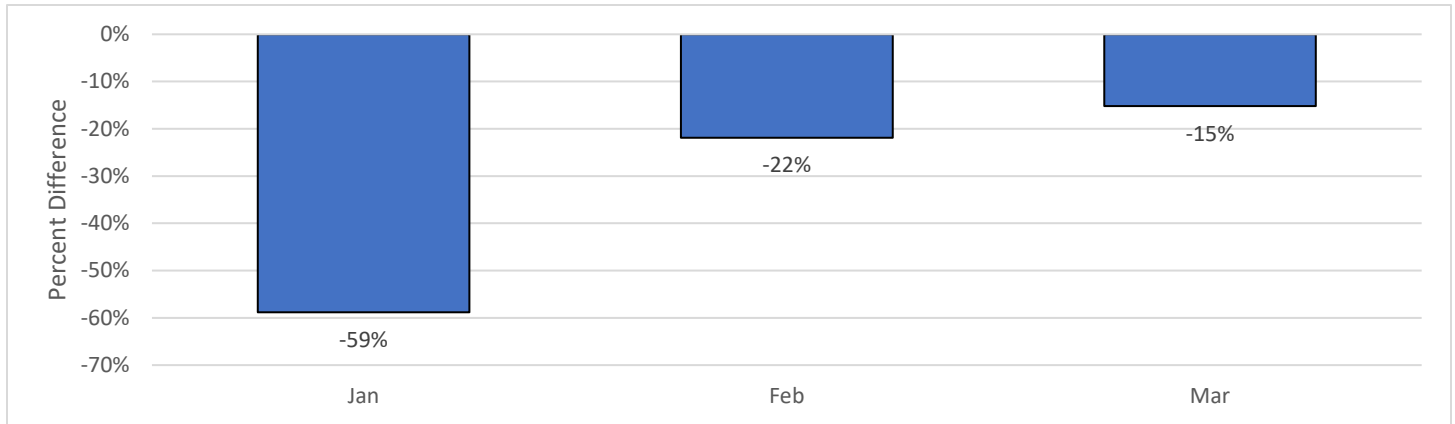
<sup>1</sup> This report includes both [NEMSIS v3.4.0](#) and [NEMSIS v3.5](#) records

<sup>2</sup> Version 10.14.2022

<sup>3</sup> To learn more about accessing free naloxone, e-mail [naloxone@mt.gov](mailto:naloxone@mt.gov)

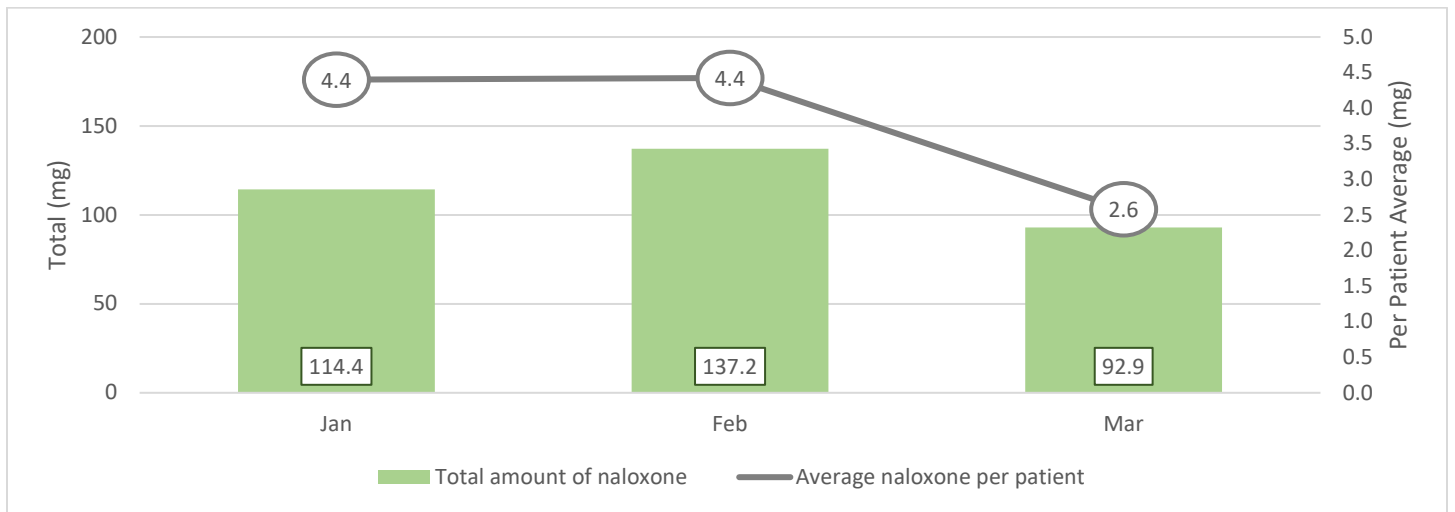
The total number of opioid overdose-related 911 responses in 2024 Q1 (N=211) was less than 2023 Q1 (N=277), possibly due to the ongoing NEMESIS 3.5 transition which started in September 2023. Figure 2 shows each month in 2024 Q1 had less responses than the same month in 2023.

**Figure 2. Percent difference in monthly number of opioid-related 911 responses, Ground Transporting Agencies, 2024 vs 2023**



Among the 93 opioid-related cases where naloxone administration was documented correctly, there were 153 naloxone doses documented with a total amount of **344 milligrams (mg)**—however, this total does not include data from records missing dosage information. The monthly average was **115 mg** (in 2023 the average was 111mg per month). In Feb 2024, almost 140 mg of naloxone was used (Figure 3). An average of **3.7 mg** of naloxone was given per opioid overdose patient, higher than the average of 3.4 during 2023. Individuals overdosing from stronger opioids may require a higher dose of naloxone to reverse their overdose.

**Figure 3. Monthly total mg naloxone administered and average mg per patient, 911 responses, Ground Transporting Agencies, 2024 Q1**





**Opioid overdose-related 911 responses, Ground Transporting Agencies, Montana, 2024 Q1**

	Q1	Q2	Q3	Q4	YTD	All %
<b>Naloxone Administration</b>						
No documentation of naloxone administration	118				118	56%
Naloxone administered, Response=Improved	68				68	32%
Naloxone administered, Response=Unchanged	21				21	10%
Naloxone administered, Response=No answer	†				†	2%
<b>Patient Disposition</b>						
Patient Evaluated and Care Provided- with Transport	175				175	83%
Patient Evaluated and Care Provided- without Transport	16				16	8%
Patient Refusal, No Transport	16				16	8%
Patient Dead at Scene, No Transport	†				†	1%
Other/Missing	†				†	1%
<b>Incident County NCHS Urban-Rural Classification</b>						
Small Metro	112				112	53%
Micropolitan	48				48	23%
Non-core (Rural)	48				48	23%
Not Reported	†				†	1%
<b>Patient Sex</b>						
Female	85				85	40%
Male	125				125	59%
Not Reported	†				†	0%
<b>Patient Age</b>						
0-17 Years	7				7	3%
18-24 Years	20				20	9%
25-44 Years	108				108	51%
45-64 Years	55				55	26%
65+ Years	19				19	9%
Not Reported	†				†	1%
<b>Patient Race*</b>						
American Indian or Alaska Native	48				48	23%
Asian	†				†	1%
Black or African American	†				†	1%
Hispanic or Latinx	†				†	2%
Native Hawaiian or Other Pacific Islander	†				†	0%
White	123				123	58%
Other Race	7				7	3%
Race Not Listed	24				24	11%
<b>Total</b>	<b>211</b>				<b>211</b>	<b>100%</b>

\*Race is a multi-select field, therefore the sum of all race categories may exceed the total.

†= Suppressed according to departmental policy if cell count is <5

For further information, please visit our website: [Injury Prevention Program](#)

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**Repeat patients experiencing an opioid overdose-related GTA 911 response, Montana, 2024 Q1**

Number of opioid overdose-related GTA 911 responses	1	2	Patient name missing	Total
Number of Patients	180	13	5	211

During 2024, there were 13 patients with two opioid overdose-related GTA 911 responses.

**Opioid overdose-related GTA 911 responses with naloxone documentation, Montana, 2024 Q1**

Incident County	Opioid Overdose related GTA 911 Responses	Naloxone administration documented correctly*	Naloxone term mentioned in narrative only	% with naloxone documented correctly (B/A*100)	% with any mention of naloxone [(B+C)/A]*100
	A	B	C		
BEAVERHEAD	1	0	1	0%	100%
BIG HORN	1	0	1	0%	100%
BLAINE	2	0	2	0%	100%
CARBON	2	1	1	50%	100%
CASCADE	35	15	19	43%	97%
CUSTER	2	0	2	0%	100%
DANIELS	1	0	1	0%	100%
FALLON	1	0	0	0%	0%
FERGUS	1	1	0	100%	100%
FLATHEAD	23	12	10	52%	96%
GALLATIN	13	5	4	38%	69%
GLACIER	1	1	0	100%	100%
HILL	7	2	3	29%	71%
LAKE	11	7	2	64%	82%
LEWIS & CLARK	7	2	3	29%	71%
LIBERTY	0	0	0	0%	0%
LINCOLN	4	3	1	75%	100%
MINERAL	1	1	0	100%	100%
MISSOULA	28	9	11	32%	71%
PHILLIPS	.	0	0	0%	0%
POWELL	6	4	0	67%	67%
RAVALLI	3	1	0	33%	33%
RICHLAND	1	0	0	0%	0%
ROOSEVELT	2	1	0	50%	50%
ROSEBUD	2	1	0	50%	50%
SILVER BOW	5	2	2	40%	80%
VALLEY	1	1	0	100%	100%
YELLOWSTONE	47	24	10	51%	72%
~NOT STATED	3	0	0	0	0
All	211	93	76	44%	80%

\*Must be documented in eMedications fields, please visit [NEMESIS 3.5 data dictionary](#) or EMSTS documentation guidelines ([video/PDF](#)) on overdose-related EMS incidents

