



Opioid Stewardship and Managing the Opioid Crisis: A Health-Care Perspective

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Dr. Salisbury-Afshar has disclosed that there is no actual or potential conflict of interest in regards to this presentation

Any financial disclosures will be presented by each speaker. This event was created without any commercial support.

Learning Objectives

At the conclusion of this course participants will be able to

- Describe local opioid prescribing, hospitalization and overdose trends in Chicago.
- Explain the neurobiological changes that occur in the brain of someone with opioid use disorder.
- Describe the current opioid prescribing guidelines for acute and chronic pain, as well as recommendations for non-pharmacological management of chronic pain.
- Explain the DSM 5 diagnostic criteria for opioid use disorder and the available treatment options for opioid use disorder.
- Define harm reduction and explain its role in working with patients who use drugs.
- Describe health-system level interventions that can be taken to promote best practices as they relate to opioid prescribing and opioid use disorder treatment.
- Describe new formulations for treatment of OUD overdose, and abuse-deterrent formulations and their effect on potential for misuse.
- Discuss challenging clinical cases with group of health professionals and identify potential approaches to clinical management.

To obtain credit you must:

- **Be present for the entire session**
- **Complete an electronic evaluation form**
- **Certificate will be sent to you by e-mail**

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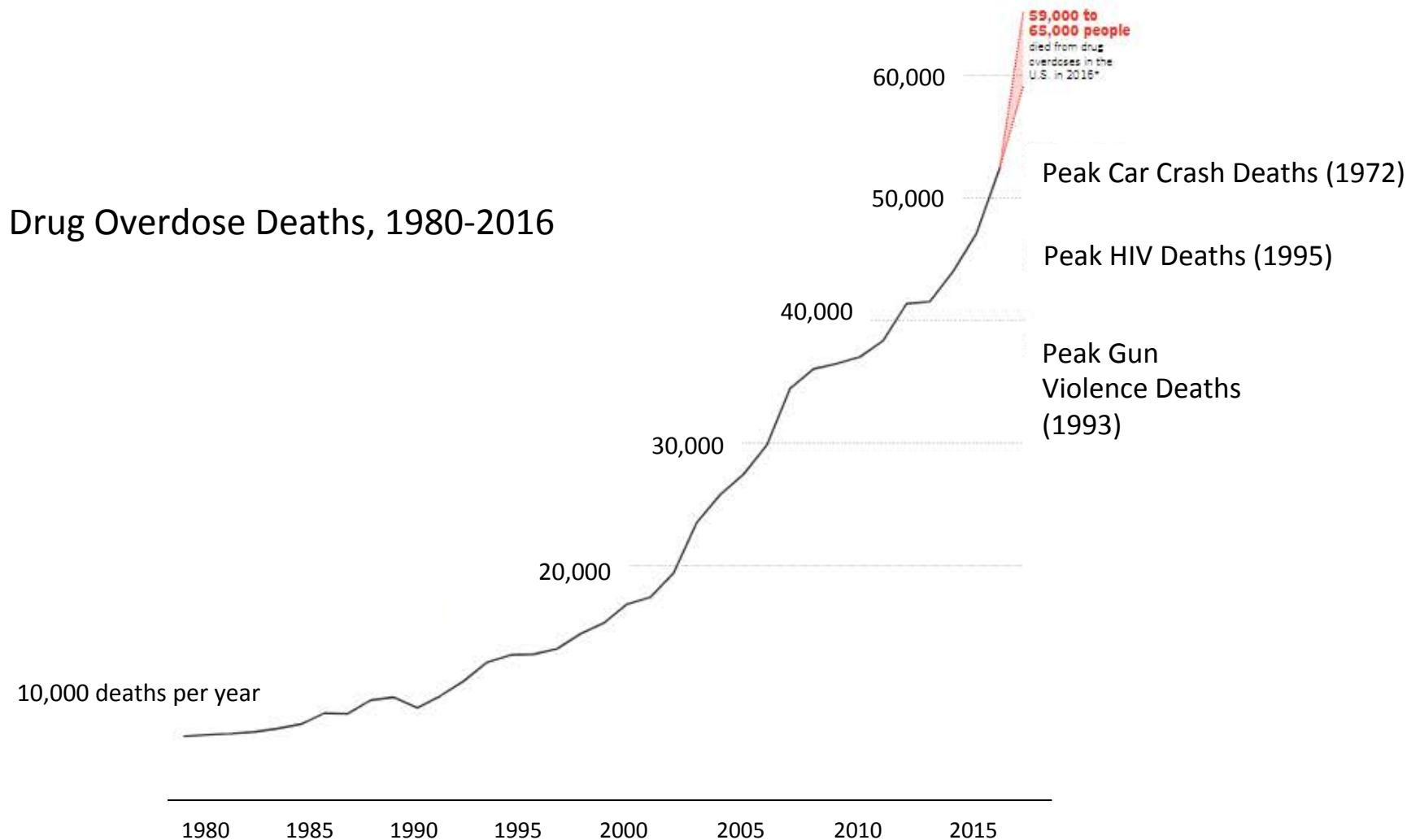
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Rush University is an approved provider for physical therapy (216.000272), occupational therapy, respiratory therapy, social work (159.001203), nutrition, speech-audiology, and psychology by the Illinois Department of Professional Regulation.



EPIDEMIOLOGY OF OPIOID USE DISORDER/OVERDOSE

“Drug Deaths in America Are Rising Faster than Ever”



*2016 final count was 63,600 (CDC)

National Story

OPIOID



Florida's Opioid Crackdown Might Be Curbing Number Of Prescriptions

Jun 02, 2016 02:49 PM EDT

The two policies implemented in late 2011 to reduce the use of opioids might be connected to a decrease in their prescriptions among the top prescribers of the drugs in the state.



Opioid Misuse And Overdose Deaths On The Rise, Study Finds

Oct 14, 2015 09:33 AM EDT

The number of people who are using opioid for nonmedical reasons and overdose deaths in the U.S. rose from 2003 to 2013, even if opioid prescriptions have decreased for the same period.



FDA Approves Painkiller OxyContin For Children Ages 11 to 16

Aug 14, 2015 03:29 PM EDT

The FDA said children with pain due to trauma, surgery or cancer could potentially qualify to receive OxyContin.



Chronic Pain Is Suffered By 100 Million Americans: But Are They Being Sufficiently Treated?

Jan 13, 2015 06:21 PM EST

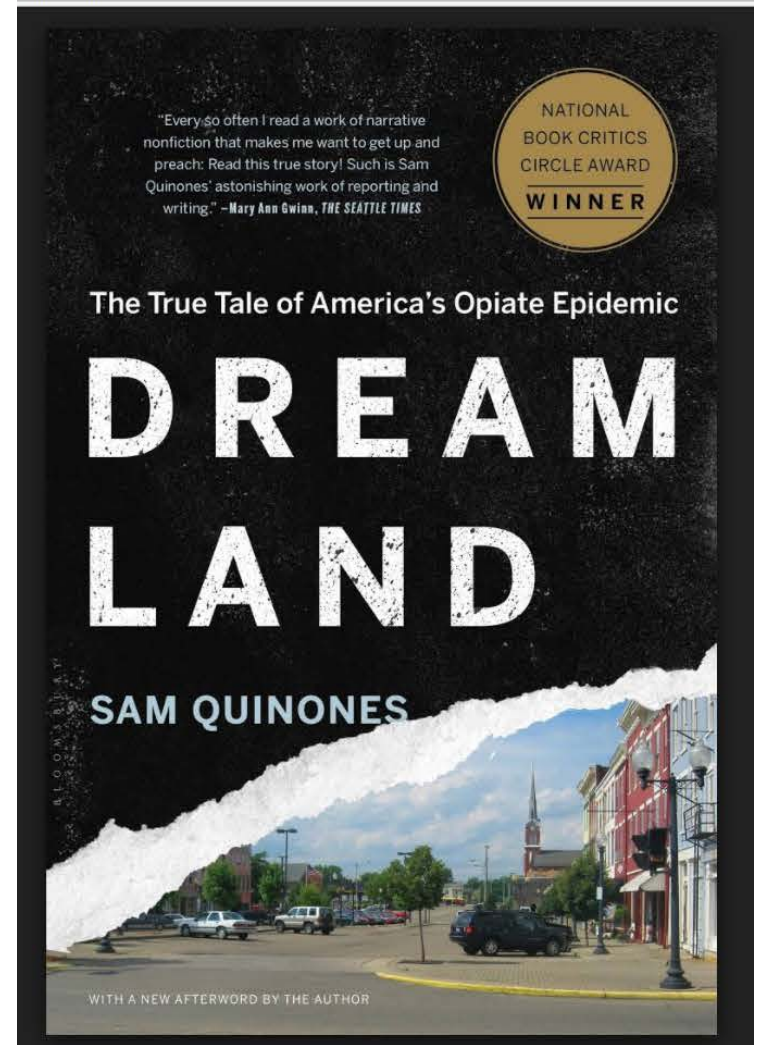
An estimated 100 million Americans live with chronic pain, but new research suggests that many of these patients receive insufficient treatment.



Opioid Overdoses Impose A Financial 'Burden' On U.S. Medical Facilities

Oct 28, 2014 04:46 PM EDT

Opioid overdoses are common and expensive.



Pain: The 5th Vital Sign



- History
 - Introduced by president of American Pain Society 1995
 - Embraced by VA system late 1990s
 - Became Joint Commission standard 2001
- Because
 - Recognition pain undertreated
 - Untreated pain leads to chronic pain
 - Chronic pain interferes with quality of life, is costly, and common

Education: Oxycodone (OxyContin)



- Approved 1995
- Sales:
 - 1996 \$45 million
 - 2000 \$1.1 billion
 - 2010 \$3.1 billion (30% of painkiller market)
- 1996-2002 funded >20,000 pain-related educational programs
- Provided financial support to: American Pain Society, the American Academy of Pain Medicine, the Federation of State Medical Boards, the Joint Commission

N Engl J Med. 1980 Jan 10;302(2):123.

ADDICTION RARE IN PATIENTS TREATED WITH NARCOTICS

To the Editor: Recently, we examined our current files to determine the incidence of narcotic addiction in 39,946 hospitalized medical patients¹ who were monitored consecutively. Although there were 11,882 patients who received at least one narcotic preparation, there were only four cases of reasonably well documented addiction in patients who had no history of addiction. The addiction was considered major in only one instance. The drugs implicated were meperidine in two patients,² Percodan in one, and hydromorphone in one. We conclude that despite widespread use of narcotic drugs in hospitals, the development of addiction is rare in medical patients with no history of addiction.

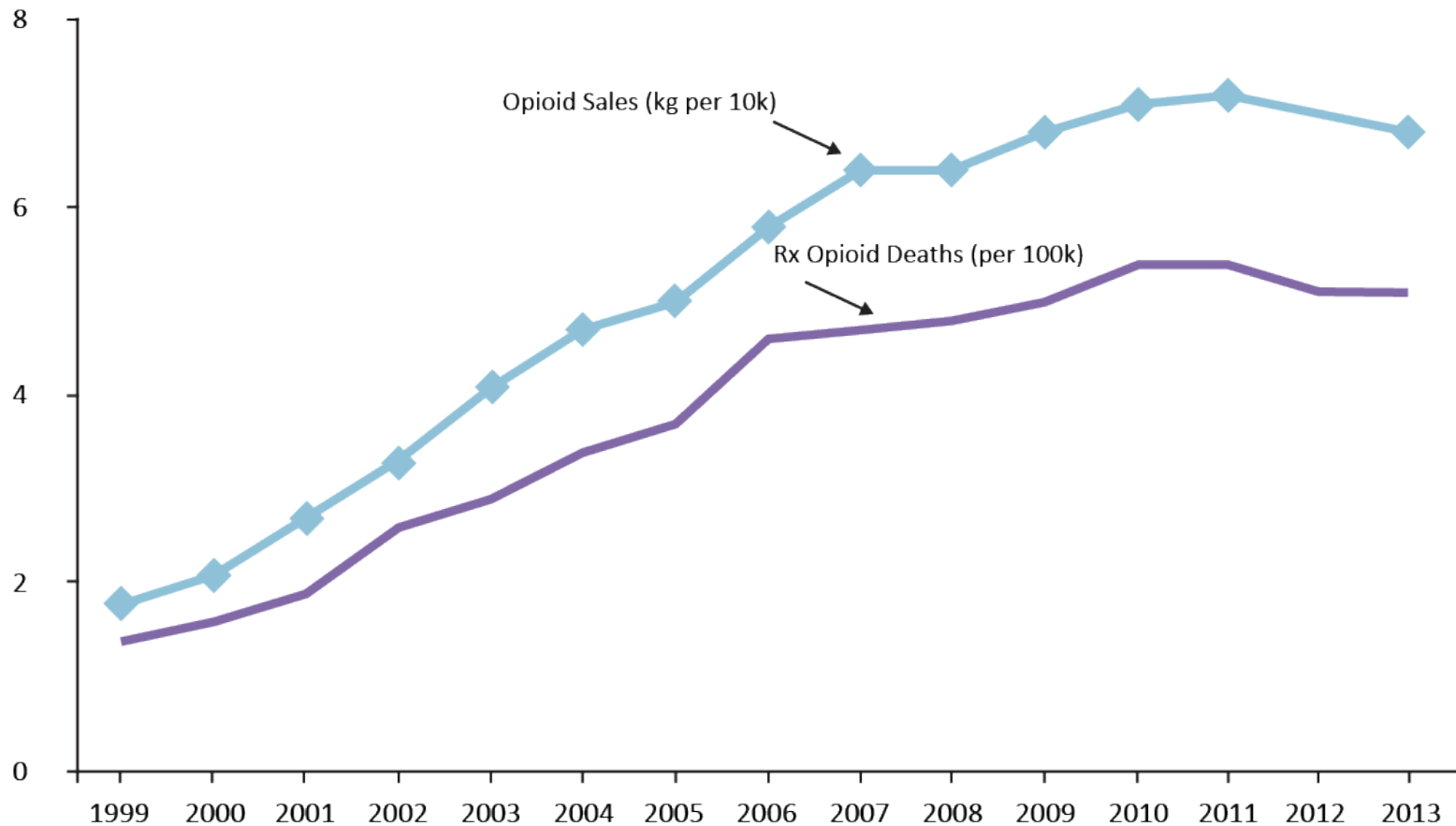
JANE PORTER
HERSHEL JICK, M.D.
Boston Collaborative Drug
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Waltham, MA 02154

Boston University Medical Center

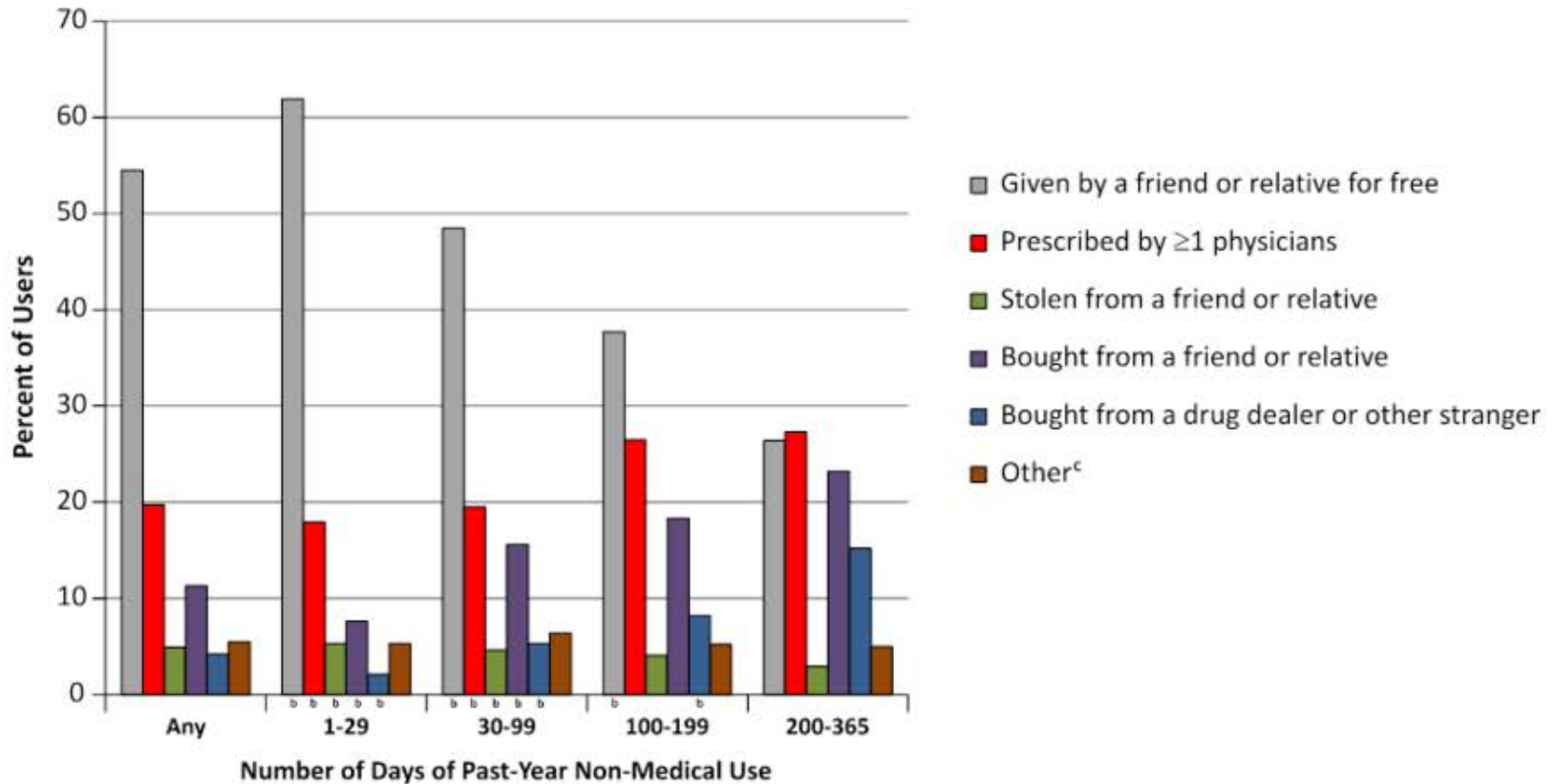
1. Jick H, Miettinen OS, Shapiro S, Lewis GP, Siskind Y, Slone D. Comprehensive drug surveillance. *JAMA*. 1970; 213:1455-60.
 2. Miller RR, Jick H. Clinical effects of meperidine in hospitalized medical patients. *J Clin Pharmacol*. 1978; 18:180-8.
-

Increase in Opioid Prescribing Associated with Increase in Death



National Vital Statistics System, DEA's Automation of Reports and Consolidated Orders System

Sources of Rx Opioids Among Past-year Non-Medical Users



^a Obtained from the US National Survey on Drug Use and Health, 2008 through 2011.⁵

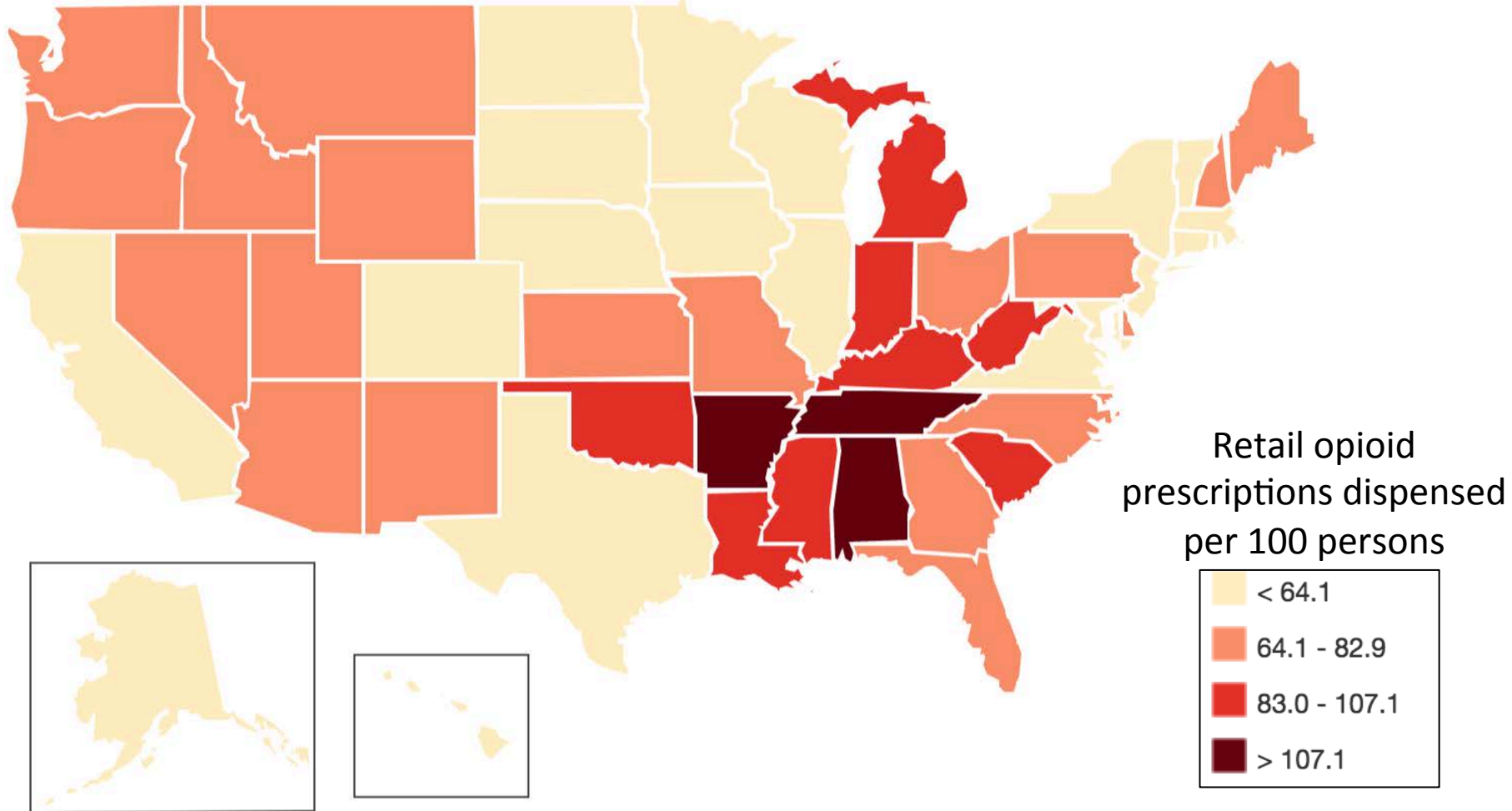
^b Estimate is statistically significantly different from that for highest-frequency users (200-365 days) ($P < .05$).

^c Includes written fake prescriptions and those opioids stolen from a physician's office, clinic, hospital, or pharmacy; purchases on the Internet; and obtained some other way.

Rx Opioids and Transition to Heroin

- Nonmedical use of Rx opioids is the strongest risk factor for heroin use¹
- Majority of current heroin users initiated opioid use with Rx opioids for non-medical purposes (approx 75%)²
- Only a small percentage of nonmedical Rx opioid users transition to heroin (approx 3-5%)¹

U.S. state opioid prescribing rates, 2016



IL: 56.8
(Highest Arkansas: 114.6)

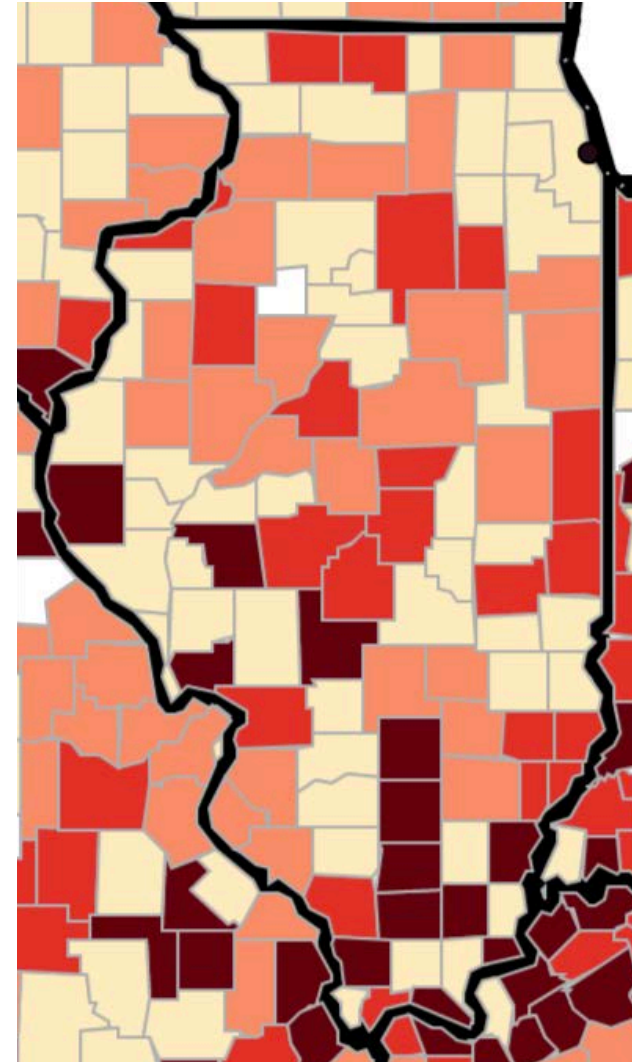
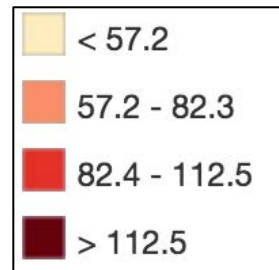
Illinois opioid prescribing rates, by county, 2016

National prescribing rate:
66.5 per 100 persons

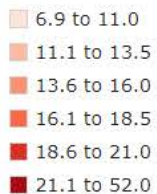
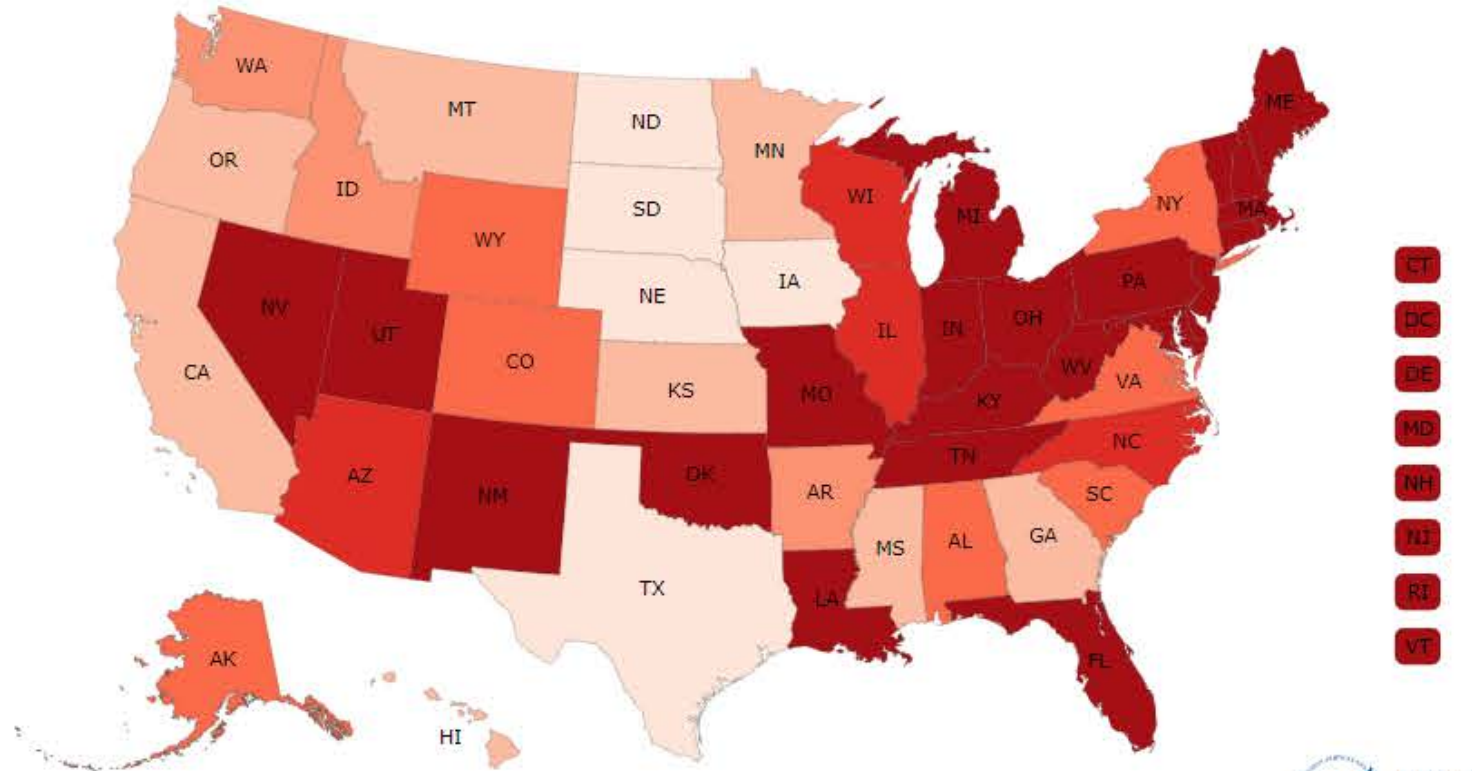
Illinois prescribing rate:
56.8 per 100 persons

Cook County prescribing rate: 41.3 per 100 persons

Retail opioid prescriptions dispensed per 100 persons



Rates of Drug Overdose Deaths, 2016



Age-adjust overdose death rate in US= 19.8
Age-adjusted overdose death rate in IL= 18.6

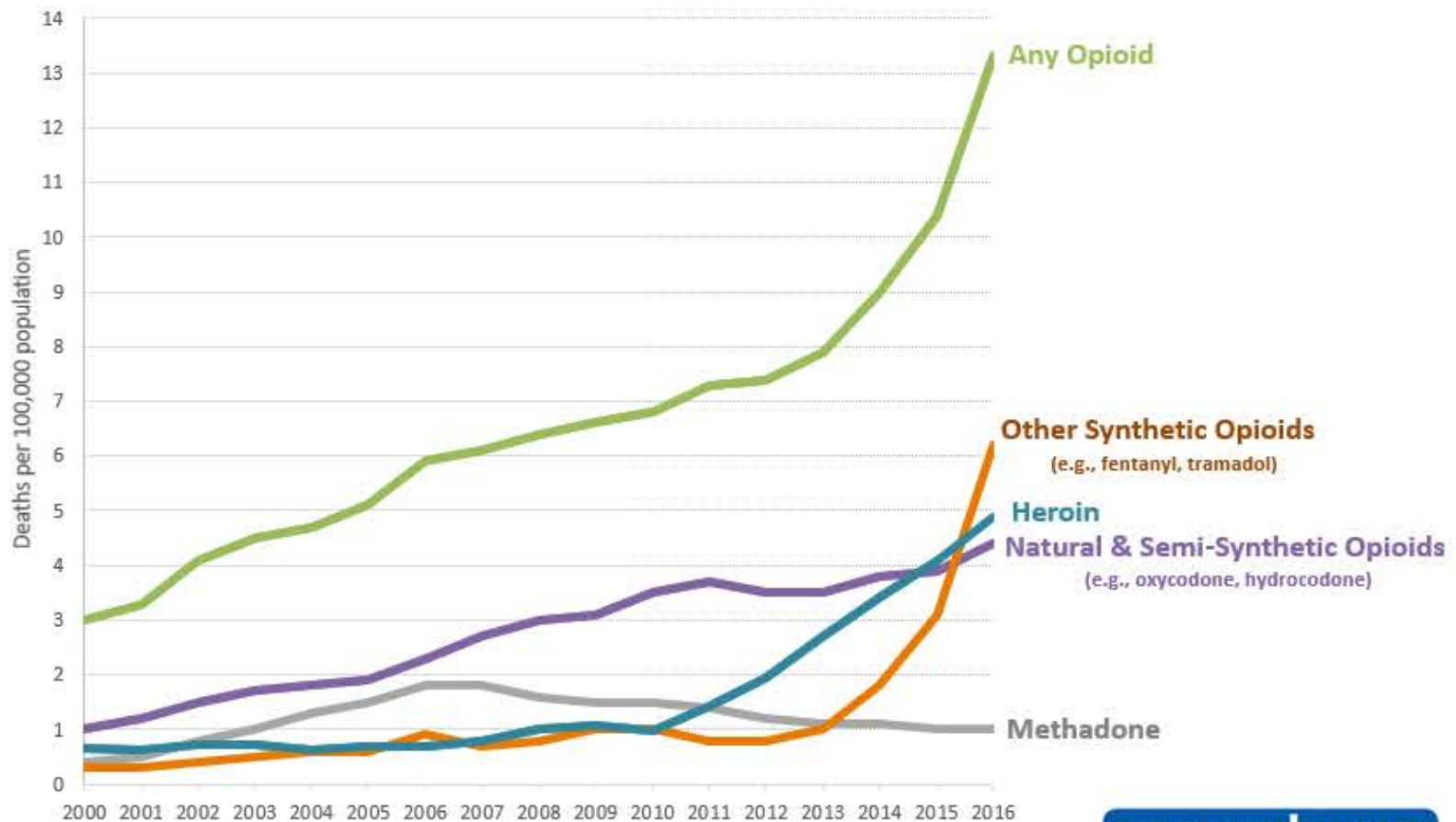


States with highest mortality rates due to drug overdose—2016

- West Virginia (52.0 per 100,000)
- Ohio (39.1 per 100,000)
- New Hampshire (39.0 per 100,000)
- Pennsylvania (37.9 per 100,000)
- Kentucky (33.5 per 100,000)

- In comparison, Illinois (18.9 per 100,000)

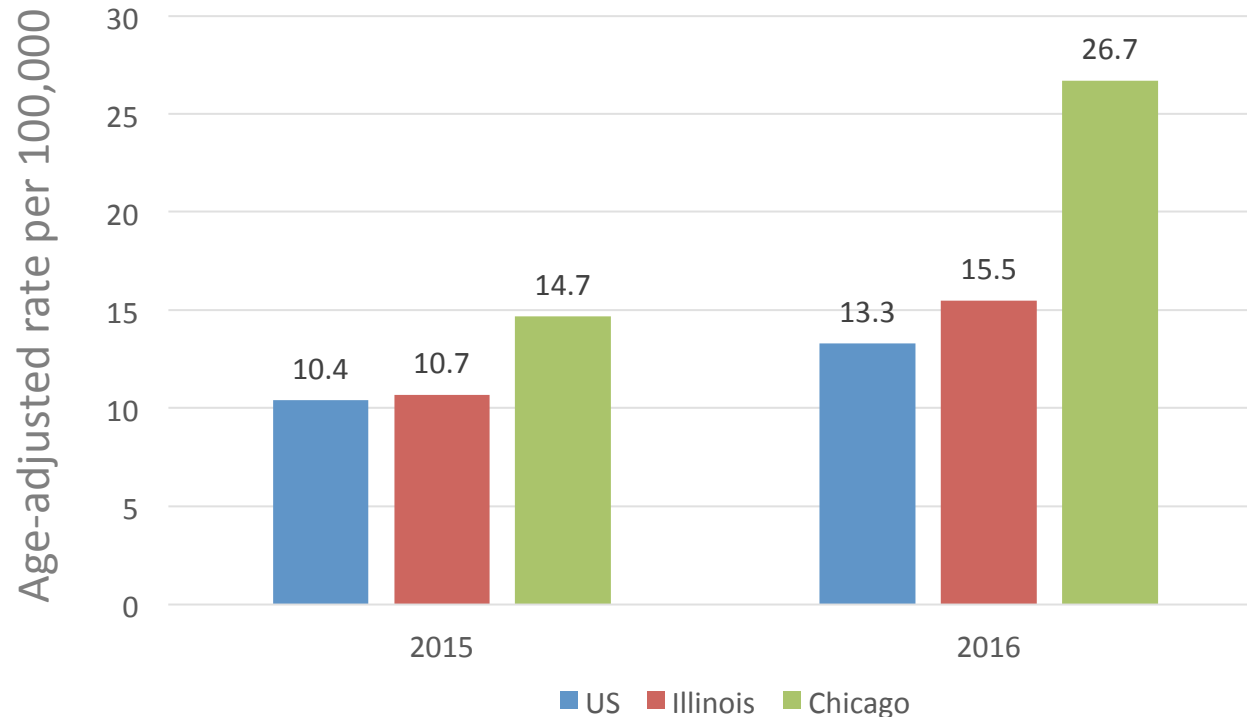
Overdose Deaths Involving Opioids, by Type of Opioid



SOURCE: CDC/NCHS, National Vital Statistics System, Mortality. CDC WONDER, Atlanta, GA: US Department of Health and Human Services, CDC; 2016. <https://wonder.cdc.gov/>.

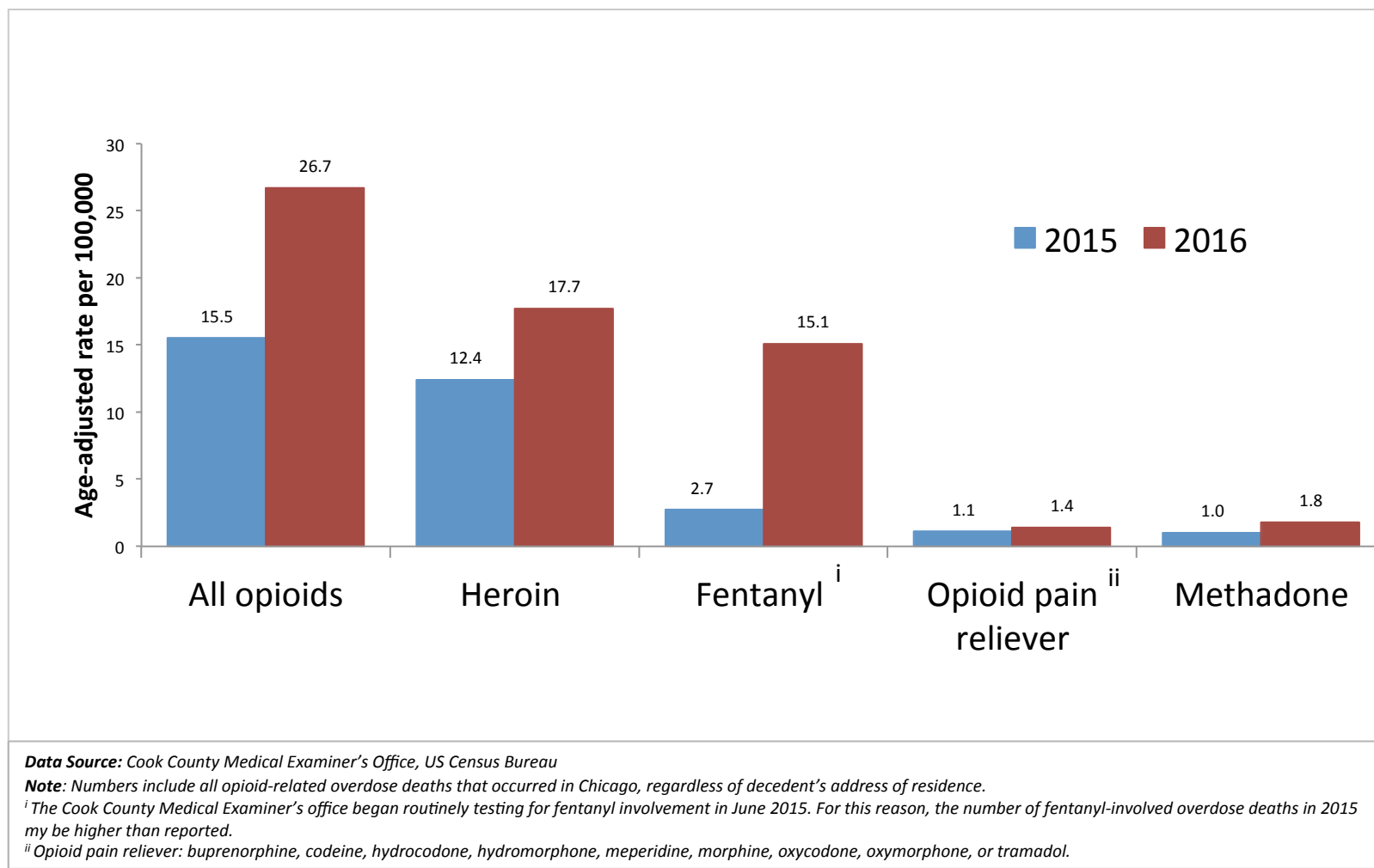


Opioid Overdose Deaths 2015 and 2016



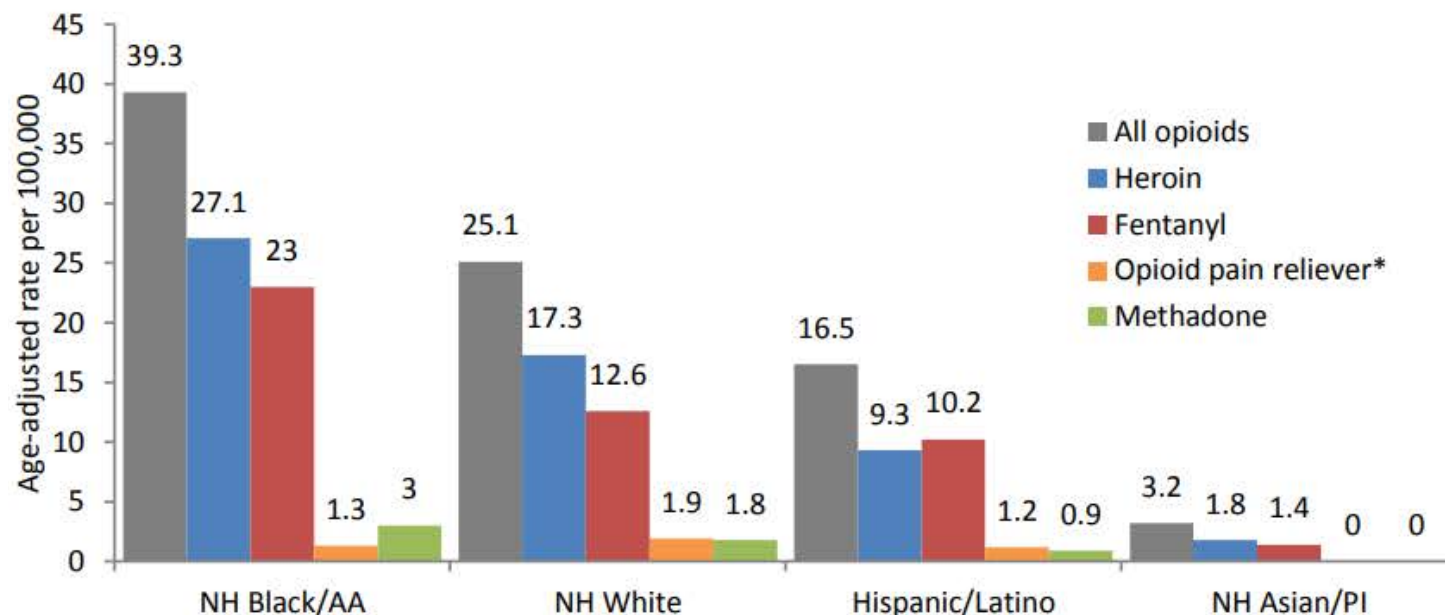
Chicago saw a 74% increase in opioid overdose death rate in one year

Chicago Opioid-Related Overdose Deaths- 2015 and 2016



Opioid-related overdose death rates by race-ethnicity & opioid type, 2016

Figure 3. Opioid-related overdose death rates by race-ethnicity and opioid type – Chicago, 2016



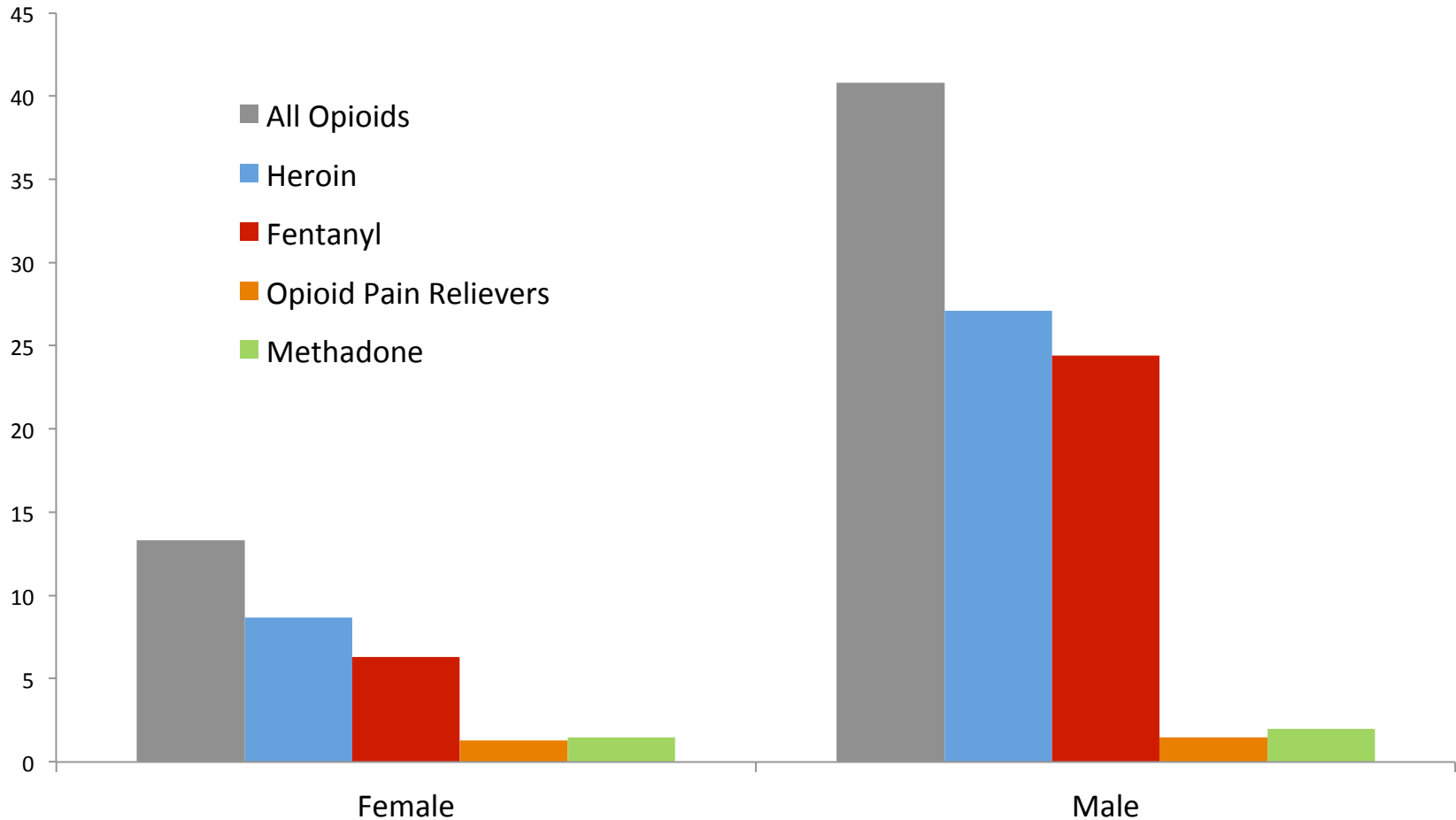
Data Source: Cook County Medical Examiner

NH = non-Hispanic, PI = Pacific Islander, AA = African American

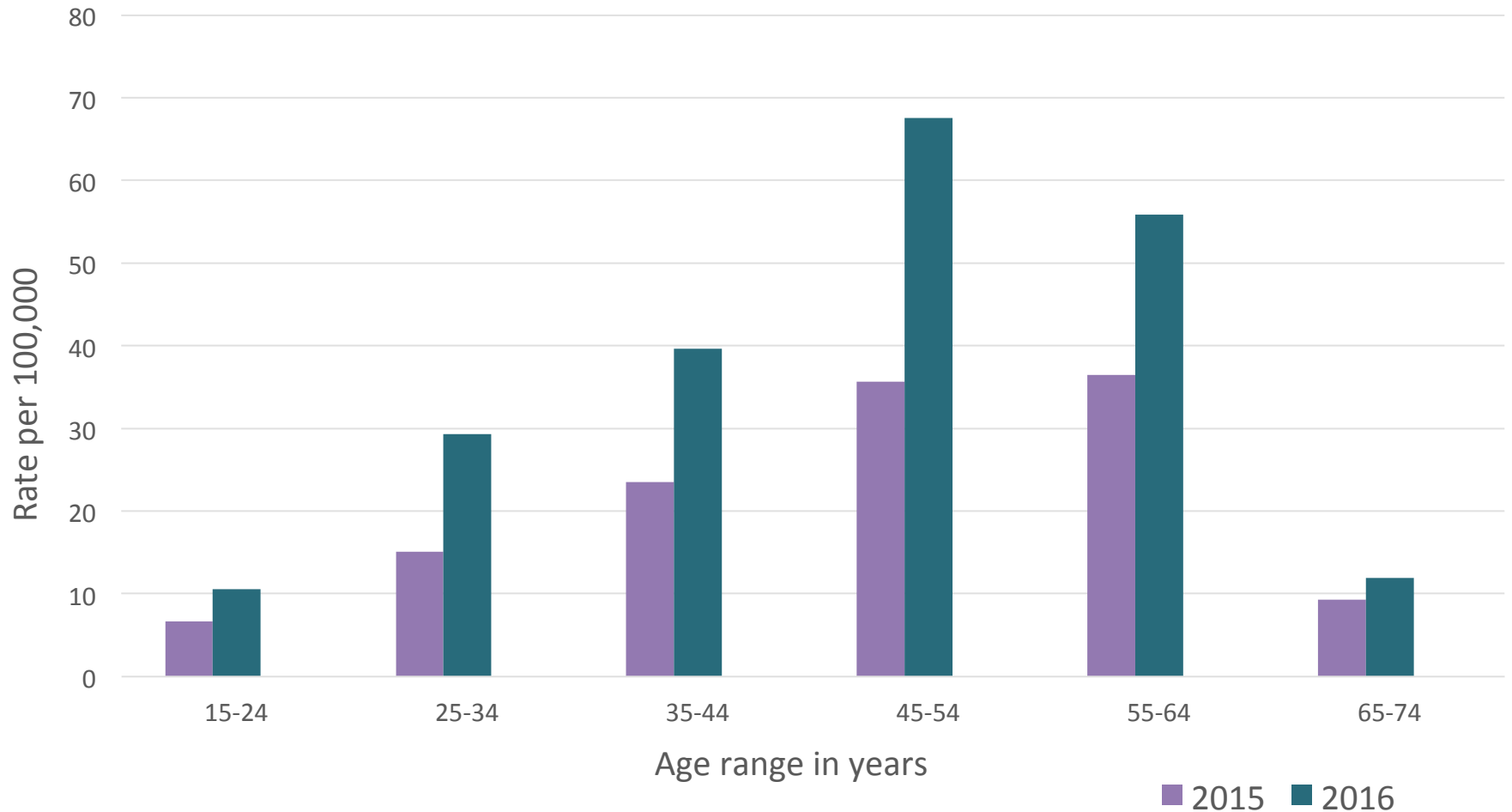
* Opioid pain reliever: buprenorphine, codeine, hydrocodone, hydromorphone, meperidine, morphine, oxycodone, oxymorphone, or tramadol.

Note: Numbers include all opioid-related overdose deaths that occurred in Chicago, regardless of decedent's address of residence.

Chicago Opioid-related overdose deaths by Gender- 2016

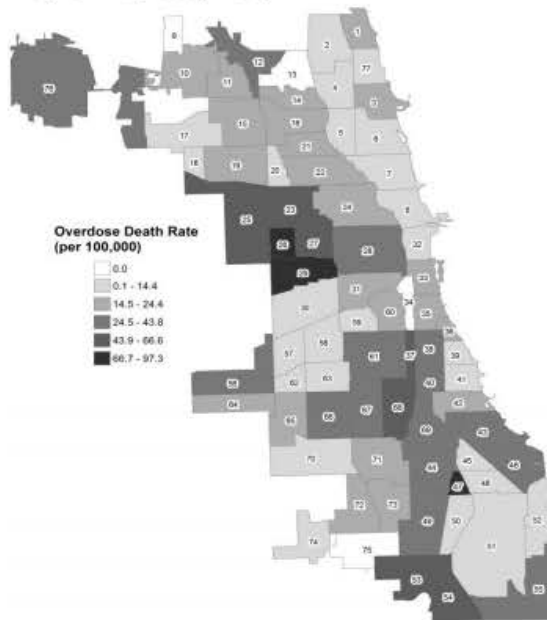


Chicago Opioid Overdose Death Rate by Age, 2015-2016

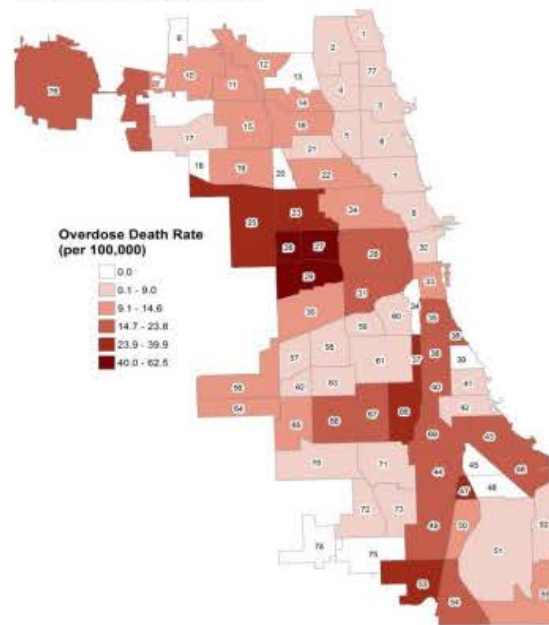


Overdose Deaths in Chicago- 2016

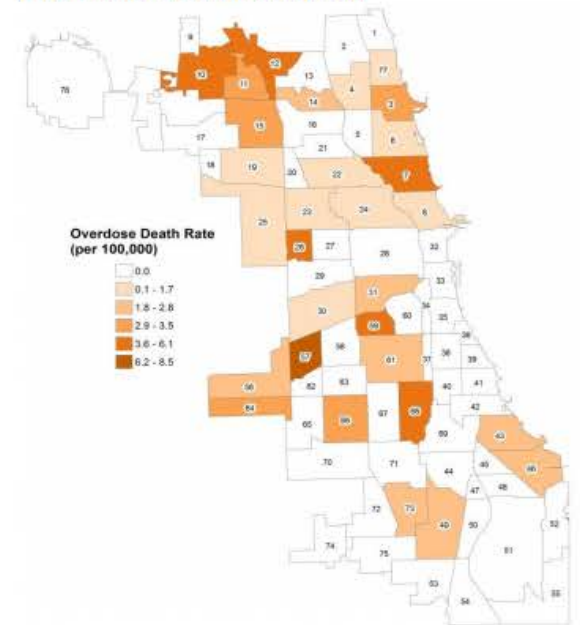
Map 3. All Opioids (n=604)



Map 5. Fentanyl (n=336)



Map 6. Opioid Pain Relievers (n=34)



1 Rogers Park	9 Edison park	17 Dunning	25 Austin	33 Near South Side	41 Hyde Park	49 Roseland	57 Archer Heights	65 West Lawn	73 Washington Heights
2 West Ridge	10 Norwood Park	18 Montclare	26 West Garfield Park	34 Armor Square	42 Woodlawn	50 Pullman	58 Brighton Park	66 Chicago Lawn	74 Mount Greenwood
3 Uptown	11 Jefferson Park	19 Belmont Cragin	27 East Garfield Park	35 Douglas	43 South Shore	51 South Deering	59 McKinley Park	67 West Englewood	75 Morgan Park
4 Lincoln Square	12 Forest Glen	20 Hermosa	28 Near West Side	36 Oakland	44 Chatham	52 East Side	60 Bridgeport	68 Englewood	76 O'Hare
5 North Center	13 North Park	21 Avondale	29 North Lawndale	37 Fuller Park	45 Avalon Park	53 West Pullman	61 New City	69 Greater Grand Crossing	77 Edgewater
6 Lakeview	14 Albany Park	22 Logan Square	30 South Lawndale	38 Grand Blvd	46 South Chicago	54 Riverdale	62 West Elston	70 Ashburn	
7 Lincoln Park	15 Portage Park	23 Humboldt Park	31 Lower West Side	39 Kenwood	47 Burnside	55 Hegewisch	63 Gage park	71 Auburn Gresham	
8 Near North Side	16 Irving Park	24 West Town	32 Loop	40 Washington Park	48 Calumet Heights	56 Garfield Ridge	64 Clearing	72 Beverly	

Data Source: Cook County Medical Examiner. Community area overdose death rates are crude rates. Deaths are geocoded to location of incident. Location of 12 deaths could not be accurately identified.

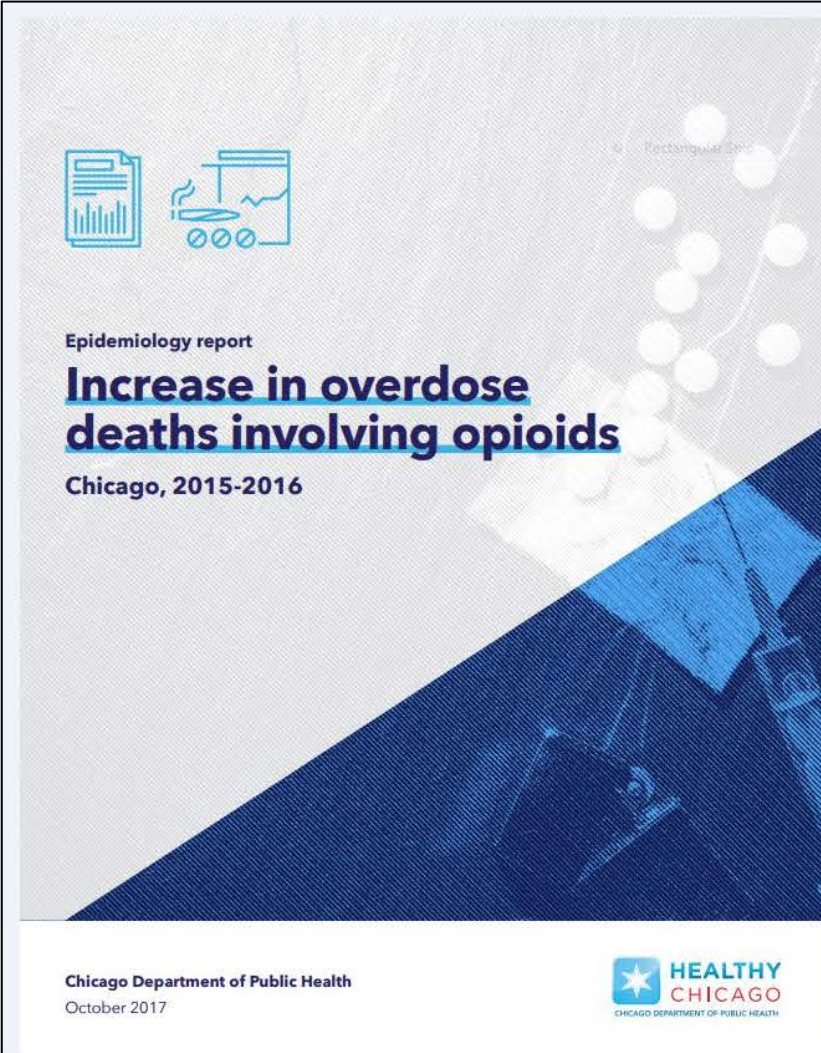
Takeaways:

- Opioid overdose mortality rates continue to increase nationally and locally
- Significant variations in prescribing practices, drug availability, and overdose death trends
- In Chicago, illicit substances account for majority of the mortality burden with the highest rates of overdose among 45-64 year old African American men
- Communities with high economic hardship are more affected by opioid-related overdose
- Understanding local trends can help craft more targeted interventions

Public Health Approaches to Opioid Crisis

- Primary prevention school education programs
- Safe opioid prescribing & disposal
 - Prescription Drug Monitoring Programs*
 - Drug take-back initiatives
 - Provider education (and education mandates)
 - Regulation and legal action around “pill mills”
 - Opioid prescribing limits (insurance and legislation)
- Screening, Brief Intervention and Referral to Treatment
- Abuse-deterrent opioid formulations
- Opioid Use Disorder (OUD) treatment
 - Agonist therapy (methadone and buprenorphine)*
- Overdose response education and naloxone distribution*
 - Good Samaritan Laws
 - Laws to allow access without a prescription
- Safe Injection/Consumption Facilities*


Resource Table



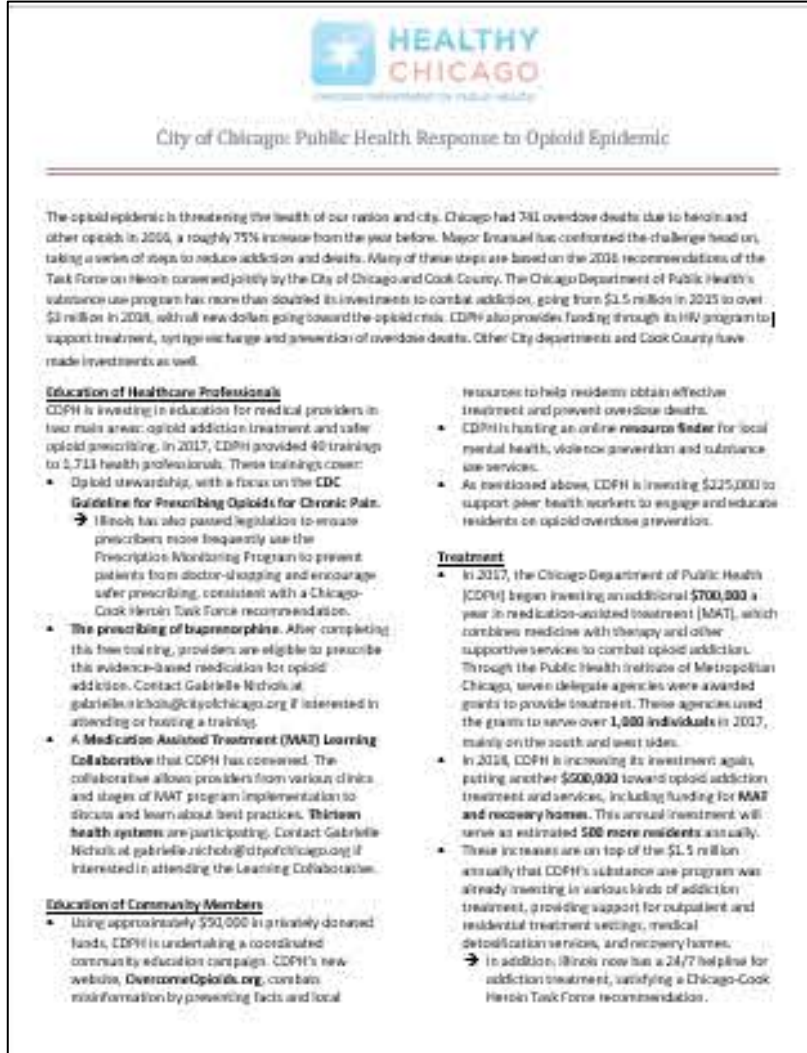
The cover of the report features a background of a city skyline at night with bokeh light effects. In the top left, there are two icons: a document with a bar chart and a laboratory flask with a graph. The title is in a large, bold, blue font, and the subtitle is in a smaller, black font. The Chicago Department of Public Health logo is in the bottom right corner.

Epidemiology report
Increase in overdose deaths involving opioids
Chicago, 2015-2016

Chicago Department of Public Health
October 2017



HEALTHY CHICAGO
CHICAGO DEPARTMENT OF PUBLIC HEALTH



The cover features the Healthy Chicago logo at the top right, which includes a blue star icon. Below the logo is the title of the report. The background is a light, textured grey.

HEALTHY CHICAGO
CHICAGO DEPARTMENT OF PUBLIC HEALTH

City of Chicago: Public Health Response to Opioid Epidemic

The opioid epidemic is threatening the health of our nation and city. Chicago had 781 overdose deaths due to heroin and other opioids in 2016, a roughly 75% increase from the year before. Mayor Emanuel has confronted the challenge head on, taking a series of steps to reduce addiction and deaths. Many of these steps are based on the 2016 recommendations of the Task Force on Heroin convened jointly by the City of Chicago and Cook County. The Chicago Department of Public Health's substance use program has more than doubled its investments to combat addiction, going from \$1.5 million in 2015 to over \$3 million in 2018, with all new dollars going toward the opioid crisis. CDPH also provides funding through its HIV program to support treatment, syringe exchange and prevention of overdose deaths. Other City departments and Cook County have made investments as well.

Education of Healthcare Professionals

CDPH is investing in education for medical providers in two main areas: opioid addiction treatment and safer opioid prescribing. In 2017, CDPH provided 40 trainings to 5,713 health professionals. These trainings cover:

- Opioid stewardship, with a focus on the CDC **Guideline for Prescribing Opioids for Chronic Pain**.
→ Illinois has also passed legislation to ensure prescribers more frequently use the Prescription Monitoring Program to prevent patients from doctor-shopping and encourage safer prescribing, consistent with a Chicago-Cook Heroin Task Force recommendation.
- **The prescribing of buprenorphine**. After completing this new training, providers are eligible to prescribe this evidence-based medication for opioid addiction. Contact Gabrielle Nicholas at gabrielle.nicholas@cityofchicago.org if interested in attending or hosting a training.
- A **Medication Assisted Treatment (MAT) Learning Collaborative** that CDPH has convened. The collaborative allows providers from various clinics and stages of MAT program implementation to discuss and learn about best practices. **Thirteen health systems** are participating. Contact Gabrielle Nicholas at gabrielle.nicholas@cityofchicago.org if interested in attending the Learning Collaborative.

Education of Community Members

- Using approximately \$50,000 in privately donated funds, CDPH is undertaking a coordinated community education campaign. CDPH's new website, OvercomeOpioids.org, contains misinformation by presenting facts and local resources to help residents obtain effective treatment and prevent overdose deaths.

- CDPH is hosting an online **resource finder** for local mental health, violence prevention and substance use services.
- As mentioned above, CDPH is investing \$225,000 to support peer health workers to engage and educate residents on opioid overdose prevention.

Treatment

- In 2017, the Chicago Department of Public Health (CDPH) began investing an additional **\$700,000** a year in medication-assisted treatment (MAT), which combines medicine with therapy and other supportive services to combat opioid addiction. Through the Public Health Institute of Metropolitan Chicago, seven delegate agencies were awarded grants to provide treatment. These agencies used the grants to serve over **1,000 individuals** in 2017, mainly on the south and west sides.
- In 2018, CDPH is increasing its investment again, putting another **\$500,000** toward opioid addiction treatment and services, including funding for **MAT and recovery homes**. This annual investment will serve an estimated **500 more residents** annually.
- These increases are on top of the \$1.5 million annually that CDPH's substance use program was already investing in various kinds of addiction treatment, providing support for outpatient and residential treatment settings, medical detoxification services, and recovery homes.
→ In addition, Illinois now has a 24/7 helpline for addiction treatment, satisfying a Chicago-Cook Heroin Task Force recommendation.

What is an opioid overdose?

Heroin and opioid pain medications can cause bad reactions that make your breathing slow down or even stop. This can happen if your body can't handle the opioids you take that day, or if you take stronger opioids than usual.



chicagoconnects.org

If you are considering drug treatment, you can find local resources on chicagoconnects.org or by calling 1-833-2FINDHELP.

Now that you have Naloxone...
TELL SOMEONE WHERE IT IS AND HOW TO USE IT.

TIPS TO AVOID OPIOID OVERDOSE:

-  Try not to use drugs alone. If you do use drugs alone, let someone know where you are.
-  Try not to mix drugs. If you do mix drugs, use less of each drug.
-  Try a small amount of your drug to determine how strong it is.
-  Try to use less if you are sick or your immune system is down.
-  If you've had a period of abstinence (for example detox or incarceration) use less drug than normal.
-  Try to leave the door unlocked whenever possible.
-  Try not to mix your opioids with alcohol, benzodiazepines (Xanax, Ativan, Klonopin, Valium), or medicines that make you sleepy.
-  Be sure to let others know that you have naloxone and teach them how to use it.

SAVE A LIFE GET NALOXONE



FOR MORE INFORMATION & ADDITIONAL RESOURCES, VISIT OVERCOMEOPIOIDS.ORG







CHICAGO DEPARTMENT OF PUBLIC HEALTH

In Case of Overdose:

1 CHECK RESPONSIVENESS

LOOK FOR ANY OF THE FOLLOWING:

-  No response even if you shake them or say their name
-  Breathing slows or stops
-  Lips and fingernails turn blue or gray
-  Skin gets pale or clammy

2 CALL 911 & GIVE NALOXONE IF THEY ARE NOT BREATHING

IF NO REACTION IN 3 MINUTES, GIVE SECOND NALOXONE DOSE

3 DO RESCUE BREATHING AND/OR CHEST COMPRESSIONS

FOLLOW 911 DISPATCHER INSTRUCTIONS

LET 911 DISPATCHER KNOW HOW MUCH NALOXONE YOU HAVE GIVEN THEM

STAY WITH PERSON UNTIL HELP ARRIVES.

Illinois has a Good Samaritan Law with certain protections for those calling 911. Learn more at overcomeopioids.org/respond



How To Give Naloxone:

There are 3 common naloxone products. Follow the instructions for the type you have.

Nasal Spray

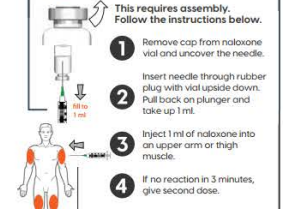
This nasal spray needs no assembly and can be sprayed up one nostril by pushing the plunger.

If no reaction in 3 minutes, give second dose.



Injectable Naloxone

This requires assembly. Follow the instructions below.

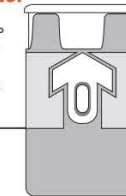


How To Get More Naloxone:

Find a nearby Chicago Recovery Alliance (CRA) location where you can be trained and get an injectable naloxone kit for free! For a list of locations and times visit www.anypositivechange.org

Ask your local pharmacist for naloxone (pharmacists who have completed training can dispense naloxone without a prescription). Depending on your insurance, there may be a cost.

Ask your healthcare provider for a prescription for naloxone that you can fill in a pharmacy.



Auto-Injector

The naloxone auto-injector needs no assembly and can be injected into the outer thigh, even through clothing. It contains a speaker that provides step-by-step instructions.

Naloxone handouts available through CDPH or online at: overcomeopioids.org/prevent/



**OVERCOME
OPIOIDS**
ADDICTION & OVERDOSE

STEP UP
SAVE A LIFE. GET NALOXONE.

Midway
Harlem
Ashland/63rd Cottage Grove
Linden
54th/Cermak
Kimball

OPIOID OVERDOSE CAN HAPPEN TO ANYONE, ANYWHERE, ANYTIME.

OVERDOSE DEATH RATES DECREASED BY HALF IN COMMUNITIES WITH ACCESS TO NALOXONE.

GET NALOXONE **ASK YOUR PROVIDER**

HEALTHY CHICAGO
CHICAGO DEPARTMENT OF PUBLIC HEALTH
OVERCOME OPIOIDS.ORG

IS YOUR LOVED ONE TAKING MEDICINE FOR PAIN?
SOMETIMES PAINKILLERS CAN HURT.

YOU CAN HELP

SAVE A LIFE **GET NALOXONE**

DRUG OVERDOSE IS THE #1 REASON FOR ADULT ACCIDENTAL DEATHS IN THE U.S.

NALOXONE IS A SAFE WAY TO REVERSE AN OPIOID OVERDOSE. ASK YOUR PROVIDER FOR MORE INFORMATION.

HEALTHY CHICAGO
CHICAGO DEPARTMENT OF PUBLIC HEALTH
OVERCOME OPIOIDS.ORG

Posters available through CDPH or online at: overcomeopioids.org/prevent/

Learn more about public health in Chicago: Health Alert Network

<https://www.chicagohan.org>

- For updates/education opportunities, register for CDPH's PROVIDER portal and alert system

Chicago
HAN
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Public Home Surveys BT Reference Pertussis Infection Control Conference Influenza Measles STI Information

Meningococcal Disease Zika TB **Opioid Information** Hepatitis A C. auris

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Publication Date	Alert ID	Topic	Title
01/26/2018 01:38:29 PM	46646786	Influenza	Weekly Chicago Flu Update Week 03
01/26/2018 09:36:40 AM	46646785	Infectious Disease	Increase in the number of Candida auris cases in the Chicago-metropolitan region
01/19/2018 03:48:18 PM	46646686	Vaccine Preventable	CDPH: Local Public Exposures for Two Recent Measles Cases -

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