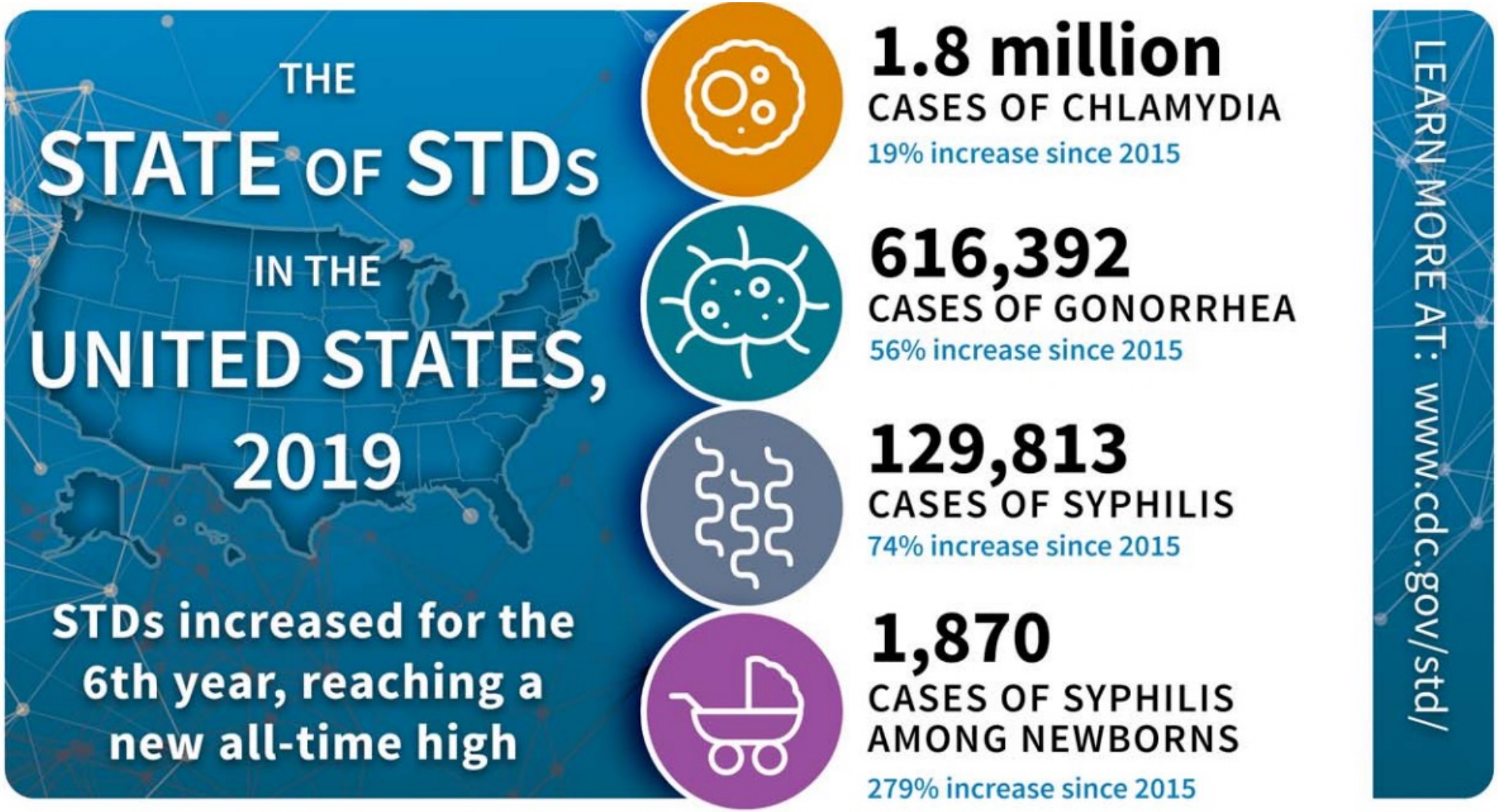
Syphilis Clinical Care and Responses in Indian Country


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/
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:

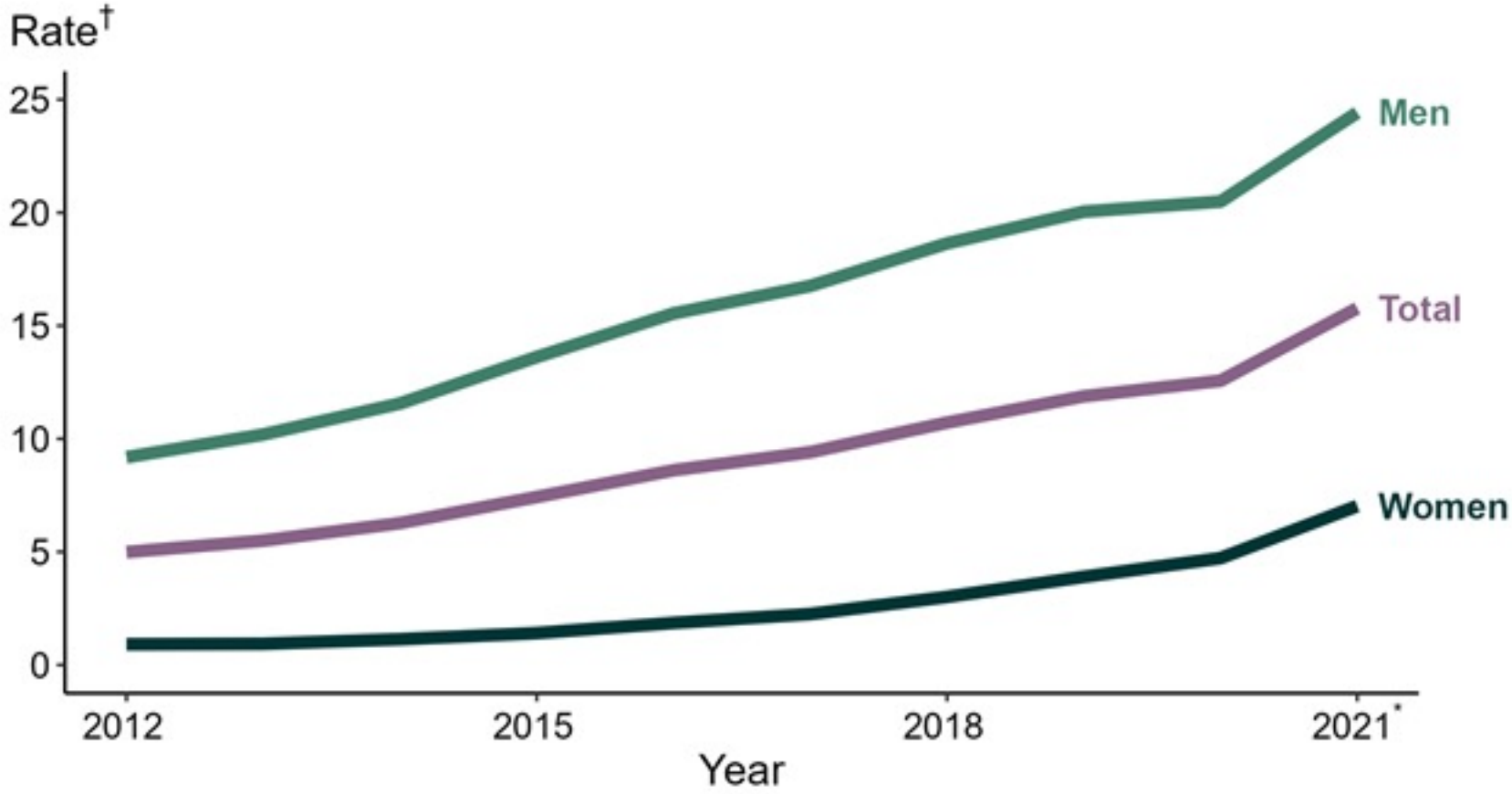
- Know the syphilis burden in your community and talk to patients about sexual health
- Test patients at first prenatal visit; repeat at 28 weeks if at risk of infection**
- Treat syphilis immediately

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

**See STI Treatment Guidelines for details

CDC

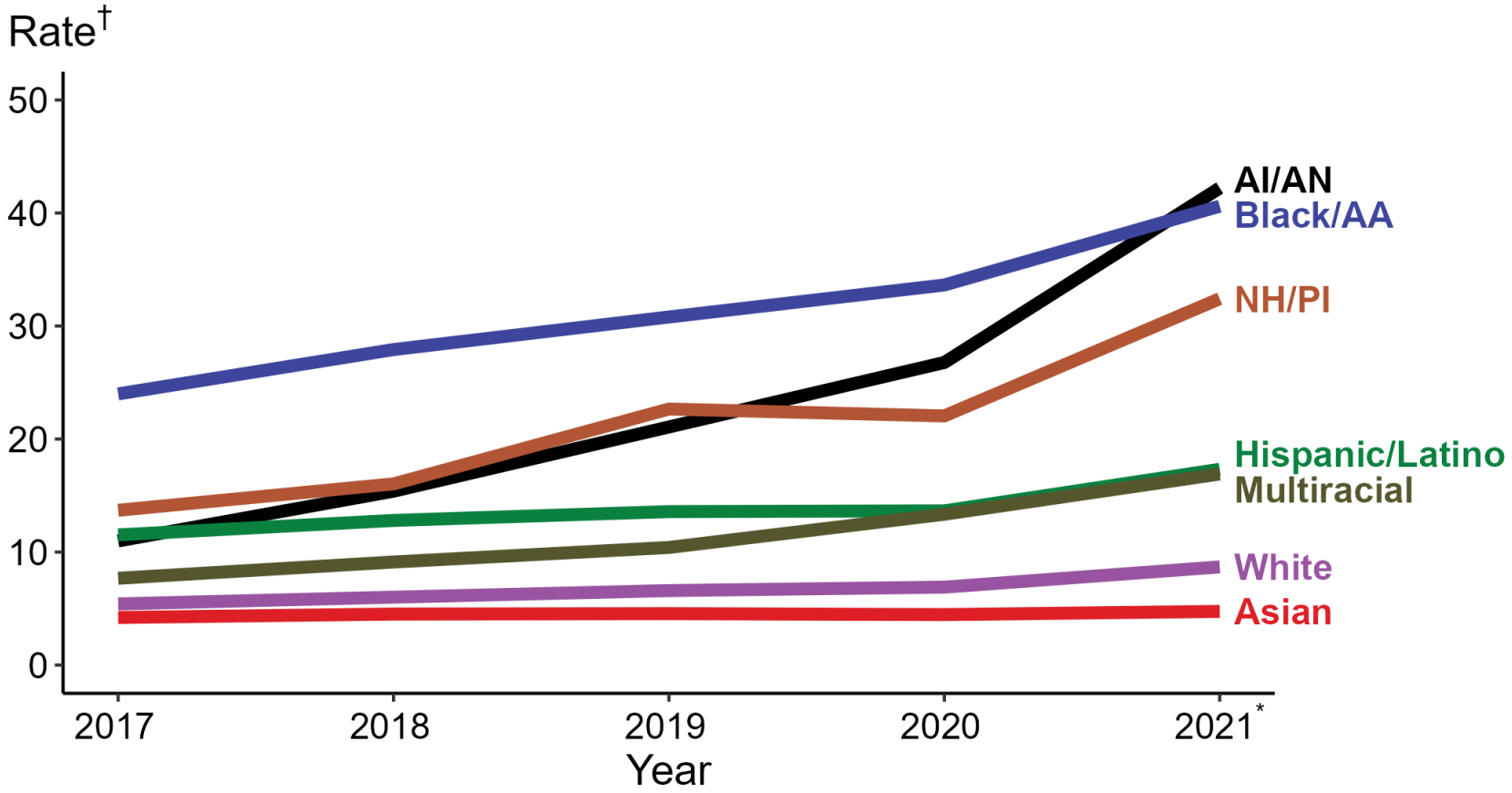
Primary and Secondary Syphilis — Rates of Reported Cases by Sex, United States, 2012–2021*



* 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, 2017–2021*



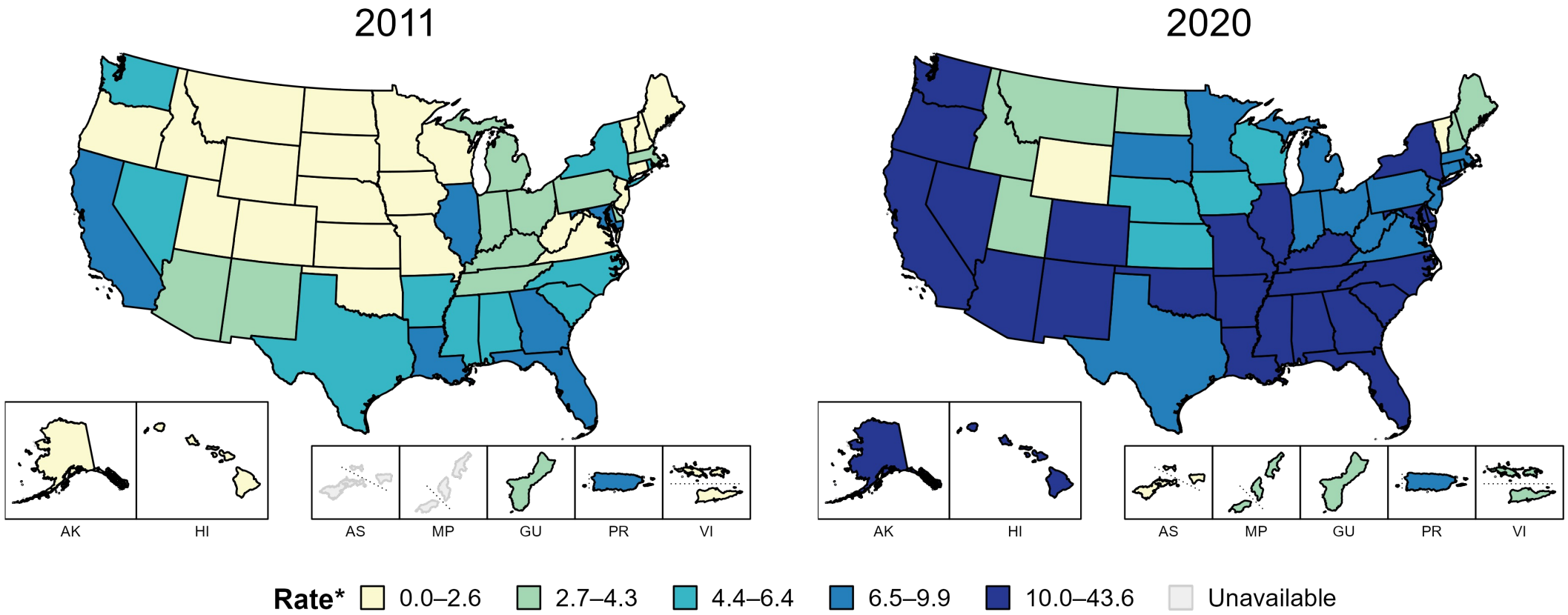
* Reported 2021 data are preliminary as of July 7, 2022

† Per 100,000

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

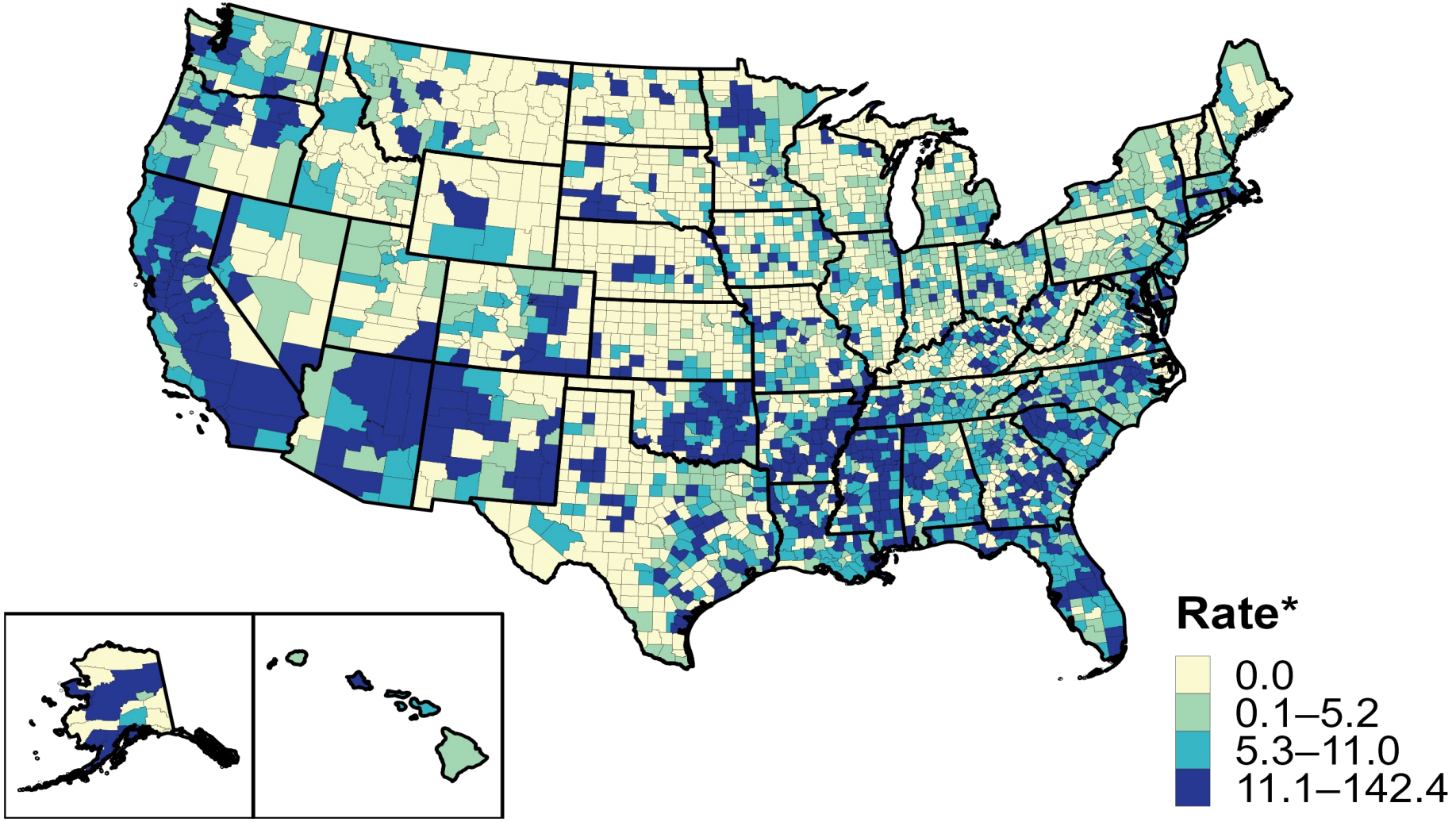
https://www.cdc.gov/std/statistics/2021/default.htm

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



* Per 100,000

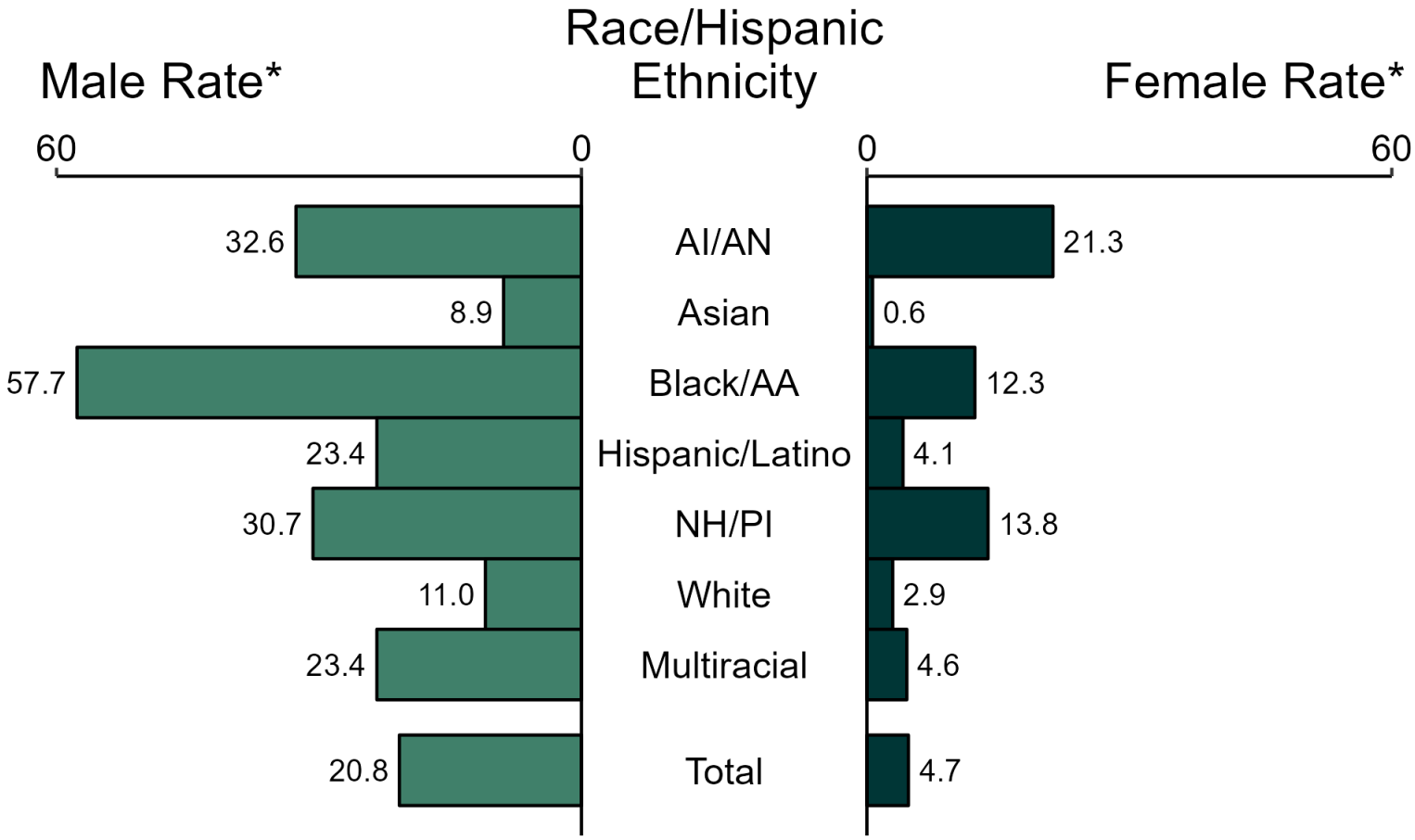
Primary and Secondary Syphilis — Rates of Reported Cases by County, United States, 2020



* Per 100,000

https://www.cdc.gov/std/statistics/2020/figures.htm

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

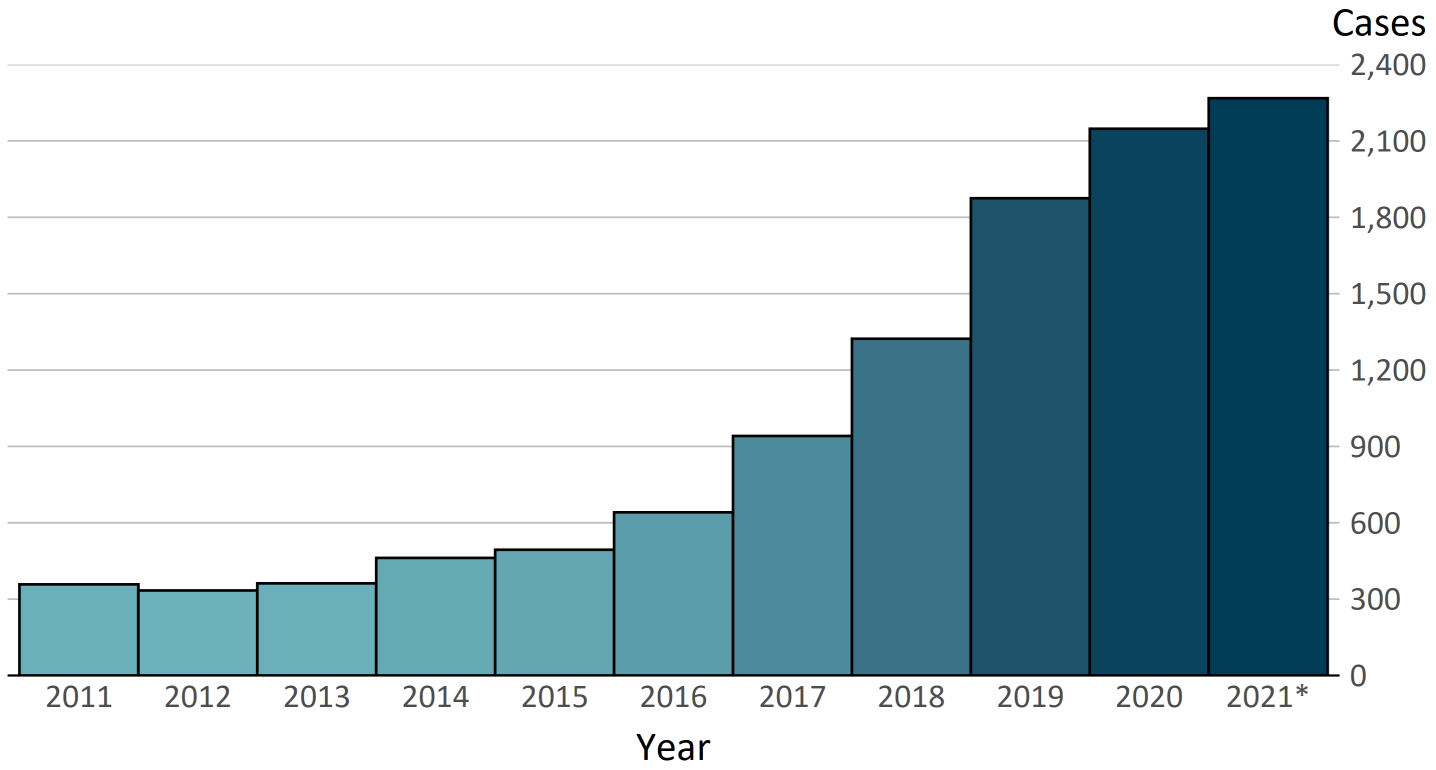


Per 100,000

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.

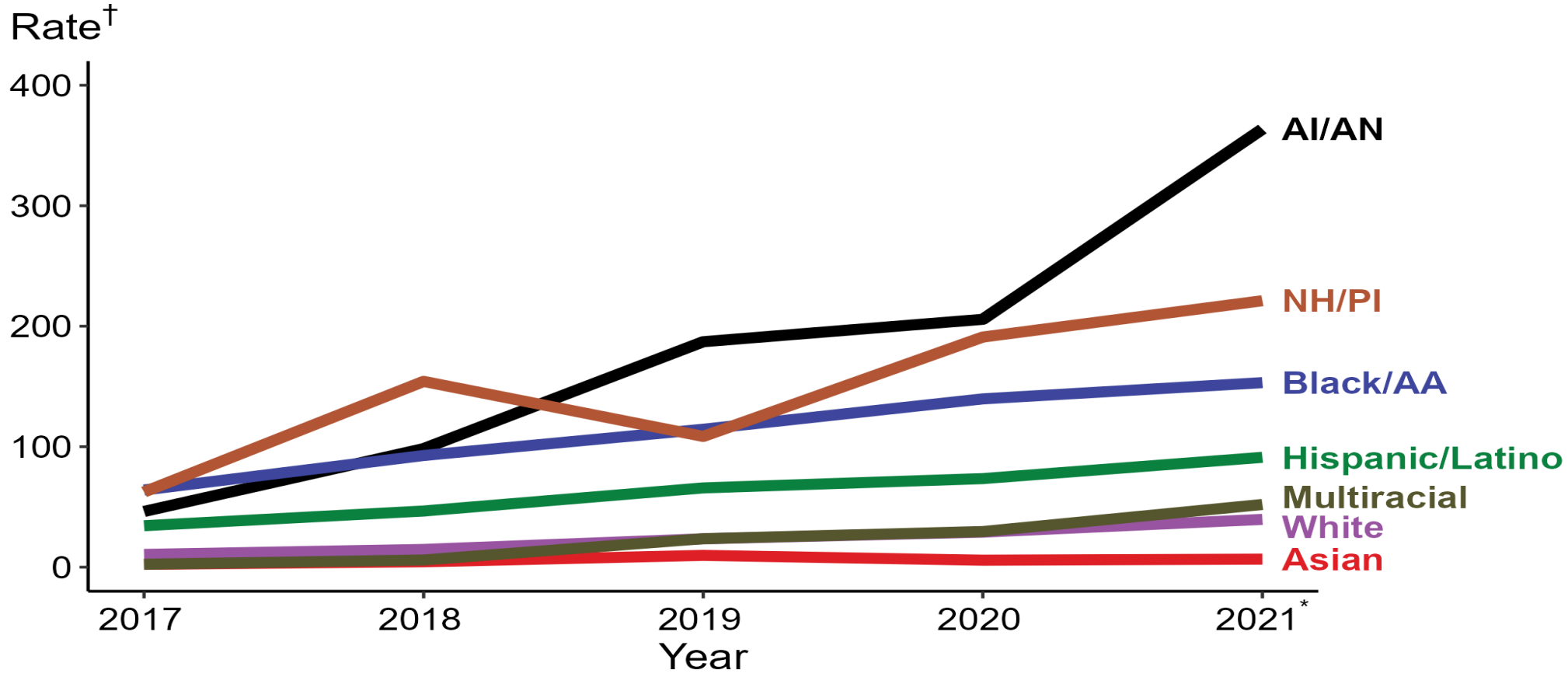
In the United States, 2,268 infants born in 2021* have already been reported as cases of congenital syphilis



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

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

Congenital Syphilis — Rates of Reported Cases by Year of Birth, Race/Hispanic Ethnicity of Mother, United States, 2017–2021*

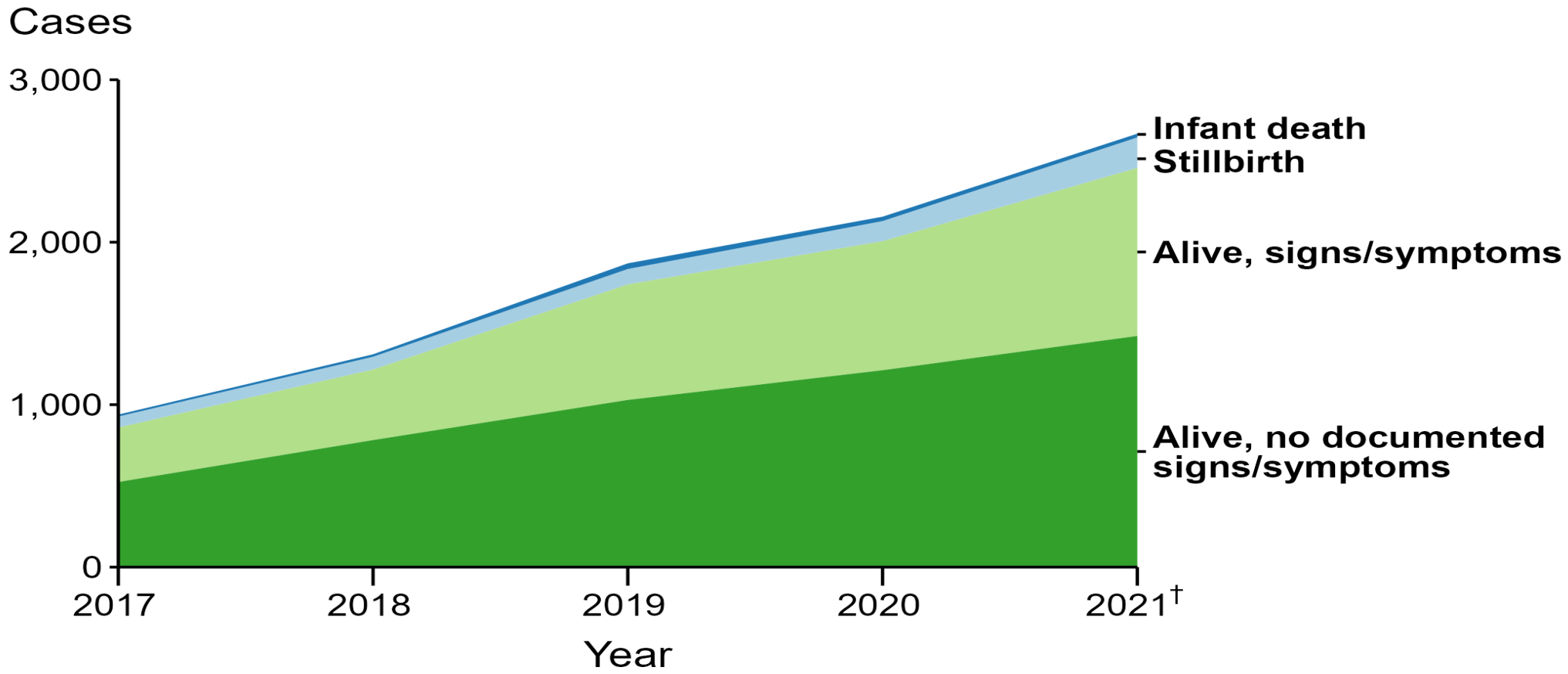


* Reported 2021 data are preliminary as of July 7, 2022

† Per 100,000 live births

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

Congenital Syphilis — Reported Cases by Vital Status and Clinical Signs and Symptoms* of Infection, United States, 2017–2021†

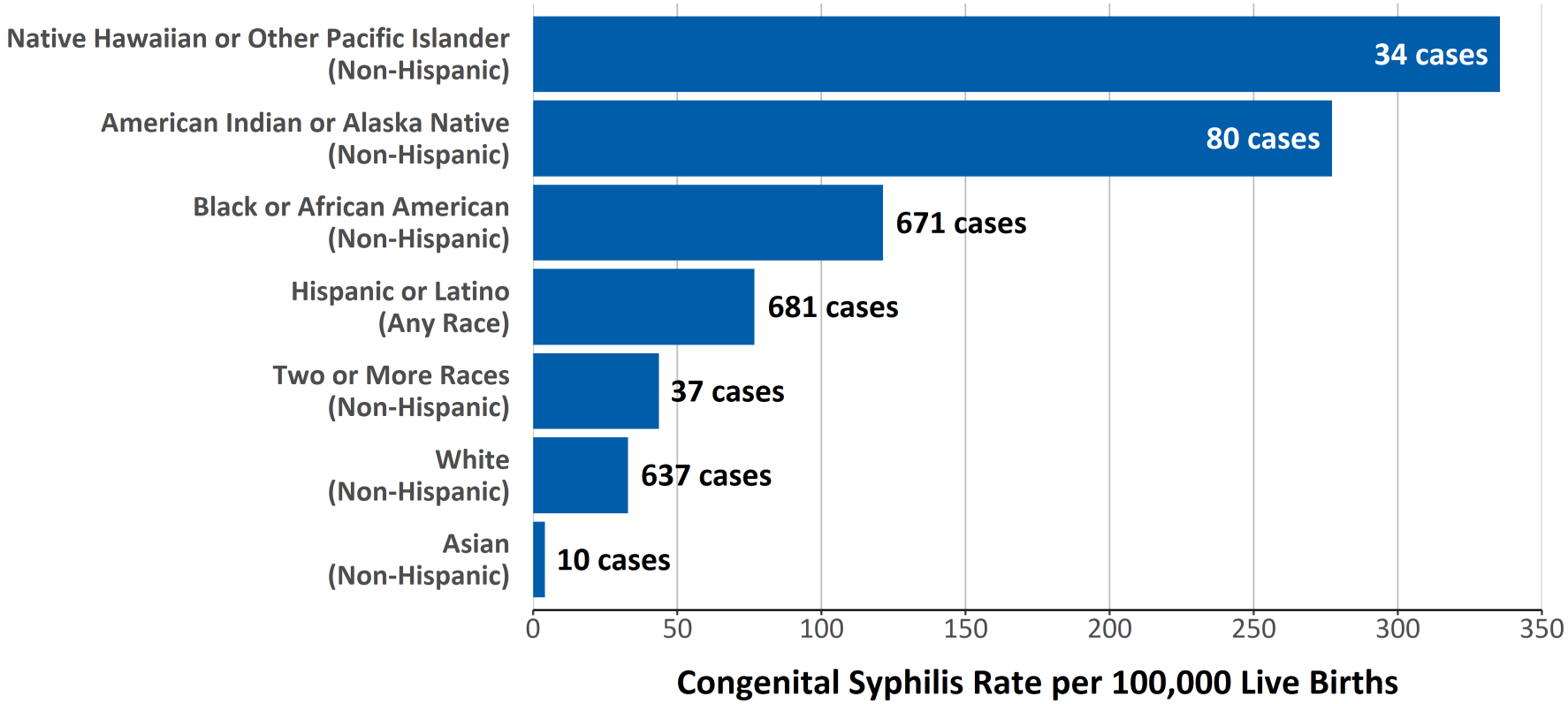


* Infants with signs/symptoms of congenital syphilis have documentation of at least one of the following: long bone changes consistent with congenital syphilis, snuffles, condyloma lata, syphilitic skin rash, pseudoparalysis, hepatosplenomegaly, edema, jaundice due to syphilitic hepatitis, reactive CSF-VDRL, elevated CSF WBC or protein, or evidence of direct detection of *T. Pallidum*.

† Reported 2021 data are preliminary as of July 7, 2022

NOTE: Of the 8,974 congenital syphilis cases reported during 2017 to 2021, 30 (0.3%) did not have sufficient information to be categorized.

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

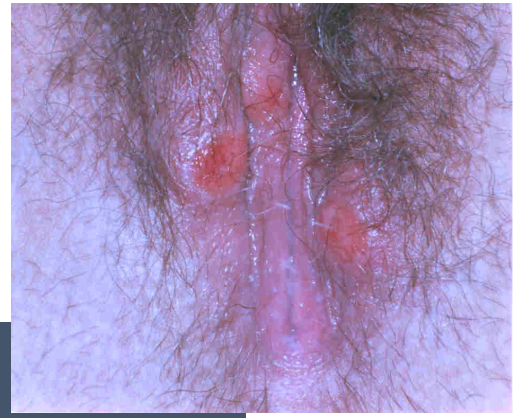
- Screening of pregnant women at first prenatal visit, during 3rd trimester and again at delivery
- At minimum, annual* screening of sexually active **MSM** at exposed sites (urethral/pharyngeal/rectal)
- At minimum, annual* screening of **HIV-infected** persons
- At minimum, bi-annual* screening for persons on **PrEP.**
- Women ≤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)

Syphilis: Clinical Stages

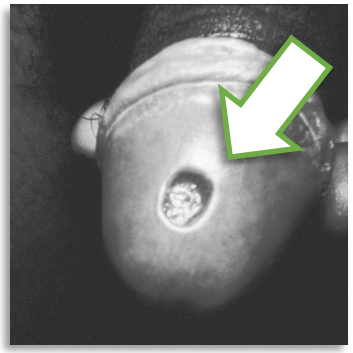
Primary

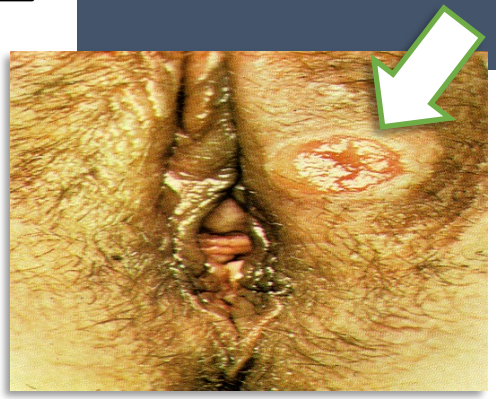


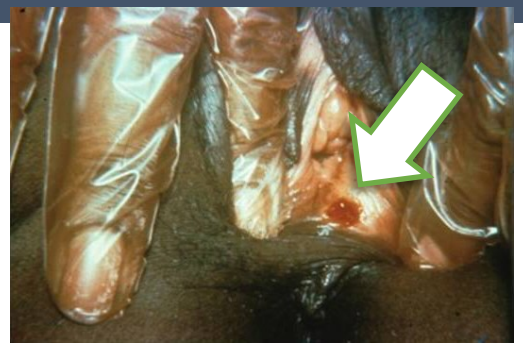
"Kissing" Lesion

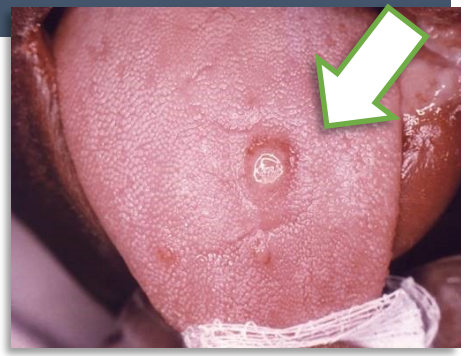
Chancre
Painless ulcer

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



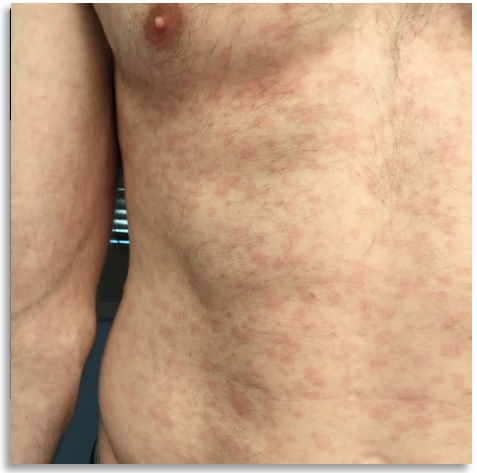


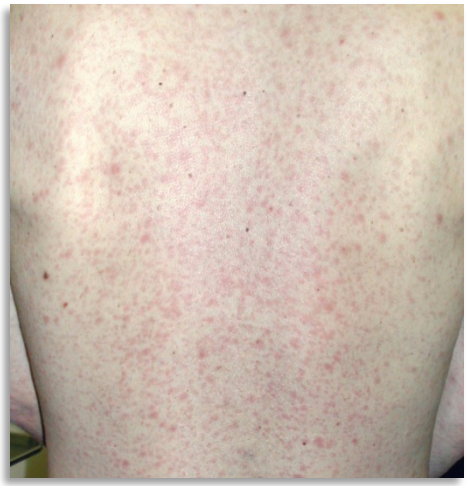




Syphilis: Clinical Stages

Secondary

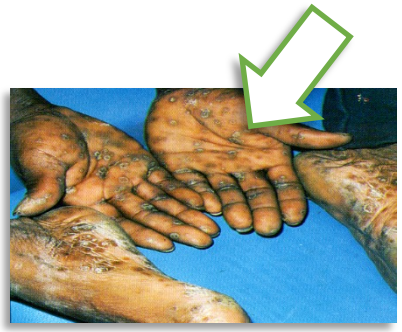


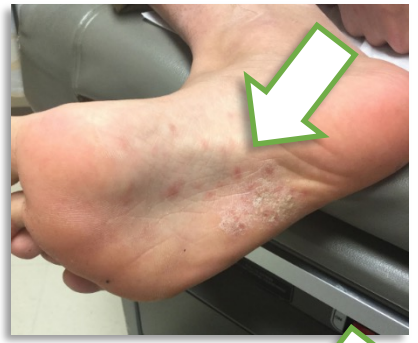


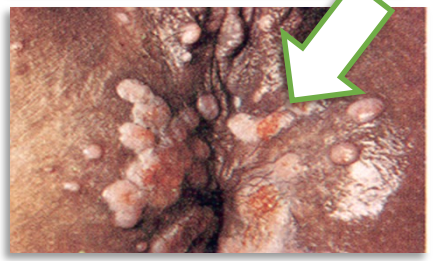
Rash

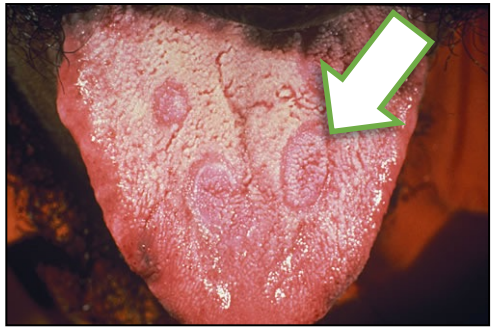
Mucocutaneous lesions
Lymphadenopathy
Hair loss

- *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!**

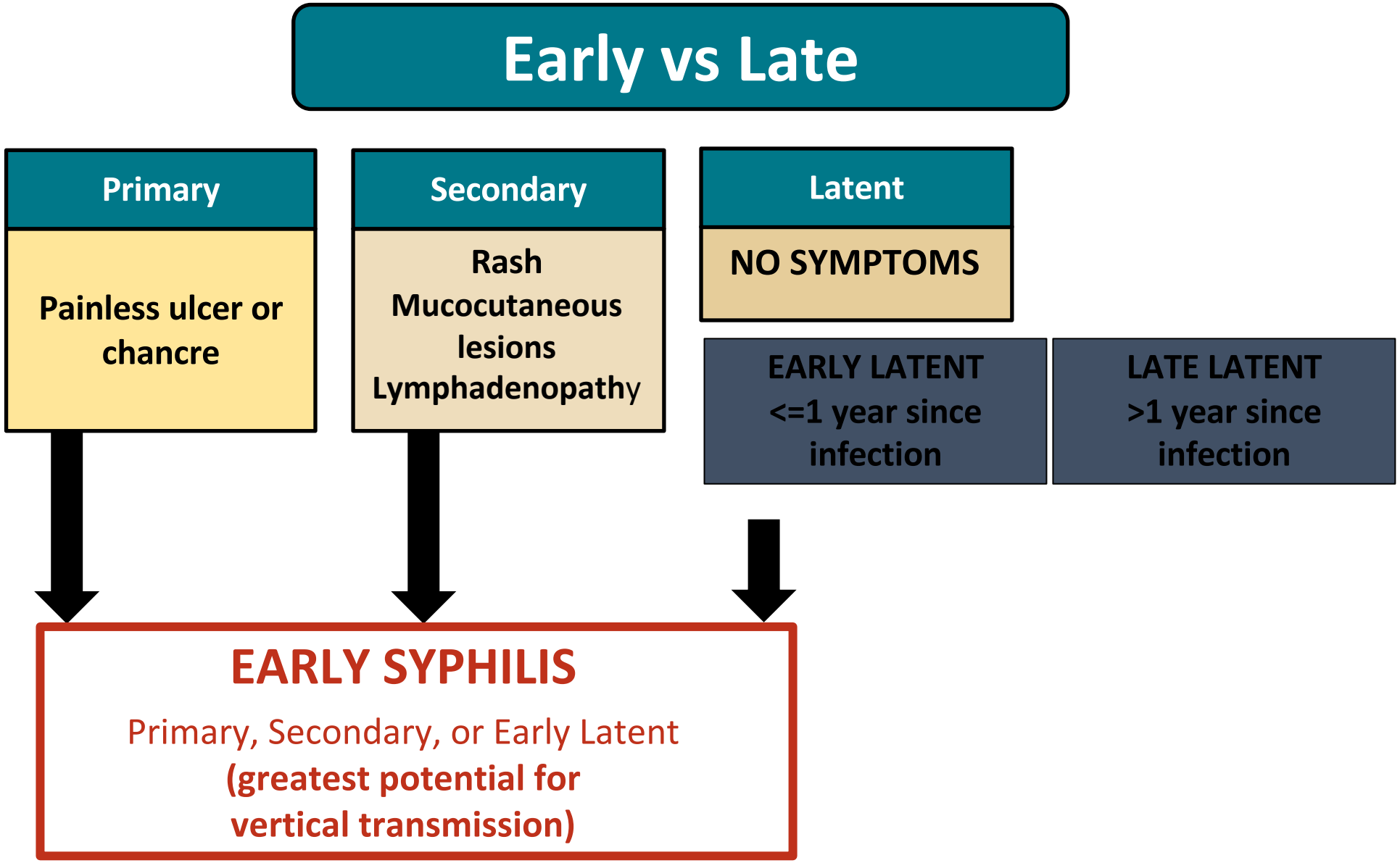








Syphilis: Clinical Stages



Treatment of syphilis: Overview

Stage				
Primary	**Secondary**	**Early non-primary, non secondary**	**Late Latent/ or Unknown Duration**	**Neurosyphilis, ocular syphilis and otosyphilis**
Benzathine penicillin 2.4 million units IM in a single dose	Benzathine penicillin 2.4 million units IM in a single dose	Benzathine penicillin 2.4 million units IM in a single dose	Benzathine penicillin 2.4 million units total administered as 3 doses of 2.4 million units IM each at 1-week intervals	Aqueous crystalline penicillin G 18-24 million units per day, administered as 3-4 million units by IV every 4 hours or continuous infusion for 10-14 days Alternative: procaine penicillin G 2.4 million units IM 1x/day PLUS probenecid 500 mg orally 4x/day, both for 10-14 days

https://www.cdc.gov/std/treatment-guidelines/default.htm

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 3rd 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)

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.

Valentine, Jo and Gail Bolan. Syphilis Elimination: Lessons Learned Again. Sex Transm Dis. Author manuscript; available in PMC 2019 Sep 18.
Published in final edited form as: Sex Transm Dis. 2018 Sep; 45(9): S80–S85. doi: 10.1097/OLQ.0000000000000842

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

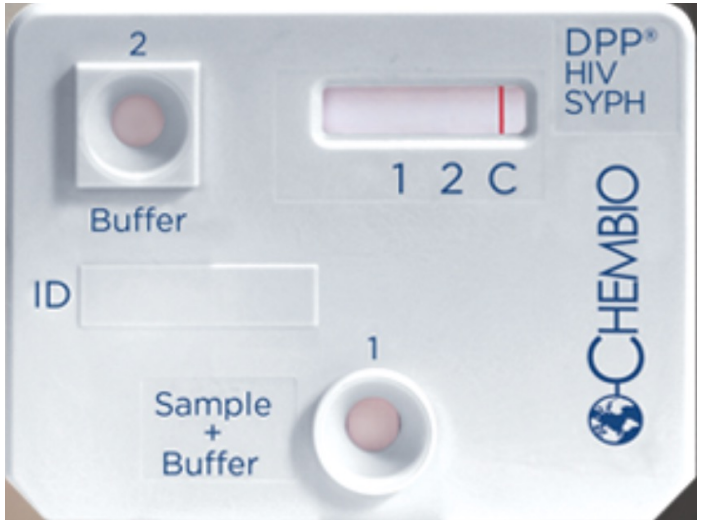
Browne K, Ridpath A, Scranton R et al. Abstract # 39462. 2018 National STD Prevention Conference Washington, D.C., Aug. 27-30, 2018. https://cdc.confex.com/cdc/std2018/webprogram/Paper39462.html

Rapid Screening for Syphilis

Considerations of rapid screening

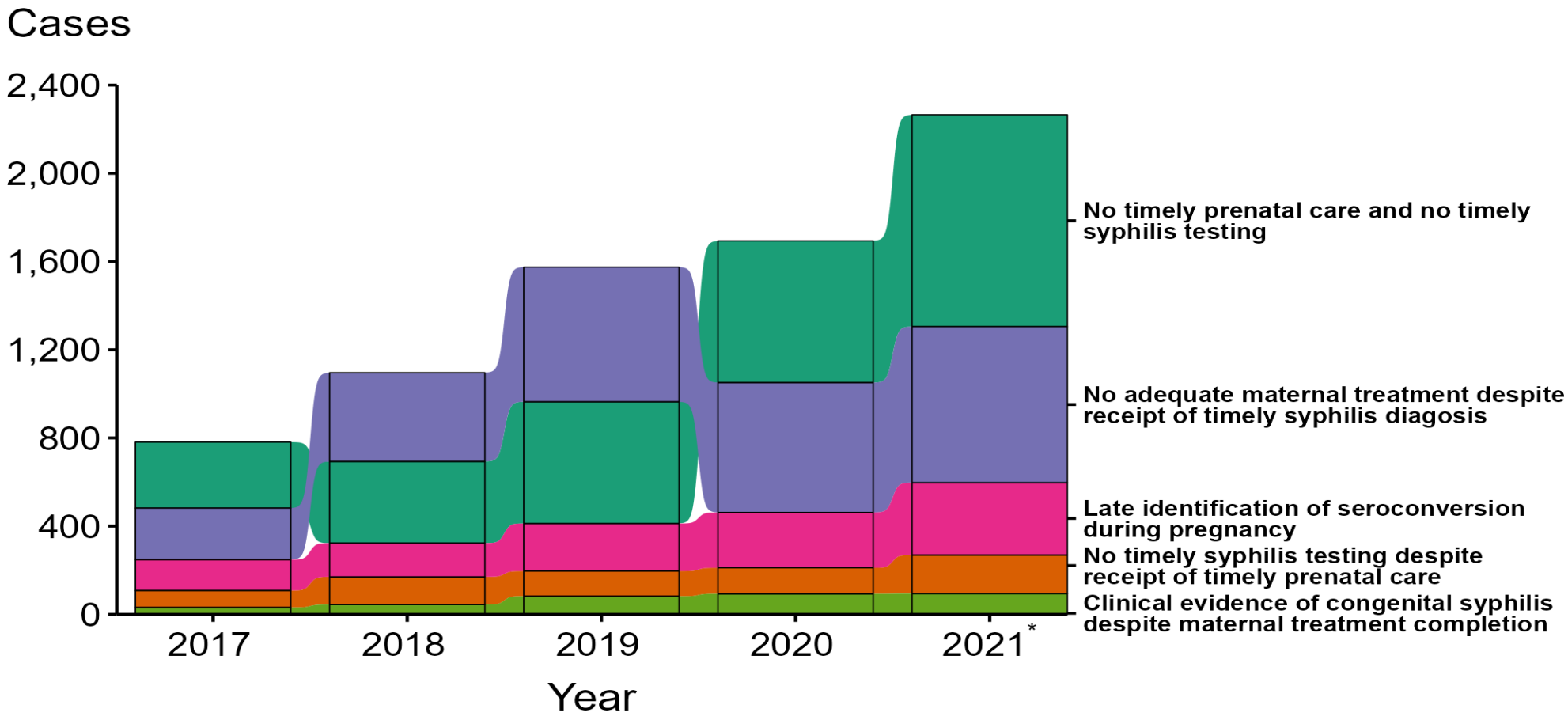
- Only 1 CLIA waived test – Health Check
  - CLIA Waived for Fingerstick Whole Blood
  - Accuracy: >97%*
  - 10 minute results

- 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.

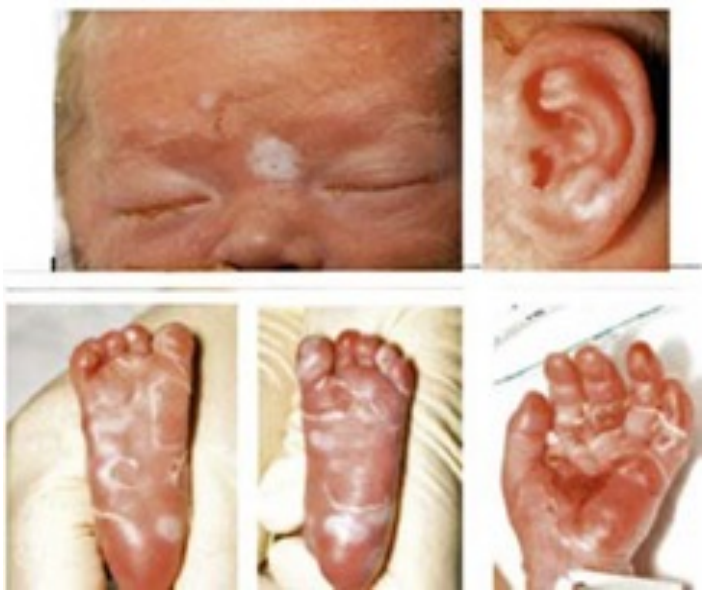
Congenital Syphilis — Missed Prevention Opportunities among Mothers Delivering Infants with Congenital Syphilis, United States, 2017–2021*

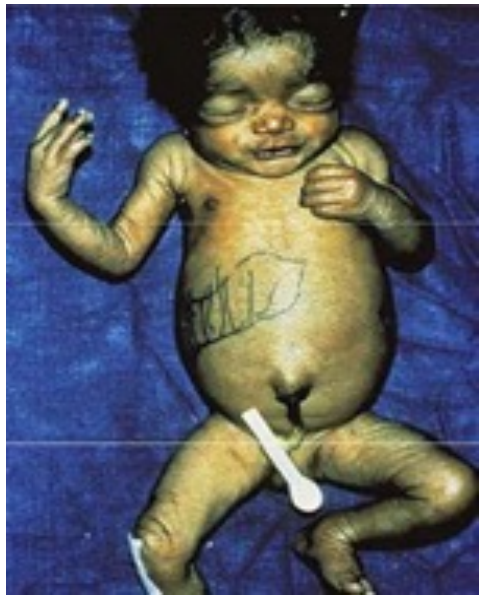


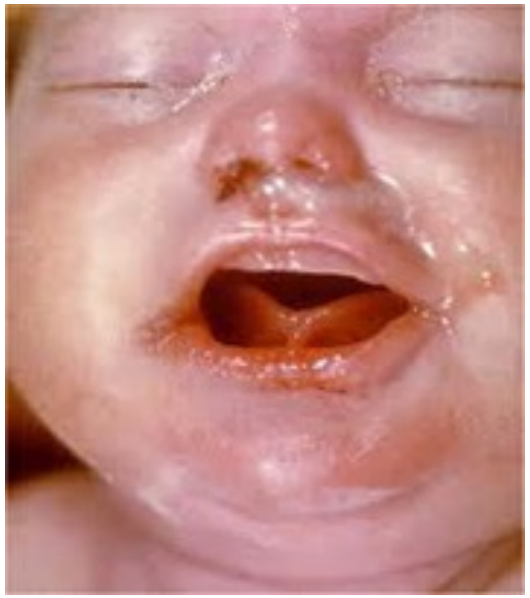
* Reported 2021 data are preliminary as of July 7, 2022

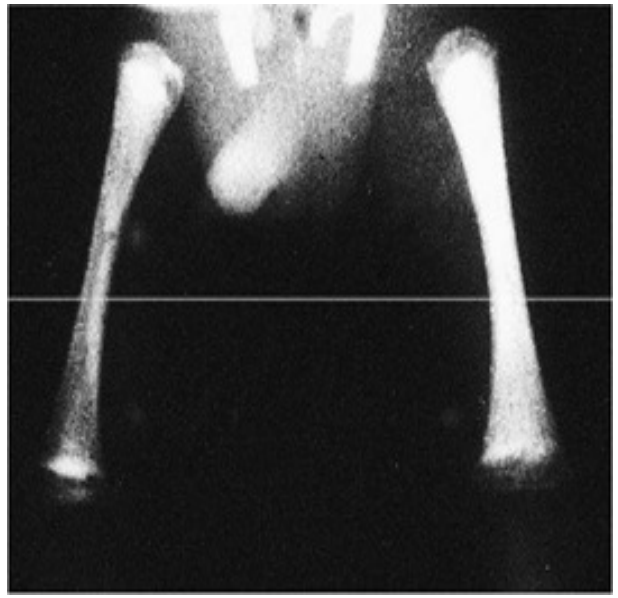
NOTE: Of the 8,974 congenital syphilis cases reported during 2017 to 2021, 1,562 (17.4%) were not able to have the primary missed prevention opportunity identified due to insufficient information provided to CDC related to maternal prenatal care, testing, or treatment.

Clinical Manifestations of Congenital Syphilis (CS)







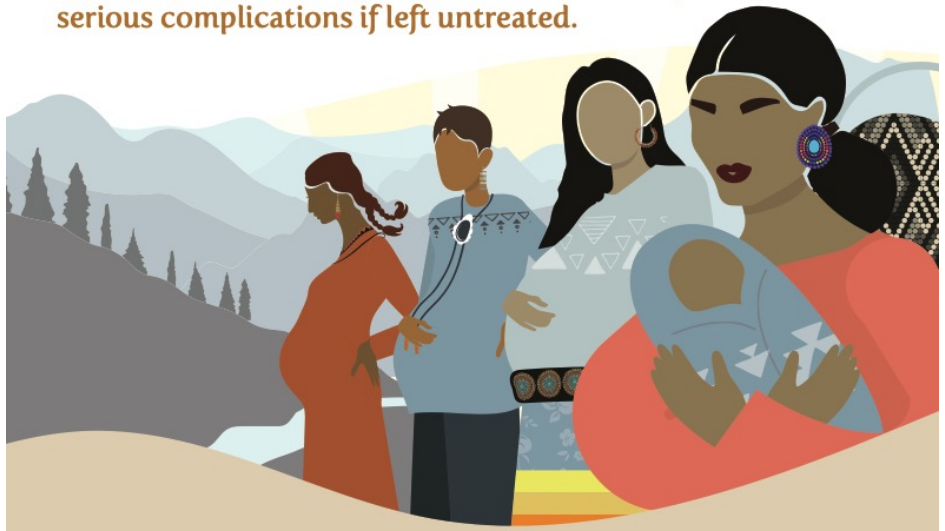


https://www.cdc.gov/ncbddd/birthdefects/surveillancemanual/quick-reference-handbook/congenital-syphilis.html

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

Get tested for syphilis today!

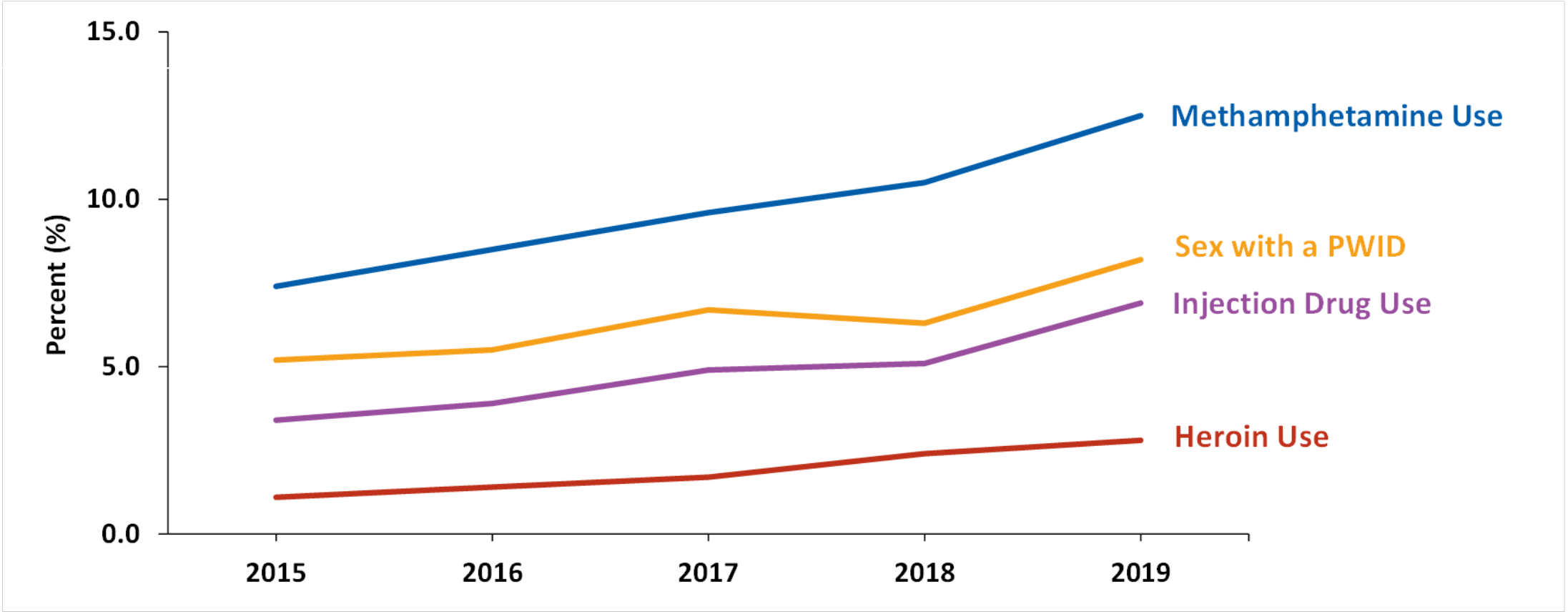
GREAT PLAINS TRIBAL LEADERS HEALTH BOARD

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)**.

https://harmreduction.org/about-us/principles-of-harm-reduction/

“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,

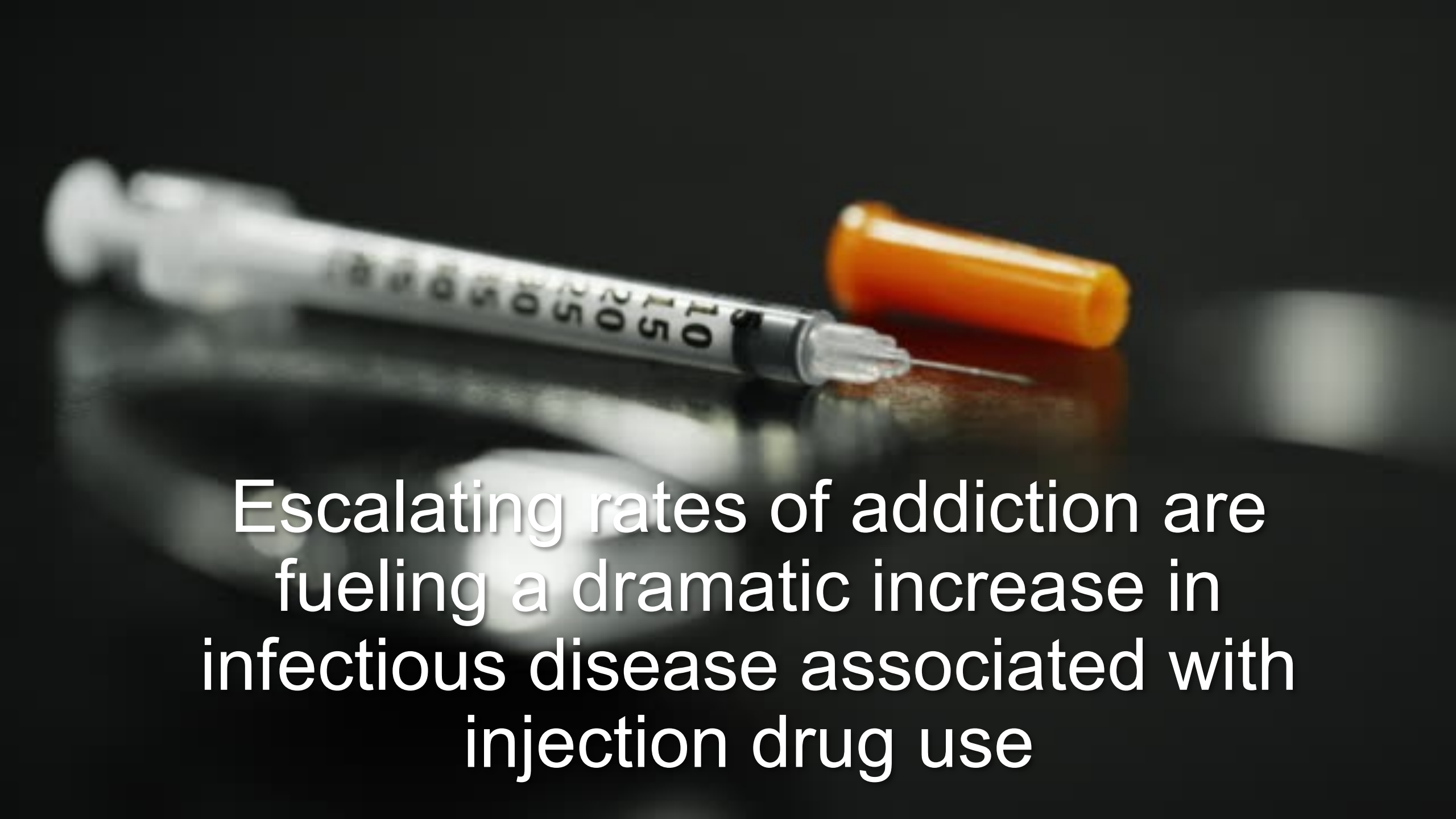
community.

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

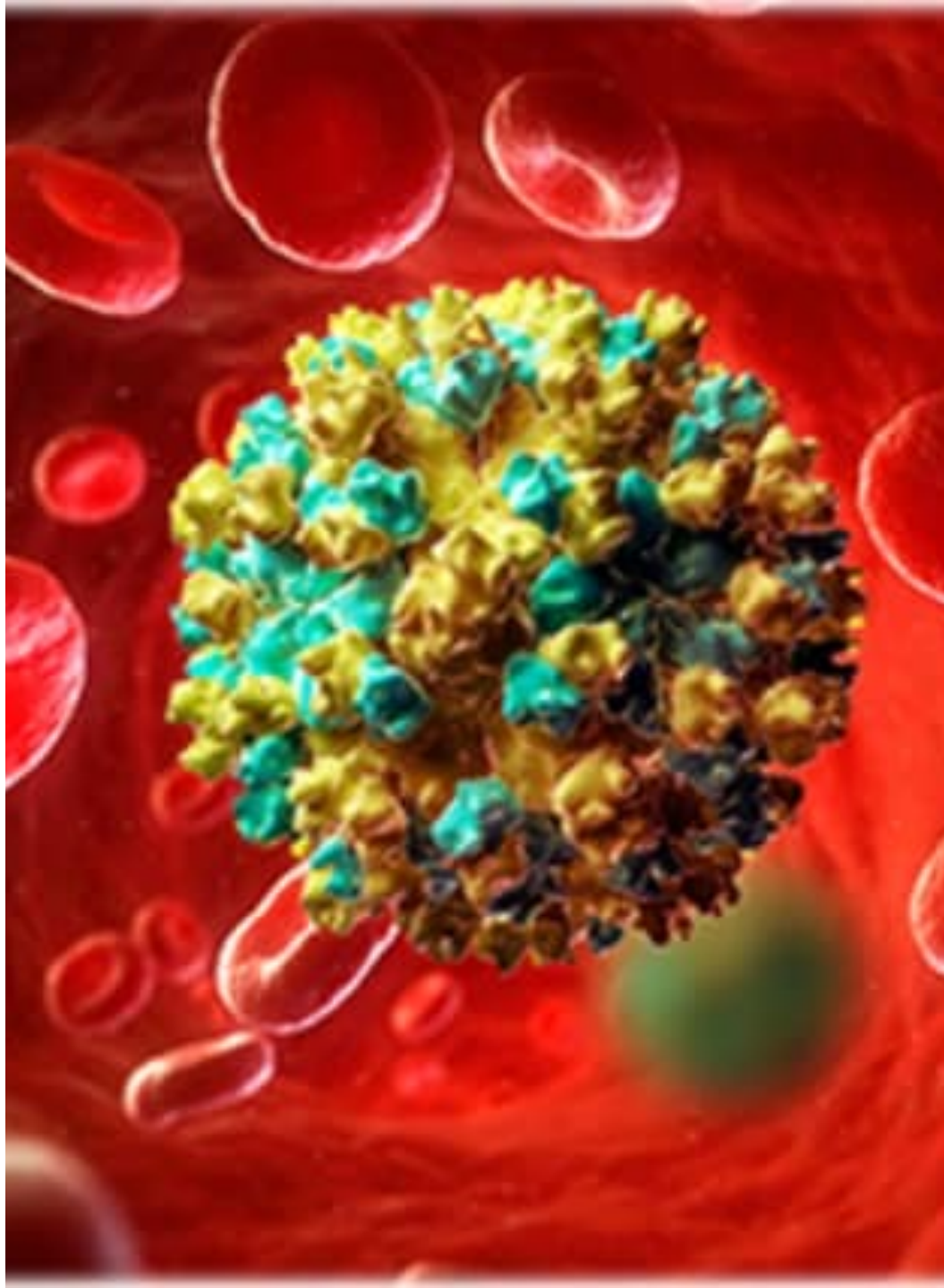
Syringe Service Program


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

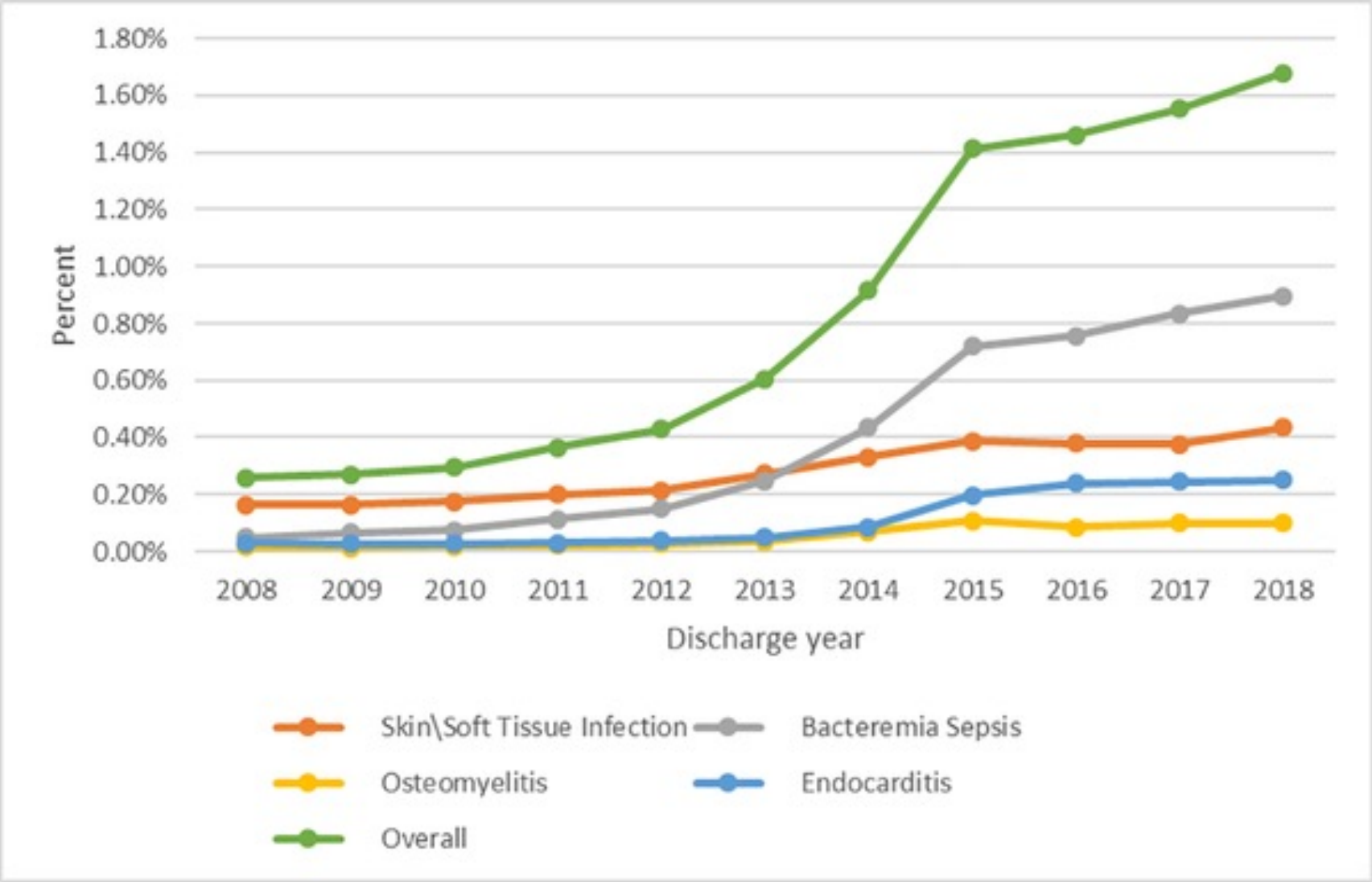
Reports of acute hepatitis C virus (HCV) infection rose 3.5-fold from 2010 to 2016, and **the majority of new HCV infections are due to injection drug use**.

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.



Capizzi J, Leahy J, Wheelock H, Garcia J, Strnad L, et al. (2020) Population-based trends in hospitalizations due to injection drug use-related serious bacterial infections, Oregon, 2008 to 2018. PLOS ONE 15(11): e0242165. https://doi.org/10.1371/journal.pone.0242165
https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0242165

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

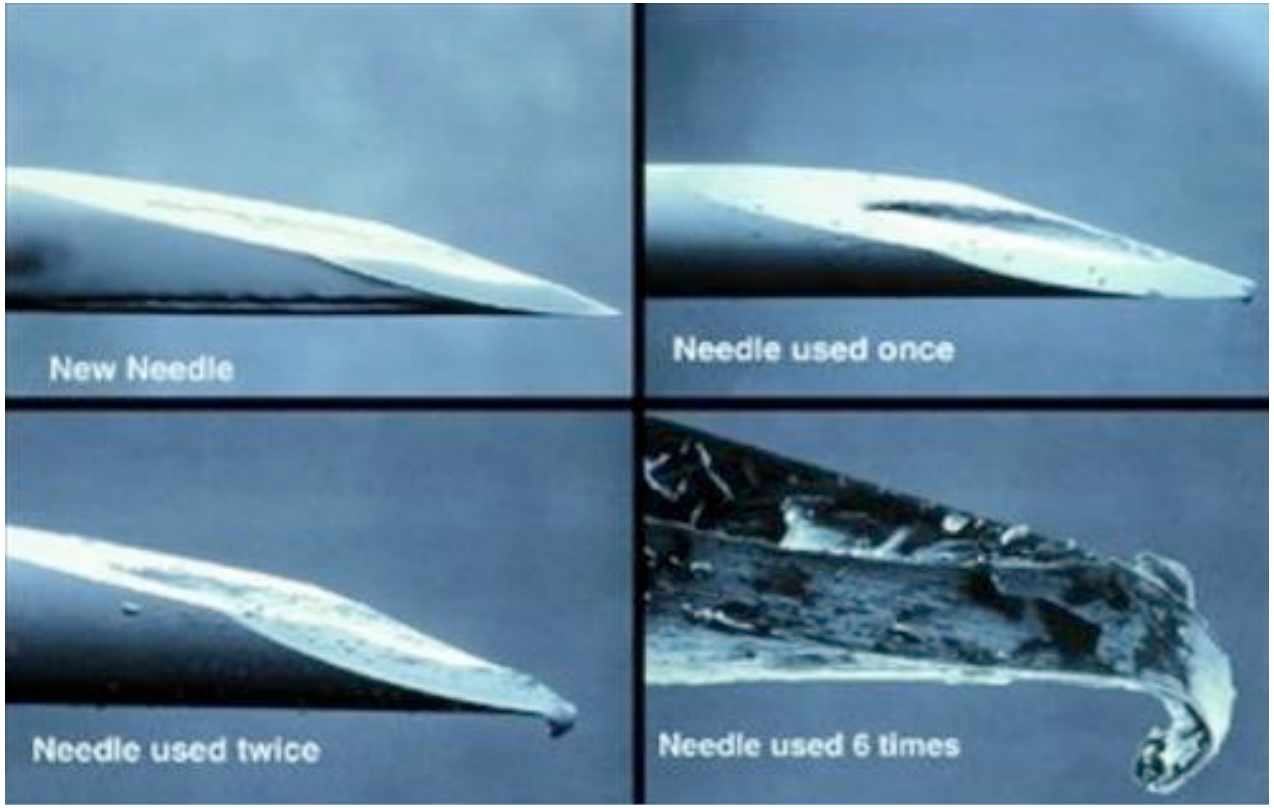
Fernandes RM, Cary M, Duarte G, et al. Effectiveness of needle and syringe programmes in people who inject drugs – An overview of systematic reviews. BMC Public Health. 2017;17(1):309. doi:10.1186/s12889-017-4210-2.

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

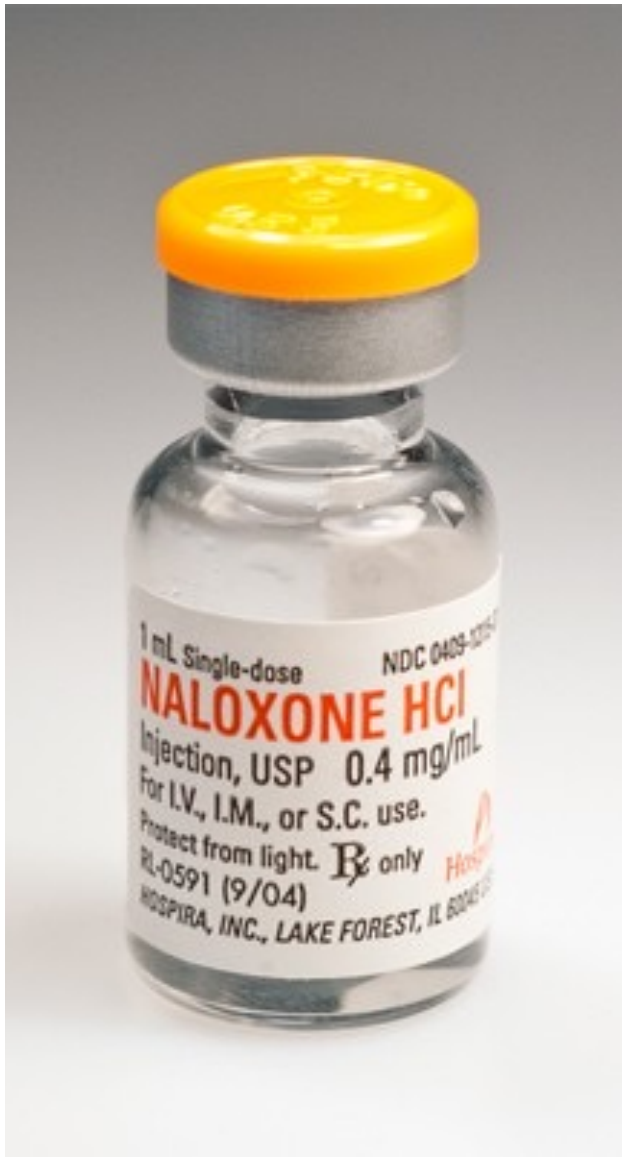


https://www.cdc.gov/ssp/syringe-services-programs-factsheet.html

SSPs provide more than just needles

ONE LINE
FENTANYL!

TWO LINES
NO FENTANYL



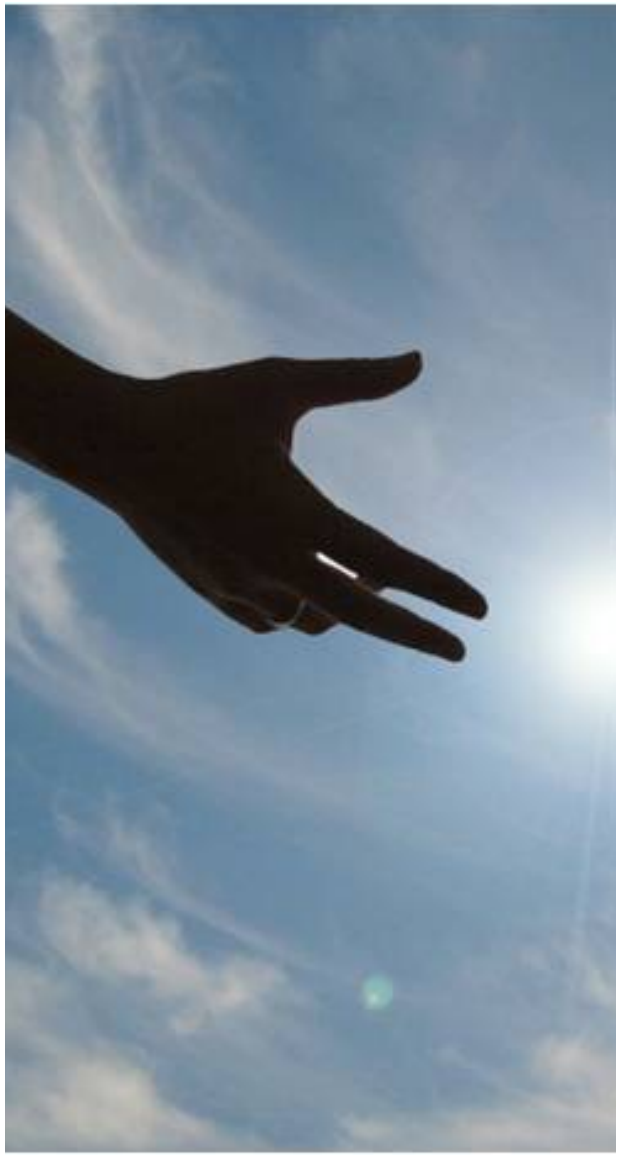
SSPs provide naloxone directly to individuals who use drugs.

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?


RATED TV-MA

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