

# Substance Use Indicator Trends in New Mexico



## NMDOH Substance Use Epi Section

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- Josh Swatek

**Presentation to the OSAP Recipient Meeting, August 17, 2021**

# Emergency Department Syndromic Surveillance (EDSS) Trends

Hayley Peterson, MPH

Drug Overdose Morbidity Epidemiologist

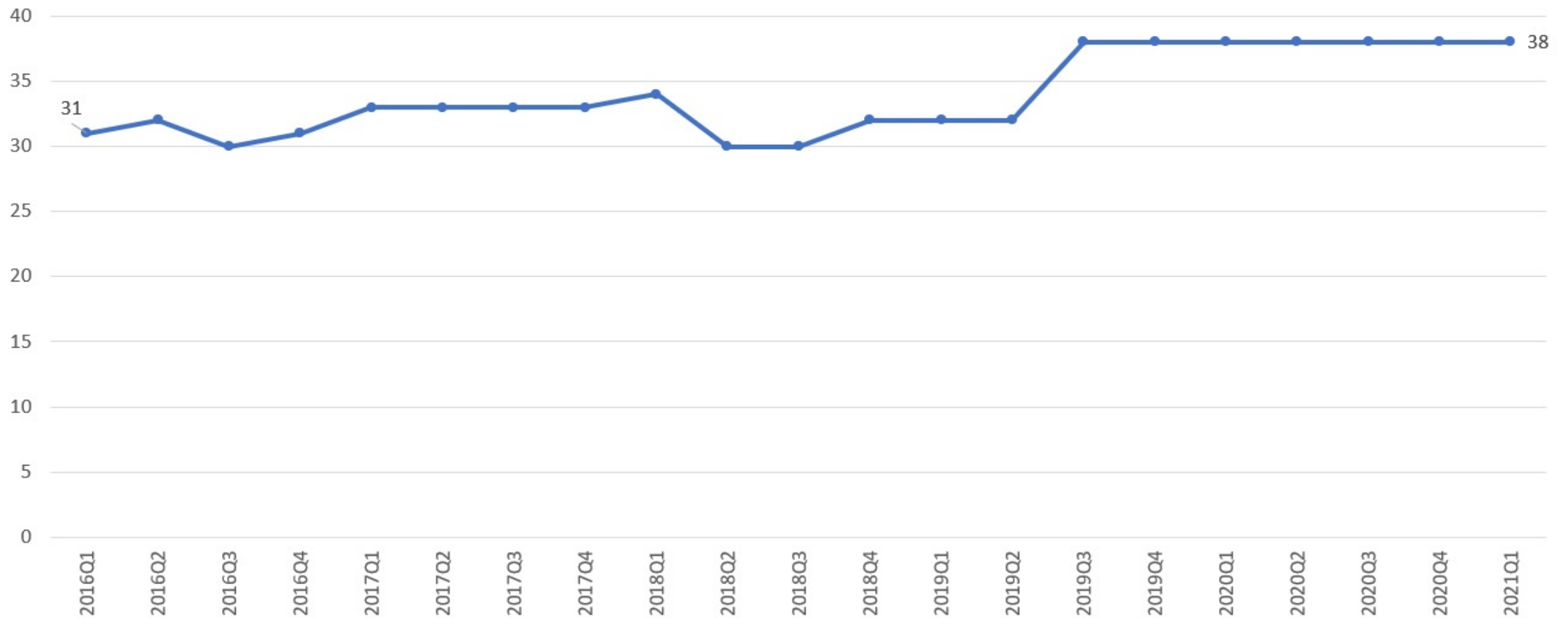
New Mexico Department of Health

# Emergency Department Syndromic Surveillance

- Originally intended for infectious disease surveillance
- In recent years, it has been utilized to monitor ED visits related to nonfatal drug overdose.
  - Has the advantage of providing more timely data
- Caveats to consider:
  - Stability of the number of reporting facilities
  - Does not include federal or IHS facilities
  - Intended to provide a rough estimate of disease burden rather than an exact measure
  - Toxicology not consistently performed

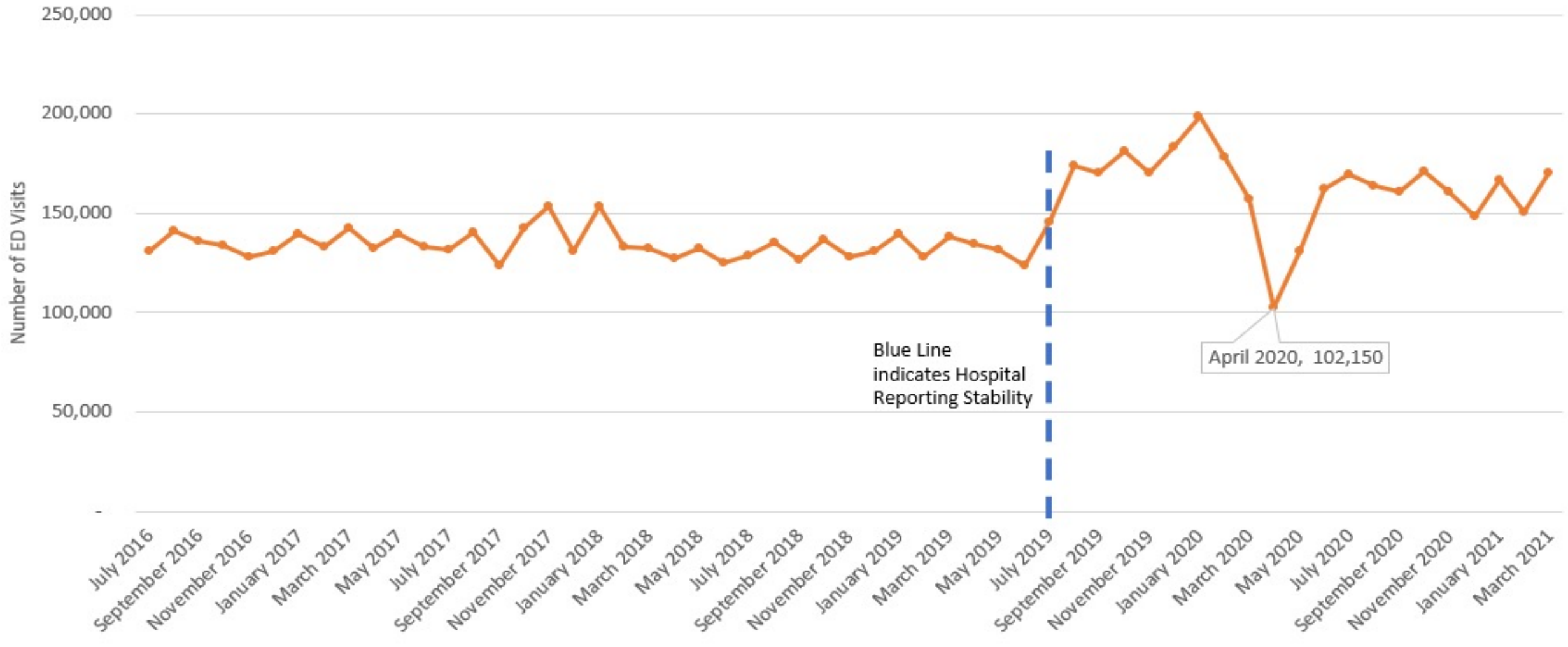
# Number of Hospitals Reporting to New Mexico EDSS

Number of Hospitals in New Mexico EDSS Data by Quarter, 2016Q1 – 2021Q1

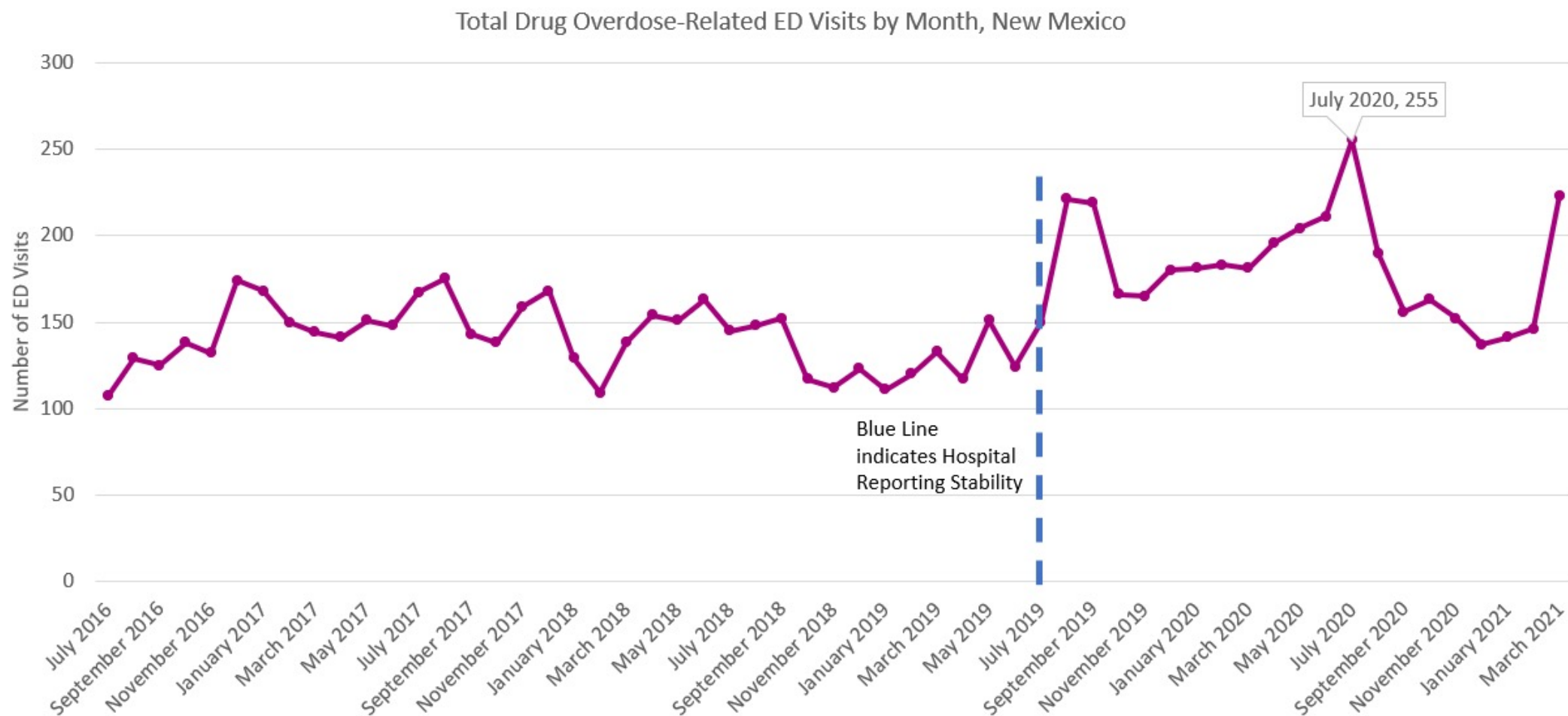


# Total ED Visits by Month

Total All-Cause ED Visits by Month, New Mexico July 2016-March 2021



# Total Drug Overdose Related ED Visits by Month

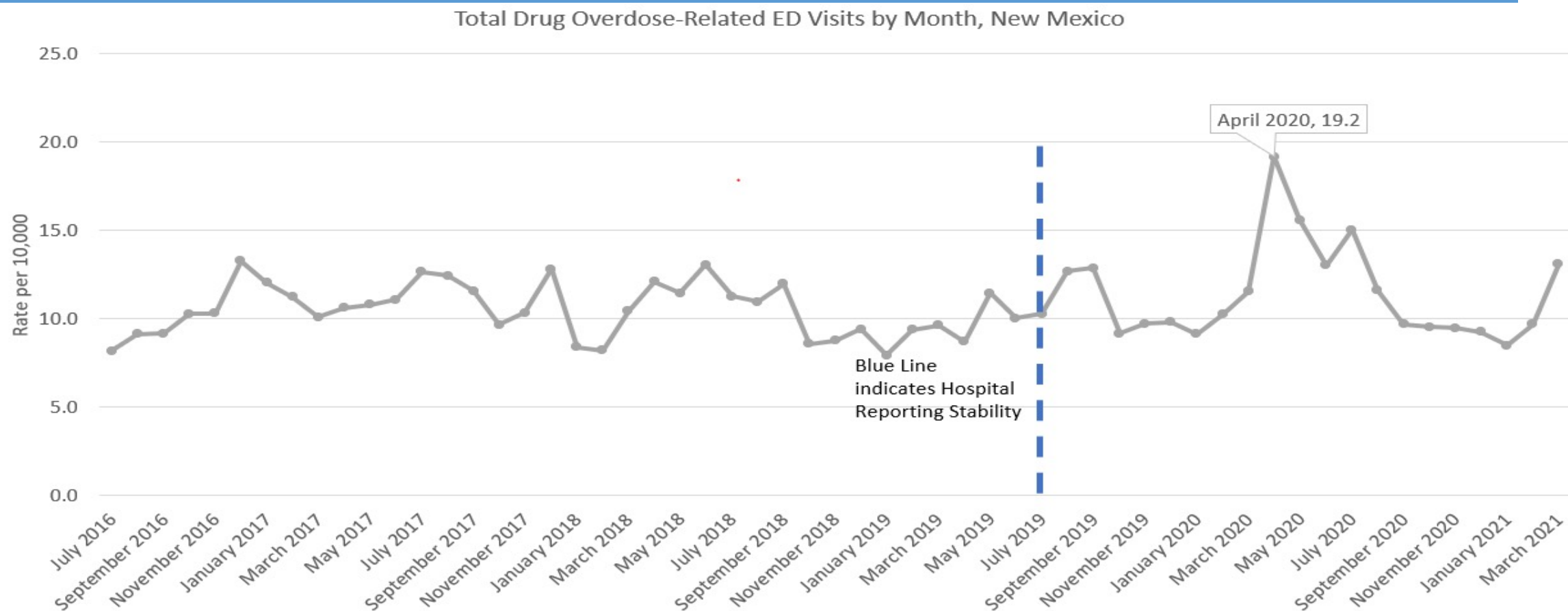


Data source: NMDOH Syndromic Surveillance ED Files

\*Total Overdose visits include any overdose due to opioids, amphetamines, benzodiazepines, or cocaine based on finding those drug poisoning ICD-10-CM & ICD-9-CM codes in any diagnosis field.

\*\*These are not individual level data i.e., a person may visit the ED more than once in the specified time period.

# Total Drug Overdose Related ED Visit Rate per 10,000 by Month



Data source: NMDOH Syndromic Surveillance ED Files

\*Total Overdose visits include any overdose due to opioids, amphetamines, benzodiazepines, or cocaine based on finding those drug poisoning ICD-10-CM & ICD-9-CM codes in any diagnosis field.

\*\*These are not individual level data i.e. a person may visit the ED more than once in the specified time period.

# Syndromic Surveillance Using EMS Data in New Mexico

Hayley Peterson, MPH

Drug Overdose Morbidity Epidemiologist

New Mexico Department of Health

*Slides Provided by the NM DOH ERD  
Emergency Medical Systems Bureau*



## WHY USE EMS FOR SYNDROMIC SURVEILLANCE?

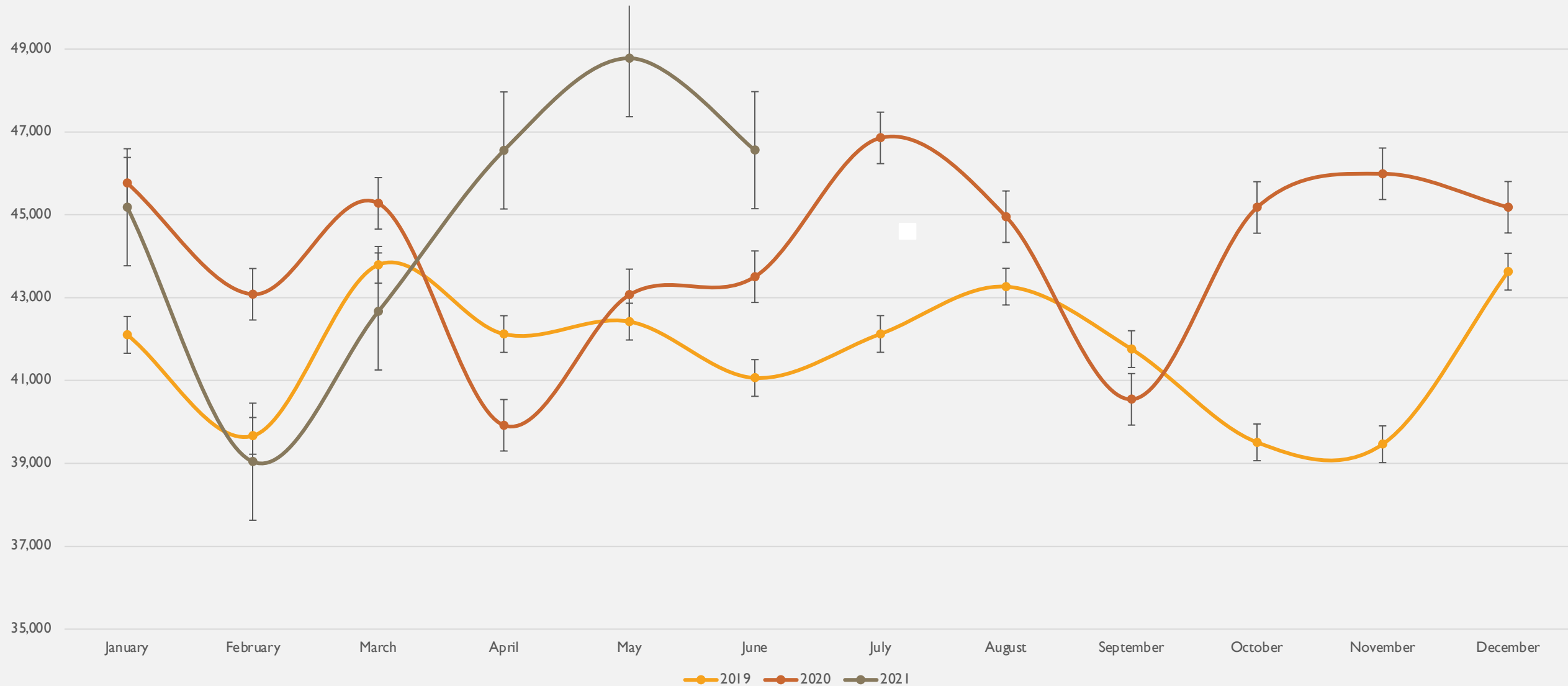
- Coverage of rural and frontier areas
  - More comprehensive than emergency department data
  - States with no ED data may have EMS data
- Quick turnaround time with limited lag (typically <24 hours)
- Large sample size (~500,000 runs per year)
- Captures encounters that would not be picked up in other medical data sets
  - Transport refusals
    - Substance use disorders
    - Overdoses
    - Mental health
  - Deaths

## LIMITATIONS TO EMS DATA

- Smaller sample size than ED data
- Limited to sickest patients
- Children are frequently transported by privately-owned vehicle
- Lack of diagnosis
- COVID-specific limitations
  - Bias in severity of calls for EMS due to fear of interfacing with the medical system
  - Percentages of calls impacted by COVID calls
    - However, very little influenza
- Magnitude of differences between years

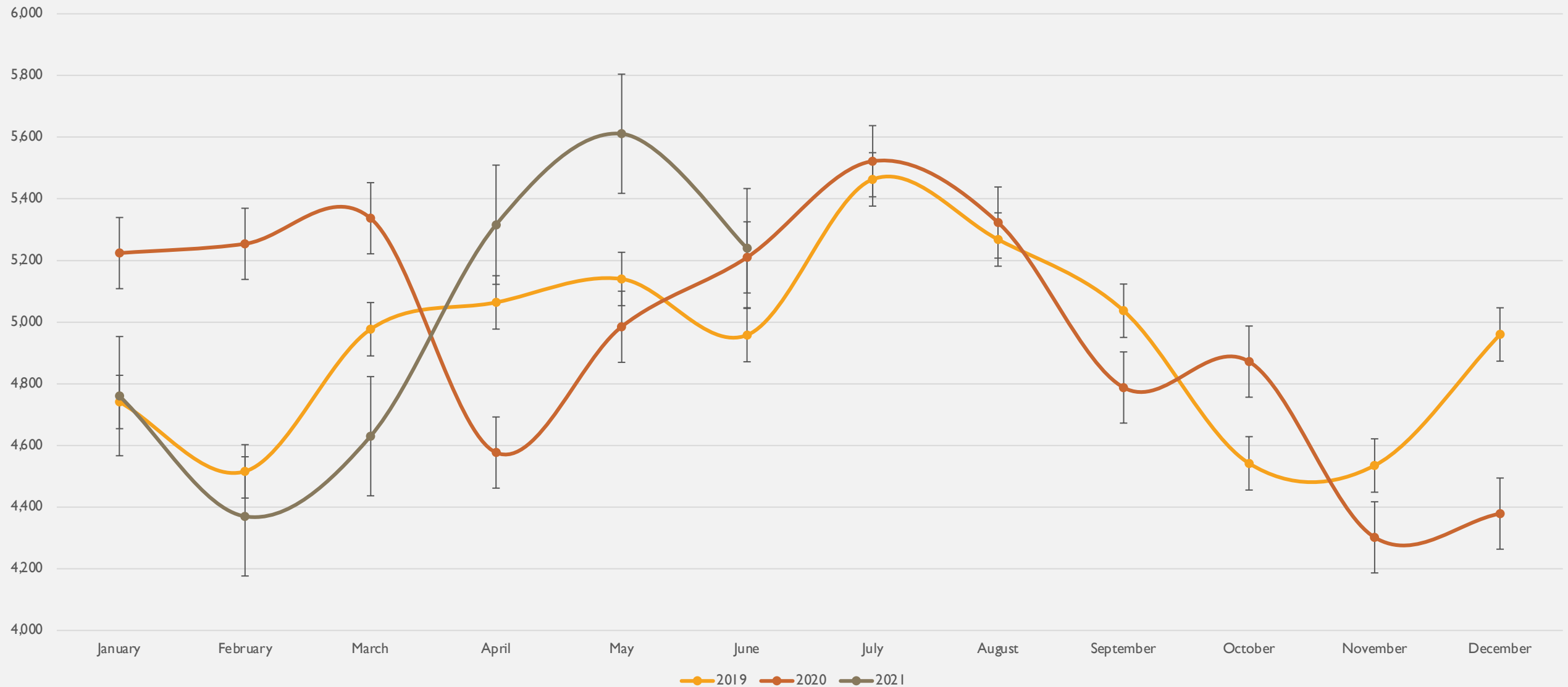
# NM COUNT OF EMS ACTIVATIONS

Number of EMS Activations in NMEMSTARS  
2019-2021  
N = 1229011



# ALCOHOL RELATED CALLS

Number of NMEMSTARS EMS Runs Related to Alcohol  
January 2019 - June 2021  
N = 148901



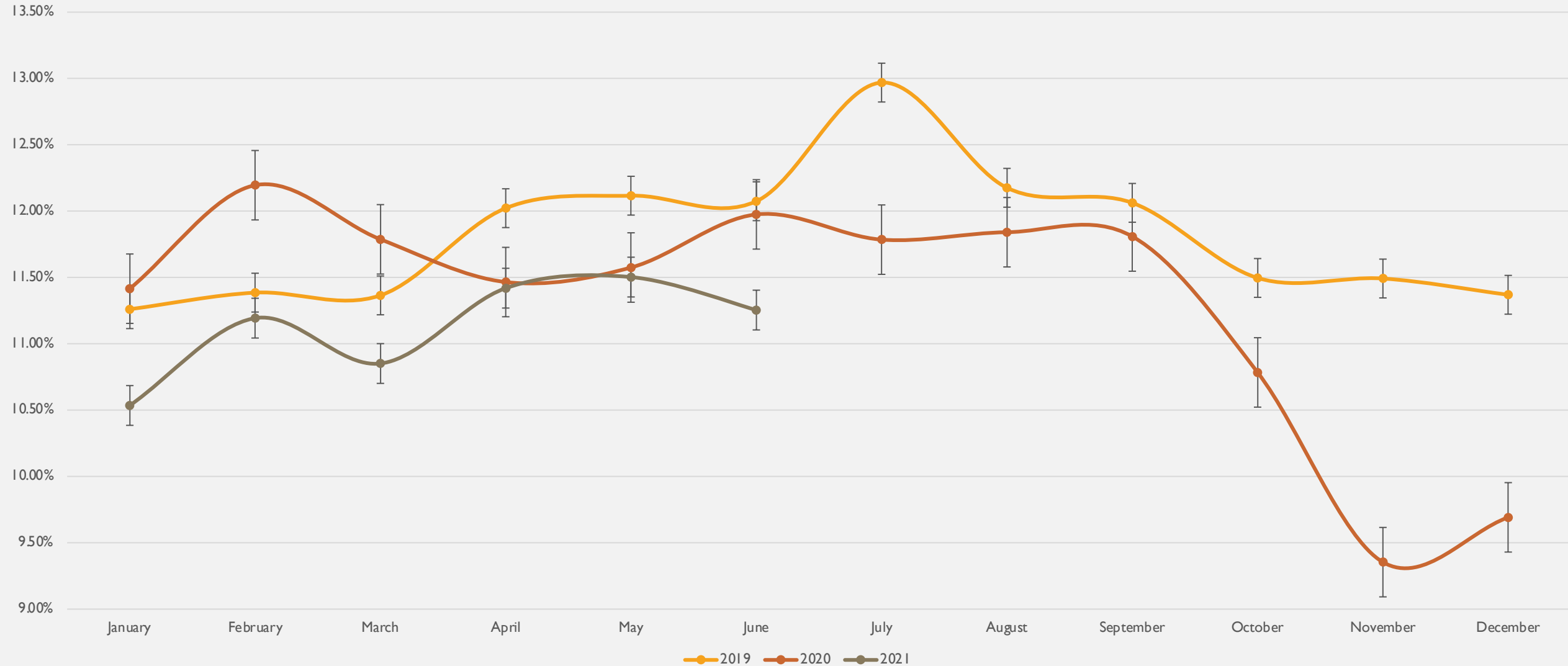
# ALCOHOL RELATED CALLS

Percentage of NMEMSTARS EMS Runs Related to Alcohol

January 2019 - June 2021

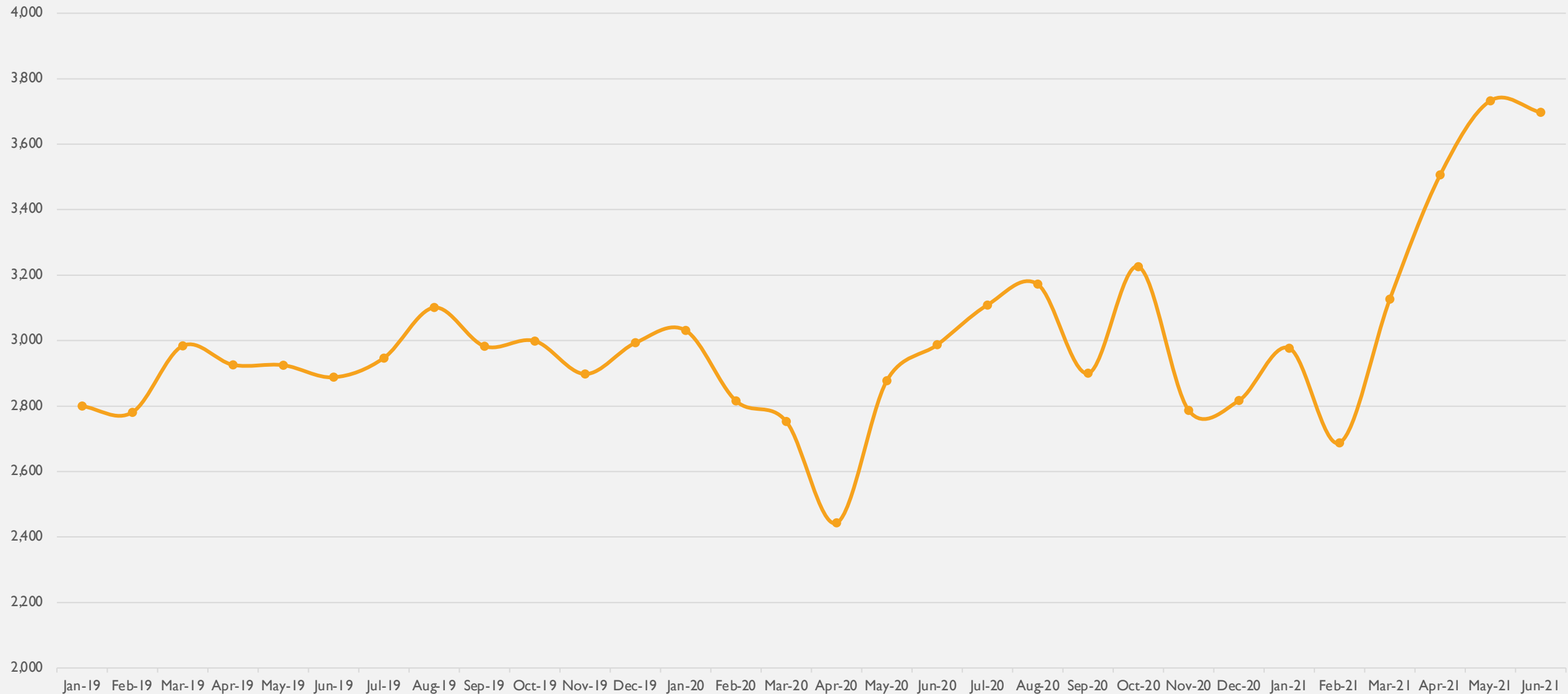
N = 148901

N TOTAL = 1299011



# OPIOID USE AND OVERDOSE CALLS

Number of NMEMSTARS EMS Runs Related to Opioid Use and Overdoses  
January 2019 - June 2021  
N = 89872



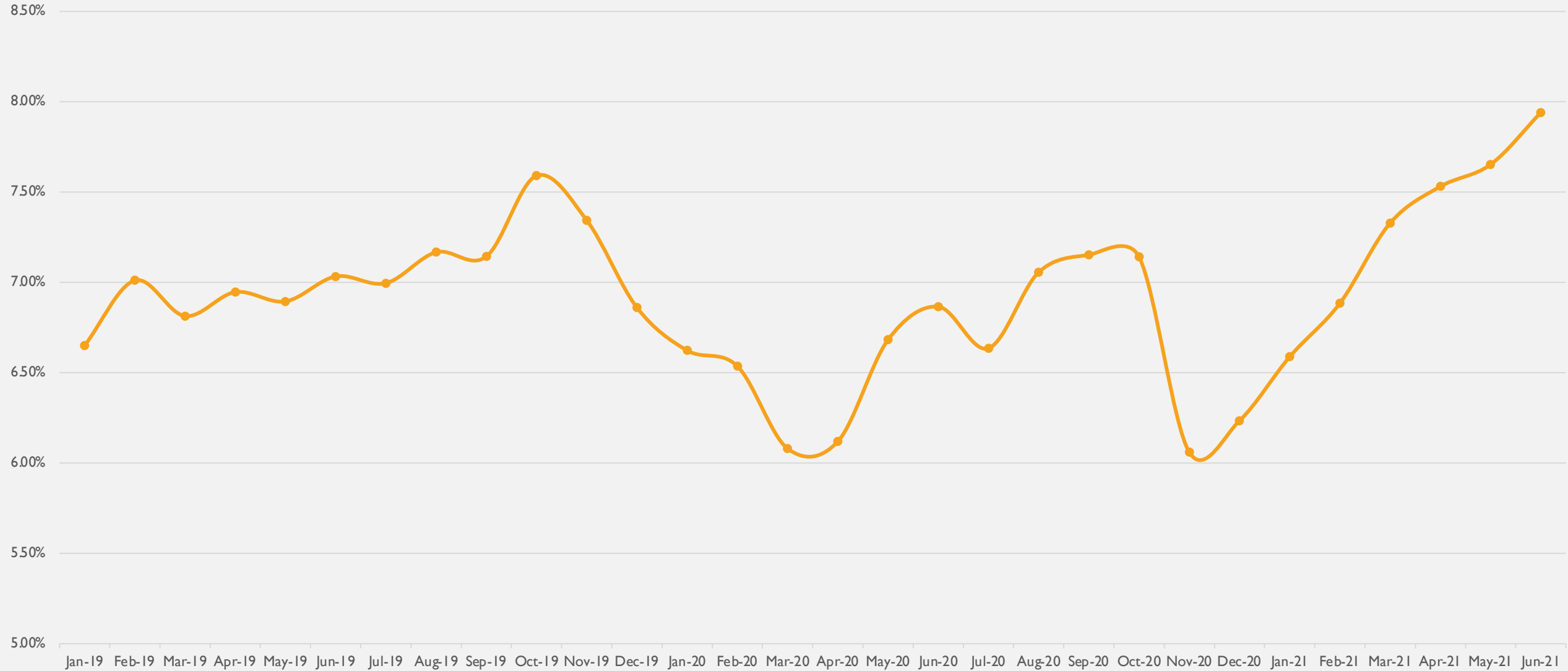
# OPIOID USE AND OVERDOSE CALLS

Percentage of NMEMSTARS EMS Runs Related to Opioid Use and Overdoses

January 2019 - June 2021

N = 89872

N TOTAL = 1299011



# Alcohol Related Death Trends

Annaliese Mayette, PHD

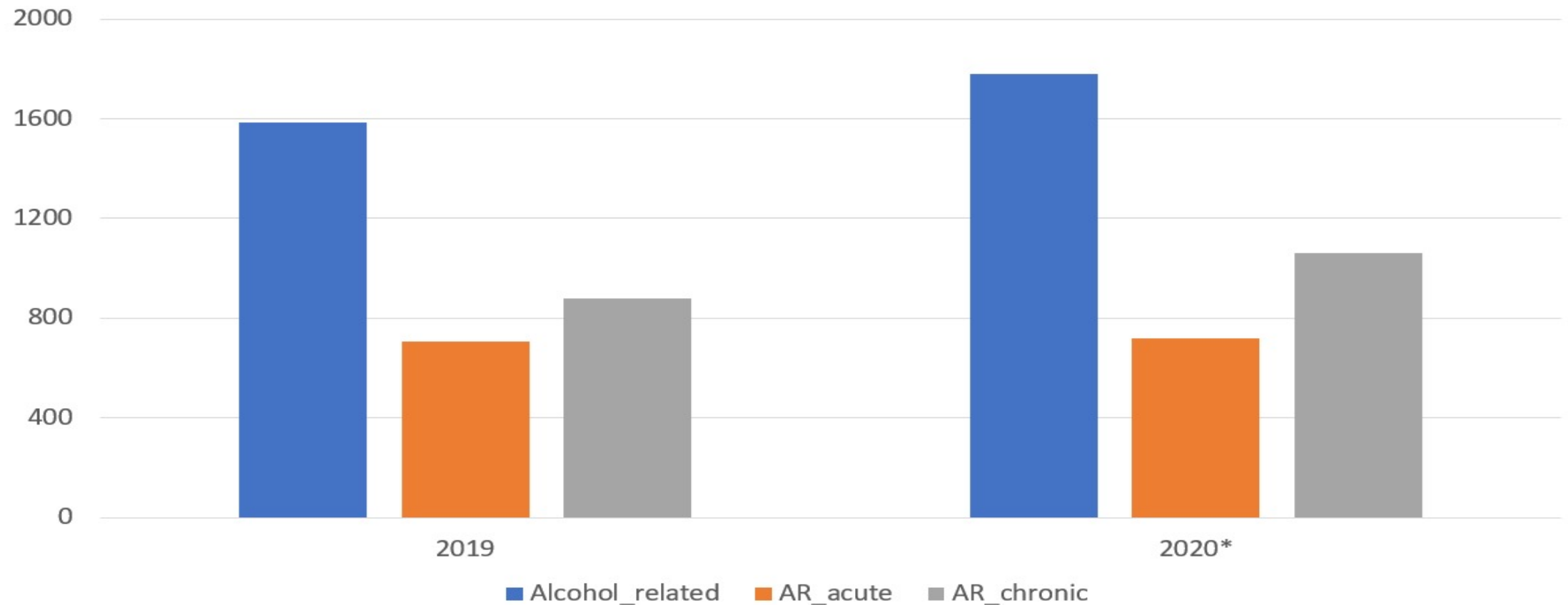
Alcohol Epidemiologist

New Mexico Department of Health

*The alcohol-related section of this presentation was supported 100% by Cooperative Agreement Number NU58DP001006 from The Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.*



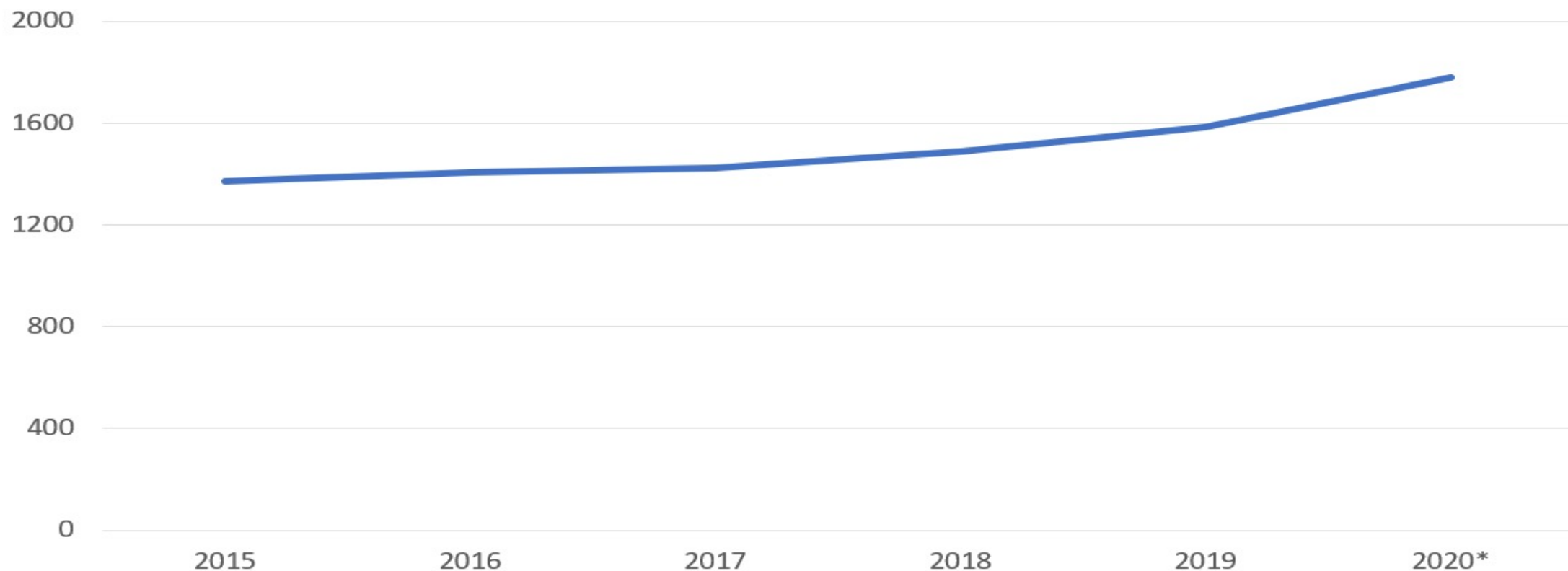
# Alcohol-related Deaths, NM, 2019 Final, 2020 Preliminary



Source: NMDOH Vital Records and Health Statistics Bureau

\* 2020 data are provisional as of 7/14/2021 and are subject to change.

# Alcohol-related Deaths, NM, 2015-2019 Final and 2020 Preliminary



Source: NMDOH Vital Records and Health Statistics Bureau

\* 2020 data are provisional as of 7/14/2021 and are subject to change.

# Community Preventive Services Task Force (CPSTF) Recommendations to Decrease Excessive Alcohol Use and Related Harms:

- Electronic screening and brief intervention
- Increasing alcohol taxes
- Increase dram shop liability
- Maintaining limits on days of sales
- Regulation of alcohol outlet density
- Maintaining limits on hours of sales
- Enhanced enforcement of laws prohibiting sales to minors

<https://www.thecommunityguide.org/topic/excessive-alcohol-consumption>

# NMDOH Activities to Decrease Excessive Alcohol Use, Related Harms, and Alcohol-Related Death:

- Disseminate data on rates and harms of excessive alcohol consumption
- Collect and analyze Medicaid paid alcohol screening and brief intervention (a-SBI) services data.
- Call a quarterly state-wide interagency workgroup to address alcohol-related death in NM with representatives from NMHSD, NMDFA, NMDOT, NMRLD, NMCYFD, and NMDOH.
- Support local evidence-based interventions and programs

# Provisional 2020 Drug Overdose & Polysubstance Trends

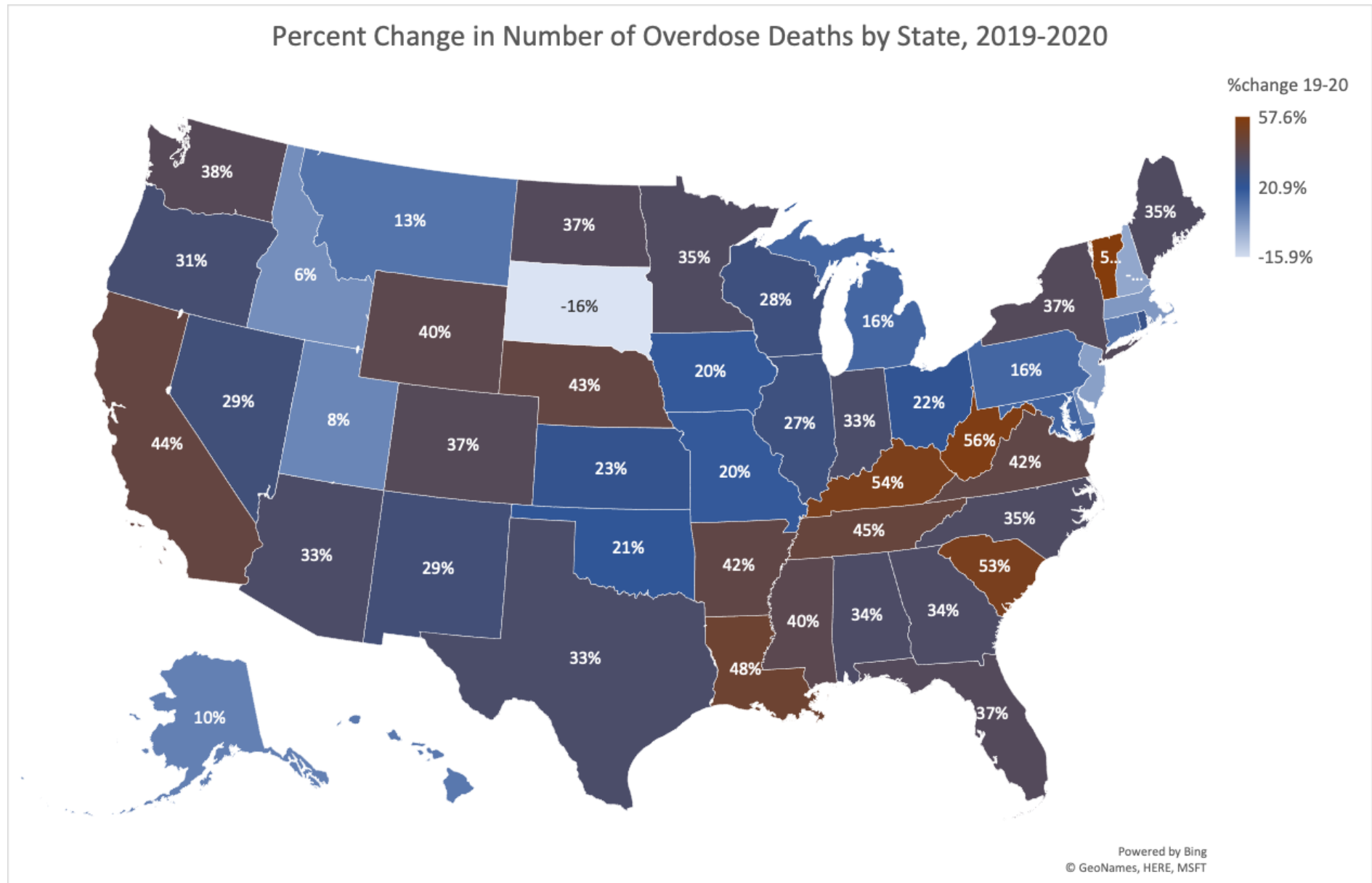
Megan Deissinger

Drug Overdose Epidemiologist

New Mexico Department of Health

# Provisional 2020 Trends & Observations

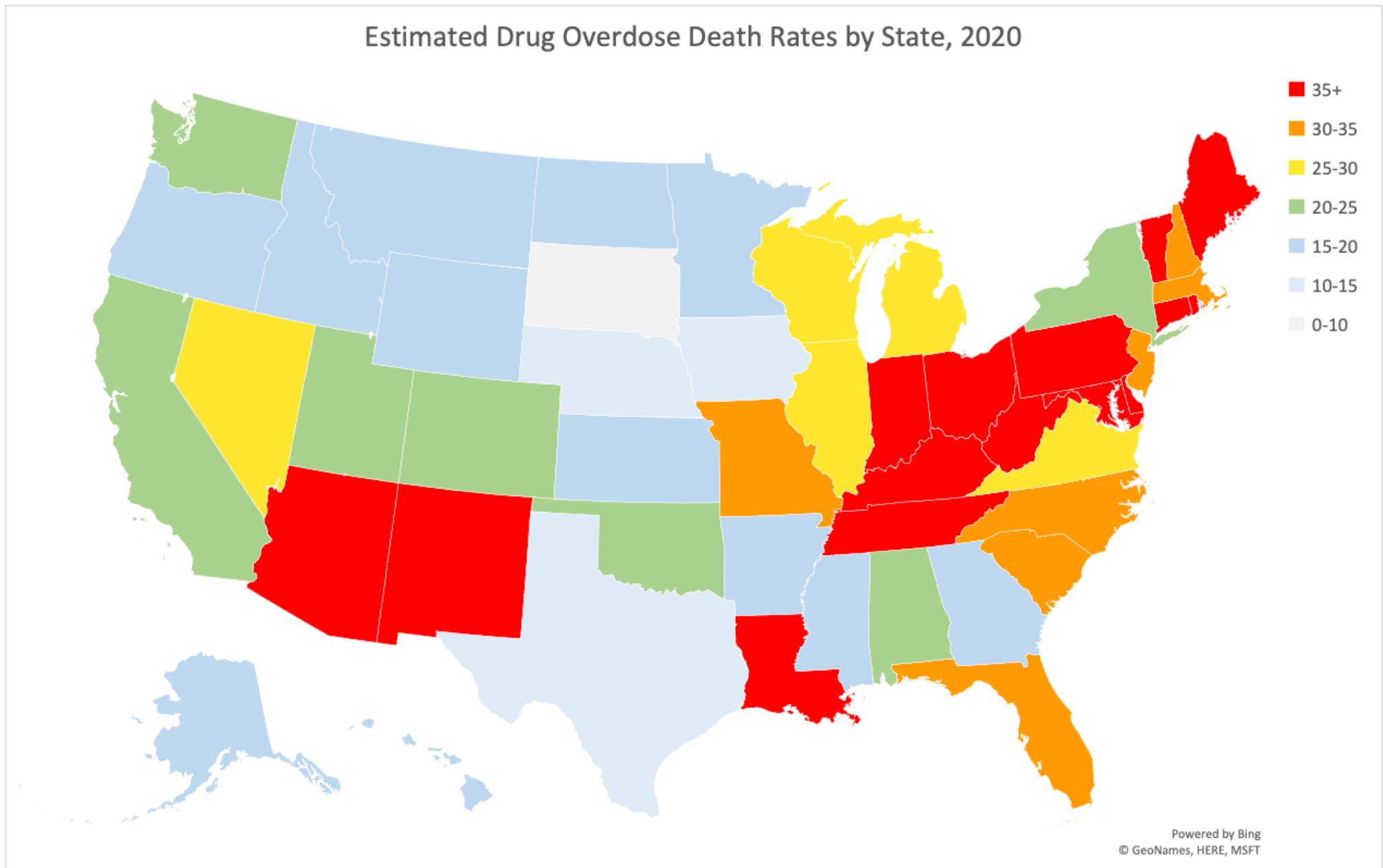
- Data are provisional as of 7/14/2021 and are subject to change
- Record level of overdose deaths
  - Count >750
- Driven by illicit substances
  - Fentanyl
  - Methamphetamine
  - Cocaine
- Overdose death rate due to prescription opioids is decreasing
- Increase in statewide rate driven by increases in:
  - Urban and high population counties (Bernalillo, Dona Ana, Santa Fe, San Juan)
  - SE region (Lincoln, Lea, Chaves counties)



Source: NCHS/NVSS provisional data through Dec 2020

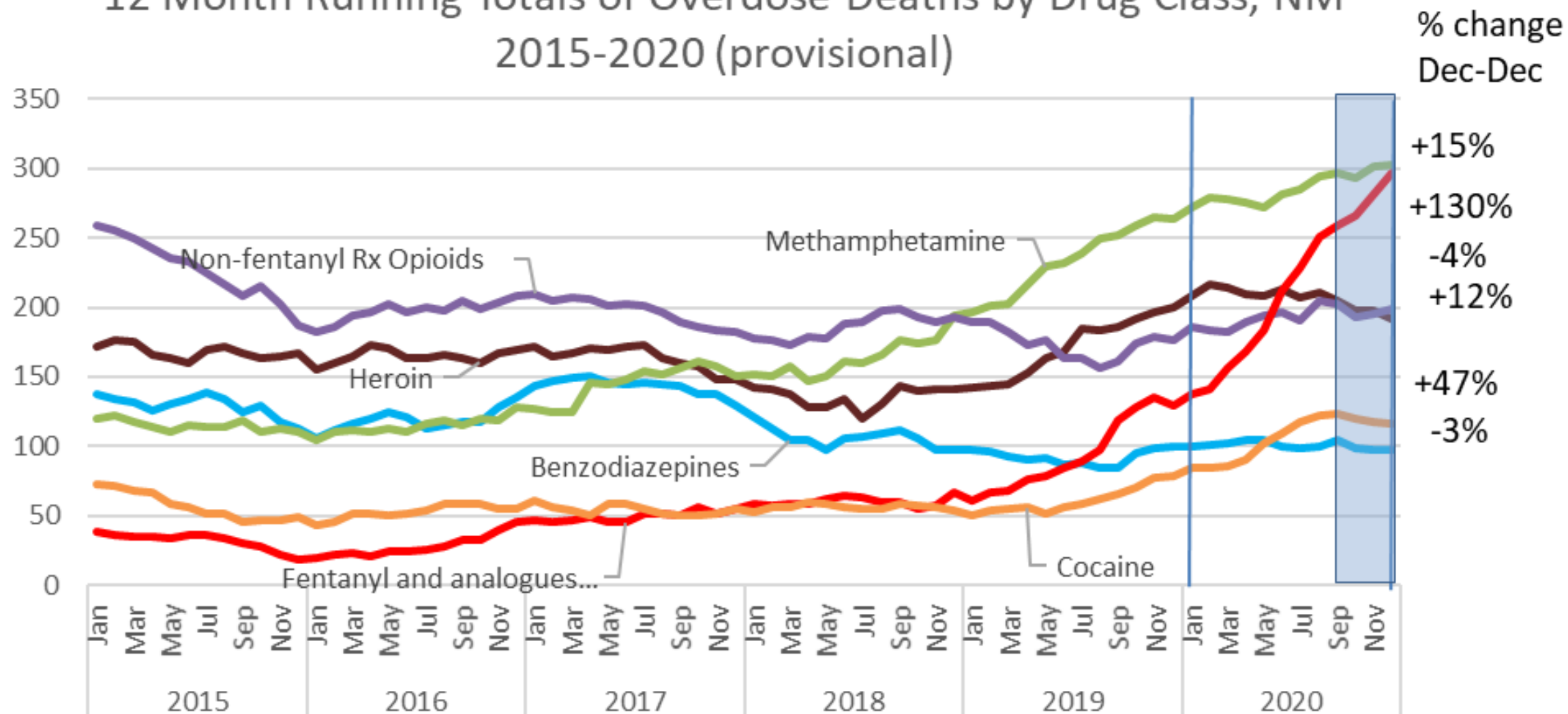






Rate per 100,000 population, estimated from NCHS/NVSS provisional data through Dec 2020  
Source: NCHS/NVSS provisional data

# 12 Month Running Totals of Overdose Deaths by Drug Class, NM 2015-2020 (provisional)



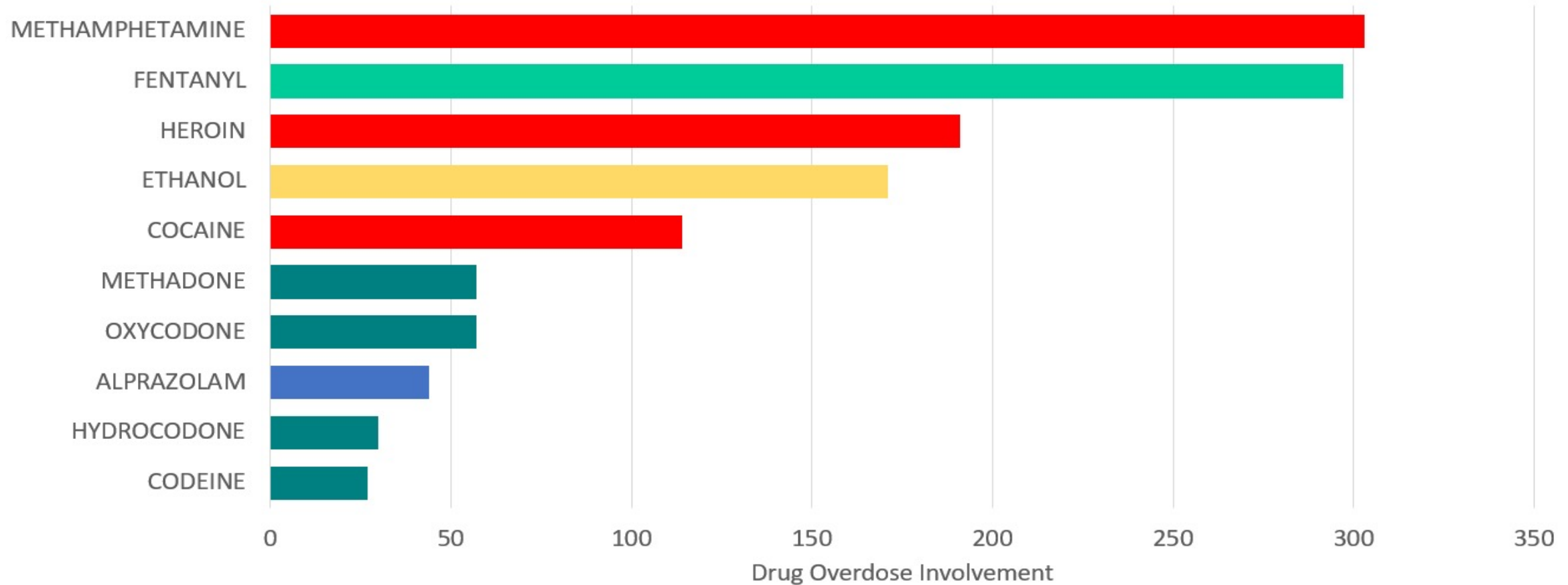
Each point represents the sum of the prior 12 months

Drug types are not mutually exclusive

2020 data are provisional as of 7/14/21 and subject to change

Source: NM DOH Bureau of Vital Records and Health Statistics death data

# Top 10 Drugs in Drug Overdose Death, 2020\*



\*2020 data are provisional as of 7/14/2021 and are subject to change

\*Substances include alcohol

Drug types are not mutually exclusive

Source: NMDOH Bureau of Vital Records and Health Statistics death data

# Substances in Heroin-involved Drug Overdose Death, 2020\*

Heroin with...	and with...						% Alcohol Involved
	None	Cocaine	Fentanyl	Treatment Opioids	Pain opioids	Benzodiazepines	
None	35						37%
Methamphetamine	37	6	38	4	2	3	11%
Cocaine	7		5	1	1	1	40%
Fentanyl	18			4	2	2	26%
Treatment Opioids	3					2	40%
Pain opioids	1					1	100%
Benzodiazepines	6						50%

\*2020 data are provisional as of 7/14/2021 and are subject to change

\*Substances include alcohol

Drug types are not mutually exclusive

Source: NMDOH Bureau of Vital Records and Health Statistics death data

# Substances in Methamphetamine-involved Drug Overdose Death, 2020\*

Methamphetamine with...	and with...						% Alcohol Involved
	None	Cocaine	Fentanyl	Treatment Opioids	Pain opioids	Benzodiazepines	
None	110						5%
Heroin	37	6	38	4	2	3	11%
Cocaine	5		8	2			38%
Fentanyl	34			2	10	2	10%
Treatment Opioids	12				1	2	7%
Pain opioids	2					1	0%
Benzodiazepines	2						100%

\*2020 data are provisional as of 7/14/2021 and are subject to change

\*Substances include alcohol

Drug types are not mutually exclusive

Source: NMDOH Bureau of Vital Records and Health Statistics death data

# Substances in Fentanyl-involved Drug Overdose Death, 2020\*

Fentanyl with...	and with...						% Alcohol Involved
	None	Methamphetamine	Cocaine	Treatment Opioids	Pain opioids	Benzodiazepines	
None	66						36%
Heroin	18	41	5	4	2	2	18%
Methamphetamine	34		8	2	10	2	14%
Cocaine	29			2	5	9	30%
Treatment Opioids	2				1		33%
Pain opioids	10					12	23%
Benzodiazepines	13						38%

\*2020 data are provisional as of 7/14/2021 and are subject to change

\*Substances include alcohol

Drug types are not mutually exclusive

Source: NMDOH Bureau of Vital Records and Health Statistics death data



# Substances in Pain opioid-involved Drug Overdose Death, 2020\*

Pain opioids with...		and with....					% Alcohol Involved	
		None	Methamphetamine	Cocaine	Fentanyl	Treatment Opioids		Benzodiazepines
None Heroin Methamphetamine Cocaine Fentanyl Treatment Opioids Benzodiazepines	None	29						34%
	Heroin	1	4	1	2		1	56%
	Methamphetamine	2		2	11	1	1	11%
	Cocaine	2			5		1	50%
	Fentanyl	10				1	12	26%
	Treatment Opioids	2						0%
	Benzodiazepines	6						18%

\*2020 data are provisional as of 7/14/2021 and are subject to change

\*Substances include alcohol

Drug types are not mutually exclusive

Source: NMDOH Bureau of Vital Records and Health Statistics death data

# Substances in Benzodiazepine-involved Drug Overdose Death, 2020\*

Benzodiazepines with...	and with...						% Alcohol Involved
	None	Methamphetamine	Cocaine	Fentanyl	Treatment Opioids	Pain opioids	
None	4						100%
Heroin	6	7	1	3	2	1	30%
Methamphetamine	2		2	4	2	1	27%
Cocaine	1			11		1	15%
Fentanyl	13					12	29%
Treatment Opioids	1						0%
Pain opioids	6						18%

\*2020 data are provisional as of 7/14/2021 and are subject to change

\*Substances include alcohol

Drug types are not mutually exclusive

Source: NMDOH Bureau of Vital Records and Health Statistics death data



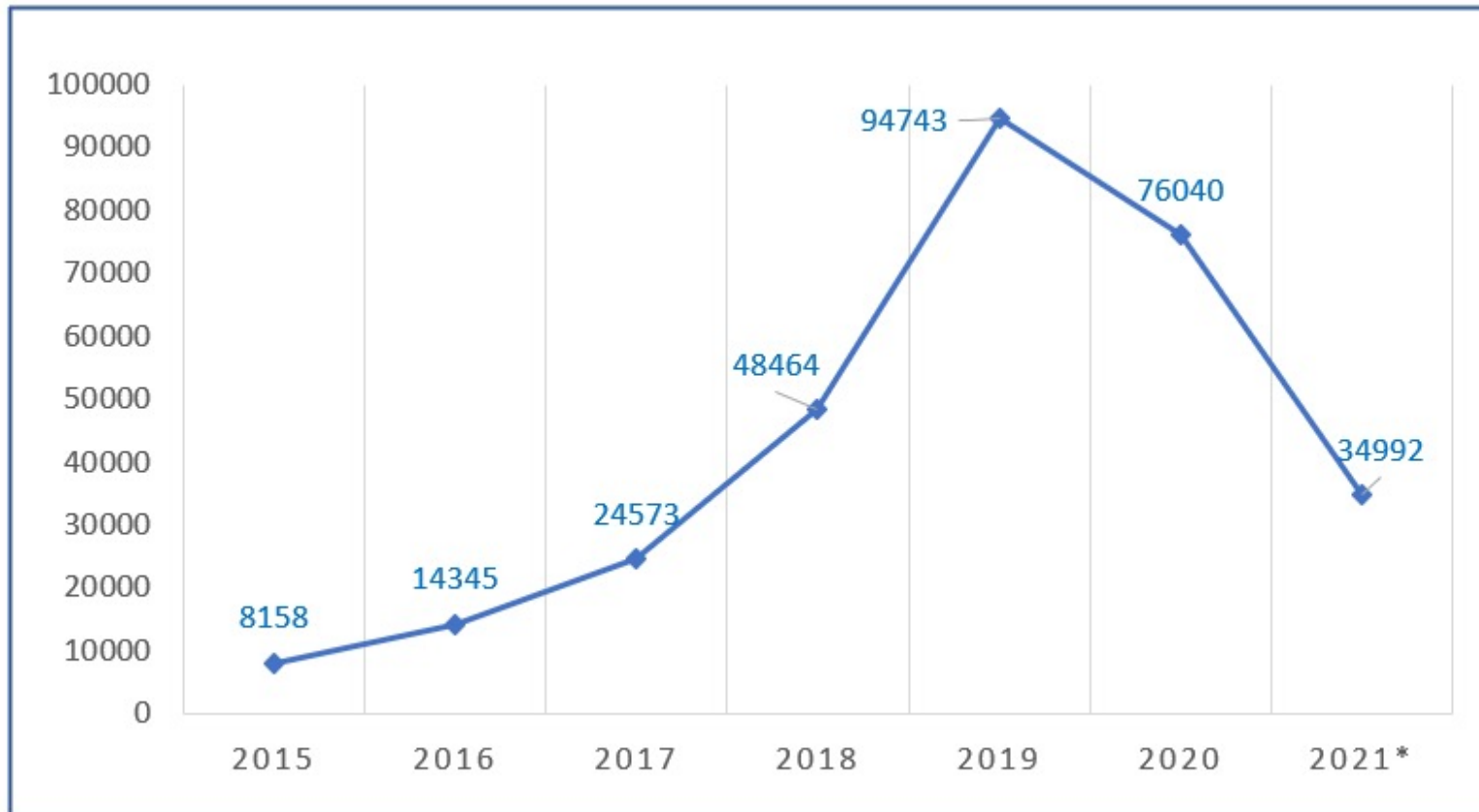
# Naloxone Distribution

Alisha Campbell, MPH

Substance Use Epidemiologist

New Mexico Department of Health

# Naloxone Doses Distributed, NM, 2015-2021\*



Total Distribution doubled each year through 2019

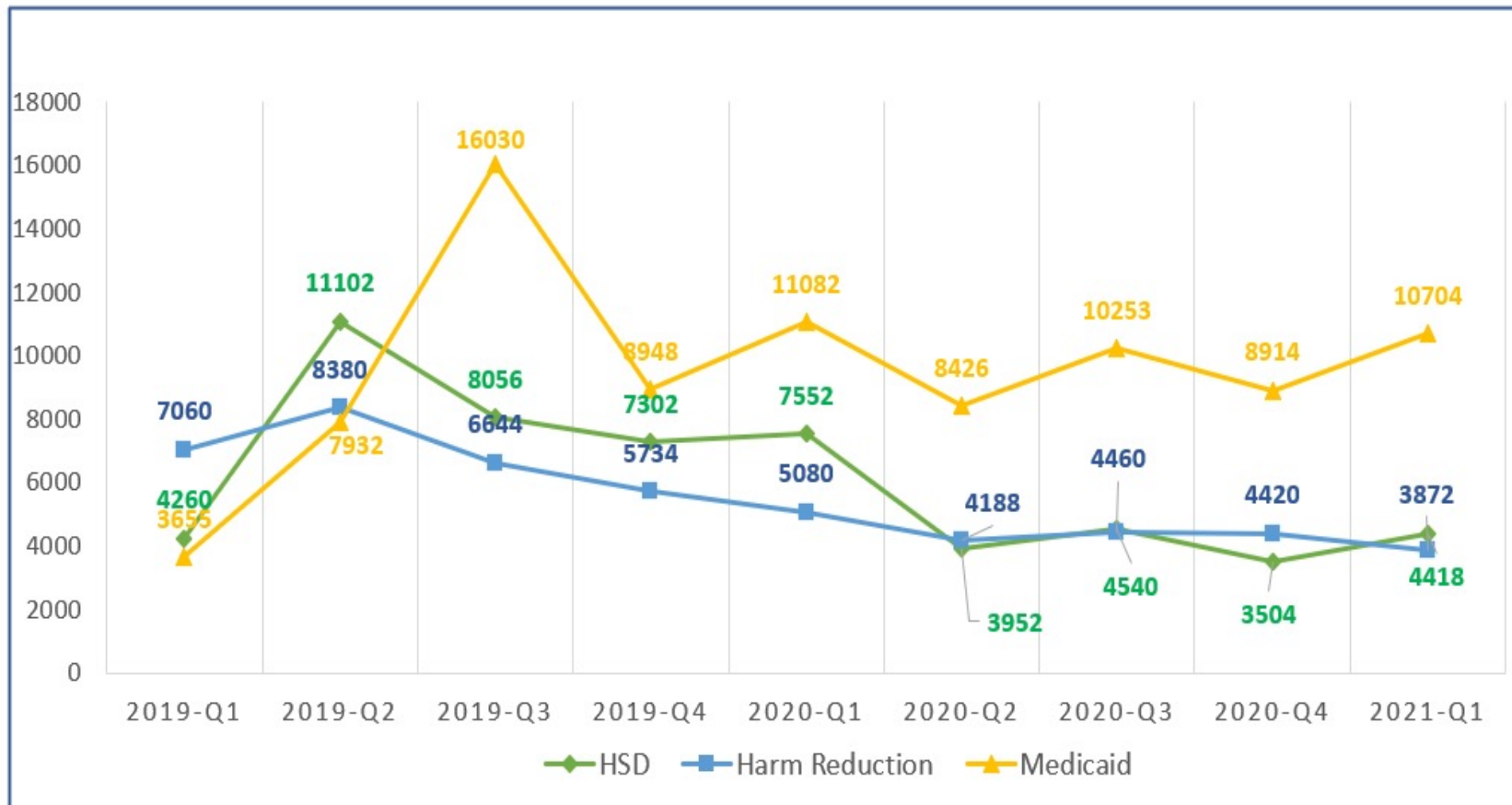
In 2020, there was a 20% decrease

In 2021, current reported data reflects 46% of previous years distribution.

Data sources: NMDOH Harm Reduction Program, Medicaid Claims data, and BHSD-OSAP data.

\*2021 Data is not complete

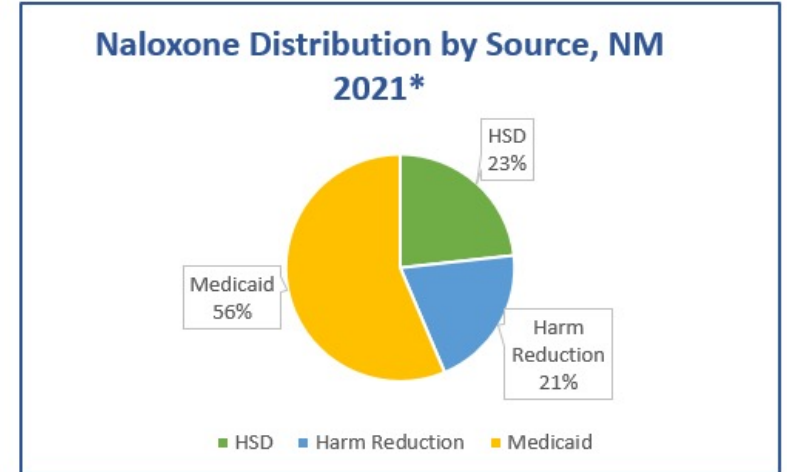
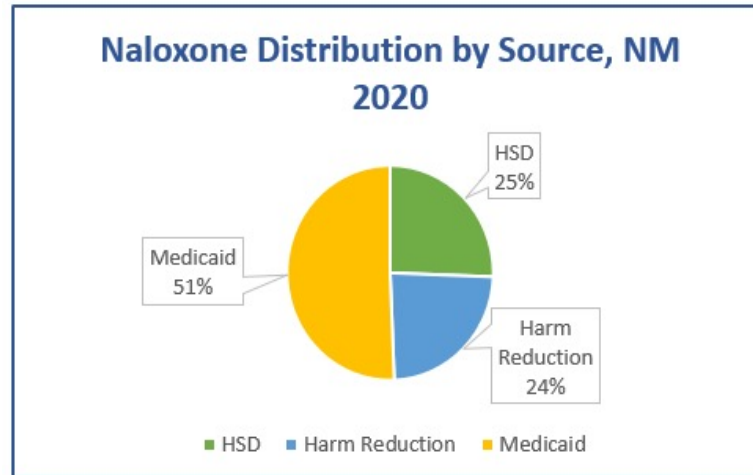
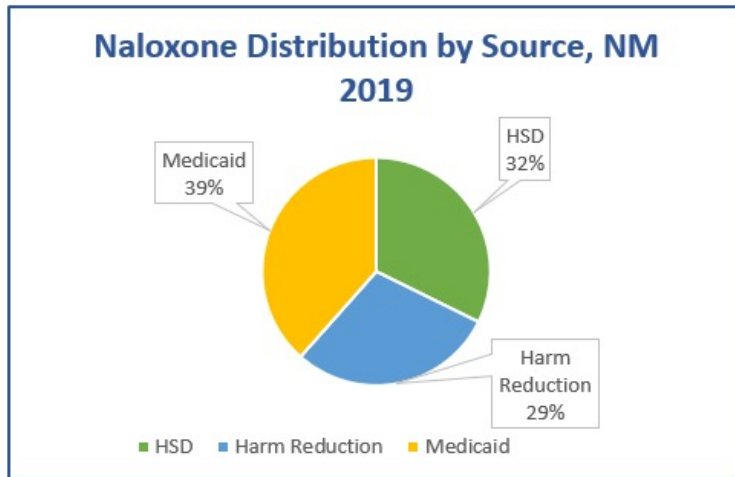
# Naloxone Distribution by Quarter and Source, NM, 2019Q1-2021Q1



- The data DOH reports is collected from 3 sources
- Declines in distribution 2020-Q2 though 2021-Q1
- Medicaid has decreased slightly, is the largest distributing source

Data sources: NMDOH Harm Reduction Program, Medicaid Claims data, and BHSD-OSAP data.

# Naloxone Distribution by Source, NM, 2019-2021\*

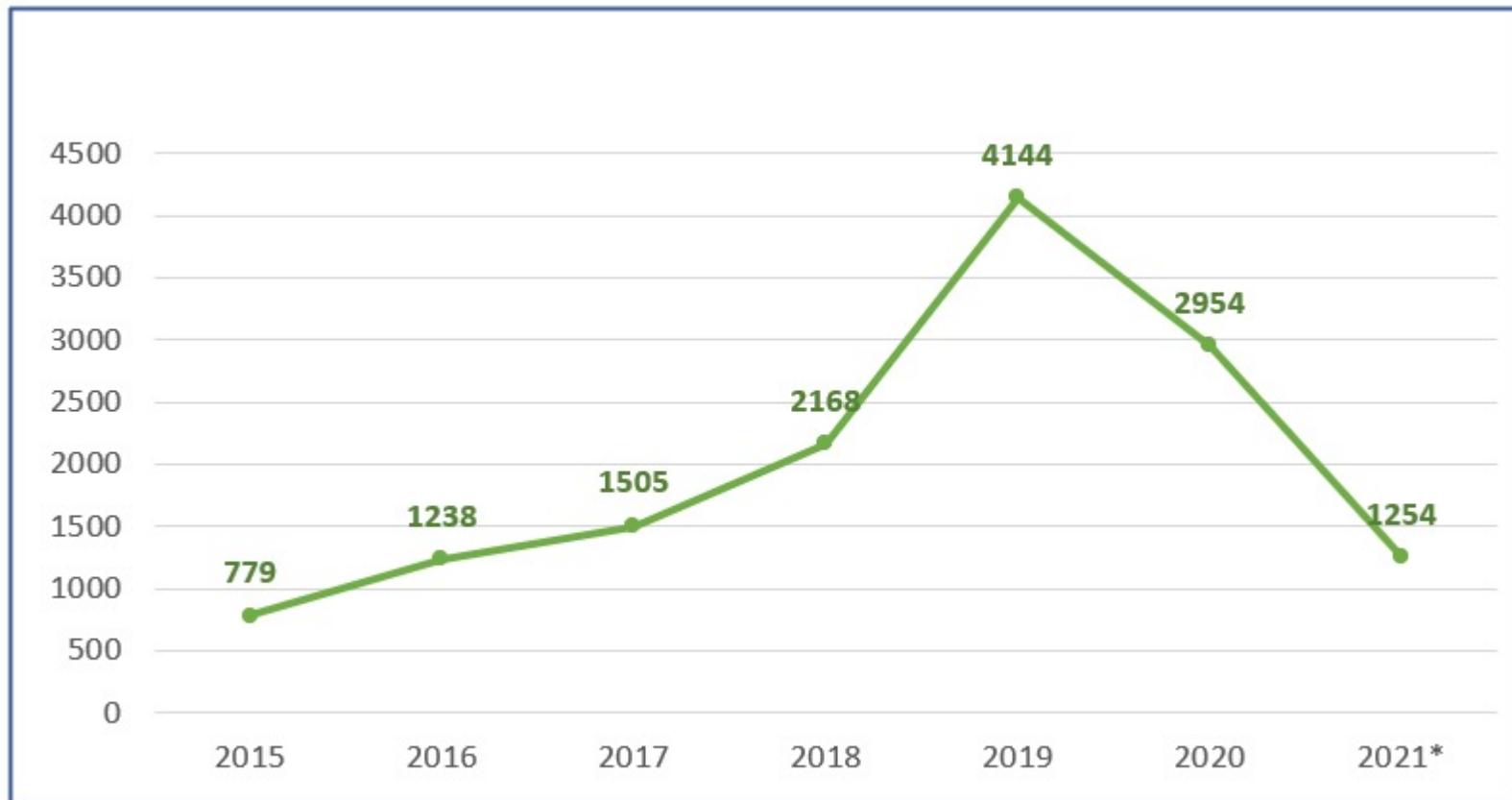


Data sources: NMDOH Harm Reduction Program, Medicaid Claims data, and BHSD-OSAP data.

\*2021 Data is not complete

- In 2019, the distribution was slightly more equal
- In 2020, Medicaid increased to 51%
- So far in 2021, Medicaid claims are still the largest source for naloxone distribution

# Reported Reversals, New Mexico, 2015-2021\*



Reporting of reversals was steadily increasing

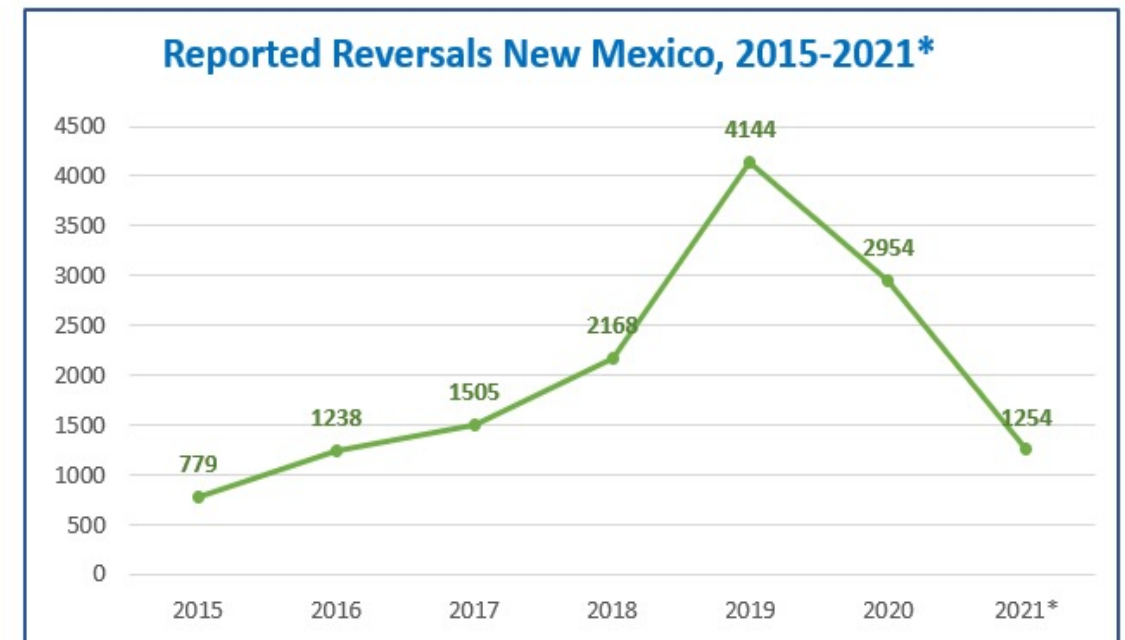
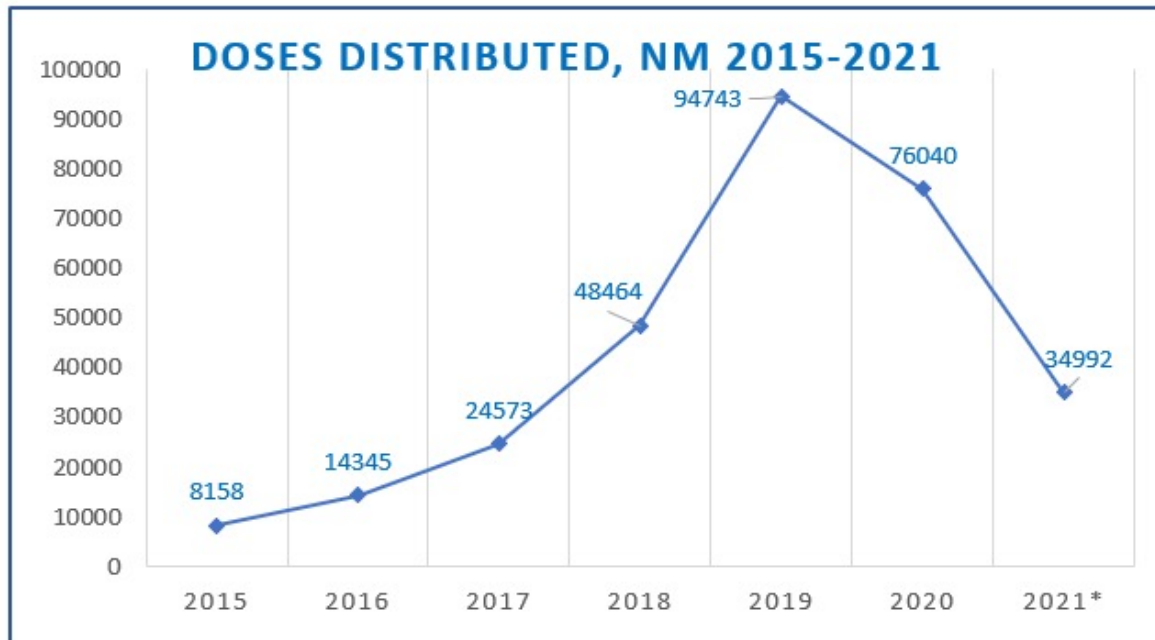
There was about a -29% in reversals reported 2019 to 2020

Roughly 95% of reversals are reported through harm reduction services.

\*Reversals are defined as a patient outcome of "OK"

\*\*Reversals are not individual level data i.e. the same person may have been reversed more than once.

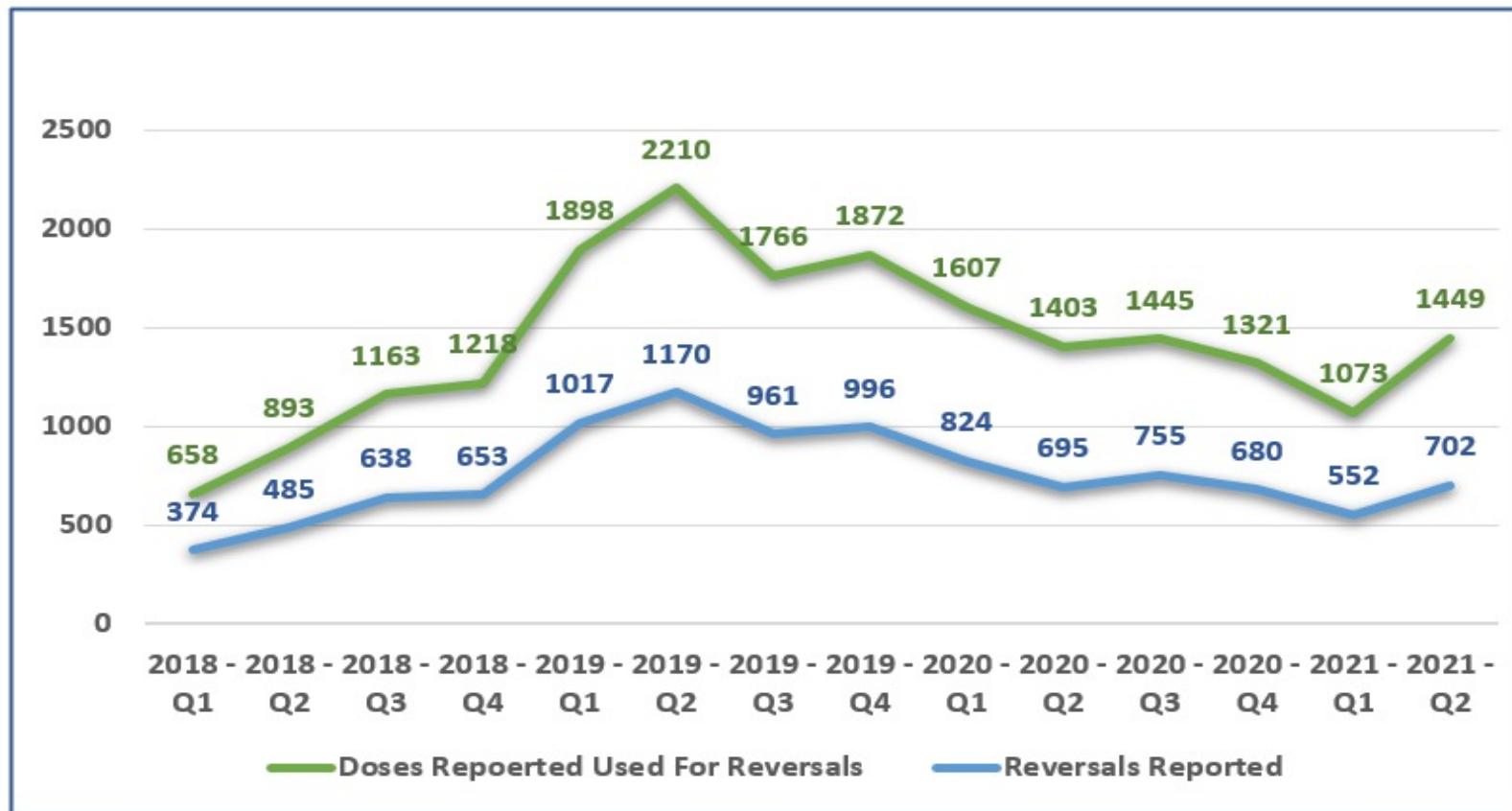
# Doses of Naloxone Distributed and Reported Reversals, NM, 2015-2021\*



Data sources: NMDOH Harm Reduction Program, Medicaid Claims data, and BHSD-OSAP data.

\*2021 Data is not complete

# Reported Reversals and Naloxone Doses Used by Quarter, NM, 2018-2021Q2



- An average of 1.9 doses are used per reported reversal.
- Decrease started 2019-Q3
- A slight increase has occurred 2021-Q2

Data Source: NMDOH Harm Reduction Program

\*Reversals are defined as a patient outcome of "OK"

\*\* Reversals are not individual level data i.e. the same person may have been reversed more than once

# Harm Reduction Program Trends

Josh Swatek

Hepatitis and Harm Reduction Program Manager

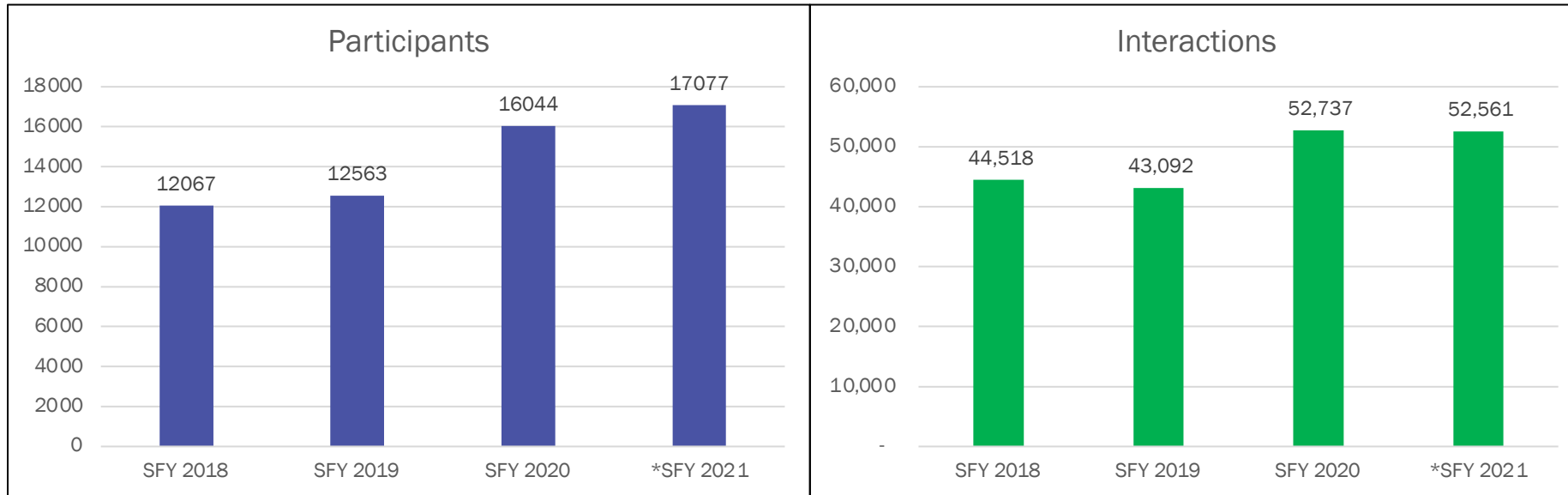
New Mexico Department of Health

*Slides Provided by the NMDOH Syringe  
Exchange Program*



# SFY 2018-2021 SSP

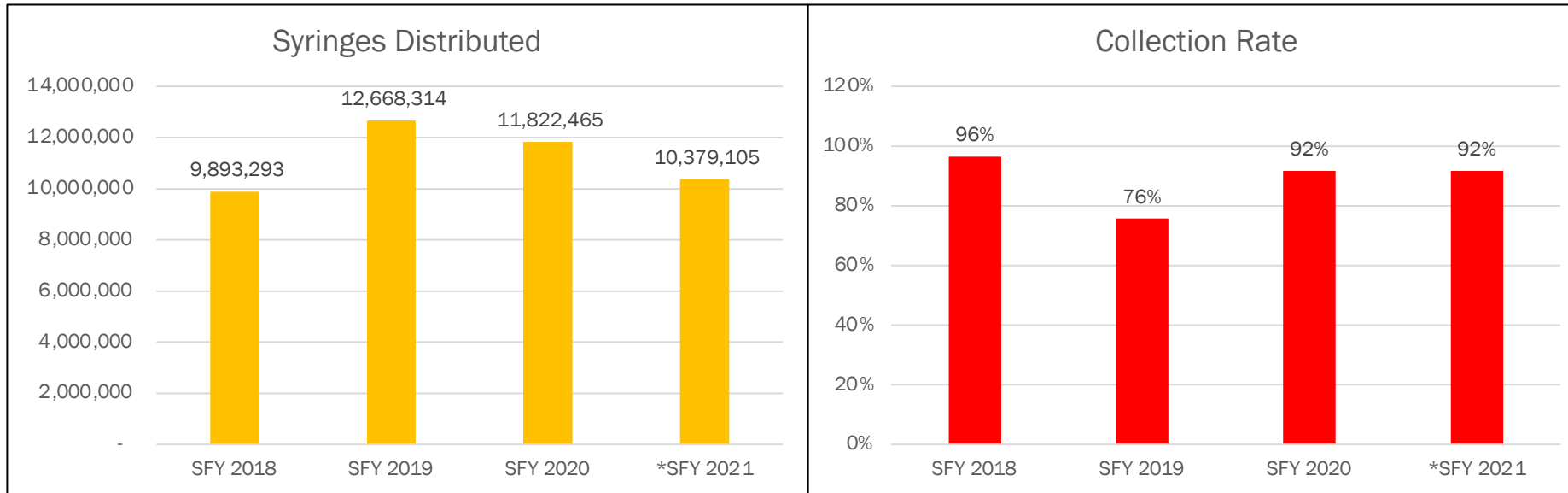
\*SFY 2021 is incomplete



- Program has grown significantly, in SFY 2013 there were 5,973 participants, with 25,258 sessions. Provisional data for SFY 2021 indicates over 17,000 participants with over 52,000 sessions
- Increase likely due to increased reach and program accessibility

# SFY 2018-2021 SSP

\*SFY 2021 is incomplete



- Slight dip in collection rate in 2019, provider training and policy changes led to increase, however collection rate not best measure of program success
- Historically program is above 90% collection rate

# Questions?

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