HIV in the Agricultural Worker Population: Initiating a Screening Program

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2019 Midwest Stream Forum for Agricultural Worker Health

Great Lakes Bay Health Centers

About Us

Great Lakes Bay Health Centers (GLBHC) is a federally qualified health center with 28+ sites located throughout the Great Lakes Bay region. GLBHC provides quality care that is sensitive to the needs of individuals and communities. Services rendered are not based on ability to pay and are offered without regard to race, religion, national origin, sexual orientation, and gender identity.

Our Vision

"We change lives because we care."

"Cambiamos vidas, porque nos importa."

Our Slogan

"Quality Healthcare for Everyone."

"Atención Médica de Calidad Para Todos."

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HIV Transmission & Myths

1. **You can "catch" HIV by casual contact like sharing living space, using a public toilet, etc.**

2. **There is no treatment for HIV.**

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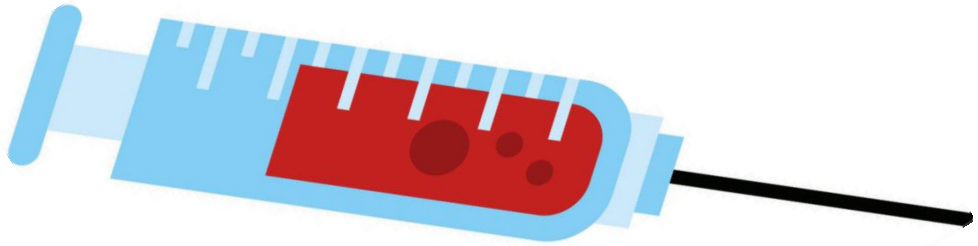
HIV Transmission & Myths cont.

3. **If you get poked with a needle or splashed with blood from an HIV-infected person at work, you will most likely get HIV.**



4. **If you think you might have been exposed to HIV, there is nothing you can do about it but wait and see.**

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HIV Transmission & Myths cont.

5. **Once you get HIV, you will soon be sick all the time and die young. You can't live a normal life.**

6. **You can tell if someone has HIV because they look or act sick.**

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HIV Transmission & Myths cont.

7. **Because of all the funding, it is easy to get treated for HIV once you have been diagnosed.**

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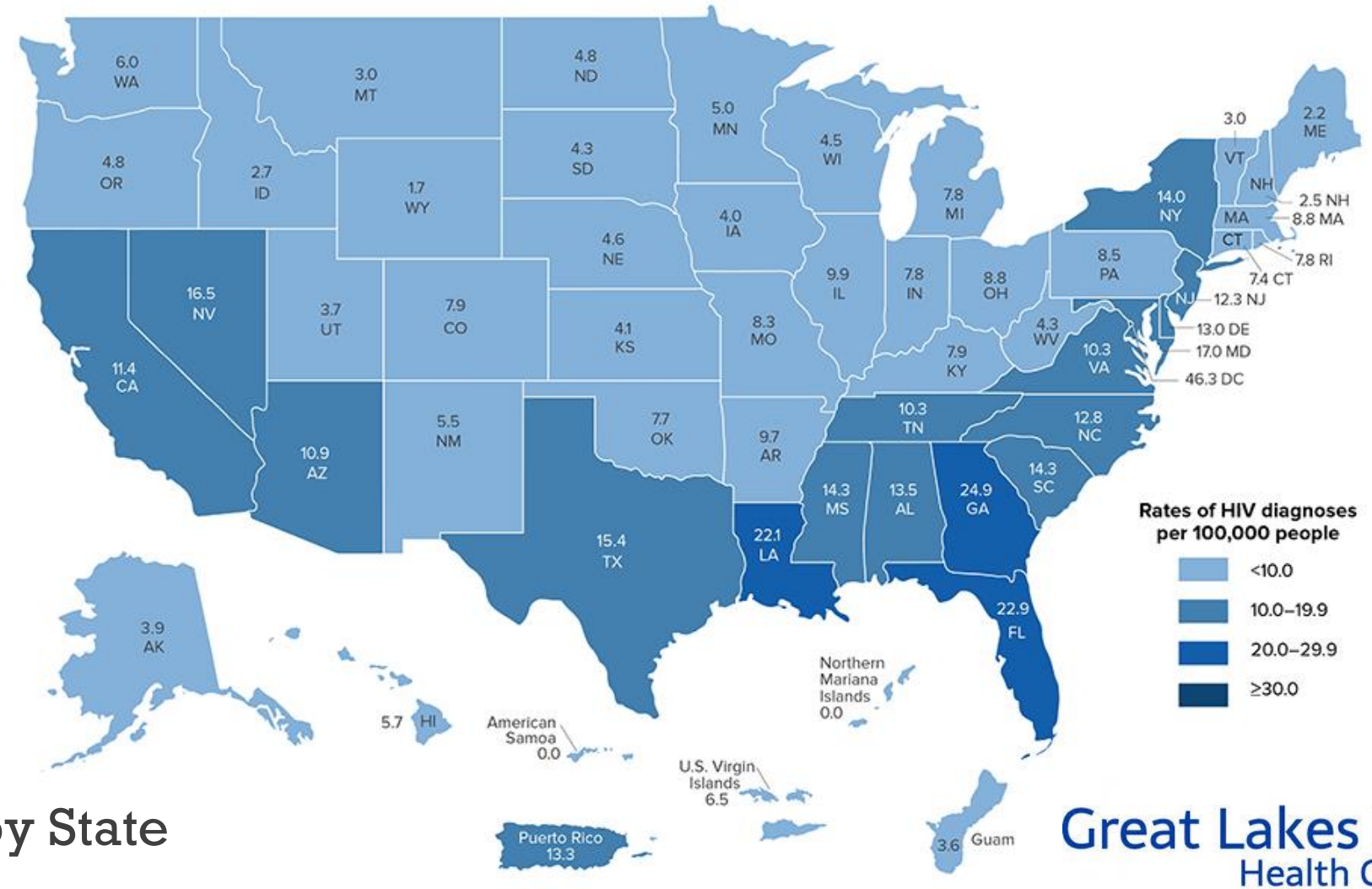
HIV Transmission & Myths cont.

8. HIV is a disease of metropolitan areas or big cities



HIV Diagnosis Rate by State

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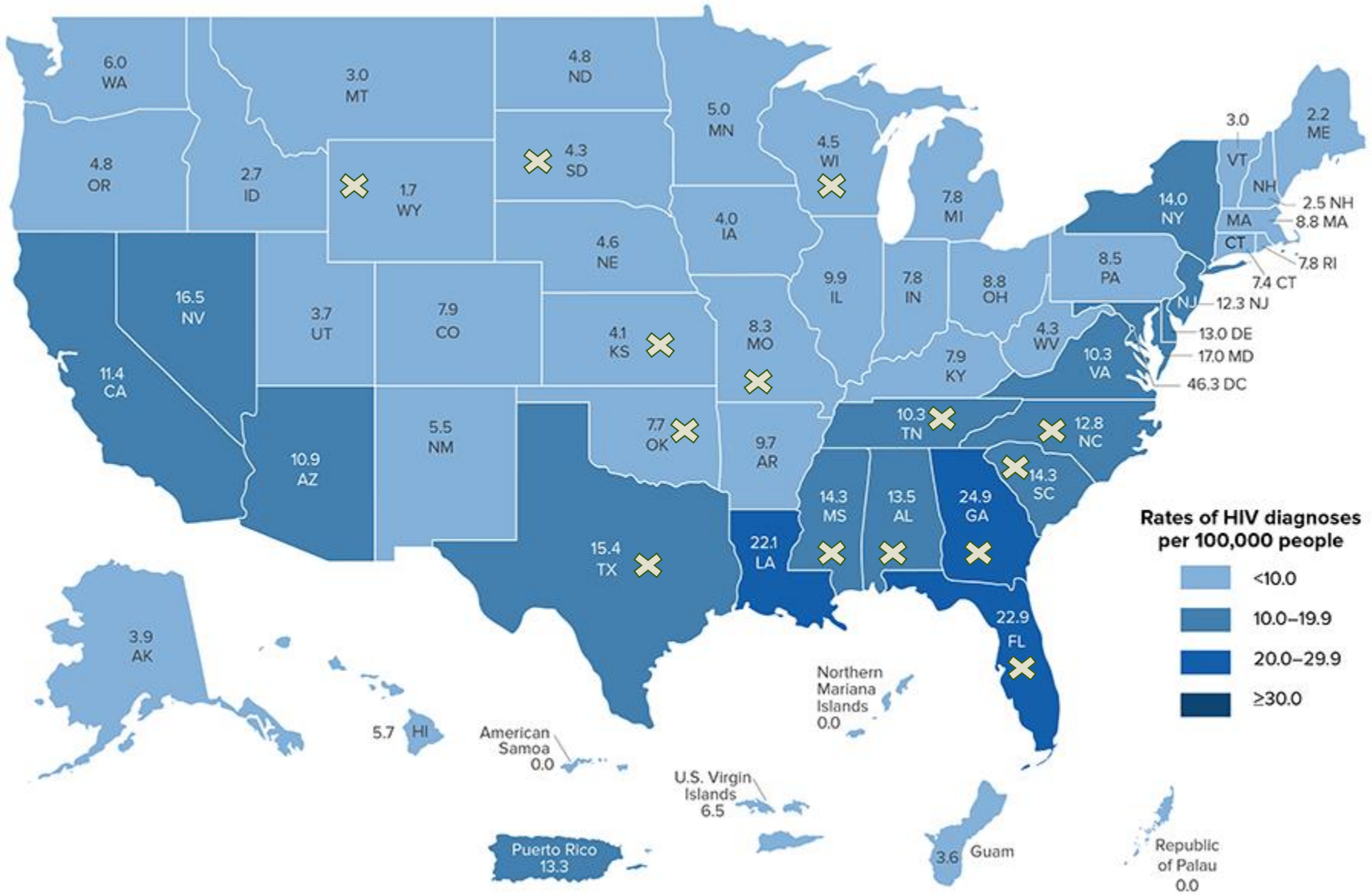
States that did not expand Medicaid



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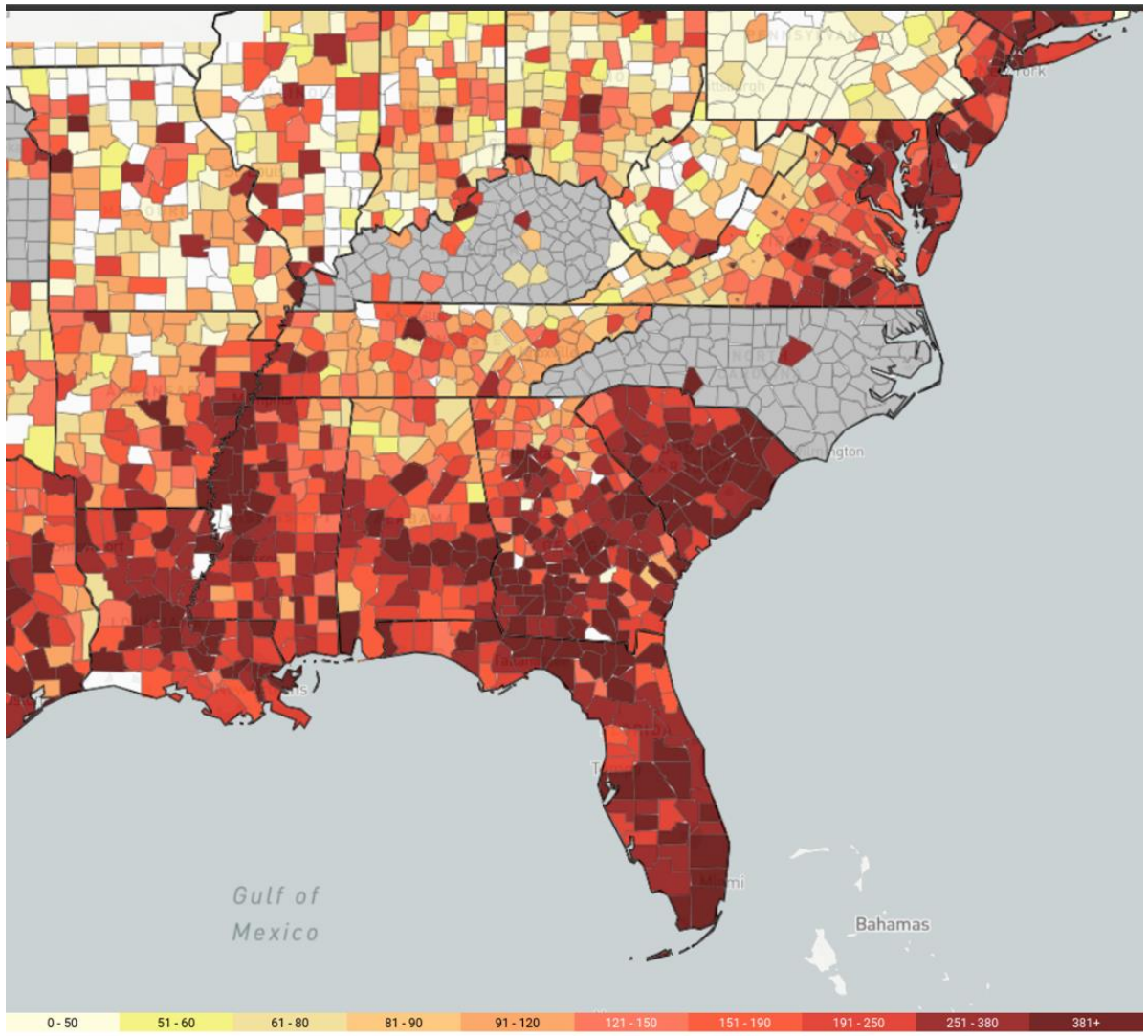
Rates of Persons Living with HIV by County (Southeast)



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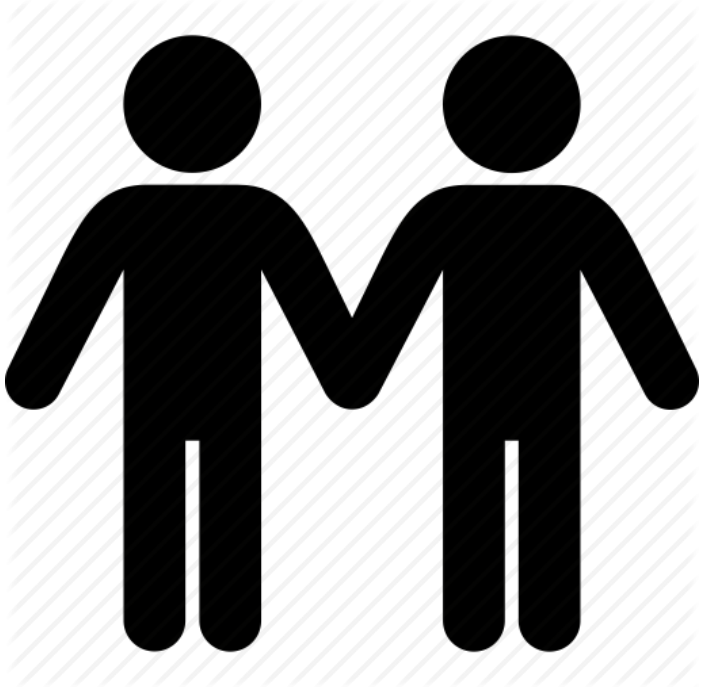
HIV Transmission & Myths cont.

9. **Only men who have sex with men get HIV.**



10. **Male-to-male sexual contact is rare in the Latino community (both in the US and in Latin America and the Caribbean), so HIV is not much of a problem for Latinos or other non-white communities.**

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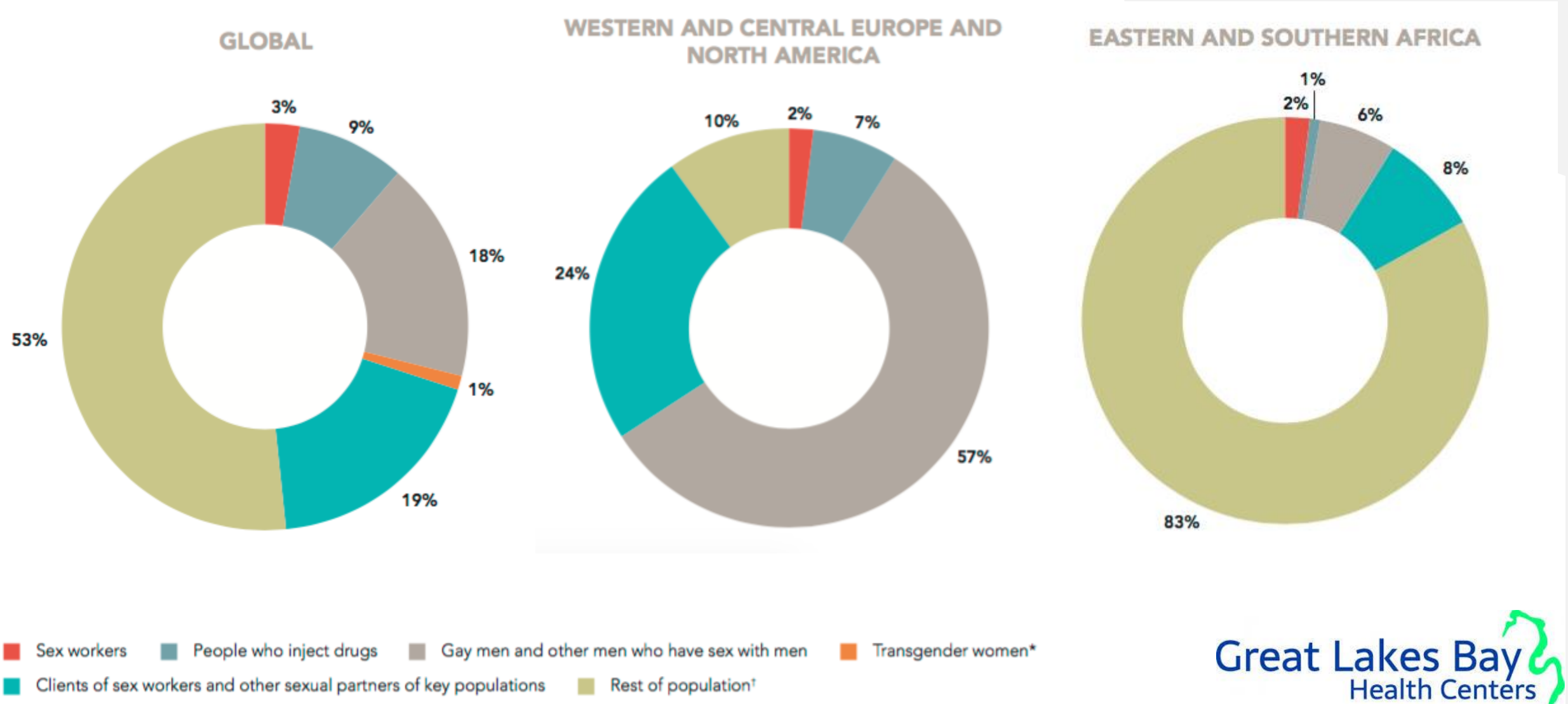
New HIV Infections by Population, 2017

UNAIDS



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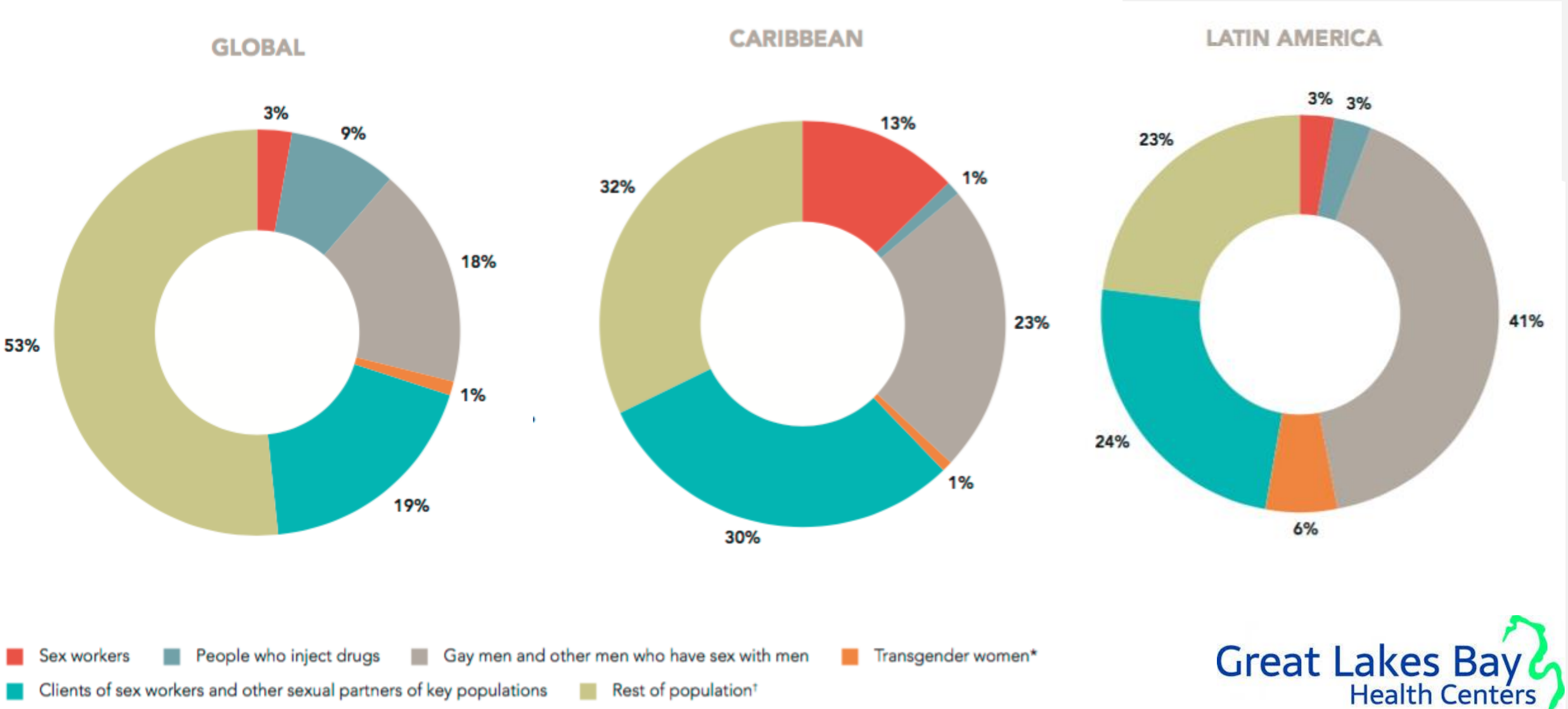
New HIV Infections by Population, 2017

UNAIDS



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HIV Transmission

1. Sexual Transmission

1. Parenteral (Injection) Transmission

1. Maternal Transmission

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Estimated per-act risk for acquisition of HIV, by exposure route

Exposure route		Risk per 10,000 exposures to an infected source (risk)
Blood-borne exposure	Blood transfusion	9000 (9/10)
	Needle-sharing injection drug use	67 (1/150)
	Percutaneous needle stick	23 (1/435)
	Mucous membrane exposure to blood (eg, splash to eye)	10 (1/1,000)
Sexual exposure	Receptive anal intercourse	138 (1/72)
	Insertive anal intercourse	11 (1/900)
	Receptive penile-vaginal intercourse	8 (1/1250)
	Insertive penile-vaginal intercourse	4 (1/2500)
	Receptive or insertive penile-oral intercourse	0-4
Other	Biting, spitting, throwing body fluids (including semen and saliva), sharing sex toys	Negligible

There are scant empiric data on per contact risk of exposure. This table lists the estimated risk by exposure type in the absence of antiretroviral treatment of the HIV-infected source and in the absence of amplifying factors. Most of these estimates are derived through modeling studies of different cohorts. Clinicians need to be aware that estimates of sexual risk are often based on studies of monogamous couples among whom amplifying factors have been treated and repeated exposure may offer as yet unexplained protection from infection. Using a single value for assessing risk of HIV transmission based on route of sexual exposure fails to reflect the variation associated with important cofactors. A variety of amplifying factors and conditions have been identified, and these factors can be expected to increase transmission probability.

Data from:

1. *Donegan E, Stuart M, Niland JC, et al. Infection with human immunodeficiency virus type 1 (HIV-1) among recipients of antibody-positive blood donations. Ann Intern Med 1990; 113:733-9.*
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5. *Cohen MS. Amplified transmission of HIV-1: Missing link in the HIV pandemic. Trans Am Clin Climatol Assoc 2006; 117: 213–225.*
6. *Centers for Disease Control and Prevention, US Department of Health and Human Services. Updated Guidelines for Antiretroviral Postexposure Prophylaxis After Sexual, Injection Drug Use, or Other Nonoccupational Exposure to HIV—United States, 2016.*

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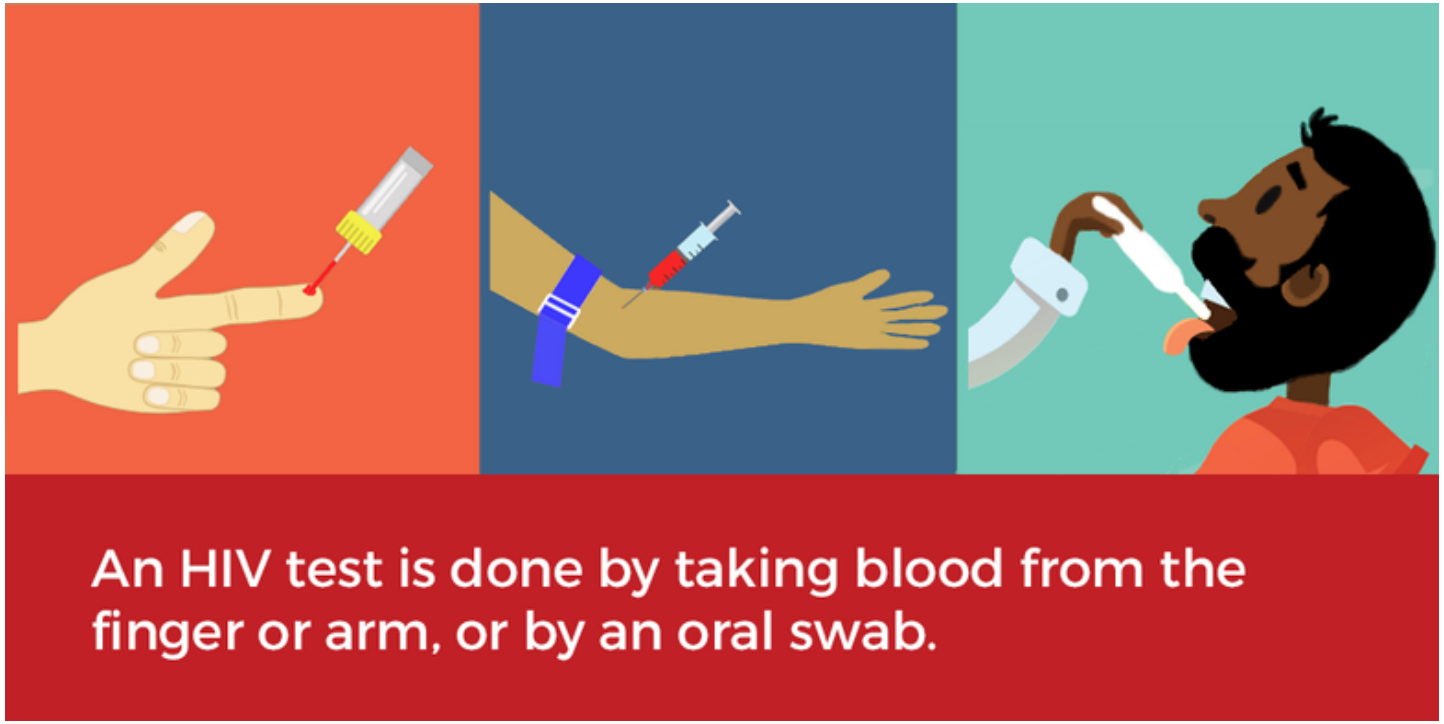
How is HIV diagnosed

Screening Testing

Confirmation/Diagnostic Testing



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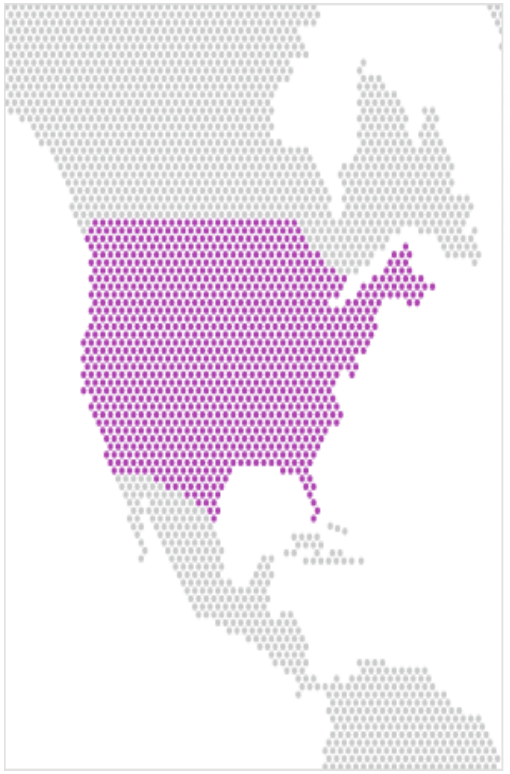
HIV Epidemic

Summary of the global HIV epidemic (2018)

	People living with HIV in 2018	People newly infected with HIV in 2018	HIV-related deaths 2018
Total	37.9 million [32.7 million – 44.0 million]	1.7 million [1.4 million – 2.3 million]	770 000 [570 000 – 1.1 million]
Adults	36.2 million [31.3 million – 42.0 million]	1.6 million [1.2 million – 2.1 million]	670 000 [500 000 – 920 000]
Women	18.8 million [16.4 million – 21.7 million]	–	–
Men	17.4 million [14.8 million – 20.5 million]	–	–
Children (<15 years)	1.7 million [1.3 million – 2.2 million]	160 000 [110 000 – 260 000]	100 000 [64 000 – 160 000]

Source: UNAIDS/WHO estimates

World Health Organization



USA (2018)

1.1m people living with HIV**

n/a adult HIV prevalence (ages 15-49)*

38,500 new HIV infections**

6,000 AIDS-related deaths

n/a adults on antiretroviral treatment*

n/a children on antiretroviral treatment*

*All adults/children living with HIV

Source: UNAIDS, *no data since 2011/12, **CDC 2015

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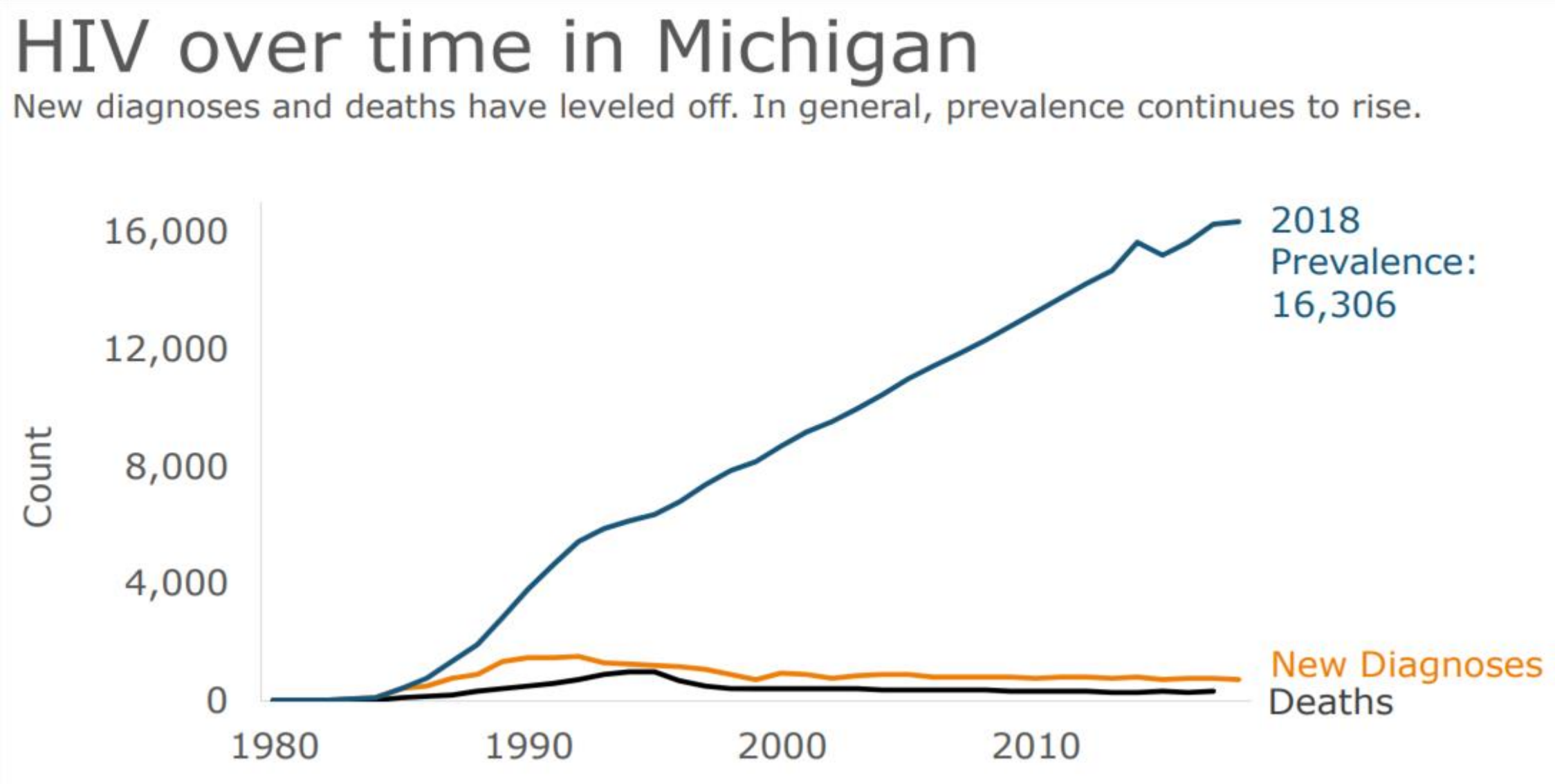
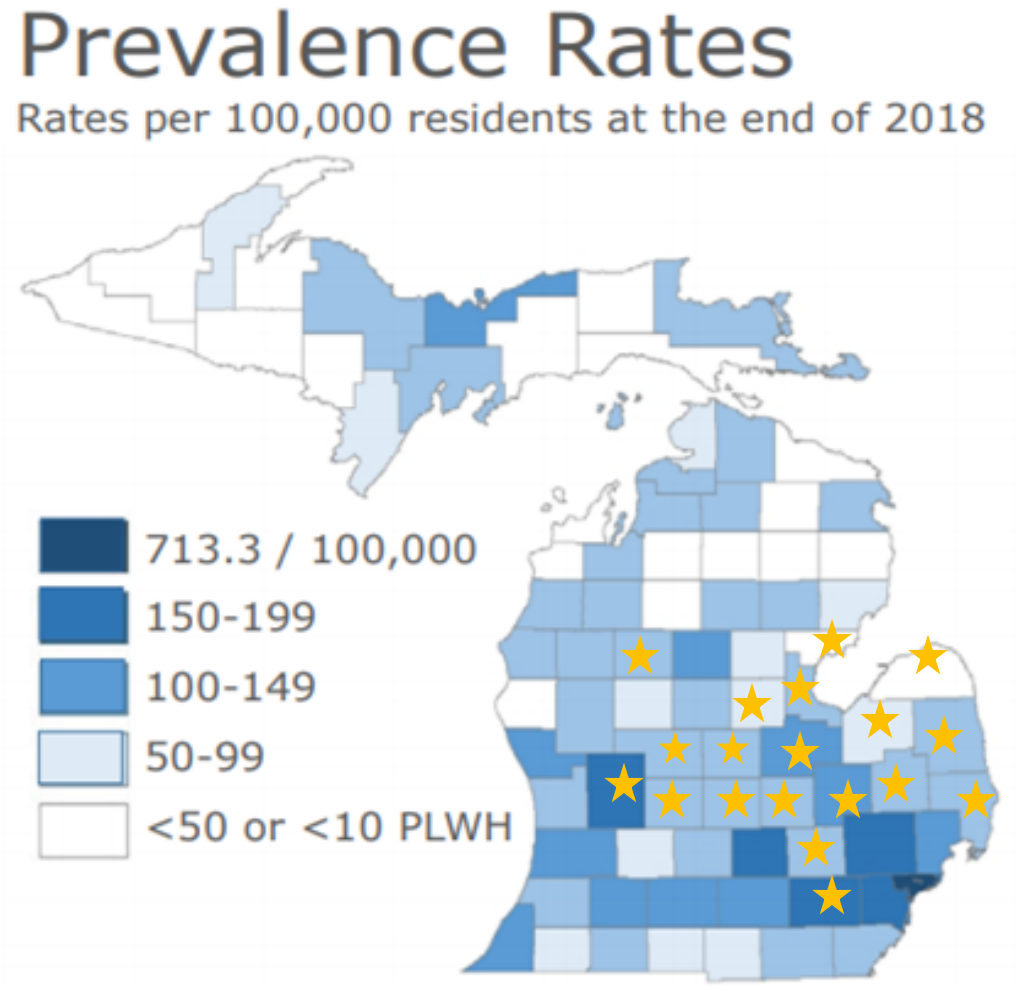
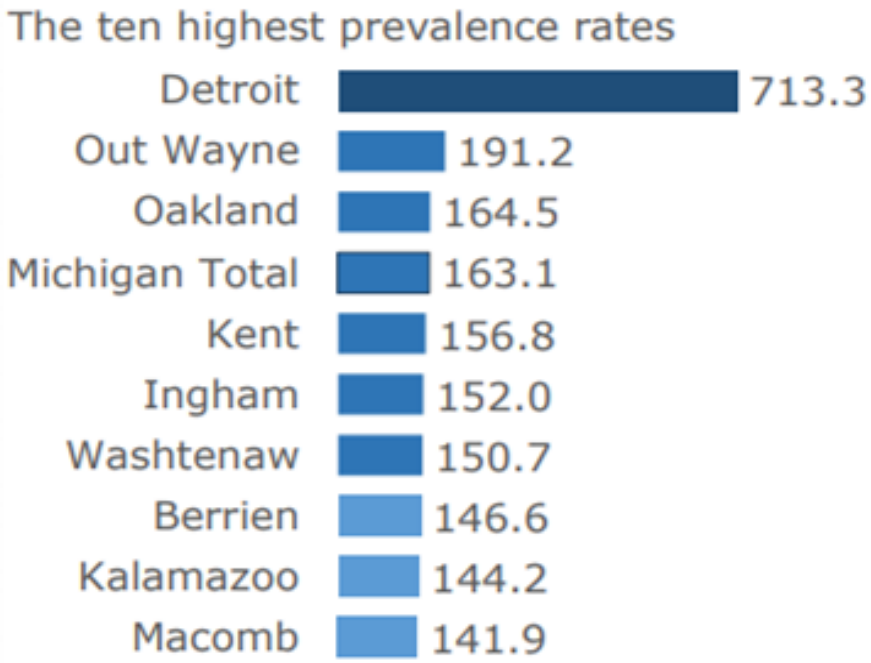
Current Trends



Current Trends cont.





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Who are the Agricultural Workers?

- Many of the agricultural workers either travel domestically from Texas or abroad from Latin America and the Caribbean i.e., “Mexico, Haiti & Guatemala.”
- Agricultural workers perform physical labor and operate machinery to maintain and tend to crops.
- H-2A Worker:
    1. Offer a job that is of a temporary or seasonal nature.
    2. Demonstrate that there are not enough U.S. workers who are able, willing, qualified, and available to do the temporary work.
    3. Show that employing H-2A workers will not adversely affect the wages and working conditions of similarly employed U.S. workers.
    4. The maximum period of stay in H-2A classification is 3 years. A person who has held H-2A nonimmigrant status for a total of 3 years must depart and remain outside the United States for an uninterrupted period of 3 months before seeking readmission as an H-2A nonimmigrant.
    5. An H-2A worker’s spouse and unmarried children under 21 years of age may seek admission in H-4 nonimmigrant classification.

HIV in the Agricultural Worker Population

- Minimal data on HIV incidence and prevalence in agricultural worker populations.
- Some research indicates HIV infection rates as low as 2% to 13% among Mexican and Black agricultural workers.
- Examined the HIV prevalence rates among Mexican and Guatemalan population and compared to HIV prevalence of Latinos in the U.S.
- HIV diagnoses increased 7.8% annually between 2003 and 2006 along the U.S. - Mexico border.
- 700 deported migrant laborers in Tijuana, Mexico found a relatively high prevalence of HIV among men.

HIV Epidemic in Agricultural Worker Country of Origin

	Mexico	Guatemala	Haiti
Estimated number of new HIV infections in 2018	• 11,000	• 47,000	• 160,000
Estimated number of people living with HIV in 2018	• 230,000	• 2,300	• 7,300
Percent of people living with HIV who are virally suppressed.	• 63	• 34	• Unknown (However, 58% of people living with HIV are on ART).
Percent distribution of HIV among focus groups	• Sex work – 7 MSM – 17.3 Transgender – 17.4 People who inject drugs – 2.5	• Sex work – 1 MSM – 9 Transgender – 22.2 People incarcerated– 0.7	• Sex work – 8.7 MSM – 12.9 People incarcerated – 2.7

Challenges and Barriers Encountered by Agricultural Workers

Structural barriers

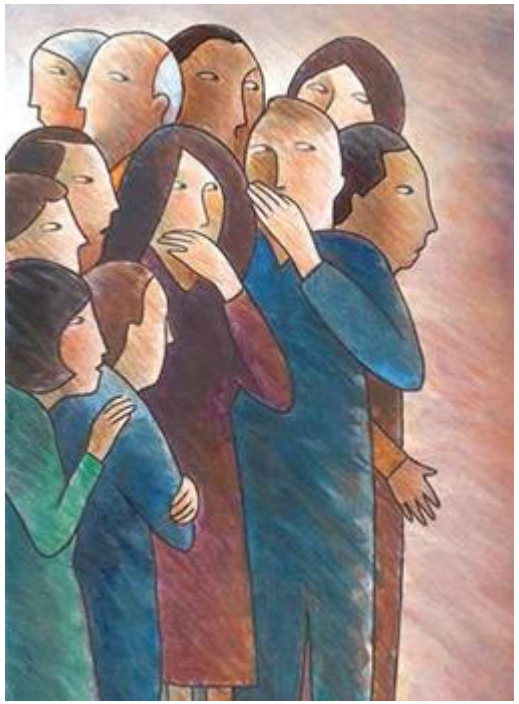
- Poor Housing
- Limited access to healthcare
- Limited English Proficiency
- Social isolation
- Mobile lifestyle
- Poverty
- Low income

Knowledge, Attitudes & Beliefs

- HIV is Not relevant or a serious problem.
- HIV testing is not necessary if perceived healthy looking.
- Discomfort with discussing sexuality.
- Lack of risk reduction strategies.
- Men who have sex with men
- Unprotected sexual activity

Challenges and Barriers Encountered by Agricultural Workers cont.

HIV Stigma



Linkage to Care

Limited English Proficiency

Political Climate

Access to and Continuity of Care

HIV is a specialty practice

Need for multiple providers/access sites

Chronic illness and trends in management

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Access to medications

Cost of medications

1. Lack of insurance

1. Ryan White HIV/AIDS program

1. Emergency Medicaid

How is Great Lakes Bay Health Centers Bridging the Gap?

Addressing the implications of HIV screening

1) Finding a way of introducing non-judgmental testing and providing privacy
2) Have someone present who is trained in discussing the test result and its implications
3) Have the ability to draw blood for laboratory-based testing for confirmation/diagnosis
4) Know resources available for accessing HIV care - our company has HIV specialist and access to medications as well limited transportation services available
5) Have involved, motivated staff who are willing to support patients and help them with their barriers to care, e.g., finding providers and resources prior to a migration if possible

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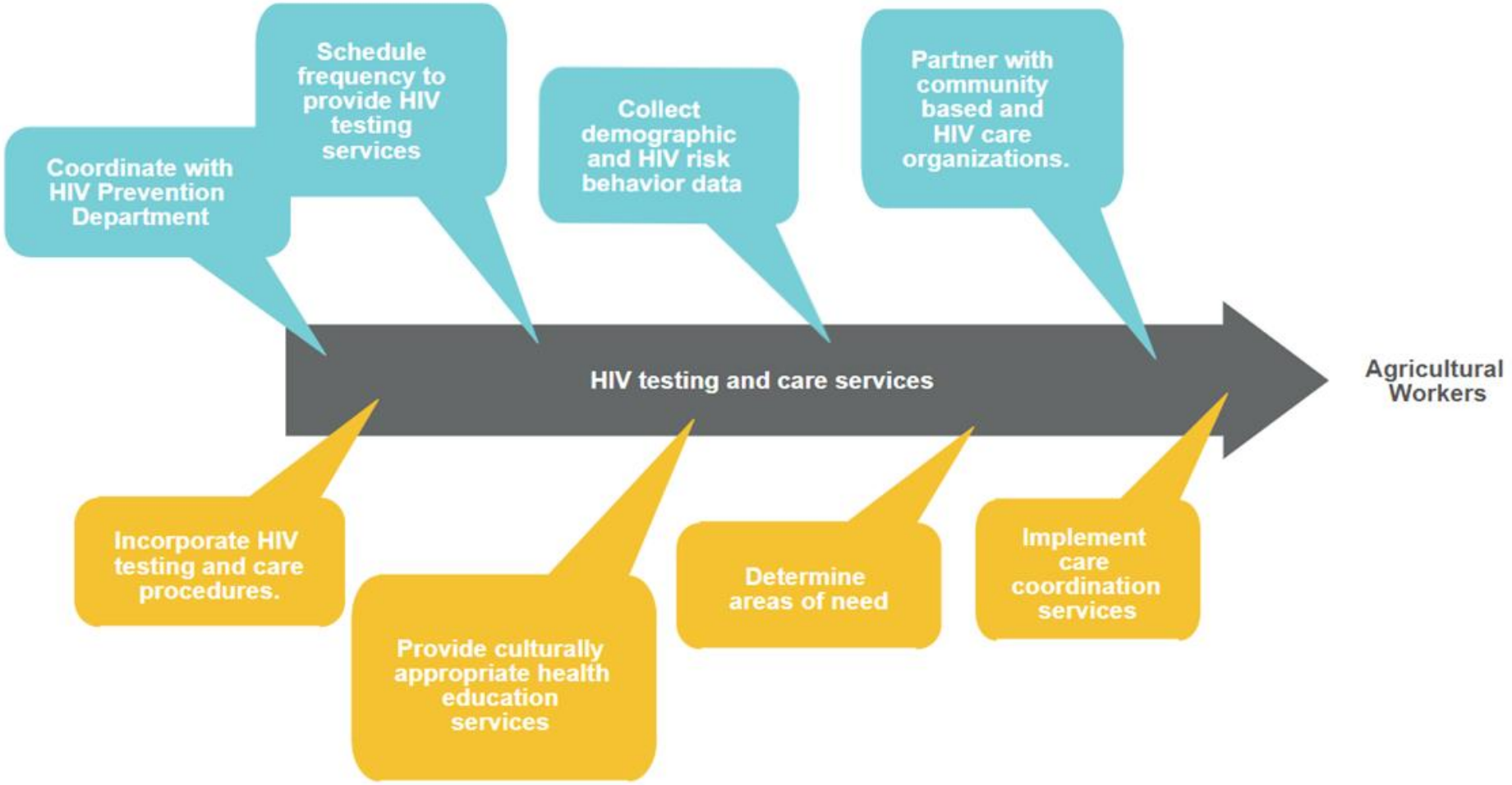
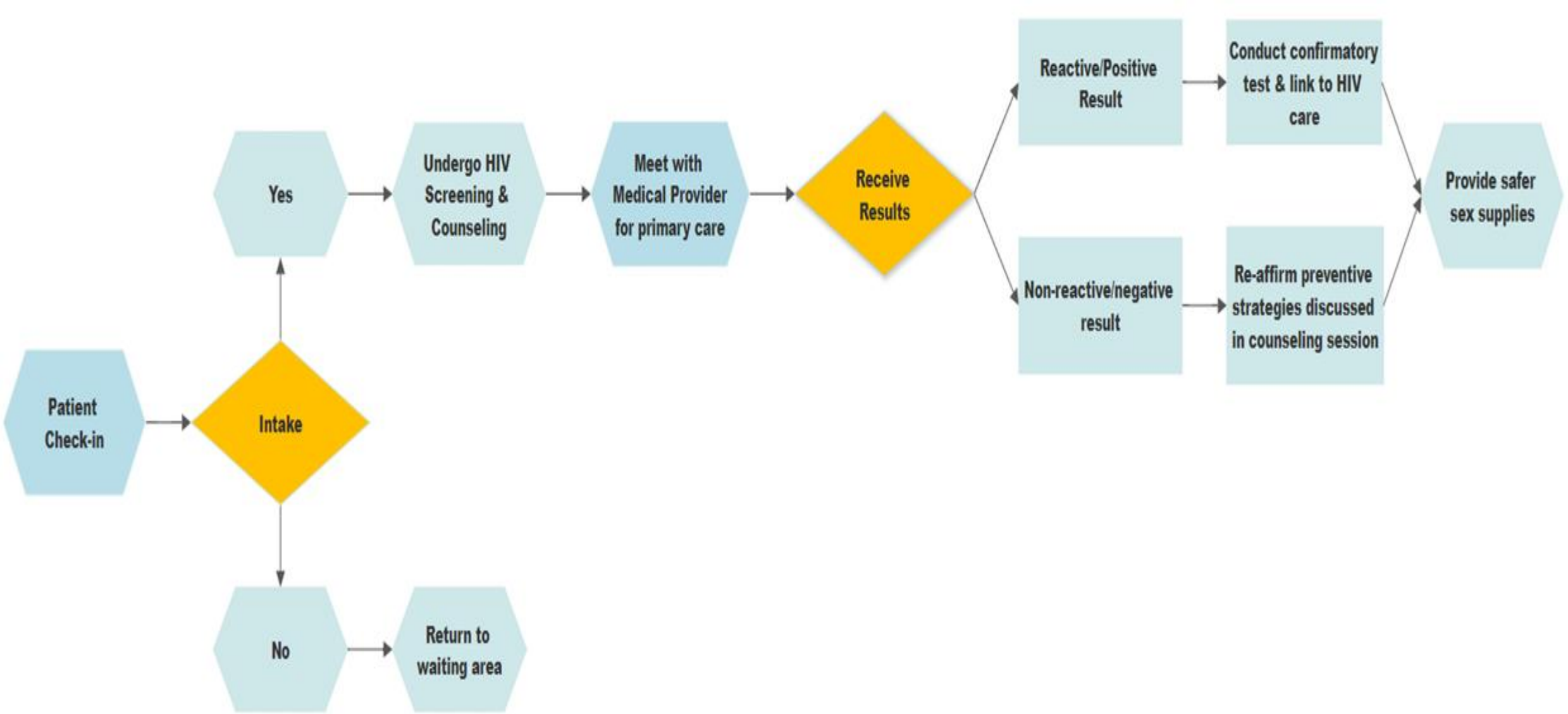
HIV Screening Implementation



HIV Screening Process



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7. Pollini RA, Alvelais J, Gallardo M, et al. The harm inside: injecting during incarceration among male injection drug users in Tijuana, Mexico. Drug Alcohol Depend. 2009;103(1–2):52–8.

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Thank You

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