



# Syphilis Clinical Care and Responses in Indian Country



THE  
**STATE OF STDs**  
IN THE  
**UNITED STATES,**  
**2019**

**STDs increased for the  
6th year, reaching a  
new all-time high**



**1.8 million**  
CASES OF CHLAMYDIA  
19% increase since 2015



**616,392**  
CASES OF GONORRHEA  
56% increase since 2015



**129,813**  
CASES OF SYPHILIS  
74% increase since 2015



**1,870**  
CASES OF SYPHILIS  
AMONG NEWBORNS  
279% increase since 2015

LEARN MORE AT: [www.cdc.gov/std/](http://www.cdc.gov/std/)

**ANYONE WHO HAS SEX COULD  
GET AN STD, BUT SOME GROUPS  
ARE MORE AFFECTED**

- **YOUNG PEOPLE AGED 15-24**
- **GAY & BISEXUAL MEN**
- **PREGNANT PEOPLE**
- **RACIAL & ETHNIC MINORITY GROUPS**

# SYPHILIS IS INCREASING IN THE U.S.

## BUT IT IS 100% PREVENTABLE

Early 2021 data show an **increase** in primary and secondary syphilis among adults

**Women up 34%**  
10,620 cases\*

**Men up 9%**  
36,614 cases\*



Syphilis in **newborns is up 6% in 2021**; 2,268 cases already reported\*



**33 states** report increases

### If you are sexually active:

- Ask your provider about how to prevent syphilis
- Talk to your partner(s) about STIs and safer sex
- Get tested, especially if you are pregnant or planning to get pregnant

### If you are a healthcare provider:

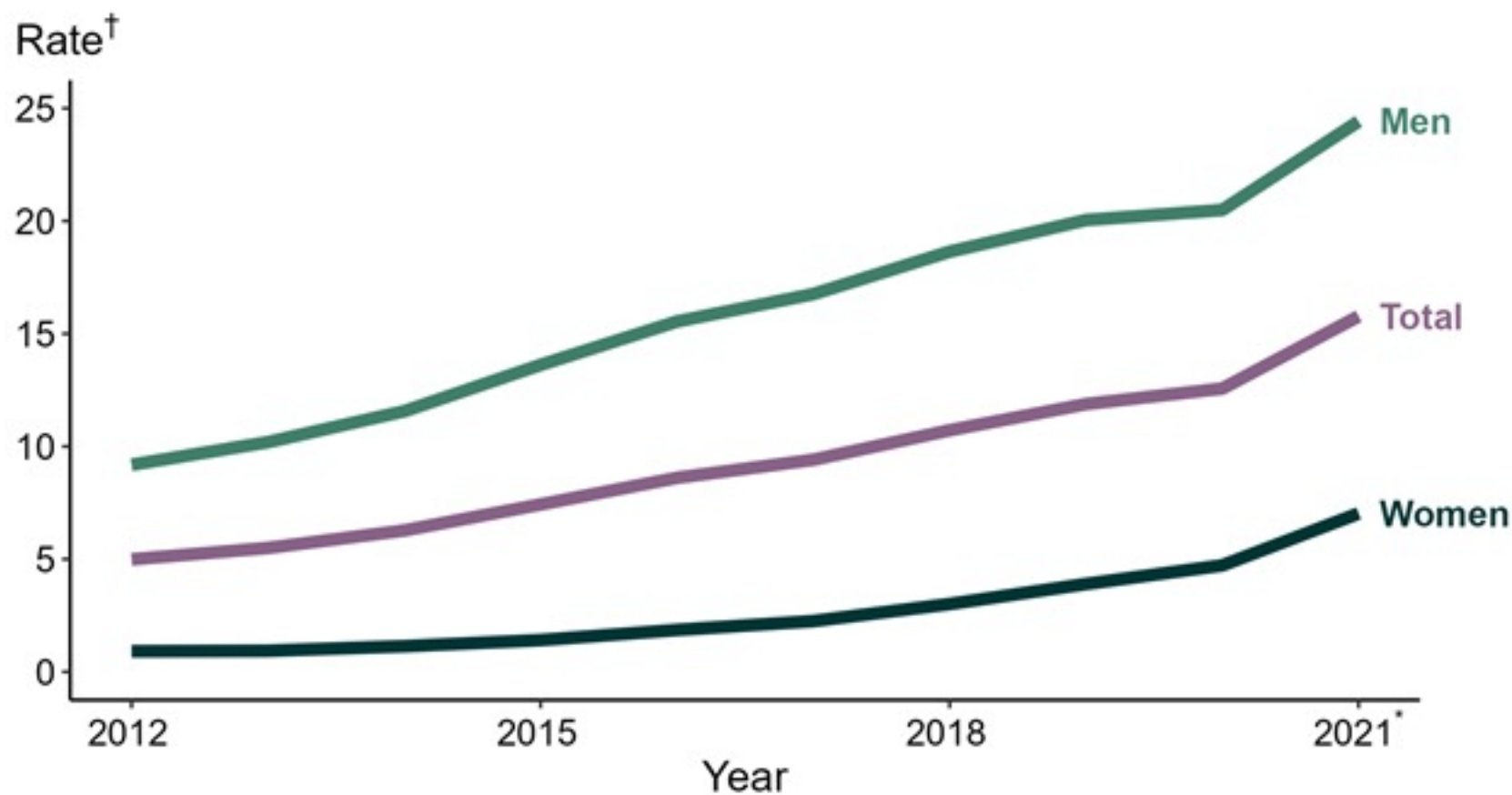
- Know the syphilis burden in your community and talk to patients about sexual health
- Test patients at first prenatal visit; repeat at 28 weeks if at risk of infection\*\*
- Treat syphilis immediately

\*COVID-19 affected 2021 reporting; these data points reflect what is known as of March 2022

\*\*See STI Treatment Guidelines for details



# Primary and Secondary Syphilis — Rates of Reported Cases by Sex, United States, 2012–2021\*



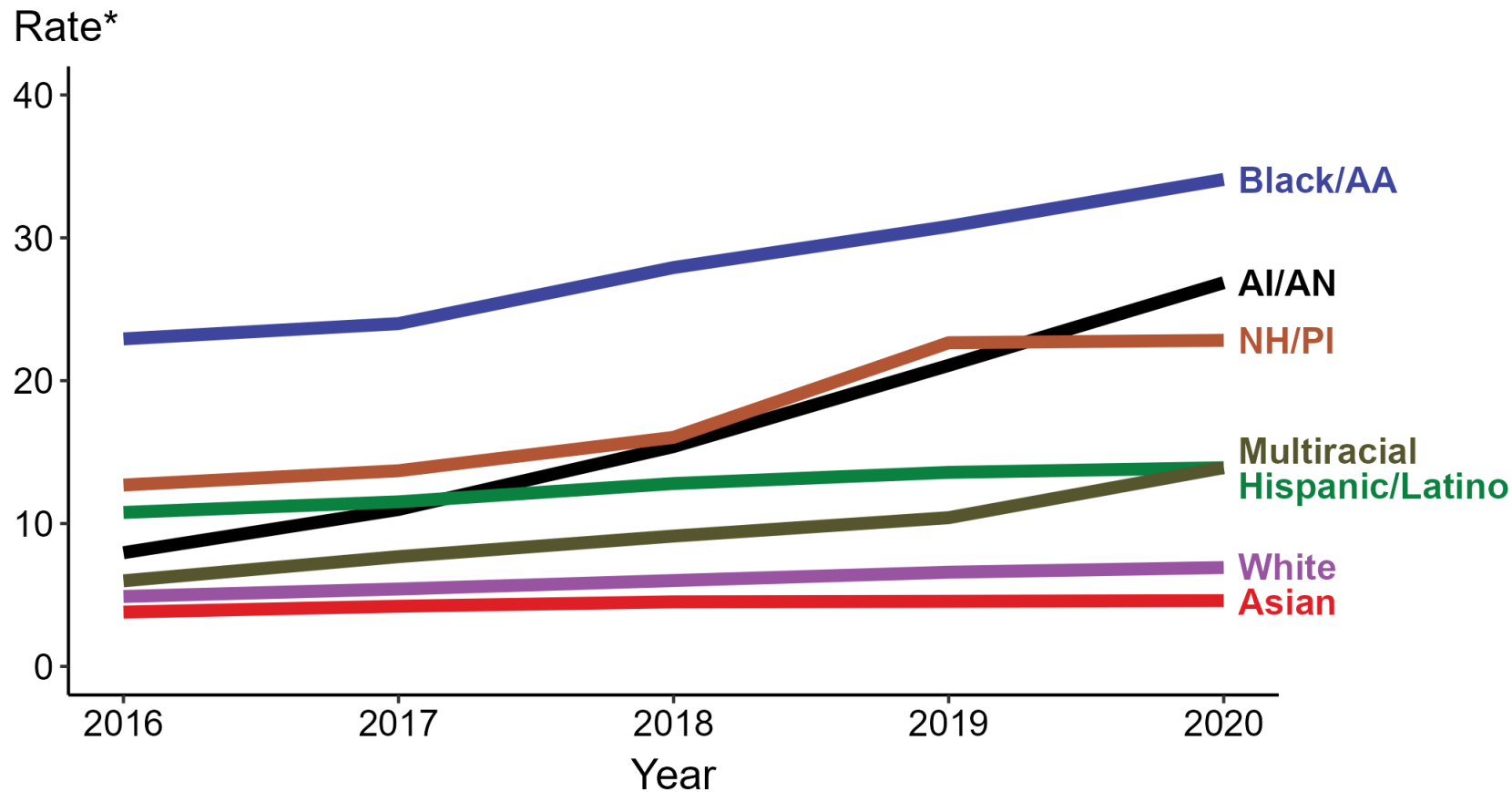
\* Reported 2021 data are preliminary as of July 7, 2022

† Per 100,000





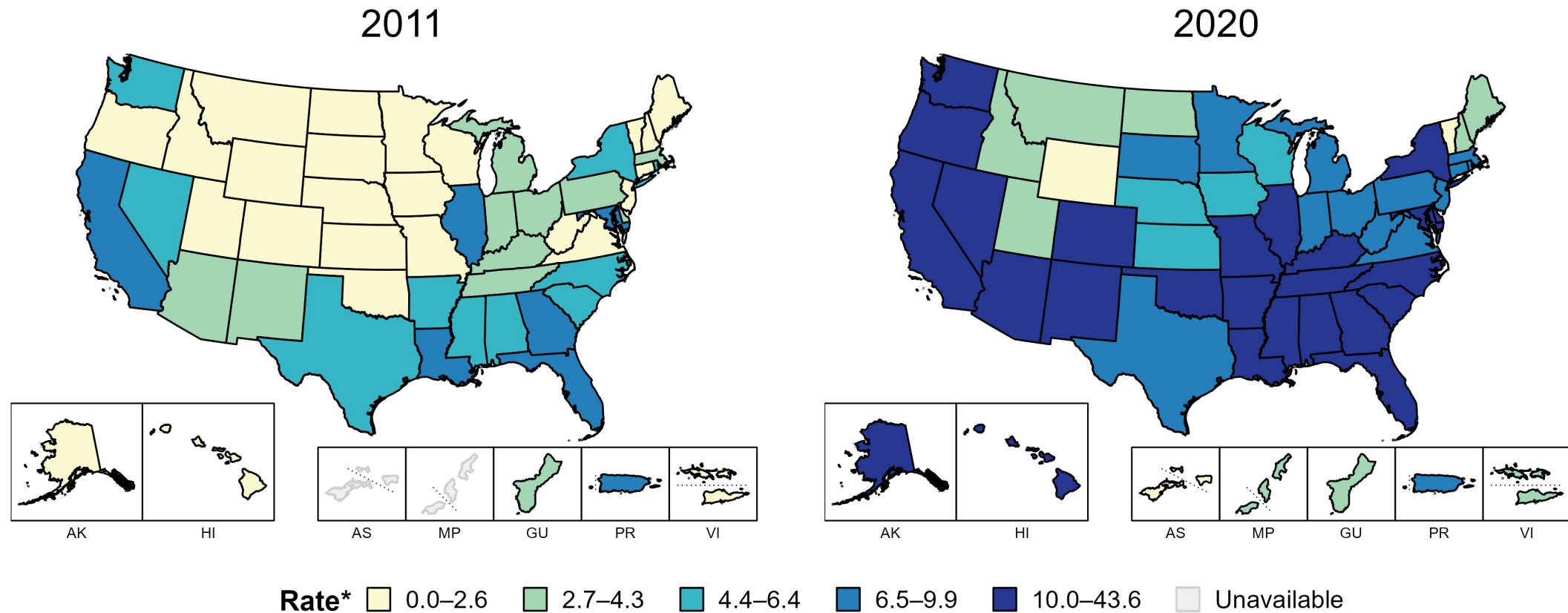
# Primary and Secondary Syphilis — Rates of Reported Cases by Race/Hispanic Ethnicity, United States, 2016–2020



Per 100,000

**ACRONYMS:** AI/AN = American Indian/Alaska Native; Black/AA = Black or African American; NH/PI = Native Hawaiian/Pacific Islander

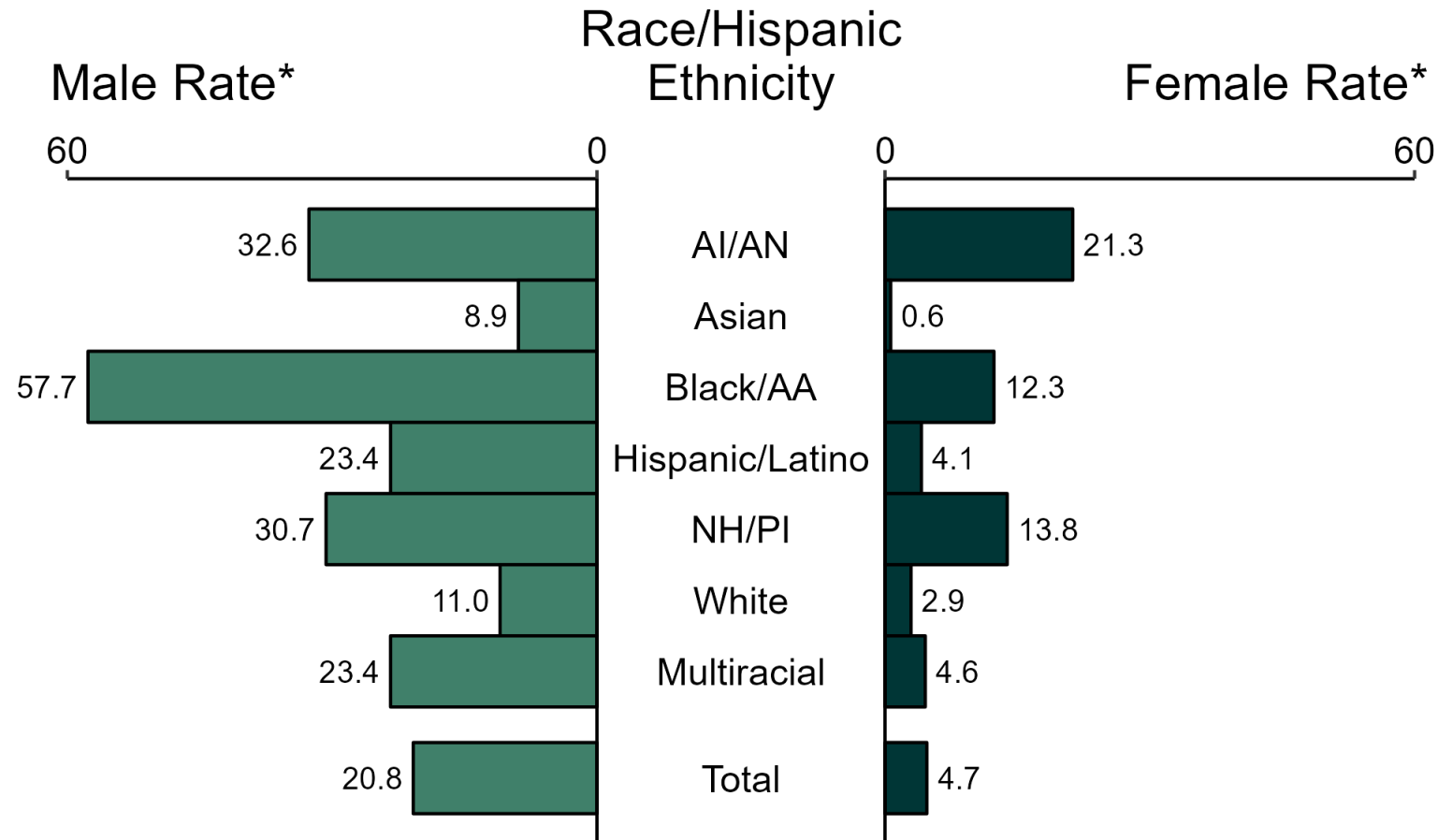
# Primary and Secondary Syphilis — Rates of Reported Cases by State, United States and Territories, 2011 and 2020



\* Per 100,000



# Primary and Secondary Syphilis — Rates of Reported Cases by Race/Hispanic Ethnicity and Sex, United States, 2020

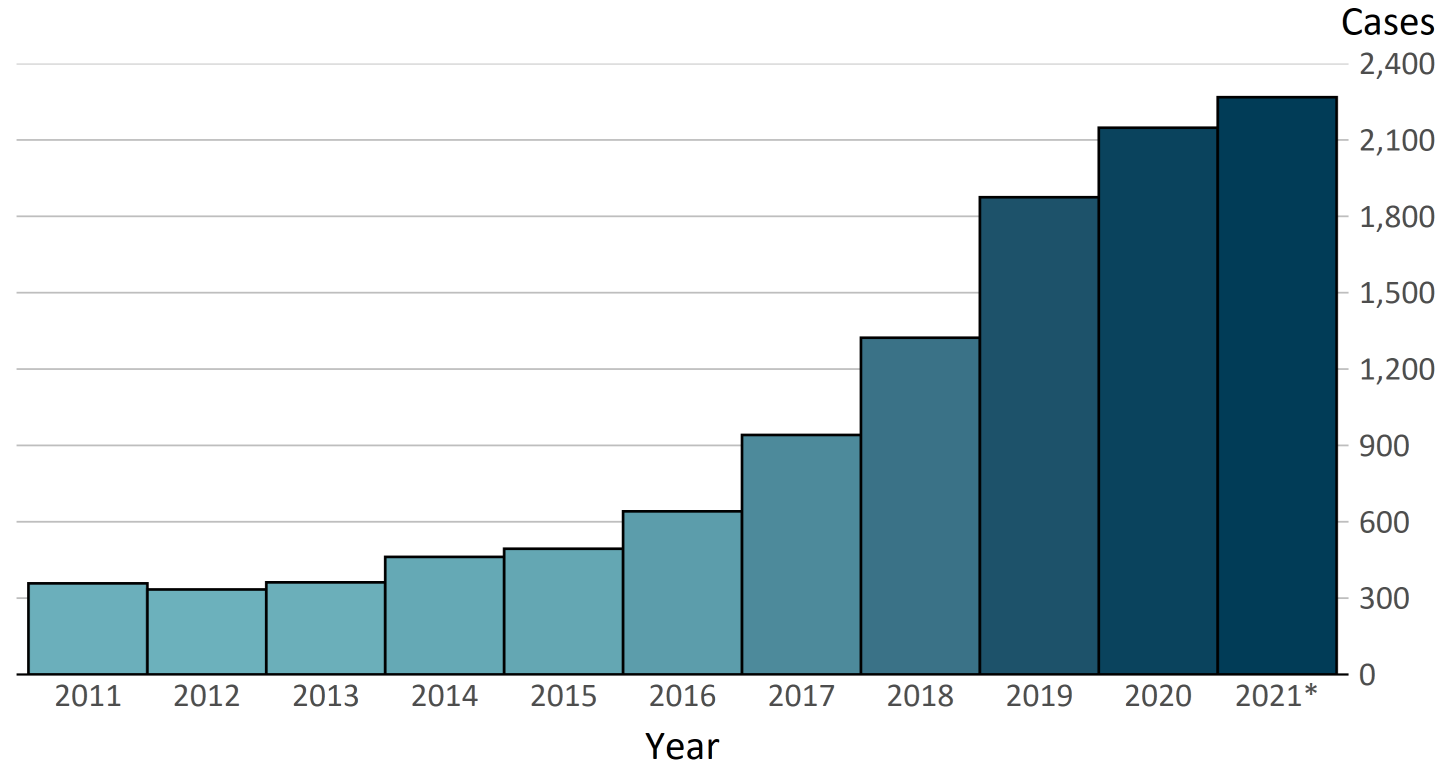


Per 100,000

**ACRONYMS:** AI/AN = American Indian/Alaska Native; Black/AA = Black or African American; NH/PI = Native Hawaiian/Pacific Islander

**NOTE:** Total includes all cases including those with unknown race/Hispanic ethnicity.

# In the United States, 2,268 infants born in 2021\* have already been reported as cases of congenital syphilis



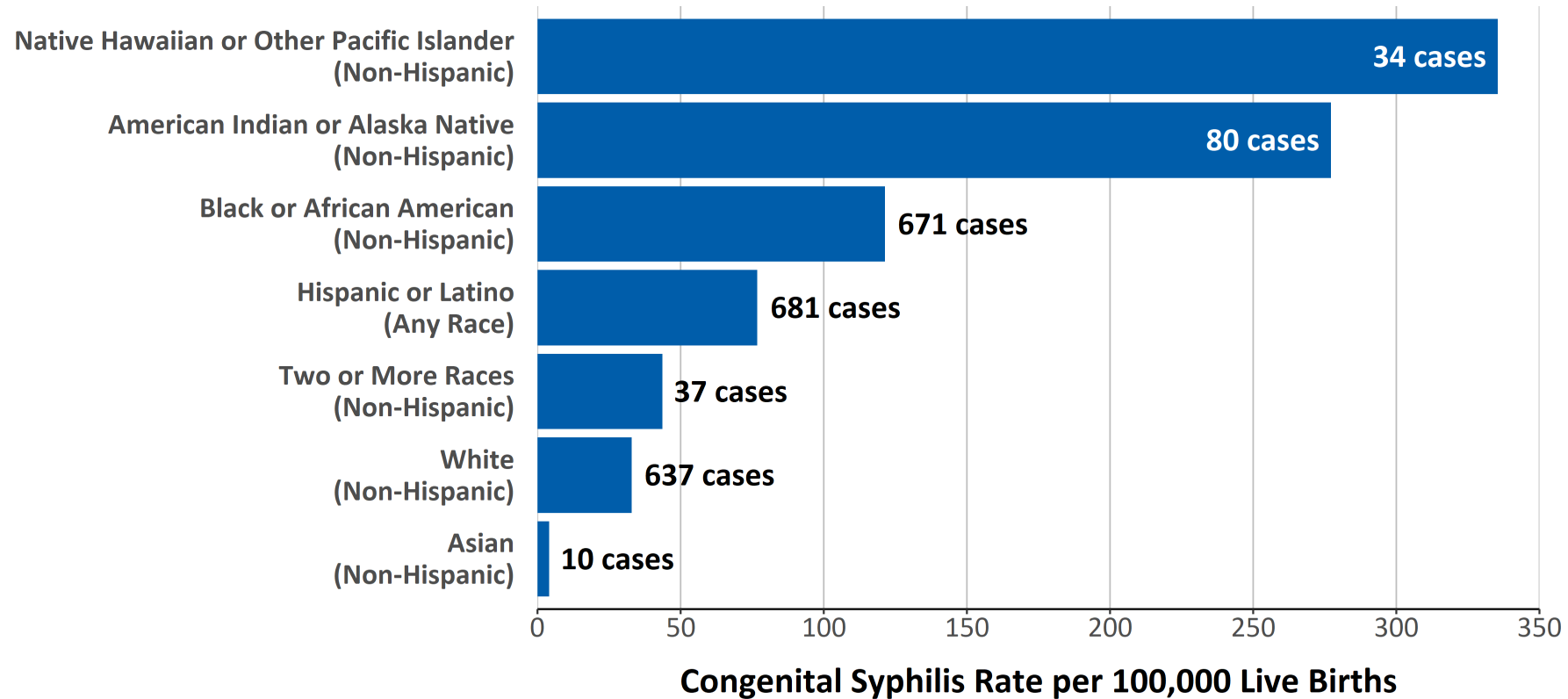
\* Reported 2021 congenital syphilis data are preliminary as of March 9, 2022.

## Congenital Syphilis — Reported Cases by Year of Birth, United States, 2011–2021\*





# Racial and ethnic disparities in rates of reported congenital syphilis continued to persist in 2021\*



\* Reported 2021 congenital syphilis data are preliminary as of March 9, 2022.

NOTE: In 2021, 118 cases (5.2%) were missing reported race and/or hispanic ethnicity.

**Congenital Syphilis — Case Counts and Rates of Reported Cases by Race and Hispanic Ethnicity, United States, 2021\***



# Syphilis Screening

- Screening of pregnant women at first prenatal visit, during 3<sup>rd</sup> trimester and again at delivery
- At minimum, annual\* screening of sexually active **MSM** at exposed sites (urethral/pharyngeal/rectal)
- At minimum, annual\* screening of **HIV-infected** persons
- At minimum, bi-annual\* screening for persons on **PrEP**.
- Women  $\leq 35$  years and men  $< 30$  years of age in **corrections** facilities at intake as opt out screening

\*More often based on risk

[STI Treatment Guidelines \(cdc.gov\)](https://www.cdc.gov/sti/treatment-guidelines)



# Syphilis: Clinical Stages

## Primary

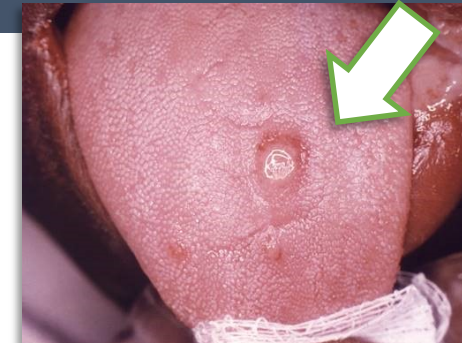
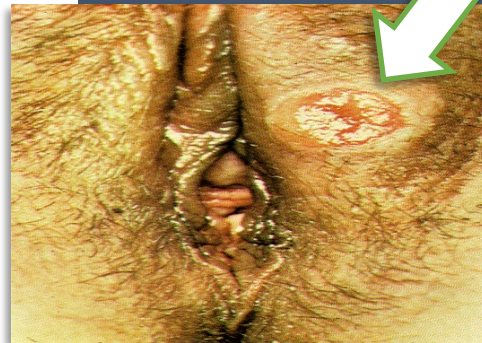
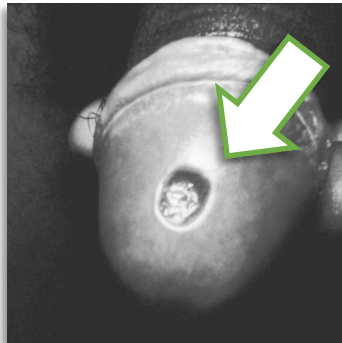
Chancre

Painless ulcer

- Appears 10 to 90 days after infection
- **Sore goes away even if person is not treated**
- Patient may never be aware of a chancre



"Kissing" Lesion



# Syphilis: Clinical Stages

## Secondary



### Rash

Mucocutaneous lesions  
Lymphadenopathy  
Hair loss

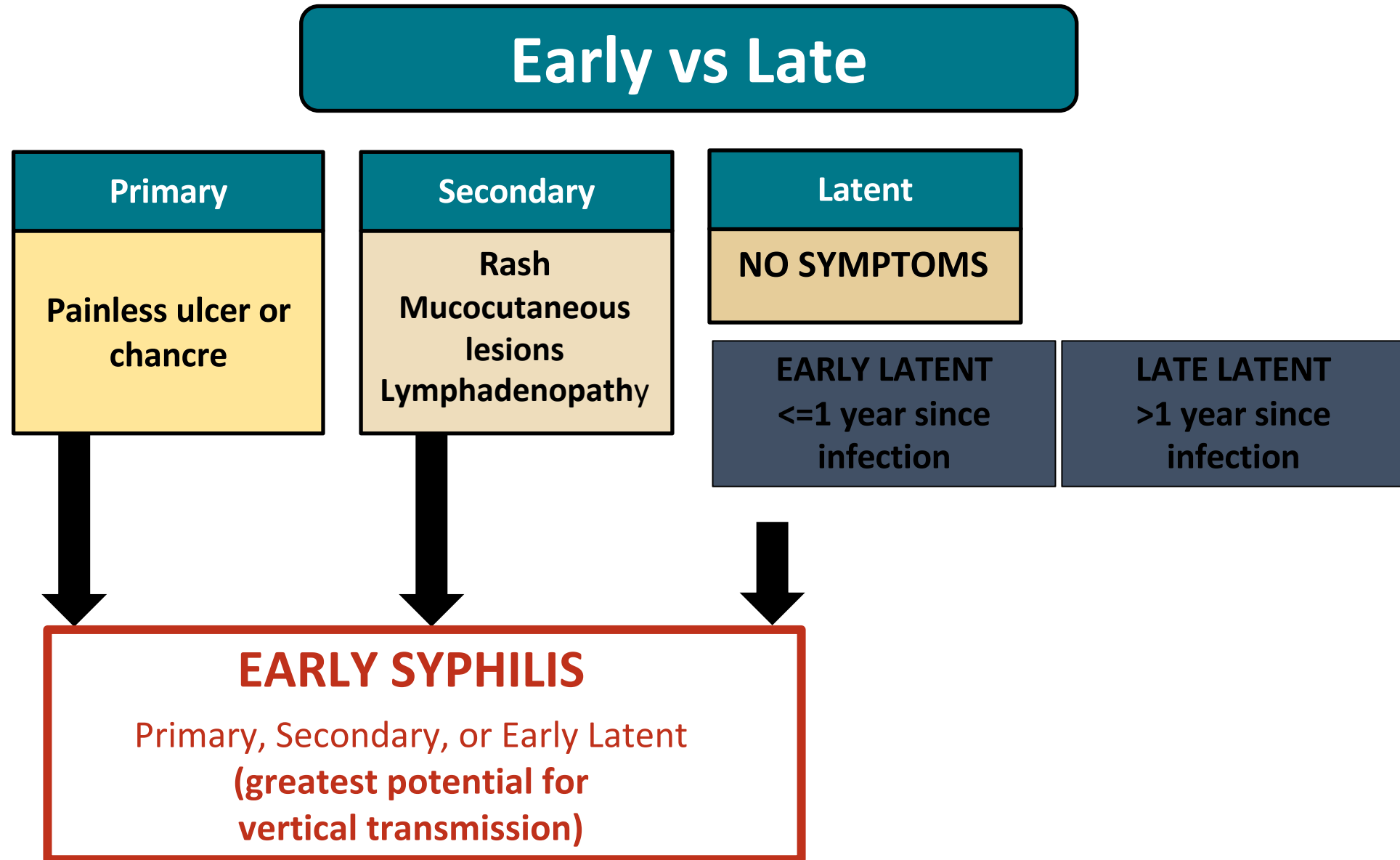


- Usually occurs 3 to 6 weeks after primary syphilis
- Patients may only have one subtle skin change
- **Symptoms also go away even if not treated!**





# Syphilis: Clinical Stages

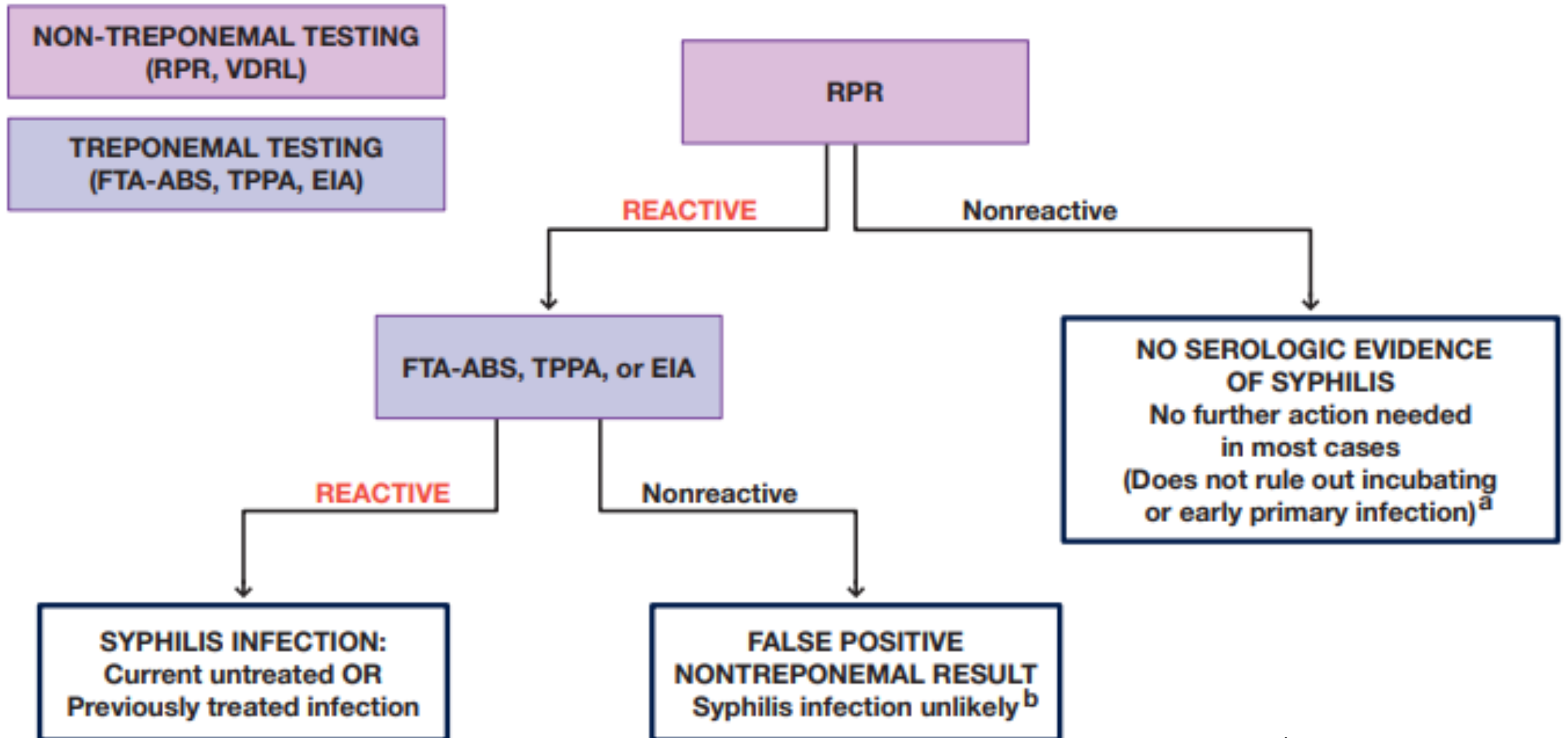


# Laboratory Diagnosis of Syphilis

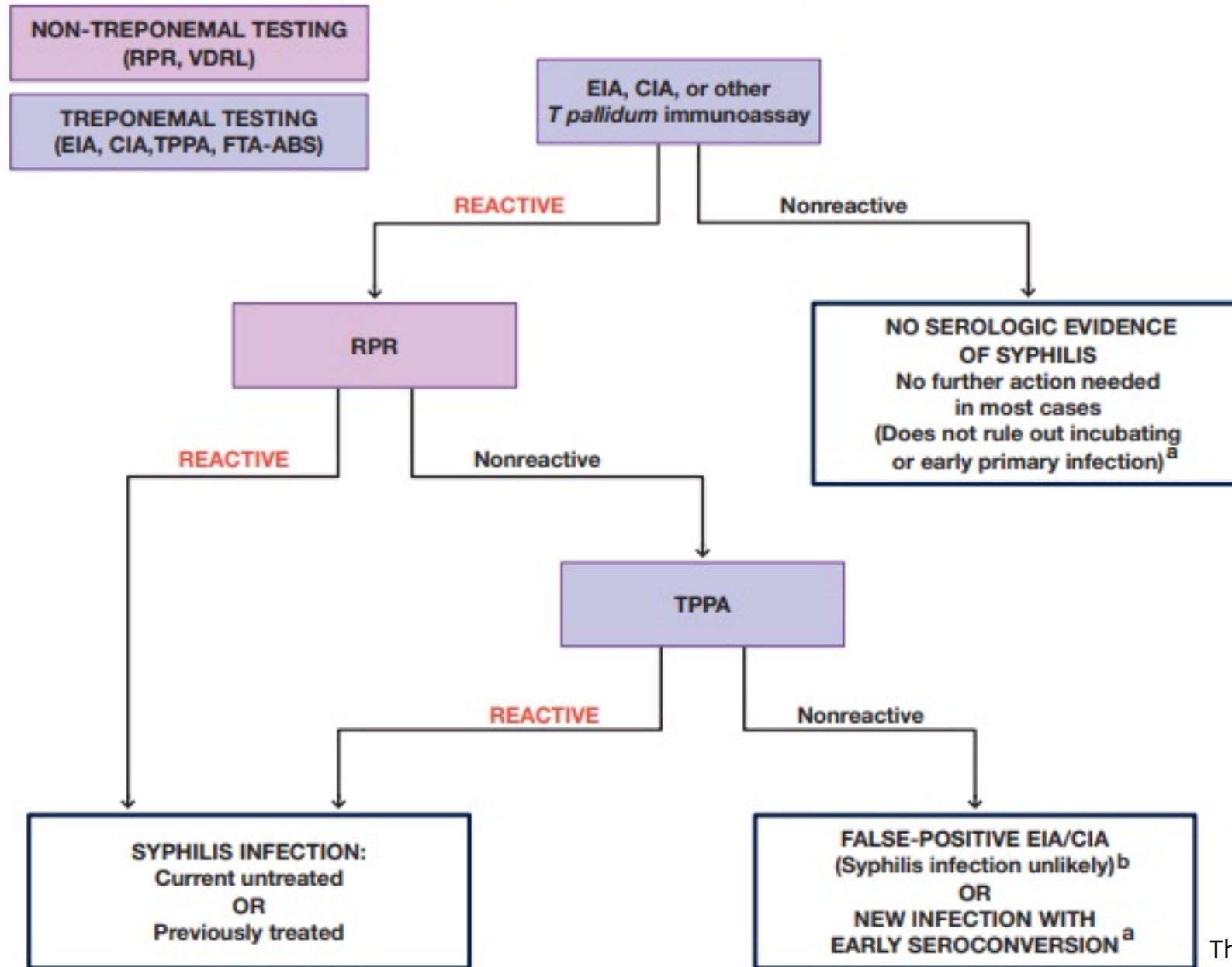
- Traditional Algorithm begins with nontreponemal test (e.g. RPR, VDRL) with confirmation using a treponemal test (e.g. TPPA, EIA, FTA-ABS, TPHA)
- Reverse Sequence algorithm begins with treponemal test with confirmation using a nontreponemal test



## TRADITIONAL ALGORITHM



### REVERSE-SEQUENCE ALGORITHM



# Adult Syphilis Treatment

- Primary, Secondary and Early Latent Stages
  - **Benzathine penicillin G** 2.4 million units IM in a single dose
- Unknown Duration and Late Latent
  - **Benzathine penicillin G** 7.2 million units total, administered as 3 doses of 2.4 million units IM each at 1-week intervals
- Neurosyphilis, Ocular Syphilis, or Ootosyphilis Among Adults
  - **Aqueous crystalline penicillin G** 18–24 million units per day, administered as 3–4 million units IV every 4 hours or continuous infusion for 10–14 days
  - Alternative: **Procaine penicillin G** 2.4 million units IM once daily PLUS **Probenecid** 500 mg orally 4 times/day, both for 10–14 days

# Syphilis response: Best practices in high burden areas

- Support active case finding through **case investigation and partner elicitation**
- **Rapid treatment** of cases and sexual partners by stage of infection
- **Presumptive treatment** (prior to test results) of sexual partners of syphilis cases
- **Presumptive treatment** of people with symptoms consistent with syphilis
- **Screening of pregnant women** at first prenatal visit, during 3<sup>rd</sup> trimester and again at delivery.
- **Expanded screening** to at-risk communities of sexually active adults and adolescents (schools, corrections, emergency department, primary care, community venues, parole centers, work physicals)
- **Field treatment** with benzathine penicillin for people with syphilis unable or unwilling to present to a medical facility
- **Electronic health record (E H R)** reminders for screening and standard order sets for testing and treatment)



# Expanded Screening Based on Local Prevalence

- “Clinicians should consider the communities they serve and consult local public health authorities for guidance regarding identifying groups more vulnerable to STDs on the basis of disease prevalence”
- [STI Treatment Guidelines \(cdc.gov\)](#)

# Syphilis Elimination Today

- Addressing a broader array of determinants of sexual health may be a more effective strategy for reducing health disparities but implementing such an approach is challenging.
- What then were the key lessons learned from this latest effort to eliminate syphilis from the United States?
- Five fundamental components emerged as being key:
  1. access to care is essential,
  2. expanded partnerships are critical,
  3. diverse epidemics require tailored interventions,
  4. effective program evaluation is critical, and
  5. it takes more than money.

# Considerations for syphilis outbreak response

## Expand case finding and prompt treatment

- I. Effective disease intervention (case investigation with identification and management of sexual partners)
- II. Expand screening to populations at risk (health facility- and community-based)
- III. Ensure access to prompt treatment (health facility or field-based)
- IV. Case surveillance to guide response

## Increase community awareness and engagement

- I. Public health announcements with information on testing locations
- II. Engagement with community and venue leadership (health facilities, CBOs, corrections, schools, community events) to expand awareness and screening
- III. Educational outreach using prevention interventions

## Methods of Case Finding

<b>Partner Services</b>	<b>51%</b>
<b>Screening</b> <i>Provider screen (74%)</i> <i>Prenatal screen (11%)</i> <i>Jail screen (7%)</i> <i>Community screen (7%)</i>	<b>32%</b>
<b>Self-Referral</b>	<b>14%</b>
<b>Referred by partner</b>	<b>2%</b>

Browne K, Ridpath A, Scranton R et al. Abstract # 39462. 2018 National STD Prevention Conference Washington, D.C., Aug. 27-30, 2018.

<https://cdc.confex.com/cdc/std2018/webprogram/Paper39462.html>



# Other Considerations - Screening

- Is there clear policy? Where?
  - Universal? At all touch points?
  - ED and Lab key
- Do you have a syphilis reminder? Is it up to date?
  - Who is it for?
- Screening and Testing
  - ED priority
  - Primary care
  - Pregnant people
  - People who are using drugs

# Rapid Screening for Syphilis

## Considerations of rapid screening

- Only 1 CLIA waived test – Health Check
  - CLIA Waived for Fingertick Whole Blood
  - Accuracy: >97%\*
  - 10 minute results
- Other rapid tests (can also be used for HIV screening) require to be done in lab
  - 99% for HIV and >94% for T. pallidum
  - 15 minute dual rapid test
  - Combined reimbursement: CPT Codes 86703, 8678



Reaching those at higher risk with a more comprehensive health and wellness approach.



# Syphilis cases are on the rise.

Know your status,  
especially if you're pregnant.

Syphilis can be hard to spot, often starting with an easily missed sore or rash. While anyone can get syphilis, pregnant people and newborn babies face serious complications if left untreated.



Testing is easy and treatment is quick.

Protect your and your baby's future by  
getting tested today!

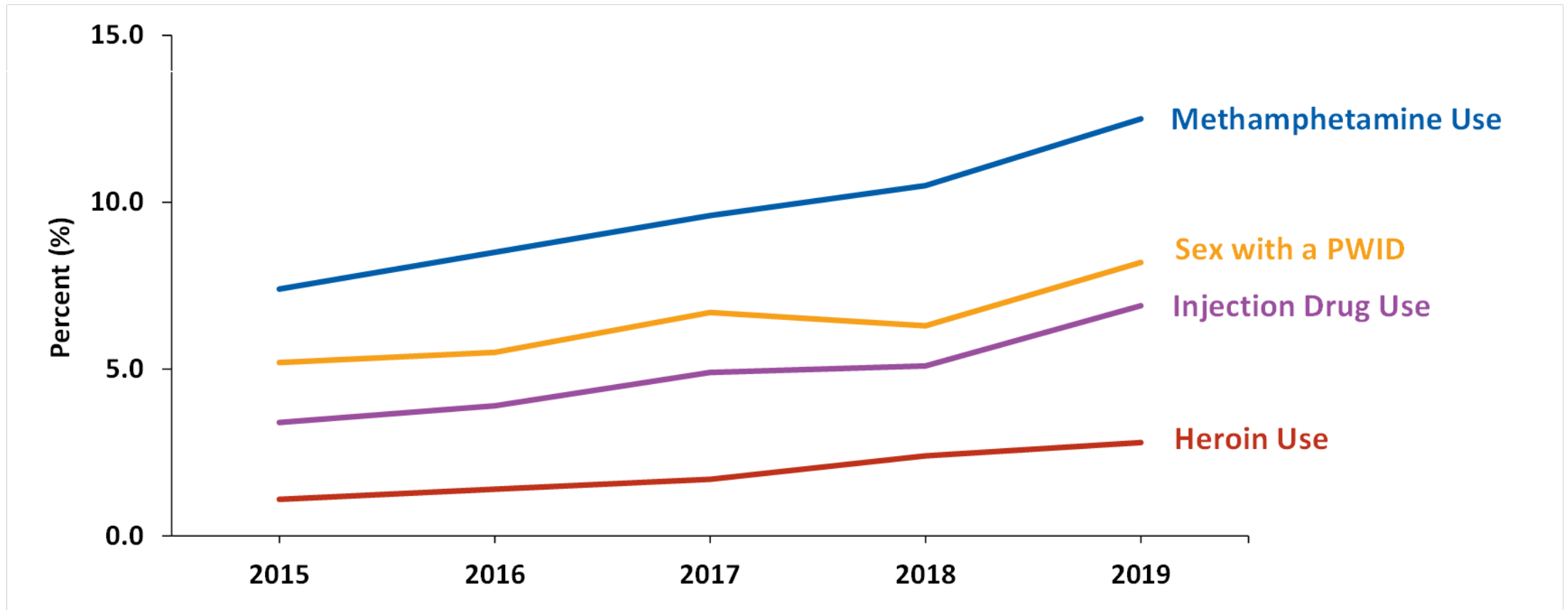


NPAIHB  
Indian Leadership for Indian Health

# Reaching PWUD

- The interviews explored injection drug use practices, access to injection equipment, substance use treatment resources, and health system perception and knowledge of AI/AN injection drug use behaviors.
- Participants described local needs that centered on communication, accessibility, and humanization.
  - PWUDs felt that their needs were not seen, while community workers acknowledged the need for further harm reduction and substance use treatment program development.
  - The expression of the human experience of AI/AN PWUDs in relation to drug use practices, procedures, and perceived place in the community was unveiled in the analysis.

# Reported\* Injection Drug Use, Methamphetamine Use, Heroin Use, and Sex with a PWID Among Primary and Secondary Syphilis Cases, United States, 2015–2019



# Harm Reduction

What is it, what it isn't, why it matters

Harm reduction is  
something all of us do,  
every day.











So, what is harm reduction as it is applied to substance misuse and sexual health?

Harm reduction is a set of practical strategies and ideas aimed at reducing negative consequences associated with drug use. Harm reduction is also a movement for social justice built on **a belief in, and respect for, the rights of people who use drugs (and alcohol).**



**“a belief in, and respect for, the rights of people who use drugs (and alcohol).”**

People who use drugs and alcohol are  
people first. People who use drugs and  
alcohol are our...

brothers,

sisters,

relatives,

community.


Drug and/or alcohol use doesn't negate the value of their lives.

First, and foremost: keep them safe, keep them alive, let them know they are loved.

# Example

Syringe Service Program



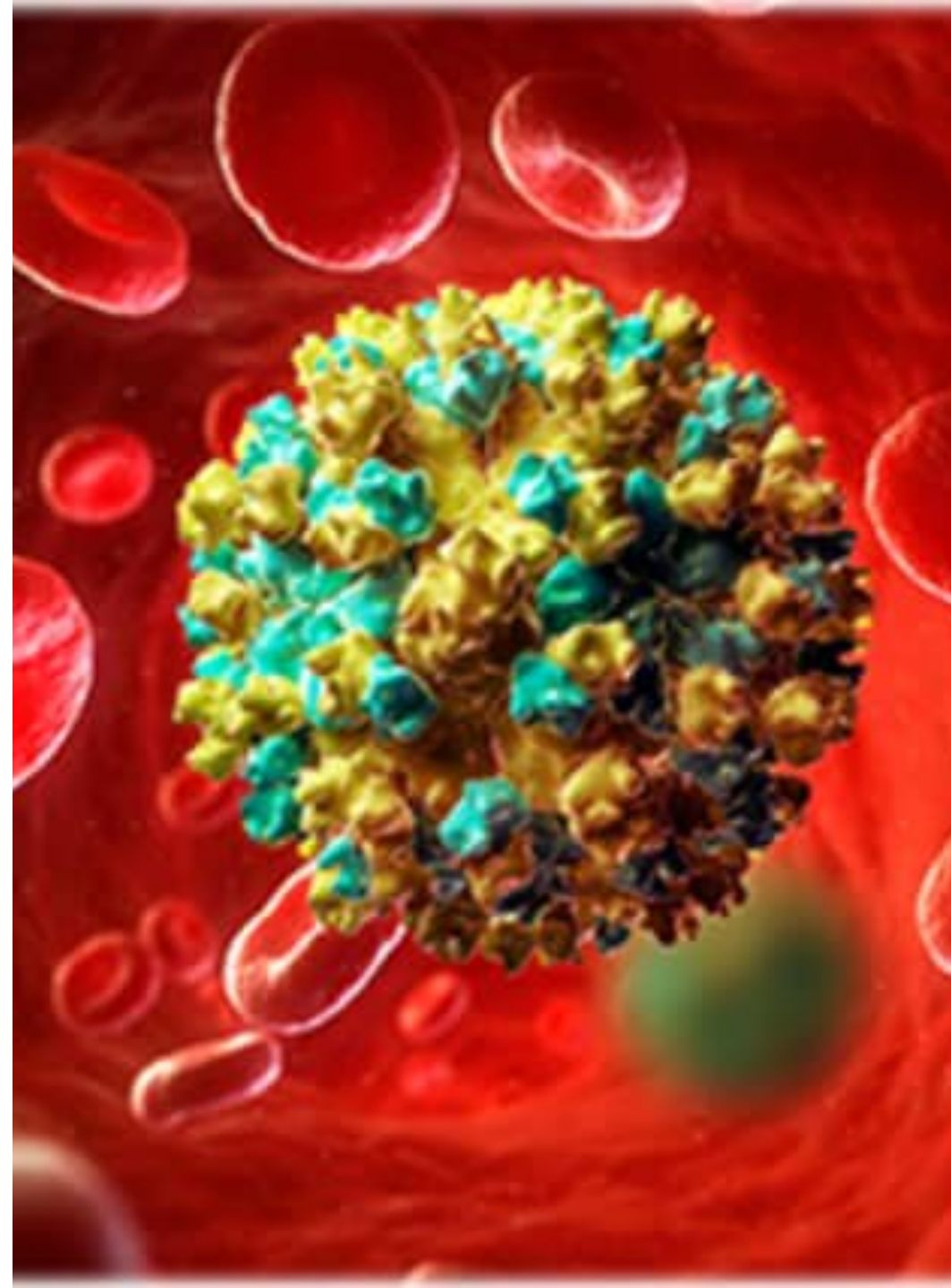
A close-up photograph of a medical syringe and an orange pill cap resting on a dark, reflective surface. The syringe is positioned diagonally, with its needle pointing towards the right. The barrel of the syringe has numerical markings: 10, 15, 20, 25, 30, 35, 40, 45, and 50. The orange pill cap is lying horizontally to the right of the syringe. The background is dark and out of focus, with some blurred white shapes that could be other pills or containers.

Escalating rates of addiction are fueling a dramatic increase in infectious disease associated with injection drug use

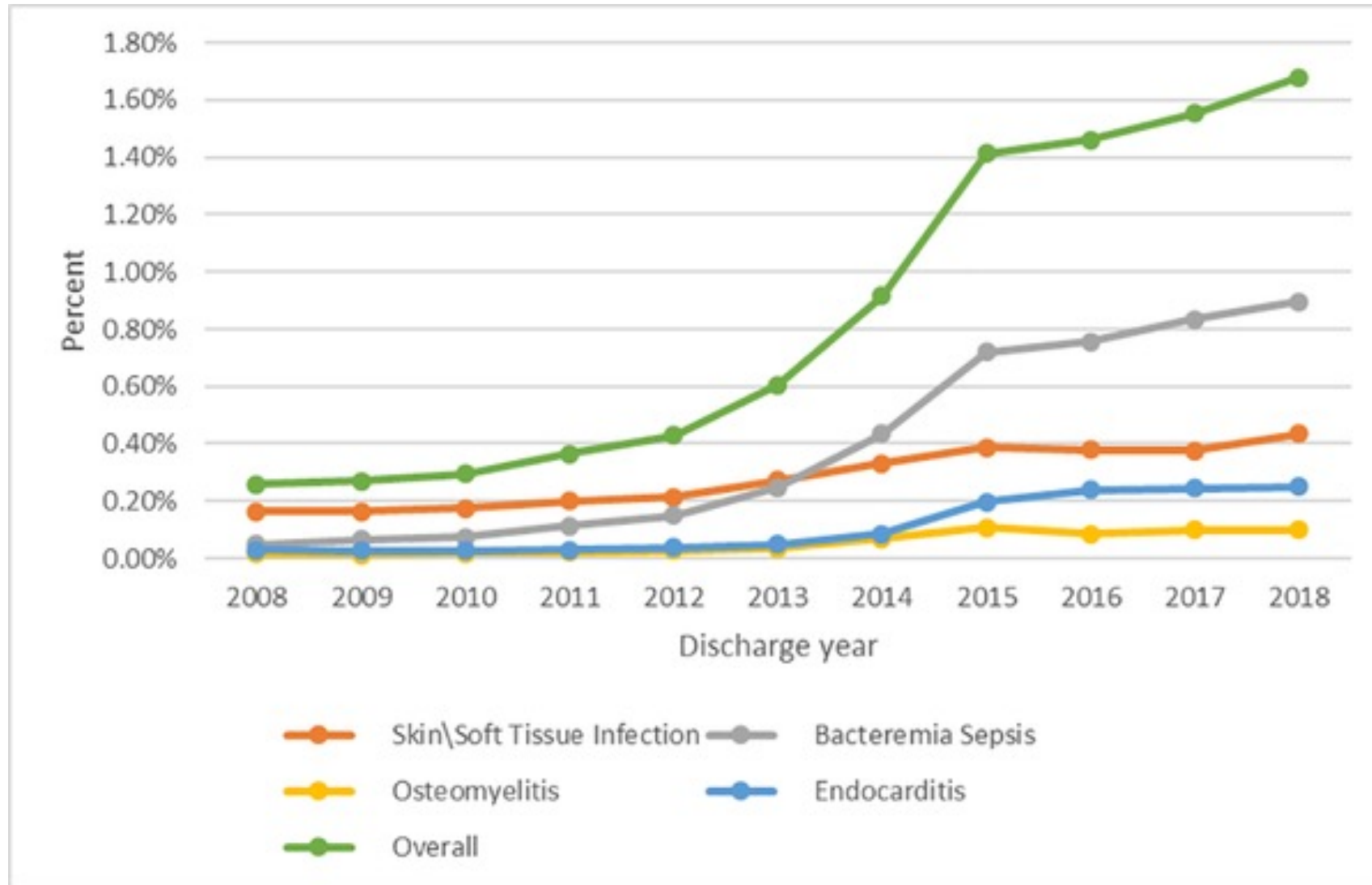
Reports of acute hepatitis C virus (HCV) infection rose 3.5-fold from 2010 to 2016, and **the majority of new HCV infections are due to injection drug use.**

Over 2,500 new HIV infections occur each year among people who inject drugs (PWID).

Drug use is also tightly entwined in the current syphilis increase in Indian Country.



# Injection drug use-related SBI hospitalizations, overall and by SBI type, as a percentage of all hospitalizations, Hospital Discharge Data, Oregon, 2008–2018.



There were 81,000 drug overdose deaths in the 12 months ending May 2020, the highest number ever recorded in a 12-month period

Largely driven by increased fentanyl in drug supply

Likely exacerbated by isolation and fear during COVID pandemic

# What is syringe service?

SSPs are a life-saving intervention.

SSPs are associated with a 50% reduction in HIV and HCV incidence.

When combined with medications that treat opioid dependence, HCV and HIV transmission is reduced by over two thirds.

Centers for Disease Control and Prevention. [Surveillance for Viral Hepatitis — United States, 2016 pdf icon\[PDF – 1.5 MB, 75 pages\]](#).

Centers for Disease Control and Prevention. Estimated HIV incidence and prevalence in the United States, 2010–2015. [HIV Surveillance Supplemental Report. 2018;23\(No. 1\) pdf icon\[PDF – 2 MB, 77 pages\]](#)

Platt L, Minozzi S, Reed J, et al. Needle syringe programmes and opioid substitution therapy for preventing hepatitis C transmission in people who inject drugs. Cochrane Database Syst Rev. 2017;9:CD012021. doi:10.1002/14651858.CD012021.pub2.

Fernandes RM, Cary M, Duarte G, et al. Effectiveness of needle and syringe programmes in people who inject drugs – An overview of systematic reviews. BMC Public Health. 2017;17(1):309. doi:10.1186/s12889-017-4210-2.



# AND...

New users of SSPs are **five times** more likely to enter drug treatment and **three times** more likely to stop using drugs than those who don't use the programs.

<https://www.cdc.gov/ssp/syringe-services-programs-factsheet.html>

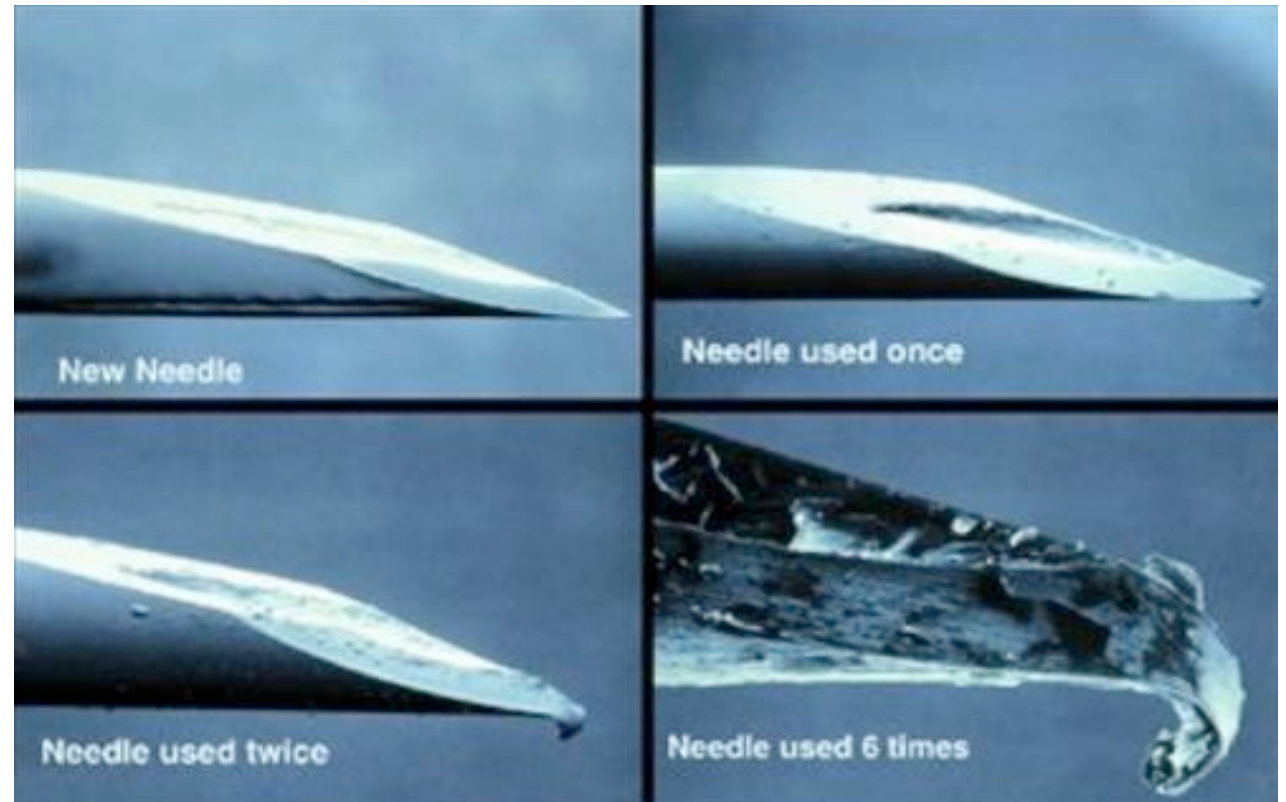
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How?

✓ Sufficient supply of needles means less need to share.

✓ New needles decrease infection in other ways as well.

✓ SSPs increase HIV, HCV and STI testing as well



SSPs provide more than just needles



ONE LINE  
FENTANYL!



TWO LINES  
NO FENTANYL







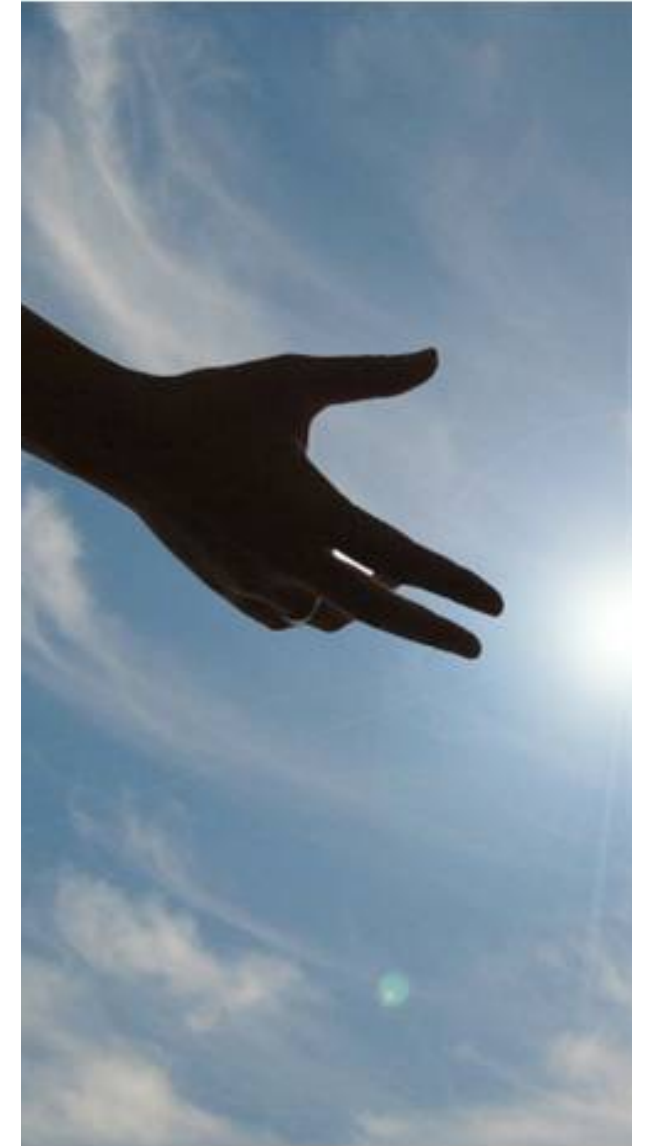
**SSPs provide naloxone directly to individuals who use drugs.**

This matters because persons who use drugs perform the majority – over 80% -- of reported overdose reversals.

<https://www.cdc.gov/media/releases/2020/p1218-overdose-deaths-covid-19.html>

World Health Organization. Community management of opioid overdose. Geneva, Switzerland: World Health Organization; 2014.

SAMHSA <http://store.samhsa.gov/product/Opioid-Overdose-Prevention-Toolkit-Updated-2014/SMA14-4742>



## Siletz Harm Reduction Program: Lending a Hand to Community Members Others Struggle to Reach



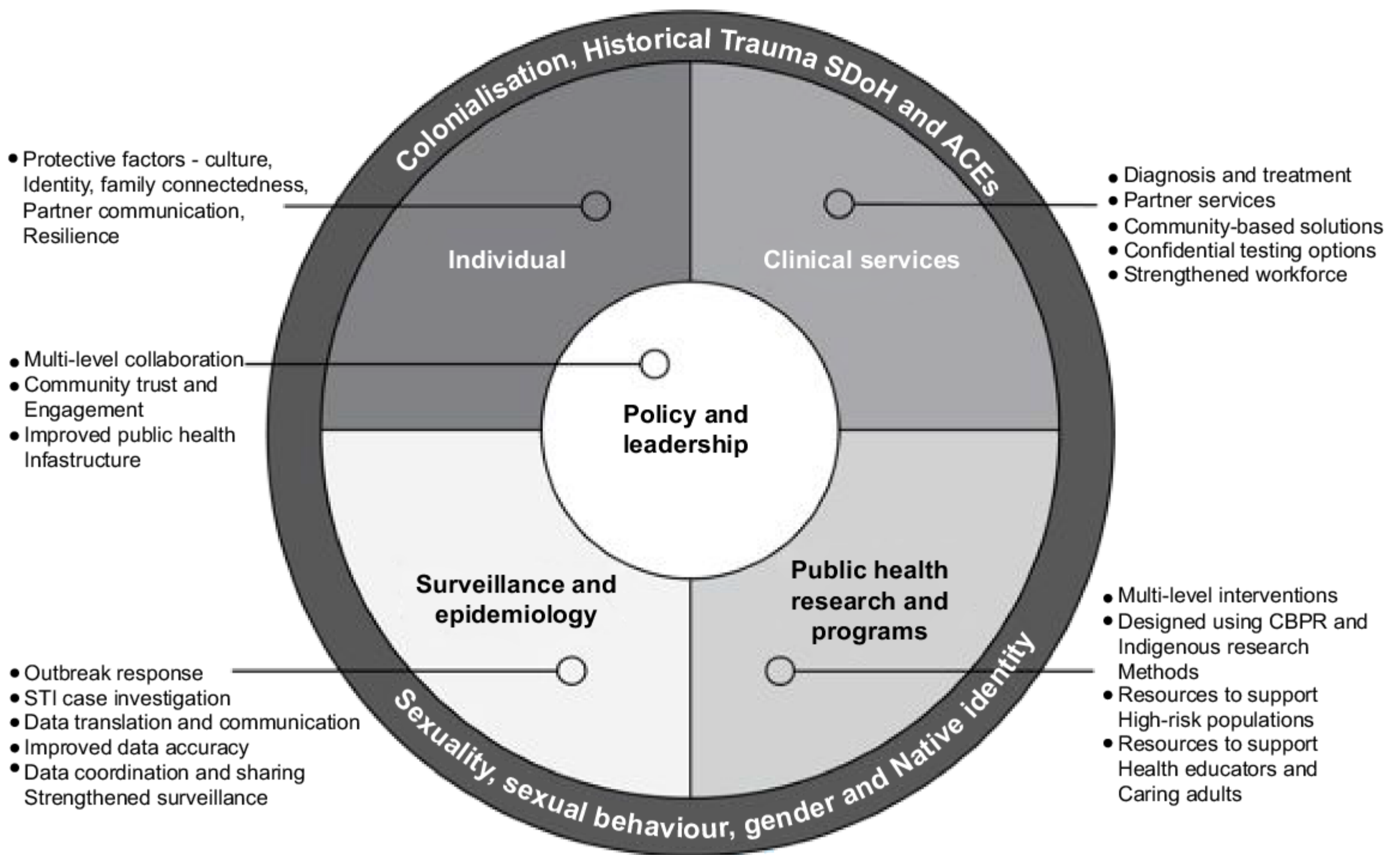
*Francisca "Sissy" Rilatos and a colleague at a syringe exchange booth in the community.*

In 2018, the Siletz Community Health Clinic was awarded an **HIV Early Intervention Services and Outreach** grant from the Oregon Health Authority. With this funding, the Siletz Harm Reduction Program is able to offer syringe exchange, distribute naloxone nasal spray (used to reverse an opioid overdose), provide rapid HIV and hepatitis C testing, and connect clients to needed medical and social services.

What about patients who don't want treatment & struggle to stop using drugs or alcohol in the hospital?



**Goal: Improve care for patients with substance use disorders, whether or not the patient wants to decrease or stop their use.**





# HIV and Sexually Transmitted Infections Among Persons with Monkeypox — Eight U.S. Jurisdictions, May 17–July 22, 2022

- In the current global monkeypox outbreak, HIV infection and sexually transmitted infections (STIs) are highly prevalent among persons with monkeypox.
- Among 1,969 persons with monkeypox in eight U.S. jurisdictions, 38% had HIV infection, and 41% had an STI in the preceding year. Among persons with monkeypox, hospitalization was more common among persons with HIV infection than persons without HIV infection.
- It is important to leverage systems for delivering HIV and STI care and prevention and prioritize persons with HIV infection and STIs for vaccination. Screening for HIV and other STIs and other preventive care should be considered for persons evaluated for monkeypox, with HIV care and HIV preexposure prophylaxis offered to eligible persons.

