



# The Epidemics of SUD, HCV and Other Infectious Diseases

Robert Lawrence, MD / Alaska Chief Medical Officer

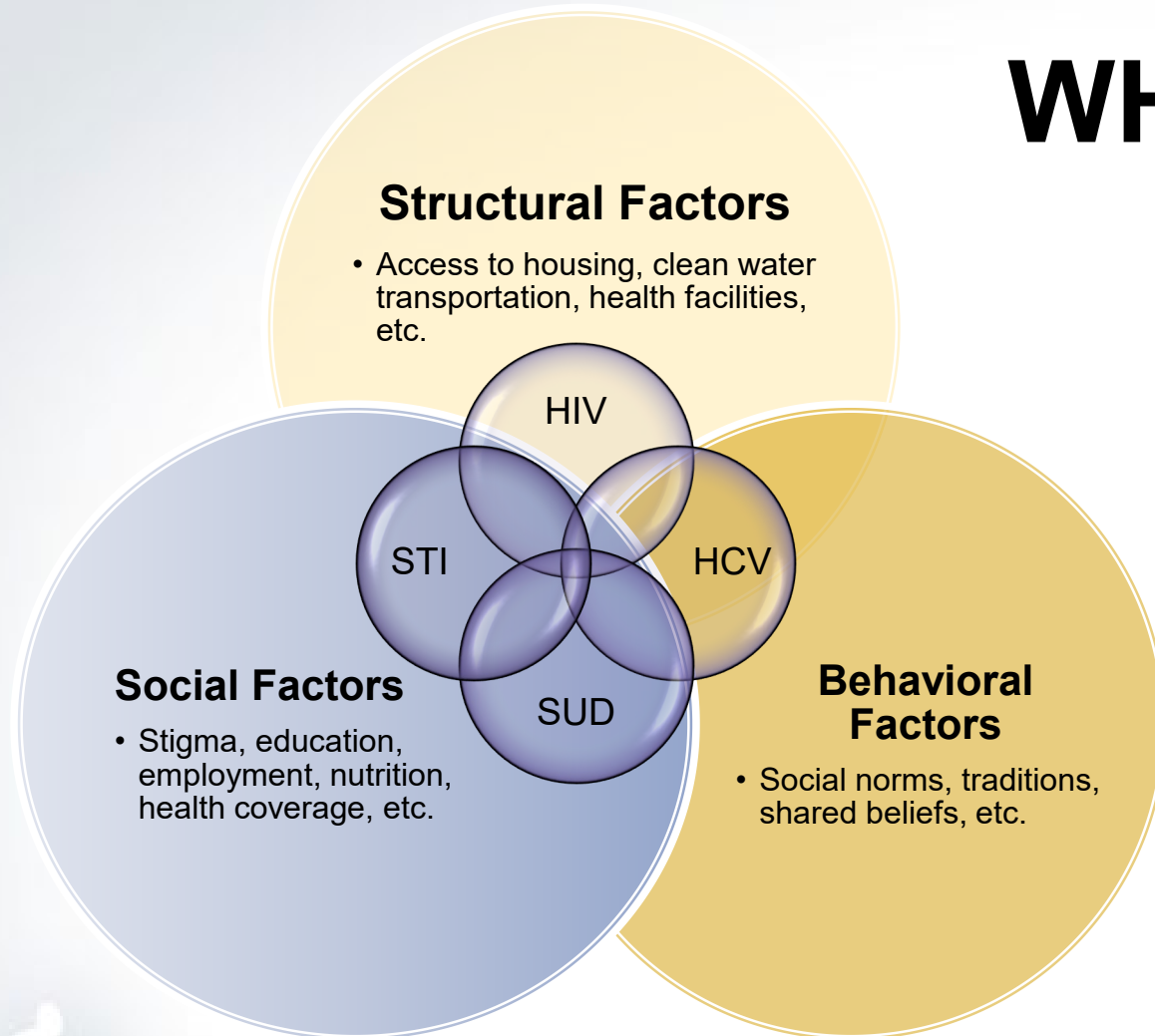


# WHAT IS A SYNDEMIC?

Singer, M. and Clair, S. (2003), Syndemics and Public Health: Reconceptualizing Disease in Bio-Social Context. *Medical Anthropology Quarterly*, 17: 423-441. <https://doi.org/10.1525/maq.2003.17.4.423>



# WHAT IS A SYNDEMIC?



- Clustering of two or more health conditions in a population
- Synergism producing excess burden of disease in a population
- Precipitation and propagation by large scale behavioral, structural and social forces

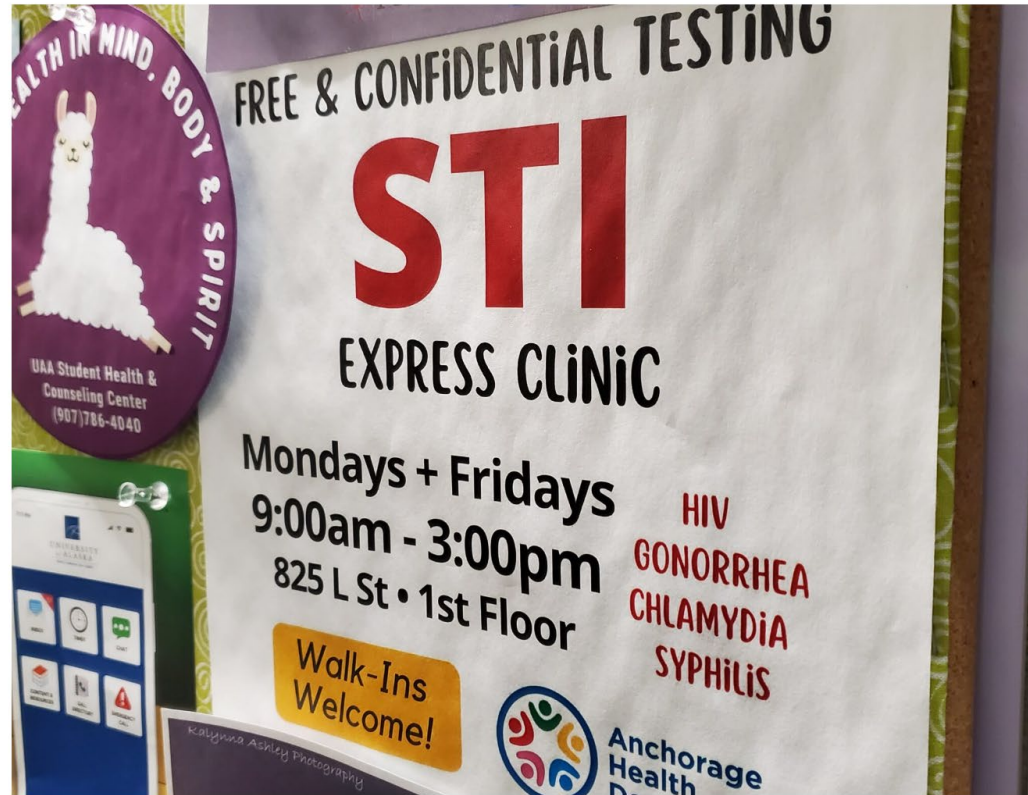
Singer, M. and Clair, S. (2003), Syndemics and Public Health: Reconceptualizing Disease in Bio-Social Context. *Medical Anthropology Quarterly*, 17: 423-441. <https://doi.org/10.1525/maq.2003.17.4.423>



ALASKA IN BRIEF

# Alaska's gonorrhea rate is the nation's highest and chlamydia rate is third highest

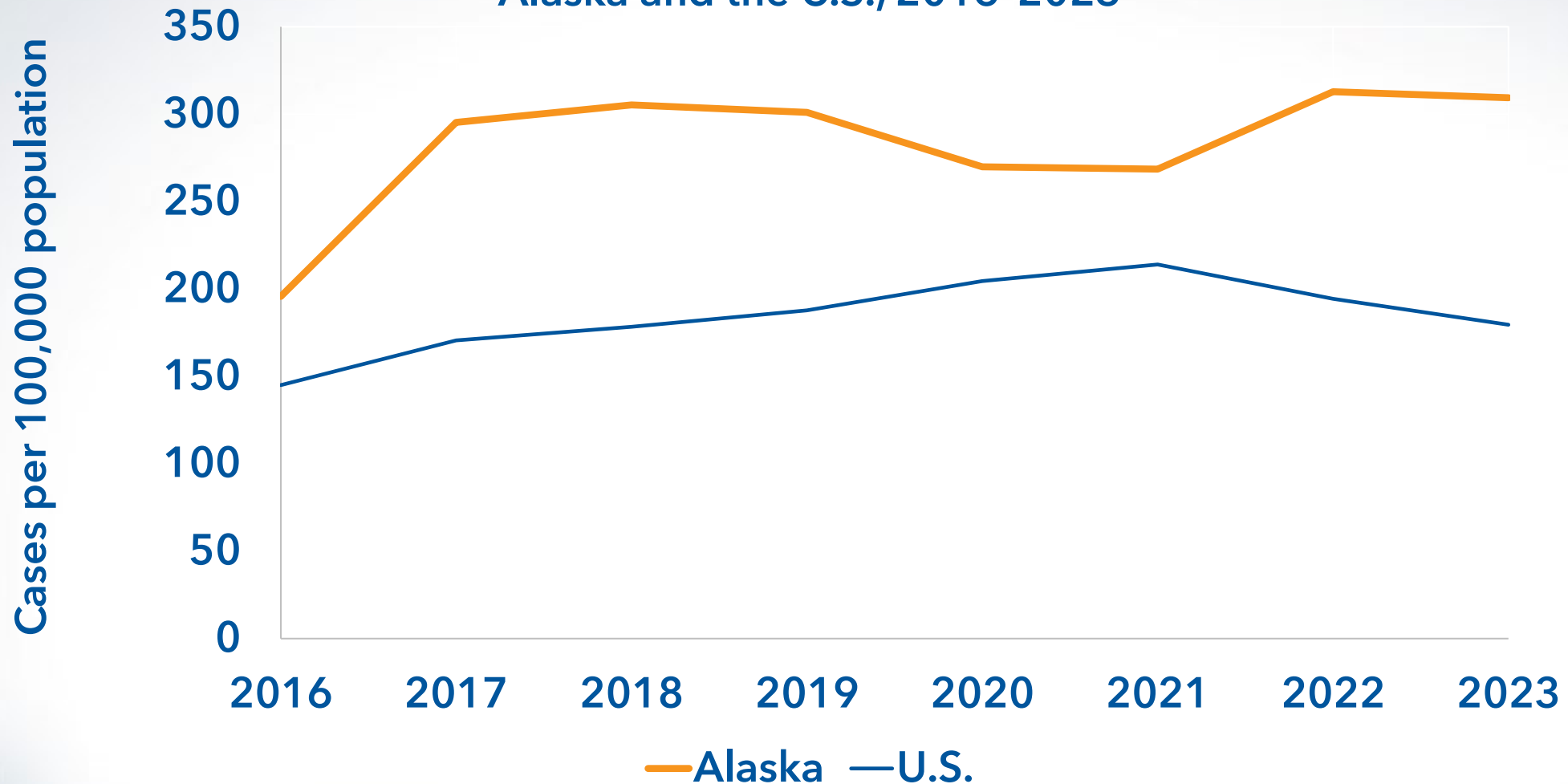
BY: YERETH ROSEN - NOVEMBER 22, 2024 12:44 PM



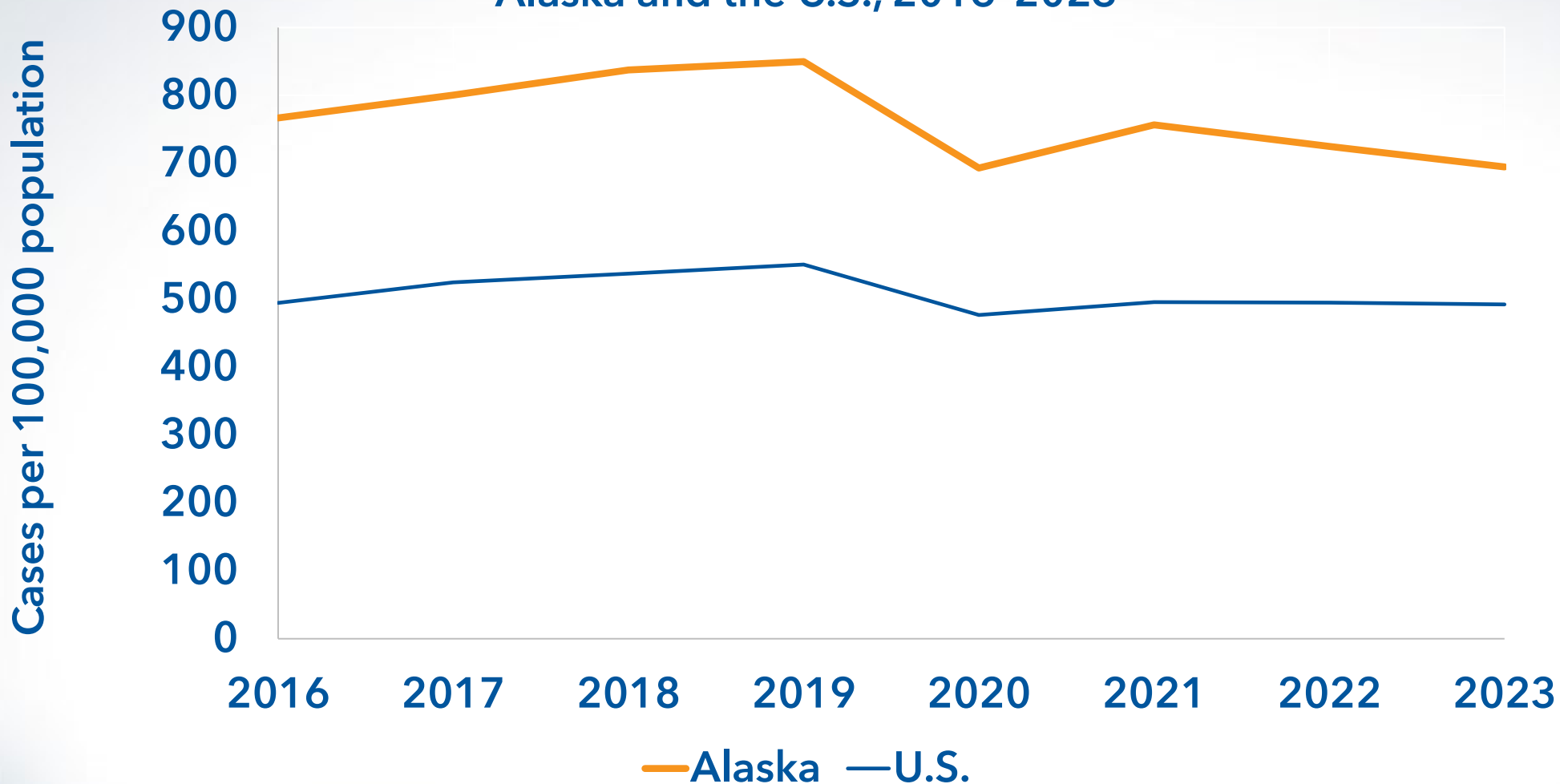
A flier posted on on Thursday on a University of Alaska Anchorage bulletin board gives information about testing for sexually transmitted infections. Alaska had the nation's highest gonorrhea rate last year. (Photo by Yereth Rosen/Alaska Beacon)



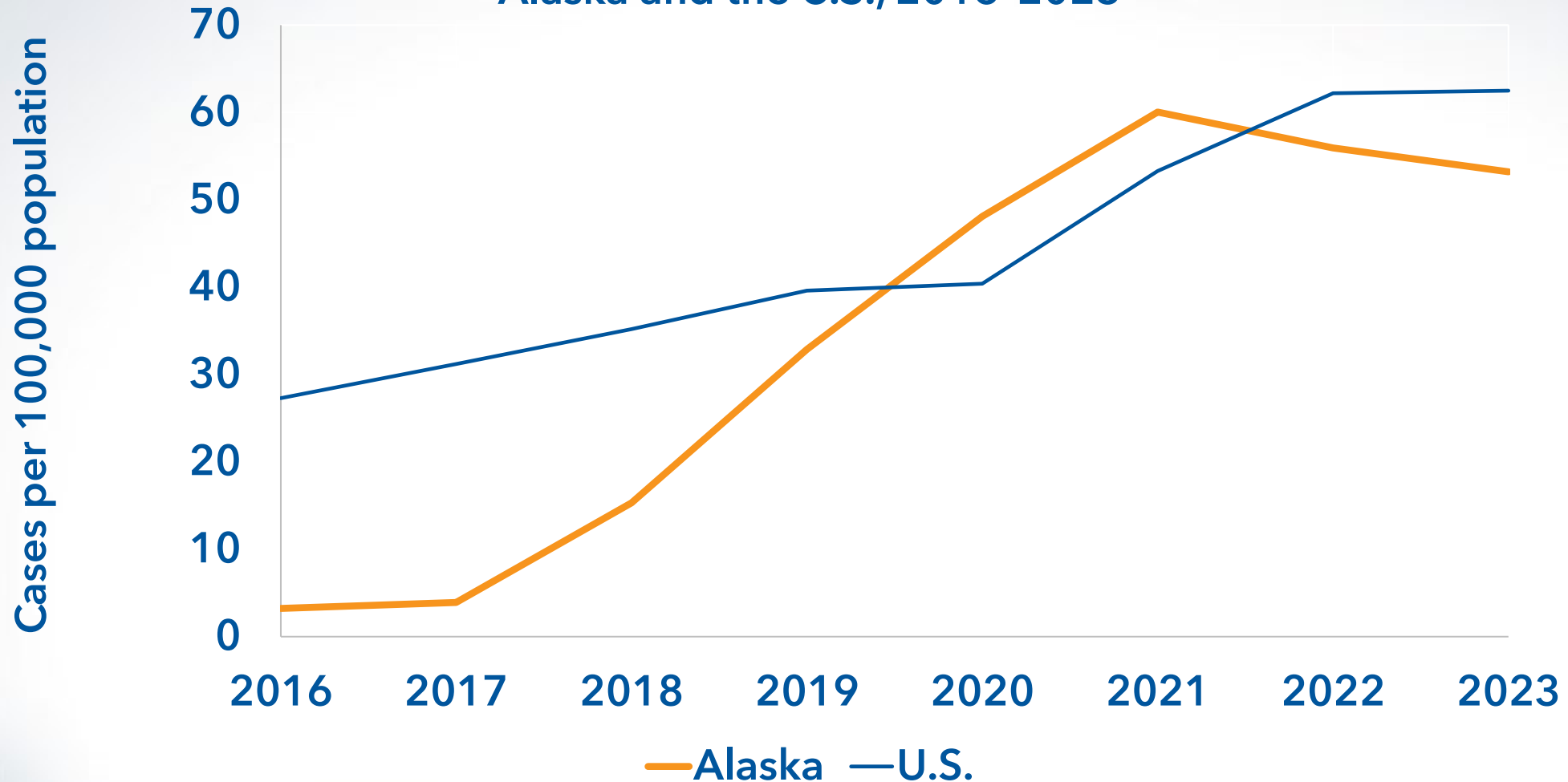
## Rate of reported gonorrhea cases per 100,000 population Alaska and the U.S., 2016-2023



## Rate of reported chlamydia cases per 100,000 population Alaska and the U.S., 2016-2023

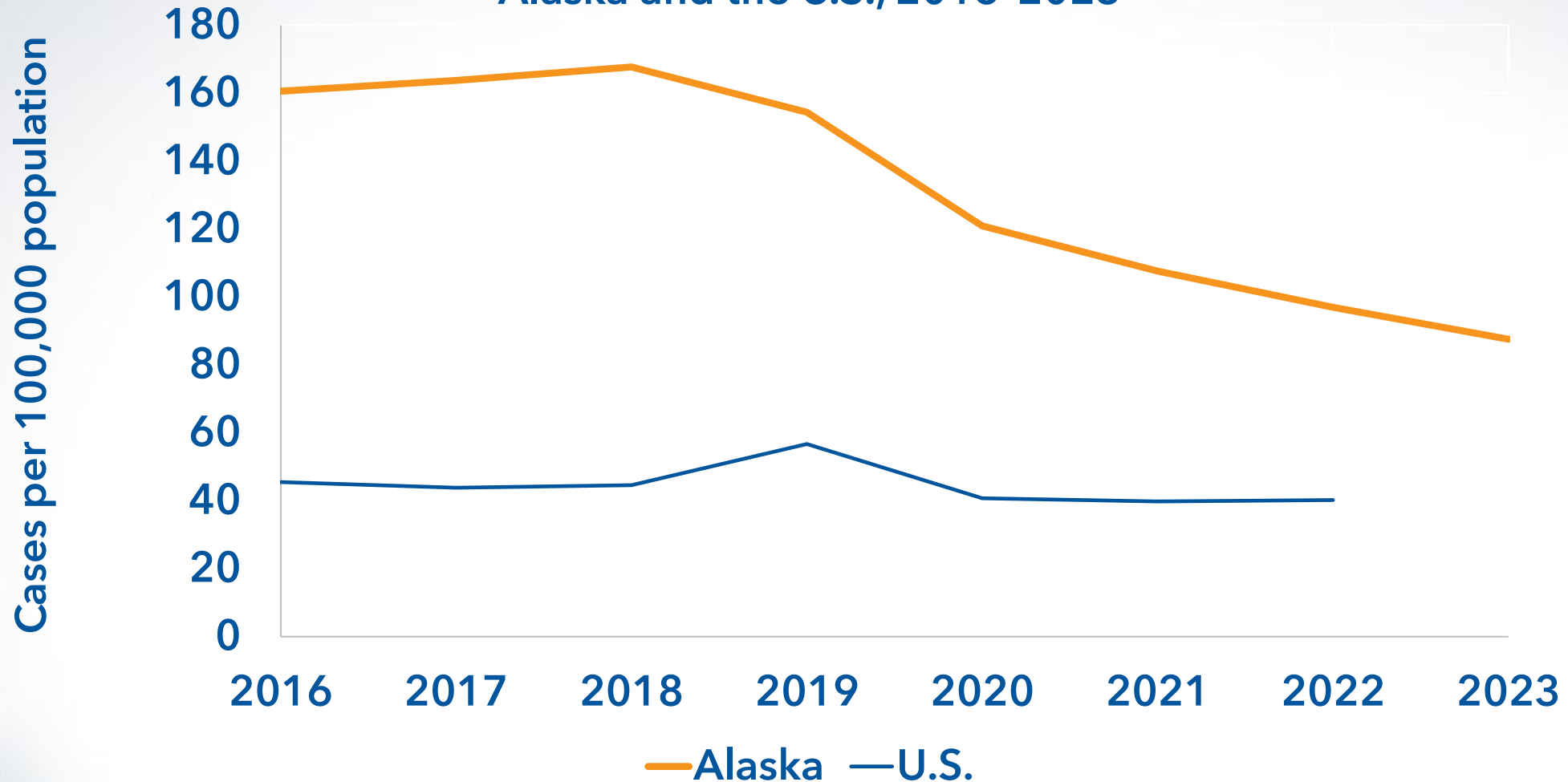


## Rate of reported syphilis cases per 100,000 population Alaska and the U.S., 2016-2023





## Rate of reported chronic hepatitis C cases per 100,000 persons Alaska and the U.S., 2016-2023

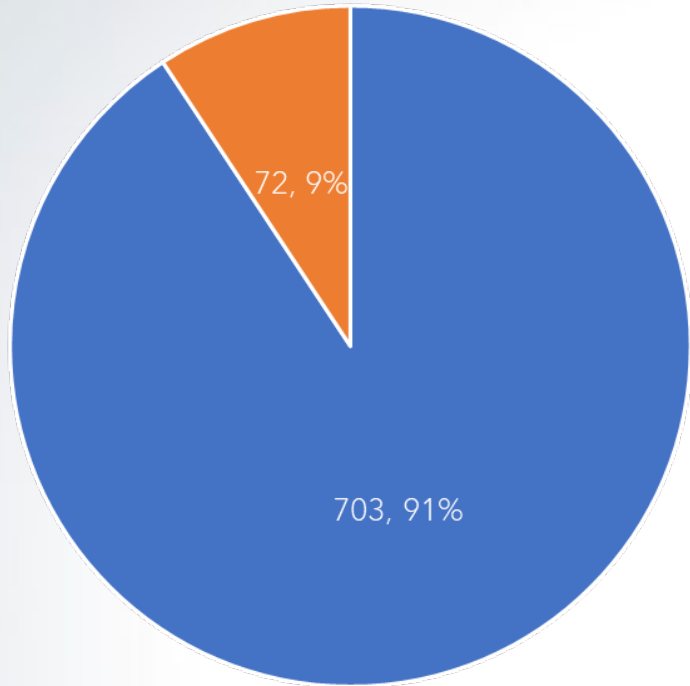


\*Not all states reported all years. 2023 national data not yet available.



# CONFIRMED AND PROBABLE HEPATITIS C INVESTIGATIONS

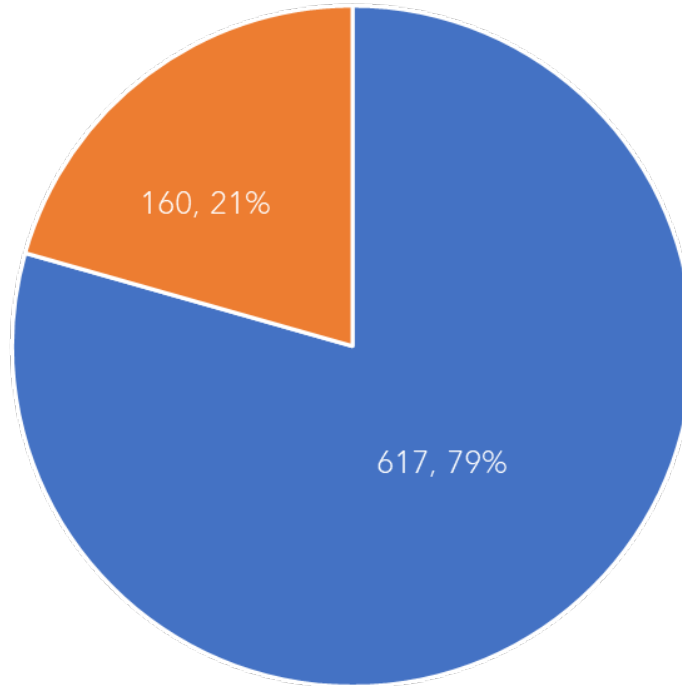
2020



■ Non-DoC Facilities ■ Department of Corrections

Total = 775

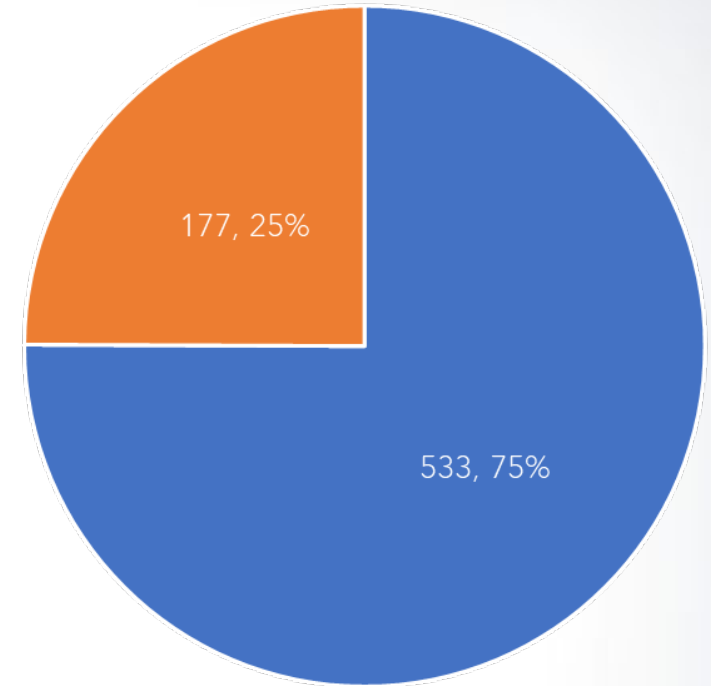
2021



■ Non-DoC Facilities ■ Department of Corrections

Total = 777

2022\*



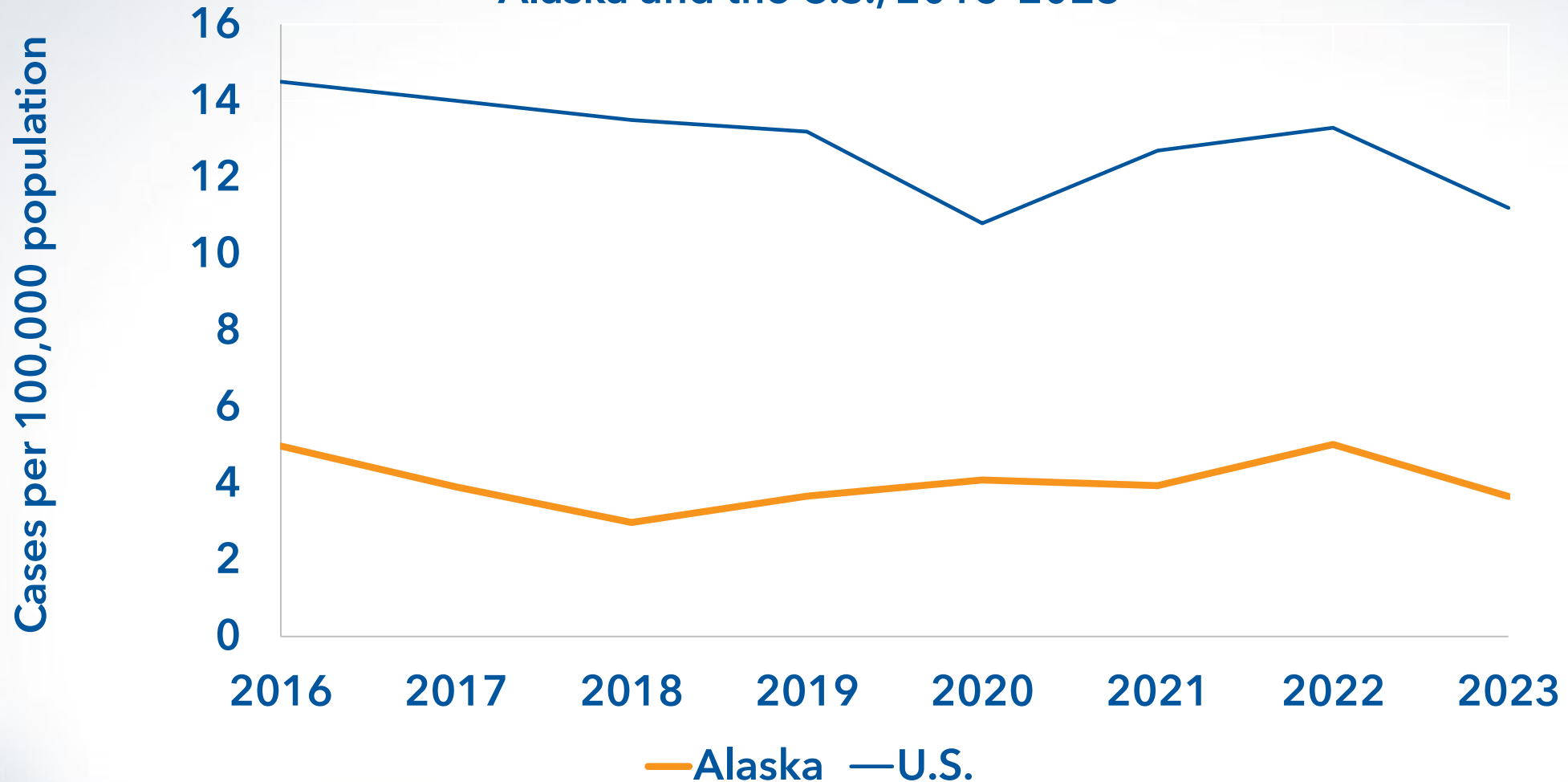
■ Non-DoC Facilities ■ Department of Corrections

Total = 710



\* This data is provisional and may be subject to change.

## Rate of reported new HIV infections per 100,000 population Alaska and the U.S., 2016-2023



\*2023 U.S. rate is preliminary

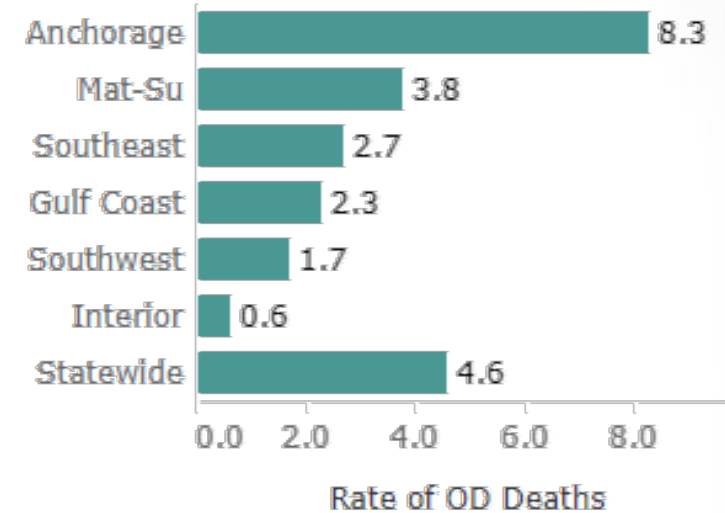
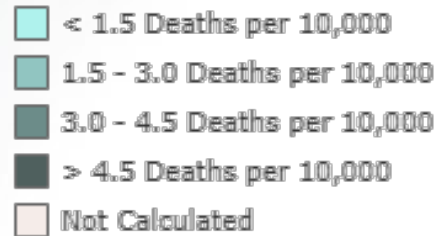


# Overdose Deaths in Alaska

Available OD Deaths Data

Rate of OD Deaths

Date Range: Jul 2023 - Jun 2024



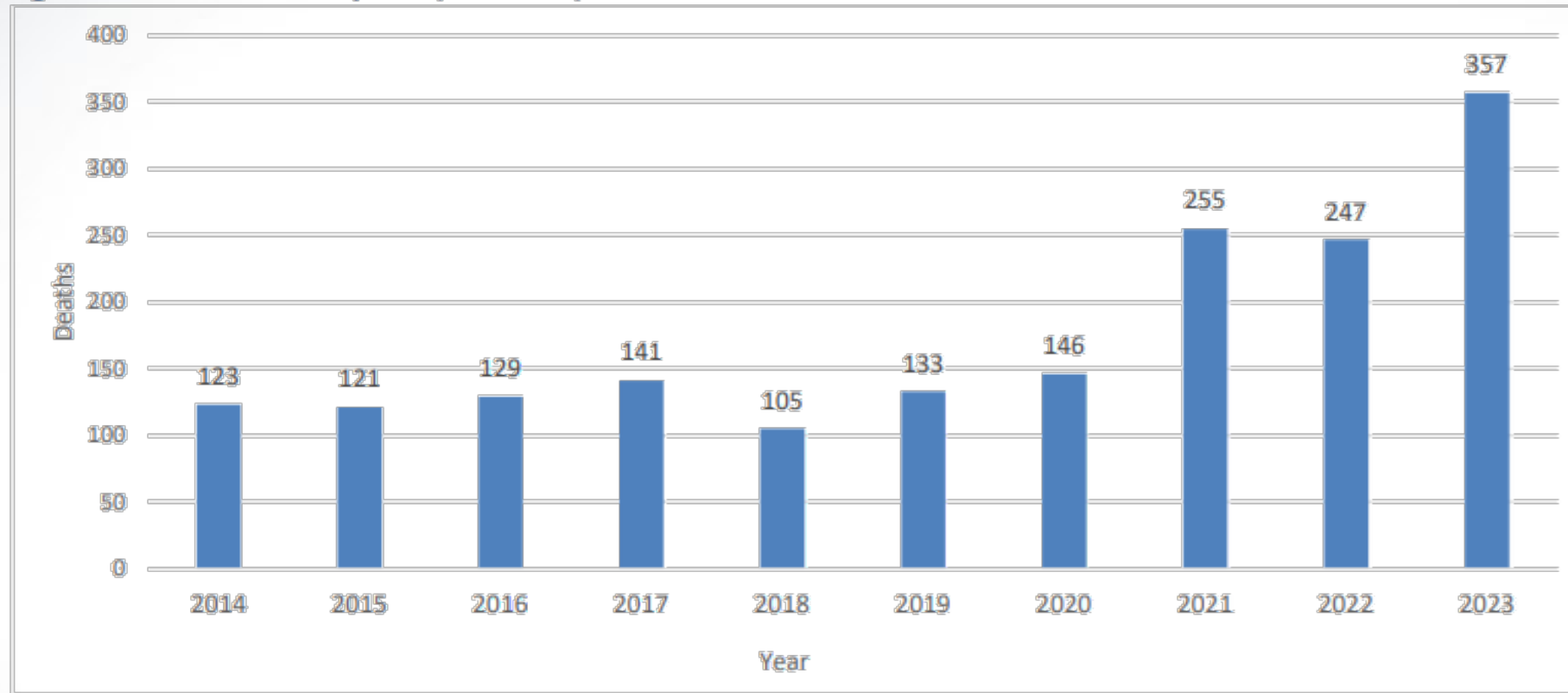
Northern Public Health Region numbers and rates are not reported due to small sample size

- In 2023, Alaska saw an annual increase in overdose deaths of 43% over the previous year

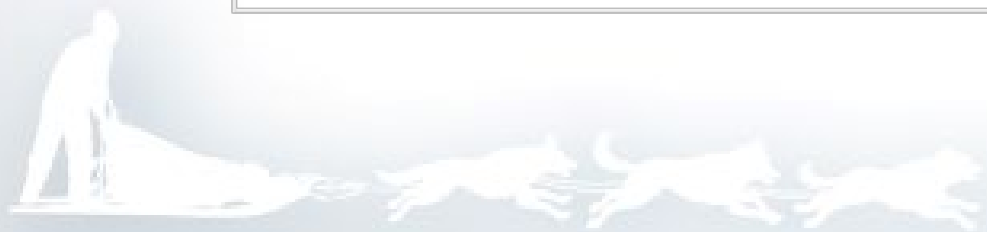


# Overdose Deaths in Alaska

Figure 1. Overdose Deaths by Year (2014-2023)

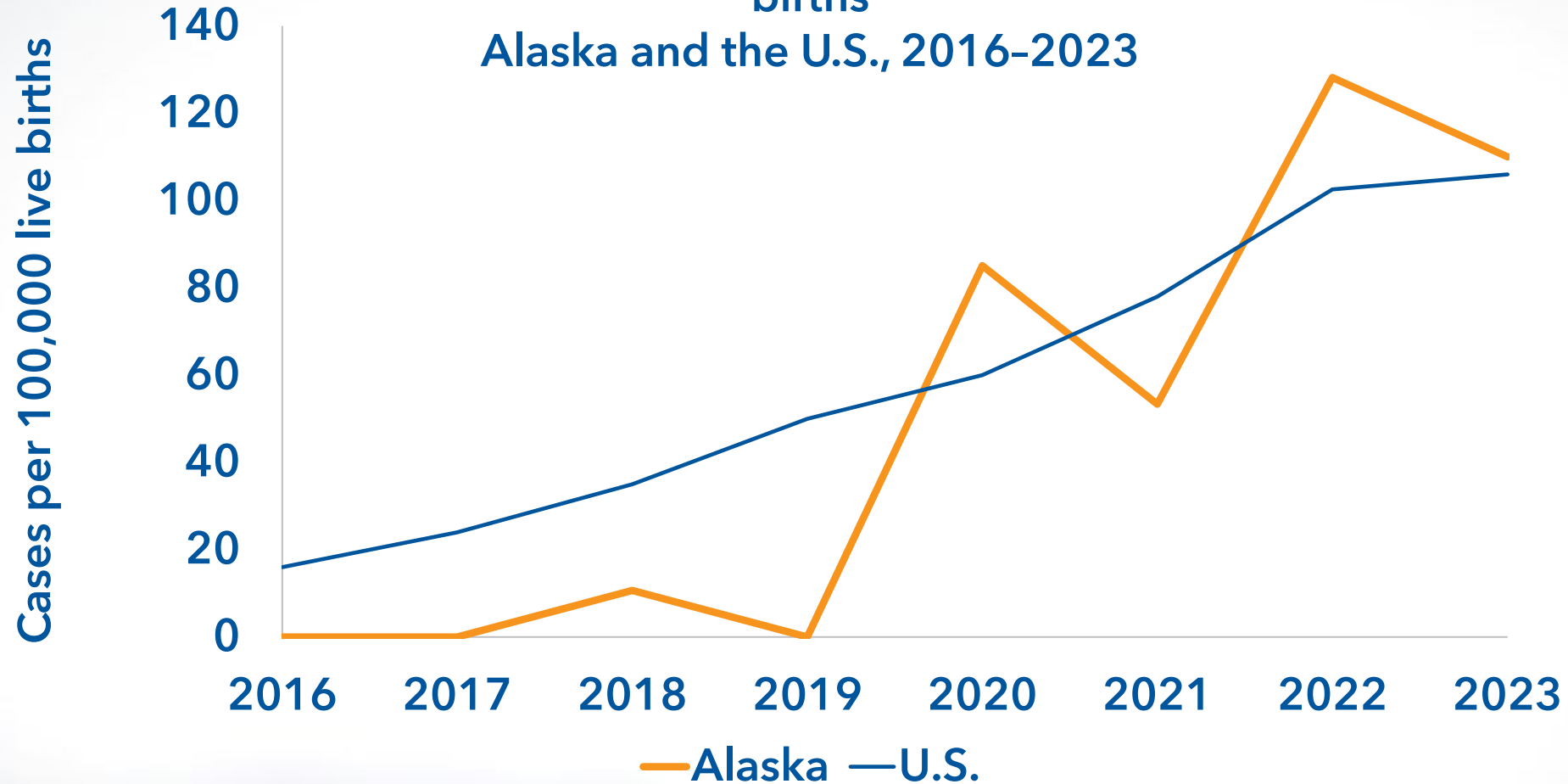


- In 2023, Alaska saw an annual increase in overdose deaths of 43% over the previous year



# Example: Alaska's Congenital Syphilis Cases

Rate of reported congenital syphilis cases per 100,000 live births

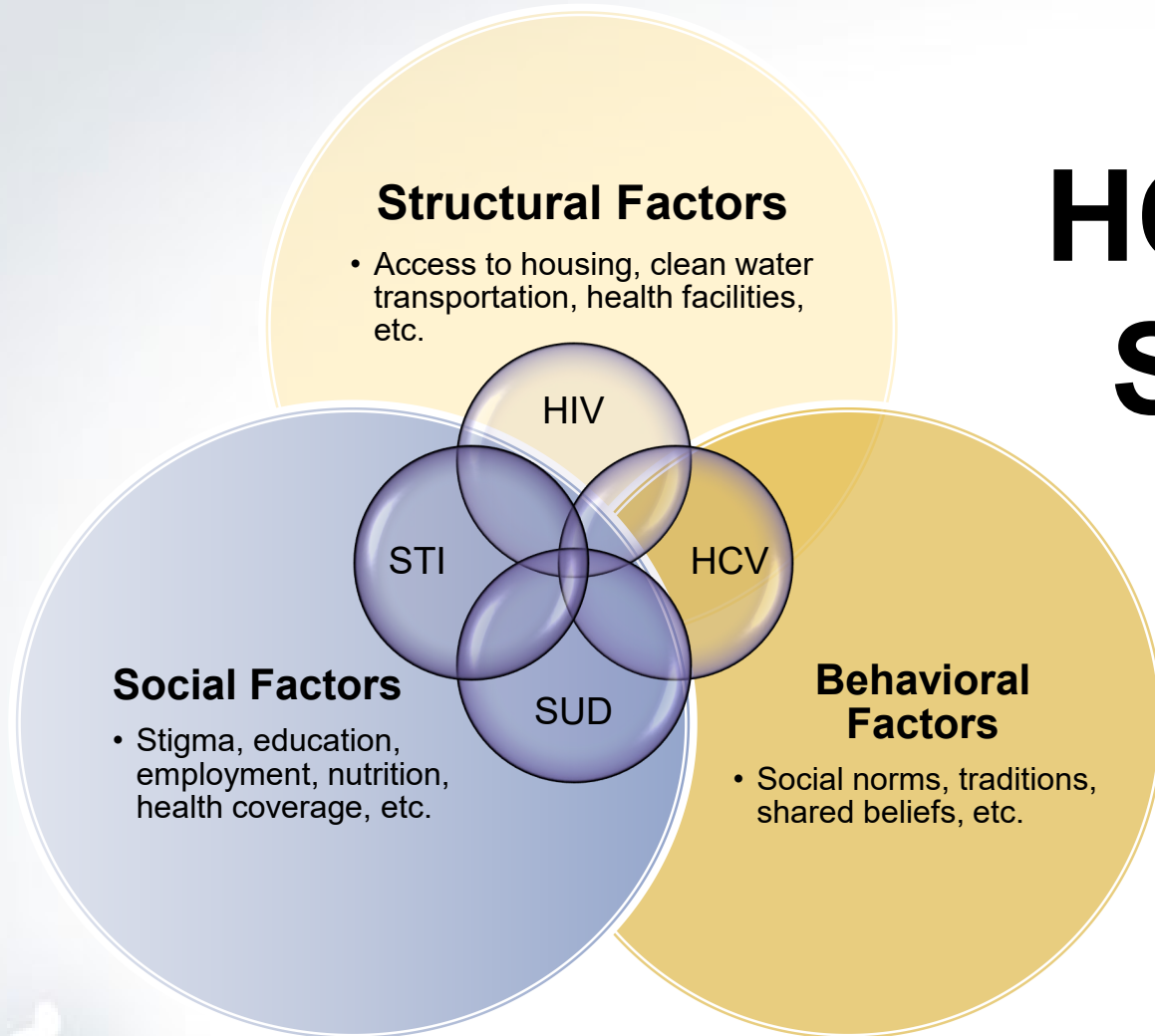


# Example: Alaska's Congenital Syphilis Cases

- No or inadequate prenatal care
- Experiencing homelessness
- Substance use – especially methamphetamine
- Previous sexually transmitted infection (STI)
- Previous syphilis



# HOW DO WE THINK SYNDEMICALLY?

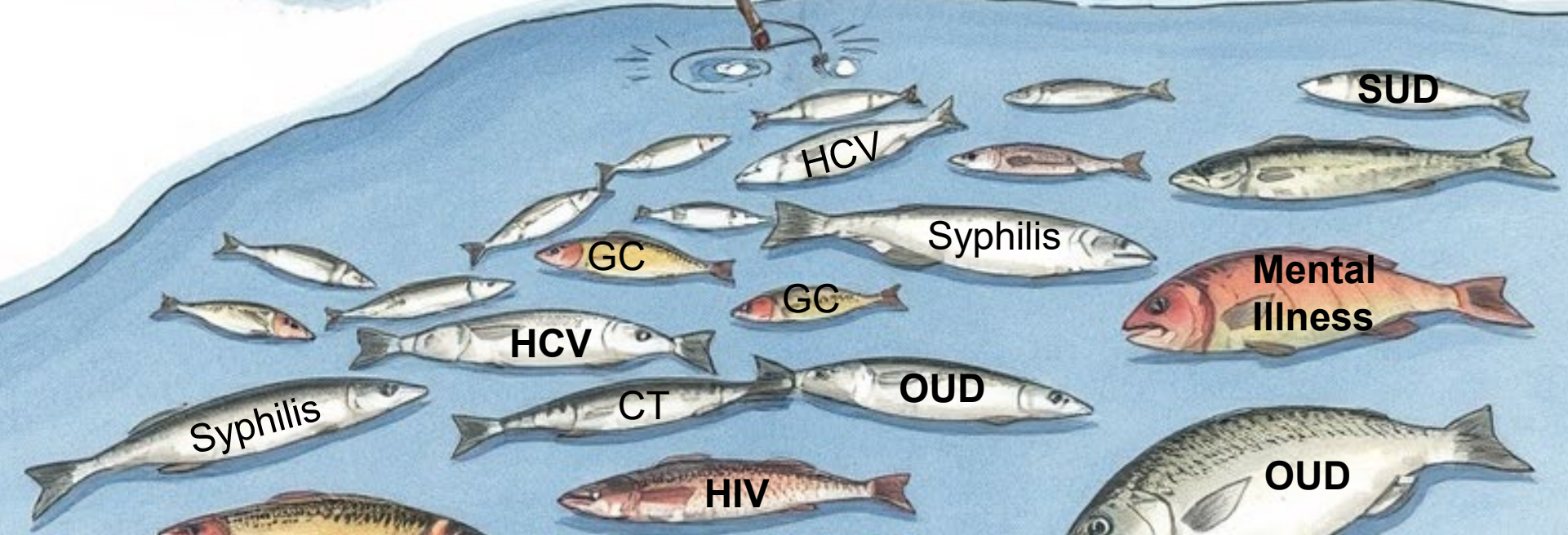




# Think Syndemically



# Think Syndemically



# Keep an Upstream Perspective





# Keep an Upstream Perspective

Community  
Conditions

Individual Health  
Related Needs

Clinical  
Care



# Keep an Upstream Perspective

Nutrition

Clean  
Water

Homelessness

Sickness

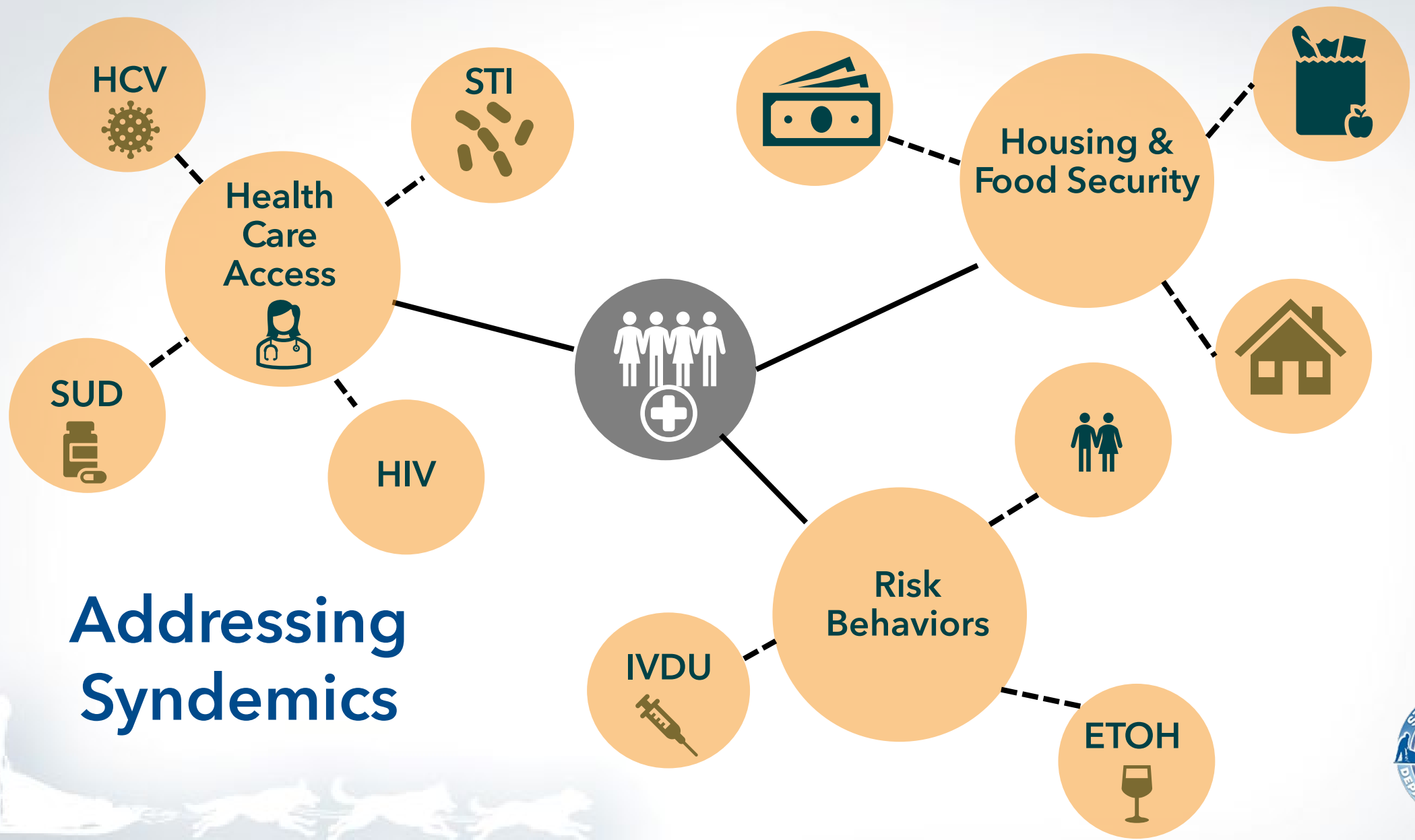
Exposures

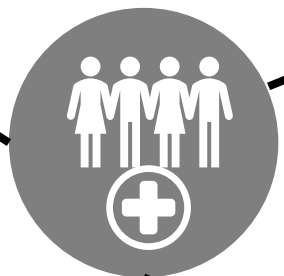
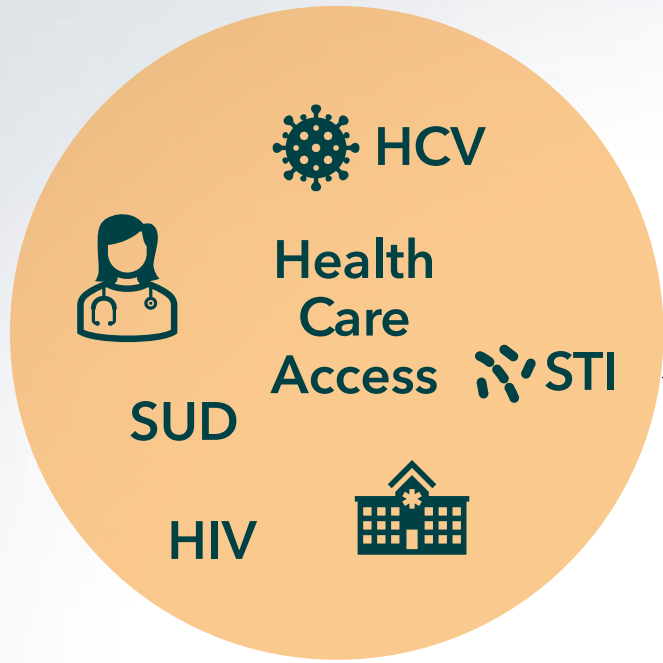
Justice

Individual Health  
Related Needs

Clinical  
Care

# Addressing Syndemics





# Addressing Syndemics



# Addressing Syndemics





# Ending the Syndemic: STI/HIV

Bethel, AK - December 4-5, 2024

**Leah Besh, PA-C, AAHIVS**

Early Intervention Services/HIV Program

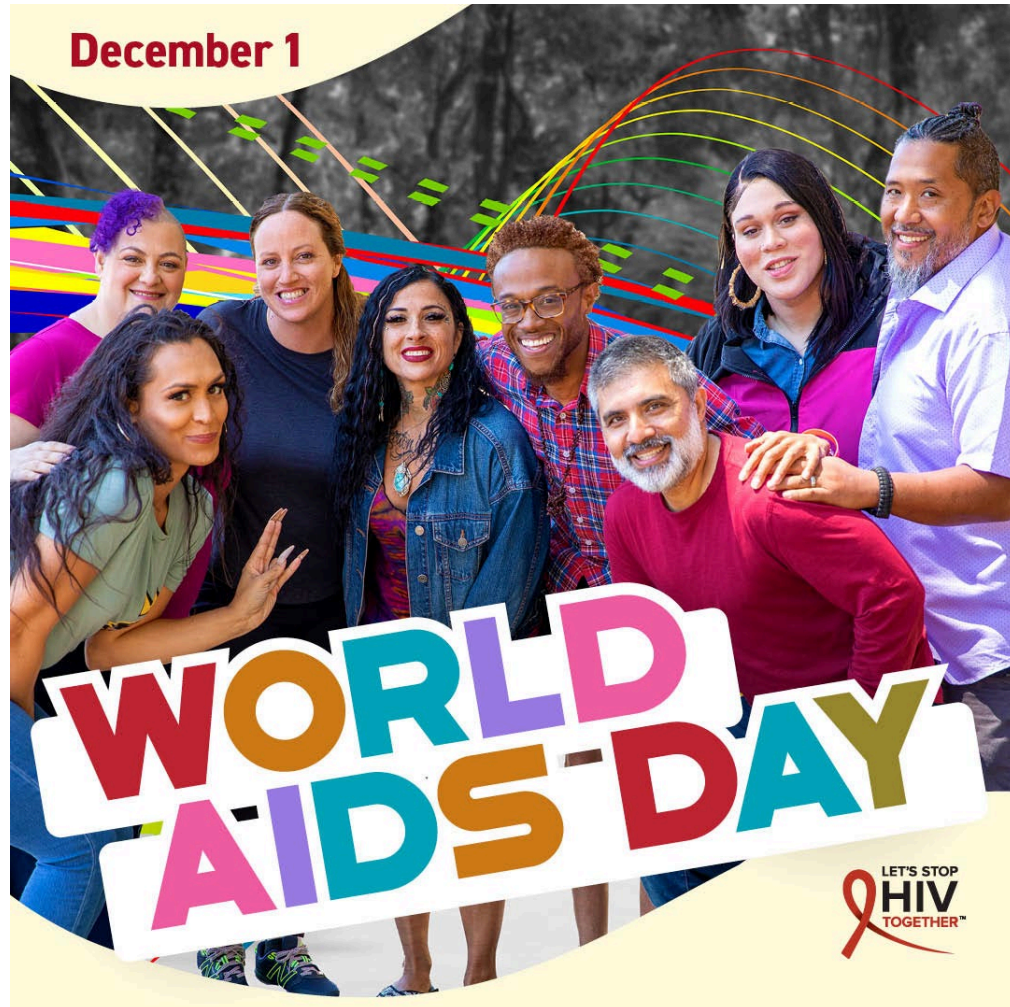
Alaska Native Tribal Health Consortium

labesh@anthc.org

(907) 729-2907



# World AIDS Day – December 1



December 1st is World AIDS Day – a day to reflect and raise awareness about HIV and AIDS and honor the lives impacted by the epidemic.

This year's theme is Collective Action: Sustain and Accelerate HIV Progress. Together, we can prevent HIV, support people with HIV, and remember those who lost their lives to an HIV-related illness.

I have no conflicts of interest to disclose



# Acknowledgement

This Mountain West AIDS Education and Training (MWAETC) program is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling \$3,098,654 with 0% financed with non-governmental sources.

The content of this presentation are those of the author(s) and do not necessarily represent the official views, nor an endorsement, by HRSA, HHS, or the U.S. Government.

# Objectives

- Understand the Epidemiology of HIV and STIs and how it affects your community \*\*State of Alaska EPI removed from PDF\*\*
- Increase your knowledge and comfort with comprehensive STI screening
- Increase your knowledge and prescribing of PEP and PrEP
- Understand how you can play a part in HIV elimination.
- Understand where there are disparities and gaps in care related to HIV/STI prevention.

# Four Pillars of Ending the HIV Epidemic in the U.S. (EHE)

**75%**  
reduction  
in new  
HIV  
diagnoses  
in 5 years  
and a  
**90%**  
reduction  
in 10  
years.



## Diagnose

All people with HIV as early as possible.



## Treat

People with HIV rapidly and effectively to reach sustained viral suppression.



## Prevent

New HIV transmissions by using using proven interventions, including pre-exposure prophylaxis (PrEP) and syringe services programs (SSPs).



## Respond

Quickly to potential HIV outbreaks to get needed prevention and treatment services to people who need them.

# HIV/STI Screening and Lab Interpretation



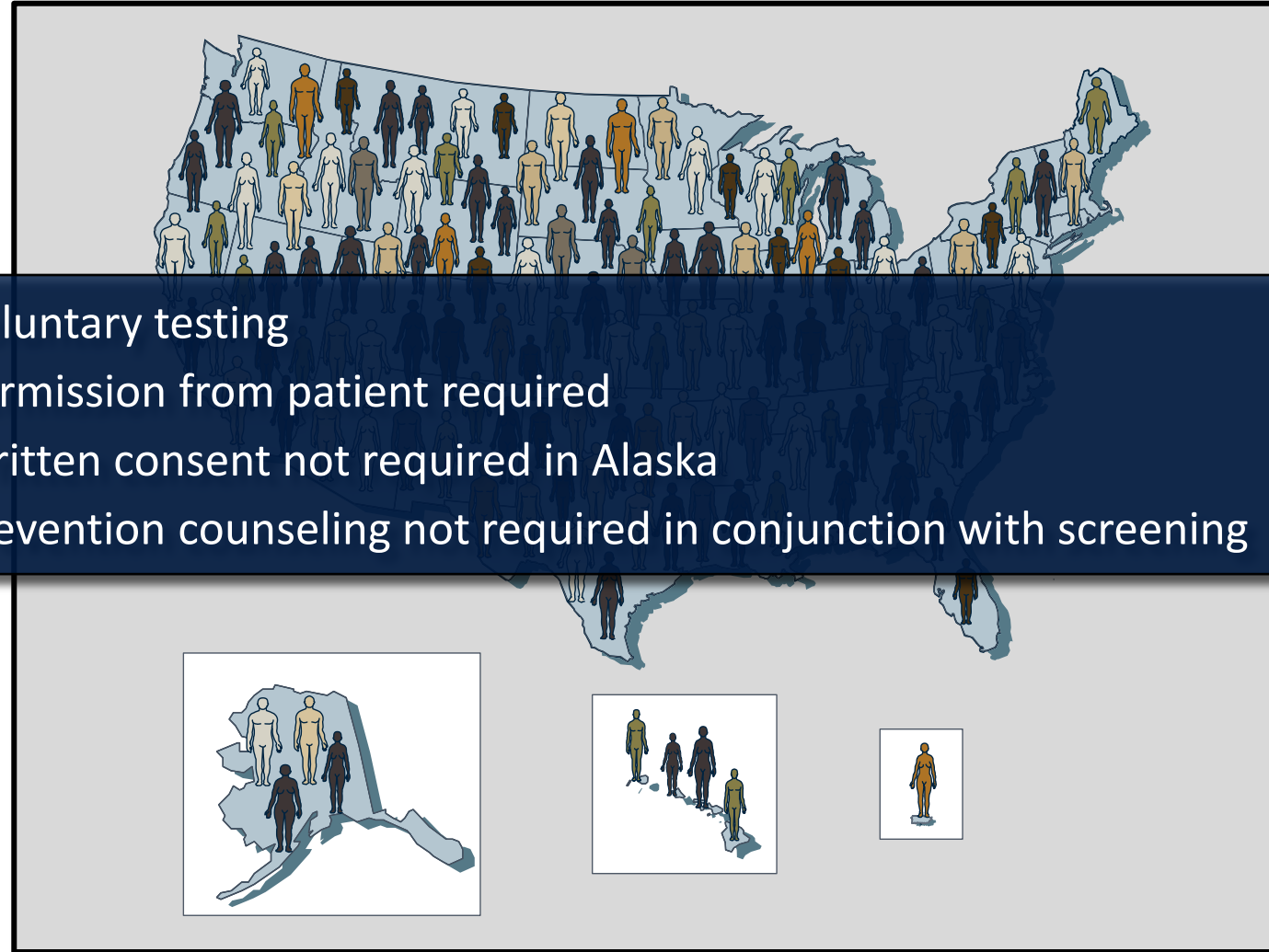
# Routine Screening for HIV Infection

CDC and USPSTF  
Grade A  
recommendation

- Voluntary testing
- Permission from patient required
- Written consent not required in Alaska
- Prevention counseling not required in conjunction with screening

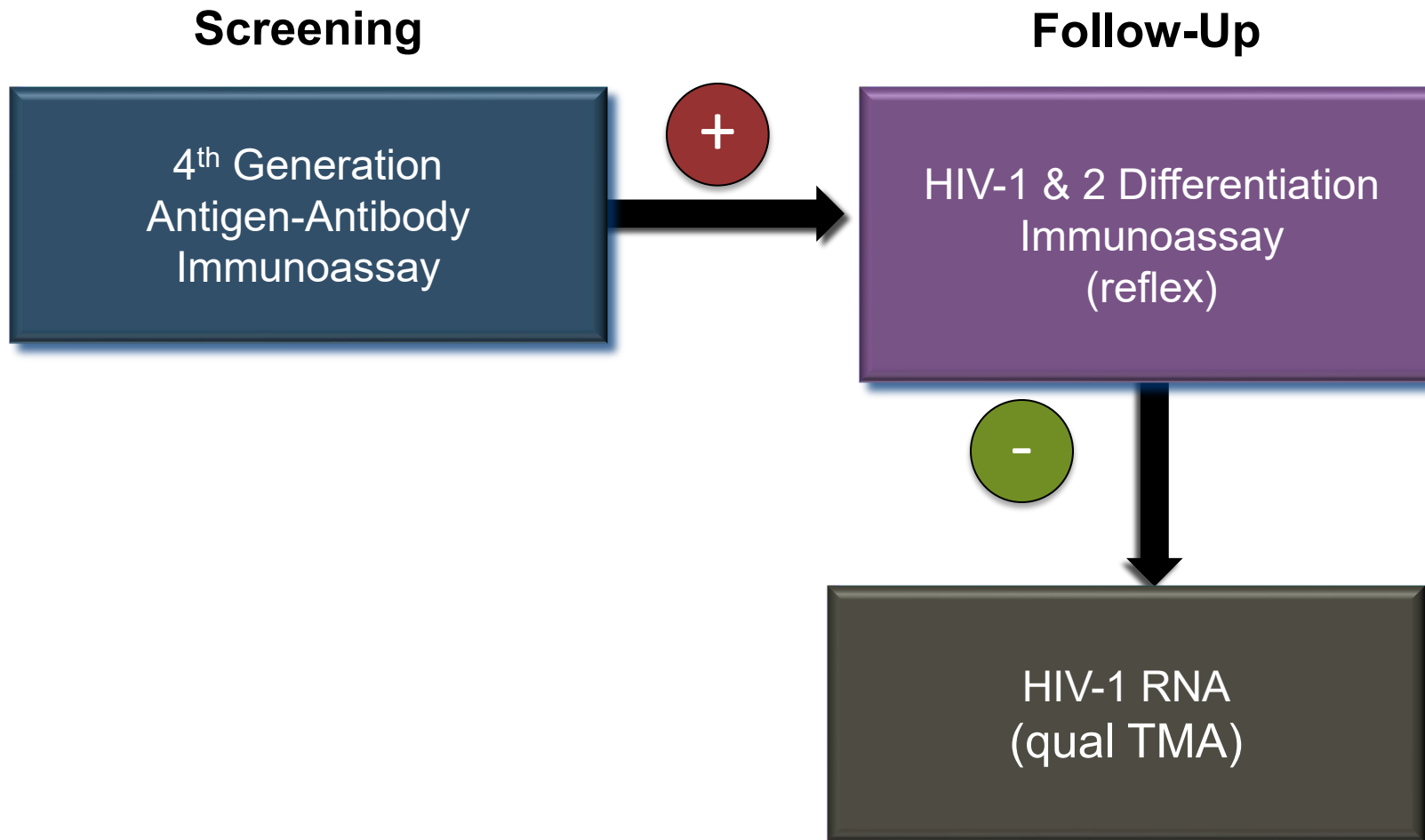
Universal screening:

- At least once in your life
- More frequency per risk
- With each pregnancy





# Approach to HIV Screening and Diagnostic Testing



# STI/HIV Complete Screen

Test	Exceptions
HIV Ag/Ab screening	<ul style="list-style-type: none"> <li>-Add HIV PCR if concerned for acute HIV infection</li> <li>-All positive rapid Ab only HIV testing need confirmatory testing</li> </ul>
Syphilis screen	<ul style="list-style-type: none"> <li>-Start with RPR if Hx of syphilis infection</li> </ul>
Chlamydia/Gonorrhea	<ul style="list-style-type: none"> <li>-Offer testing at all sites people use for sex-ASK, offer all sites anyway</li> <li>-We rarely use urethral swabs, urine is just fine (and clients more likely to return for testing!)</li> </ul>
Trichomonas	<ul style="list-style-type: none"> <li>-Offer with all vaginal aptima swabs</li> <li>-No specific guidelines for non-vaginal testing</li> </ul>
Hepatitis C Antibody	<ul style="list-style-type: none"> <li>-If positive it means patient has been exposed, may not have active infection-confirmation needed</li> <li>-If known Hx of HCV, Screen via HCV PCR (viral load)</li> </ul>
Hepatitis B Screening with: HBV surface Antigen, HBV core Antibody, HBV surface antibody	<ul style="list-style-type: none"> <li>-If there is documentation of full vaccine series, screen may not be indicated unless immunocompromised.</li> <li>-If no infection and not immune-VACCINATE</li> </ul>
Hepatitis A total Antibody	<p>Screening recommended for MSM, IDU populations.</p> <ul style="list-style-type: none"> <li>-I would recommend if there is no documented Hx of HAV vaccination series, and HAV total Ab negative-VACCINATE</li> <li>(if pos they are immune from prior vaccine or prior infection)</li> </ul>

# Emphasis on Extragenital Testing

Missed  
Diagnosis

Change in  
Management

ORIGINAL STUDY

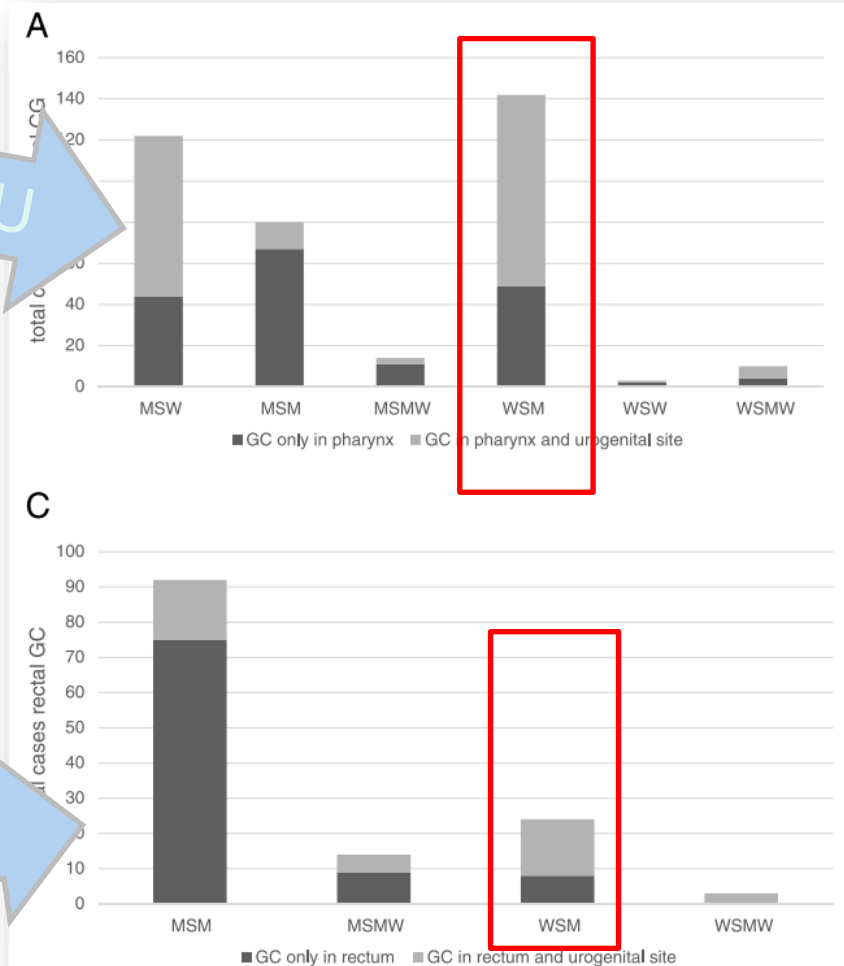
## Extragenital Gonorrhea and Chlamydia Among Men and Women According to Type of Sexual Exposure

*David M. Bamberger, MD,\*†‡ Georgia Graham, MD,\*§  
Leshia Dennis, BA,† and Mary M. Gerkovich, PhD‡*

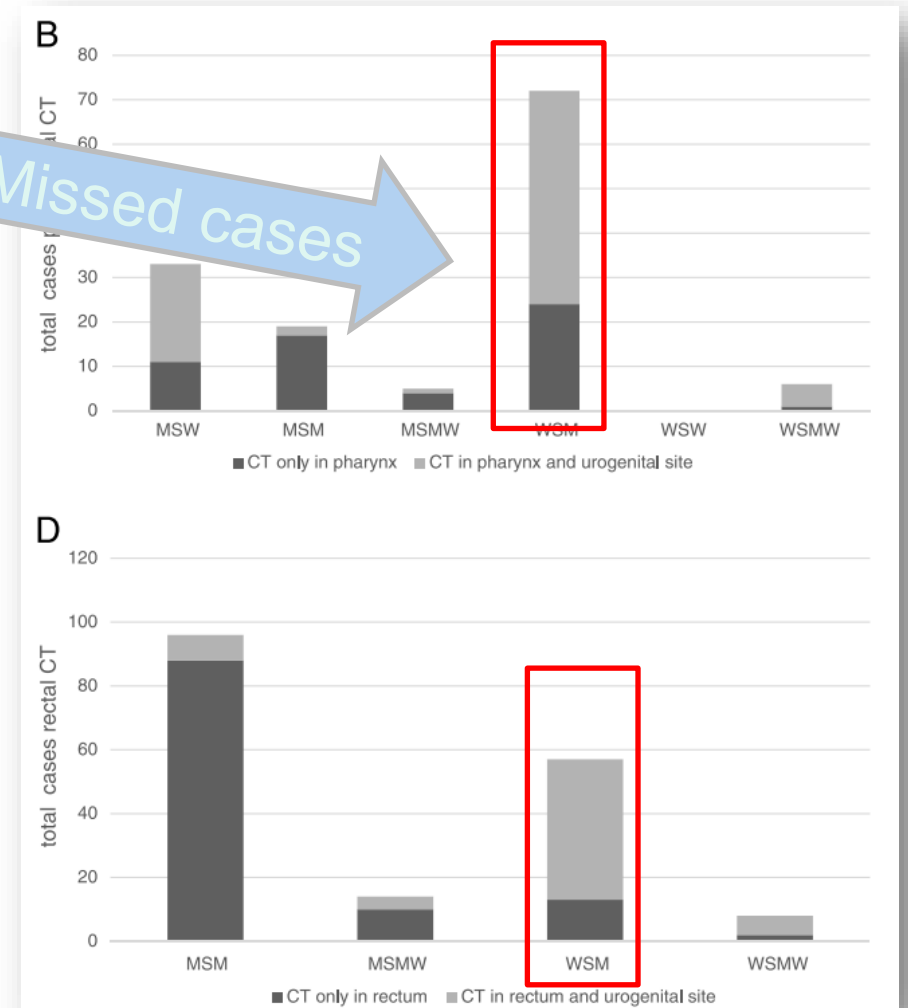
- Kansas City Department of Health STD Clinics - 9,646 clinical encounters

# Emphasis on Extra Genital Testing

## Gonorrhea



## Chlamydia



# Vaginal Swab Tips and Tricks

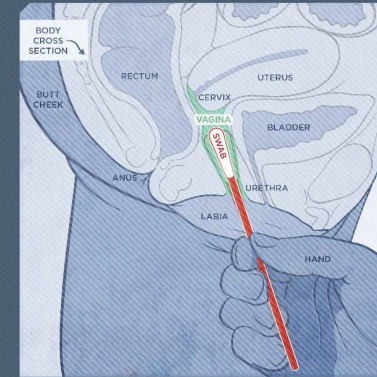
- Insert about 2 inches just like a tampon, swirl for 10-30 seconds or whatever they want.
- If giving patients the collection tube, remind them not to poke through the foil top or spill the fluid, consider giving just the wrapper.
- Does not matter if they are on their period or bleeding.

Posters available, email [AlaskaKit@anthc.org](mailto:AlaskaKit@anthc.org)

<https://www.uwptc.org/self-testing-guides-downloads>

## TEST YOURSELF

The Visual Guide for a  
Self-collected Vaginal Swab



1 Wash your hands with soap and water.



2 Remove the transport tube and collection swab from packaging.



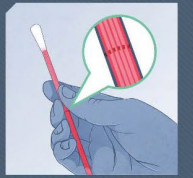
3 Label the transport tube with your Patient label.



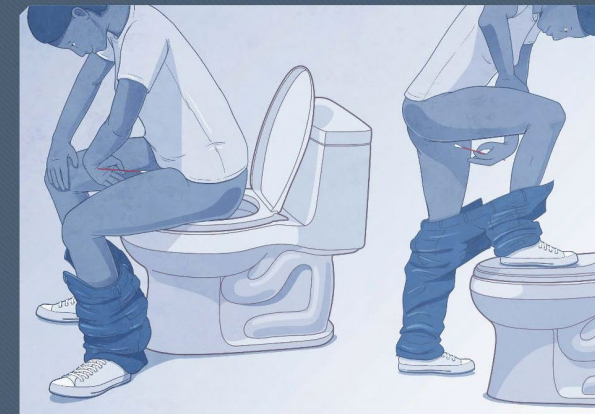
4 Label the transport tube with the Vaginal label.



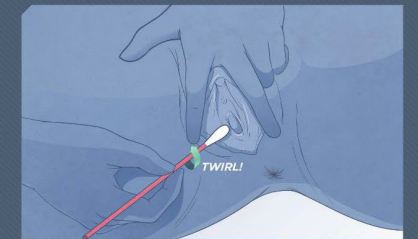
5 Open the package containing the collection swab.



6 Firmly hold the collection swab above the dashed line (closer to the swab tip).



7 Get into a comfortable position, either sitting or standing with one foot on a toilet seat or step stool. If you have a tampon inserted, remove it now.

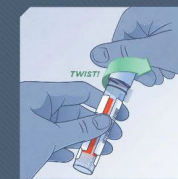


8 Gently insert swab about 2 inches (5 cm) into the vagina (like inserting a tampon, but not as far) and twirl the swab for 10-30 seconds. Make sure the swab touches the sides of the vagina.

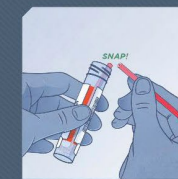
Remove the swab but do not put the swab down.



9 It is okay if there is some discharge or blood on the swab.



10 Unscrew the cap from the transport tube.



11 Place the collection swab into the transport tube, snapping it at the dashed line. Do not to spill the liquid or pierce the foil top of the cap.



12 Put the cap back on the transport tube and twist it closed to prevent leaks.



13 Put the transport tube into the biohazard bag.



14 Wash your hands with soap and water.

# Pharyngeal Swab Tips and Tricks

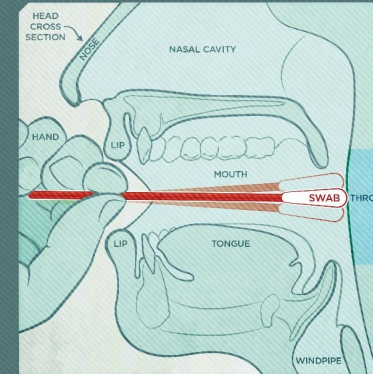
- It's just like a strep swab, no need for stigma!
- The one swab patients often prefer the care team to do due to gag reflex.

Posters available, email [AlaskaKit@anthc.org](mailto:AlaskaKit@anthc.org)

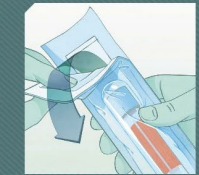
<https://www.uwptc.org/self-testing-guides-downloads>

## TEST YOURSELF

The Visual Guide for a  
Self-collected Throat Swab



1 Wash your hands with soap and water.



2 Remove the transport tube and collection swab from packaging.



3 Label the transport tube with your Patient label.



4 Label the transport tube with the Throat label.



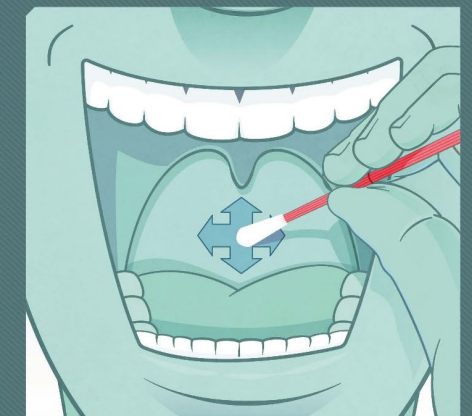
5 Open the package containing the collection swab.



6 Hold the collection swab far enough from the tip.



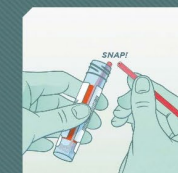
7 Say AHH... and reach the collection swab into your mouth to gently touch your throat.



8 Gently rub the swab tip on your throat side to side, up and down at least 5 times.



9 Unscrew the cap from the transport tube.



10 Place the collection swab into the transport tube, snapping it at dashed line.



11 Put the cap back on the transport tube and twist it closed to prevent leaks.



12 Put the transport tube into the biohazard bag.



13 Wash your hands with soap and water.

# Rectal Swab Tips and Tricks:

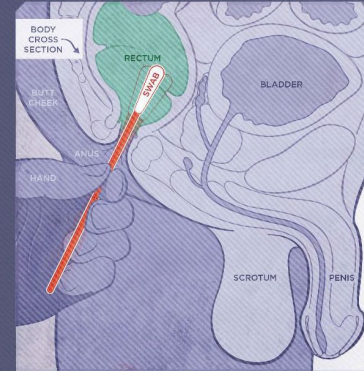
- Ask patients to separate their buttocks, spreading out the anal opening allows for less friction while inserting probe
- Can dampen with water, but no lube even if water-based, please.
- You really only need to go in one inch, and swirl 5 times. You do not need to reach the transition zone as in an anal PAP

Posters available, email [AlaskaKit@anthc.org](mailto:AlaskaKit@anthc.org)

<https://www.uwptc.org/self-testing-guides-downloads>

## TEST YOURSELF

The Visual Guide for a  
Self-collected Rectal Swab



1 Wash your hands with soap and water.



2 Remove the transport tube and collection swab from packaging.



3 Label the transport tube with your **Patient label**.



4 Label the transport tube with the **Rectal label**.



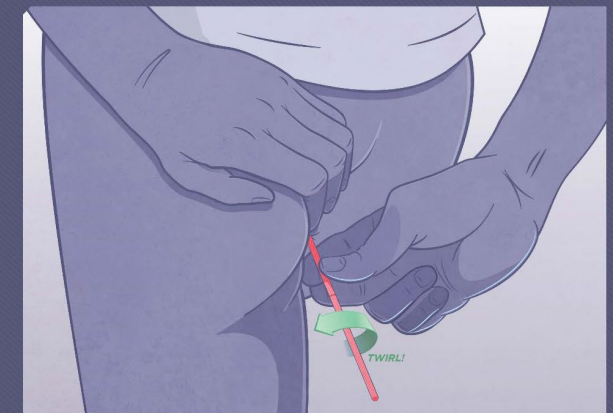
5 Open the package containing the collection swab.



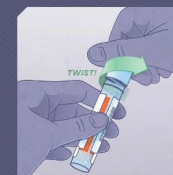
6 Firmly hold the collection swab above the dashed line (closer to the swab tip).



7 Get into a comfortable position that allows you access to your anus. Putting your foot on the step stool may help.



8 Gently insert the swab 1 inch into the rectum and swirl the swab in a circle at least 5 times.



9 Unscrew the cap from the transport tube.



10 Place the collection swab into the transport tube, snapping it at dashed line.



11 Put the cap back on the transport tube and twist it closed to prevent leaks.



12 Put the transport tube into the biohazard bag.

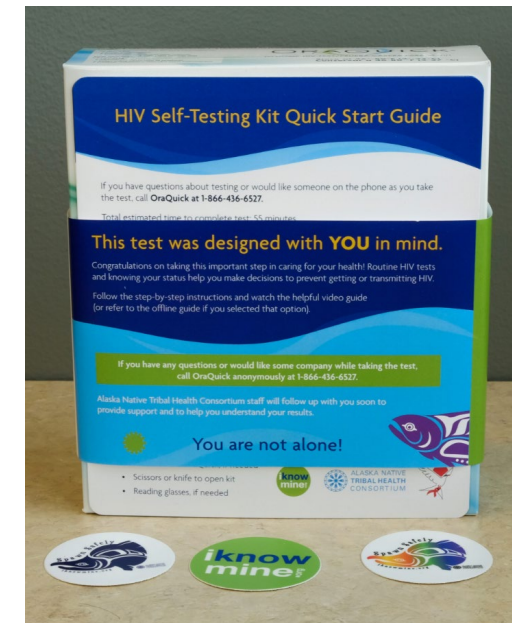


13 Wash your hands with soap and water.



# HIV Self-Test Kit

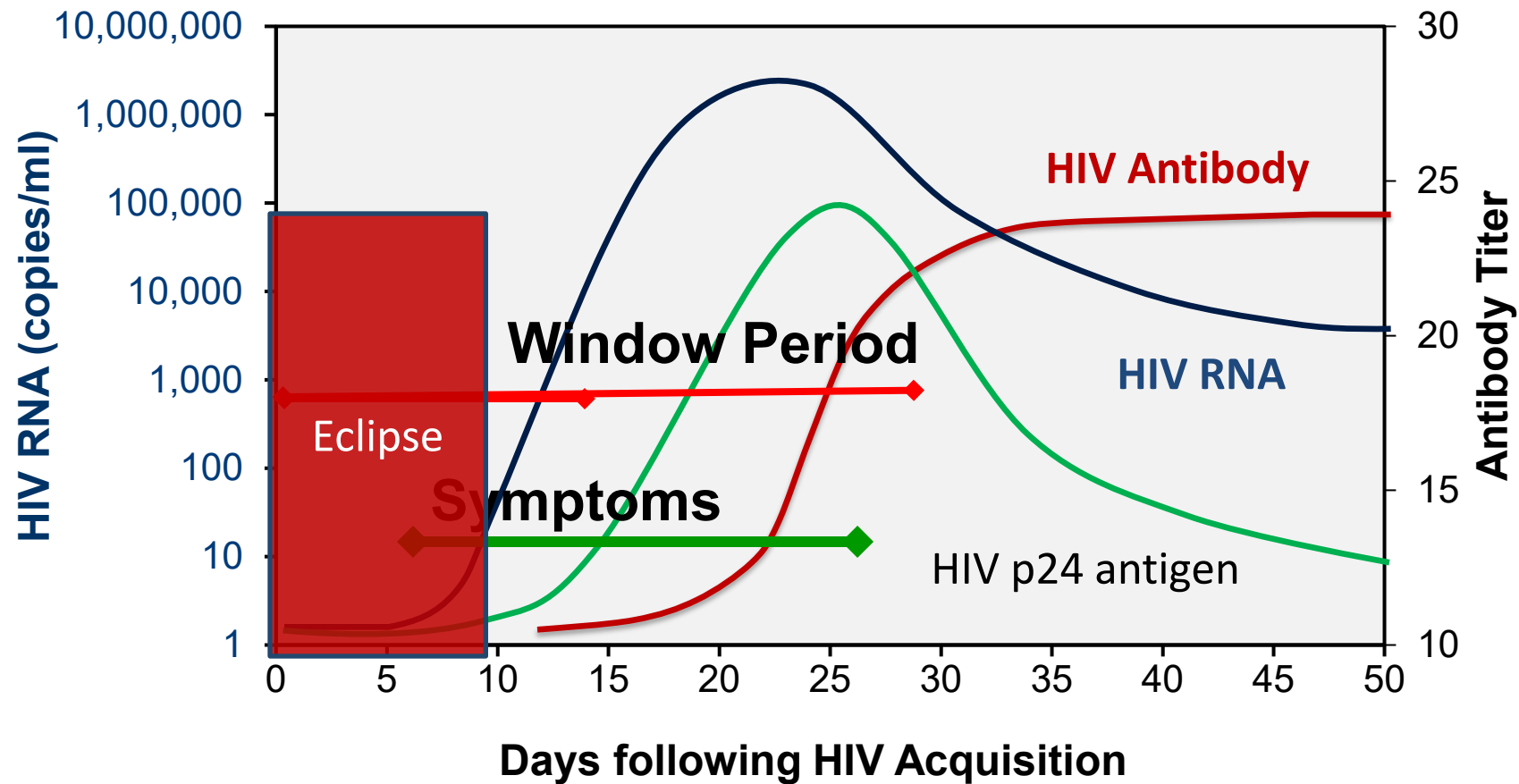
- Mailed to individuals
- OraQuick 24/7 support center available via telephone
- AK-based RN available during business hours



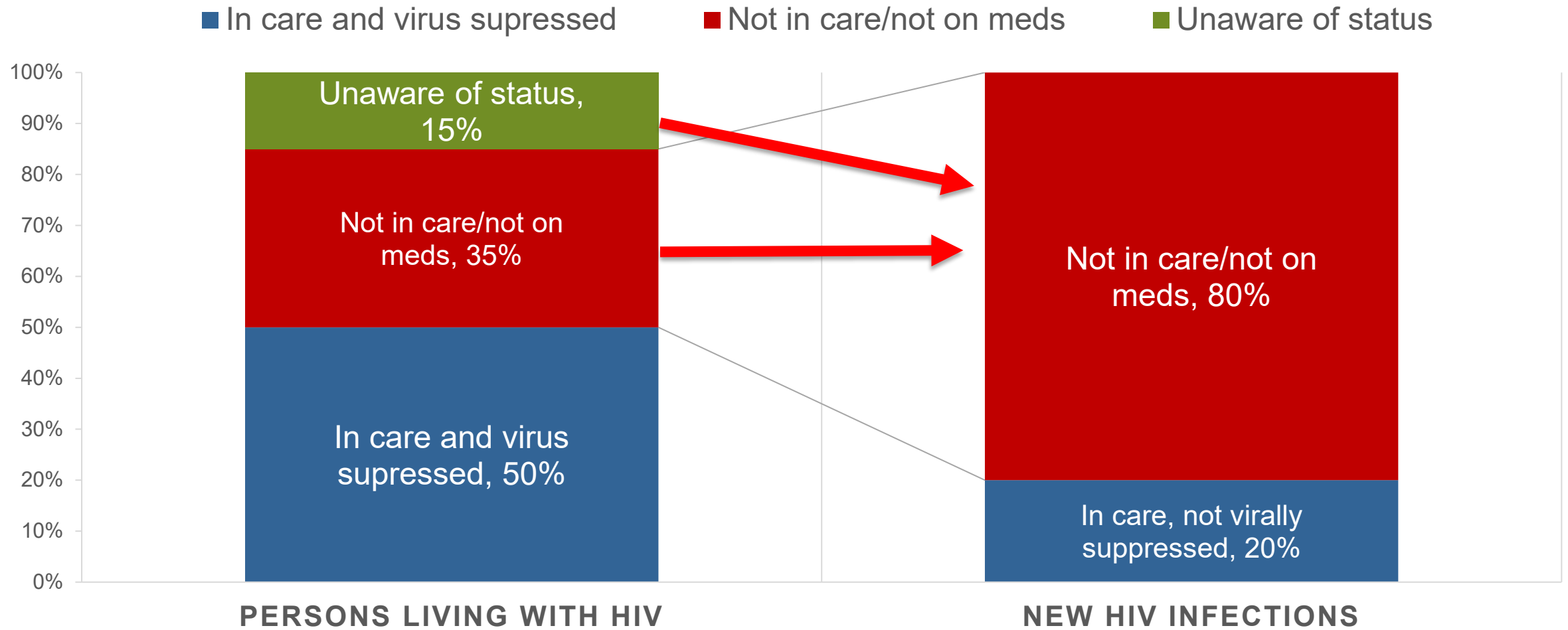
[iknowmine.org/shop](http://iknowmine.org/shop)



# Laboratory Diagnosis of Early HIV Infection



# PLWHIV not in care transmit most of new infections

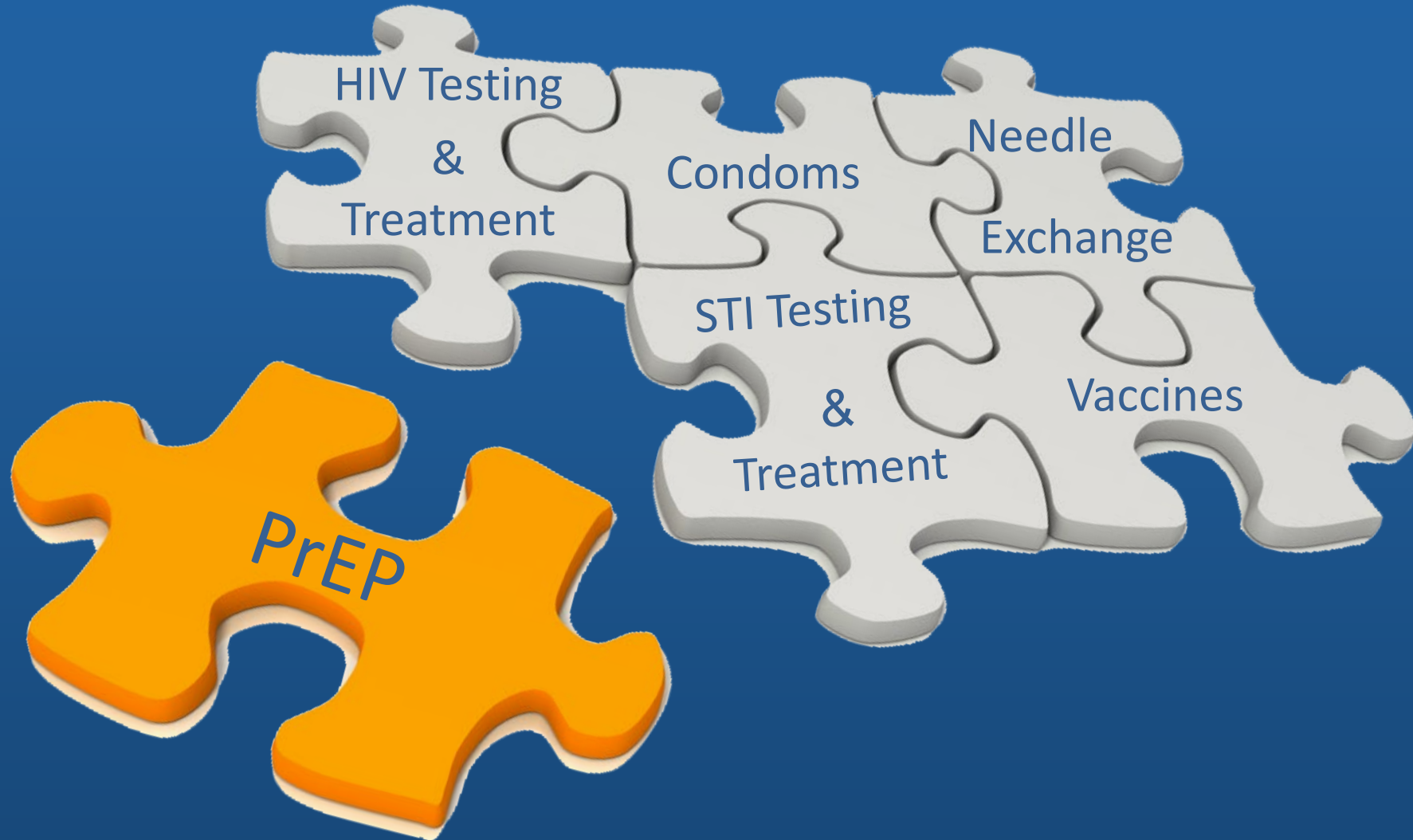


UFEU



# HIV Prevention PEP/PrEP

# PrEP is One Piece of the HIV Prevention Puzzle



Nonoccupational or Occupational Post-Exposure Prophylaxis is a tool we can use to help prevent HIV infections.


- The three drug antiviral regimen helps by blocking the HIV virus entry into cells, and therefore blocks infection.
- PEP first used in 1990s for healthcare workers
- nPEP guidelines first published by the CDC in 2005, updated in 2016

## PrEP vs. PEP

PrEP and PEP are methods for preventing HIV that involve taking HIV medicines. When you take steps to protect yourself against a disease, like HIV, it's called prophylaxis.

PrEP and PEP are for people who don't have HIV, but are at risk of getting it.

<b>PrEP</b> stands for pre-exposure prophylaxis.	<b>What's it called?</b>	<b>PEP</b> stands for post-exposure prophylaxis.
<b>Before HIV exposure.</b> PrEP is taken every day, before possible exposure.	<b>When is it taken?</b>	<b>After HIV exposure.</b> In emergency situations, PEP is taken within 72 hours (3 days) after possible exposure.
<b>PrEP</b> is for people who don't have HIV and: <ul style="list-style-type: none"><li>• are at risk of getting HIV from sex</li><li>• are at risk of getting HIV from injection drug use</li></ul>	<b>Who's it for?</b>	<b>PEP</b> is for people who don't have HIV but may have been exposed: <ul style="list-style-type: none"><li>• during sex</li><li>• by sharing injection drug equipment</li><li>• during a sexual assault</li><li>• at work through a needlestick or other injury</li></ul>
Consistent use of <b>PrEP</b> can reduce the risk of getting HIV from sex by about 99% and from injection drug use by at least 74%.	<b>How effective is it?</b>	<b>PEP</b> can prevent HIV when taken correctly, but it is not always effective. Start PEP as soon as possible to give it the best chance of working.
Ask your health care provider about a prescription for <b>PrEP</b> , or use PrEPLocator.org to find a health care provider in your area who can prescribe PrEP.	<b>How do you get it?</b>	Within 72 hours of a potential exposure to HIV, talk to your health care provider or an emergency room doctor about a prescription for <b>PEP</b> .

For more information, visit 

# nPEP Considerations

- What is your patient's HIV status?
- Do you know the source patient's HIV status?
  - If they do have HIV, do we know their HIV antiviral history?
- What exposure occurred?
- When did the exposure occur, or when did it last occur?

## WHAT IS PEP?

**PEP** (or post-exposure prophylaxis) involves taking anti-HIV drugs **very soon after** a possible exposure to HIV to **prevent HIV**.



# What is your patient's HIV status

A HIV screen (Antigen/Antibody) screen should be obtained at baseline

- If Screen is positive:
  - Connect patient to services for ongoing HIV management and rapid antiviral therapy start
  - A 28 day of PEP is not useful
- If Screen is negative:
  - Continue to assess PEP indication
  - Are they taking PrEP? If Yes, PEP may not be indicated

## HOW CAN YOU TELL IF YOU HAVE HIV?

You **can't** rely on symptoms to tell if you have HIV.

The **only** way to know for sure is to **GET TESTED!**

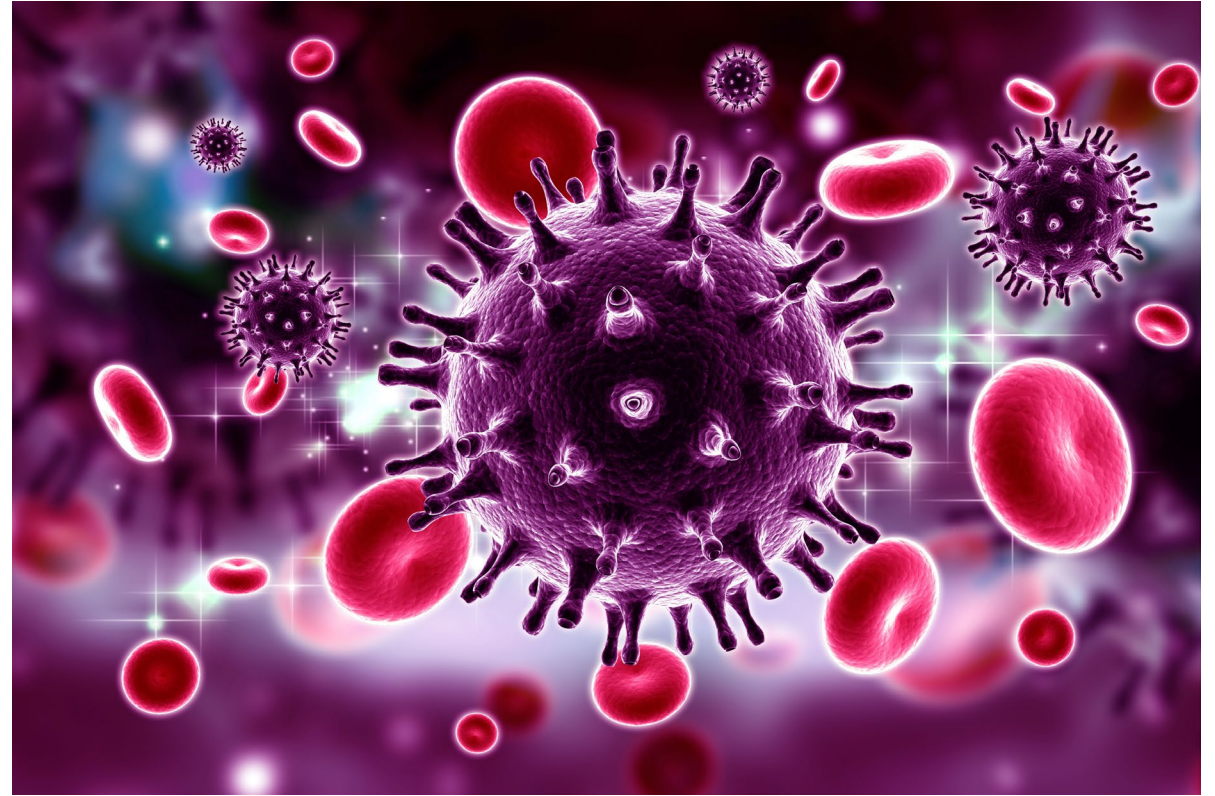


HIV  
gov



# Do you know the source patient's HIV Status

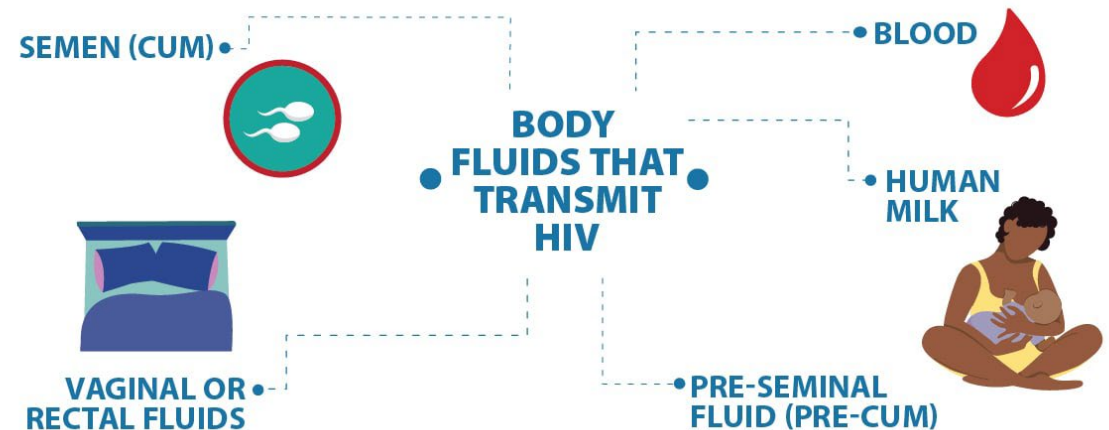
- Often in cases of sexual assault the source patient status will be unknown
- If HIV status positive
  - Are they undetected
  - U=U (undetectable = untransmissible)



# What was the exposure

Nonoccupational HIV PEP should only be used in the setting of “substantial risk for HIV acquisition,” defined as contact involving an area of the body known to be associated with HIV acquisition (vagina, rectum, eye, mouth, or other mucous membranes, nonintact skin, or percutaneous needlestick injuries) with an infectious body fluid (e.g., blood, semen, vaginal secretions, rectal secretions, breast milk, or any other body fluid visibly contaminated with blood).

Only **certain body fluids** from a person who has HIV **can transmit HIV**.



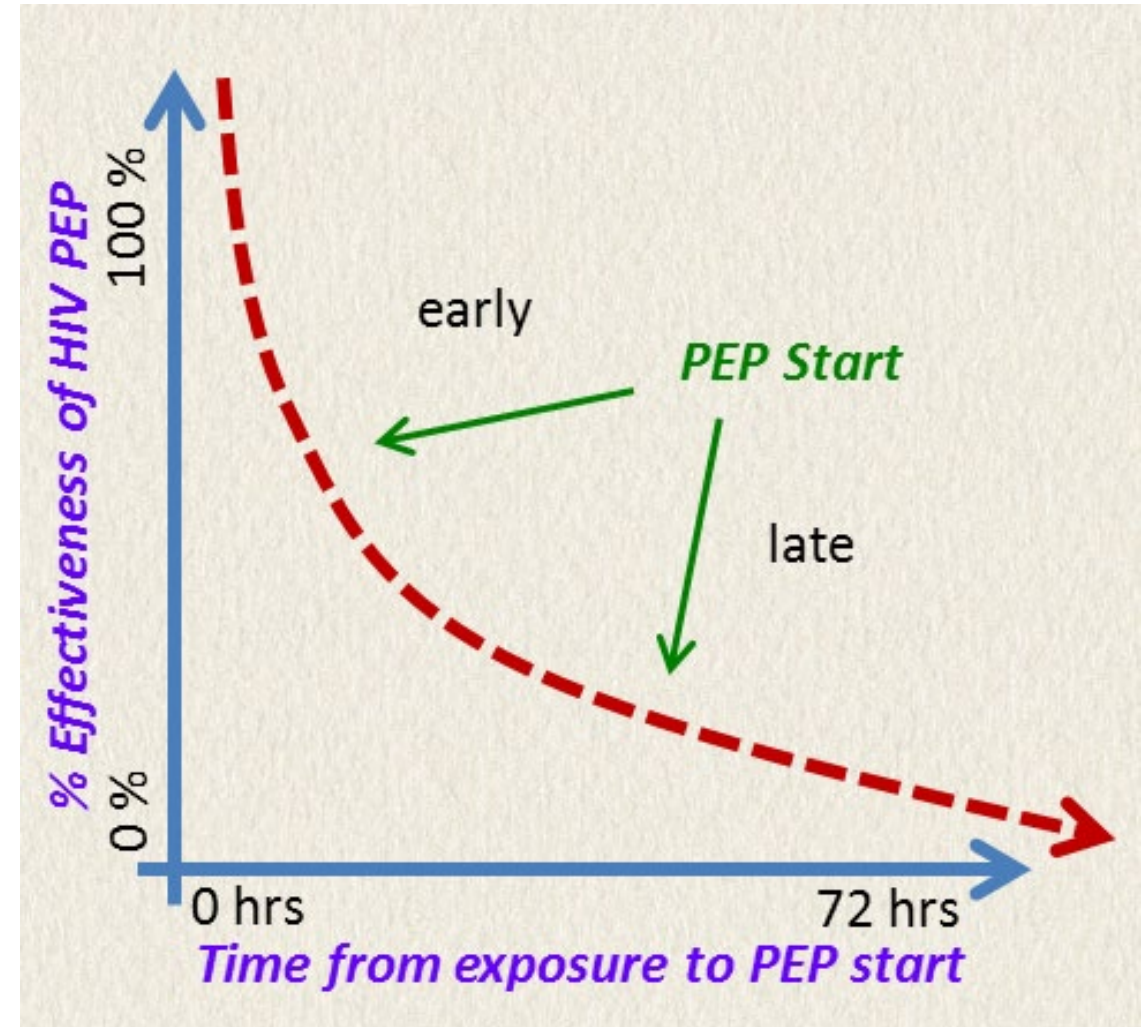
# Risk

Table 1.  
**Estimated Per-Act Probability of Acquiring HIV from an Infected Source, by Exposure Act\***

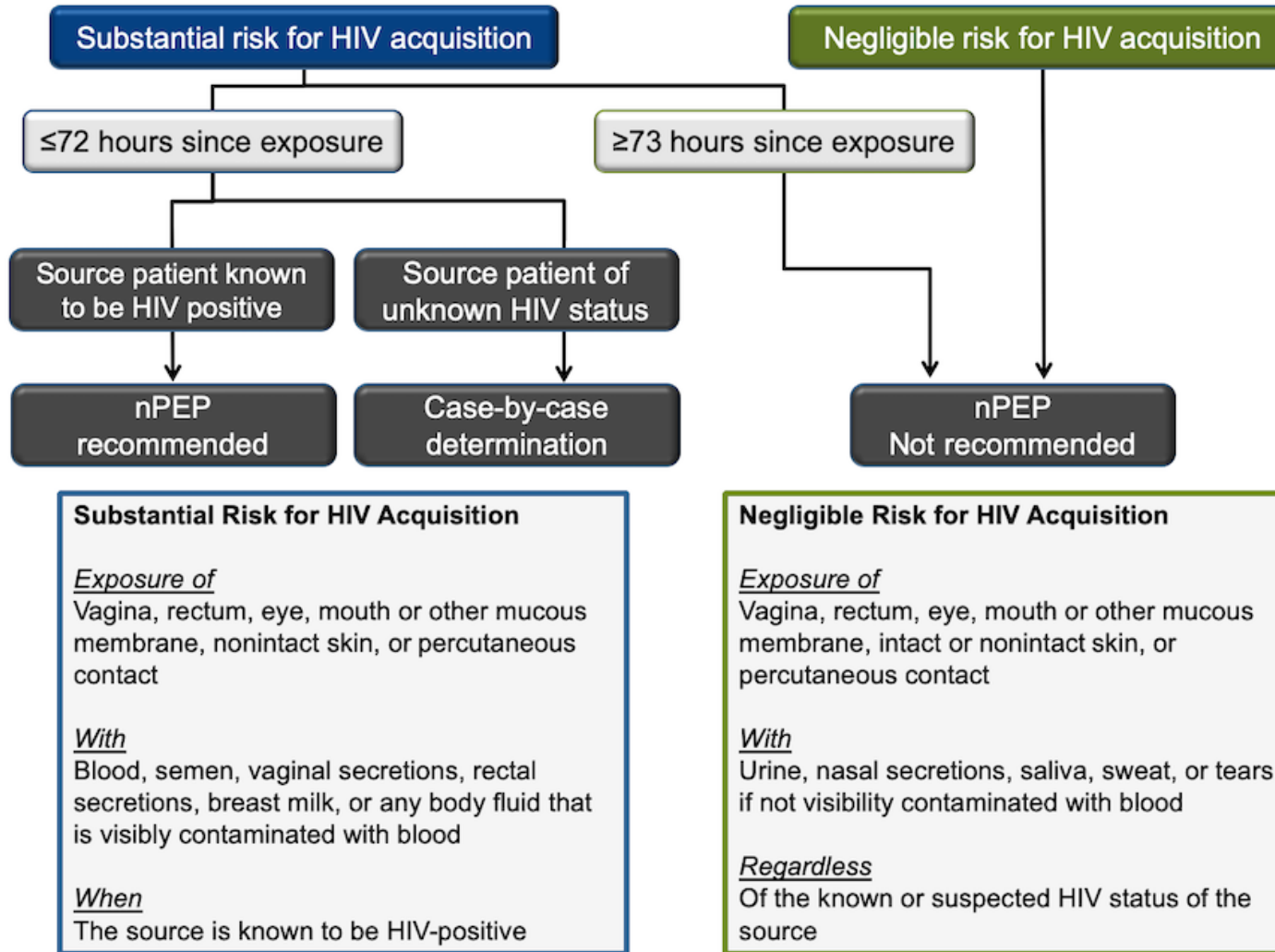
Exposure Type	Rate for HIV Acquisition per 10,000 Exposures
<b>Parenteral</b>	
Blood transfusion	9,250
Needle sharing during injection drug use	63
Percutaneous (needlestick)	23
<b>Sexual</b>	
Receptive anal intercourse	138
Insertive anal intercourse	11
Receptive penile-vaginal intercourse	8
Insertive penile-vaginal intercourse	4
Receptive oral intercourse	Low
Insertive oral intercourse	Low
<b>Other<sup>^</sup></b>	
Biting	Negligible
Spitting	Negligible
Throwing body fluids (including semen or saliva)	Negligible
Sharing sex toys	Negligible

# When did it occur

- Multiple studies have demonstrated PEP is only beneficial if started within 72 hrs
  - If multiple exposures, can initiate within 72 hrs after last exposure



# nPEP Decision Algorithm



# nonoccupational Post Exposure Prophylaxis: Medication Options

- Preferred Regimen:

Tenofovir Disoproxil Fumarate/Emtricitabine 200/300mg 1qd (Truvada) **plus**  
Dolutegravir 50mg 1qd x 28 days or Raltegravir 400mg BID

- Prefer to prescribe both together for 28-day supply initially
- Prefer once a day dosing for simplicity and improved compliance

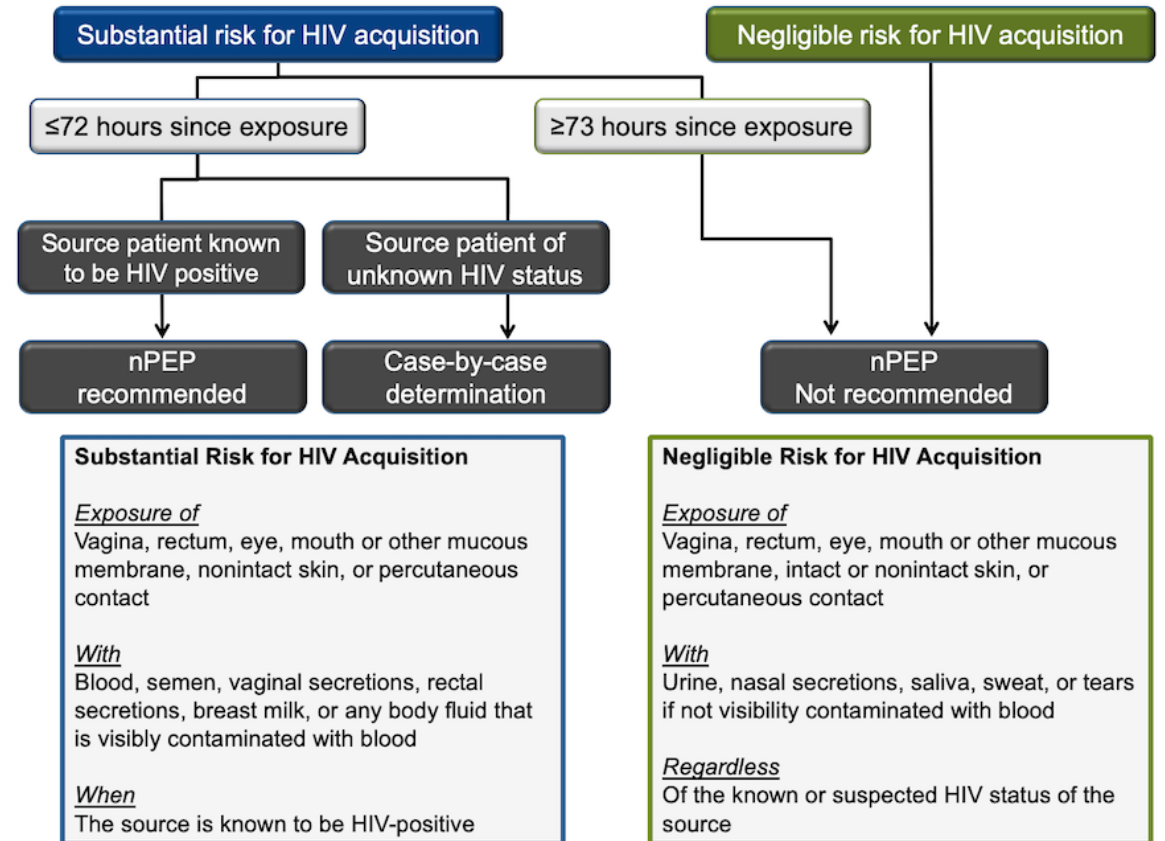
Dolutegravir (DTG) became a preferred medication in pregnancy in 2022 after additional research was obtained to demonstrate no significant increased NTD risk for patients taking DTG vs other ART medications.

# What is nPEP: nonoccupational Post Exposure Prophylaxis

- **TDF/FTC 200/300mg 1qd (Truvada) plus**

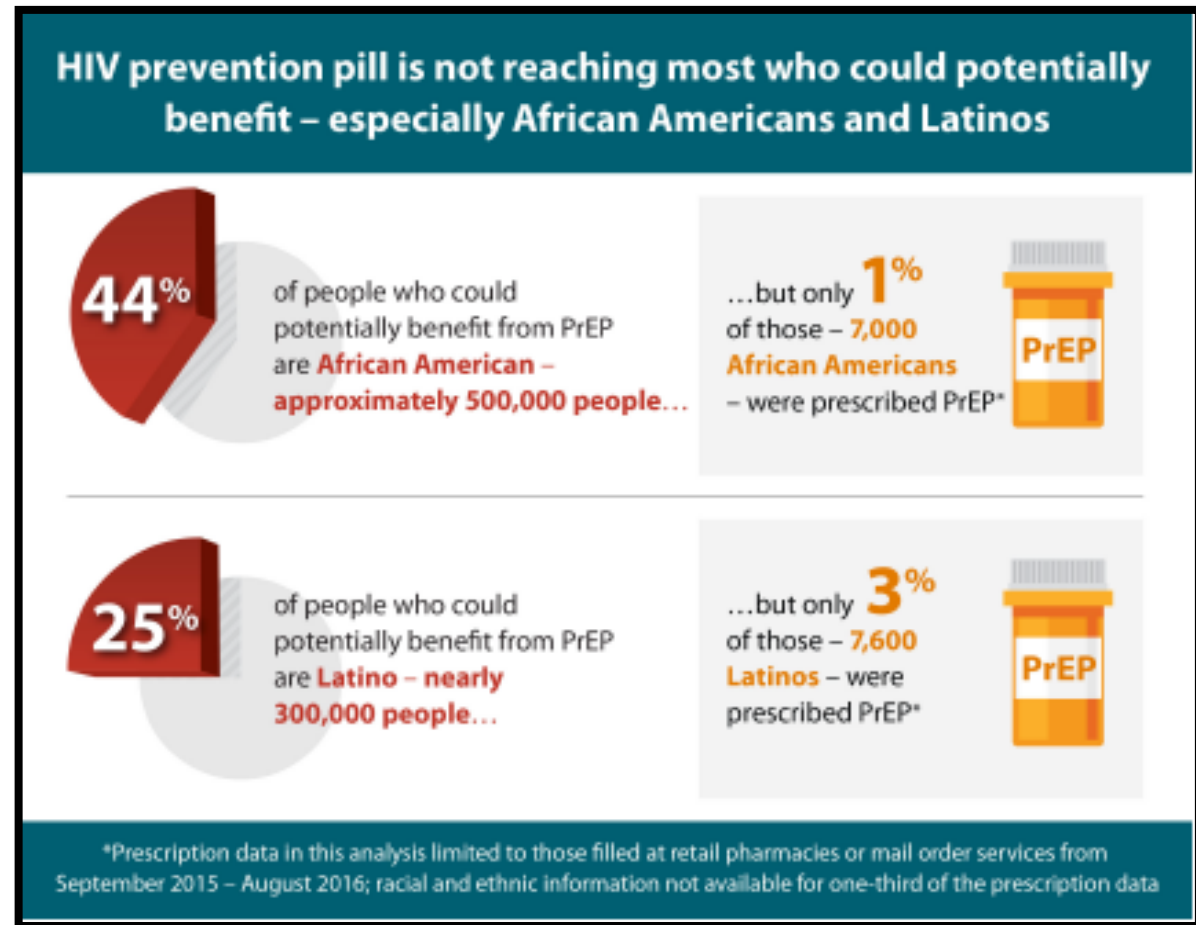
Raltegravir 400mg BID or **Dolutegravir 50mg 1qd x 28 days**

- Determine if PEP is necessary
- Start within 72 hours of exposure
- Determine if client should transition from PEP→PrEP
- Ensure follow-up labs occur



# What is PrEP?

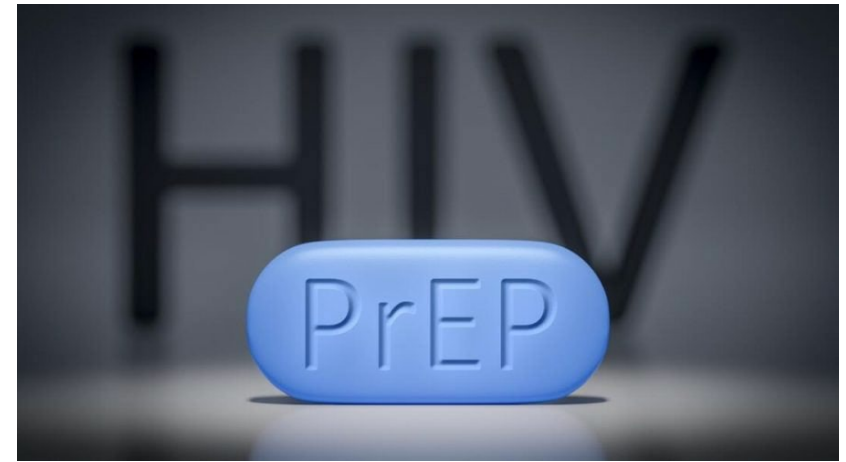
- A prevention strategy in which a **high-risk** individual takes a medication **regularly** (along with continued behavioral **risk-reduction** strategies) to prevent HIV infection
- Medication first became available in 2012
- United States PrEP guidelines first published in 2014
- U.S. Preventative Task Force classified PrEP as a
- grade A recommendation in June 2019
  - Insurance coverage improved
- First injectable Medication approved January 2022





# Who May Benefit from PrEP

- Anyone who self-identifies a need for PrEP
- People with partners living with or at-risk for HIV
- People with any of the following risk factors in the past 6 months
  - Bacterial STI (gonorrhea, syphilis, any rectal STI)
  - Condomless anal sex
  - Transactional sex
  - Injection drug use with shared needles and/or shared equipment
- Some populations are at higher risk based on epidemiology and sexual networks
  - MSM
  - Trans women



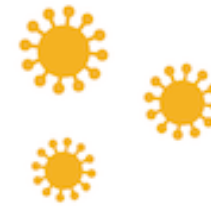
**Additional risk factor**  
**if the patient's partners would benefit from PrEP**

# PrEP Indications following CDC 2021 Updates

- **All** sexually active adults and adolescents should be informed about PrEP
- **Patients who request PrEP should be offered it**, even when no specific risk behaviors are elicited.
- Because most people who inject drugs are also sexually active, they should be assessed for sexual risk.

## What is PrEP?

PrEP (pre-exposure prophylaxis) is a once-a-day pill taken to prevent HIV



## The benefits of PrEP

When taken consistently, PrEP can reduce the risk of contracting HIV by 99%



PrEP is most effective when combined with condoms and other prevention tools

## PrEP is recommended for anyone wanting to prevent HIV and is for those who are:

- Sexually active with a HIV+ partner
- Sexually active with men who have sex with men, more than one partner, or your partner has more than one partner
- Having anal or vaginal sex and not consistently using condoms
- An intravenous drug user who shares needles, syringes, or other equipment to inject drugs

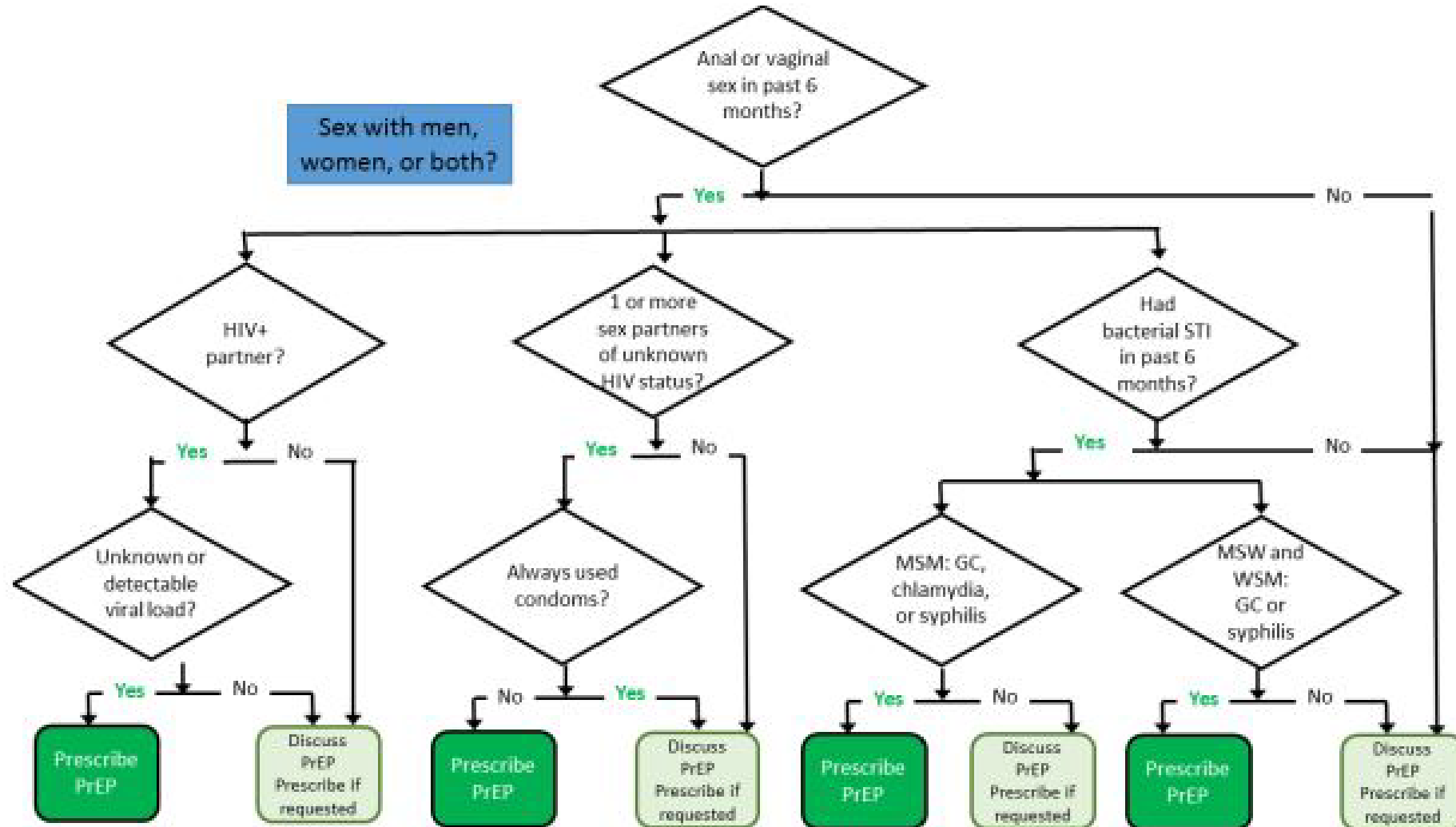


# PrEP Medications

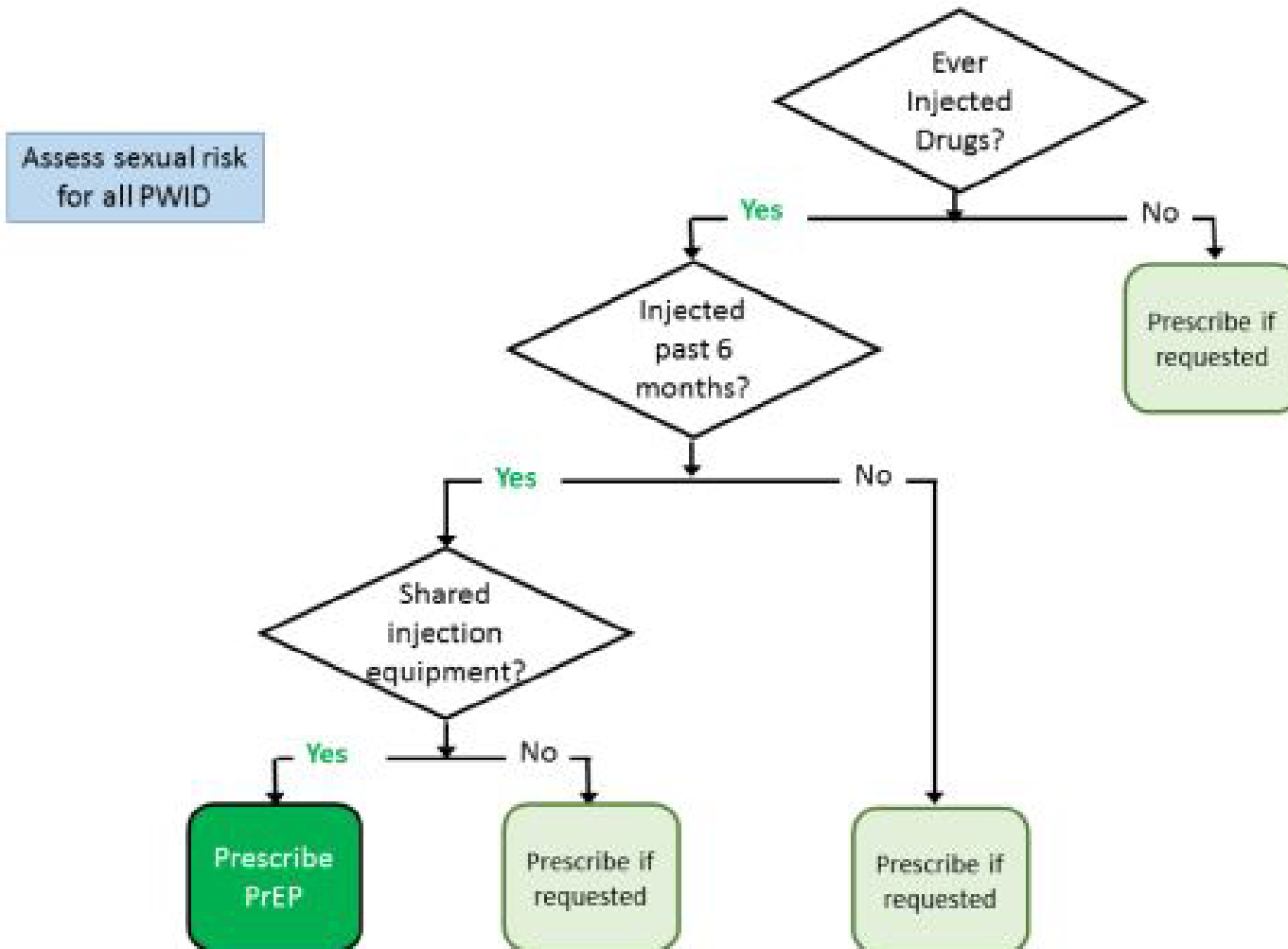
- **Tenofovir DF-emtricitabine:** TDF/FTC (Truvada) approved for HIV PrEP by the FDA in July 2012
- **Tenofovir AF-emtricitabine:** TAF/FTC (Descovy) approved for HIV PrEP by FDA October 3, 2019
  - Approved for males and transgender women
  - Not approved for women or on-demand dosing
- Added benefits: some protection against HSV and HBV
- **Long acting Cabotegravir Injection:** CAB (Apretude)
  - Every other month injection (after loading dose)



# Assessing PrEP indication: Sex Risk



# Assessing PrEP Indication: IDU



# Lab Testing for F/TDF, F/TAF

**Table 5 Timing of Oral PrEP-associated Laboratory Tests**

Test	Screening/Baseline Visit	Q 3 months	Q 6 months	Q 12 months	When stopping PrEP
<b>HIV Test</b>	X*	X			X*
<b>eCrCl</b>	X		If age $\geq 50$ or eCrCL $< 90$ ml/min at PrEP initiation	If age $< 50$ and eCrCl $\geq 90$ ml/min at PrEP initiation	X
<b>Syphilis</b>	X	MSM /TGW	X		MSM/TGW
<b>Gonorrhea</b>	X	MSM /TGW	X		MSM /TGW
<b>Chlamydia</b>	X	MSM /TGW	X		MSM /TGW
<b>Lipid panel (F/TAF)</b>	X			X	
<b>Hep B serology</b>	X				
<b>Hep C serology</b>	MSM, TGW, and PWID only			MSM, TGW, and PWID only	

\* Assess for acute HIV infection (see Figure 4)

# Lab Testing for Cabotegravir

**Table 7** Timing of CAB PrEP-associated Laboratory Tests

Test	Initiation Visit	1 month visit	Q2 months	Q4 months	Q6 months	Q12 months	When Stopping CAB
<b>HIV*</b>	X	X	X	X	X	X	X
<b>Syphilis</b>	X			MSM^/TGW~ only	Heterosexually active women and men only	X	MSM/TGW only
<b>Gonorrhea</b>	X			MSM/TGW only	Heterosexually active women and men only	X	MSM/TGW only
<b>Chlamydia</b>	X			MSM/TGW only	MSM/TGW only	Heterosexually active women and men only	MSM/TGW only

\* HIV-1 RNA assay

X all PrEP patients

^ men who have sex with men

~ persons assigned male sex at birth whose gender identification is female

# PrEP Summary of Recommendations: Oral Meds

- TDF not recommended for CrCl <60
- TAF not recommended for CrCl <30

Table 1a: Summary of Clinician Guidance for Daily Oral PrEP Use

	Sexually-Active Adults and Adolescents <sup>1</sup>	Persons Who Inject Drug <sup>2</sup>
Identifying substantial risk of acquiring HIV infection	Anal or vaginal sex in past 6 months AND any of the following: <ul style="list-style-type: none"> <li>• HIV-positive sexual partner (especially if partner has an unknown or detectable viral load)</li> <li>• Bacterial STI in past 6 months<sup>3</sup></li> <li>• History of inconsistent or no condom use with sexual partner(s)</li> </ul>	HIV-positive injecting partner OR Sharing injection equipment
Clinically eligible	<b>ALL OF THE FOLLOWING CONDITIONS ARE MET:</b>	
	<ul style="list-style-type: none"> <li>• Documented negative HIV Ag/Ab test result within 1 week before initially prescribing PrEP</li> <li>• No signs/symptoms of acute HIV infection</li> <li>• Estimated creatinine clearance <math>\geq 30</math> ml/min<sup>4</sup></li> <li>• No contraindicated medications</li> </ul>	
Dosage	<ul style="list-style-type: none"> <li>• Daily, continuing, oral doses of F/TDF (Truvada®), <math>\leq 90</math>-day supply OR</li> <li>• For men and transgender women at risk for sexual acquisition of HIV; daily, continuing, oral doses of F/TAF (Descovy®), <math>\leq 90</math>-day supply</li> </ul>	
Follow-up care	<p><b>Follow-up visits at least every 3 months to provide the following:</b></p> <ul style="list-style-type: none"> <li>• HIV Ag/Ab test and HIV-1 RNA assay, medication adherence and behavioral risk reduction support</li> <li>• Bacterial STI screening for MSM and transgender women who have sex with men<sup>3</sup> – oral, rectal, urine, blood</li> <li>• Access to clean needles/syringes and drug treatment services for PWID</li> </ul> <p><b>Follow-up visits every 6 months to provide the following:</b></p> <ul style="list-style-type: none"> <li>• Assess renal function for patients aged <math>\geq 50</math> years or who have an eCrCl &lt;90 ml/min at PrEP initiation</li> <li>• Bacterial STI screening for all sexually-active patients<sup>3</sup> – [vaginal, oral, rectal, urine- as indicated], blood</li> </ul> <p><b>Follow-up visits every 12 months to provide the following:</b></p> <ul style="list-style-type: none"> <li>• Assess renal function for all patients</li> <li>• Chlamydia screening for heterosexually active women and men – vaginal, urine</li> <li>• For patients on F/TAF, assess weight, triglyceride and cholesterol levels</li> </ul>	

<sup>1</sup> adolescents weighing at least 35 kg (77 lb)

<sup>2</sup> Because most PWID are also sexually active, they should be assessed for sexual risk and provided the option of CAB for PrEP when indicated

<sup>3</sup> Sexually transmitted infection (STI): Gonorrhea, chlamydia, and syphilis for MSM and transgender women who have sex with men including those who inject drugs; Gonorrhea and syphilis for heterosexual women and men including persons who inject drugs

<sup>4</sup> estimated creatine clearance (eCrCl) by Cockcroft Gault formula  $\geq 60$  ml/min for F/TDF use,  $\geq 30$  ml/min for F/TAF use



# PrEP Summary of Recommendations: Injection

## Lab Interval Change

- HIV Ab/Ag screening plus HIV-1 RNA assay every 2 months
- STI screening every 4 months (more frequently per risk)

Table 1b: Summary of Clinician Guidance for Cabotegravir Injection PrEP Use

	Sexually-Active Adults	Persons Who Inject Drugs <sup>1</sup>
Identifying substantial risk of acquiring HIV infection	Anal or vaginal sex in past 6 months AND any of the following: <ul style="list-style-type: none"> <li>• HIV-positive sexual partner (especially if partner has an unknown or detectable viral load)</li> <li>• Bacterial STI in past 6 months<sup>2</sup></li> <li>• History of inconsistent or no condom use with sexual partner(s)</li> </ul>	HIV-positive injecting partner OR Sharing injection equipment
Clinically eligible	<b>ALL OF THE FOLLOWING CONDITIONS ARE MET:</b> <ul style="list-style-type: none"> <li>• Documented negative HIV Ag/Ab test result within 1 week before initial cabotegravir injection</li> <li>• No signs/symptoms of acute HIV infection</li> <li>• No contraindicated medications or conditions</li> </ul>	
Dosage	<ul style="list-style-type: none"> <li>• 600 mg cabotegravir administered as one 3 ml intramuscular injection in the gluteal muscle               <ul style="list-style-type: none"> <li>◦ Initial dose</li> <li>◦ Second dose 4 weeks after first dose (month 1 follow-up visit)</li> <li>◦ Every 8 weeks thereafter (month 3,5,7, follow-up visits etc)</li> </ul> </li> </ul>	
Follow-up care	<p><b>At follow-up visit 1 month after first injection</b></p> <ul style="list-style-type: none"> <li>• HIV Ag/Ab test and HIV-1 RNA assay</li> </ul> <p><b>At follow-up visits every 2 months (beginning with the third injection – month 3) provide the following:</b></p> <ul style="list-style-type: none"> <li>• HIV Ag/Ab test and HIV-1 RNA assay</li> <li>• Access to clean needles/syringes and drug treatment services for PWID</li> </ul> <p><b>At follow-up visits every 4 months (beginning with the third injection- month 3) provide the following:</b></p> <ul style="list-style-type: none"> <li>• Bacterial STI screening<sup>2</sup> for MSM and transgender women who have sex with men<sup>2</sup> – oral, rectal, urine, blood</li> </ul> <p><b>At follow-up visits every 6 months (beginning with the fifth injection – month 7) provide the following:</b></p> <ul style="list-style-type: none"> <li>• Bacterial STI screening<sup>2</sup> for all heterosexually-active women and men – [vaginal, rectal, urine - as indicated], blood</li> </ul> <p><b>At follow-up visits at least every 12 months (after the first injection) provide the following:</b></p> <ul style="list-style-type: none"> <li>• Assess desire to continue injections for PrEP</li> <li>• Chlamydia screening for heterosexually active women and men – vaginal, urine</li> </ul> <p><b>At follow-up visits when discontinuing cabotegravir injections provide the following:</b></p>	

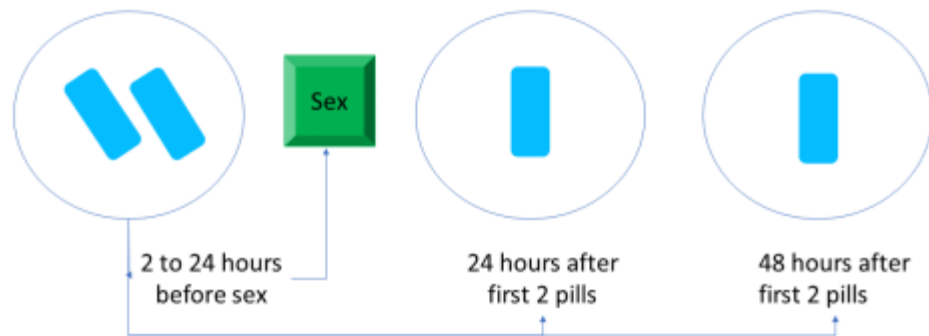
<sup>1</sup> Because most PWID are also sexually active, they should be assessed for sexual risk and provided the option of CAB for PrEP when indicated

<sup>2</sup> Sexually transmitted infection (STI): Gonorrhea, chlamydia, and syphilis for MSM and transgender women who have sex with men including those who inject drugs; Gonorrhea and syphilis for heterosexual women and men including persons who inject drugs

<ul style="list-style-type: none"> <li>• Re-educate patients about the “tail” and the risks during declining CAB levels</li> <li>• Assess ongoing HIV risk and prevention plans</li> <li>• If PrEP is indicated, prescribe daily oral F/TDF or F/TAF beginning within 8 weeks after last injection</li> <li>• Continue follow-up visits with HIV testing quarterly for 12 months</li> </ul>
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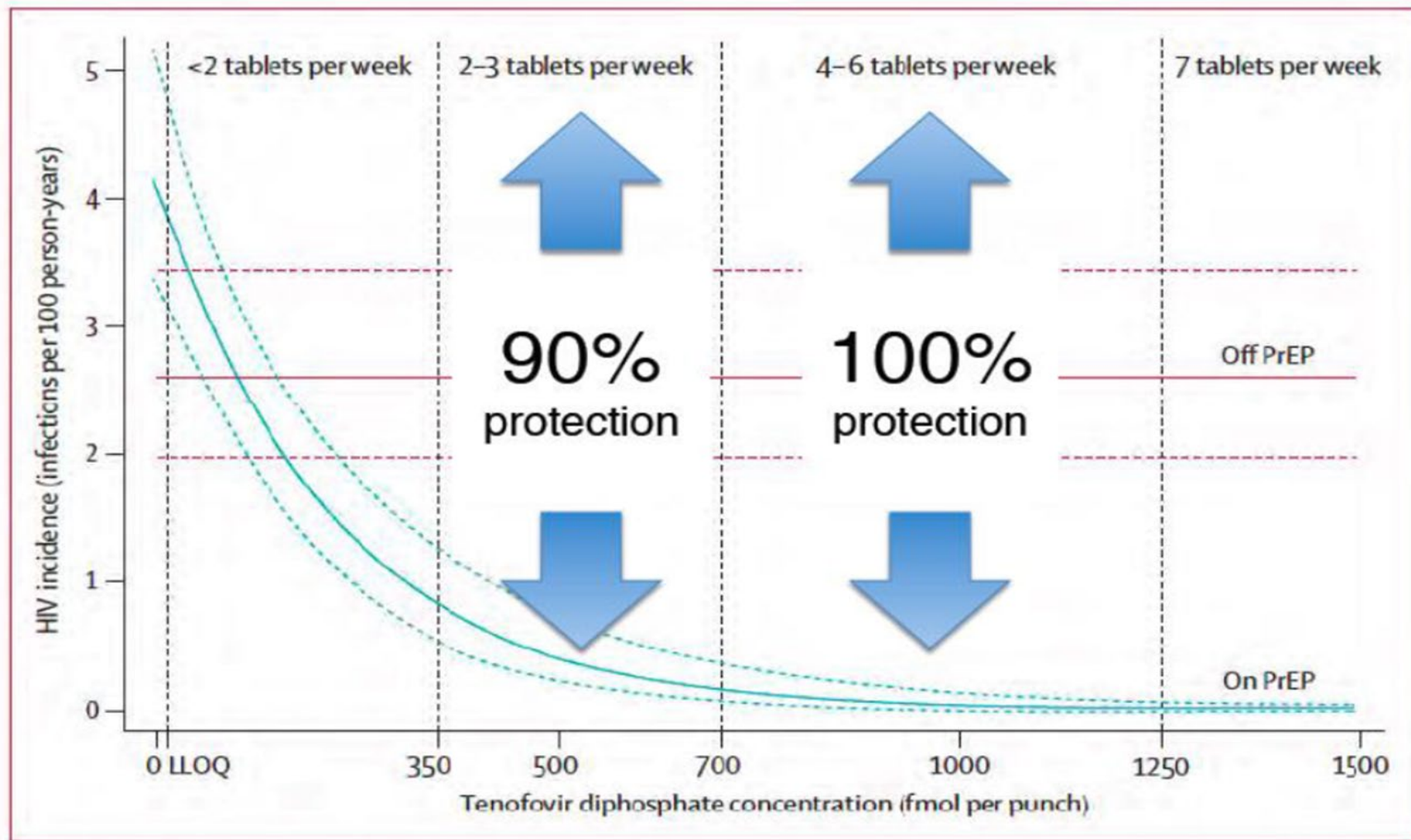
# On Demand/2-1-1 PrEP

- Process of taking PrEP only when engaging in high risk behavior
- No U.S. Guidelines, consideration added to PrEP 2021 update
- Consider in men or transgender women whose risk factor is sexual activity
- TDF/FTC obtains max concentrations in rectal tissue within 7 days of continued use vs 20 days in blood and cervical/vaginal tissue.
- PrEP 2-1-1
  - Take two tablets 2-24 hrs before high risk event, one tablet 24 hrs after, and one tablet 48 hrs after. If High risk events continue, then continue with daily PrEP dosing.



- If next sexual encounter is <7 days after last took pill, restart 1 pill daily
- If next sexual encounter is >7 days after last took pill, restart with 2 pills
- If high risk continues, continue with 1 pill a day
- Prescribe 30 pills at a time

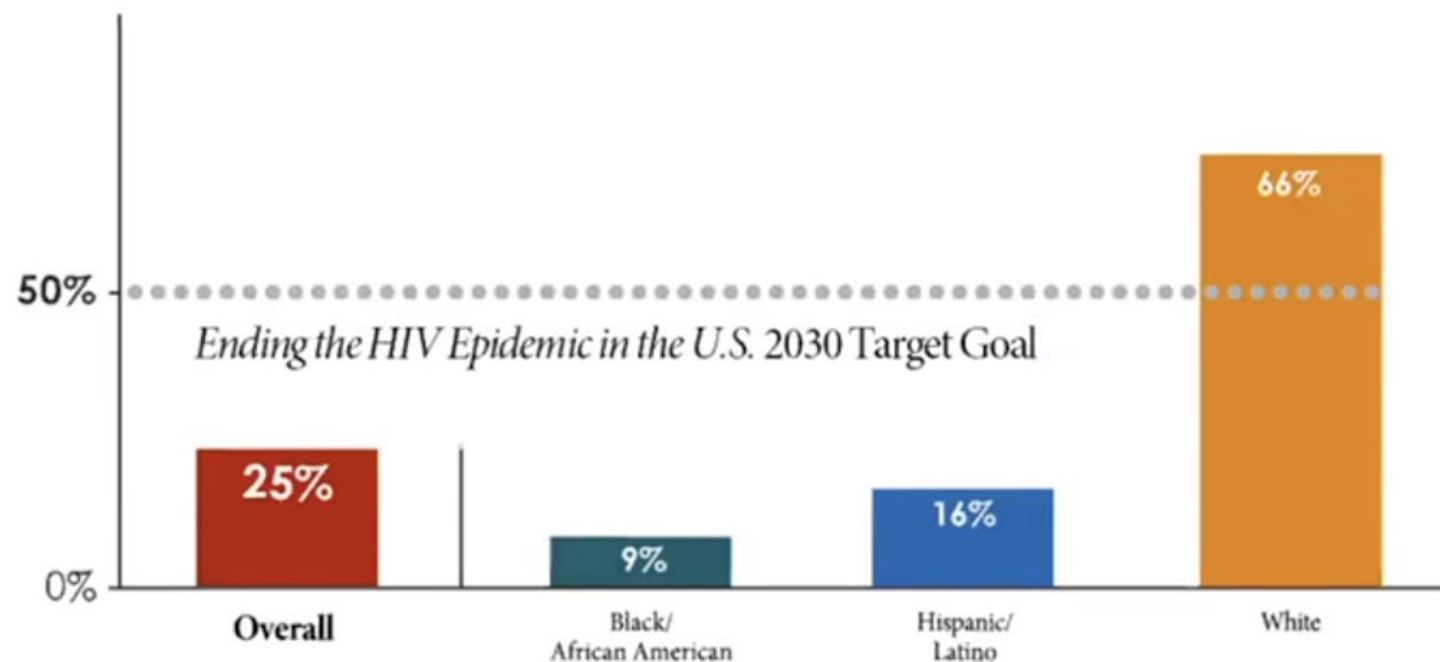
# iPrEx OLE confirmed prior estimates



# Continued Engagement and Decreasing Disparities

**WHILE 25% OF PEOPLE ELIGIBLE FOR PREP WERE PRESCRIBED IT IN 2020, COVERAGE IS NOT EQUAL**

PREP COVERAGE IN THE U.S. BY RACE/ETHNICITY, 2020



# PrEP Discontinuation

- Discontinuation only if:
  - Per patient request/risk decrease
  - Safety concerns related to medication, may consider alternative approved medication
  - Patient becomes HIV positive
  - Continue PrEP for at least 28 days after high risk situation
  - If Patient wishes to Restart PrEP the same pre-treatment eval should be performed
  - Remember to screen for HIV/STIs per risk even after PrEP is stopped





# HIV Care: Linkage to Care

# Rapid ART Start

- Rapid start of ART (antiretroviral therapy): Starting ART as soon as patient is willing after HIV diagnosis, goal within 1 week.
  - has showed better engagement and retention in care
  - Overtime decreased inflammation within the body, linked to decreased CVD
  - Regimens available that can be started prior to all lab results returning
    - Avoid regimens containing abacavir
    - Should cover HBV unless aware of immune status
  - Patient must be willing, ready and able without contraindications
- Obtain recommended labs at first visit and start ART-do not wait for labs to return to start ART, can modify regimen if needed when resistance results and other labs result.

Utilize YKHC Raven power plans:  
HIV





LET'S STOP HIV  
TOGETHER

Learn more at [cdc.gov/stophivtogether](https://cdc.gov/stophivtogether)

## Resources



# ANTHC Early Intervention Services/HIV Clinical Team

Program: (907)729-2907 Hospital on-call ID: (907)563-2662

## Clinicians

**Leah Besh, PA-C, HIV Clinical Specialist** [labesh@anthc.org](mailto:labesh@anthc.org)

**Hope McGratty PA-C, HIV Clinical Specialist** [hmmcgratty@anthc.org](mailto:hmmcgratty@anthc.org)

Jacob Gray, MD, Infectious Disease Specialist

Clifford Schneider, MD, Infectious Disease Specialist

Benjamin Westley, MD Pediatric Infectious Disease Specialist

## Patient RN Care Managers

**Lisa Rea, RN** [Idrea@anthc.org](mailto:Idrea@anthc.org)

Katrina Kearney, RN

**Claire Lewis, NP YKHC**

Tillie Powers, RN SCF

Sara Malamute, RN TCC

## Program Support Team

Linda Hogins, CMA

Laura Riley, Sr. Program Manager

Minnie Chavez, ACM

Jenn Arnold, AETC Coordinator

Jeni Williamson, Rural Navigator, ECHO Coordinator



# PrEP Resources: Navigation



HIV-prevention and **payment assistance resources** in English and Spanish.

For patients and providers.



Search for **PrEP providers** in your area.

In collaboration with NPIN/PrEPLocator.

A screenshot of the 'Find a PrEP Provider' website interface. At the top, there is a navigation menu with links: 'WHAT IS PREP?', 'FIND A PROVIDER', 'PREP RESOURCES', 'WHAT IS PEP?', 'WHAT IS U-U?', 'ADD LOCATION', and 'ABOUT'. The main heading is 'Find a PrEP Provider'. Below the heading is a search input field with the placeholder text 'Enter your city or ZIP code' and a location pin icon. Below the input field is the text '- OR -' and 'Use the interactive map to search by state'. To the right of the text is an interactive map of the United States with a color gradient from dark purple to light orange. At the bottom of the map area, there is a small link: 'Not sure how to search for a PrEP Provider? [Get tips here.](#)'

# PrEP Resources: Clinical Guidance

National PrEP Line: Free clinician consultations

## PrEP: Pre-Exposure Prophylaxis



Clinically supported advice on PrEP for healthcare providers

Up-to-date clinical consultation for PrEP decision-making, from determining when PrEP is an appropriate part of a prevention program to understanding laboratory protocols and follow-up tests.

**Call for a Phone Consultation**

**(855) 448-7737 or (855) HIV-PrEP**

**Monday – Friday, 9 a.m. – 8 p.m. ET**

[nccc.ucsf.edu](http://nccc.ucsf.edu)



# Alaskan AIDS Education and Training Center (AETC)

- Alaska AIDS Education and Training Centers offers a wide range of training opportunities for health professionals, including lectures, preceptorships, webinars, and conferences.
- Delivers innovative education and training to improve access to care and quality of life for people with or are at increased risk for acquiring HIV.
  - Education and training
  - Clinical consultation
  - Capacity building assistance on prevention, diagnosis, and treatment of HIV and commonly associated co-morbidities
- For more information, please contact [AETC@anthc.org](mailto:AETC@anthc.org)





# National HIV Curriculum

[www.hiv.uw.edu](http://www.hiv.uw.edu)

FREE CME, MOC, CNE, Pharmacology CE, and CE

Free, up-to-date website for novice to expert clinicians to learn about HIV diagnosis, treatment, and prevention

The screenshot shows the top navigation bar of the National HIV Curriculum website. It includes several menu items with icons: Antiretroviral Medications, Course Modules, Question Bank, Clinical Challenges, Tools & Calculators, Clinical Consultation, and HIV Resources. Below the navigation bar is a dark blue banner with the text 'National HIV Curriculum' and a description: 'The National HIV Curriculum is an AIDS Education and Training Center Program and led by the University of Washington.' There are also buttons for 'Contributors' and 'Site Overview', and a note that the program is 'Funded by Health Resources and Services Administration (HRSA)'. The background of the banner features a stylized blue virus particle.

Recertified for CE in fall 2020, six modules with 37 lessons and corresponding question bank topics address:

- Screening and Diagnosis
- Basic HIV Primary Care
- Antiretroviral Therapy
- Co-Occurring Conditions
- Prevention of HIV
- Key Populations

The National HIV Curriculum is an AIDS Education and Training Center (AETC) Program supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services as part of an award totaling \$1,000,000 with 0% financed with non-governmental sources.



# National HIV PrEP Curriculum

[www.hivprep.uw.edu](http://www.hivprep.uw.edu)

This free curriculum addresses how to assess, initiate, and monitor HIV PrEP.

- **11 lessons** offer 14 free CME credit, CNE and CE contact hours, 10 pharmacology CE for APNs, and Certificates of Completion
- **HIV PrEP Training Certificate** available in HIV PrEP Fundamentals Module
- **HIV PrEP Tools for Clinicians** app supports interactions with patient from assessment and medication selection to what labs to order
- Experts discuss relevant topics via **Mini-Lectures, Panel Discussions, and Interviews**
- 4 concise **HIV PrEP Clinical Guides** review HIV PrEP studies, injectable cabotegravir, on-demand dosing, and recommended lab tests
- A learning group tool for healthcare entities & training programs to enroll members, assign units, and track progress

www.iwantthekit.org

- I Want the Kit (IWTK) is an STI self-collection, mail-based program that started at the Johns Hopkins University School of Medicine (JHU) in 2004.
- Since 2011, ANTHC has partnered with JHU to provide testing of self-swab samples for chlamydia, gonorrhea and trichomoniasis.
- **The Alaska-based service is working on expanding the service to include testing for HIV, Hepatitis C, Hepatitis B and syphilis using a finger prick blood collection.**
- For more information, email: [alaskakit@anthc.org](mailto:alaskakit@anthc.org)



# Alaska ID ECHO

Alaska Infectious Disease ECHO: HCV, HIV, PrEP and common STIs  
Second Tuesday of every month from noon-1 PM AKST

- Enduring CEs Available
  - HIV Update
  - Syphilis 101
  - Congenital Syphilis
  - PrEP mini-series



ALASKA NATIVE  
TRIBAL HEALTH  
CONSORTIUM

[www.anthc.org/ak-id-echo](http://www.anthc.org/ak-id-echo) // [akidecho@anthc.org](mailto:akidecho@anthc.org)



# Questions

## Leah Besh PA-C, AAHIVS

*Director HIV Clinical Services*  
Alaska Native Tribal Health Consortium

TigerText for urgent concerns  
Email: [labesh@anthc.org](mailto:labesh@anthc.org)  
[aetc@anthc.org](mailto:aetc@anthc.org)-for training inquiries  
ANTHC Early Intervention Services  
HIV Program: 907-729-2907

