



Webcast 2.2

## Who Might Benefit from PrEP? Individual-Level Assessments

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**PRESENTED BY:**

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# Overview

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- Sexual health discussions
- Understanding and assessing individual-level risk
- Risk-assessment tools
- The context for sexual health discussions: who does them?
- What do the PrEP guidelines say?

# Case Study

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## **Patient: 35-year-old gay HIV-negative barista**

- In a long-term relationship with a 36-year-old man with HIV on ART; viral load repeatedly undetectable
- Asks, while pouring your venti latte with an extra shot, “How much do I need to worry about getting HIV?”
- His partner tells him that HIV transmission risk is low with an undetectable viral load
- Barista wonders if he needs to keep using condoms

# Case Study

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## What would you recommend?

- Given his partner's undetectable viral load, it is safe for them to stop using condoms?
  - He should support his partner in maintaining an undetectable viral load, as keeping it undetectable is likely the most important factor to him staying HIV-negative.
  - He should consider pre-exposure prophylaxis (PrEP).
  - They should wear a condom every time they have anal sex.

# Population versus Individual Risk

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Your jurisdiction's  
population

# Population versus Individual Risk

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Your jurisdiction's  
population



Population at  
high-risk for HIV

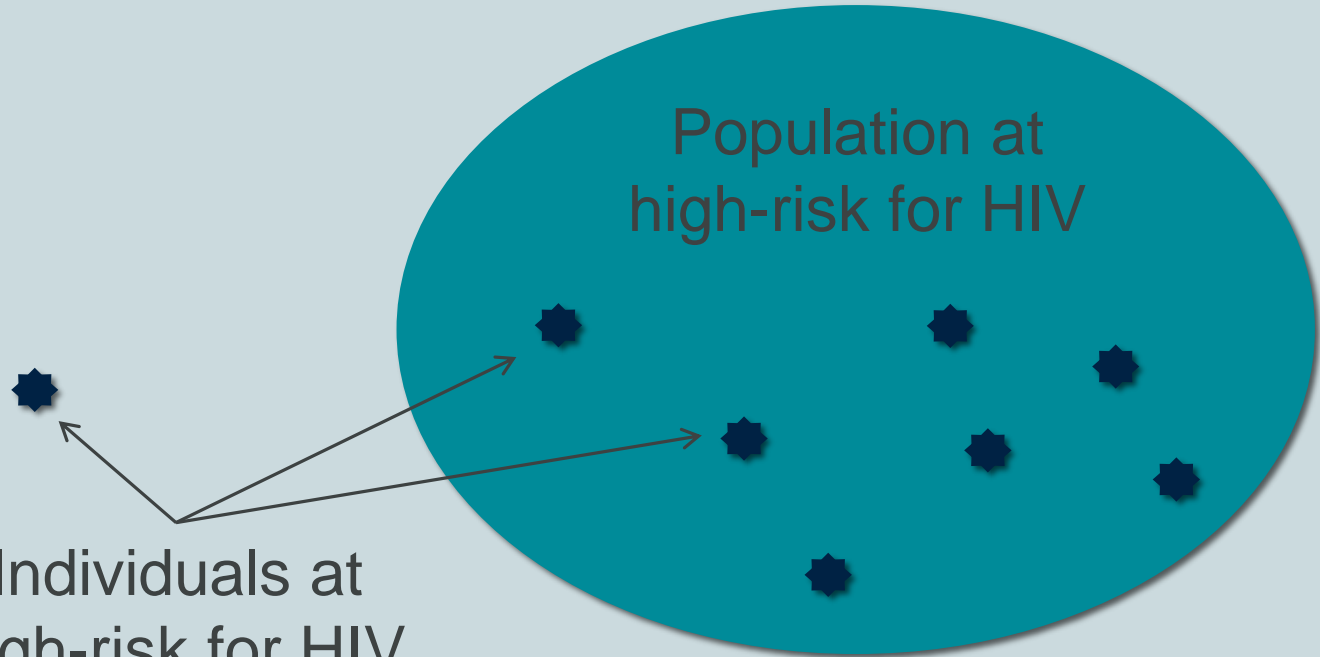
# Population versus Individual Risk

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Your jurisdiction's  
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Population at  
high-risk for HIV

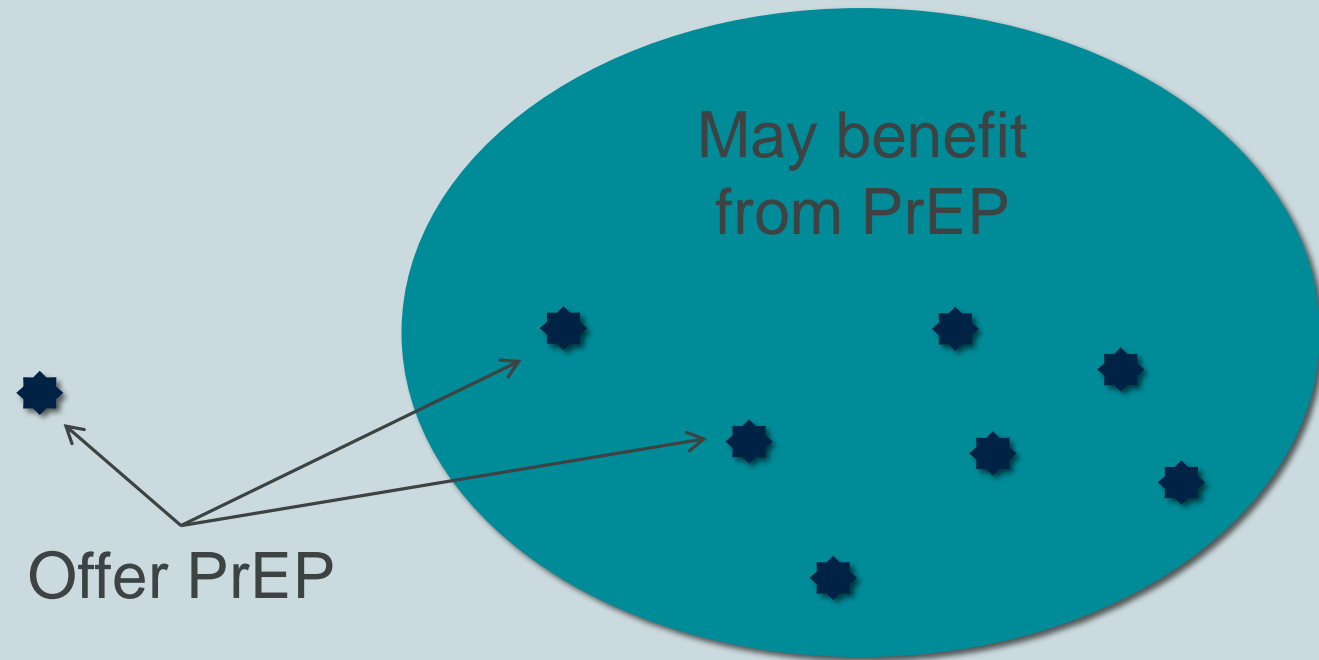
Individuals at  
high-risk for HIV



# Pulling it All Together

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No need for PrEP





# Engaging in Sexual Health Discussions

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- Create and maintain an open, trusting, and confidential environment for discussion of sexual behaviors, as well as substance use.
- Build an ongoing dialogue with the patient regarding their risk behavior.
- Reinforce the fact that PrEP is not always effective in preventing HIV infection, particularly if used inconsistently, but that consistent use of PrEP – particularly when used together with other prevention methods – confers very high levels of protection.

# Employ a Sexual Health Framework

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- Sexual health is an element of overall health
- Place behaviors in the context of having a healthy sex life
- Frame messaging in a supportive light
  - Not “I am sorry that you have chlamydia.”
  - Rather “I am so glad you came in so we could take care of this for you.”
- Open the door for disclosure and ongoing dialogue
- Understand patient desires and goals

# Sexual Health Topics to Discuss

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- Sexual orientation and gender identity
- Relationship status and support systems
- Sexual risk behaviors and prior sexual history (including STDs)
- Prior use of post-exposure prophylaxis (PEP)
- Substance-using risk behaviors
- Behavioral health needs

# Specific Topics to Cover

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From the U.S. Public Health Service Clinical Practice Guidelines for PrEP

<b>Men Who Have Sex with Men</b>	<b>Heterosexual Women and Men</b>	<b>Injection Drug Users</b>
<ul style="list-style-type: none"><li>• Sexual partner with HIV</li><li>• Recent bacterial STD</li><li>• High number of sex partners</li><li>• History of inconsistent or no condom use</li><li>• Commercial sex work</li></ul>	<ul style="list-style-type: none"><li>• Sexual partner with HIV</li><li>• Recent bacterial STD</li><li>• High number of sex partners</li><li>• History of inconsistent or no condom use</li><li>• Commercial sex work</li><li>• Lives in high-prevalence area or network</li></ul>	<ul style="list-style-type: none"><li>• HIV-positive injecting partner</li><li>• Sharing injection equipment</li><li>• Recent drug treatment (but currently injecting)</li></ul>

# Consider Using an Objective Tool to Assess Risk

## Example 1: MSM Risk Index from the US Public Health Service Clinical Provider's Supplement to the PrEP Guidelines

MSM Risk Index <sup>25</sup>			
1	How old are you today?	If <18 years, score 0 If 18-28 years, score 8 If 29-40 years, score 5 If 41-48 years, score 2 If 49 years or more, score 0	_____
2	In the last 6 months, how many men have you had sex with?	If >10 male partners, score 7 If 6-10 male partners, score 4 If 0-5 male partners, score 0	_____
3	In the last 6 months, how many times did you have receptive anal sex (you were the bottom) with a man without a condom?	If 1 or more times, score 10 If 0 times, score 0	_____
4	In the last 6 months, how many of your male sex partners were HIV-positive?	If >1 positive partner, score 8 If 1 positive partner, score 4 If <1 positive partner, score 0	_____
5	In the last 6 months, how many times did you have insertive anal sex (you were the top) without a condom with a man who was HIV-positive?	If 5 or more times, score 6 If 0 times, score 0	_____
6	In the last 6 months, have you used methamphetamines such as crystal or speed?	If yes, score 6 If no, score 0	_____
Add down entries in right column to calculate total score			_____
			<b>TOTAL SCORE*</b>

\* If score is 10 or greater, evaluate for intensive HIV prevention services including PrEP. If score is below 10, provide indicated standard HIV prevention services.

## Example 2: Denver HIV Risk Score

**The Refined Denver HIV Risk Score**

	<b>Score</b>
<b>Patient age</b>	
22-25 or 55-60	+ 4
26-32 or 47-54	+ 10
33-46	+ 12
<b>Male gender</b>	+ 21
<b>Patient self-reported race/ethnicity</b>	
Black	+ 9
Hispanic	+ 3
<b>Does the patient have sex with men, women, or both?</b>	
Men or both	+ 22
<b>Has the patient ever injected drugs?</b>	
Yes	+ 9
<b>Has the patient ever been tested for HIV?</b>	
Yes	- 4
<b>Total Score</b>	

Patients who score 30 points or greater should be considered at increased risk for having undiagnosed HIV infection and should be routinely offered HIV testing.

Very Low Risk	Low Risk	Moderate Risk	High Risk	Very High Risk
<20 points	20-29 points	30-39 points	40-49 points	≥50 points




Haukoos, *American Journal of Epidemiology*, 2012; 175(8):838-46

Haukoos, *Annals of Emergency Medicine*, 2013;61(3)353-61

## Example 3: Online Risk Calculator

- A decision-analytic model of PrEP for MSM.
- Tool available online at <https://ictrweb.johnshopkins.edu/ictr/utility/prep.cfm>.
- Population Cost-Effectiveness Calculator also developed and available at same web address.

### HIV Pre-Exposure Prophylaxis (PrEP) Risk Assessment Tool: Individual Risk Calculator

1. What percent of the time do you use condoms when having anal sex, including both receptive (bottom) and insertive (top)?  %
2. What percent of the time are you the insertive partner (top) when having anal sex?  %
3. On average, how many times per month do you have anal sex? 
4. Are you in a monogamous relationship with an HIV positive partner? Yes  No

# HIV Pre-Exposure Prophylaxis (PrEP) Risk Assessment Tool: Individual Risk Calculator

1. What percent of the time do you use condoms when having anal sex, including both receptive (bottom) and insertive (top)?

50 %

2. What percent of the time are you the insertive partner (top) when having anal sex?

50 %

3. On average, how many times per month do you have anal sex?

6

4. Are you in a monogamous relationship with an HIV positive partner?

Yes  No

4b. What is the HIV prevalence in your community?

(click [here](#) for CDC estimates of HIV prevalence among MSM by metropolitan area, age, and race/ethnicity. If left blank, the national average of 19% will be used)

16 %

## Risk of acquiring HIV this year:

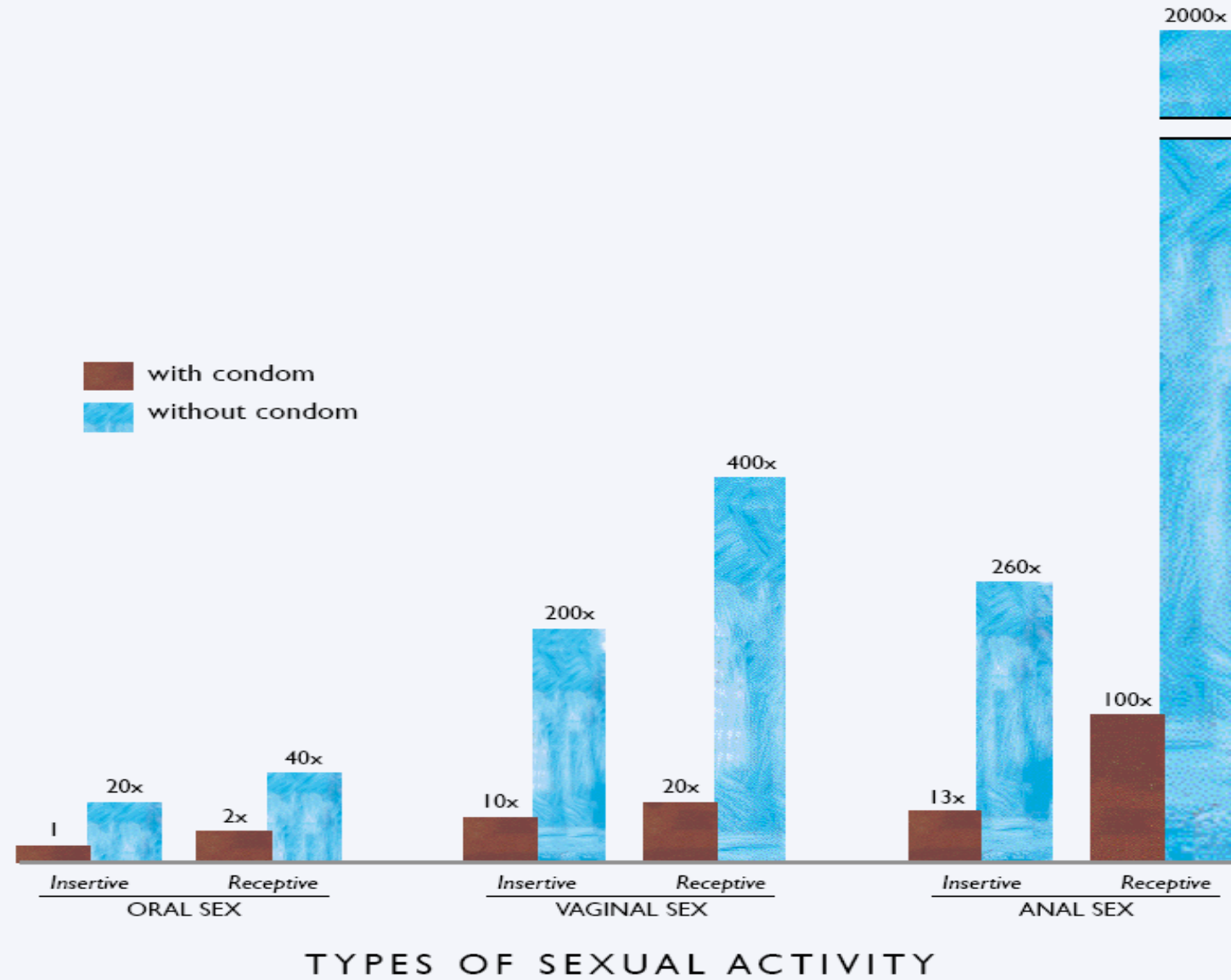
Without PrEP	1 in 44 ( 2.3%)
PrEP, expected adherence <sup>1</sup>	1 in 77 ( 1.3%)
PrEP, expected adherence + increase in risky behavior <sup>2</sup>	1 in 59 ( 1.7%)
PrEP, high adherence <sup>3</sup>	1 in 538 ( 0.2%)
PrEP, high adherence and 100% condom use	1 in 1614 ( 0.1%)



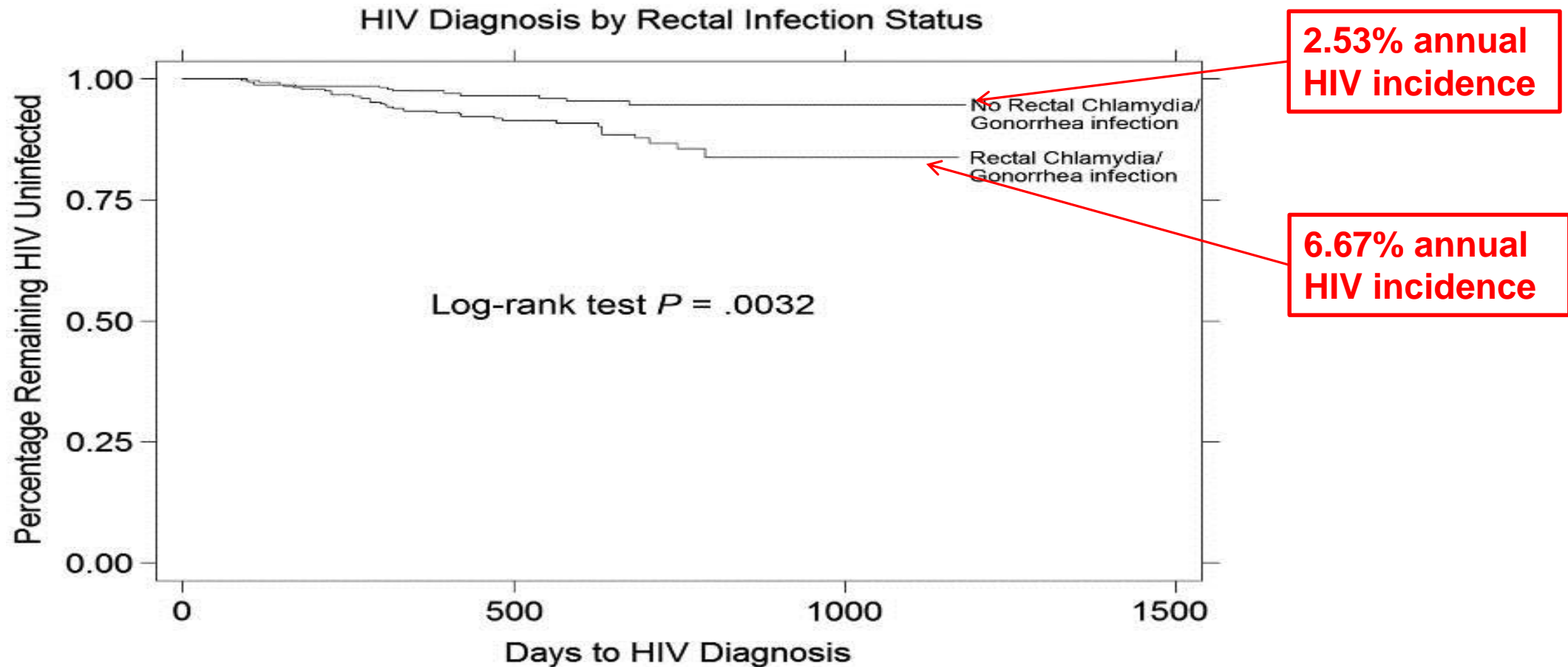
# Place Risk Information into HIV Transmission Context

<b>Estimated per act risk for acquisition of HIV-1 by exposure route</b>	
<u>Exposure Route</u>	<u>Infections per 10,000 exposures to HIV</u>
Blood Transfusion	9,250 (93%)
Childbirth	2,255 (23%)
Needle-sharing IDU	63 (0.63%)
Percutaneous Needle Stick	23 (0.2%)
<b>Sexual risk</b>	
Receptive Anal Intercourse *	138 (1.4%)
Insertive Anal Intercourse *	11 (0.11%)
Receptive Vaginal Intercourse *	8 (0.08%)
Insertive Vaginal Intercourse *	4 (0.04%)
Receptive fellatio *	Low
Insertive fellatio *	Low
* Assuming no condom use	

# RELATIVE RISK FOR TRANSMISSION<sup>1</sup>



# Ask about STDs: HIV Incidence Increased Following Rectal Bacterial Infections in MSM



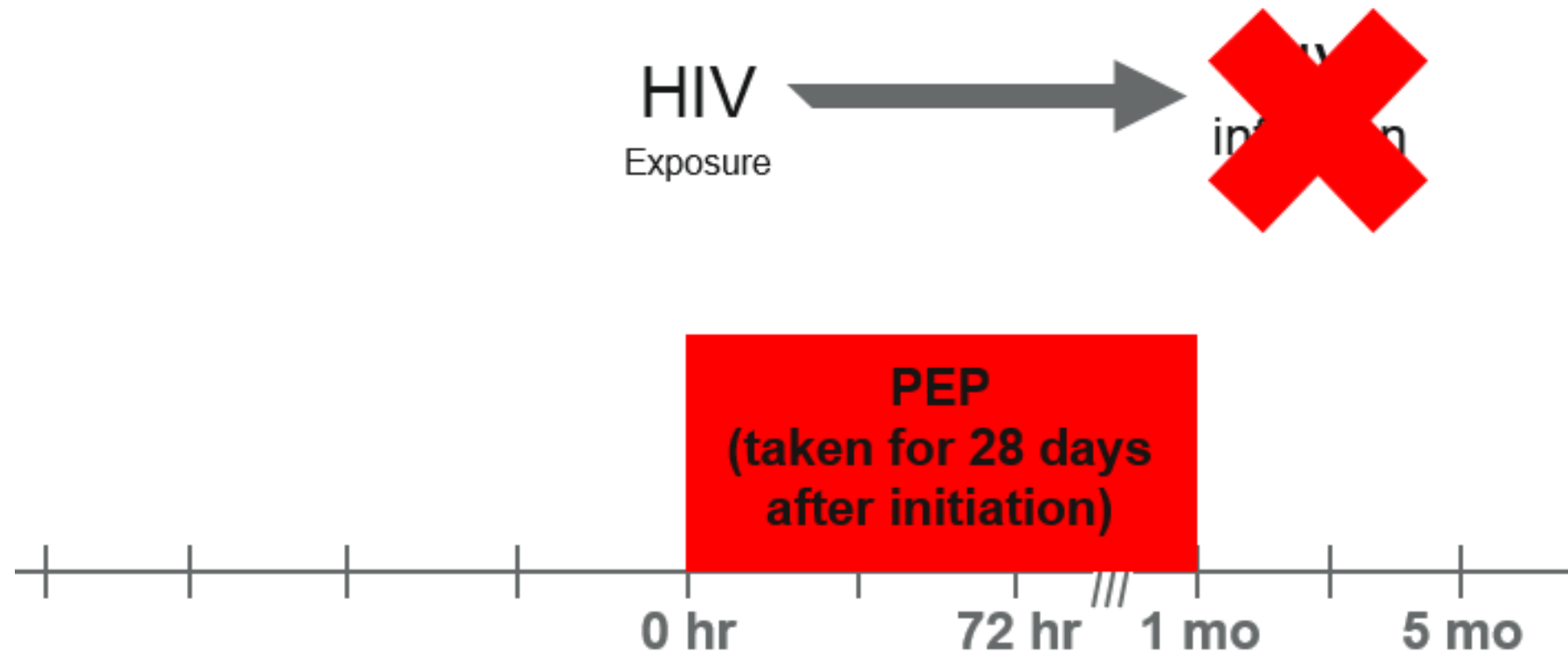
# Ask about STDs: HIV Incidence Increased in MSM with Prior Syphilis

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- Results from the iPrEx study of PrEP in MSM:
  - 2.8 cases of HIV per 100 person-years follow up for those with ***no incident syphilis***
  - 8.0 cases of HIV per 100 person-years follow up for those with ***incident syphilis***
- Hazard ratio of 2.6 for acquiring HIV for those with syphilis

# Persons Presenting for PEP May Be Ideal Candidates for PrEP

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# Discussions Should Take Into Consideration Context Provided by Local Prevalence Data

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Refer to Webcast 2.1 on population-level risk assessments for additional information.

Who should facilitate sexual health discussions and/or educate about PrEP?

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- Primary care provider or other medical provider



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- Primary care provider or other medical provider
- Sexual health/STD clinician

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- Primary care provider or other medical provider
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- Family planning practitioner

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- Primary care provider or other medical provider
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- Family planning practitioner
- Health department clinical/educational outreach staff

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- Disease intervention specialist

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- Primary care provider or other medical provider
- Sexual health/STD clinician
- Family planning practitioner
- Health department clinical/educational outreach staff
- Disease intervention specialist
- Anyone else who interacts with persons at risk for HIV in the community

What do the US Public Health Service  
Clinical Practice Guidelines for PrEP say?

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# Assessing Risk in MSM

In the past 6 months:

- Have you had sex with men, women, or both?
- If men or both sexes, how many men have you had sex with?
- How many times did you have receptive anal sex (you were the bottom) with a man who was not wearing a condom?
- How many of your male sex partners were HIV-positive?
- If any positive, with these HIV-positive male partners, how many times did you have insertive anal sex (you were the top) without you wearing a condom?
- Have you used methamphetamines (such as crystal or speed)?

# Assessing Risk in Heterosexual Men and Women

In the past 6 months:

- Have you had sex with men, women, or both?
- If opposite sex or both sexes, how many men/women have you had sex with?
- How many times did you have vaginal or anal sex when neither you nor your partner wore a condom?
- How many of your sex partners were HIV-positive?
- If any positive, with these HIV-positive partners, how many times did you have vaginal or anal sex without a condom?



# Assessing Risk in Injection Drug Users

- Have you ever injected drugs that were not prescribed to you by a clinician?
- If yes, when did you last inject unprescribed drugs?
- In the past 6 months, have you injected by using needles, syringes, or other drug preparation equipment that had already been used by another person?
- In the past 6 months, have you been in a methadone or other medication-based drug treatment program?

# International AIDS Society Guidelines

Daily PrEP should be recommended for:

- Persons at high risk for HIV based on background incidence ( $> 2\%$ ) or
- Recent diagnosis of incident STIs, especially syphilis, gonorrhea, or chlamydia.
- Individuals who have used post-exposure prophylaxis (PEP) more than twice in the past year.
- People who inject drugs and who share injection equipment, inject 1 or more times a day, or inject cocaine or methamphetamines.

# Conclusions

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- Create the opportunity for open and honest risk discussions and disclosure
- Assess risk and potential PrEP benefit using objective measures, if possible
  - Risk scale (provider- or patient-implemented)
  - Prior PEP use
  - STDs: rectal bacterial infections or syphilis in MSM
- Place risk and potential use of PrEP in larger context of sexual health
- Consider local epidemiologic data (see webcast 2.1 for additional information, resources, and tools)

# NACCHO's Educational Series on PrEP and Local Health Departments

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## Module 1

PrEP for HIV Prevention: An Introduction

Beyond the Basics: The Science of PrEP

US Public Health Service Clinical Practice Guidelines for PrEP

## Module 2

Who Might Benefit from PrEP: Population-level Assessments

**Who Might Benefit from PrEP: Individual-level Assessments**

## Module 3

Increasing PrEP Awareness and Knowledge in Your Jurisdiction

Incorporating PrEP into Comprehensive HIV Prevention Programs

# PrEP Poses Many Questions

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After watching the webcasts in Modules 1 and 2,  
join us for a live webinar discussion on

**Friday, November 21, 2014**

**from 1:00-2:00 PM ET.**

Register at <http://www.naccho.org/topics/HPDP/hivsti/prep.cfm>.

The webinar will be archived and made available via [naccho.org](http://naccho.org).