

Understanding the Opioid Epidemic



Ingham County
Health Department

Linda S. Vail, Health Officer

THE OPIOID EPIDEMIC BY THE NUMBERS

2016 and 2017 Data



130+

People died every day
from opioid-related drug
overdoses³ (estimated)



11.4 m

People misused
prescription opioids¹



42,249

People died from
overdosing on opioids²



2 million

People misused prescription
opioids for the first time¹



2.1 million

People had an opioid use
disorder¹



17,087

Deaths attributed to
overdosing on commonly
prescribed opioids²



886,000

People used heroin¹



19,413

Deaths attributed to
overdosing on synthetic
opioids other than methadone²



81,000

People used heroin
for the first time¹



15,469

Deaths attributed to
overdosing on heroin²

SOURCES

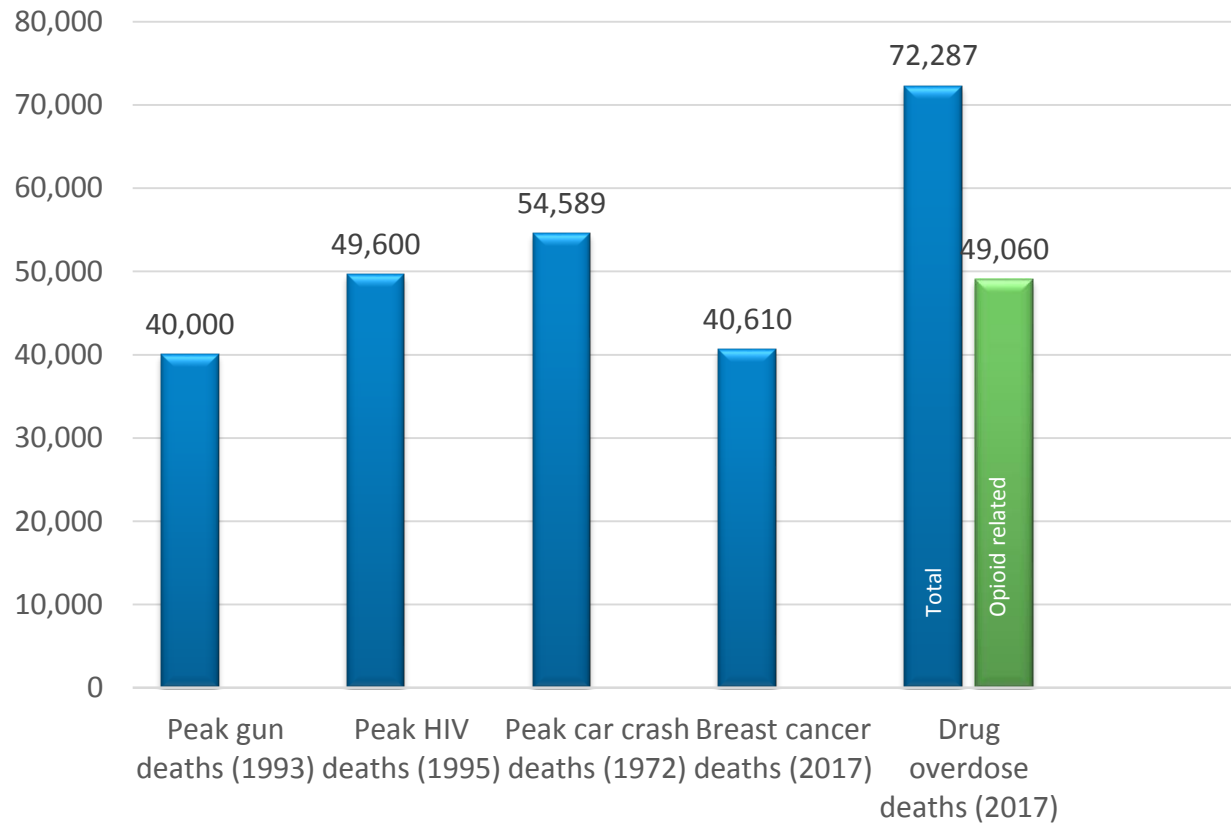
1. 2017 National Survey on Drug Use and Health, Mortality in the United States, 2016
2. NCHS Data Brief No. 293, December 2017
3. NCHS, National Vital Statistics System. Estimates for 2017 and 2018 are based on provisional data.

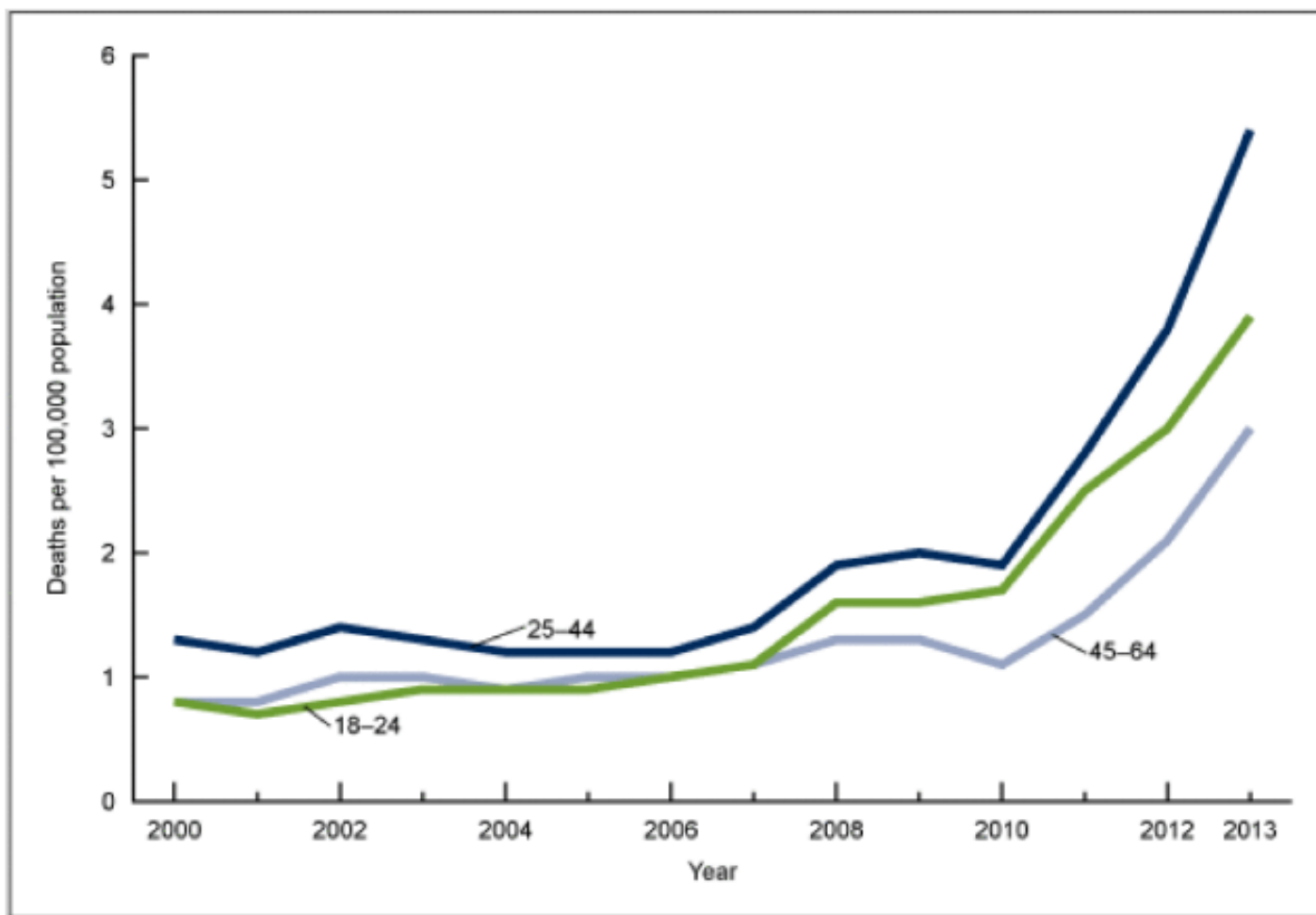
Updated September 2018. For more information, visit: <http://www.hhs.gov/opioids/>

 [HHS.GOV/OPIOIDS](http://www.hhs.gov/opioids/)



Perspective

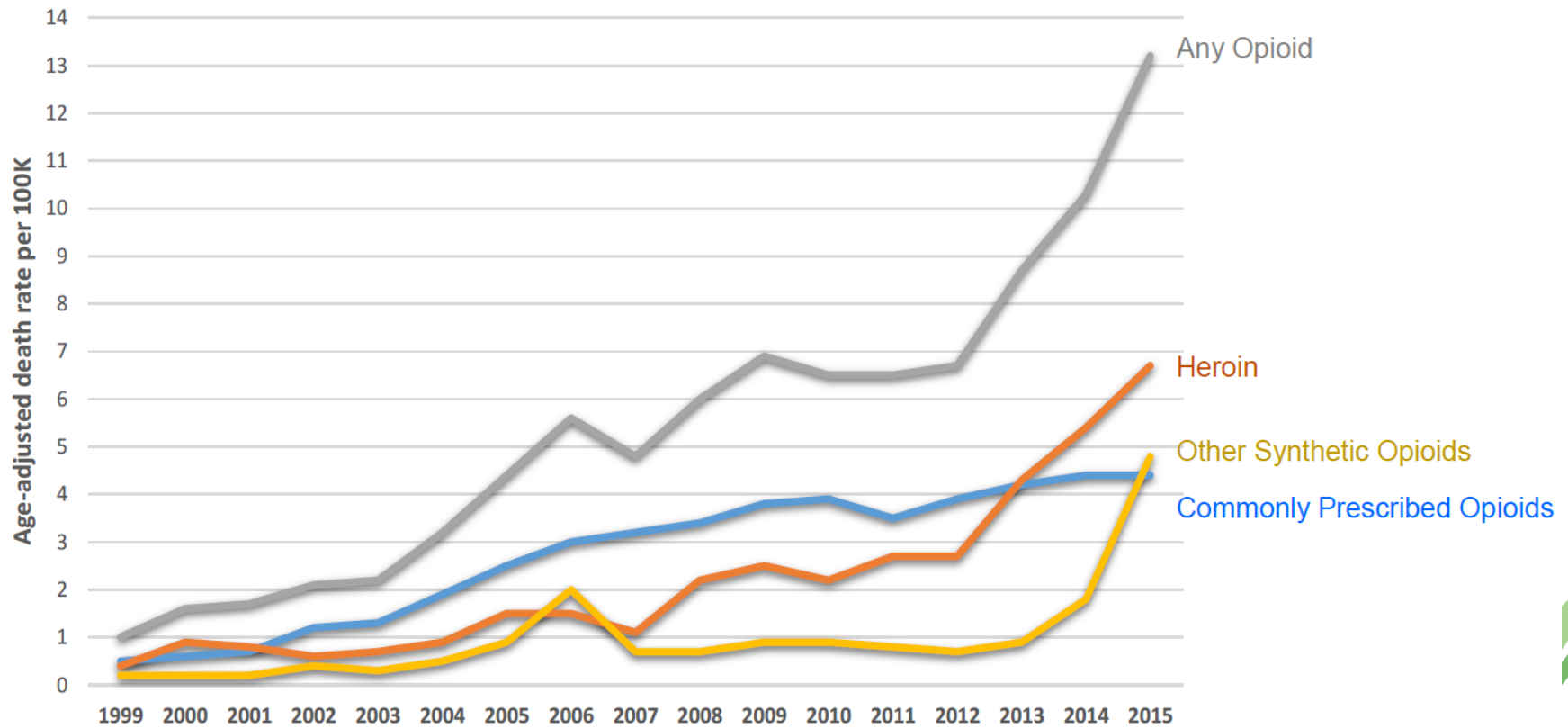




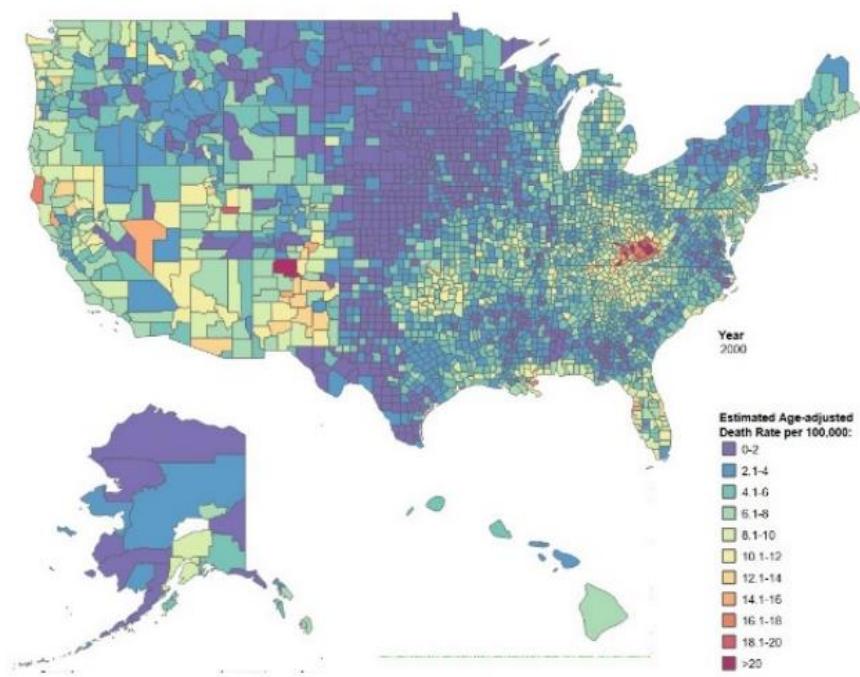
Rates for drug-poisoning deaths involving heroin, by selected age groups: United States, 2000–2013
COURTESY CDC



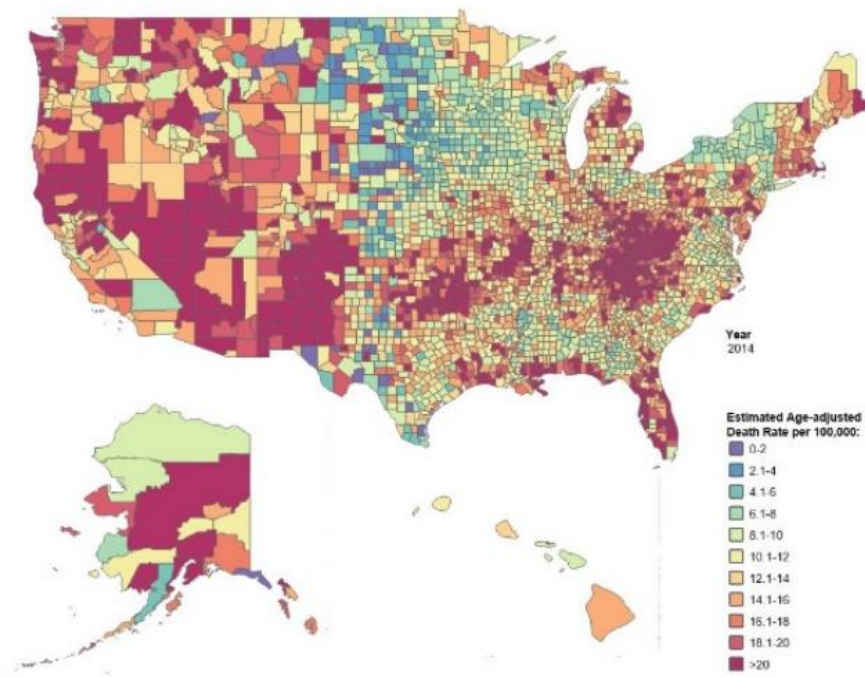
Overdose Deaths Involving Opioids, MI 1999-2015



Comparison of U.S. Drug Overdose Death Rates, 2000 vs. 2014



Designed by L. Rossen, B. Bastian & Y. Chong. SOURCE: CDC/NCHS, National Vital Statistics System.



Designed by L. Rossen, B. Bastian & Y. Chong. SOURCE: CDC/NCHS, National Vital Statistics System.

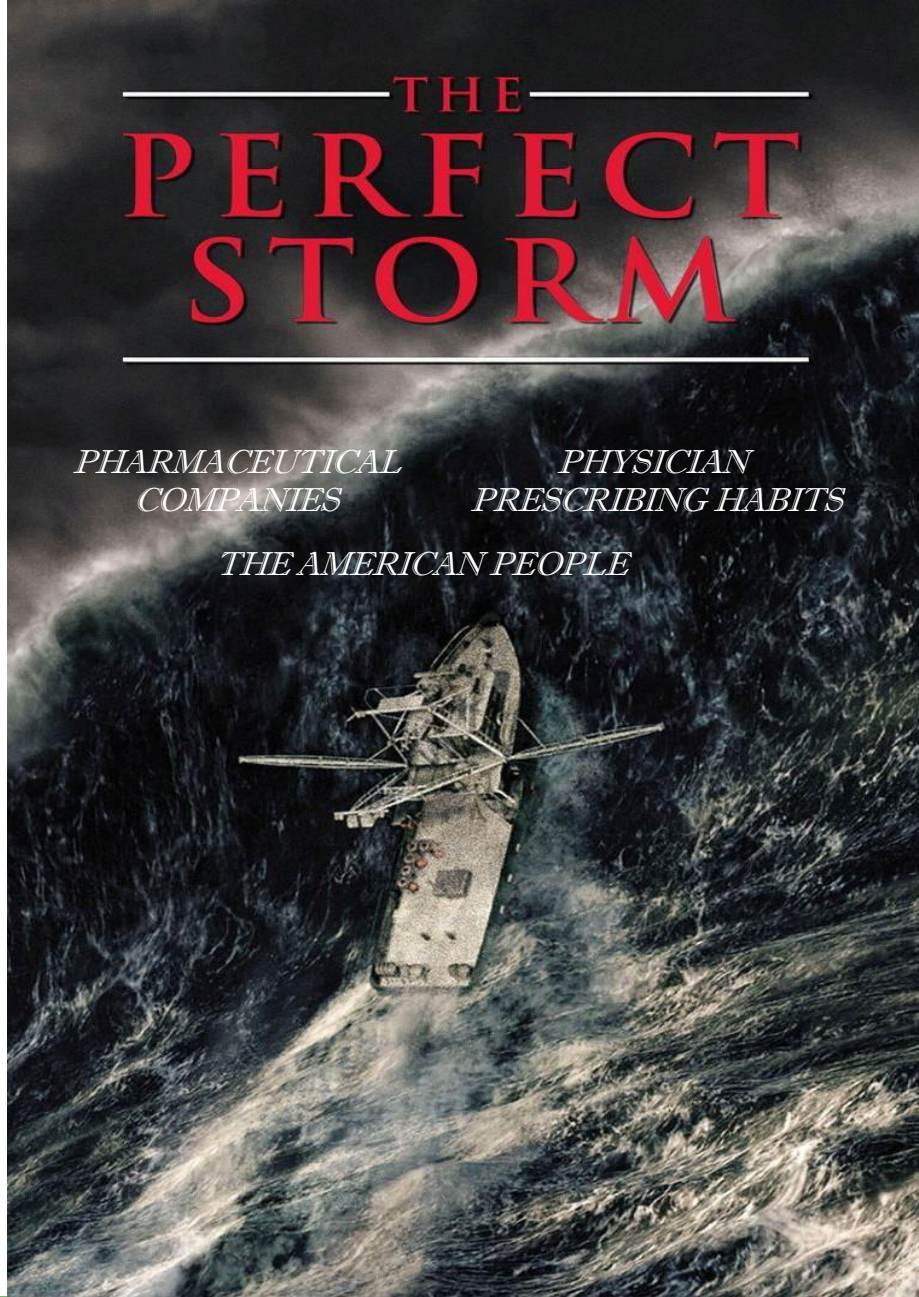


THE PERFECT STORM

*PHARMACEUTICAL
COMPANIES*

*PHYSICIAN
PRESCRIBING HABITS*

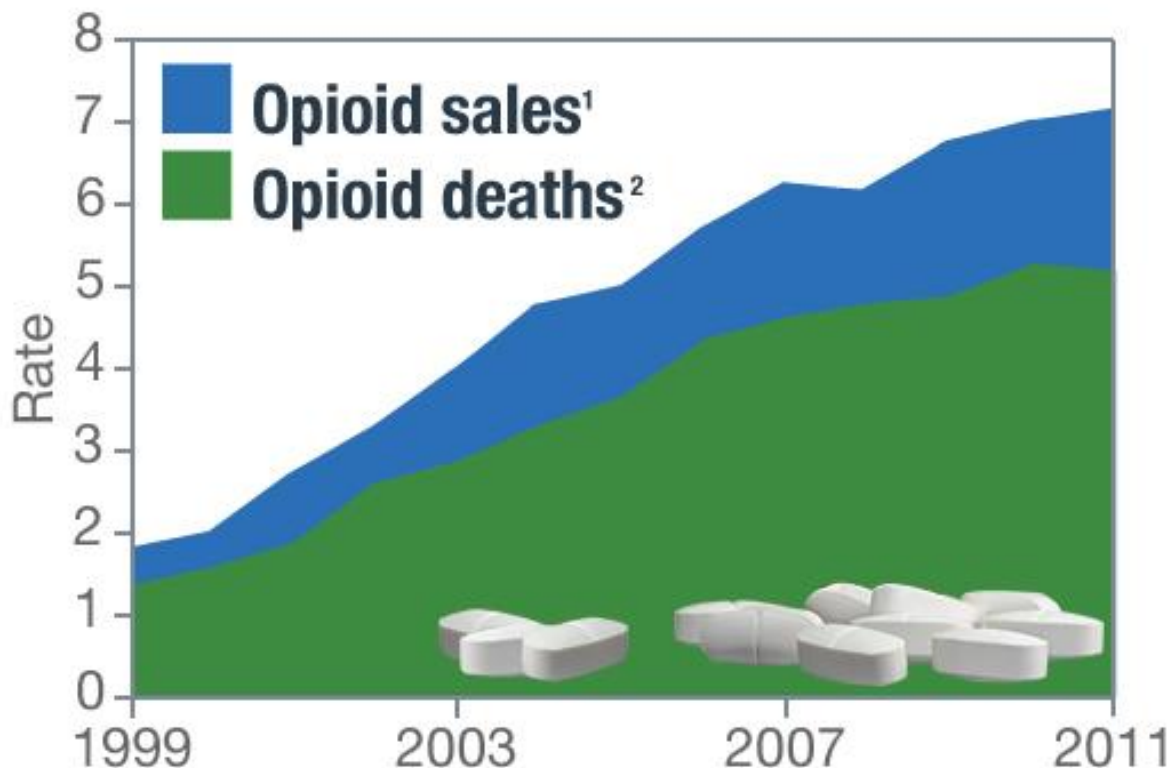
THE AMERICAN PEOPLE



Between 1999 and 2010, sales of these “opioid analgesics”—medications like Vicodin, Percocet, and OxyContin—quadrupled.



Rates of Opioid Sales and Overdose Deaths United States, 1999-2011



1. In kilograms per 10,000 people. 2. Per 100,000 people.

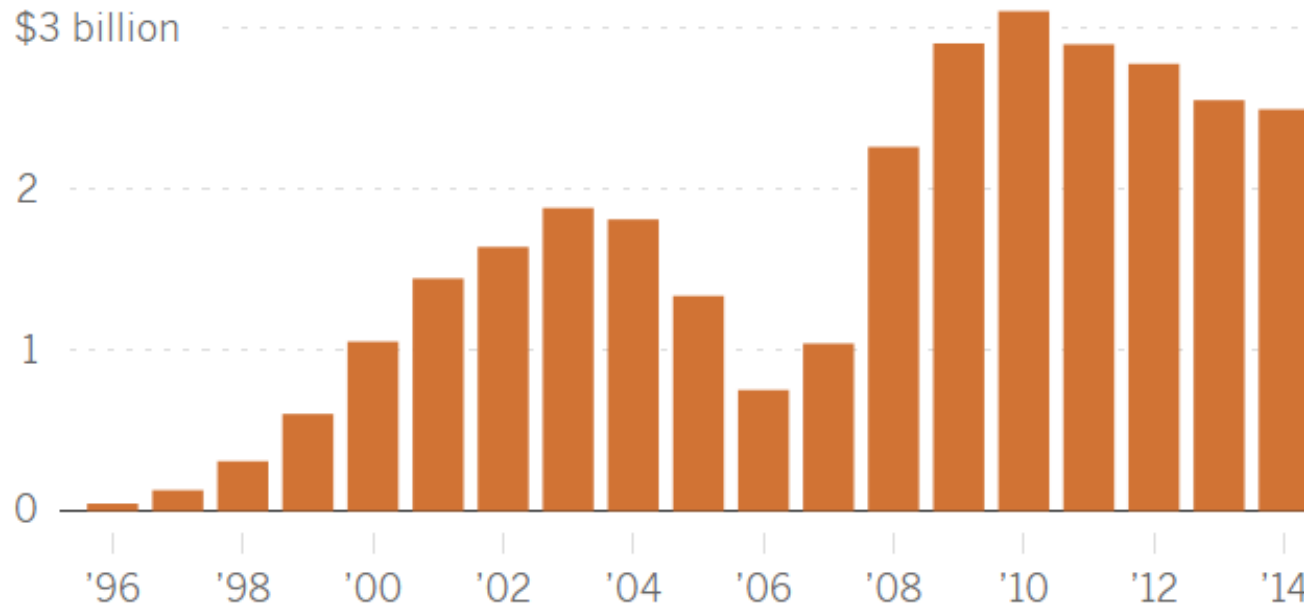
Source: Centers for Disease Control and Prevention.



PURDUE



OxyContin Sales, 1996-2014



Source: IMS National Sales Perspectives

@latimesgraphics



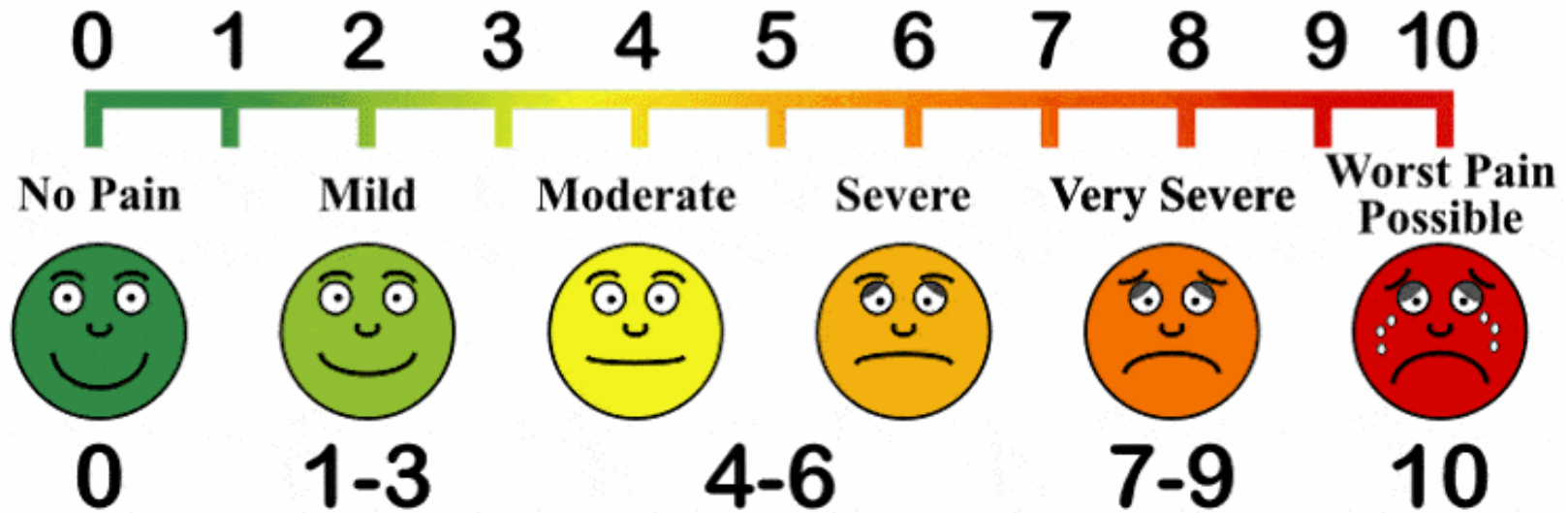
In 2007, Purdue Pharma and three of its top executives pleaded guilty to criminal charges that they had misled the F.D.A., clinicians, and patients about the risks of OxyContin addiction and abuse by aggressively marketing the drug to providers and patients as a safe alternative to short-acting narcotics. (Doctors had been taught that because OxyContin was time-released, it wouldn't cause a high that would lead to addiction.)



PHYSICIAN PRESCRIBING HABITS



Pain: The 5th Vital Sign





Our Patient Satisfaction Scores

HCAHPS Summary Report Jan 2012 - Dec 2012

	GRMC	PTDH	USA	NM
Doctors always communicated well	79	81	81	78
Nurses always communicated well	78	79	78	75
Patients always received help as soon as they wanted	66	66	67	66
Pain was always well controlled	69	72	71	69
Staff always explained about medications before giving them to patients	64	64	64	62
Room was always clean	73	75	73	70
Always quiet at night	52	60	60	59
Yes, staff did give patients information about what to do during their recovery at home	82	86	85	82
Patients who gave a rating of 9 or 10 out of 10	67	76	70	64
Yes, patients would definitely recommend the hospital	69	79	71	62

GRMC
Gila Regional
Medical Center

PTDH
Planetree Designated
Hospitals

USA
National Average

NM
New Mexico
Average



THE AMERICAN PEOPLE & THE AMERICAN WAY



CDC Clinical Reminders for Prescribing Opioids for Chronic Pain

Determining When to Initiate or Continue Opioids for Chronic Pain



- Opioids are not first-line or routine therapy for chronic pain
- Establish and measure goals for pain and function
- Discuss benefits and risks and availability of nonopioid therapies with patient

Opioid Selection, Dosage, Duration, Follow-Up, and Discontinuation



- Use immediate-release opioids when starting
- Start low and go slow
- When opioids are needed for acute pain, prescribe no more than needed
- Do not prescribe extended-release/long-acting opioids for acute pain
- Follow-up and re-evaluate risk of harm; reduce dose or taper and discontinue if needed

Assessing Risk and Addressing Harms of Opioid Use

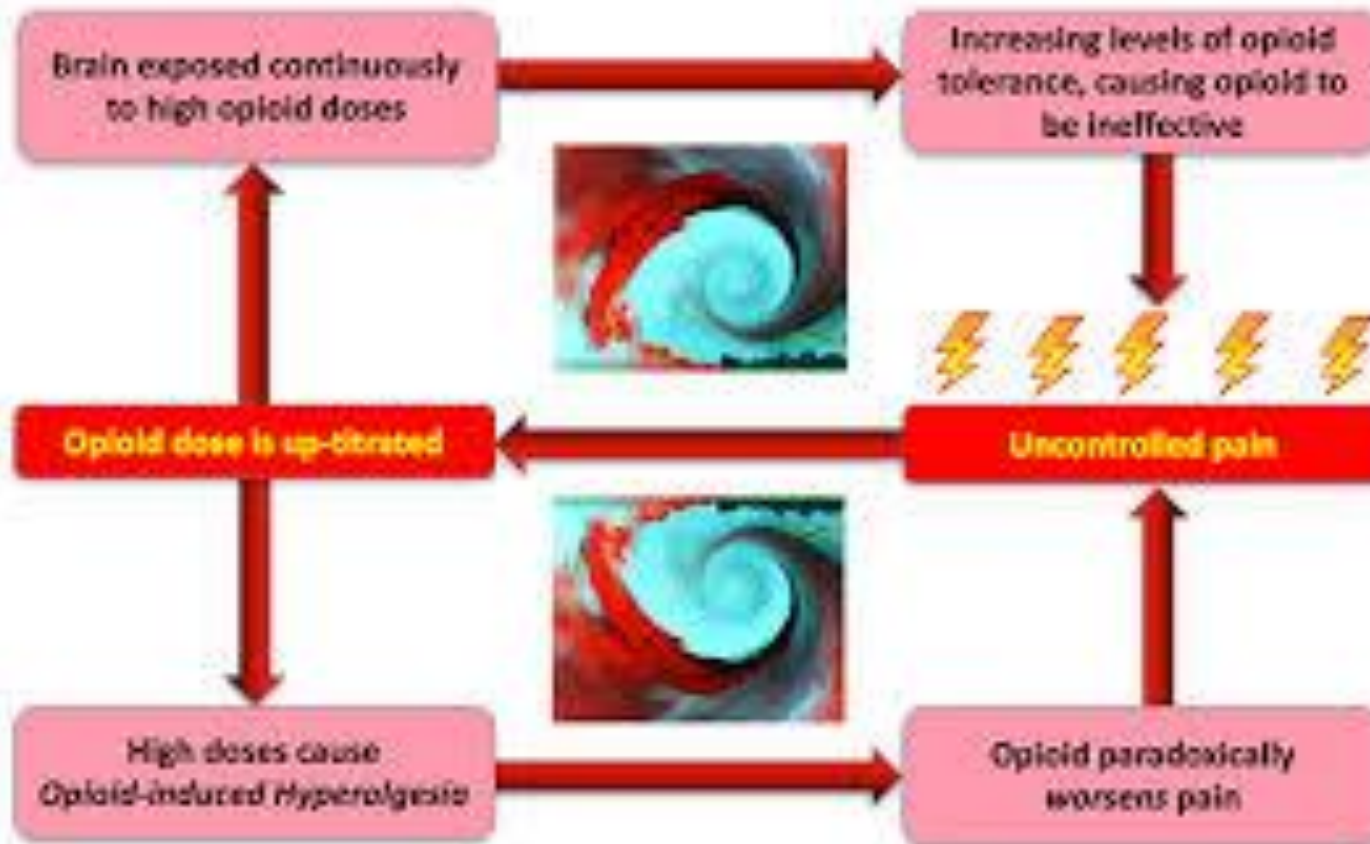


- Evaluate risk factors for opioid-related harms
- Check prescription drug monitoring program (PDMP) for high dosages and prescriptions from other providers
- Use urine drug testing to identify prescribed substances and undisclosed use
- Avoid concurrent benzodiazepine and opioid prescribing
- Arrange treatment for opioid use disorder if needed

Source: "Guideline for Prescribing Opioids for Chronic Pain," Centers for Disease Control and Prevention
NEJM Catalyst (catalyst.nejm.org) © Massachusetts Medical Society



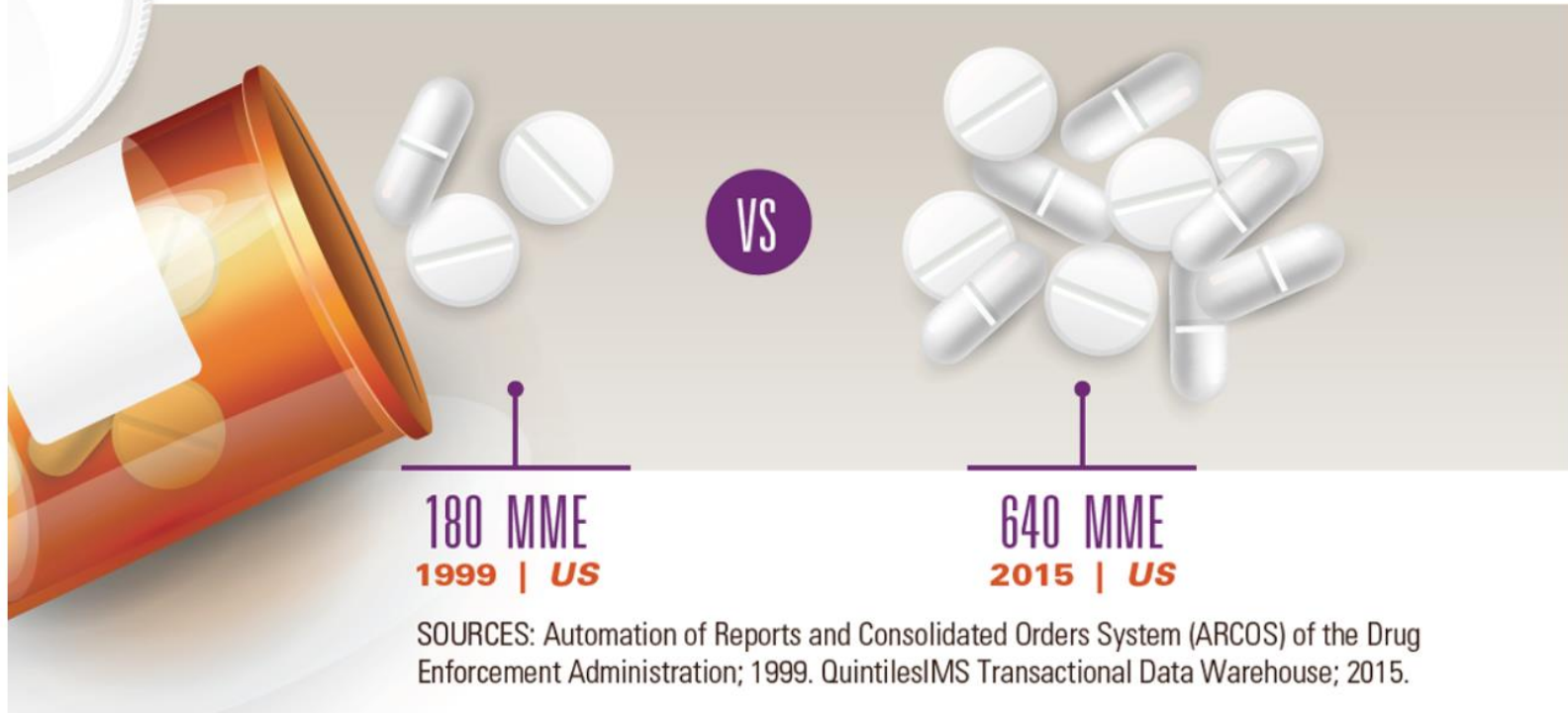
Opioid Infusion Vortex of Misery

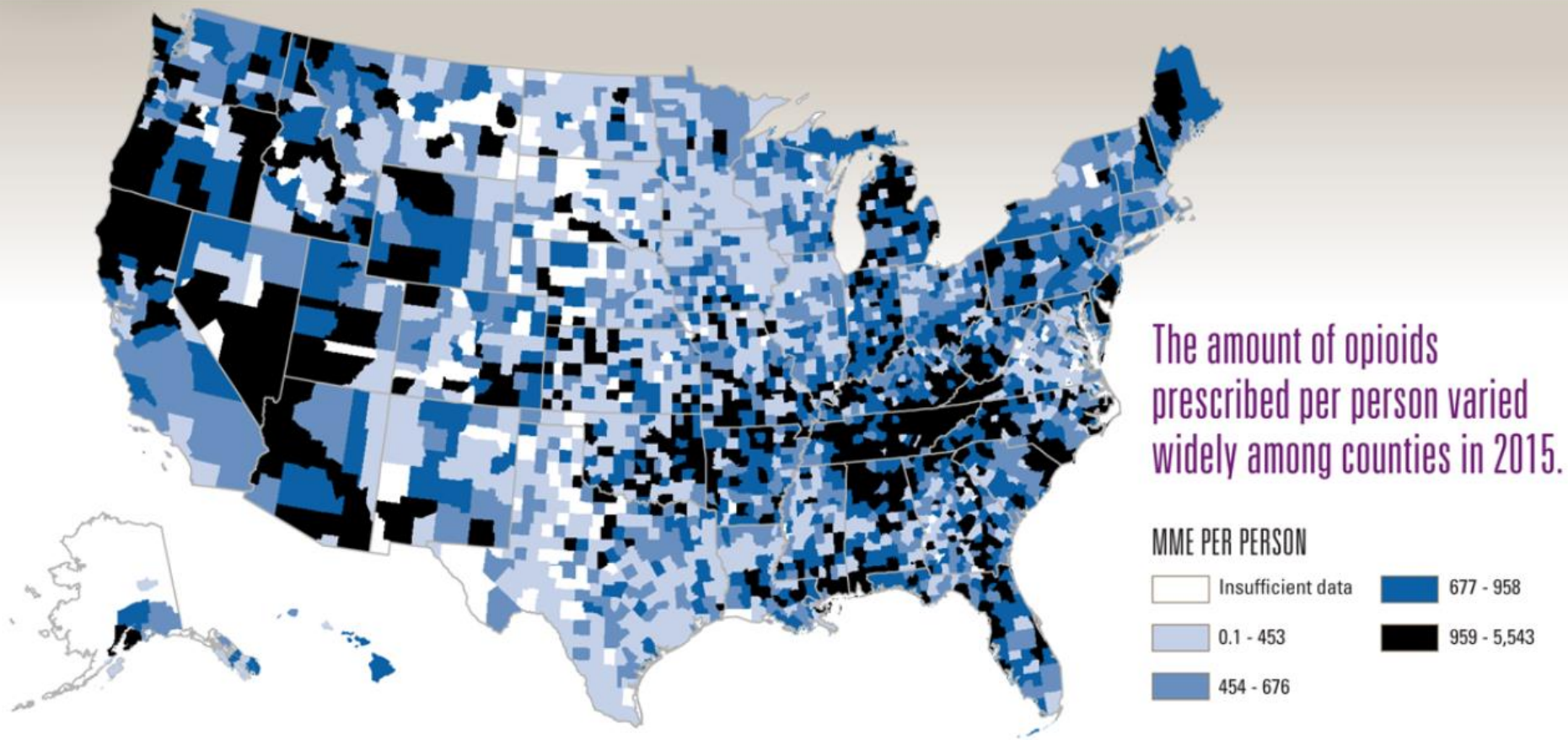


By 2010, the United States, with about 5% of the world's population, was consuming 99% of the world's hydrocodone (the narcotic in Vicodin), along with 80% of the oxycodone (in Percocet and OxyContin), and 65% of the hydromorphone (in Dilaudid).



The amount of opioids prescribed per person was three times higher in 2015 than in 1999.

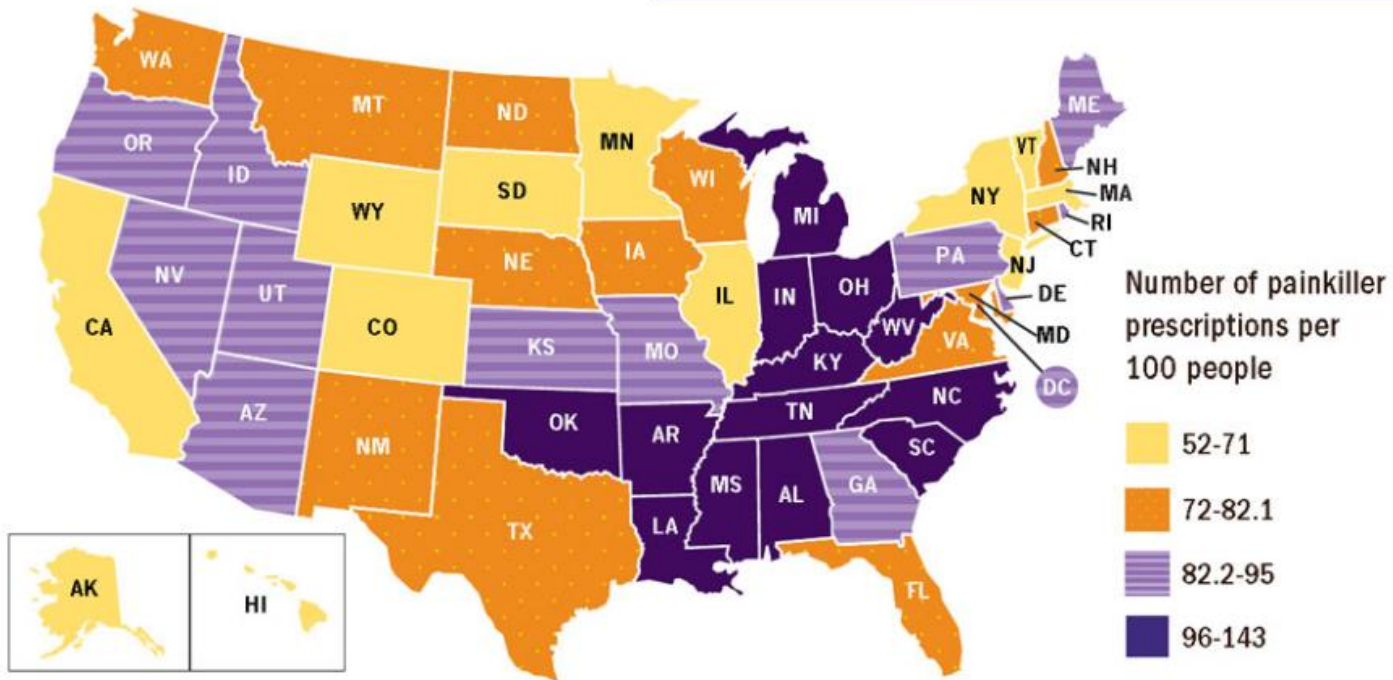




The amount of opioids prescribed per person varied widely among counties in 2015.

MME per person

Some states have more painkiller prescriptions per person than others.



SOURCE: IMS, National Prescription Audit (NPA™), 2012.



"We know of no other medication routinely used for a nonfatal condition that kills patients so frequently."

~ Dr. Thomas Frieden, CDC



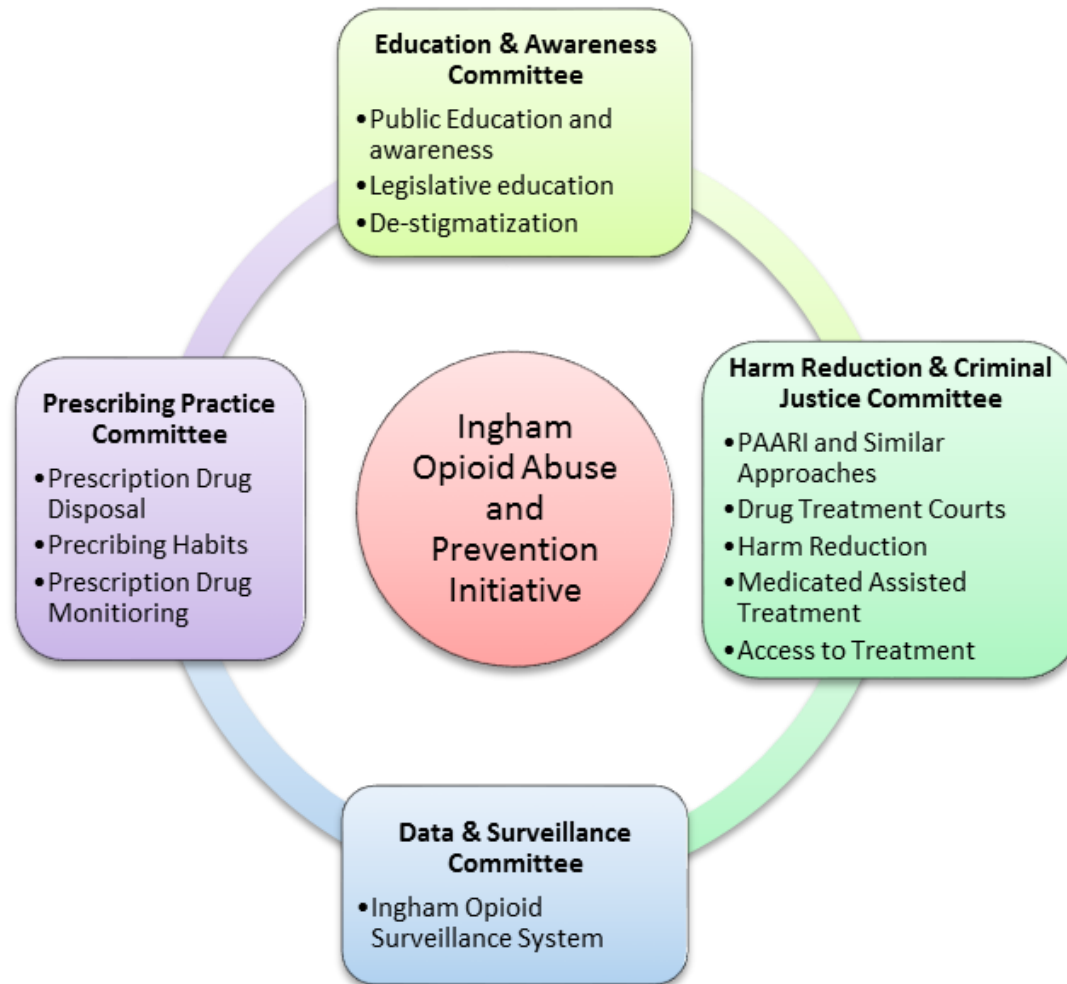


Impact Areas

- Prescribing Habits (Pain Management Practice Guidelines)
- Prescription Drug Monitoring (MAPS)
- Prescription Drug Disposal (Take Back Meds)
- Access to Treatment
- Medication Assisted Treatment
- Harm Reduction
- PAARI and Other approaches
- Drug Treatment Courts
- Education and Awareness
- De-stigmatize (a chronic brain disease)



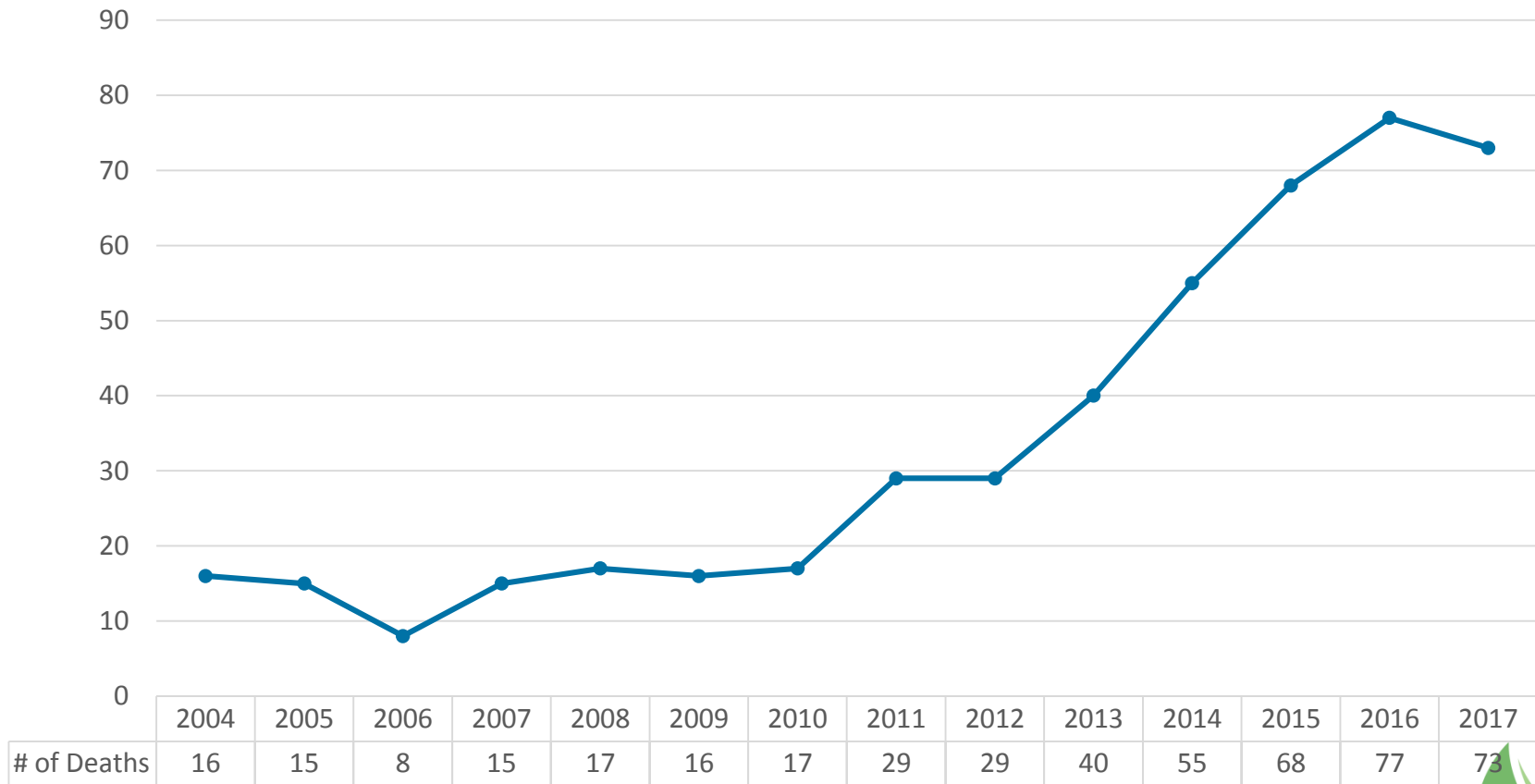
Ingham Opioid Abuse Prevention Initiative Structure



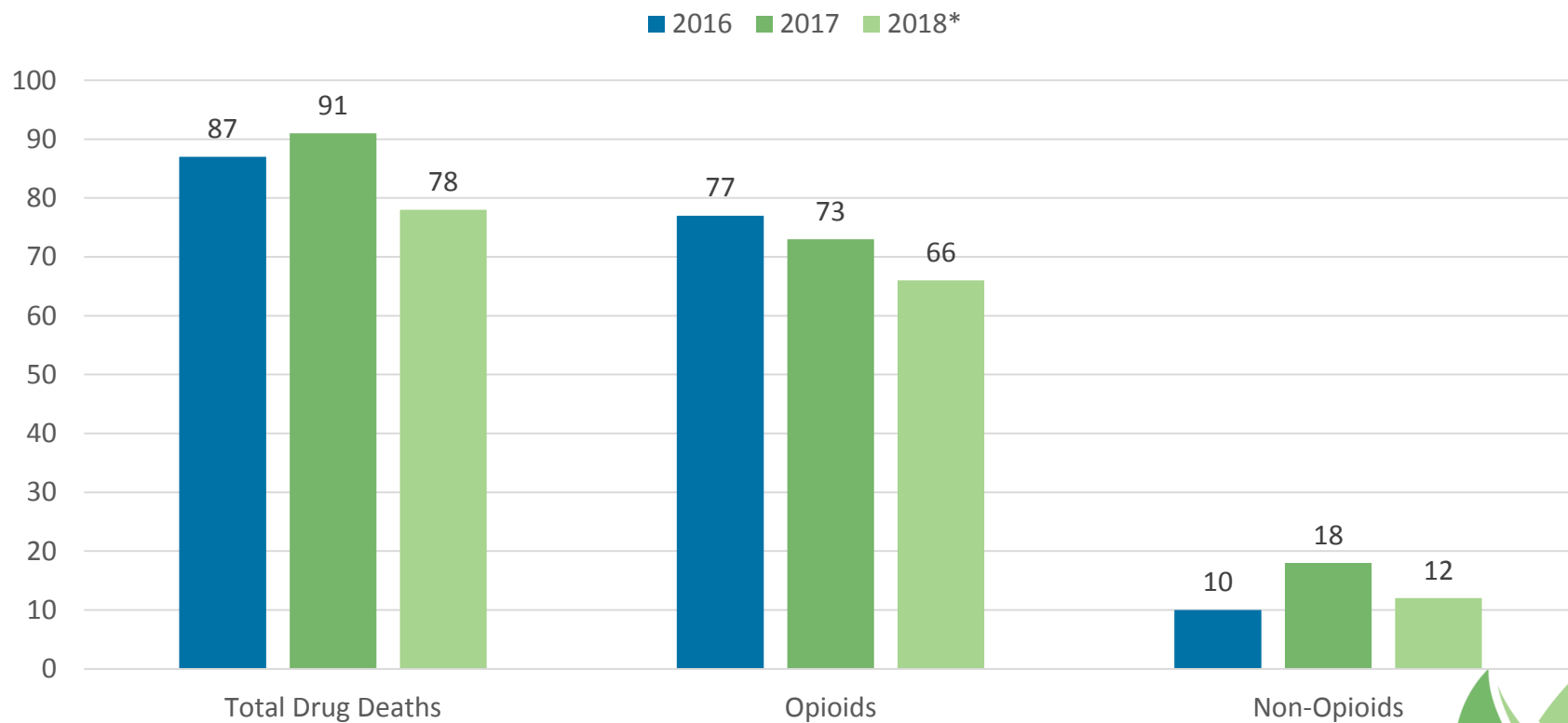
LOCALIZING THE DATA



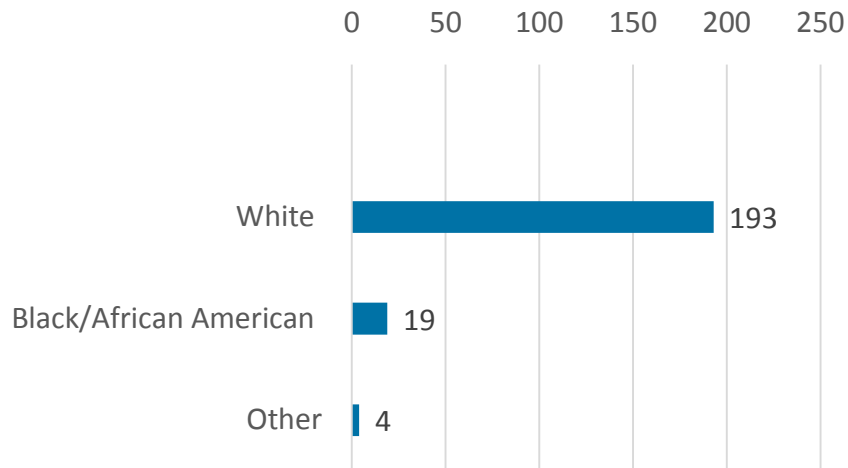
Number of Opioid-related Deaths Ingham County, 2004-2017



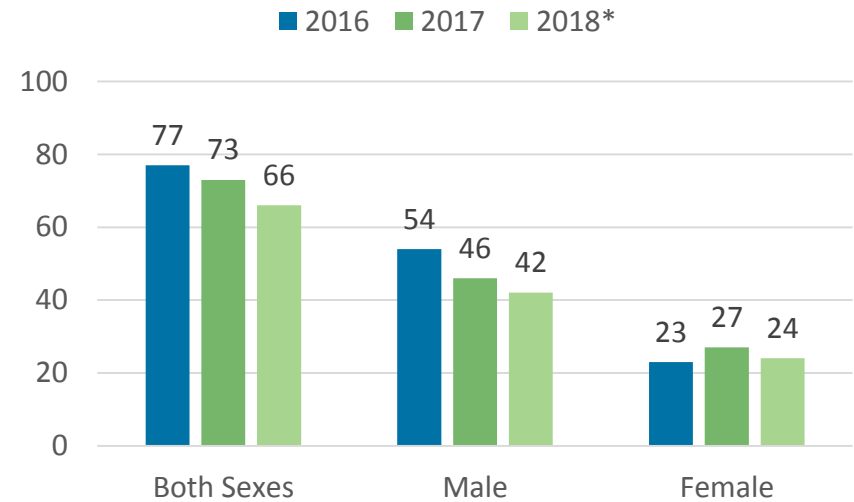
Drug-related Deaths among Residents in Ingham County 2016 - 2018*



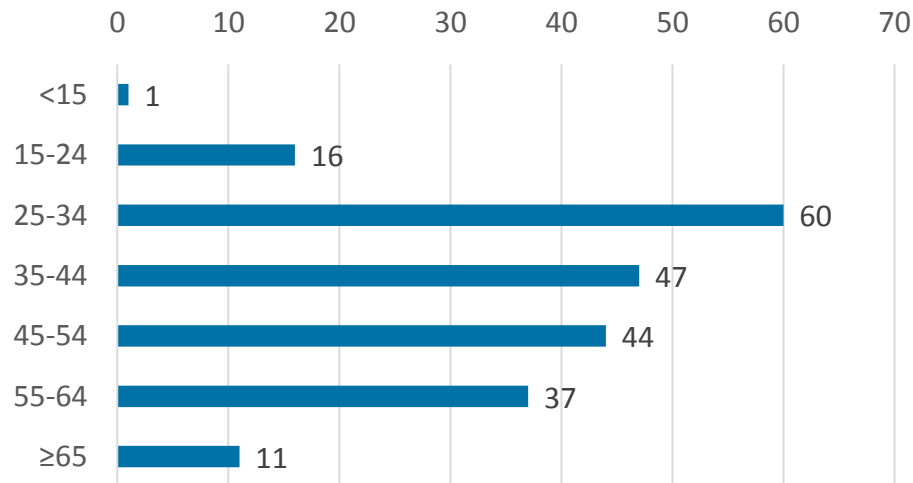
Opioid-related Deaths By Race Ingham County 2016-2018*, n=216



Opioid-related Deaths by Sex Ingham County 2016-2018*



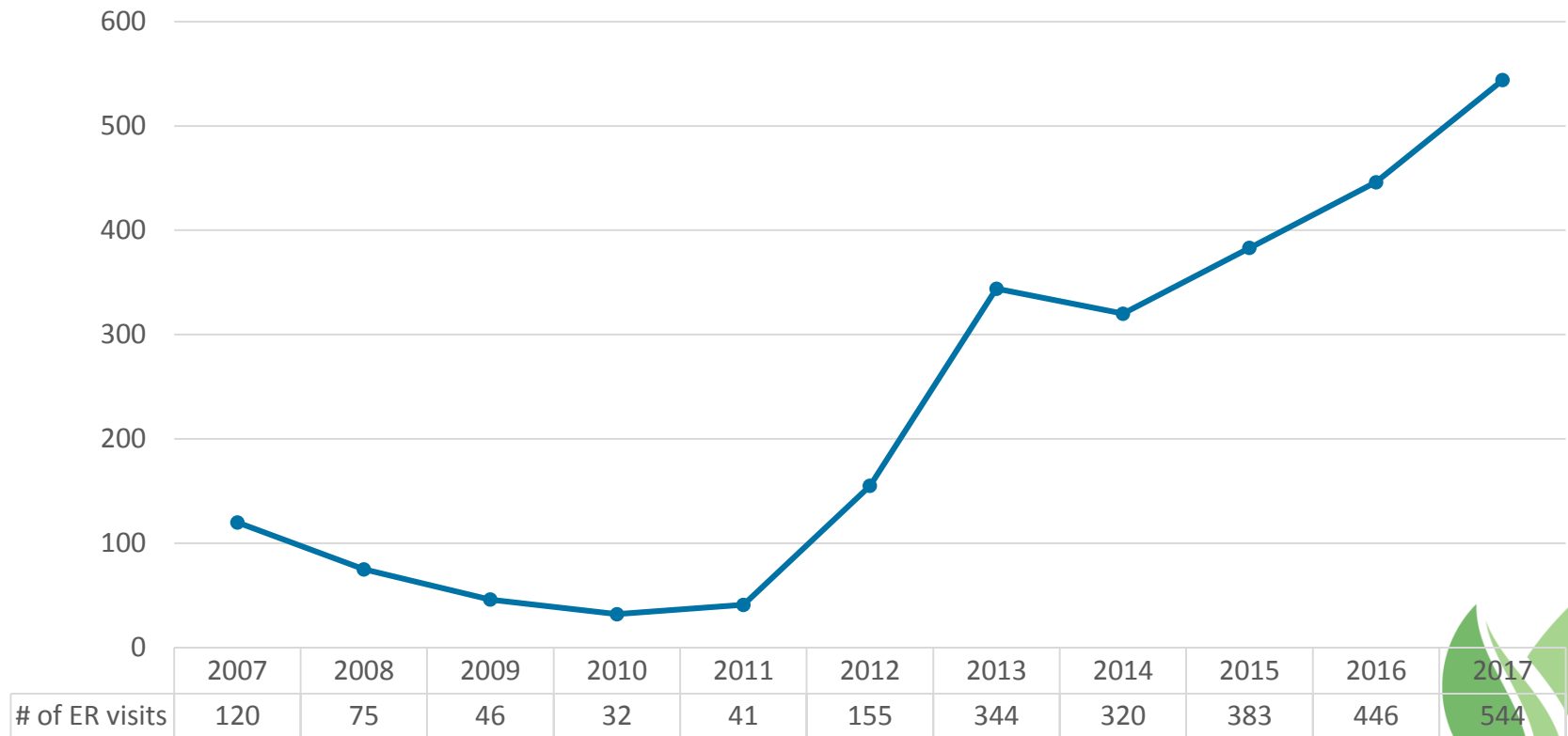
Opioid-related Deaths By Age-groups Ingham County 2016-2018*, n=216



Source: Ingham County Medical Examiner Records 2018

*Data is current as of 11/30/2018

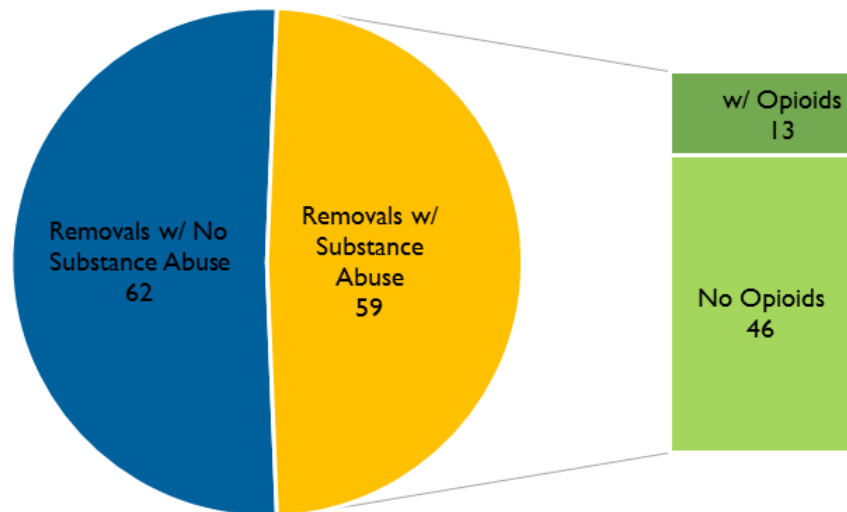
Number of Overdose-related Emergency Room Visits Ingham County, 2007-2017



Source: Michigan Syndromic Surveillance System

*Numbers are based on emergency department visit (chief complaints) and before any confirmed diagnosis are made.

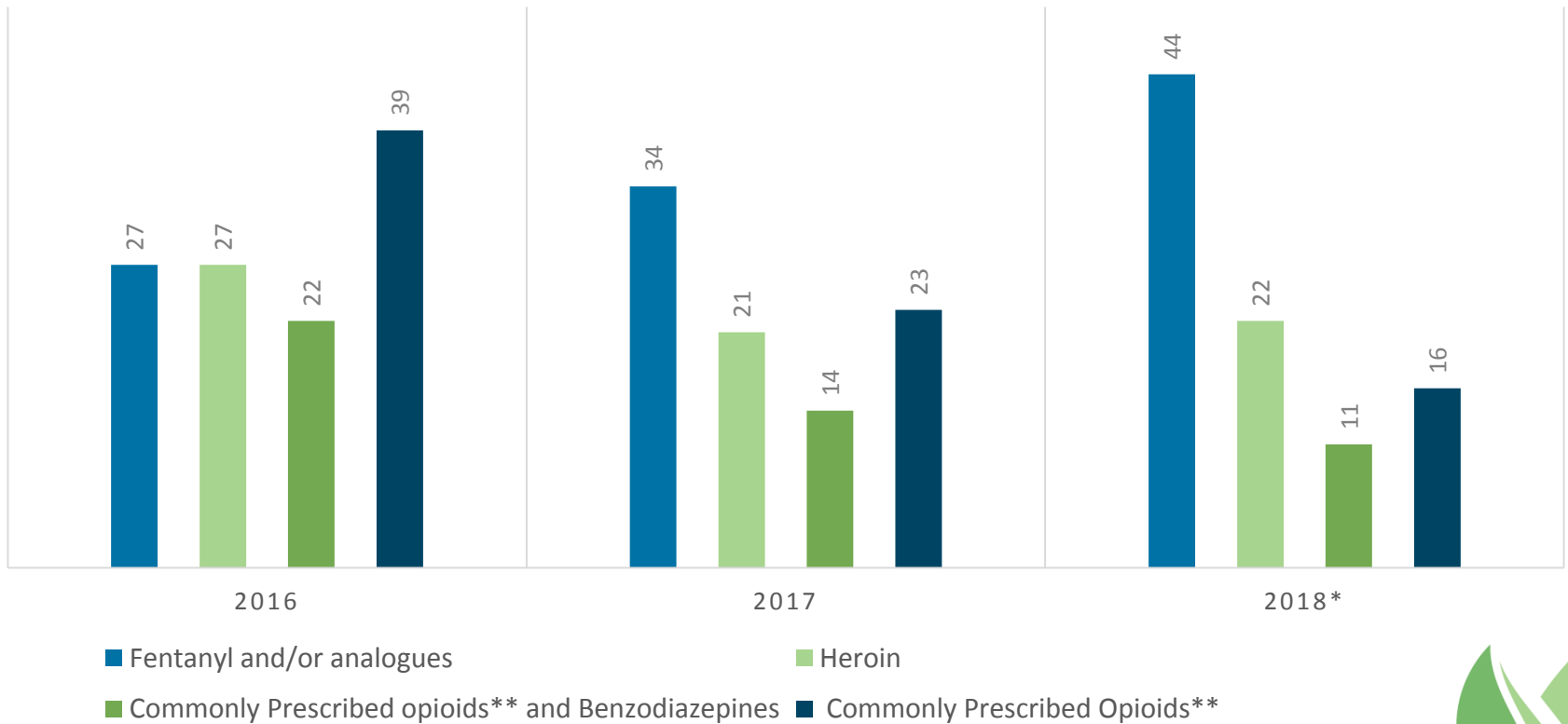
Number of Removals by Substance Abuse, Ingham County 2018*



Total DHHS Removals = 121



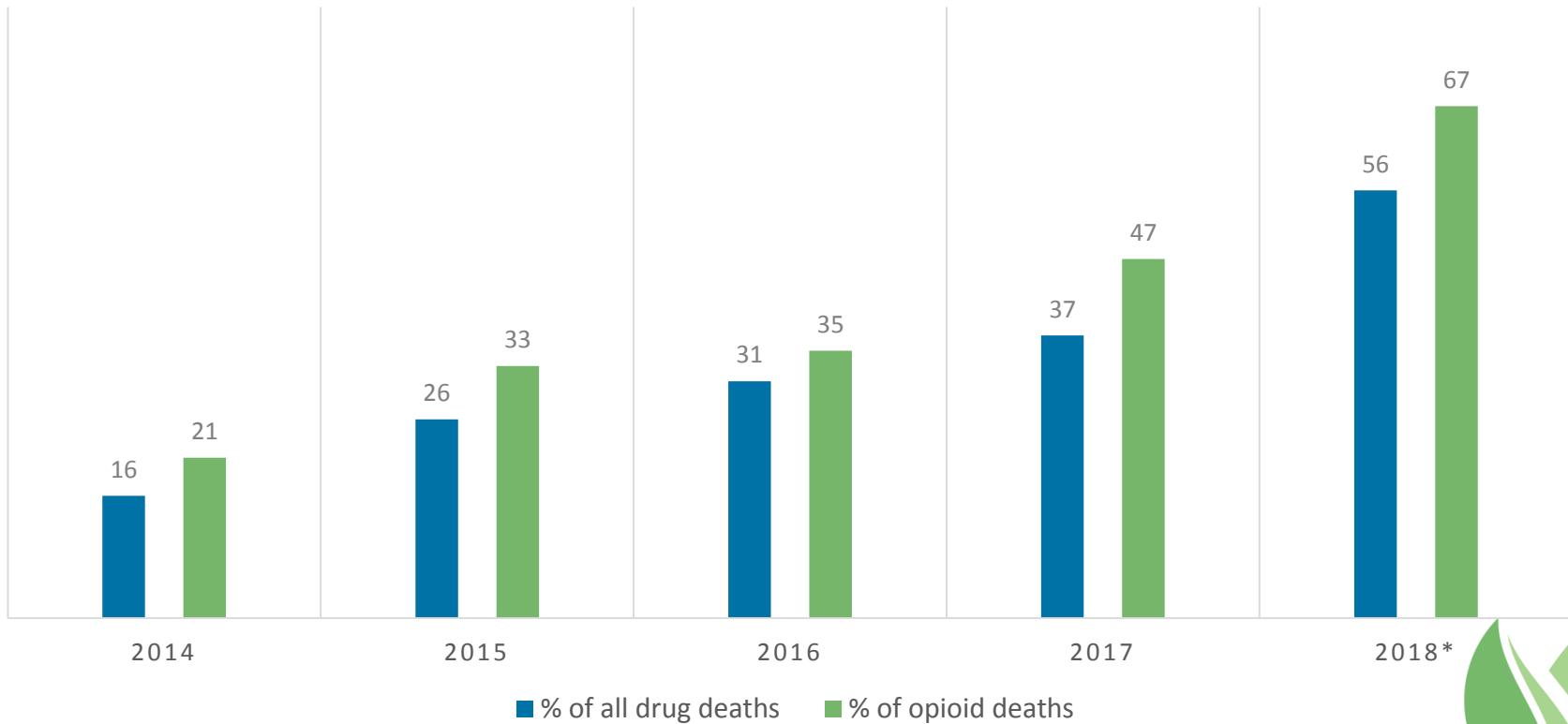
Opioid-related Deaths By Selected Type Of Opioid among Ingham County Residents, 2016-2018*



Source: Ingham County Medical Examiner Records 2018

*Data is current as of 11/30/2018

Fentanyl and/or Analog(s)-related Deaths Among Ingham County Residents, 2016-2018*



Source: Ingham County Medical Examiner Records 2018

*Data is current as of 9/9/2018

Comparative Strengths of Opioid Painkillers

Hydrocodone	1
Morphine	1
Oxycodone	1.5
Morphine IV	3
Methadone	3-4
Heroin	4-5
Hydromorphone	5
Oxymorphone	7
Levorphanol	8
Buprenorphine	40
Fentanyl	50-100
Carfentanil	10,000-100,000

<https://en.wikipedia.org/wiki/Equianalgesic>



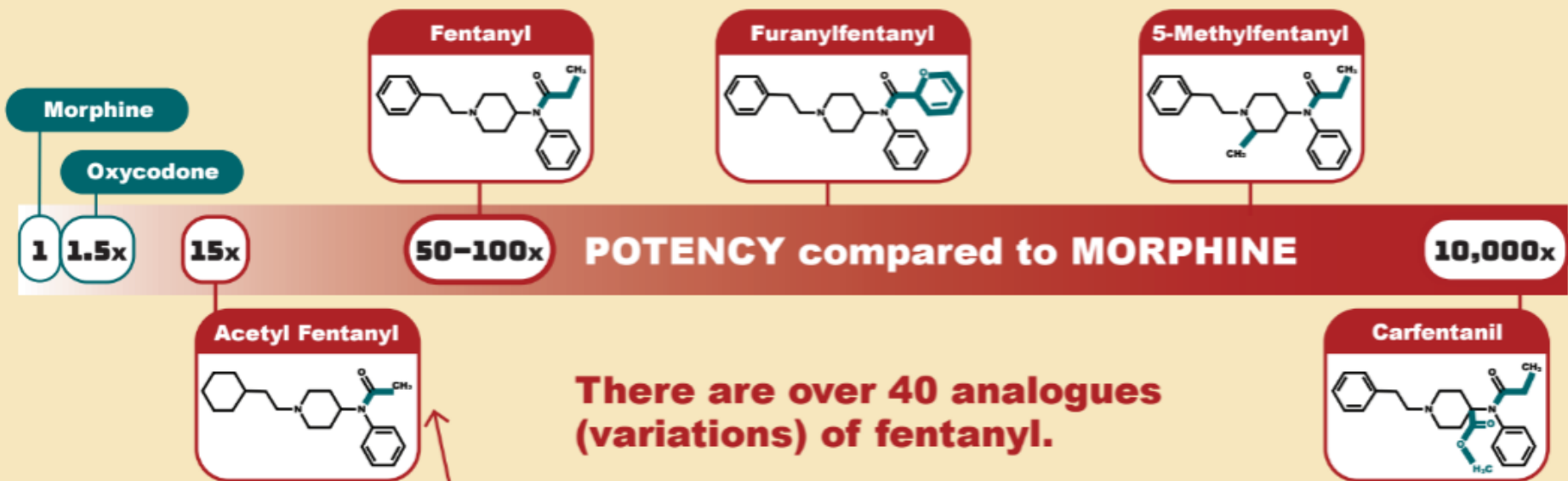
FENTANYL 101

An introduction to the Fentanyl crisis in the U.S.

What are fentanyl and fentanyl analogues?

Fentanyl is a synthetic opioid that is 50–100 times more potent than morphine.

Doctors prescribe fentanyl in medical settings, but drug traffickers manufacture black market fentanyl and sell it illegally.

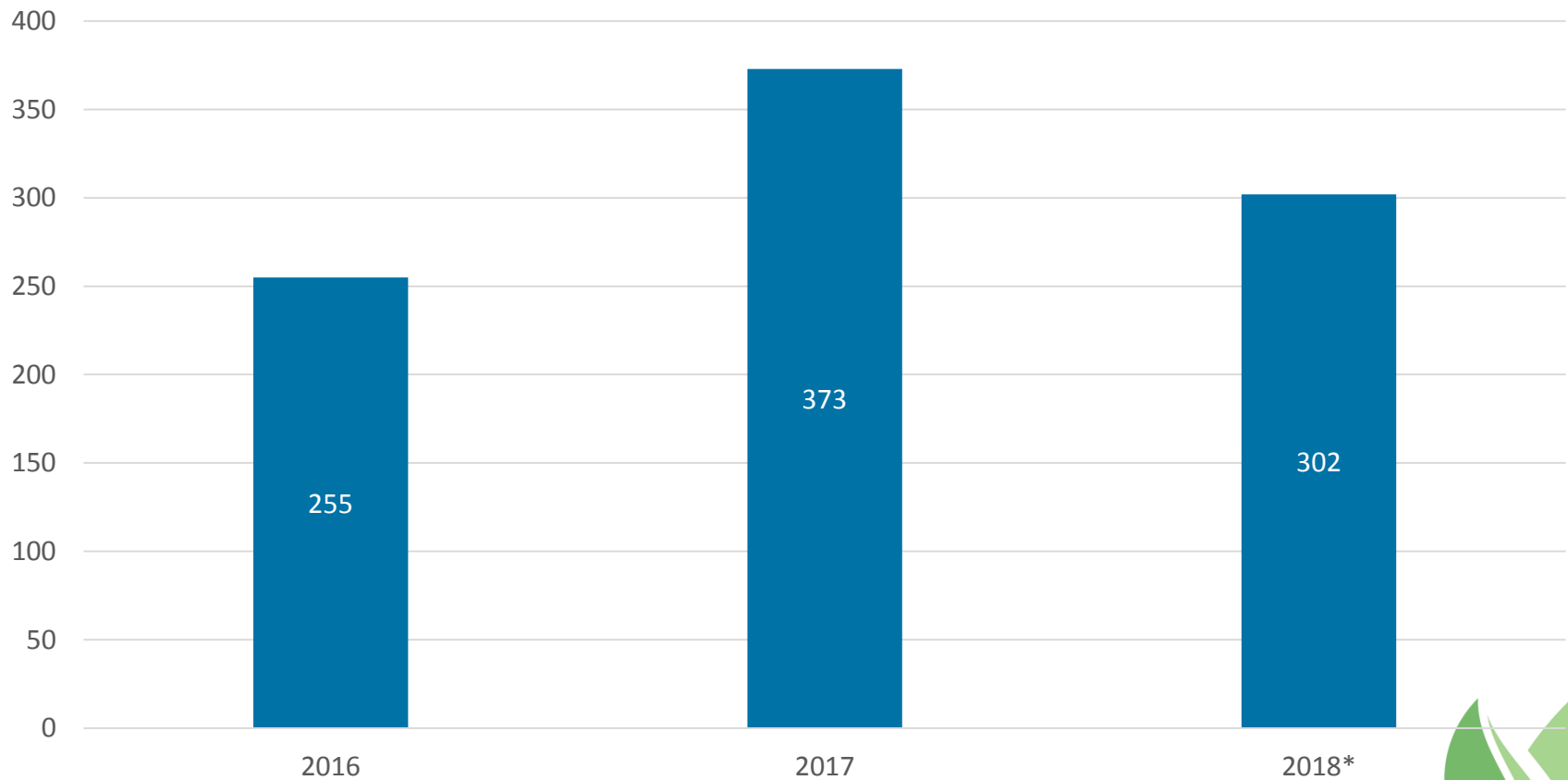




Carfentanil in an amount equivalent
to one grain of salt is enough
to kill a human being

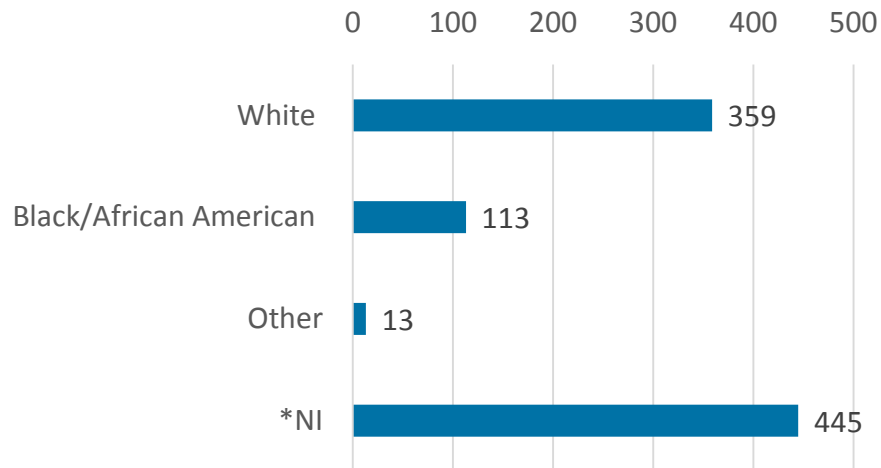


Naloxone Incidence City of Lansing Ingham County, 2016 – 2018*

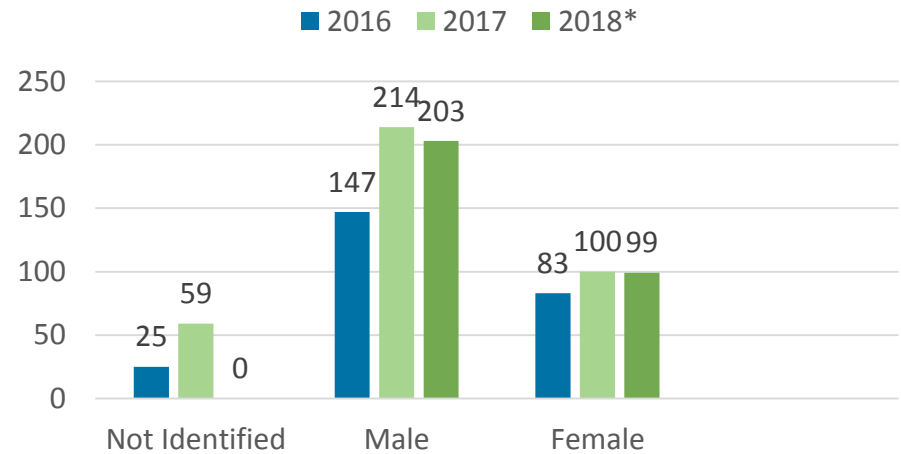


*Data is current as of 11/13/2018

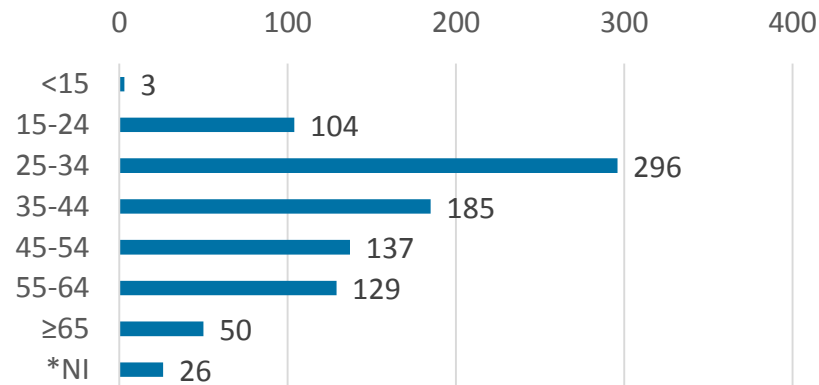
Nalaxone Incidence By Race 2016-2018* ; n=930



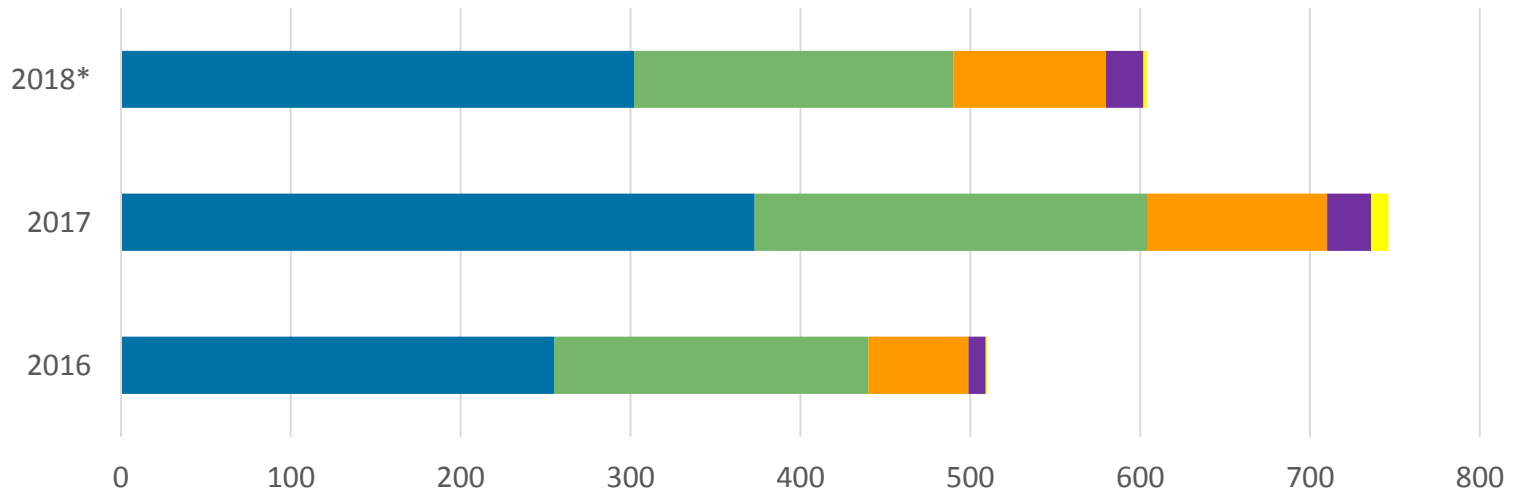
Nalaxone Incidence by Sex 2016-2018*



Nalaxone Incidence By Age-groups 2016-2018*;
n=930



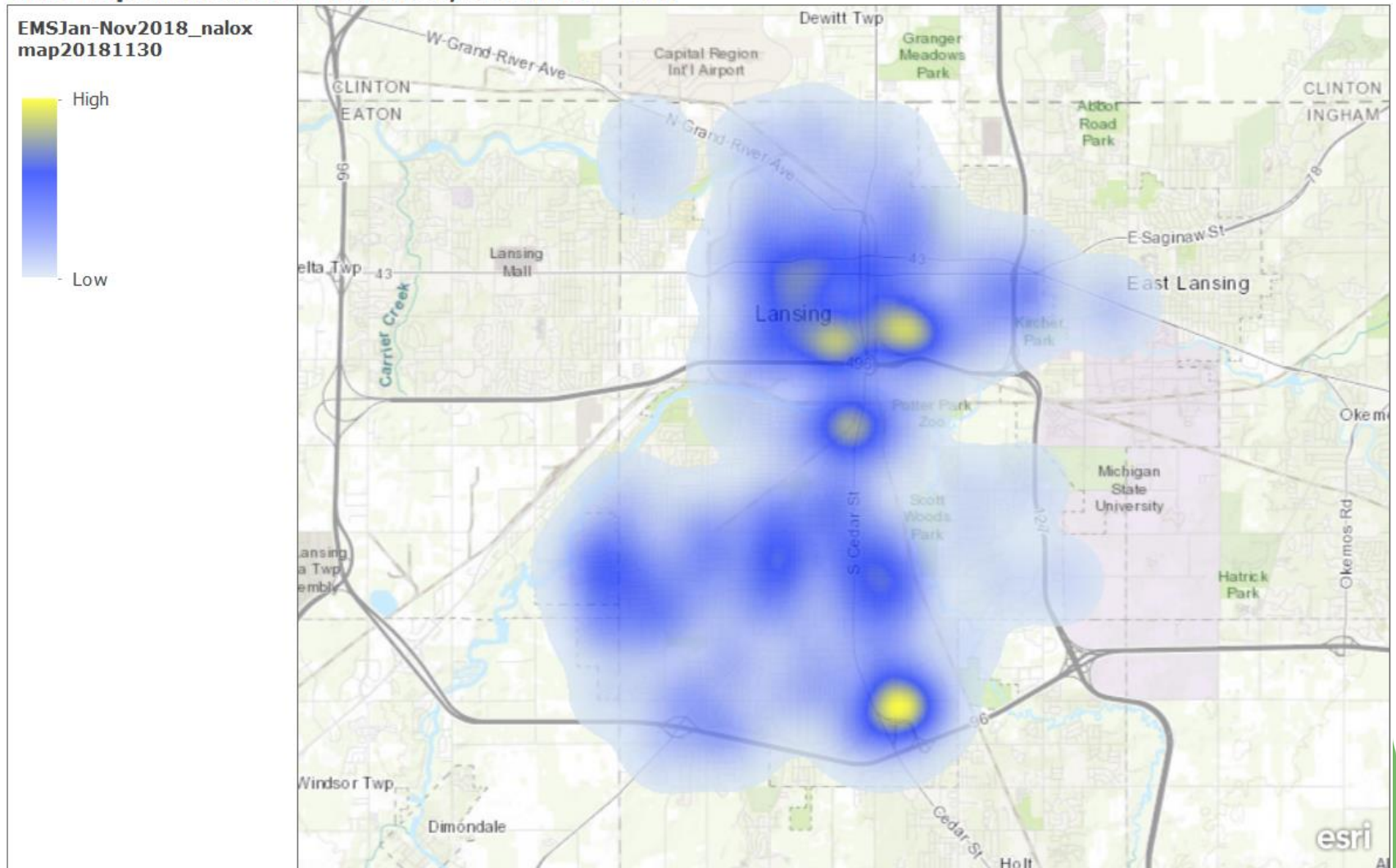
Nalaxone incidence by number of doses administered per person



	2016	2017	2018*
■ Total Nalaxone Incidence (NI)	255	373	302
■ NI = 1 dose/ person	185	231	188
■ NI = 2 doses/person	59	106	90
■ NI = 3 doses/person	10	26	22
■ NI = 4+ doses/person	1	10	2



Heat Map of Naloxone Incidences, November 2018



Michigan State University, Ontario MNR, Esri Canada, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

Why all this data? Yes, it's interesting but . . .

The more we can collect data, analyze that data, look at demographic and geographic trends in the data, the better able we are to target prevention, early intervention, and intervention efforts.

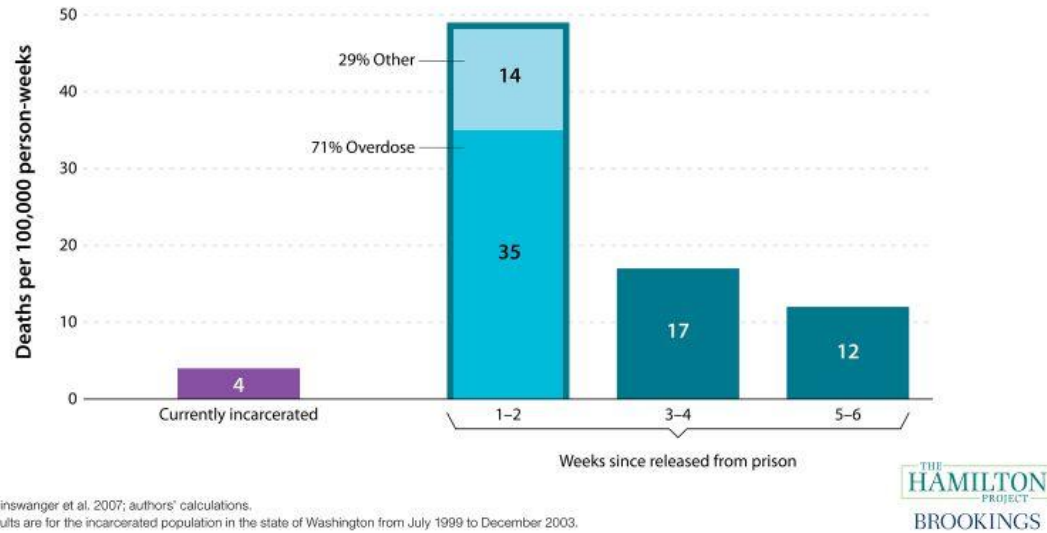
For example . . .



FIGURE 8.

Mortality Rates, by Incarceration Status and Time since Prison Release

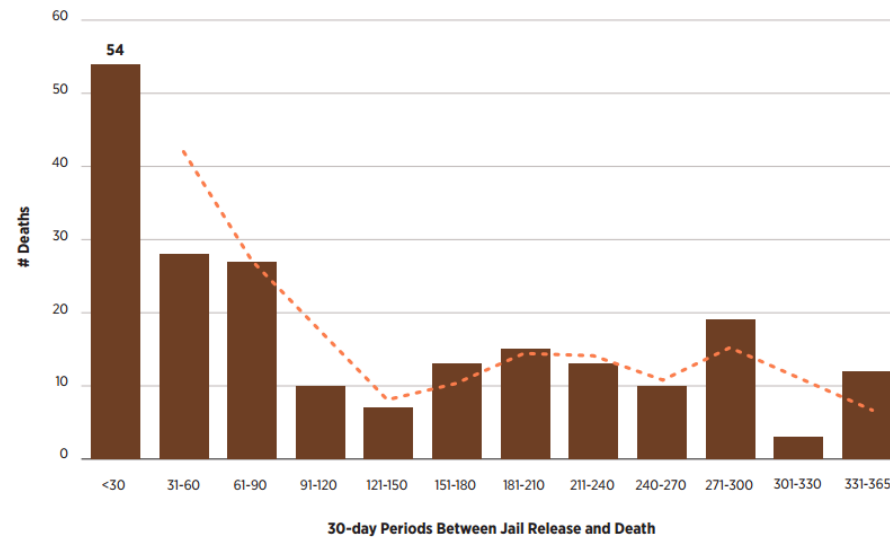
In the first two weeks of their release, former prisoners have a mortality rate 13 times greater than their matched demographic cohorts.



Source: Binswanger et al. 2007; authors' calculations.

Note: Results are for the incarcerated population in the state of Washington from July 1999 to December 2003.

FIGURE 19: Time between ACJ Release and Fatal Overdose, 2008 through 2014, N = 211



What our local data is telling us

- Irrespective of the data sources & methodology opioid overdose continues to be a growing public health crisis.
- Historically, prescription opioids have been the driving cause of opioid related deaths in this epidemic. That is shifting.
- Fentanyl related deaths have nearly tripled since 2014.
- Increasing trend in Naloxone incidence(4 or more doses per person) can indicate growing use of potent opioids such as Fentanyl.
- Numbers cannot tell the whole story. All the numbers are likely to underestimate the true burden.



Michigan 10-bill Package Became Law in 2018

- PA 246 Informed consent with minors
- PA 247 Provider relationship with patient
- PA 248 MAPS requirement
- PA 249 Corrects any conflicts in statute
- PA 250 Provider treating overdose must provide SUD info
- PA 251 Limits first time Rx to 7 days, pharmacy may fill in increments
- PA 252 Veterinary dispensing added to MAPS
- PA 253 Medicaid coverage of opioid abuse treatment
- PA 254 MDHHS to develop and make recommendations to MDE for pupil instruction
- PA 255 Incorporating dangers of Rx opioid abuse into public education

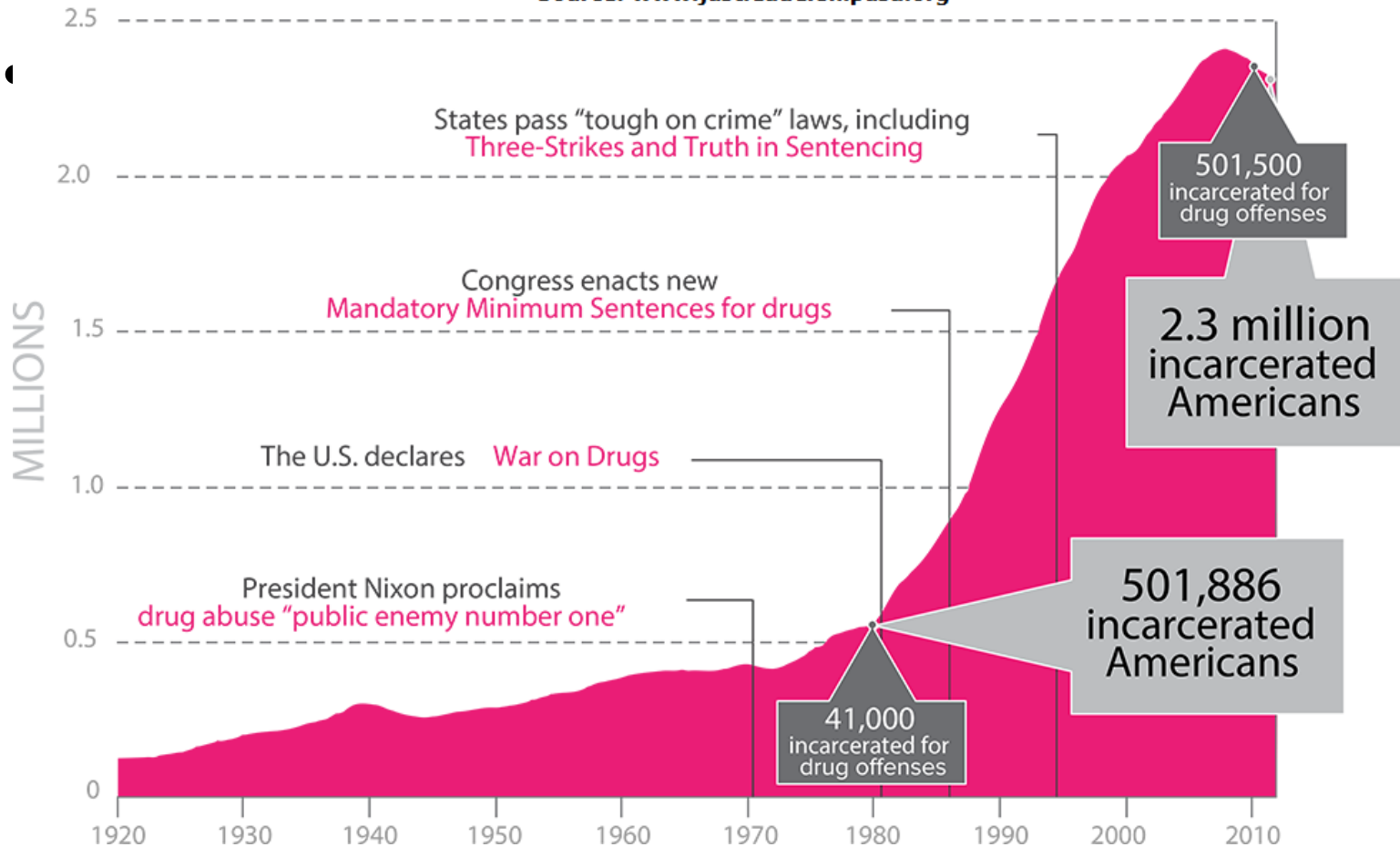


The New Jim Crow



INCARCERATED AMERICANS (1920-2013)

Source: www.justleadershipusa.org



GATEWAY

People addicted to pain pills are 40x more likely to use heroin

Ingham Opioid Work Group



**Naloxone saves hundreds
from drug overdoses in
Ingham County each year**

Ingham Opioid Work Group

DRUG DEALER

**80% of abused prescription
drugs come from home
medicine cabinets**

Ingham Opioid Work Group