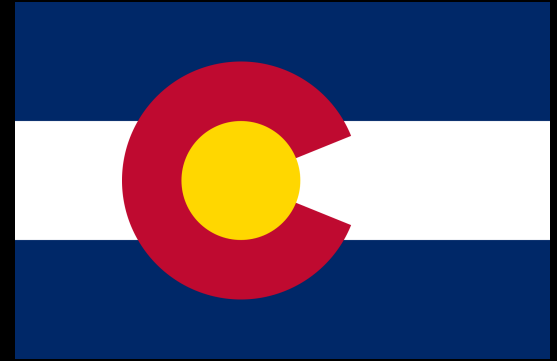


Opioid Epidemic: are physicians to blame? Colorado and beyond....



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HFEMS Associate Division Director, CDPHE
State EMS Medical Director



COLORADO
Department of Public
Health & Environment

Disclosures and Acknowledgements

- No financial conflicts
- CDPHE data team led by Amber Viitanen for Colorado opioid data
- Brent Myers, MD – ESO Chief Medical officer, national data

EMS Opioid-Associated Emergency Cases

January 1, 2013 - December 31, 2017

N= 16,267 mapped using geolocation

1% of all EMS Responses

16,000 cases over 5 years

Case Definition Development

How have other studies defined an overdose in EMS data?

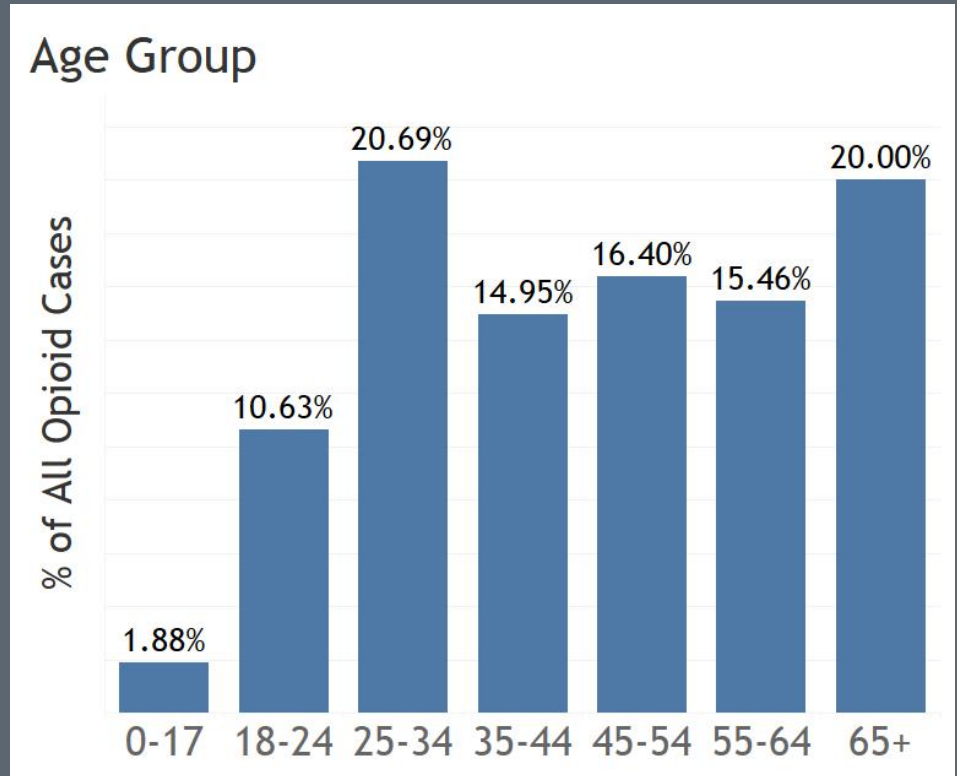
- Administration of naloxone
- Response to medication (Improved, Worsened, Unchanged)
- Physiological records: respiratory rate, blood pressure, pupil response, Glasgow Coma Scale

Several studies attempted to estimate and categorize presumed, suspected, and highly suspected opioid overdoses

Naloxone administration was common proxy for suspected opioid overdose in all studies reviewed

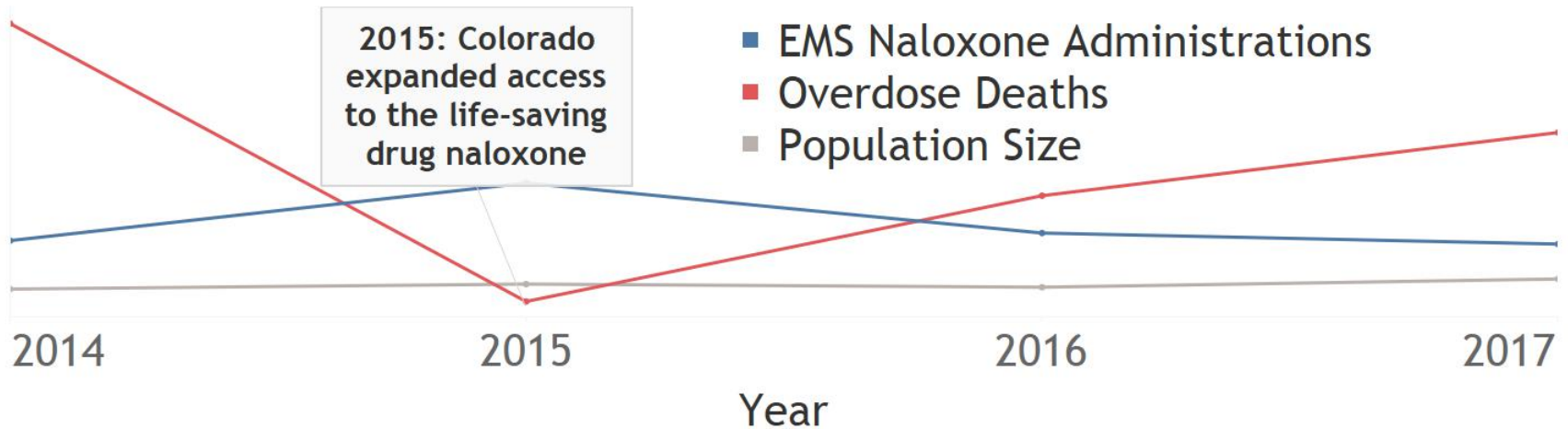
Who Is Being Treated For Opioid Overdoses By EMS

- 58% Male
- 80% White, 10% Other Race, 5% Black or African American, 3% Hispanic or Latino, 1% American Indian or Alaska Native, 1% Asian
- 9% DOA
- 98% Colorado residents
- Average age: 47 years

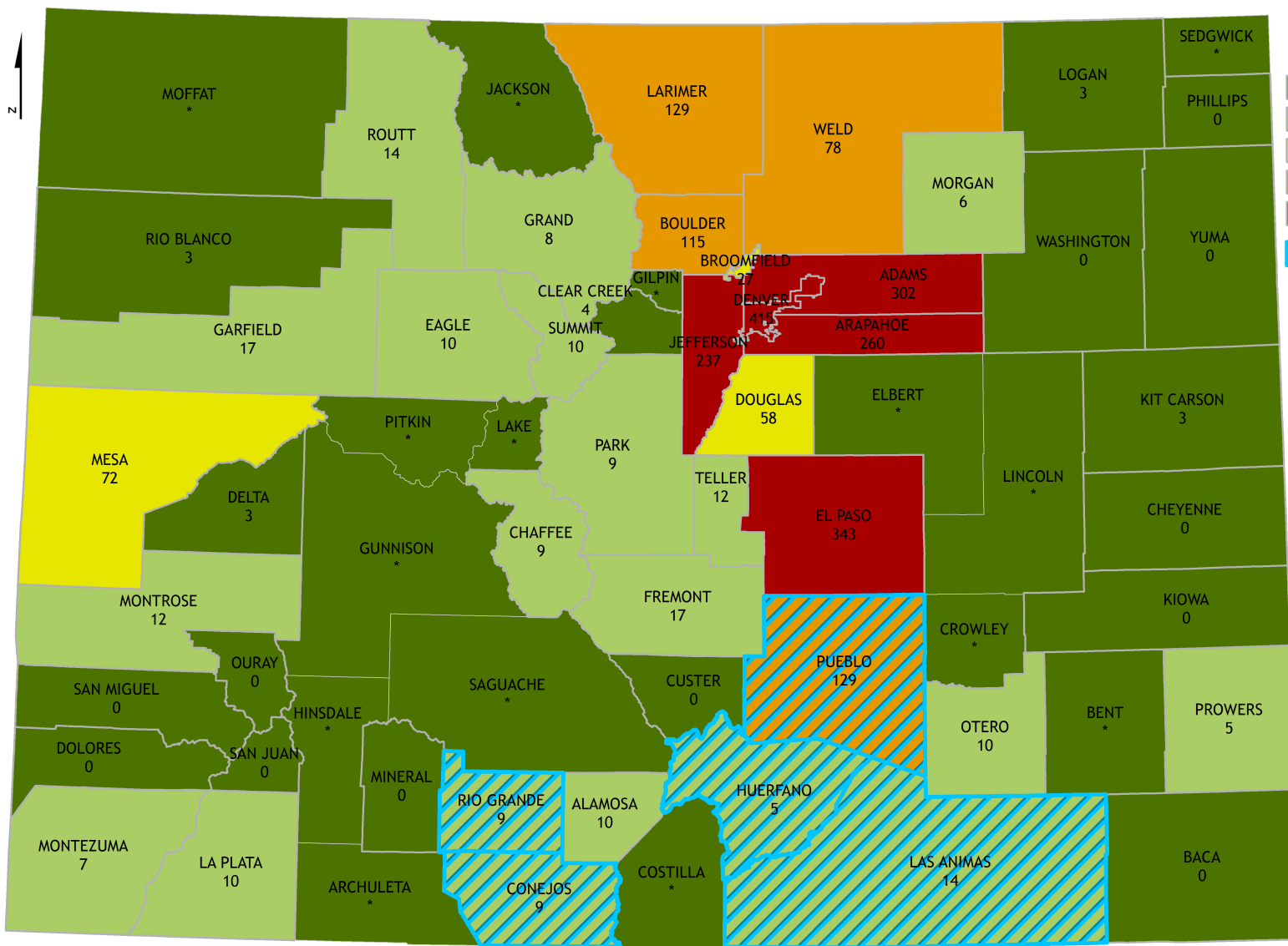


Opioid Over Time in Colorado

Percent Difference in Population, Overdose Deaths and EMS Naloxone Administrations



Count of Opioid Related Deaths by County Colorado 2013 - 2017



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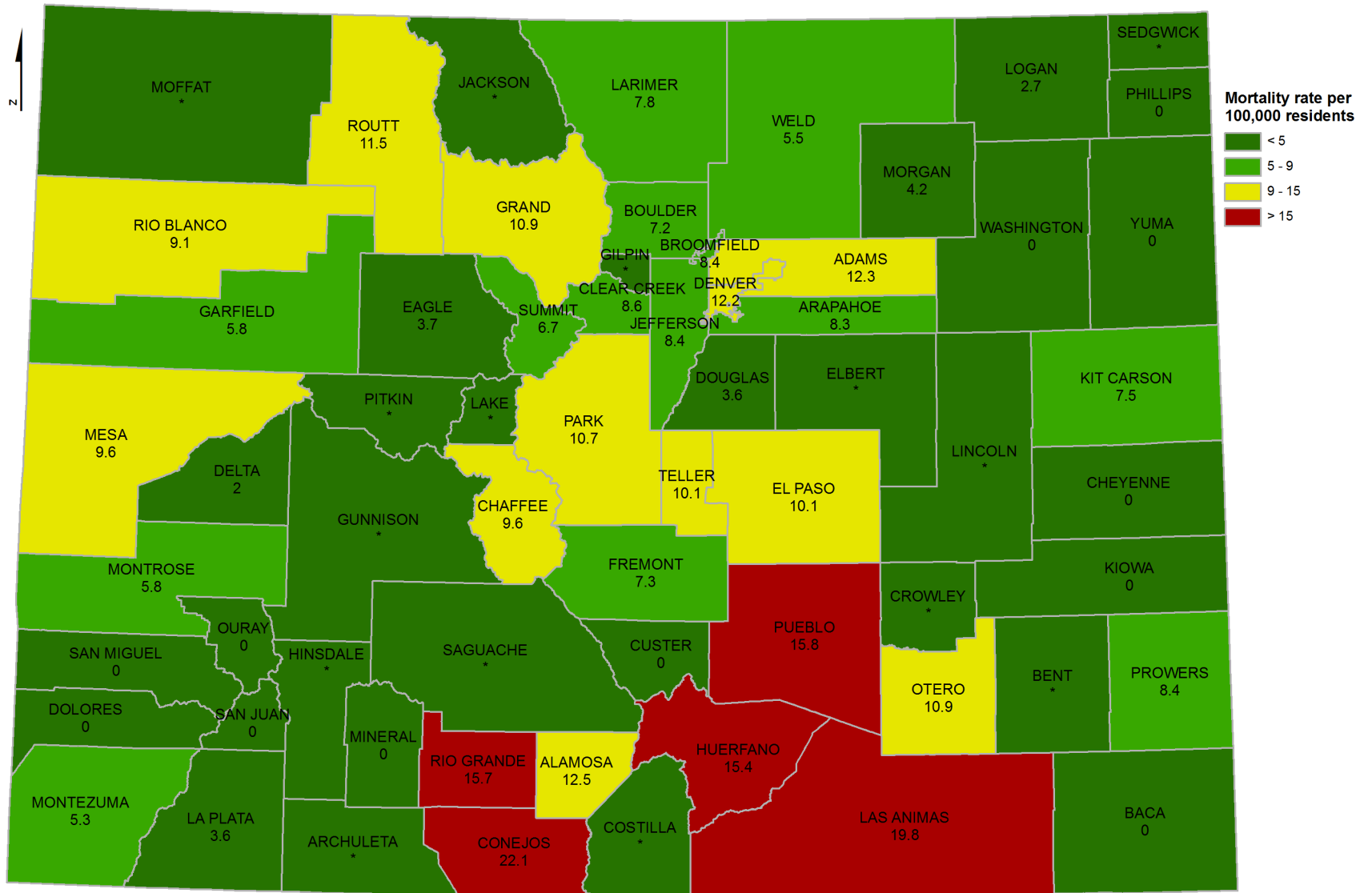


Data: Vital Statistics
Mapped
4/26/2018

n = 2,403
Opioid related deaths reported in Colorado death certificates to the Colorado Vital Statistics

Opioid Related Mortality Rate by County

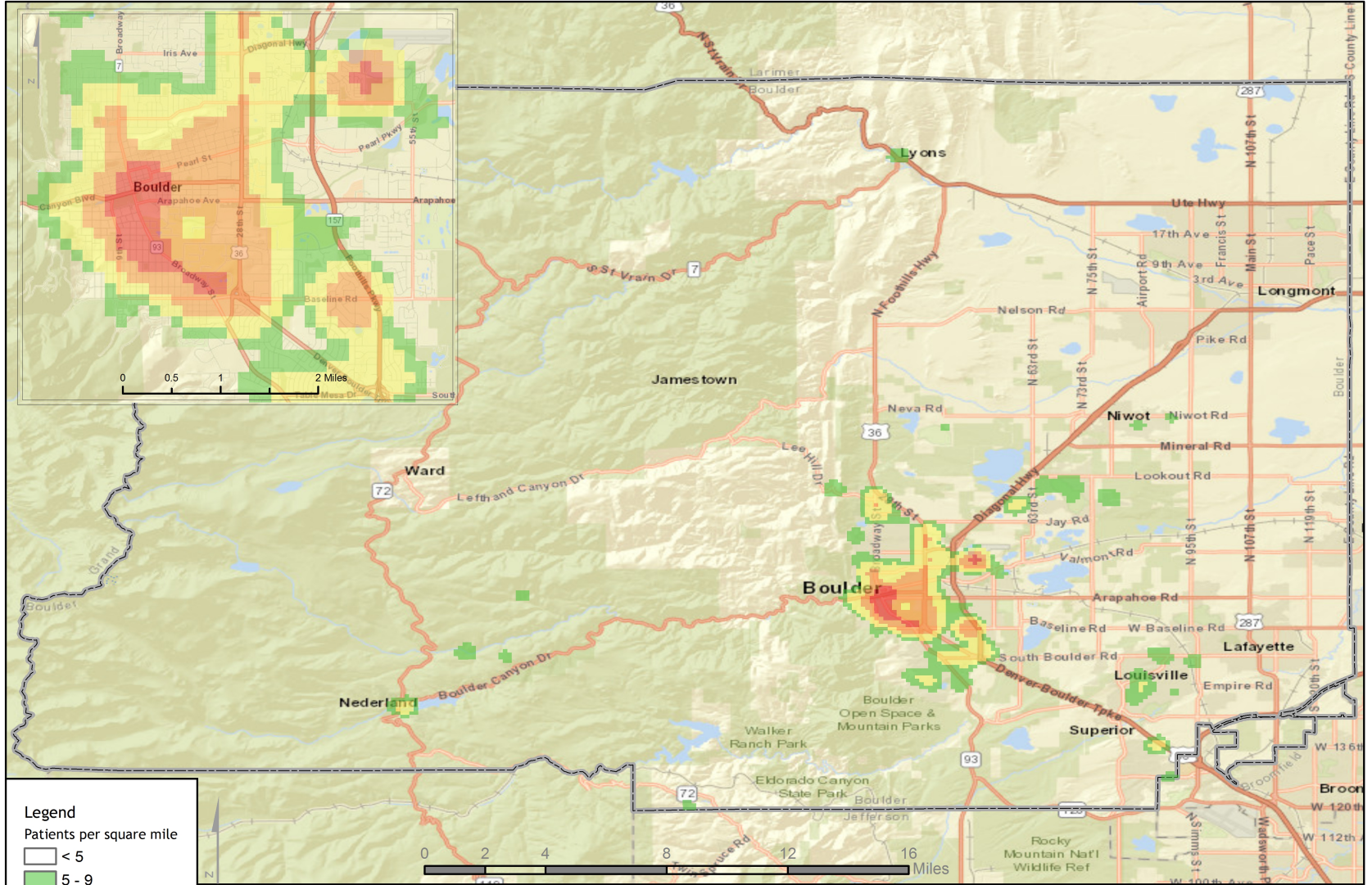
Colorado 2013 - 2017



10 Highest Percent of Opioid Deaths/Opioid Emergencies

Rank	County	Opioid Deaths	Opioid Emergencies	Percent
1	WELD	78	89	87.64%
2	CONEJOS	9	20	45.00%
3	ADAMS	302	679	44.48%
4	MESA	72	172	41.86%
5	LAKE	10	24	41.67%
6	CHAFFEE	9	24	37.50%
7	LARIMER	129	346	37.28%
8	RIO BLANCO	3	11	27.27%
9	GRAND	8	37	21.62%
10	ARAPAHOE	260	1278	20.34%
	COLORADO	2403	16267	14.77%

Density of EMS Responses with Naloxone Administration Boulder County 2015 - 2017 (n=384)



Legend
Patients per square mile

- < 5
- 5 - 9
- 10 - 24
- 25 - 49
- > 50

Kernel density mapping was used to estimate the density of patients per square mile based on the incident location of EMS responses where naloxone was administered in Boulder County; this estimate does not take into account the area's population.

Mapped 4/1/2018

Data: Colorado EMS Data Respository v2.2 and v3.4; ESRI, Inc.

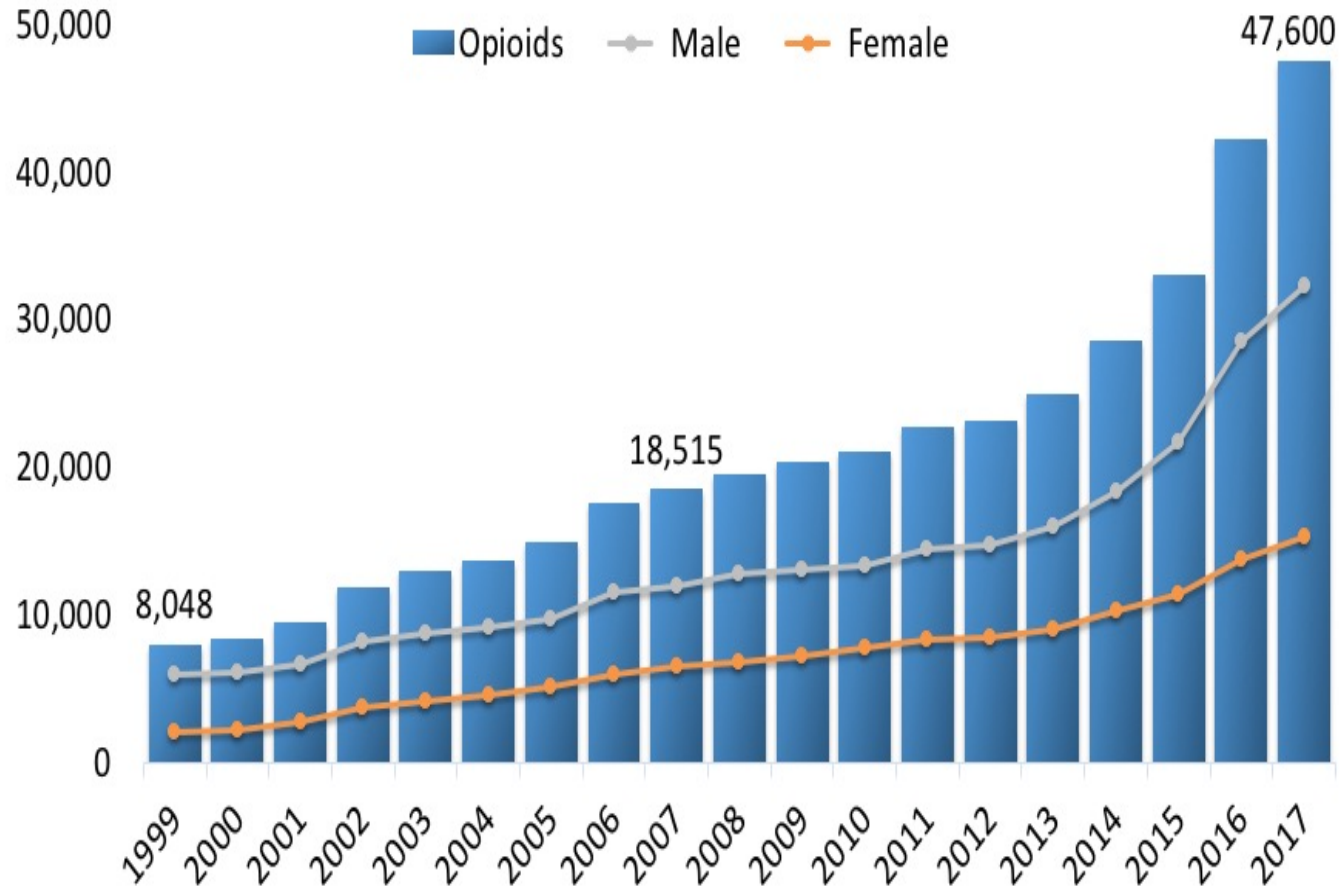


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Limitations

- Missing data
- No method to confirm the presence of opioids
- Overestimate the number of cases
 - Local protocols may guide the use of naloxone in cases (such as cardiac arrest or altered mental status)
 - Naloxone administration may be attempted for cases where the overdose substance is unknown (i.e. non-opioid)
- Underestimate the number of cases
 - Naloxone is given prior to EMS arrival by police or when public overdose kit is used and not reported in the EMS report
 - EMS does not suspect an overdose and the patient is treated by other means

National Opioid Overdose Deaths 1999-2017



Source: CDC WONDER
Online Database

Kaiser Health News

POLICY-ISH

Questioning A Doctor's Prescription For A Sore Knee: 90 Percocets

November 22, 2017 · 11:09 AM ET

MICHELLE ANDREWS

FROM **KHN**



Doctors often prescribe more opioid painkillers than necessary following surgery, for a variety of reasons.

Education Images/UIG via Getty Images

Washington Post

Americans use far more opioids than anyone else in the world



Hydrocodone bitartrate and acetaminophen pills, also known as Vicodin. United Nations data say the United States outpaces all other countries in opioid use. (Toby Talbot/AP)



By **Keith Humphreys**
March 15, 2017

UNC URGENT CARE
24/7
*Doctor visits.
Online.*

FEES WAIVED
through 9/13 for
storm relief.

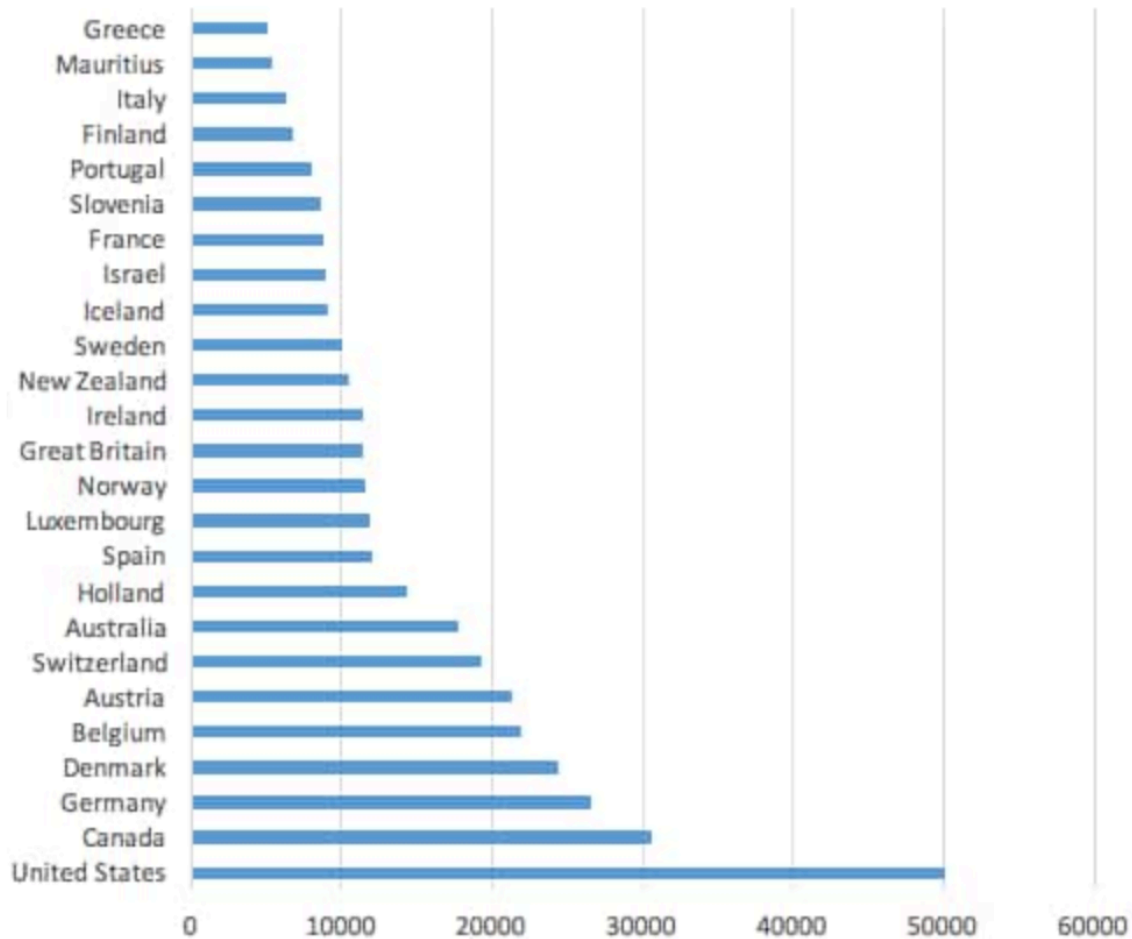
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LEARN MORE

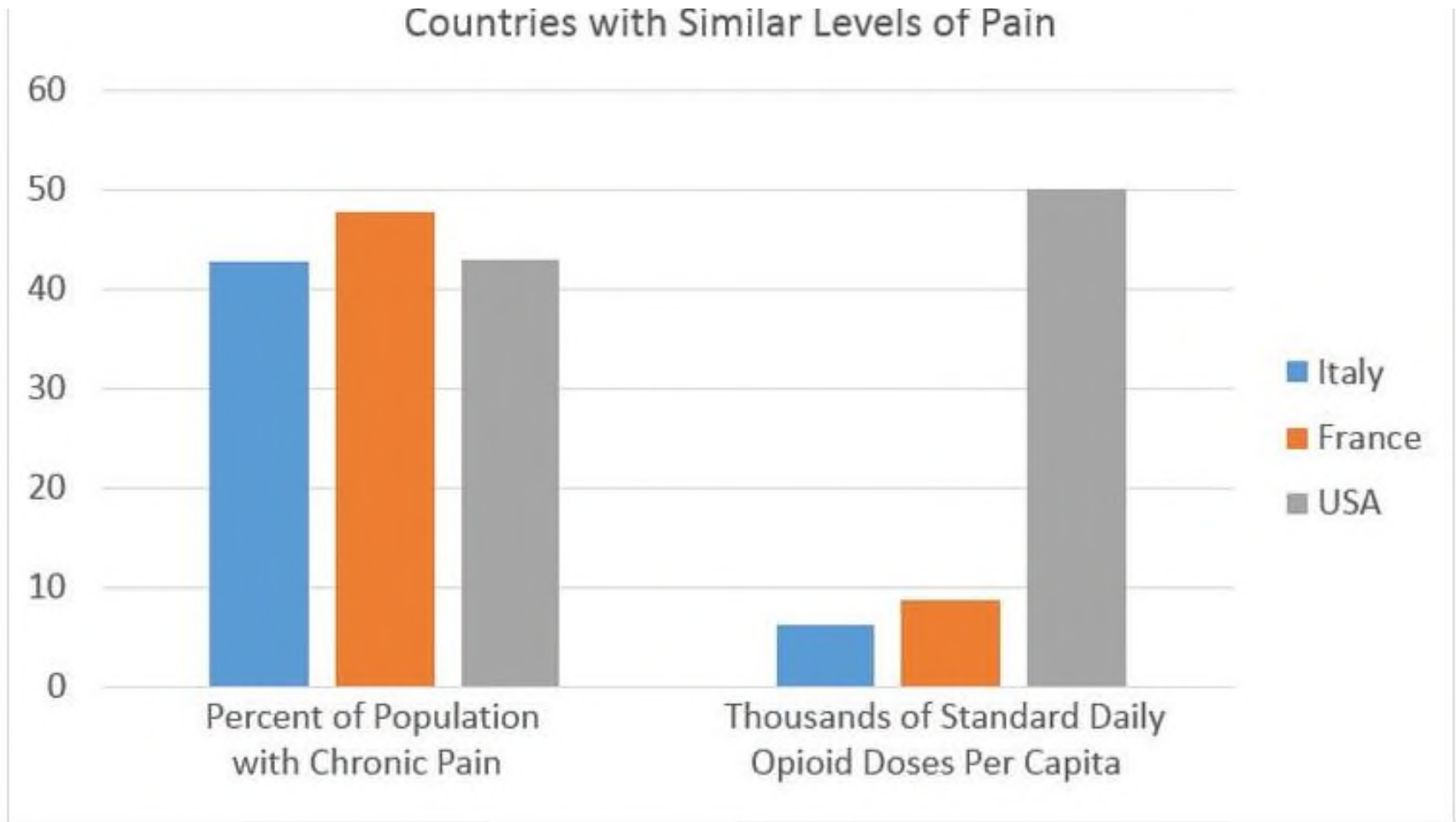
UNC
HEALTH CARE

Washington Post

Standard Daily Doses of Opioids per Million Inhabitants



Journal of pain and United Nations International Narcotics Control

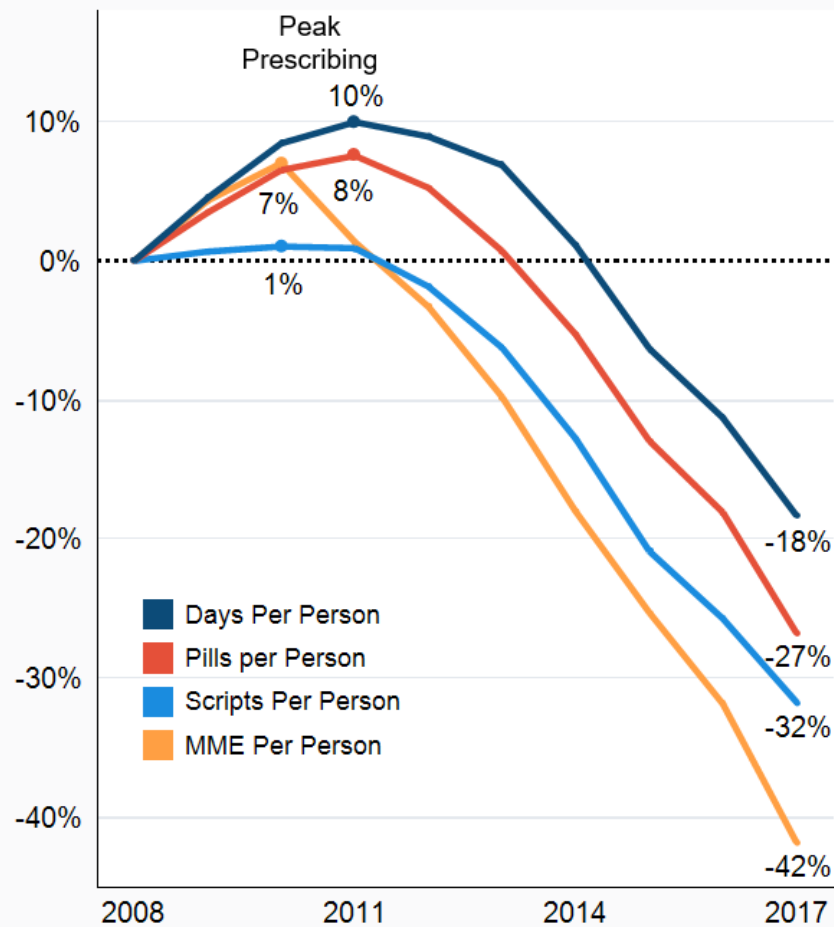


CDC Guideline for Prescribing Opioids for Chronic Pain — United States, 2016



Physician opioid prescription restrictions

Figure 1: National Percent Change in Prescription Opioid Use since 2008



Colorado PDMP



COLORADO
Department of
Regulatory Agencies

Prescription Drug Monitoring Program

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Helping reduce misuse,
abuse & diversion of
prescription drugs

PDMP LOGIN

DORA Opioid guidelines

r the Safe Pres ... nd Dispensing of Opioids.pdf
Overview of Recommendations

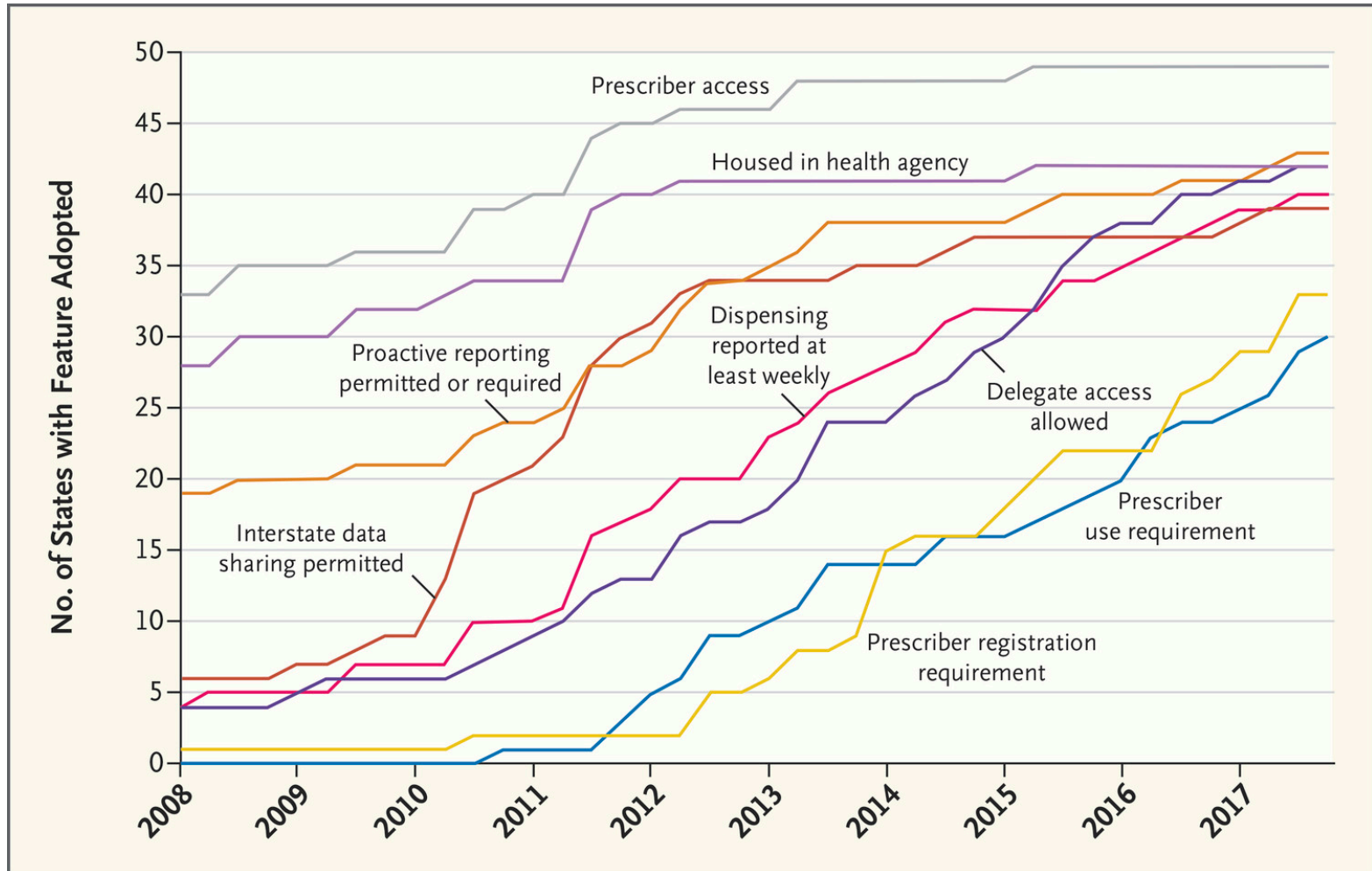
Open with ▾



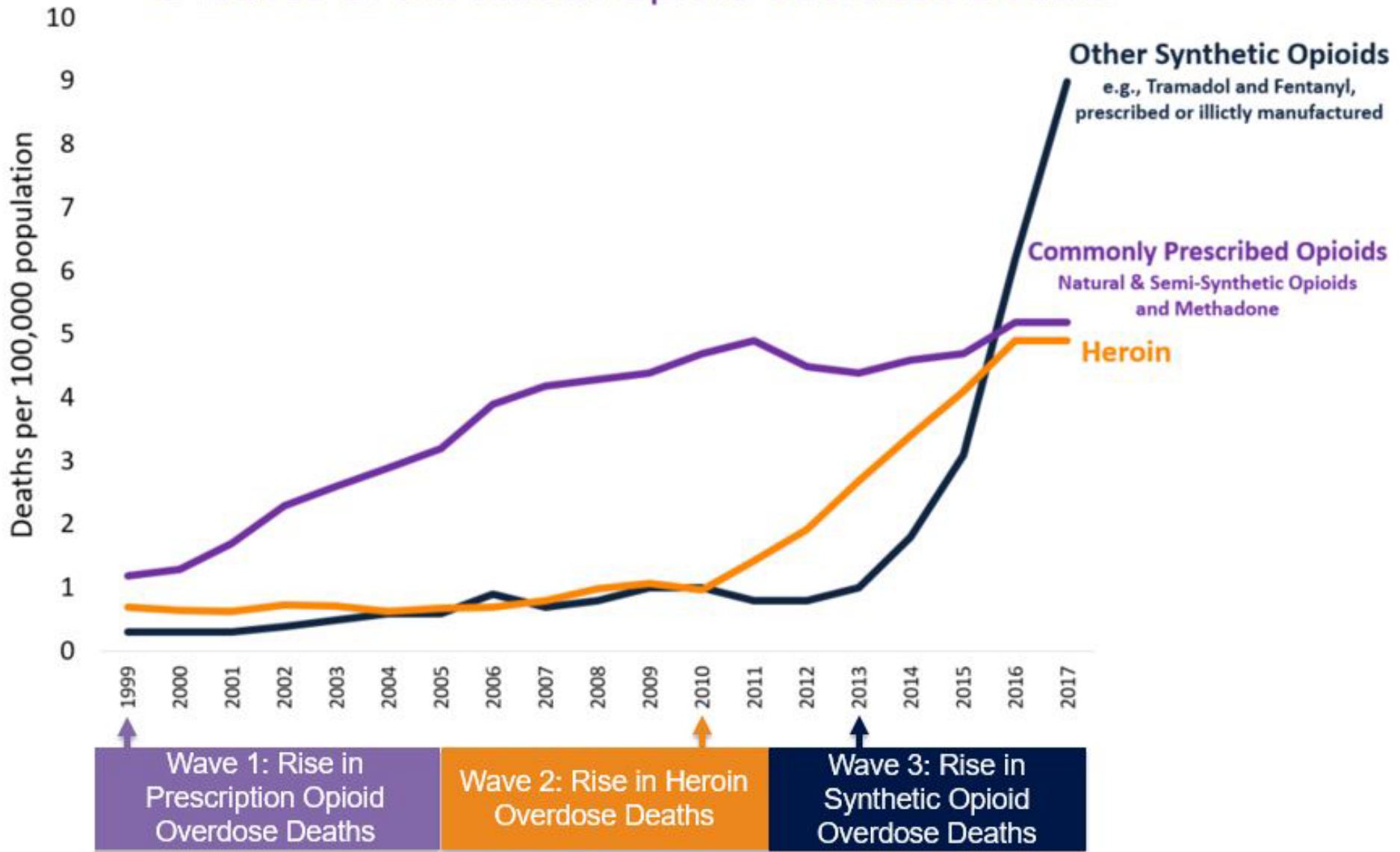
- ✚ Prior to Prescribing or Dispensing Opioids
 - ✓ Develop and Maintain Competence
 - ✓ Diagnose and Evaluate Patient
 - ✓ Consider Alternatives to Opioids
 - ✓ Collaborate with the Healthcare Team
 - ✓ Patient Education
 - ✓ Develop an Exit Strategy

- ✚ When Prescribing or Dispensing Opioids
 - ✓ Verify a patient-provider relationship
 - ✓ Prescribing Safeguards
 - **Dosage-** When prescribing a dosage **above 50 mme/day**, **STOP:** 1) Ensure the patient's condition warrants the higher dose; 2) Ensure the benefits of a higher dose outweigh the risks; and, 3) Ensure additional risk mitigation strategies are in place.
 - **Formulation-** When prescribing a **long-acting or extended relief formulation**, **STOP:** 1) Ensure the patient's condition warrants this formulation; 2) Ensure the benefits of this formulation outweigh the risks; 3) Consider concurrent medications that may potentiate the effects of the formulation; 4) Ensure the patient has been treated with immediate release opioids for at least one week prior to prescribing or dispensing this formulation; and, 5) Ensure additional risk mitigation strategies are in place.
 - **Duration-**
 - When treating acute, **non-traumatic or non-surgical pain**, **STOP:** 1) Ensure the amount of medication prescribed or dispensed does not exceed the expected duration of the pain, typically **3-7 days**, and **complies with Colorado law**. When prescribing opioids for subacute pain and the treatment of chronic, non-cancer pain **STOP:** 1) **Reassess pain and function within 30 days of initiating therapy** to ensure a clear benefit; and, 2) Ensure the benefits of continued opioid therapy outweigh the risks.
 - If the opioid treatment **exceeds 90 days for chronic, non-cancer pain**, **STOP:** 1) Ensure the patient continues to show clinical improvement with opioid therapy; 2) Ensure the benefits of continued opioid therapy outweighs the risk; and 3) Ensure additional risk mitigation strategies are in place.

States with Selected Prescription Drug Monitoring Program Features, 2008–2017.



3 Waves of the Rise in Opioid Overdose Deaths



SOURCE: National Vital Statistics System Mortality File.

Opioid Overdose: Source of Substance

June 1, 2018 to June 30, 2019:

9,560 Opioid

3%

Prescription for Patient

1%

Prescription for Another Person

2%

Legal, Non-Prescribed

94%

Illicit

Opioid harm reduction programs

Preventing Opioid Overdoses and Related Harms

