



Policies and Strategies to Address Infectious Diseases

NCSL Public Health Symposium

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Background

- **COVID-19 had a profound impact on infectious disease preparedness and response; health departments severely taxed**
- **State policies can reduce or exacerbate public health threats**
- **Infectious diseases can be chronic, lifelong issues**
- **State legislators have a unique role to influence public opinion on policy approaches that save lives, save money**

Everyone is affected...but not equally

All infections are associated with age, income, employment, housing

Black/African American and Hispanic/Latino people make up almost 3/4^{ths} of all new HIV diagnoses

50% of new HIV infections are in <2% of counties

Nearly half (45.5%) of all new STIs in the country occur among young people (ages 15-24).

LGBTQ adolescents at higher risk for negative health outcomes including sexual risk, suicide, depression

Incidence of HIV and syphilis >150 times higher in men who have sex with men and transgender women than heterosexual men and women

These infections are costly

- **STDs contribute \$2.2B to healthcare costs annually**
- **Hepatitis C contributes \$6.5B to healthcare costs annually**
- **\$501,000 lifetime HIV treatment cost**
- **\$306,000,000 in hospitalization costs for recent hepatitis A outbreaks**



Put your money where your epidemic is

\$4.5B

Saved by preventing >100,000
HIV infections from 2008-2017

\$2 Saved

For every \$1 invested in HIV
prevention

\$3.3 billion

Could be saved in health care
costs by treating hepatitis C at all
stages of disease

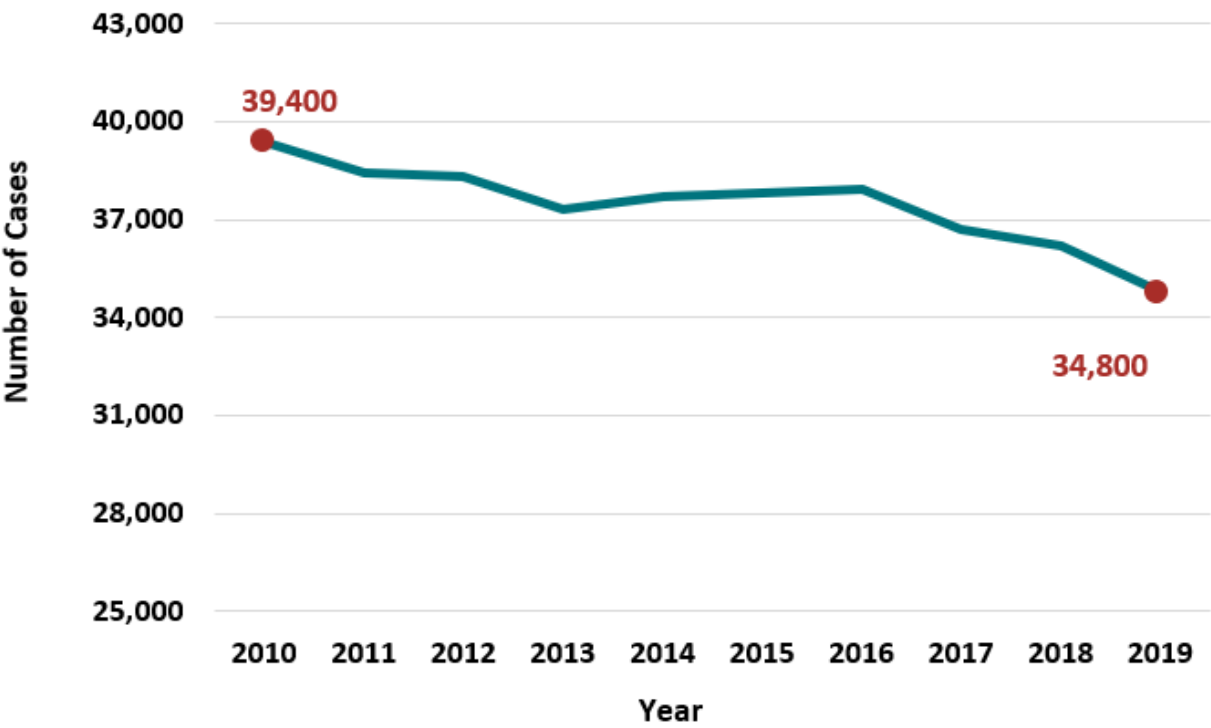
<\$10 per student

Demonstrated improvements
in important health outcomes

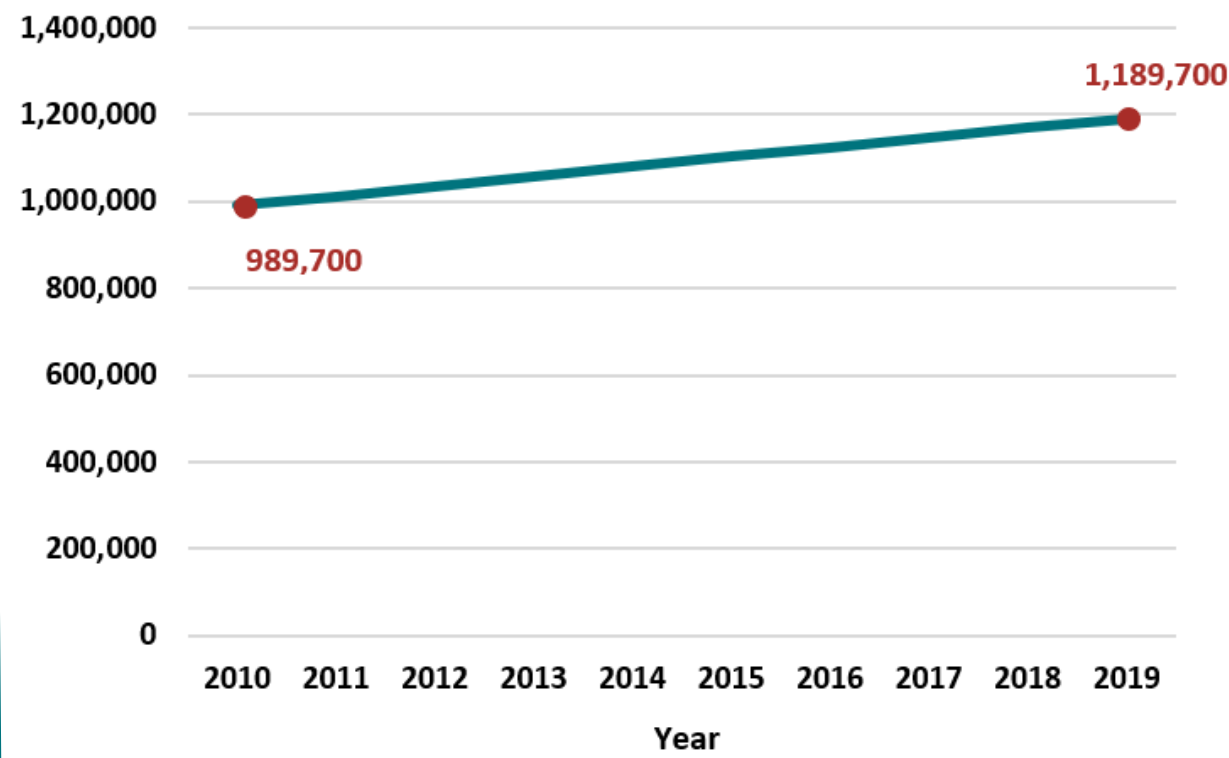
State of the Nation

HIV Incidence Declined Slightly While Prevalence Increased

Estimated HIV Incidence 2010-2019



Estimated HIV Prevalence 2010-2019*



*Includes both diagnosed and undiagnosed cases

Most transmissions are from people who don't know their status or aren't in care

HIV TRANSMISSIONS IN 2016		
% OF PEOPLE WITH HIV	STATUS OF CARE	ACCOUNTED FOR X% OF NEW TRANSMISSIONS*
15%	didn't know they had HIV	38%
23%	knew they had HIV but weren't in care	43%
11%	in care but not virally suppressed	20%
51%	taking HIV medicine and virally suppressed	0%

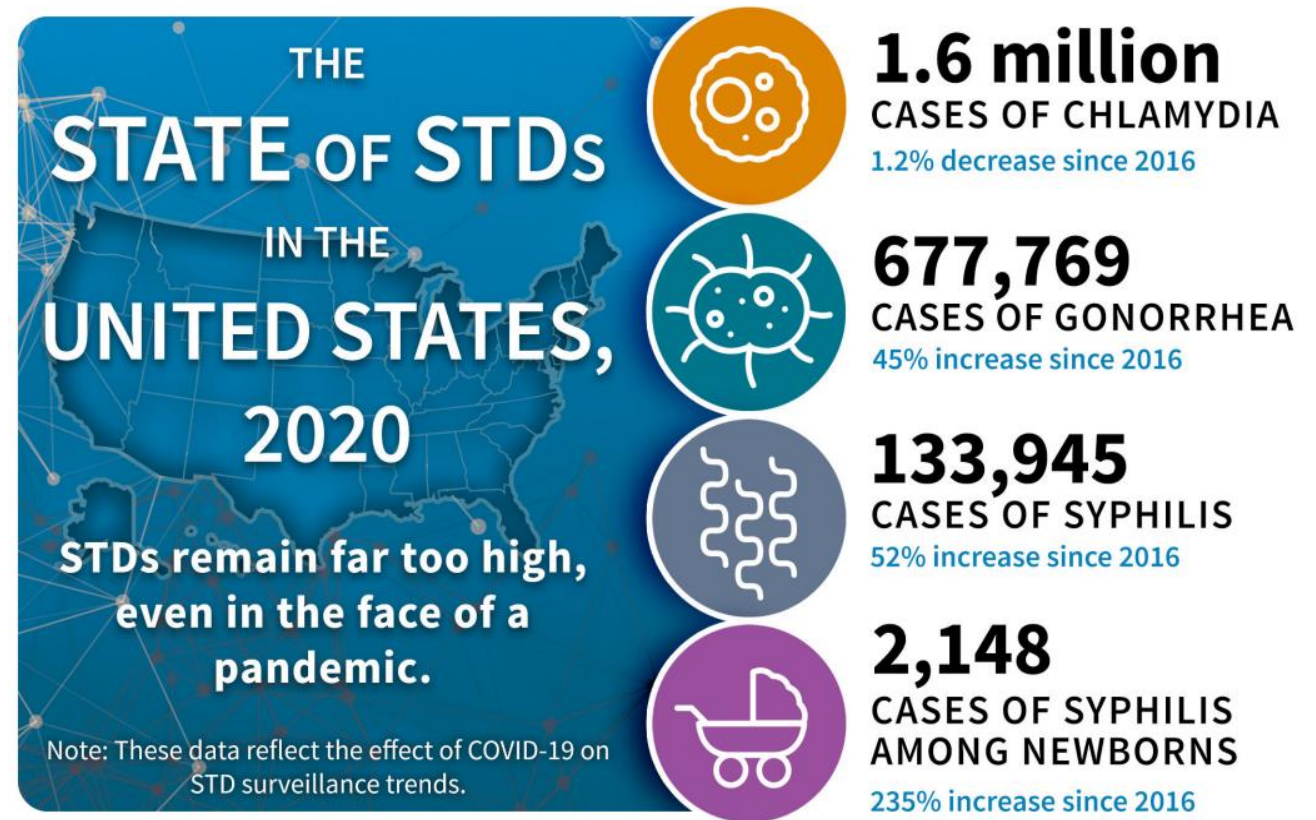
*Values do not equal 100% because of rounding

SOURCE: Vital Signs, 2019

- Average time from infection to diagnosis is 3 years
- 81% of HIV infections transmitted by people who don't know they have HIV or aren't in care

Tackling STDs is good public health and essential to HIV control

- Having an STD doubles the risk of acquiring or transmitting HIV during sex among heterosexuals
- About half of men diagnosed with syphilis have HIV
- Routinely screening and treating people with HIV for STDs will decrease new HIV infections



Increase in viral hepatitis incidence

Acute Infections

HEPATITIS A

18,846 Acute Cases
Reported in 2019
37,700 Acute Infections
(26,400-41,500)* Estimated in 2019



Rate of reported hepatitis A cases **increased 1,325%** from 2015-2019

HEPATITIS B

3,192 Acute Cases
Reported in 2019
20,700 Acute Infections
(11,800-50,800)* Estimated in 2019



Rate of reported acute hepatitis B cases remained **stable** from 2015-2019

HEPATITIS C

4,136 Acute Cases
Reported in 2019
57,500 Acute Infections
(45,500-196,000)* Estimated in 2019



Rate of reported acute hepatitis C cases **increased 63%** from 2015-2019

Chronic Infections



Estimated **2.4 million** people living with hepatitis C

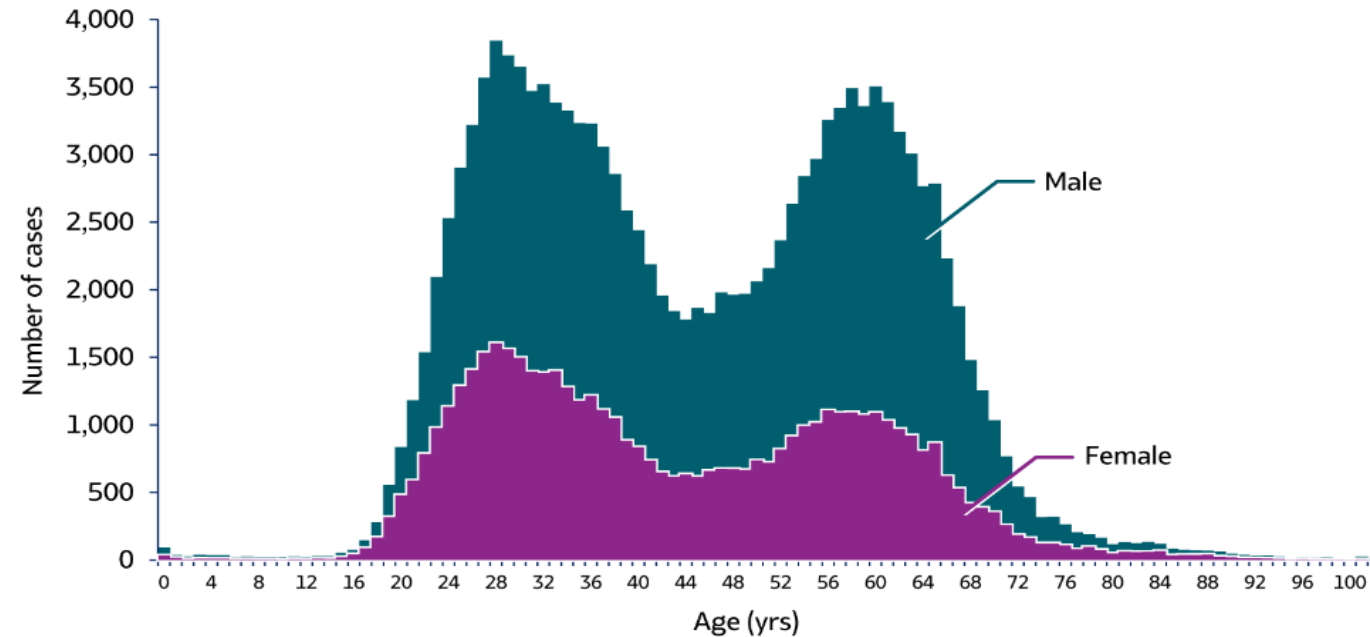
Estimated **880,000** people living with hepatitis B



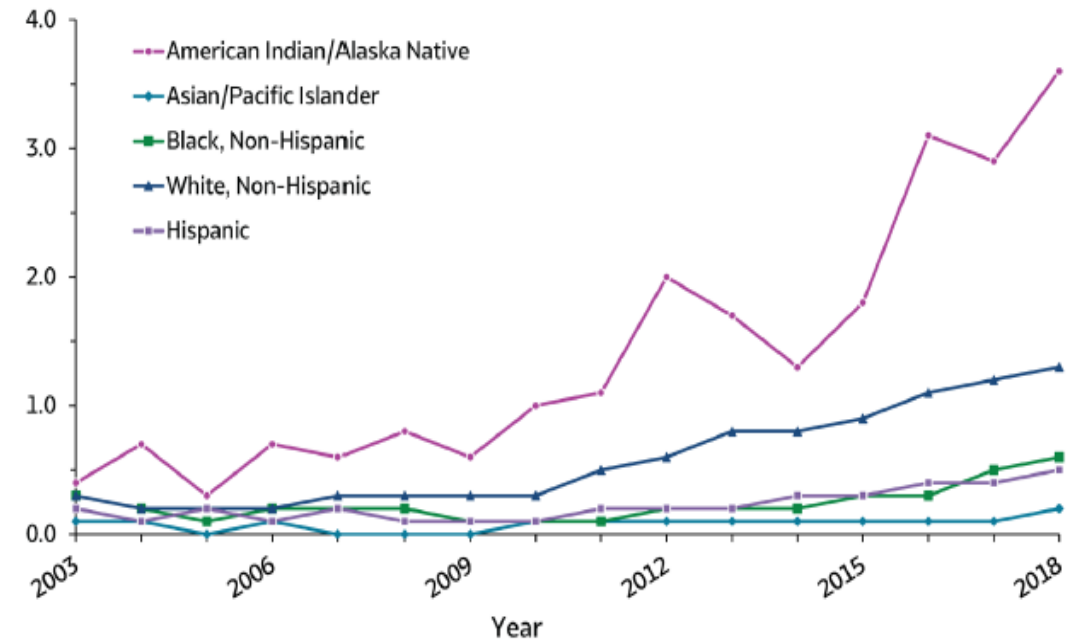
Sources: Hofmeister et al, Hepatology, 2018; Roberts et al, Hepatology, 2021; Ryerson et al, MMWR, 2020.

Disparities in hepatitis C infection

Number of newly reported chronic hepatitis C, 2018 (n=137,713)



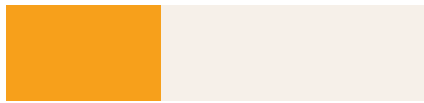
Rates of reported acute hepatitis C by race/ethnicity – United States, 2003-2018



**If CDC screening guidelines were fully implemented,
hundreds of thousands of lives and billions of dollars saved**

New CDC data reveal the magnitude of challenges youth are experiencing

37%



Of students reported **poor mental health during the pandemic**

26%



Of students who identify as LGB **attempted suicide** in prior year

17%



Of students who identify as other or questioning **attempted suicide** in prior year

55%



Of students experienced **emotional abuse in the home**

64%



Of Asian students have experienced **racism in school**

55%



Of both Black and Multiracial students have experienced **racism in school**

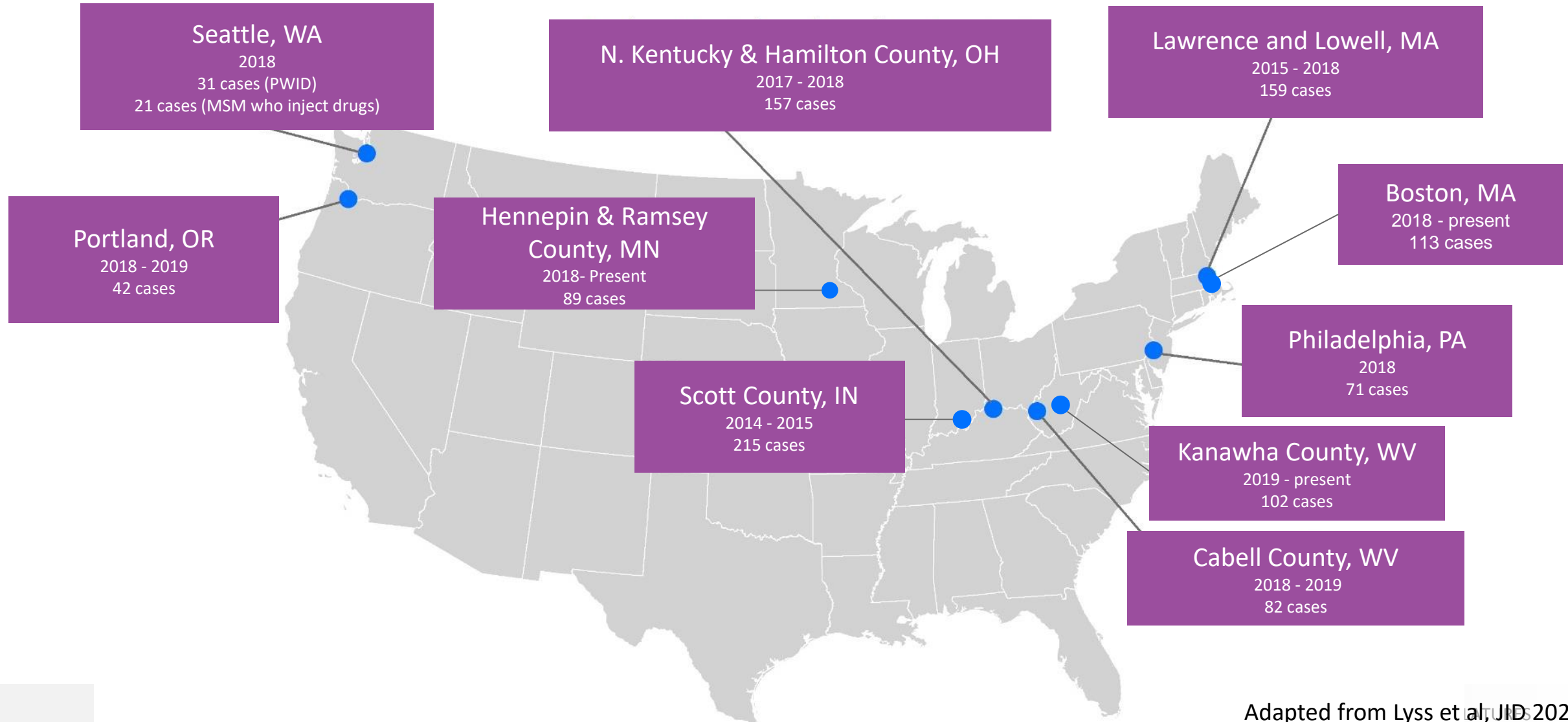
Schools need support to promote recovery and resilience

A (too) common denominator: Injection drug use

The opioid crisis is fueling a dramatic increase in infectious diseases associated with injection drug use

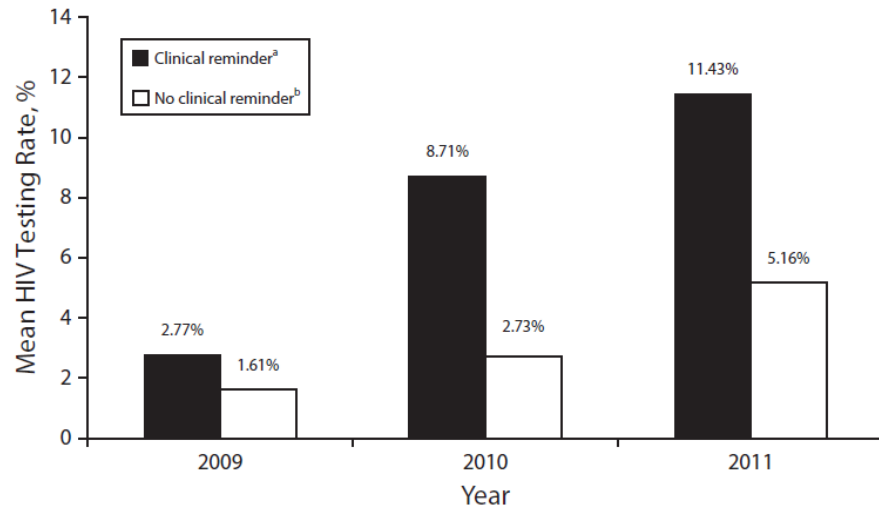
- **Reports of acute hepatitis C virus cases** rose 3.5-fold from 2010 to 2016
- **Majority of new HCV infections** are due to injection drug use
- **Over 2,500 new HIV infections** occur each year among people who inject drugs
- Increasing proportion of **syphilis** cases among people who inject drugs
- **Invasive, drug-resistant skin infections** among people who inject drugs increased 124% from 2011 to 2016

Recent HIV Outbreaks among People Who Inject Drugs



Good Public Health Policies Work

Testing and screening policies



^a47 VA facilities used an electronic reminder for at least 1 quarter.

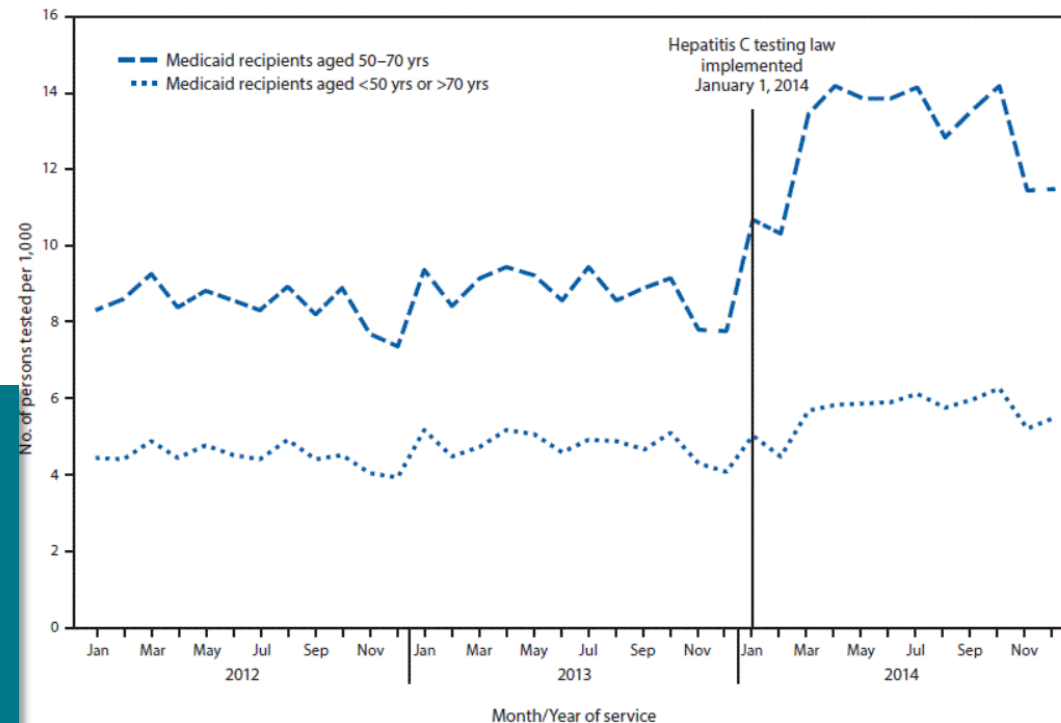
^b56 VA facilities did not use any electronic reminder.

FIGURE 1—Mean annual HIV testing rates at Veterans Affairs facilities with and without a routine HIV testing electronic clinical reminder: United States, 2009–2011.

State Policy Approach: New York **HCV** testing law associated with 52% increase baby boomer testing

Healthcare System Approach: Veterans Administration **HIV** screening program doubled testing

FIGURE 2. Rate of hepatitis C virus testing* per 1,000 Medicaid recipients, by age cohort — New York, 2012–2014



Syringe services programs prevent transmission of blood-borne infections

- Access to sterile injection equipment can help prevent blood-borne infections, skin infections and endocarditis
- Health care provided at these programs can catch problems early and provide easy-to-access treatment
- In Philadelphia, these programs averted 10,582 HIV infections over 10 years; 1-year return on investment of \$243 M



SSPs + MOUD*
together
↓ 74%
HIV & Hepatitis
C Transmission



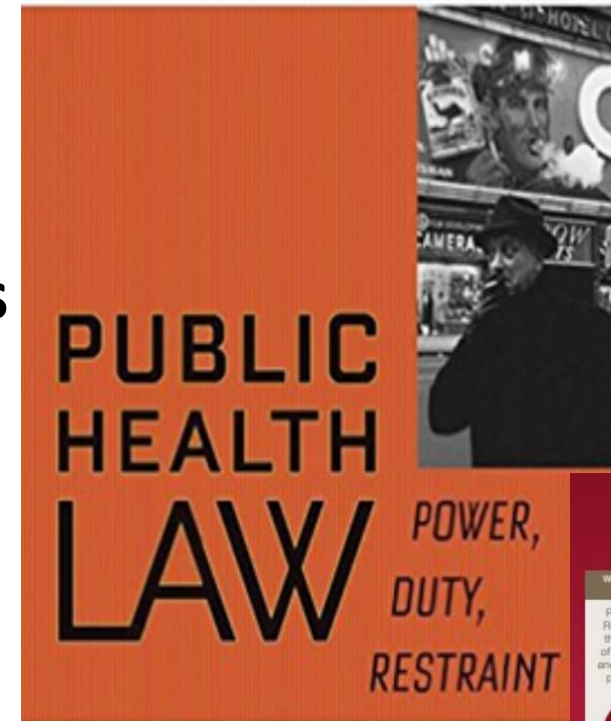
Source: <https://www.cdc.gov/ssp/syringe-services-programs-summary.html>; Ruiz, et al, *JAIDS*, 2019

Nearly 30 years of research demonstrates that Syringe Services Programs are safe, effective and provide critical services

- **Engage people who inject drugs in healthcare and other social service**
 - Improved access to primary care
 - **5 times** as likely to enter treatment for a substance use disorder
 - **3 times** more likely to stop injecting than those who don't use the programs
 - Improved treatment retention
- **Do not increase crime**
- **Keep communities clean by providing safe needle disposal**
- **State and local laws** can facilitate access to clean injection equipment and other services for persons who inject drugs.
 - Authorization of syringe services programs
 - Drug paraphernalia
 - Retail sale of syringes to persons who inject drugs

Legal Strategies for preventing IDU-associated infections

- The creation and implementation of laws can be used to achieve public health objectives
- State and local laws can facilitate access to clean injection equipment and other services for persons who inject drugs
- Laws related:
 - Authorization of syringe services programs
 - Drug paraphernalia
 - Retail sale of Syringes/Needles



Atlantic City is forcing its syringe program to shut down. What happened to 'trust science'? Editorial

It's past time for Atlantic City, a

Indiana Needle
Helped Contain
Outbreak To B

Judge continues halt on new syringe law, but hasn't rendered final decision yet

Facing tough restrictions, WV harm reduction programs wait for federal lawsuit ruling

- Misinformation
- Stigma
- Variable Community and Political Support

Needle exchanges are a proven tool to fight HIV, but officials still want to shut them down

The science is solid. The politics are more partisan than ever

ARM REDUCTION FOR HIV > FEATURES

Restrictions in West
Just How Fragile
Syringe Programs Can B

Pleasantville votes against syringe access programs in the city

Syringe access programs still not fully legal in AZ

Debate resurfaces over syringe exchanges as Scott County considers dropping program

Modernizing HIV Laws

After 40 years of HIV research and biomedical advancements to treat and prevent HIV, many state laws are now outdated and do not reflect science of HIV

- **22 States – Criminalize or control behaviors through HIV-specific statutes and regulations**
- **13 States - Criminalize or control behaviors through STD/communicable/infectious disease-specific statutes**
- **4 States – Sentence enhancement statutes**

Remove Hepatitis C treatment barriers

State Medicaid programs and private insurers have restrictions that keep Americans from being cured

- **Requiring severe disease before treatment**
- **Preventing persons who have used alcohol or drugs in past 6-12 months from accessing treatment**
- **Allowing only gastroenterologists or infectious disease physicians to prescribe medication**
- **Requiring prior authorization for treatment**



Proactive efforts to increase Hepatitis C treatment



NM uses technology, best-practice protocols, rural & community primary care clinicians to deliver care

Care Delivery Model



WA pays fee up to a cap for access to treatment. After that, state will pay per prescription at a lower cost.

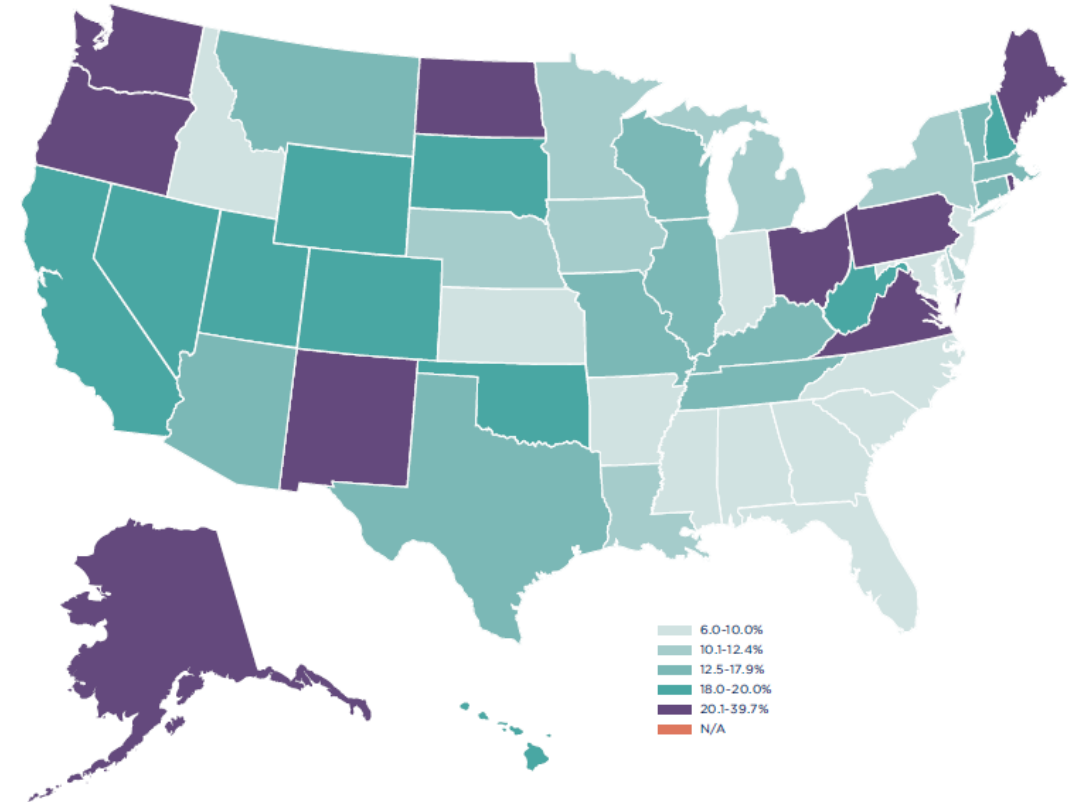


LA pays set fee for five years of unlimited access to treatment.

Financing Models

Screening upon entry into correctional facilities

- 11 million admissions annually into correctional settings
- 30% of all persons with HCV infection in the US spend at least part of the year in a correctional institution
- Lawsuits for not providing HCV treatment in state correctional facilities



- **Medicaid termination/reinstatement**

Key Players: Insurance Commissioners

- Health insurance matters
- July 2021, guidance issued by CMS directing most insurers to offer HIV pre-exposure prophylaxis (PrEP) to beneficiaries at no cost
- State insurance commissioners can issue notices requiring coverage of testing, treatment, prevention, and labs without copayments
- Community and national organizations encouraging patients to file complaints



COLORADO
Department of
Regulatory Agencies
Division of Insurance

Bulletin No. B-4.112

Policy Directives for Coverage of HIV Prevention Ancillary Services

BULLETIN 2021-10

TO: All Disability Insurers Providing Health Insurance Coverage in California

FROM: Insurance Commissioner Ricardo Lara

DATE: December 29, 2021

RE: Preventive Services Coverage for HIV Preexposure Prophylaxis (PrEP) with Provider-Administered Antiretroviral Drug Therapy

American Rescue Plan Act of 2021

Disease Intervention Specialists (DIS) Workforce Development Funds

\$1.13 billion over 5 years

State & Local Health
Departments



\$200M/year
5 years

Innovation
(e.g., Syphilis Diagnostics)



\$50M

DIS Training &
Certification



\$50M

Conclusions

- **Provide resources and implement effective strategies where there will be the greatest impact**
- **Policies and laws are public health tools**
- **Testing for infections is fundamental step in preventing and treating infectious diseases**
- **Act fast, think big, support creativity**

Thank you!

Acknowledgements: Michael Williams