



HIV, HCV and Infection Prevention: Considerations for the Care of Persons who Inject Drugs

SE ATEC Coinfection Friday, June 21, 2019

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INSTITUTE FOR GLOBAL HEALTH
& INFECTIOUS DISEASES

Disclosures

- Training grant from NIH (T32AI070114)

Disclaimer

- This presentation will reference the existence of certain harm reduction strategies that may not be legal in all states or, in the case of supervised drug consumption facilities, may not be legal under federal laws. This presentation is intended to be a review of existing evidence. It is not instructing anyone to engage in unlawful activity.

Educational Objectives

- Become familiar with the epidemiology of HIV and HCV in people who inject drugs (PWID) in the US
- Review other infections of particular concern for PWID
- Know the different modalities of infection prevention for PWID



Outline

- Quick review of opioid crisis
- Epidemiology of HIV and HCV in people who inject drugs (PWID)
- Other infections in PWID
- Enhancing care: prevention strategies, harm reduction
- Future directions

Opioids, Car Crashes and Falling: The Odds of Dying in the U.S.

A new report found that, for the first time, Americans are more likely to die of an opioid overdose than in a vehicle crash. But the likeliest causes of death are still heart disease and cancer.

Hundreds of N.C. Doctors Say They've Stopped Prescribing Opioids

NC's Surge In Rate Of Drug Overdose Deaths Second Highest In U.S.

By MARK RUMSEY • AUG 16, 2018

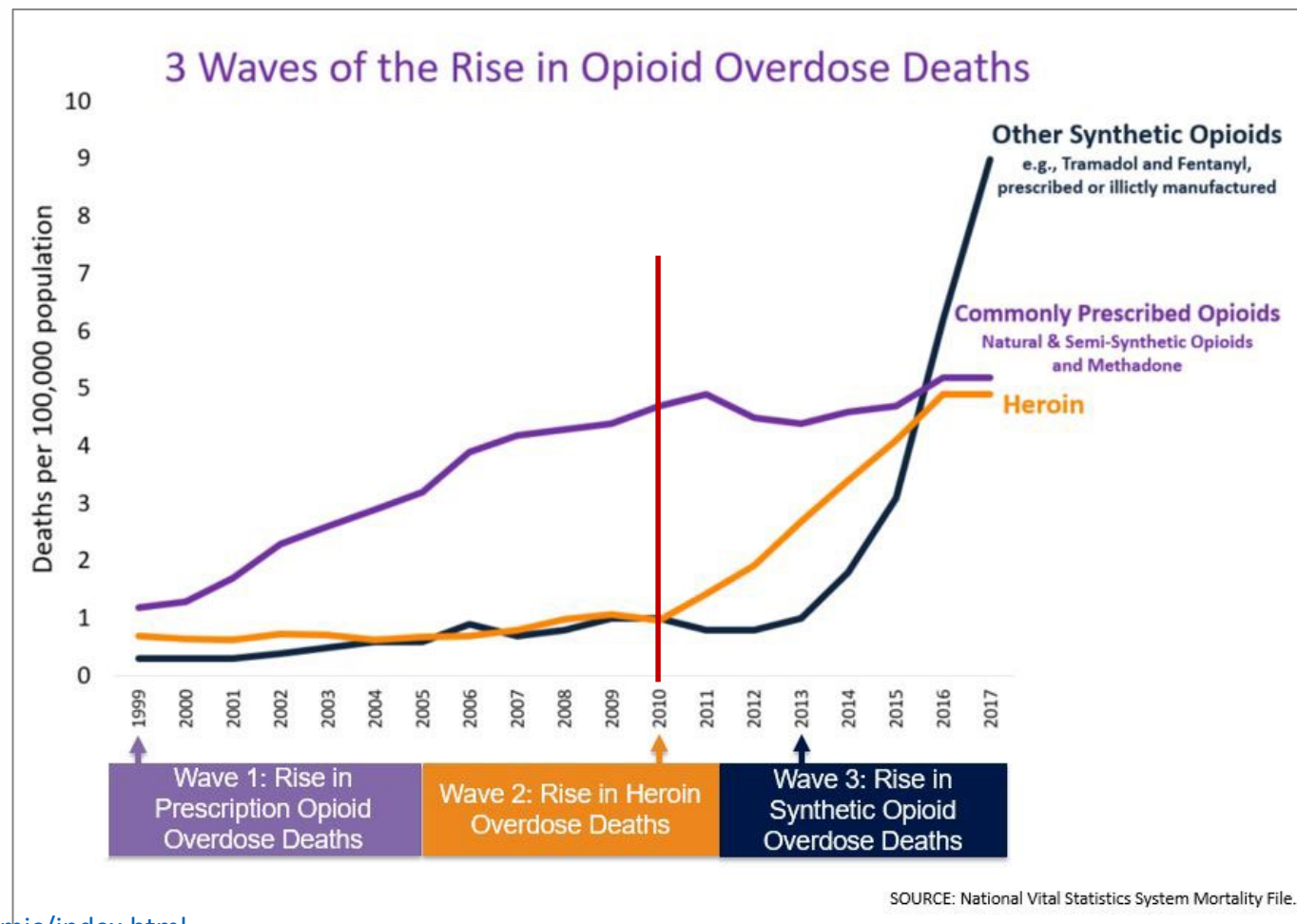
North Carolina News

NC police warns 3 overdoses in 3 hours could be result of cocaine, fentanyl mix

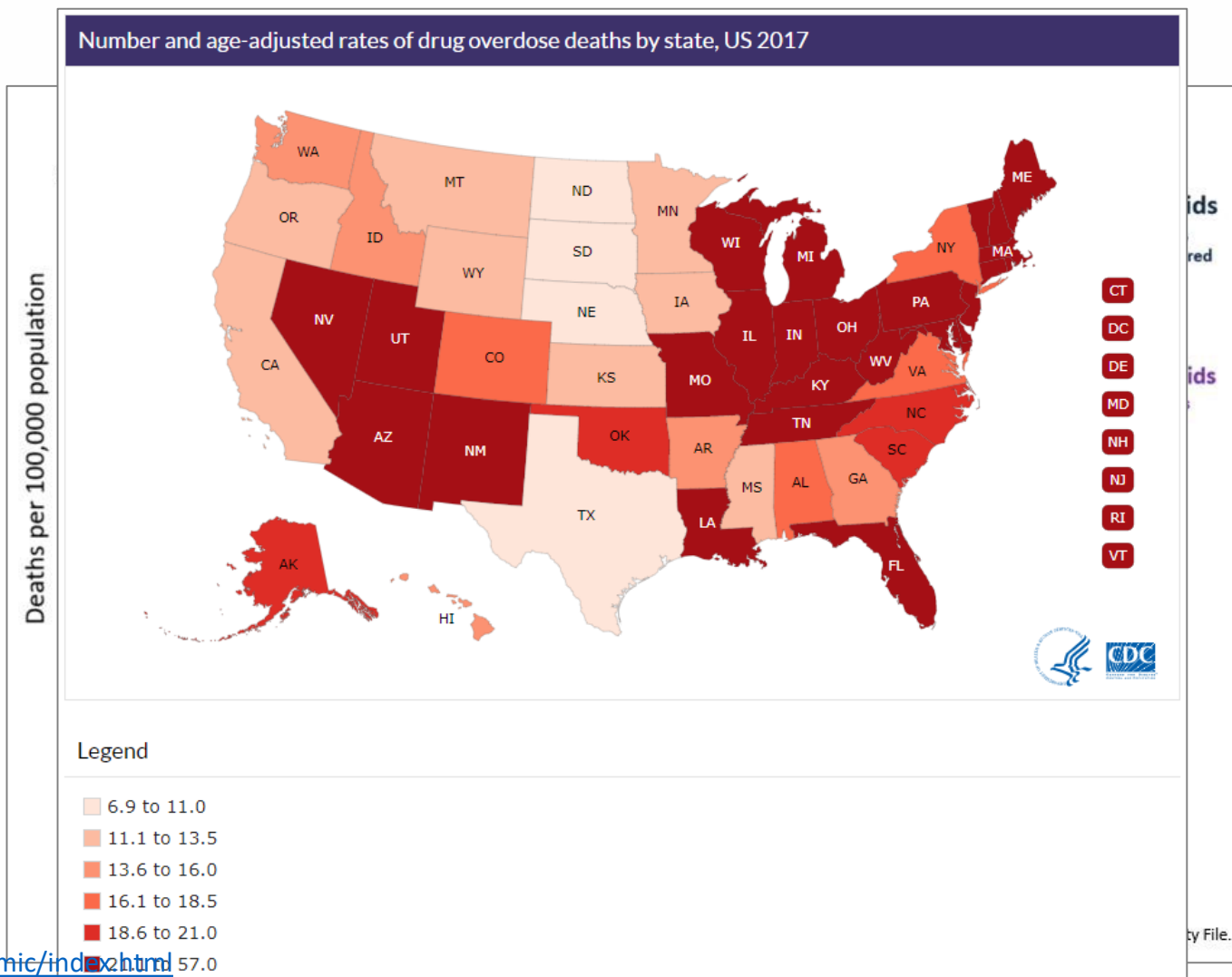
Sewage May Hold the Key to Tracking Opioid Abuse

Public health managers are hoping to pinpoint how and when people abuse drugs in order to prevent deaths

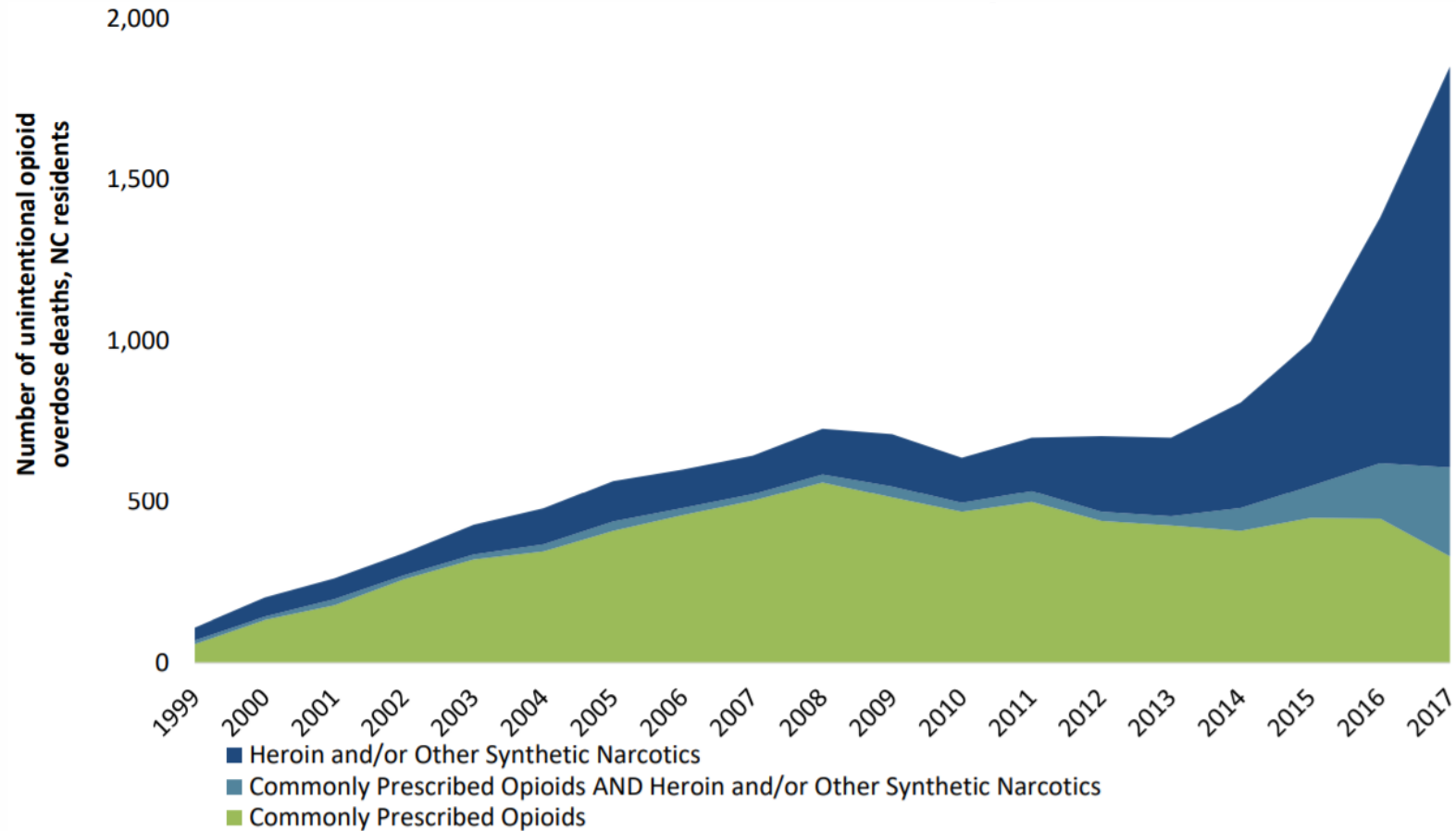
Opioid Epidemic - US



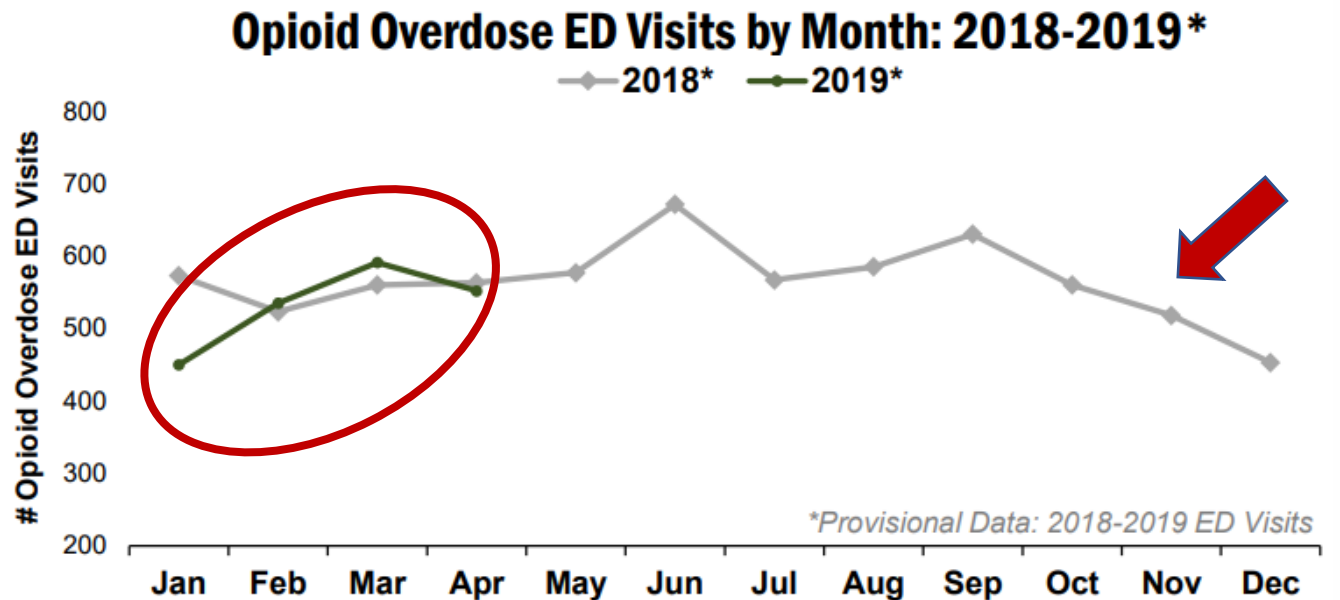
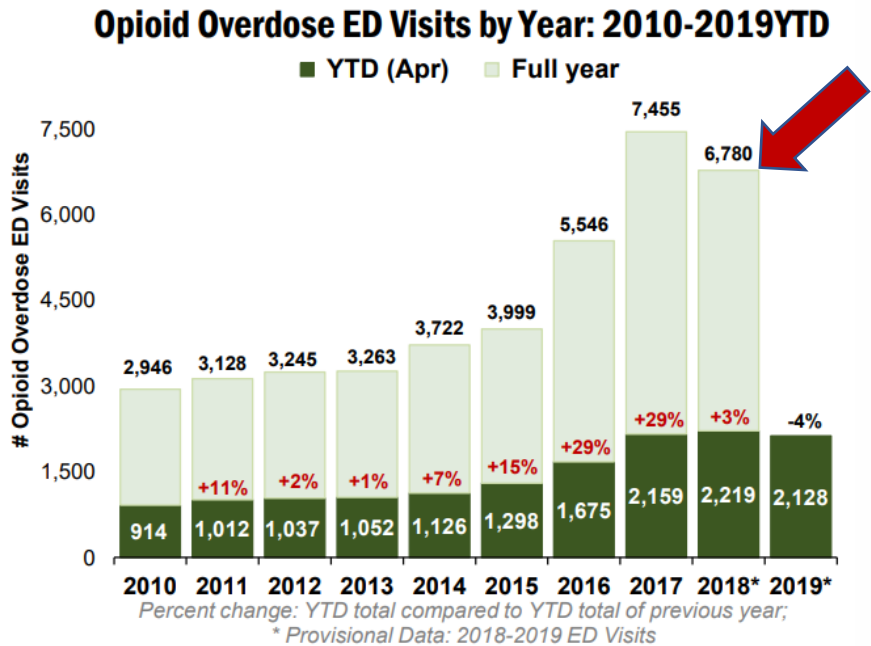
Opioid Epidemic - US



Opioid Epidemic – North Carolina



Opioid Epidemic – North Carolina



Opioid Epidemic – What’s Next?

Overdoses among persons using stimulants?

- Fentanyl contamination of other drugs

Morbidity and Mortality Weekly Report

TABLE 3. Annual number and age-adjusted rate of drug overdose deaths* involving cocaine[†] and psychostimulants with abuse potential,^{§,¶} by sex, age, race and Hispanic origin,** urbanization level,^{††} and selected states^{§§} — United States, 2015 and 2016

Decedent characteristic	Cocaine						Psychostimulants with abuse potential					
	2015		2016		Change from 2015 to 2016 ^{¶¶}		2015		2016		Change from 2015 to 2016 ^{¶¶}	
	No.	Rate	No.	Rate	Absolute rate change	% Change in rate	No.	Rate	No.	Rate	Absolute rate change	% Change in rate
All	6,784	2.1	10,375	3.2	1.1***	52.4***	5,716	1.8	7,542	2.4	0.6***	33.3***

Opioid Epidemic – What’s Next?

Overdoses among persons using stimulants?

- Fentanyl contamination of other drugs

Morbidity and Mortality Weekly Report

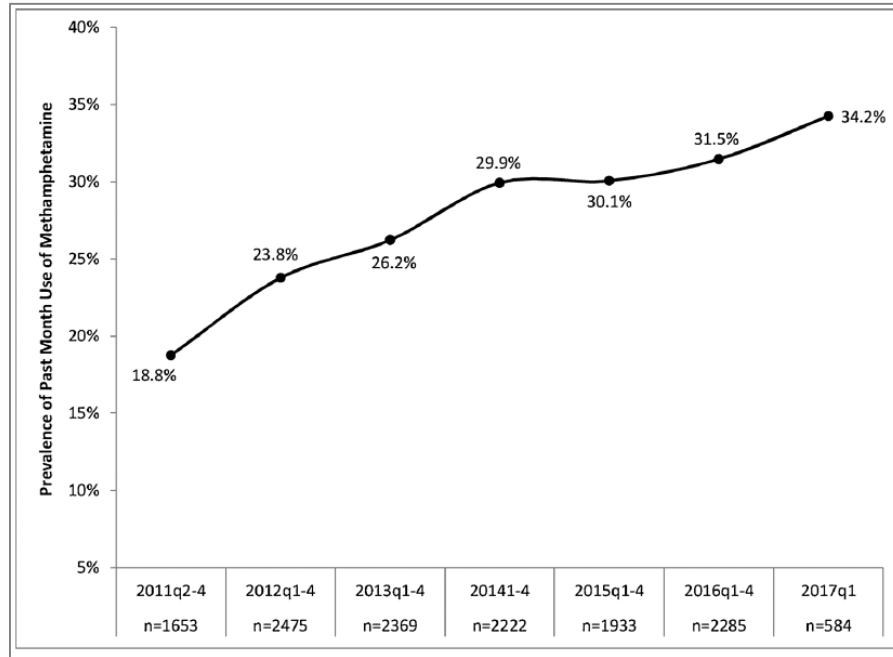
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Opioid Epidemic – What’s Next?

Increasing methamphetamine use

The New York Times
Meth, the Forgotten Killer, Is Back. And It’s Everywhere.

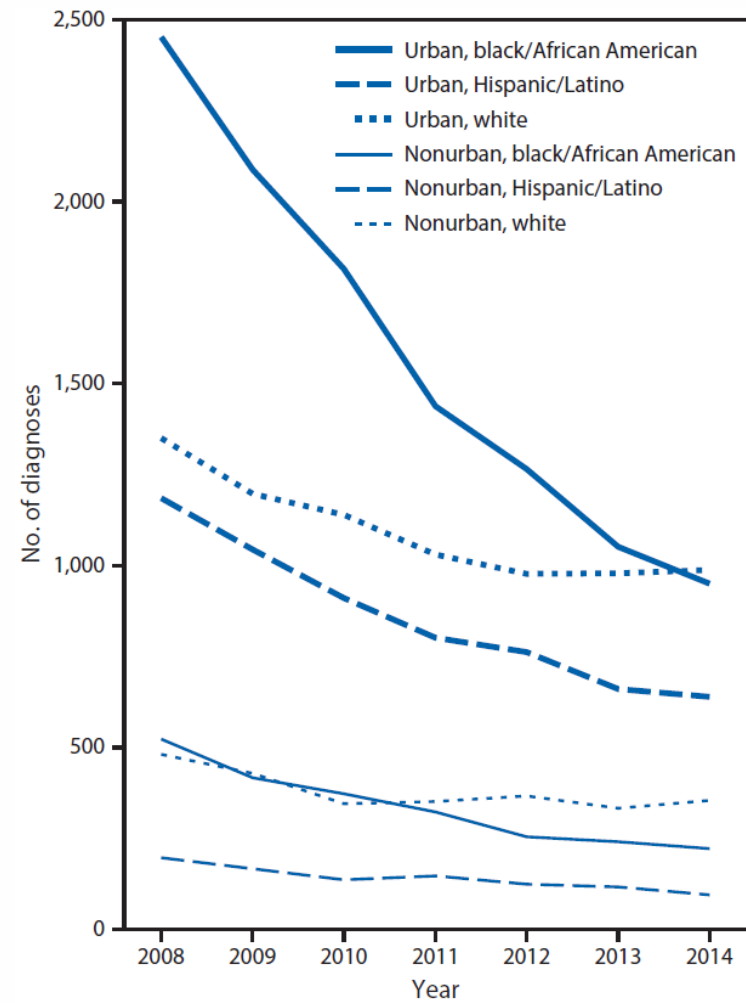




Outline

- Quick review of opioid crisis
- **Epidemiology of HIV and HCV in people who inject drugs (PWID)**
- Other infections in PWID
- Enhancing care: prevention strategies, harm reduction
- Future directions

Epidemiology - HIV



Wejnert, MMWR 2016

Epidemiology - HIV

Since 2014...

Outbreaks among persons injecting drugs

Peters, NEJM 2016.
MMWR 2019

THE NEW ENGLAND JOURNAL OF MEDICINE

ORIGINAL ARTICLE

HIV Infection Linked to Injection Use of Oxymorphone in Indiana, 2014–2015

Morbidity and Mortality Weekly Report

Notes from the Field

HIV Diagnoses Among Persons Who Inject Drugs — Northeastern Massachusetts, 2015–2018

Kevin Cranston, MDiv¹; Charles Alpren, MBChB^{2,3}; Betsy John, MPH^{1,2}; ...

investigation to characterize the outbreak and recommend control measures.

Investigators reviewed surveillance data and HIV-1 polymerase (*pol*) gene nucleotide sequences derived from drug resistance testing and interviewed persons with HIV infection.

Morbidity and Mortality Weekly Report

Outbreak of Human Immunodeficiency Virus Infection Among Heterosexual Persons Who Are Living Homeless and Inject Drugs — Seattle, Washington, 2018

Matthew R. Golden, MD^{1,2}; Richard Lechtenberg, MPH¹; Sara N. Glick, PhD^{1,2}; Julie Dombrowski, MD^{1,2}; Jeff Duchin, MD^{1,2}; Jennifer R. Reuer, MPH³; Shireesha Dhanireddy, MD³; Santiago Neme, MD²; Susan E. Buskin, PhD¹

Although diagnoses of human immunodeficiency virus (HIV) infection among persons who inject drugs in the United States are declining, an HIV outbreak among such persons in rural Indiana demonstrated that population's vulnerability to HIV infection (1). In August 2018, Public Health–Seattle and King County (PHSKC) identified a cluster of cases of HIV infection among persons living homeless, most of whom injected drugs. Investigation identified 14 related cases diagnosed from February to mid-November 2018 among women who inject drugs and men who have sex with women (MSW) who inject drugs and their sex partners. All 14 persons were living homeless in an approximately 3–square-mile area and were part of a cluster of 23 cases diagnosed since 2008. Twenty-seven cases of HIV infection were diagnosed among women and MSW who inject drugs in King County during January 1–November 15, 2018, a 286% increase over the seven cases diagnosed in 2017. PHSKC has alerted medical and social service providers and the public about the outbreak, expanded HIV testing among persons who inject drugs or who are living homeless, and is working to increase the availability of clinical and prevention services in the geographic area of the outbreak. This outbreak highlights the vulnerability of persons who inject drugs, particularly those who also are living homeless, to outbreaks of HIV infection, even in areas with high levels

In July 2018, an MSW living homeless in north Seattle tested positive for acute HIV infection (HIV Ag/Ab positive, Geenius HIV negative, HIV RNA positive) at an emergency department (ED) after being evaluated with fever (patient 6) (Table 1). He did not report injecting drugs, but had had a woman for sex. That woman was living homeless in the area, injected heroin, and had tested HIV-positive in June (patient 5). A social media search performed by a public health disease intervention specialist linked her to a man who injected drugs and was living homeless in north Seattle (patients 1, 2, and 3); none of these women had known epidemiologic links to other recently diagnosed cases. Subsequent molecular analyses conducted with HIV TRACE (2), a program that uses HIV genotypes to identify cases with related HIV strains based on HIV genetic sequence data, confirmed that four of the recently diagnosed cases in women and MSW who inject drugs, including the three without known epidemiologic links to other 2018 diagnoses, were infected with related HIV strains (patients 1–4). Molecular analysis also linked the seven recently diagnosed cases to eight cases diagnosed during 2008–2017 (patients 15, 21, and 23) and two cases identified in September

Fig 1. No. of cases

Scott County, Indiana

- 181 new HIV diagnoses
- 88% reported injecting oxymorphone
- 92% HCV co-infected

THE NEW ENGLAND JOURNAL OF MEDICINE

ORIGINAL ARTICLE

HIV Infection Linked to Injection Use of Oxymorphone in Indiana, 2014–2015

Philip J. Peters, M.D., Pamela Pontones, M.A., Karen W. Hoover, M.D., M.P.H., Monita R. Patel, Ph.D., M.P.H., Romeo R. Galang, M.D., M.P.H., Jessica Shields, B.S., Sara J. Blosser, Ph.D., Michael W. Spiller, Ph.D., Brittany Combs, R.N., William M. Switzer, M.P.H., Caitlin Conrad, B.S., Jessica Gentry, M.A., Yury Khudyakov, Ph.D., Dorothy Waterhouse, B.S., S. Michele Owen, Ph.D., Erika Chapman, M.P.H., Jeremy C. Roseberry, M.A., Veronica McCants, M.S.A., Paul J. Weidle, Pharm.D., M.P.H., Dita Broz, Ph.D., M.P.H., Taraz Samandari, M.D., Ph.D., Jonathan Mermin, M.D., M.P.H., Jennifer Walthall, M.D., M.P.H., John T. Brooks, M.D., and Joan M. Duwve, M.D., M.P.H., for the Indiana HIV Outbreak Investigation Team*

ABSTRACT

BACKGROUND

In January 2015, a total of 11 new diagnoses of human immunodeficiency virus (HIV) infection were reported in a small community in Indiana. We investigated the extent and cause of the outbreak and implemented control measures.

METHODS

We identified an outbreak-related case as laboratory-confirmed HIV infection newly diagnosed after October 1, 2014, in a person who either resided in Scott County, Indiana, or was named by another case patient as a syringe-sharing or sexual partner. HIV polymerase (pol) sequences from case patients were phylogenetically analyzed, and potential risk factors associated with HIV infection were ascertained.

RESULTS

From November 18, 2014, to November 1, 2015, HIV infection was diagnosed in 181 case patients. Most of these patients (87.8%) reported having injected the extended-release formulation of the prescription opioid oxymorphone, and 92.3% were coinfecting with hepatitis C virus. Among 159 case patients who had an HIV type 1 pol gene sequence, 157 (98.7%) had sequences that were highly related, as determined by phylogenetic analyses. Contact tracing investigations led to the identification of 536 persons who were named as contacts of case patients; 468 of these contacts (87.3%) were located, assessed for risk, tested for HIV, and, if infected, linked to care. The number of times a contact was named as a syringe-sharing partner by a case patient was significantly associated with the risk of HIV infection (adjusted risk ratio for each time named, 1.9; $P < 0.001$). In response to this outbreak, a public health emergency was declared on March 26, 2015, and a syringe-service program in Indiana was established for the first time.

CONCLUSIONS

Injection-drug use of extended-release oxymorphone within a network of persons who inject drugs in Indiana led to the introduction and rapid transmission of HIV. (Funded by the state government of Indiana and others.)

From the Division of HIV/AIDS Prevention, National Center for HIV, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention, Atlanta (P.J.P., K.W.H., M.R.P., R.R.G., M.W.S., W.M.S., Y.K., S.M.O., V.M., P.J.W., D.B., T.S., J.M., J.T.B.); and the Indiana State Department of Health (P.P., S.J.B., C.C., J.G., E.C., J.C.R., J.W., J.M.D.), Indiana University School of Medicine (J.W.), and Indiana University Richard M. Fairbanks School of Public Health (J.M.D.), Indianapolis, Clark County Health Department, Jeffersonville (J.S., D.W.), and Scott County Health Department, Scottsburg (B.C.) — all in Indiana. Address reprint requests to Dr. Peters at HIV Testing and Biomedical Interventions Activity, Epidemiology Branch, Centers for Disease Control and Prevention, 1600 Clifton Rd. NE, Mailstop E-45, Atlanta, GA 30329, or at pjpeters@cdc.gov.

A complete list of the members of the Indiana HIV Outbreak Investigation Team is provided in the Supplementary Appendix, available at NEJM.org.

This article was updated on July 21, 2016, at NEJM.org.

N Engl J Med 2016;375:229–39.
DOI: 10.1056/NEJMoa1515195
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Outbreaks/Clusters

Lawrence and Lowell, MA

- 2015-2018
- 129 cases

Seattle, WA

- 2018
- 14 cases

Cabell County, WV

- Current
- 49+ cases*

*The Logan Banner, 2019

Morbidity and Mortality Weekly Report

Notes from the Field

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6/17/2019 Active HIV cluster in Cabell County now totals 44 cases | Health | wvgazette.com

https://www.wvgazette.com/news/health/active-hiv-cluster-in-cabell-county-now-totals-cases/article_b84af5c5-a15a-5942-9299-3a7a2fb3caa4.html

Active HIV cluster in Cabell County now totals 44 cases

By Bishop Nash The Herald-Dispatch Apr 28, 2019

HUNTINGTON — Cabell County's active HIV cluster is now at 44 confirmed cases — up from 28 in March — according to the West Virginia Bureau for Public Health.

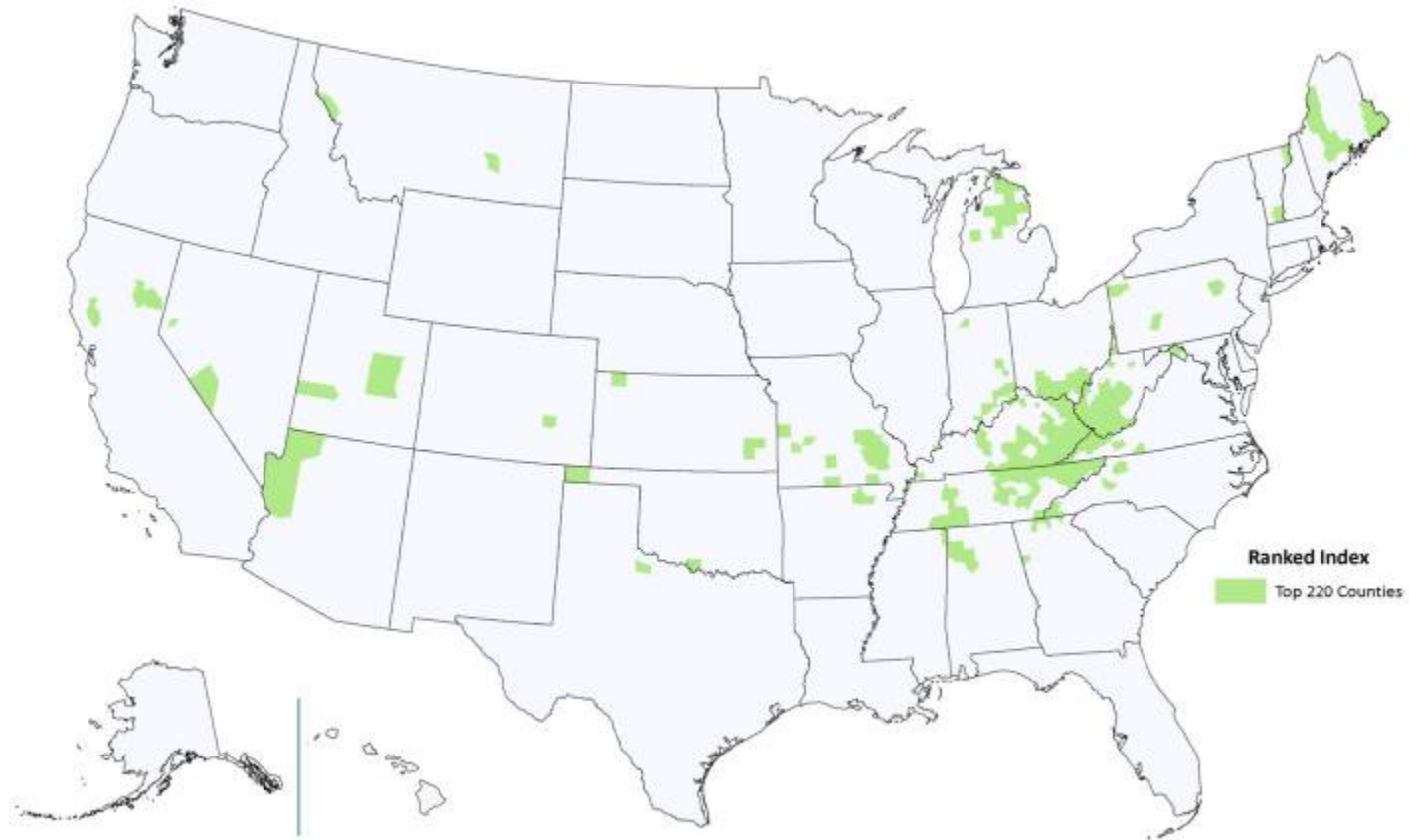
The disease has spread primarily among the county's population of intravenous drug users. There are an estimated 1,800 active IV drug users in Cabell County, according to a recent survey by Johns Hopkins University.

Cabell County's is currently the only HIV cluster in West Virginia, though the state Department of Health and Human Resources is now calling for increased HIV testing statewide.

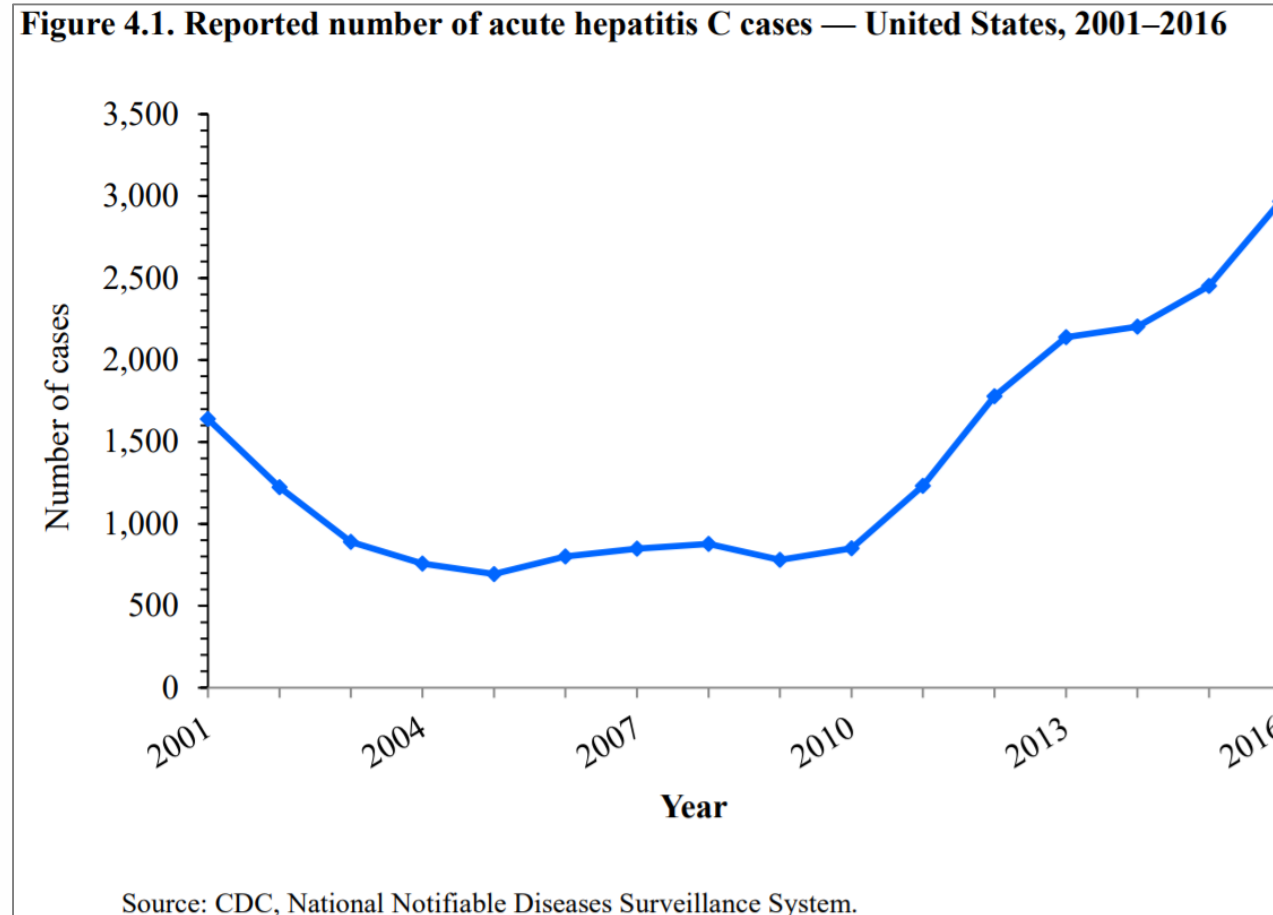
The cluster, tracked from January 2018 to the present, represents a sharp uptick from the baseline average of eight cases annually over the past five years.

This is also the first notable HIV cluster in West Virginia where intravenous drug use is identified as the main risk factor.

Future hotspots

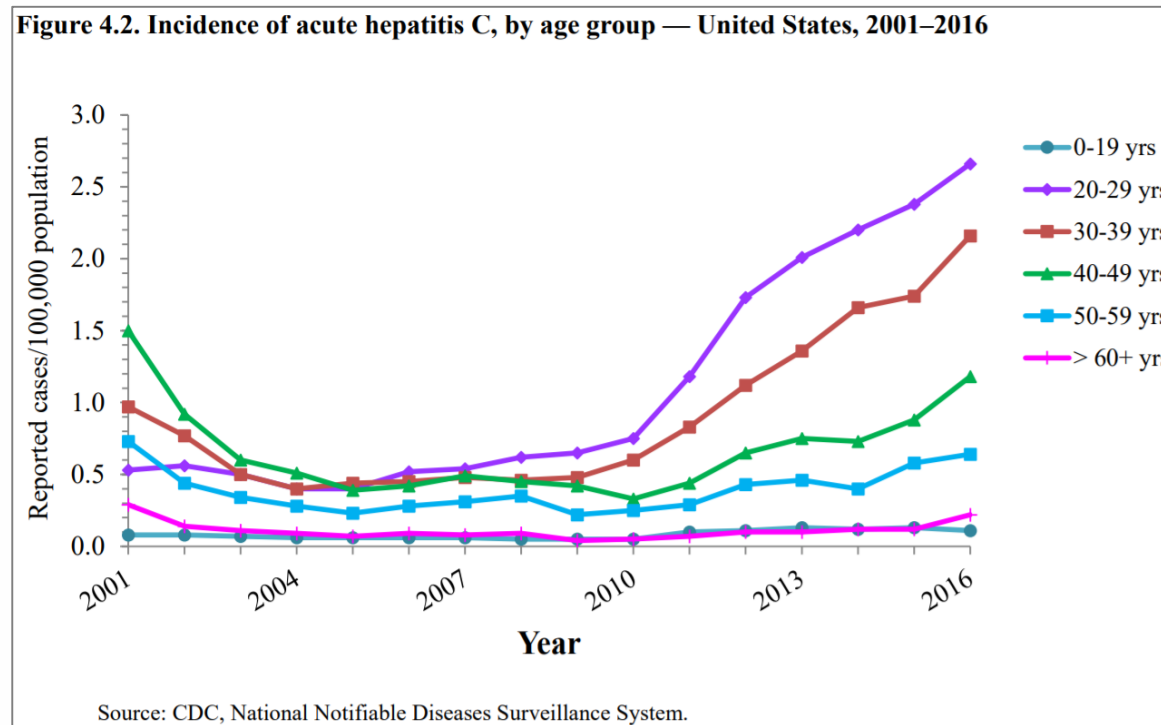


Epidemiology - HCV



Epidemiology - HCV

- 69% of cases are injection-drug related*
- Young persons with greatest rise



*Among those with risk factor data
2016 Viral Hepatitis Surveillance, CDC



Outline

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What's the process?



Courtesy of CB Hurt

Skin and Soft Tissue Infections

Cellulitis

Abscess

Necrotizing
Fasciitis



Other Severe Infections

- Endocarditis
- Osteomyelitis
- Septic arthritis
- Spine infections



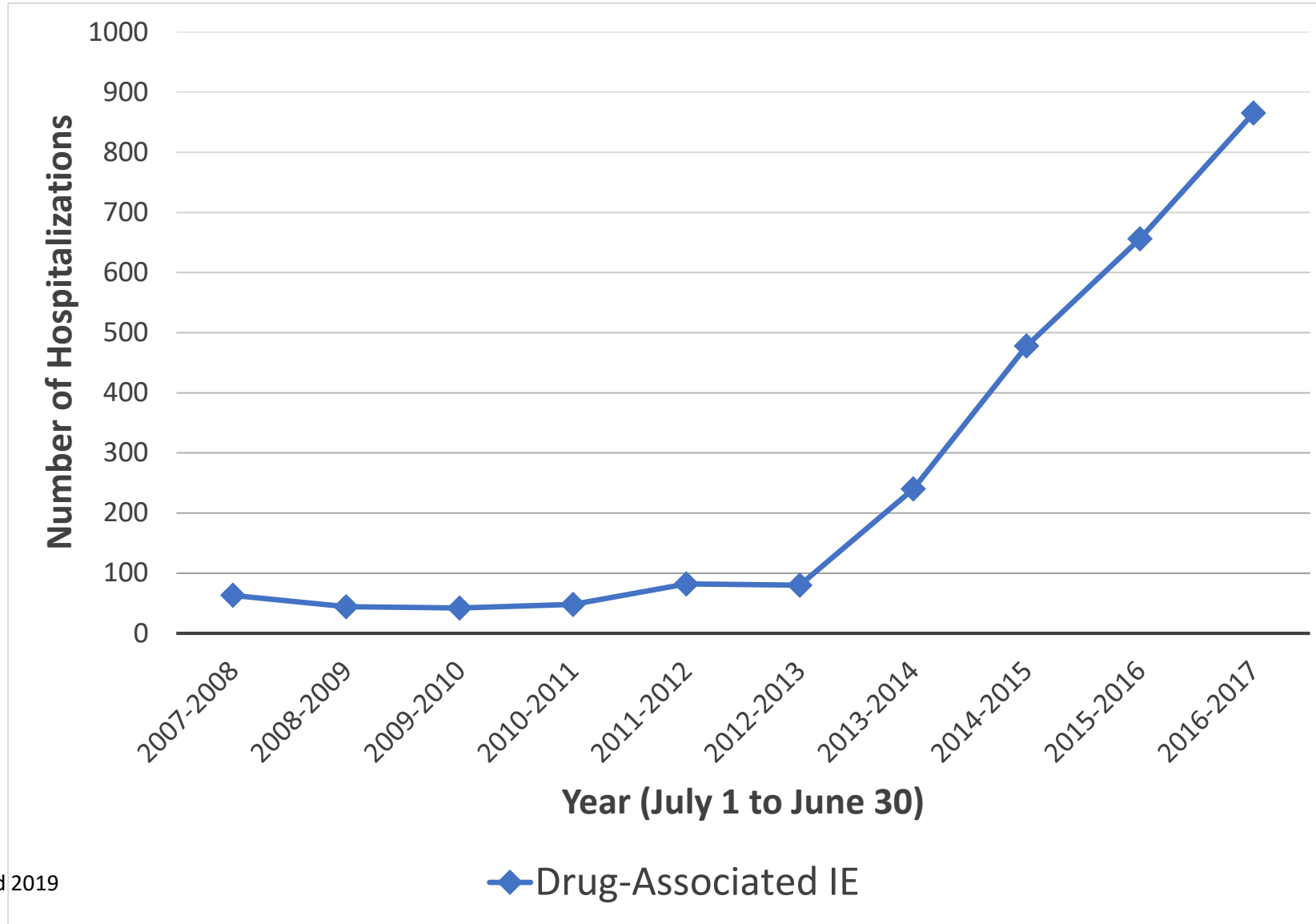
Other Severe Infections

EXHIBIT 1

National estimates of hospitalizations related to opioid abuse/dependence and associated infections

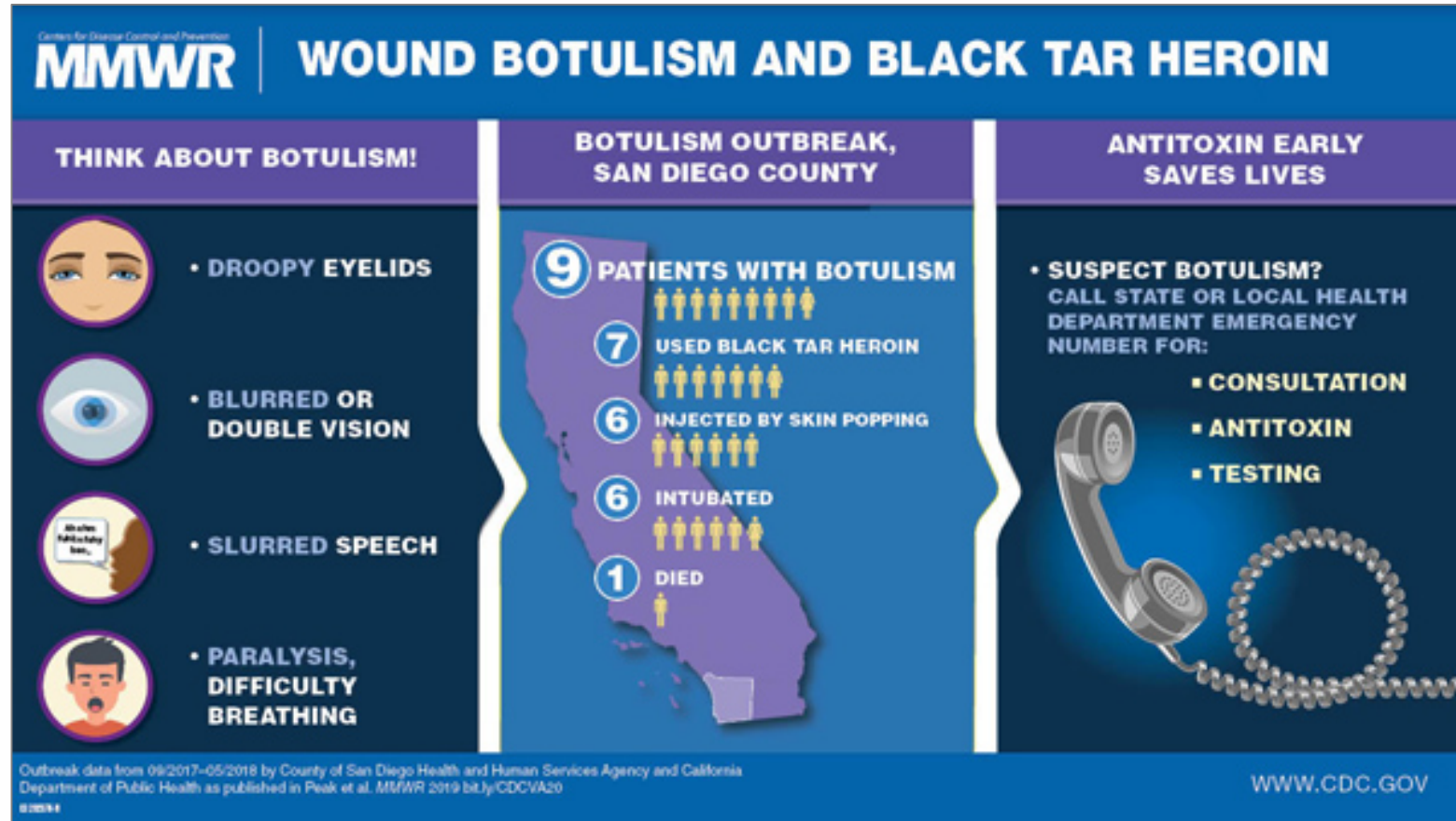
	Number of hospitalizations	
	2002 (N = 36,523,831)	2012 ^a (N = 36,484,846)
Opioid abuse/dependence	301,707	520,275****
Opioid abuse/dependence with infection ^b	3,421	6,535****
Endocarditis	2,077	3,035***
Osteomyelitis	458	985****
Septic arthritis	729	1,940****
Epidural abscess	411	1,085****

Infective Endocarditis Hospitalizations

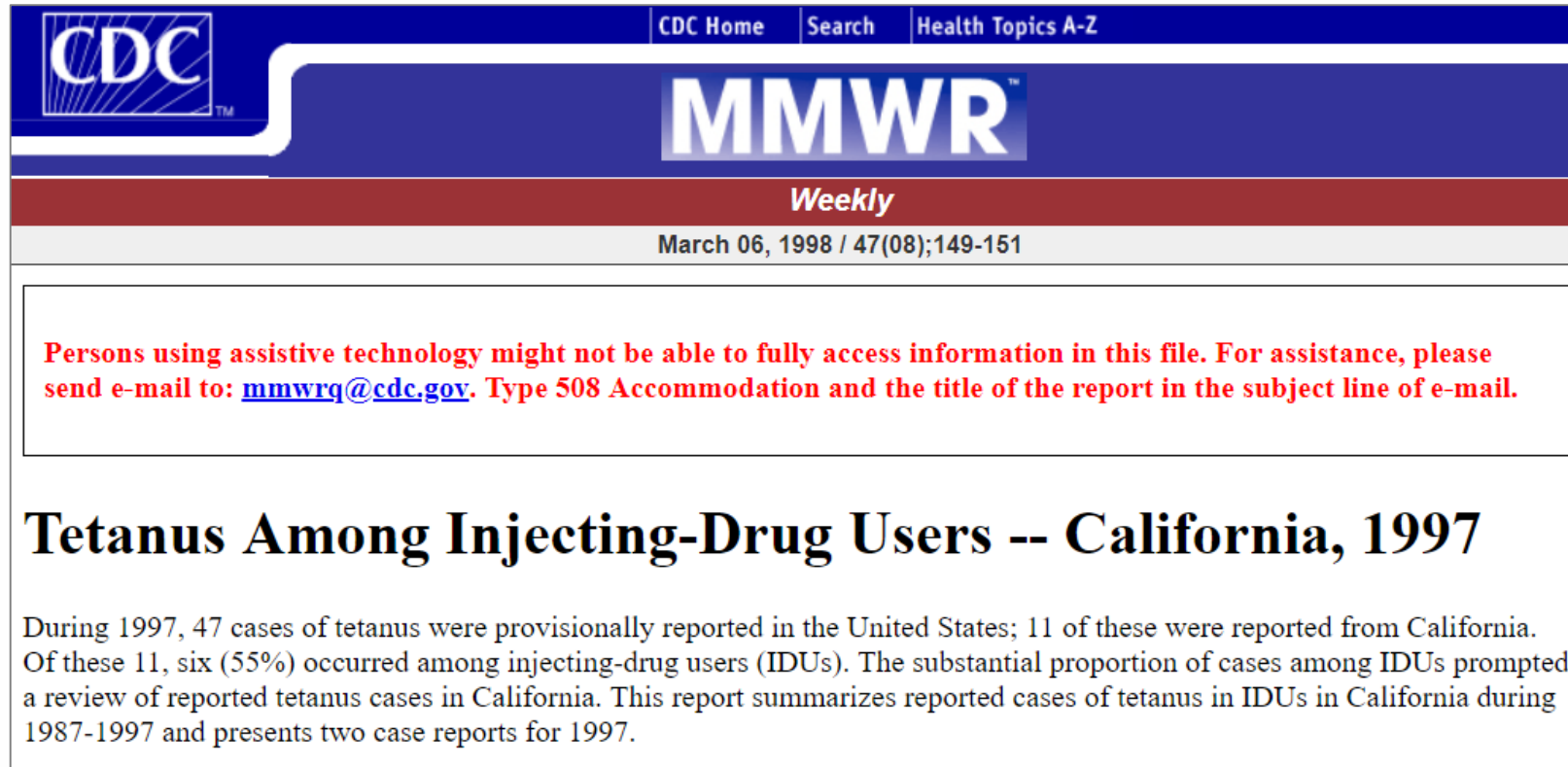


Adapted from:
Schranz, Ann Internal Med 2019

Botulism

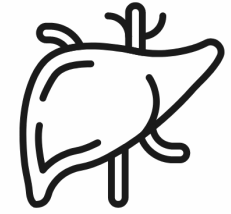


Tetanus



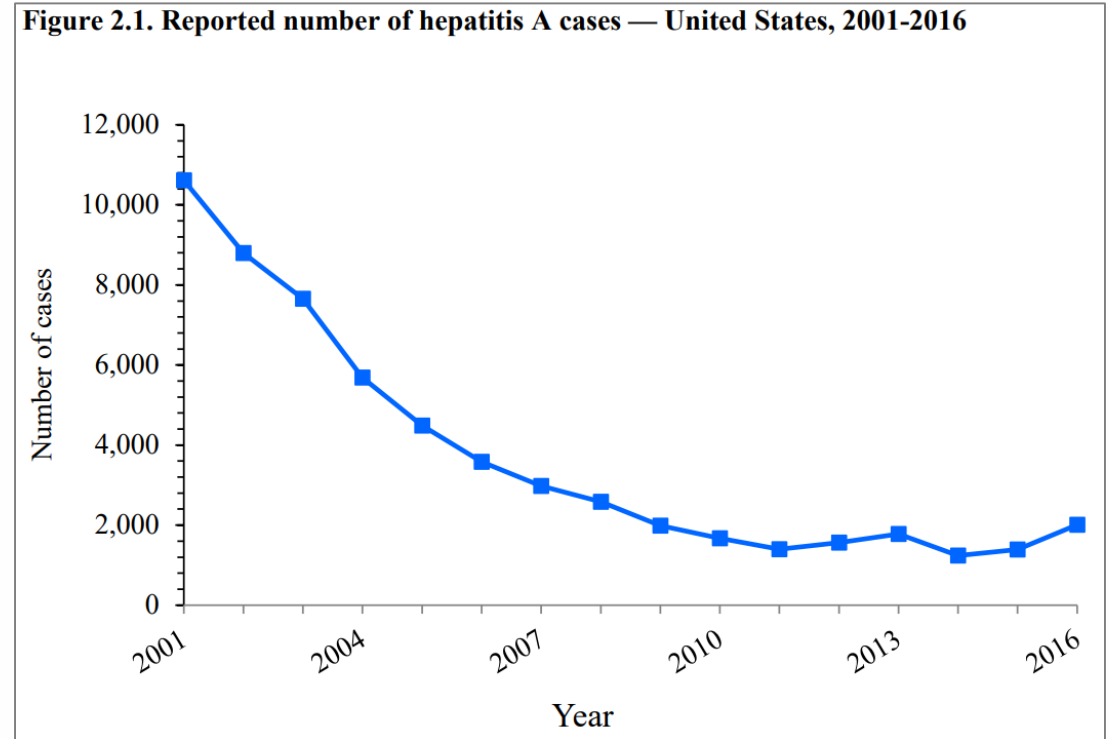
The image shows a screenshot of the CDC MMWR Weekly website. At the top, there is a blue navigation bar with the CDC logo on the left and links for "CDC Home", "Search", and "Health Topics A-Z" on the right. Below this is a dark blue banner with "MMWR" in large white letters, and "Weekly" in smaller white letters below it. A red horizontal bar contains the date "March 06, 1998 / 47(08);149-151". Below the navigation and date bars is a white box with a black border containing a red text notice: "Persons using assistive technology might not be able to fully access information in this file. For assistance, please send e-mail to: mmwrq@cdc.gov. Type 508 Accommodation and the title of the report in the subject line of e-mail." Below this notice is the main title of the report: "Tetanus Among Injecting-Drug Users -- California, 1997". Underneath the title is a paragraph of text: "During 1997, 47 cases of tetanus were provisionally reported in the United States; 11 of these were reported from California. Of these 11, six (55%) occurred among injecting-drug users (IDUs). The substantial proportion of cases among IDUs prompted a review of reported tetanus cases in California. This report summarizes reported cases of tetanus in IDUs in California during 1987-1997 and presents two case reports for 1997."

...And Other Viruses - **Hep A**

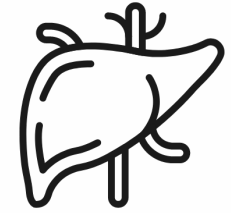


Hepatitis A

- Recent outbreaks among people injecting drugs
- Vaccine-preventable

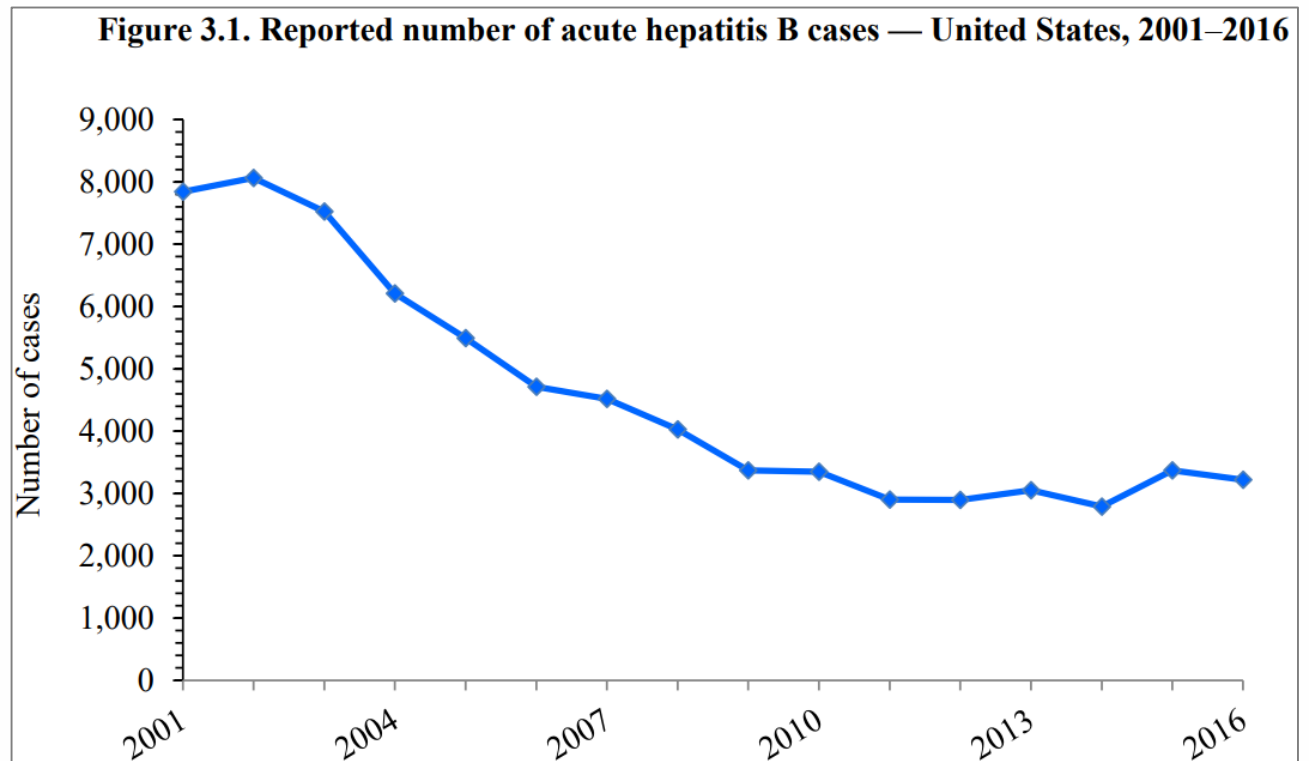


...And Other Viruses – **Hep B**

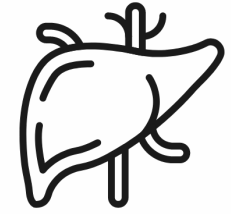


Hepatitis B

- Confirm immunity...
or vaccinate
- Injecting drugs =
main risk factor

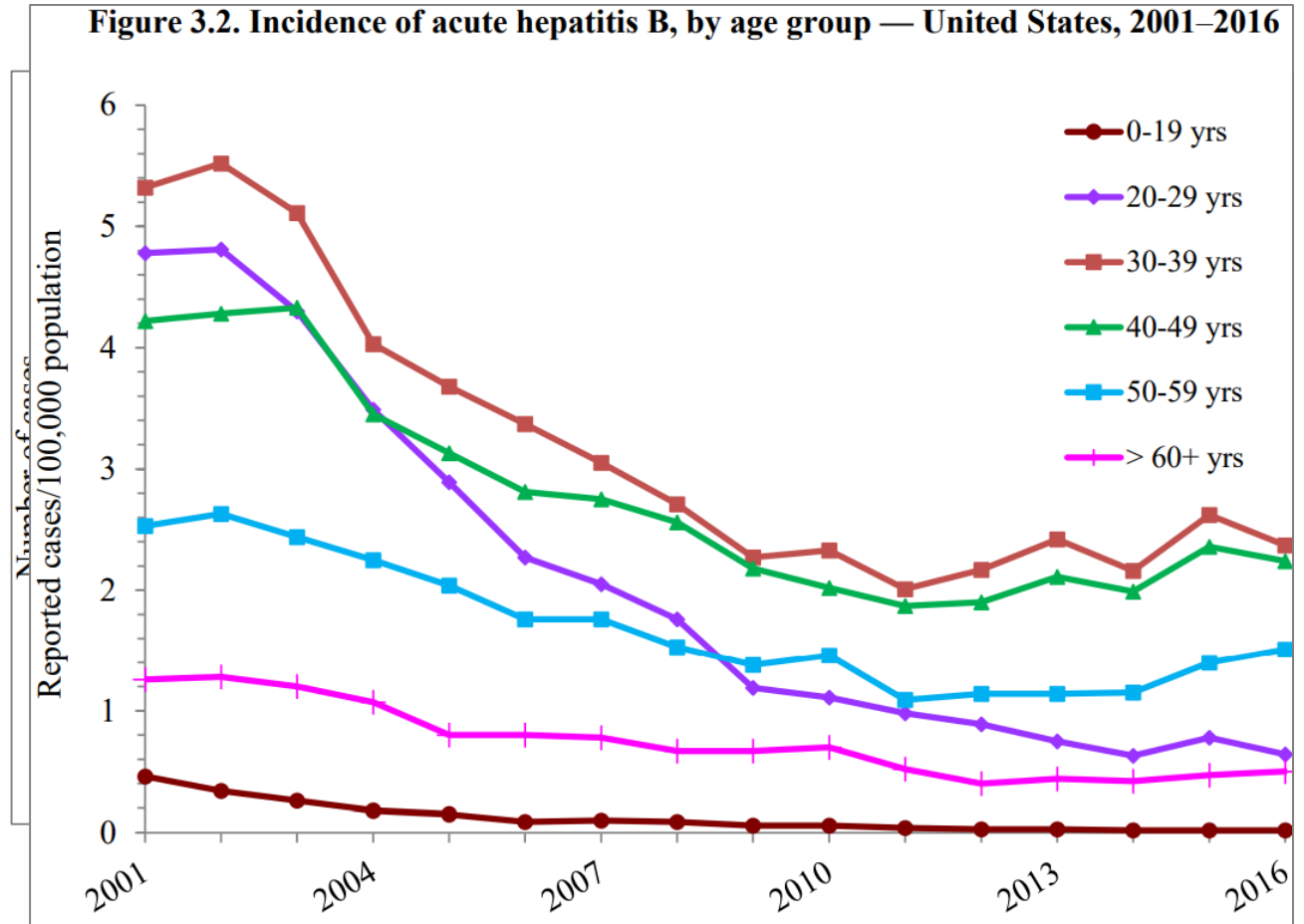


...And Other Viruses – Hep B



Hepatitis B

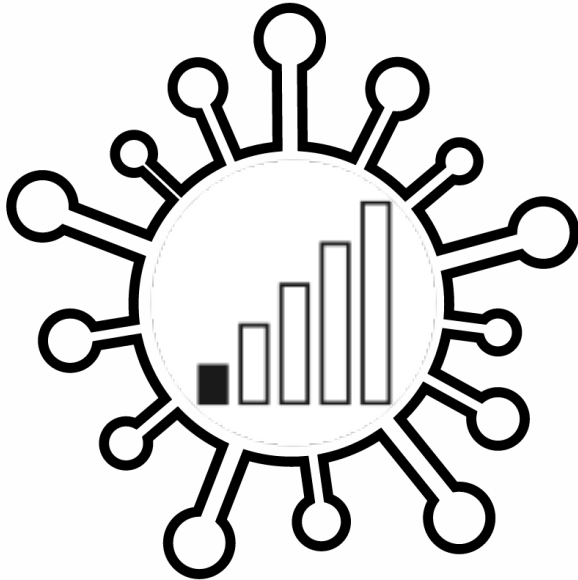
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- Injecting drugs = main risk factor



Transmission Risk

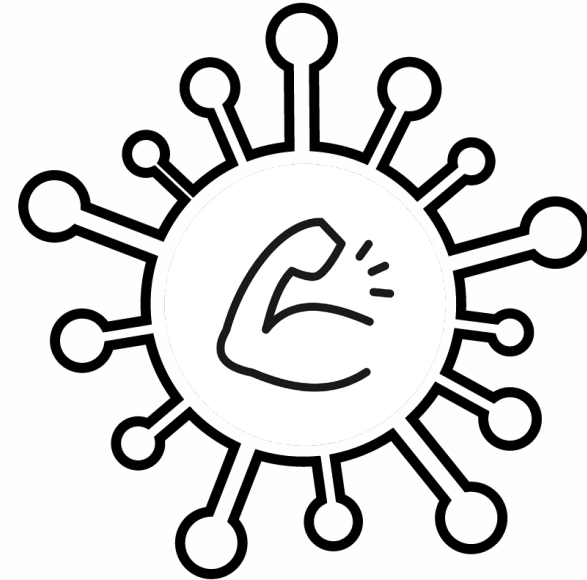
HIV

1 of ~50-200 injection events



HCV

Persists for long periods on inanimate surfaces





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Immunization

Hepatitis A

- Hepatitis A alone: two doses
- Combined Hepatitis A/B: three doses

Hepatitis B

- Conventional
 - Three doses: 0, 1 and 6 months
- Novel adjuvant
 - **Two doses:** 0 and 1 month

Tetanus

- Same as general population (every 10 years)

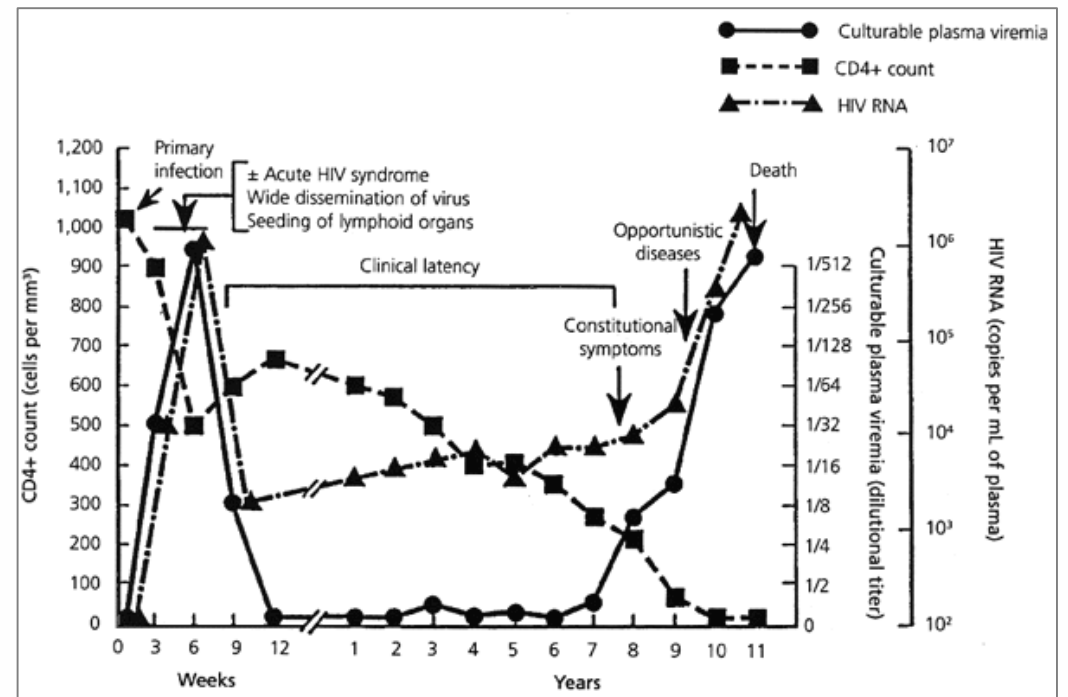
All are safe for immunocompromised individuals



HIV

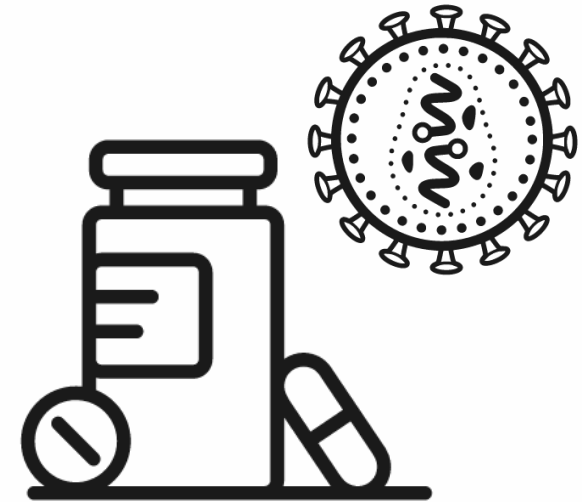
Testing

- Antigen/antibody test ideally
- Acute HIV concern? → HIV RNA



Pre-Exposure Prophylaxis for HIV

- Combination antiretrovirals for prevention of HIV acquisition
 - Tenofovir disoproxil fumarate / emtricitabina (Truvada) once daily
- One study of directly-observed PrEP among PWID
- **Recommended by CDC and USPSTF for PWID**



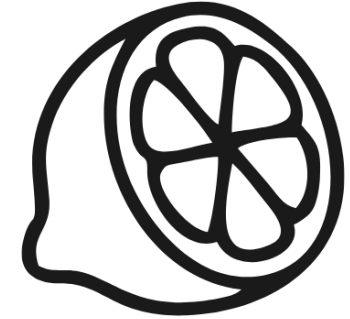
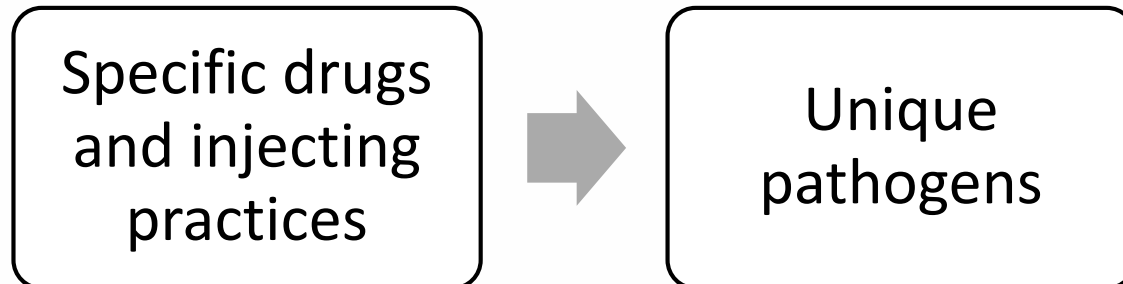
What's the process?



Courtesy of CB Hurt

What's the process?

- Dissolving solids
- Licking needles



What's the process?

“Sharing drugs”

- Can mean different things



Cleaning injection equipment

- Avoid reuse if possible

How To Clean Your Syringes

- If possible, always use a new, sterile syringe* and never share any injection equipment.
- A disinfected syringe is not as good as a new, sterile syringe, but it can greatly reduce your risk for HIV and viral hepatitis.
- Wash your hands before cleaning your syringes.
- You will need three clean containers (cup, bowl, jar, etc.), clean water, and bleach.

To clean a syringe correctly, you must do **all nine steps below**:

A. Rinse with clean water

1. 
In first container, fill up syringe (rig) with clean water
2. 
Tap or shake syringe for 30 seconds.
3. 
Discard water from syringe.

REPEAT steps 1, 2, and 3 at least once or until water in syringe is clear (no blood).

B. Disinfect with pure bleach

4. 
In second container, fill up syringe (rig) with bleach.
5. 
Tap or shake syringe for 30 seconds.
6. 
Discard bleach from syringe.

C. Rinse with clean water

7. 
In third container, fill up syringe (rig) with new, clean water.
8. 
Tap or shake syringe for 30 seconds.
9. 
Discard water from syringe.

Because viral hepatitis can survive on surfaces (even if you can't see blood), cookers (like a spoon) should also be cleaned with water and bleach.

For more information please visit www.cdc.gov/hiv

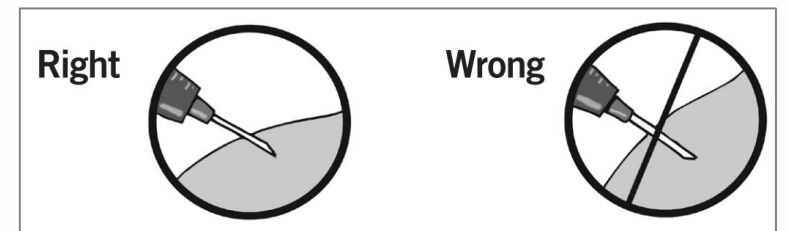
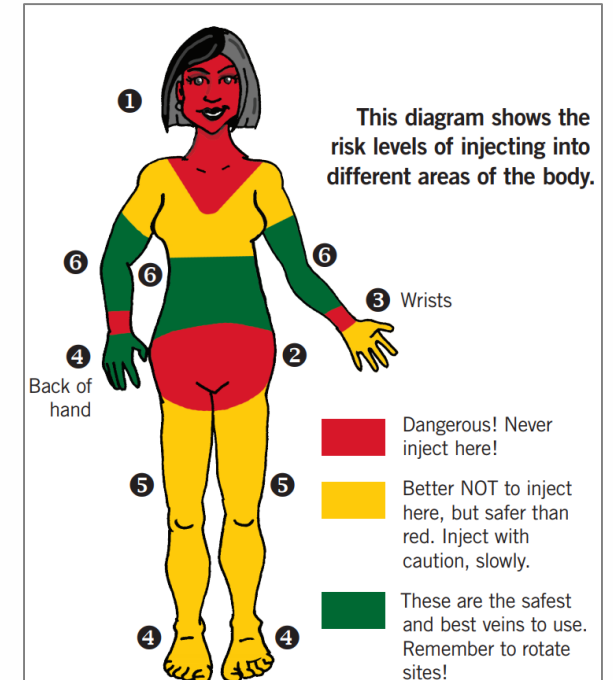
* In this fact sheet, the term syringe includes a syringe and needle as a single unit.

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Division of HIV/AIDS Prevention



Safer Injection Technique

- Aseptic technique
- Needles – small (higher gauge), sharp, inserted bevel up



Where to learn more?



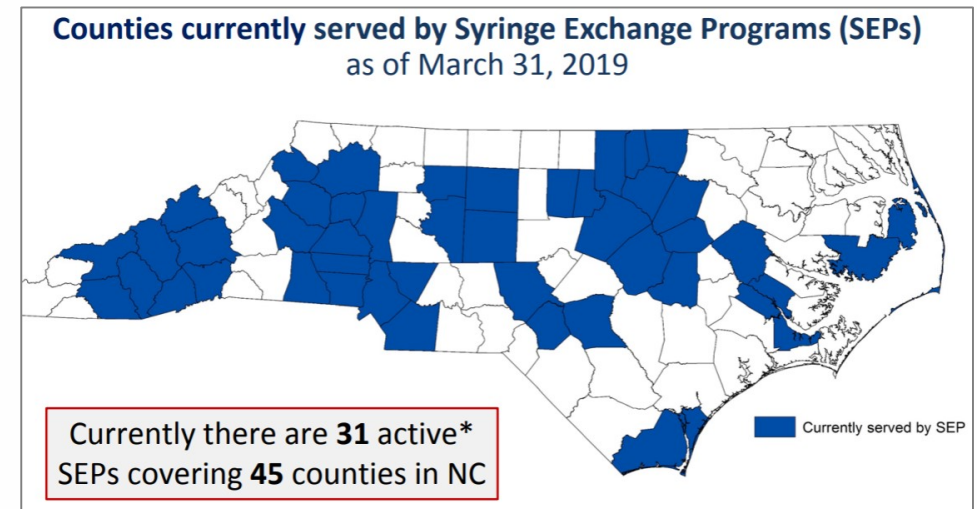
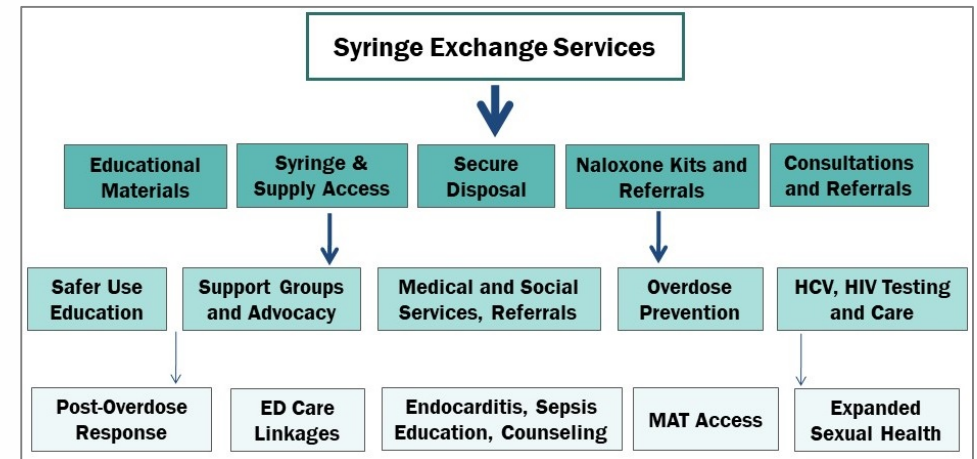
- *Getting Off Right* (Harm Reduction Coalition)
- *Sharp Shooters* (CATIE)
- *Safer Injecting* (Merchants Quay Ireland)

Words matter

Words to Avoid	Words to use
Addict	Person with substance use disorder
Alcoholic	Person with alcohol use disorder
Drug problem, drug habit	Substance use disorder
Drug abuse	Drug misuse, harmful use
Drug abuser/junkie	Person with substance use disorder
Drug user	Person who uses drugs/injects drugs
Clean	Abstinent, not actively using
Dirty	Actively using
A clean drug screen	Testing negative for substance use
A dirty drug screen	Testing positive for substance use
Former/reformed addict/alcoholic	Person in recovery/person in long-term recovery
Opioid replacement/methadone maintenance	Medication-assisted treatment

Syringe Exchange Programs

- Legal in NC as of July 2016
- Active list with contacts maintained at NC DHHS website
- Services offered:
 - Sterile injecting equipment
 - Secure disposal of used equipment
 - Naloxone
 - Education
 - Many other services





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Syringe Exchange Programs in North Carolina

AIDS Leadership Foothills-area Alliance (ALFA) Foothills-area Harm Reduction Mission (the FARM)
Fixed; mobile; peer-based; integrated
Liz
(828) 999-0055
wecare@thefarmnc.org
www.thefarmnc.org [↗](#)
Fixed-site exchange at "Steve's Place":
211 NC-127 SE Hickory, NC 28602
Mobile exchange available Tuesdays.
Services available on the first Tuesday of each month (look for the Big Red Mobile Unit) at:
241 Northview Plaza, North Wilkesboro, NC 28659

- [North Carolina Safer Syringe Initiative](#)
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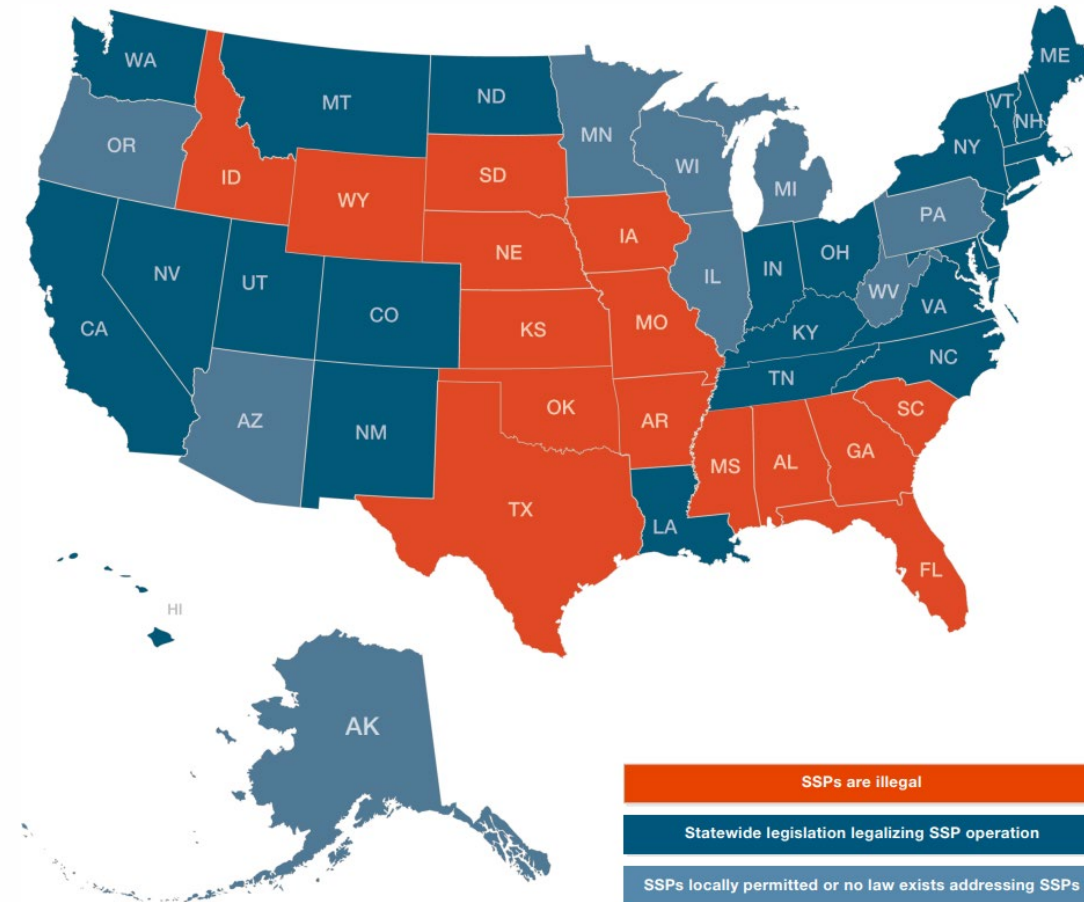
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Syringe Exchange Programs



<https://www.amfar.org/uploadedFiles/amfarorg/Articles/On The Hill/2017/15.pdf>

Medications for Opioid Use Disorder

- Detoxification alone ineffective (60-81% relapse in one year)

Medication	Mechanism of Action	Notes
Methadone	Full opioid agonist	Must be delivered in Opioid Treatment Program (aka methadone clinic)
Buprenorphine	Partial opioid agonist	-Delivery in primary care settings – need “X” waiver -In-hospital use by anyone -Precipitated withdrawal risk
Naltrexone	Opioid antagonist	-IM injection q28 days -Precipitated withdrawal risk

- Treatments for methamphetamine or cocaine - tougher

Gossop M, Br J Psychiatry 1989.

Broers B, Drug Alcohol Depend 2000.

Gossop M, Addiction 2002.



Outline

- Quick review of opioid crisis
- Epidemiology of HIV and HCV in people who inject drugs (PWID)
- Other infections in PWID
- Enhancing care: prevention strategies, harm reduction
- **Future directions**

Supervised Drug Consumption Facilities

- **Illegal by federal law**, but some municipalities moving forward
- >75 internationally, including Canada
- Goals (broadly)
 - “(1) Reduce the harms associated with illicit drug use, including fatal overdose and infectious disease transmission
 - (2) Connect people who use drugs with addiction treatment and other health and social services
 - (3) Reduce public order and safety problems associated with illicit drug use”


Supervised Drug Consumption Facilities

Some outcomes observed:

- Decreased syringe sharing
- Fewer overdoses
- Prevented HIV infections, and healthcare costs saved
- Decreased crime in surrounding area
 - *based on observational and modeling studies

Kennedy, Curr HIV/AIDS Rep 2017
Gostin, JAMA 2019

Curr HIV/AIDS Rep (2017) 14:161–183
DOI 10.1007/s11904-017-0363-y



THE SCIENCE OF PREVENTION (JD STEKLER AND J BAETEN, SECTION EDITORS)

Public Health and Public Order Outcomes Associated with Supervised Drug Consumption Facilities: a Systematic Review

Mary Clare Kennedy^{1,2} · Mohammad Karamouzian^{1,3} · Thomas Kerr^{1,4}

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© Springer Science+Business Media, LLC 2017

Abstract
Purpose of Review Supervised drug consumption facilities (SCFs) have increasingly been implemented in response to public health and public order concerns associated with illicit drug use. We systematically reviewed the literature investigating the health and community impacts of SCFs.
Recent Findings Consistent evidence demonstrates that SCFs mitigate overdose-related harms and unsafe drug use behaviours, as well as facilitate uptake of addiction treatment and other health services among people who use drugs (PWUD). Further, SCFs have been associated with improvements in public order without increasing drug-related crime. SCFs have also been shown to be cost-effective.
Summary This systematic review suggests that SCFs are effectively meeting their primary public health and order objectives and therefore supports their role within a continuum of services for PWUD. Additional studies are needed to better understand the potential long-term health impacts of SCFs and how innovations in SCF programming may help to optimize the effectiveness of this intervention.

Keywords Supervised drug consumption facilities · Supervised injection facilities · Illicit drug use · Harm reduction · Systematic review

Introduction
Illicit drug use remains a major global public health concern and, in particular, is a key driver of HIV/AIDS and overdose epidemics [1–4]. Public drug use and public disposal of syringes are also community concerns in various settings, particularly in inner-city neighbourhoods [5]. In an effort to mitigate these challenges, supervised drug consumption facilities (SCFs) have been established in a number of cities worldwide [6*, 7*]. SCFs are healthcare facilities that provide sterile equipment and a safe and hygienic space for people who use drugs (PWUD) to consume pre-obtained illicit drugs under the supervision of nurses or other trained staff [7*]. SCFs are also referred to as drug consumption rooms and include supervised injection facilities (SIFs), which accommodate people who inject drugs

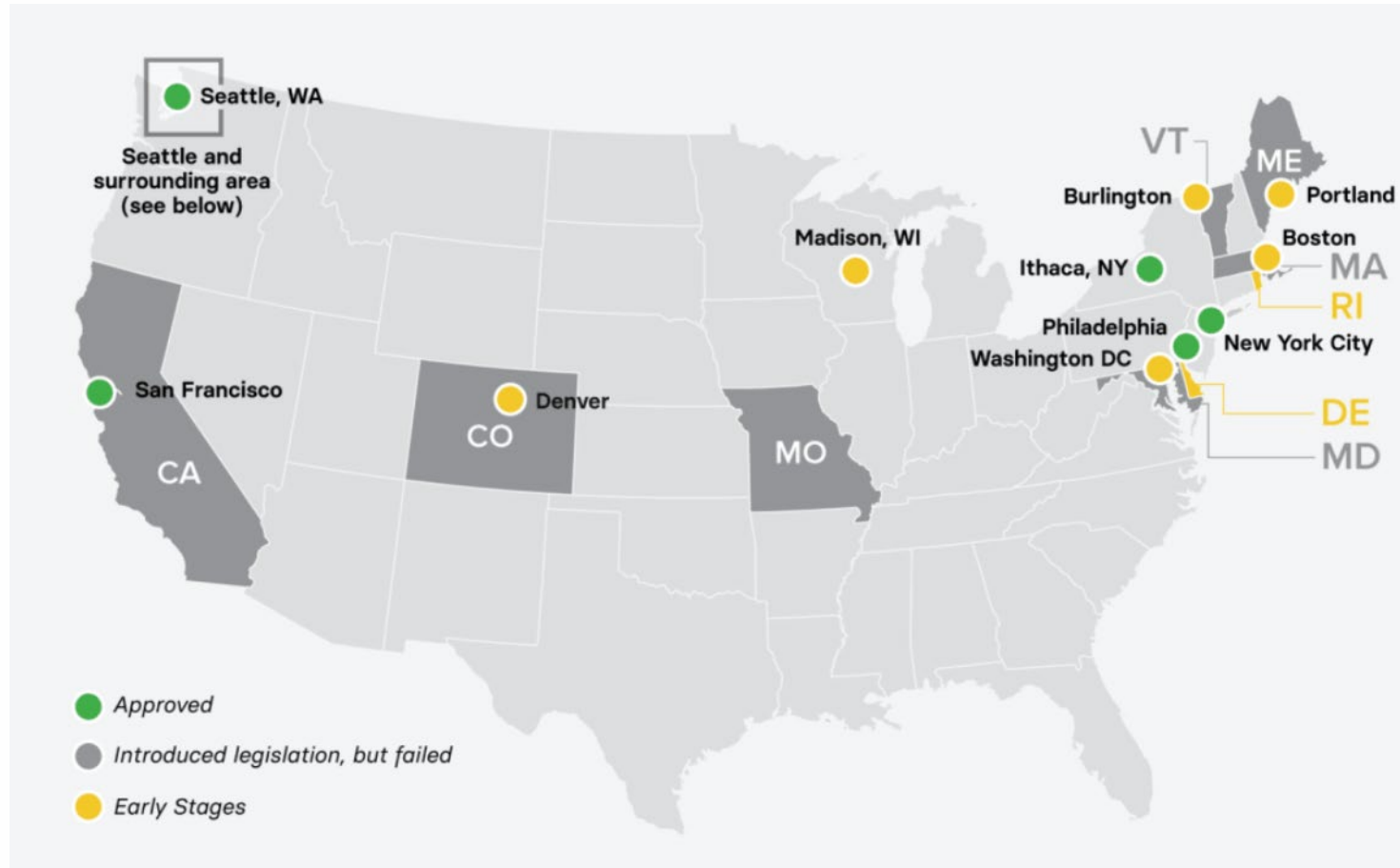
This article is part of the Topical Collection on *The Science of Prevention*

Electronic supplementary material The online version of this article (doi:10.1007/s11904-017-0363-y) contains supplementary material, which is available to authorized users.

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Supervised Drug Consumption Facilities



<https://www.buzzfeednews.com/article/azeenghorayshi/safe-injection-site-proposals-map>

Hepatitis C *Treatment as Prevention*

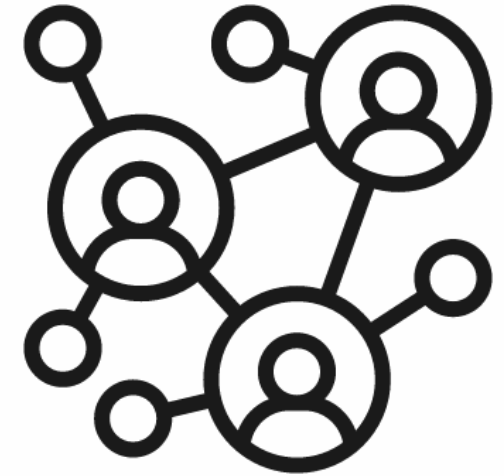
Treatment as Prevention (TasP) –

Treating infected persons stems ongoing transmission

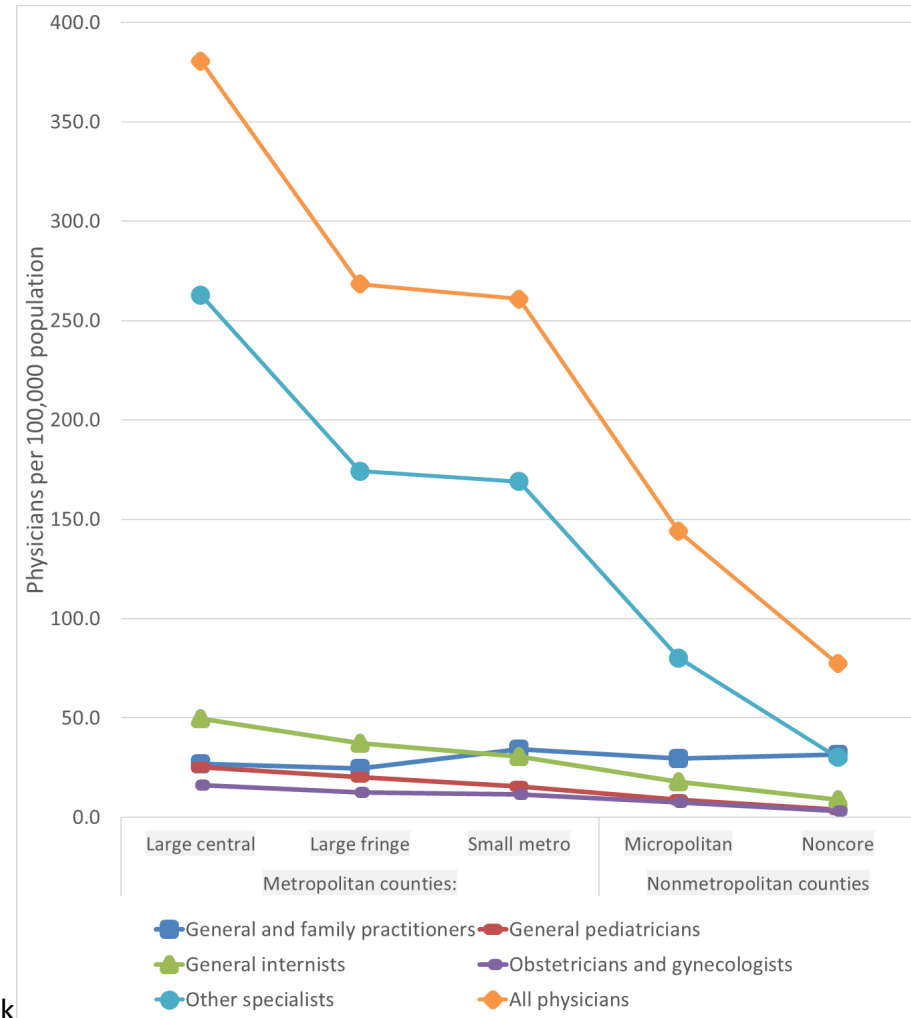
Strong evidence base in HIV

Interest in applying to HCV... but unlike HIV:

- Risk of reinfection
- High prevalence
 - HCV >40% of PWID, vs. HIV ~2% of PWID
- High treatment coverage needed

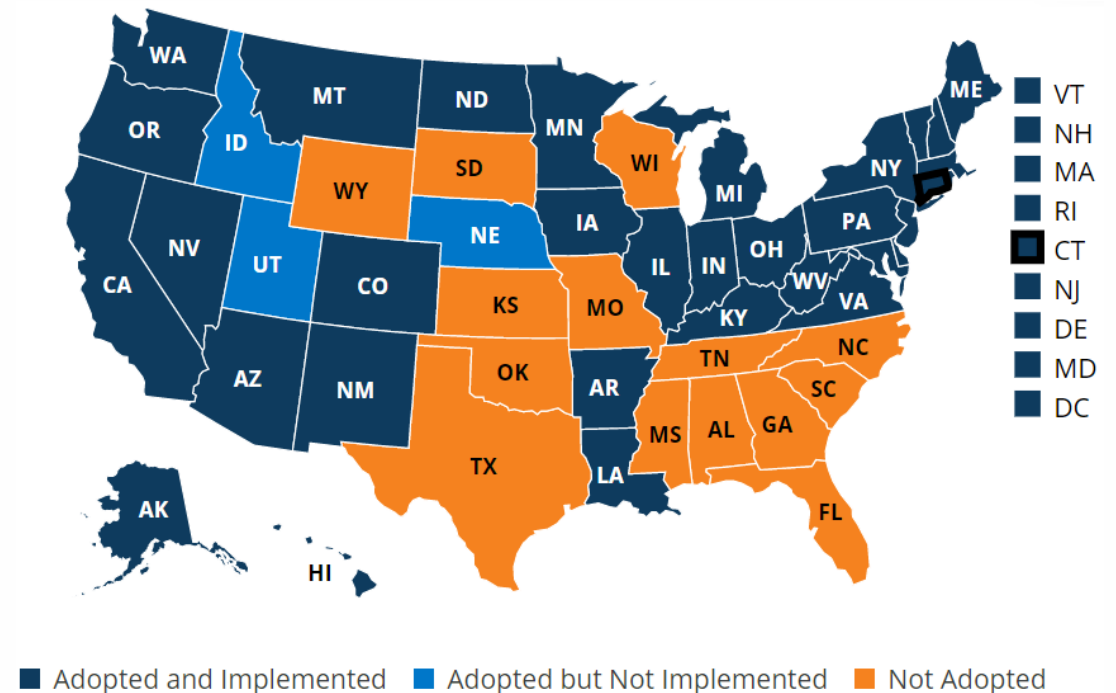


Barriers to Widespread HCV Treatment



Barriers to Widespread HCV Treatment

- 9% of PCPs comfortable treating chronic HCV
...in 2016
- Providers reluctant to treat PWID
- Lack of healthcare coverage for uninsured PWID



Where to learn more?

- NC Injury and Violence Prevention Branch
 - Poisoning statistics
- NC DHHS Syringe Exchange Registry
- Harm Reduction Coalition
- CDC.gov
- PCSSnow.org (Buprenorphine waiver)



Conclusions

- The opioid crisis continues and may encompass poly-drug use
- HIV is occurring in outbreaks among PWID and viral hepatitis is increasing
- Bacterial infections are common among PWID and can range from mild to severe
 - Be mindful of atypical infections
 - Ask what drugs patients use and how they use them
- Addiction care and harm reduction are elements of infection prevention

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