



NIH OFFICE OF AIDS RESEARCH (OAR)

U.S. Department of Health and Human Services



U.S. Women Living with HIV

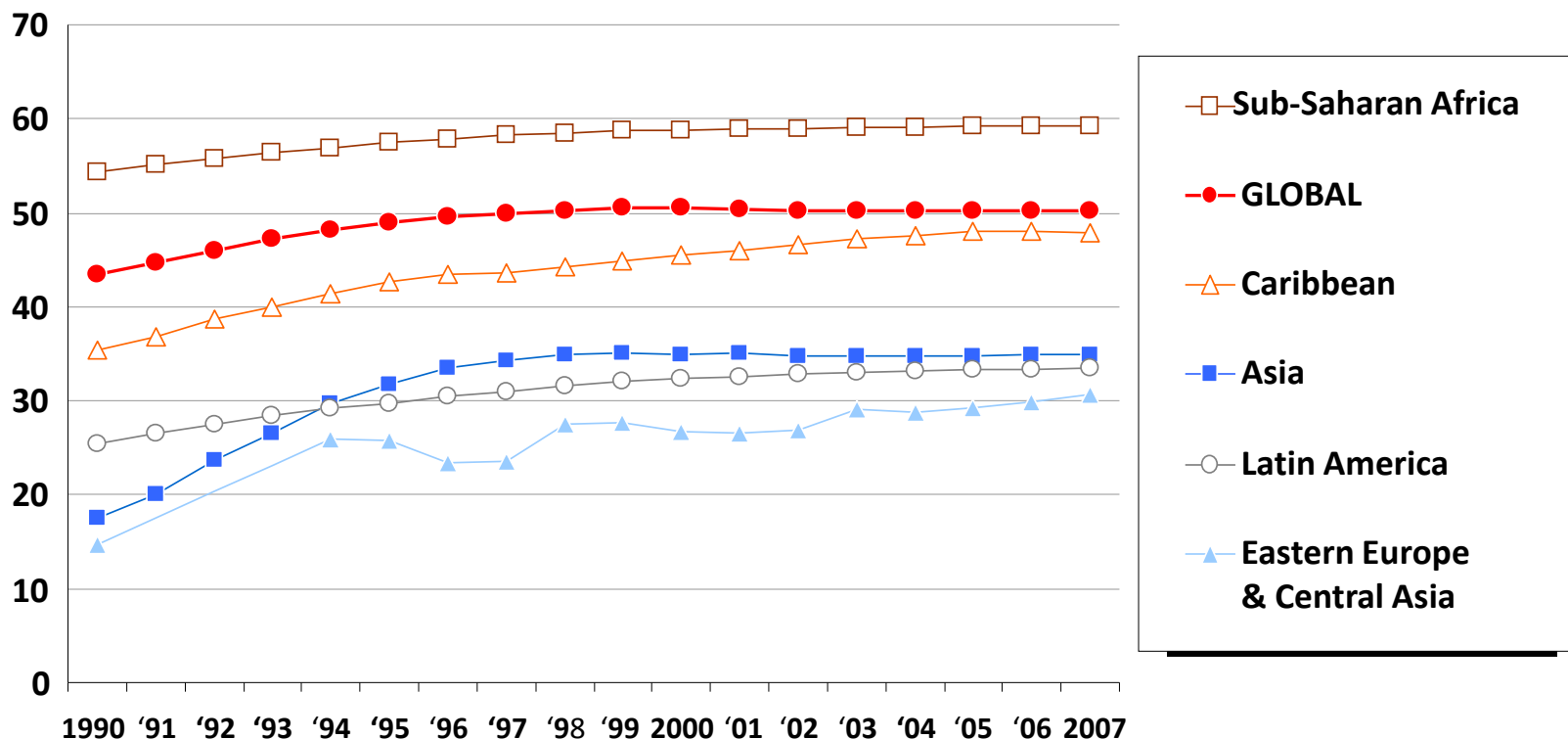
WRI

Gina M. Brown, M.D.

February 28, 2012

Percent of Adults (15+) Living with HIV Who are Female, 1990–2007

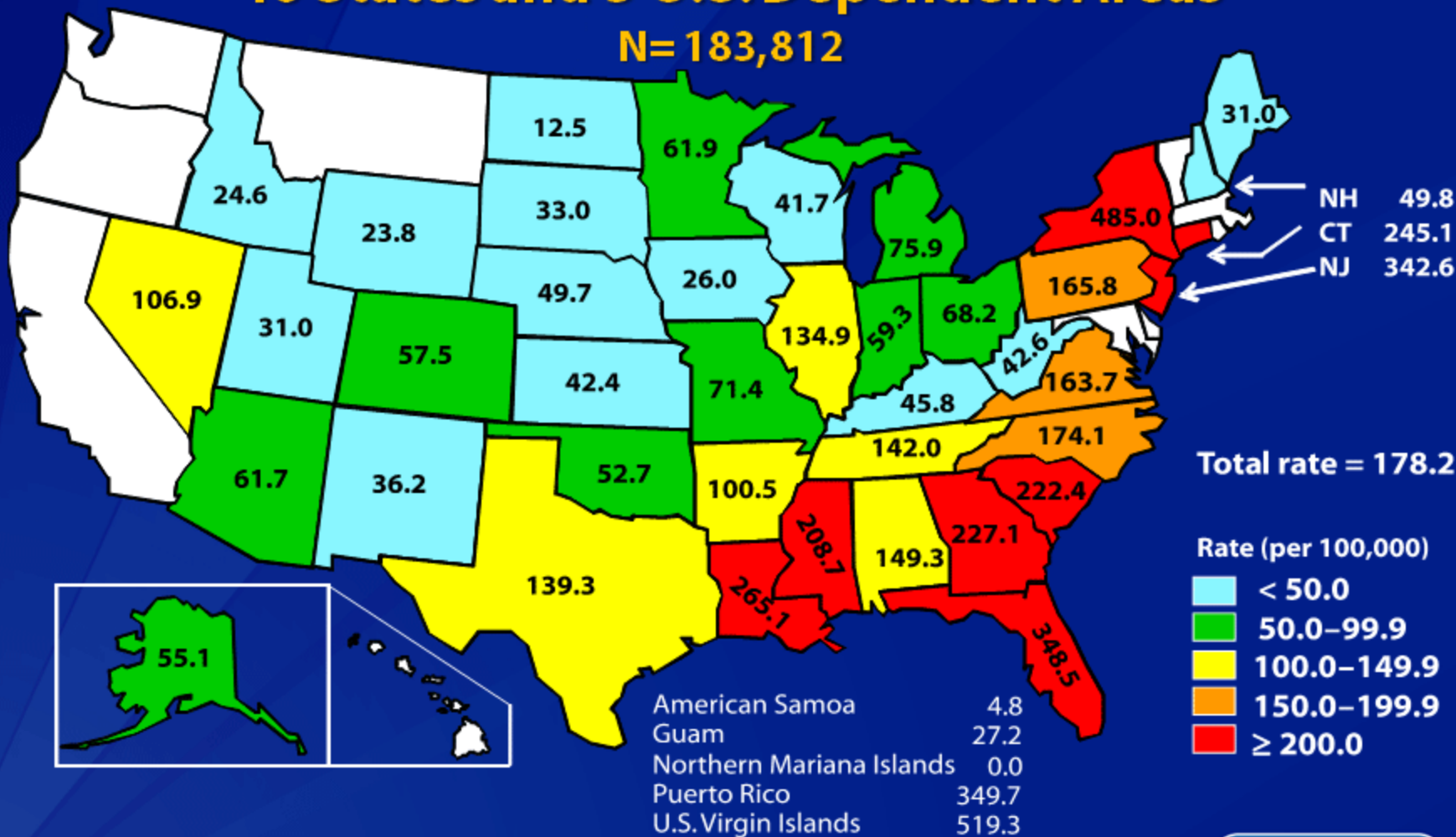
Percent female (%)



Women are > 50% of worldwide epidemic

Rates of Adult and Adolescent Females Living with a Diagnosis of HIV Infection, year-end 2008— 40 States and 5 U.S. Dependent Areas

N= 183,812



Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting.



HIV/AIDS in Women in DC 2009 (2.7%)

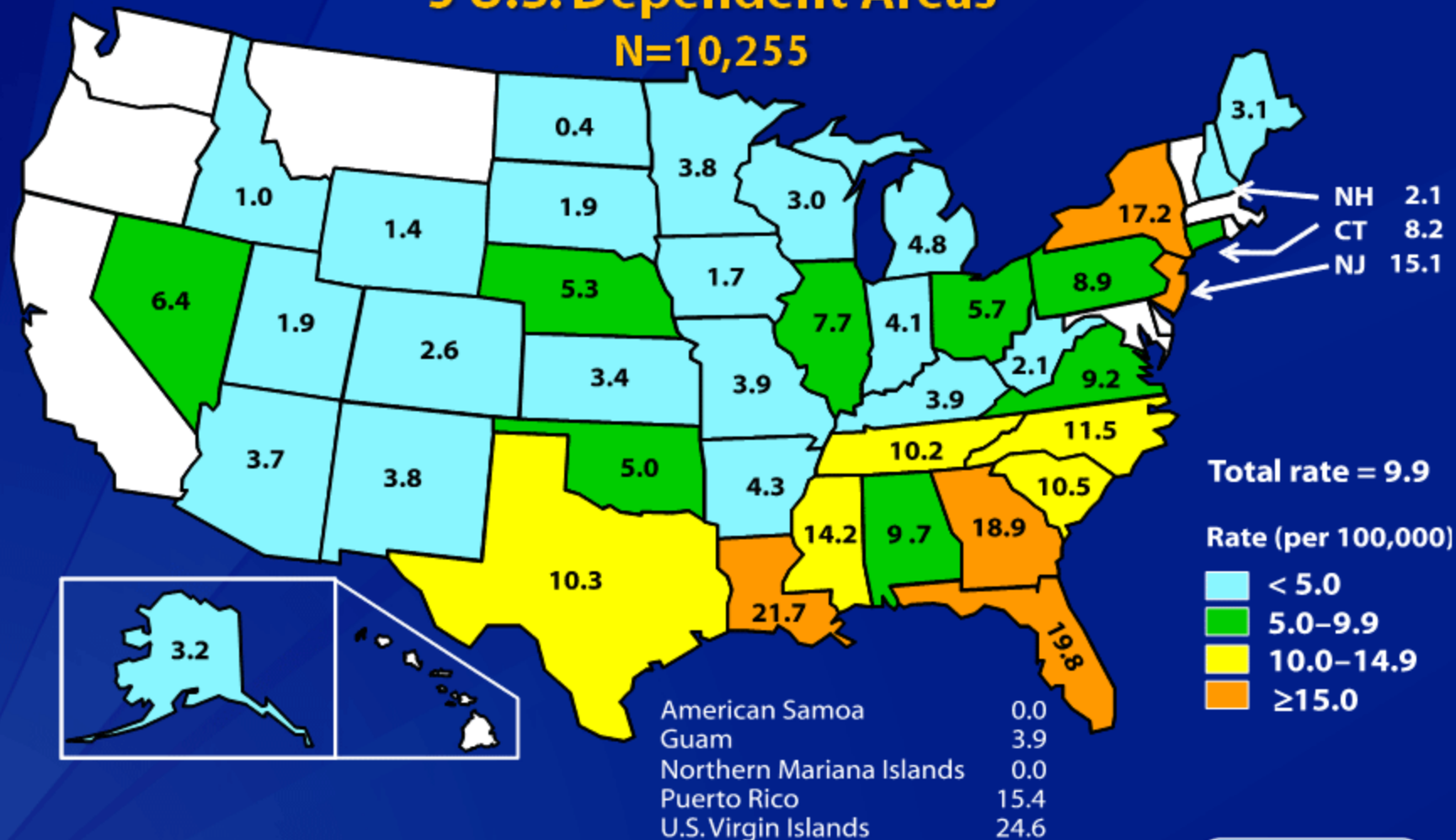
(DC DOH)

Race	Rate/100K
Black	2,826.4
Hispanic/Latina	785.0
White	153.4
Other	862.6
Total	1692.4



Rates of Diagnoses of HIV Infection among Adult and Adolescent Females, 2009—40 States and 5 U.S. Dependent Areas

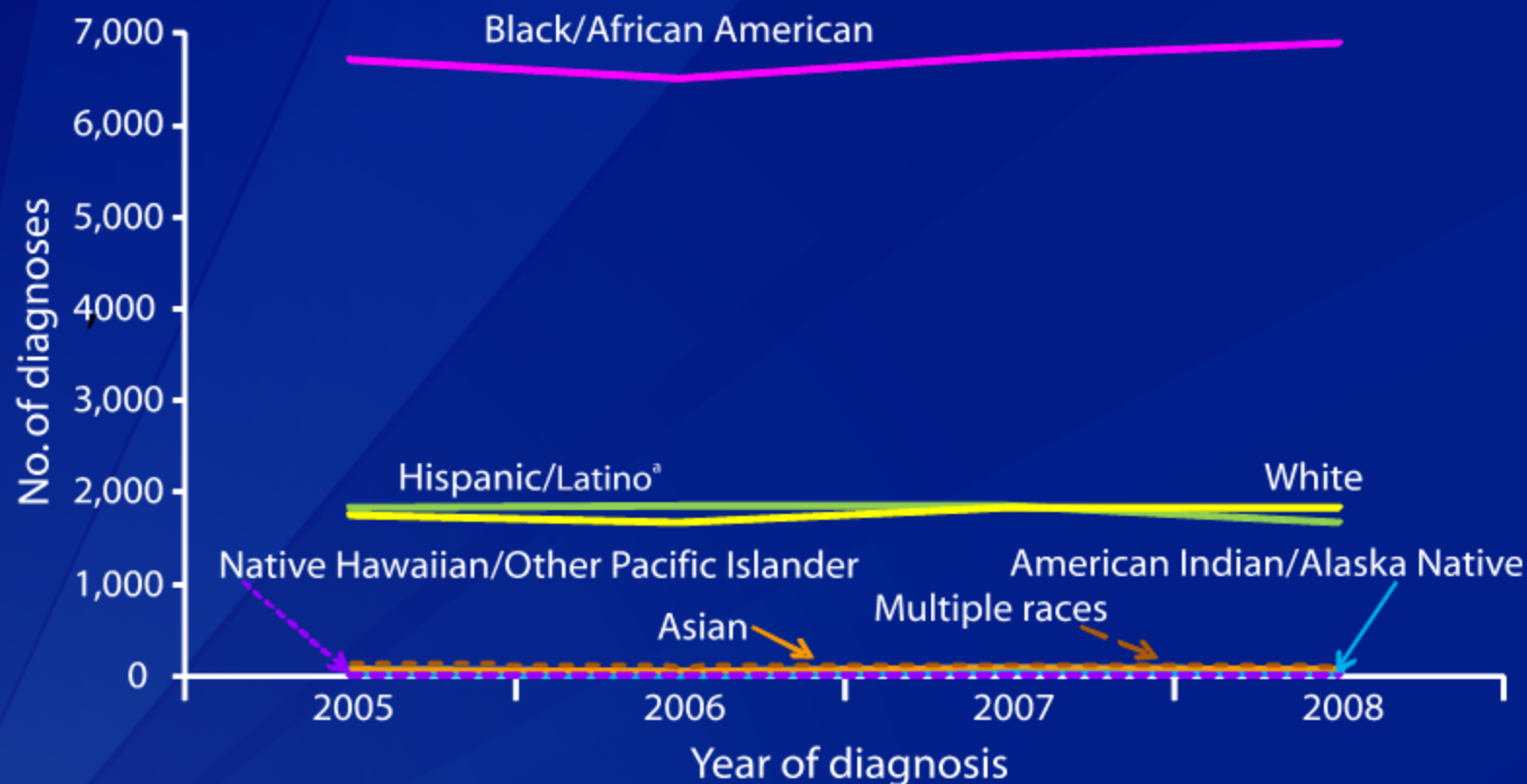
N=10,255



Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting.



Diagnoses of HIV Infection among Adult and Adolescent Females, by Race/Ethnicity, 2005–2008—37 States and 5 U.S. Dependent Areas



Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. Data from 37 states and 5 U.S. dependent areas with confidential name-based HIV infection reporting since at least January 2005.

All displayed data have been estimated. Estimated numbers resulted from statistical adjustment that accounted for reporting delays, but not for incomplete reporting.

^a Hispanics/Latinos can be of any race.



Diagnoses of HIV Infection among Adult and Adolescent Females, by Race/Ethnicity, 2010—46 States

Race/ethnicity	No.	Rate
American Indian/Alaska Native	61	6.4
Asian	134	2.5
Black/African American	6,268	41.7
Hispanic/Latino ^a	1,533	9.2
Native Hawaiian/other Pacific Islander	6	4.5
White	1,733	2.1
Multiple races	133	9.7
Total	9,868	8.0

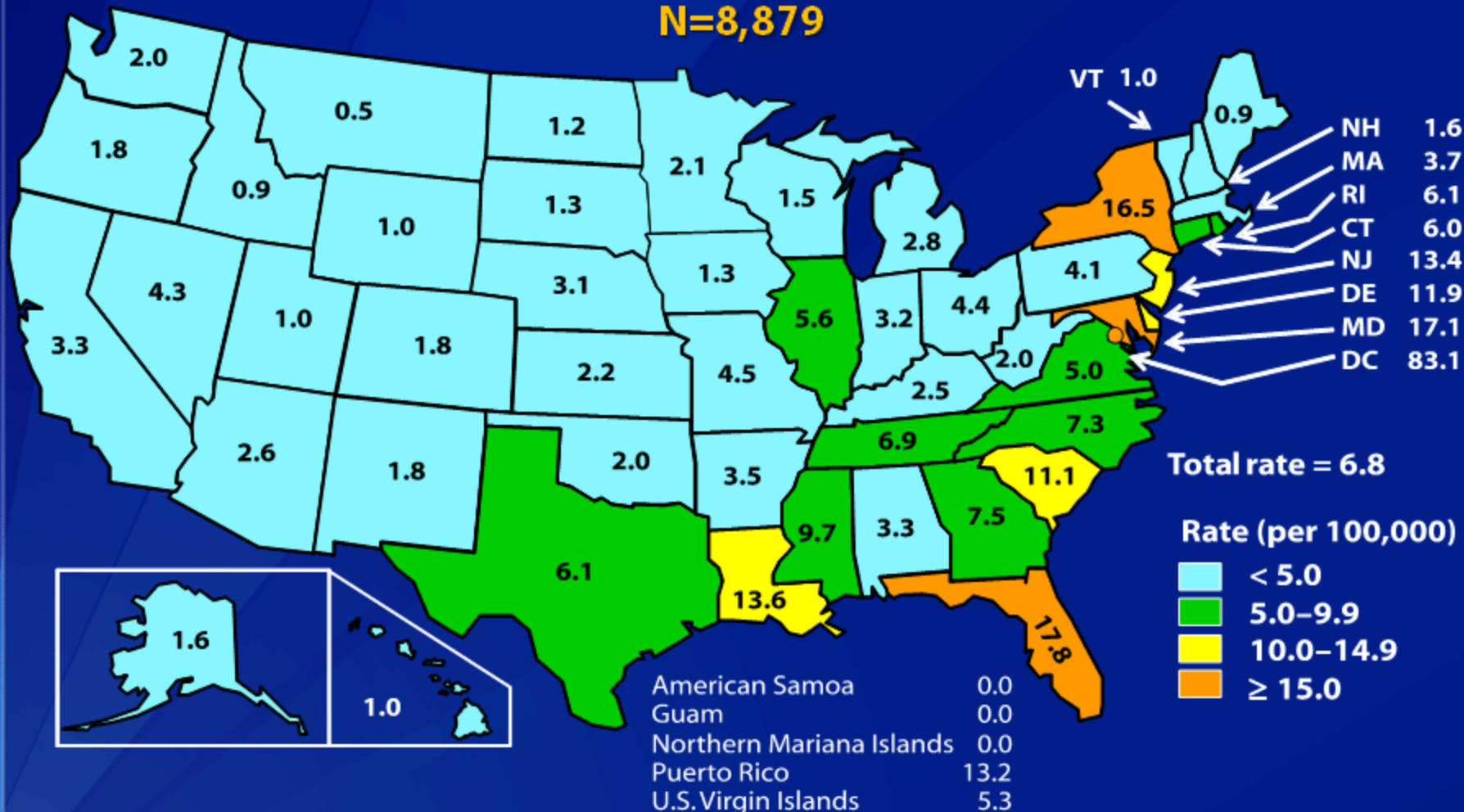
Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting. Rates are per 100,000 population.

^a Hispanics/Latinos can be of any race.



Rates of AIDS Diagnoses among Adult and Adolescent Females, 2009—United States and Dependent Areas

N=8,879

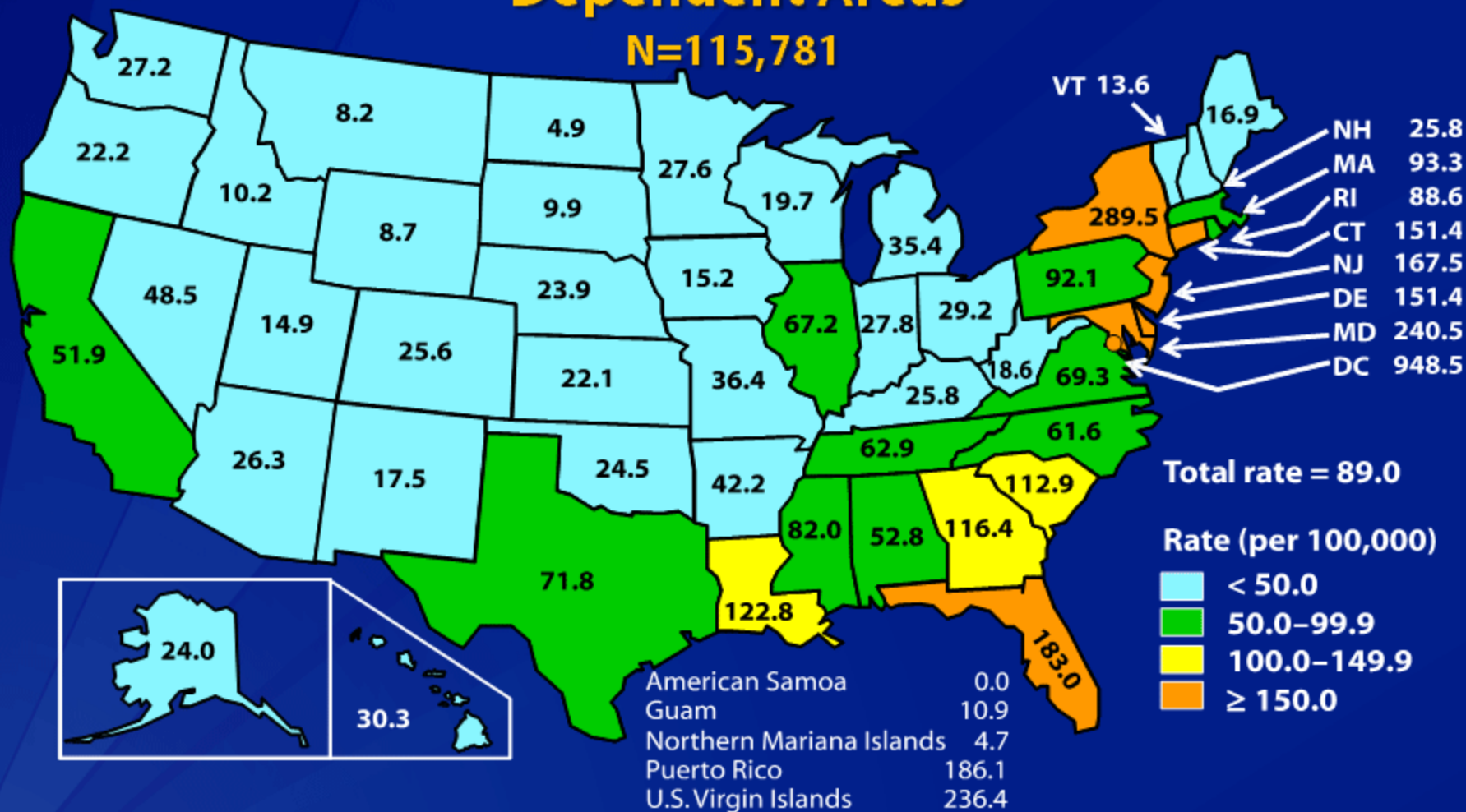


Note. All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting.



Rates of Adult and Adolescent Females Living with an AIDS Diagnosis, year-end 2008—United States and Dependent Areas

N=115,781



Note. All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting.



HIV/AIDS in Women rates/100,000 in U.S. CDC (* 40 states reporting)

Race/Ethnicity	HIV dx 2009 *	AIDS dx 2009 *	Deaths with HIV dx 2008*
Black/ African American	47.8	35.1	22.1
◆Hispanic/Latina	11.9	7.9	6.1
White	2.4	1.5	1.1
◆American Indian/ Alaskan Native	6.6	2.9	2.4
Asian	3.4	1.3	0.2
Hawaii/ Pacific	13.3	4.0	0.0
Multiple races	13.4	12.7	13.7

Women's HIV Risk Factors



Diagnoses of HIV Infection among Adult and Adolescent Females, by Transmission Category and Age at Diagnosis, 2009—40 States and 5 U.S. Dependent Areas

Age at Diagnosis (in years)

Transmission category	13–19	20–24	25–34	35–44	≥45
	N=476 %	N=1,194 %	N=2,565 %	N=2,741 %	N=3,280 %
Injection drug use	9.6	10.0	13.0	15.9	17.9
Heterosexual contact ^a	90.4	89.7	86.9	84.0	81.5
Other ^b	0.0	0.3	0.1	0.1	0.6
Total	100.0	100.0	100.0	100.0	100.0

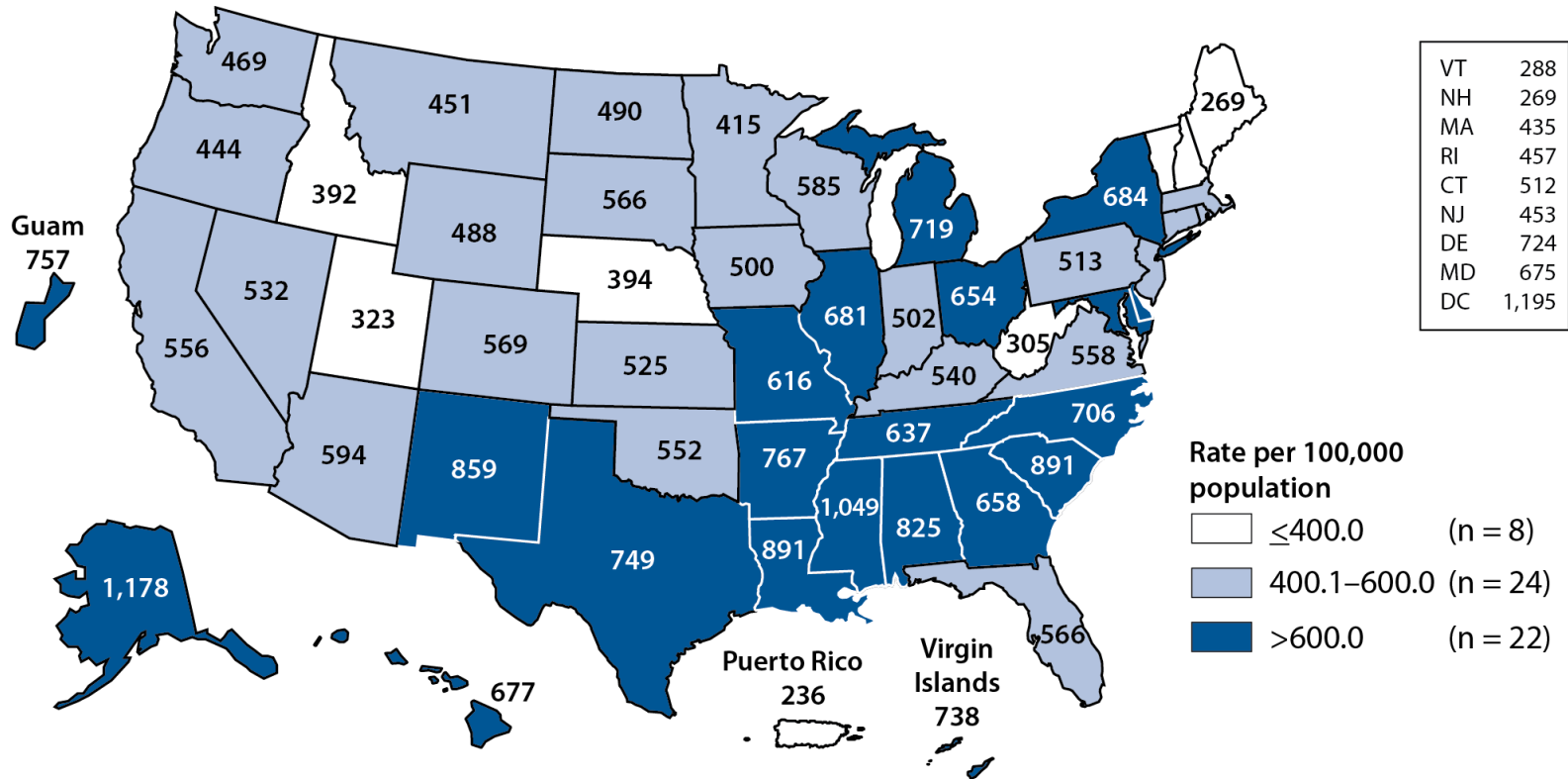
Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays and missing risk-factor information, but not for incomplete reporting.

^a Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

^b Includes blood transfusion, perinatal exposure, and risk factor not reported or not identified.

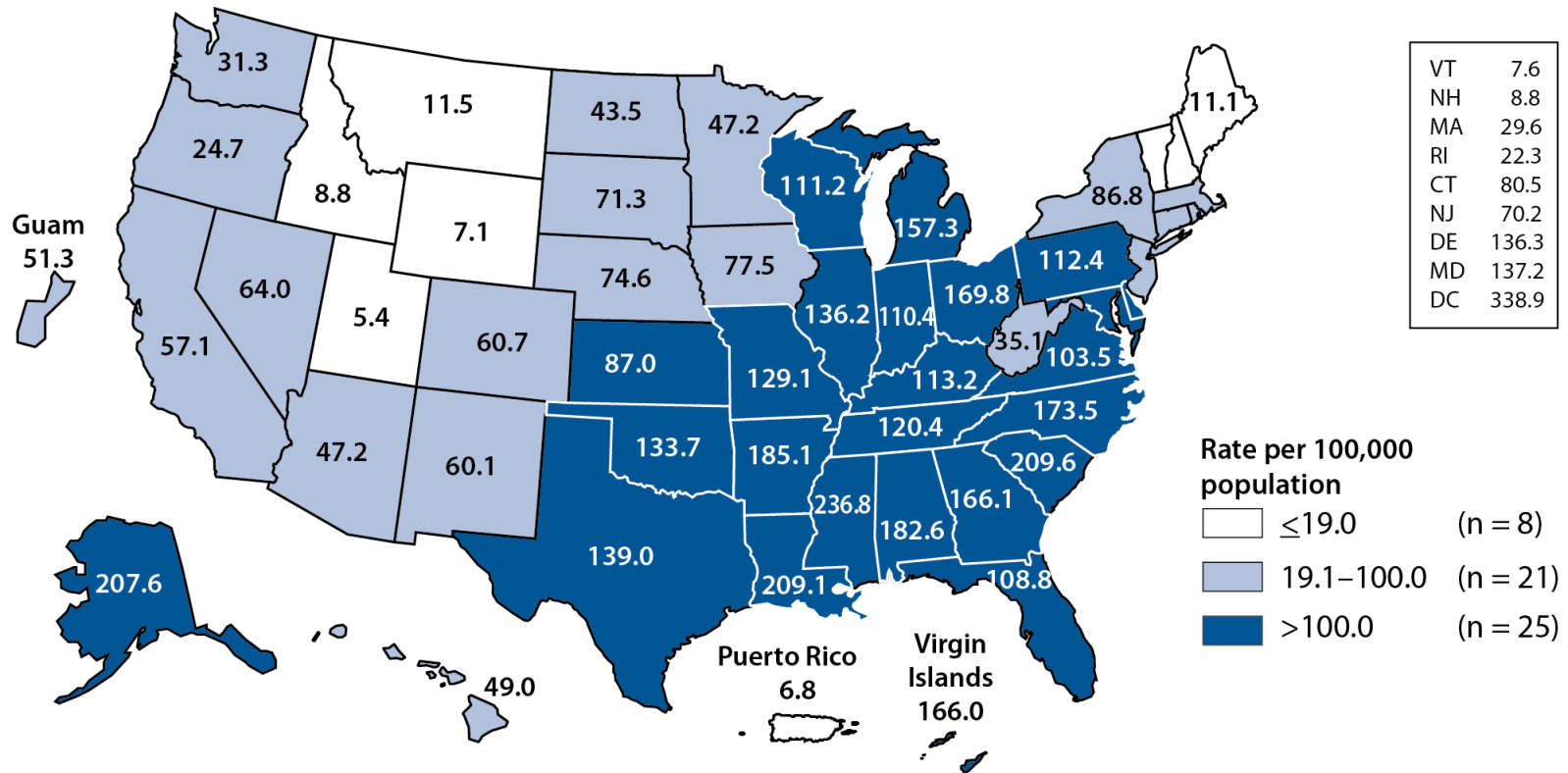


Chlamydia—Women—Rates by State, United States and Outlying Areas, 2010



NOTE: The total chlamydial infection rate among women in the United States and outlying areas (Guam, Puerto Rico, and Virgin Islands) was 605.8 per 100,000 female population.

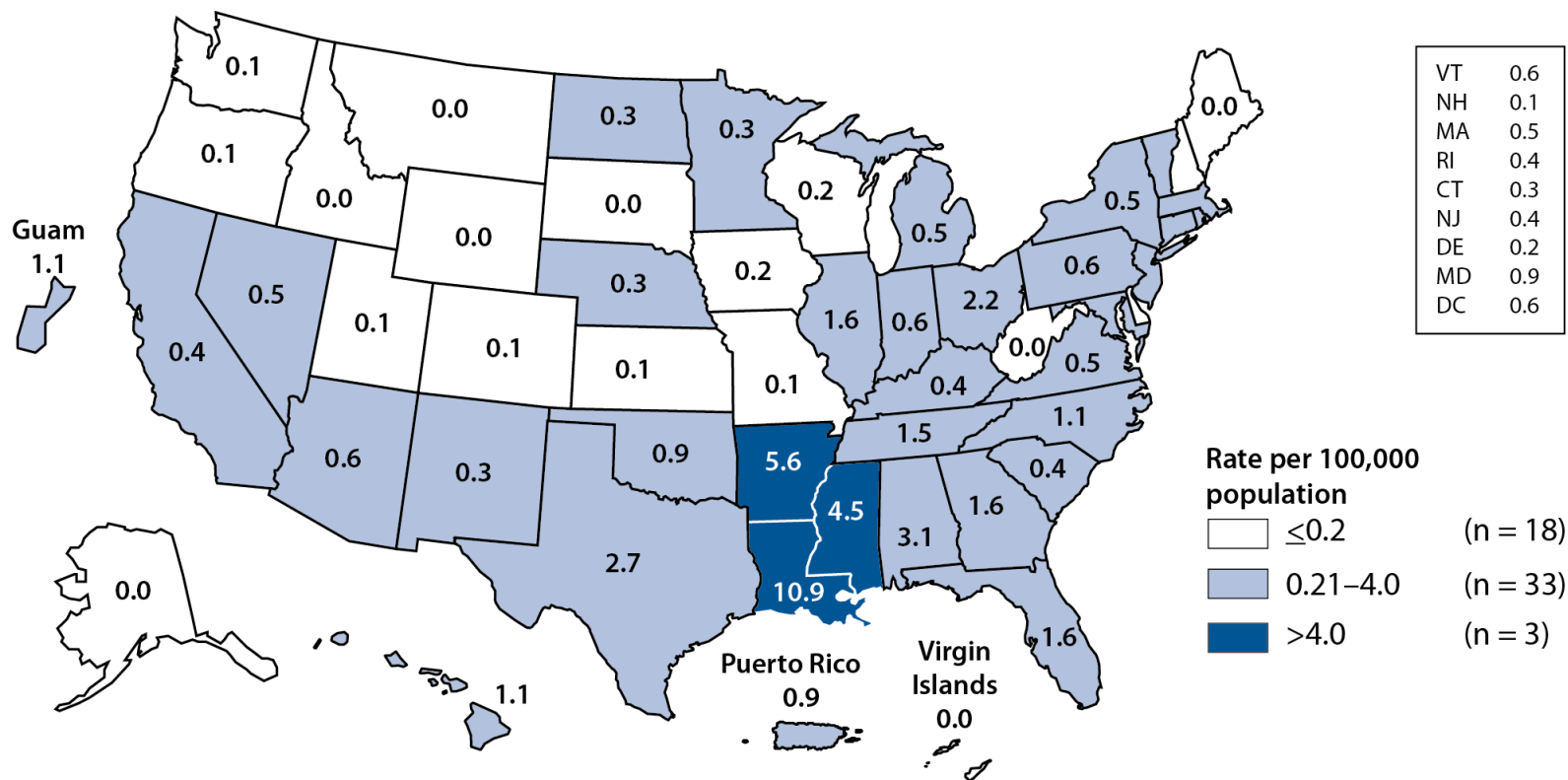
Gonorrhea—Women—Rates by State, United States and Outlying Areas, 2010



NOTE: The total gonorrhea infection rate among women in the United States and outlying areas (Guam, Puerto Rico, and Virgin Islands) was 105.2 per 100,000 female population.



Primary and Secondary Syphilis—Women—Rates by State, United States and Outlying Areas, 2010



NOTE: The total rate of primary and secondary syphilis among women in the United States and outlying areas (Guam, Puerto Rico, and Virgin Islands) was 1.1 per 100,000 females.



Women's HIV Risk Behaviors and Race (NSFG 2006-2010)

Risk	Black	White	Hisp./Latina
Sex for drugs/ money	1.3	0.7	0.6
MSW-M partner	1.3	1.3	1.7
Partner substance abuse	0.5*	0.8	0.8
5+ sex partners	2.5*	1.6	1.4
Any HIV-related sex behavior	5.0*	3.5	4.0
Any HIV-related drug behavior	0.5	1.3	1.0
Rx for STD	7.0*	3.6	3.3

Sexual Violence (NISVS 2008/ 2010)

- **1 in 5 women experience rape in their lifetime**
- **1 in 6 women have been stalked during their lifetime.**
- **1 in 4 women have been the victim of severe physical violence by an intimate partner**
- **20% to 25% of women in college reported experiencing an attempted or a completed rape in college**
- **60.4% of female victims were first raped before age 18**
- **25.5% of females were first raped before age 12**

Condom use -- unmarried men and women

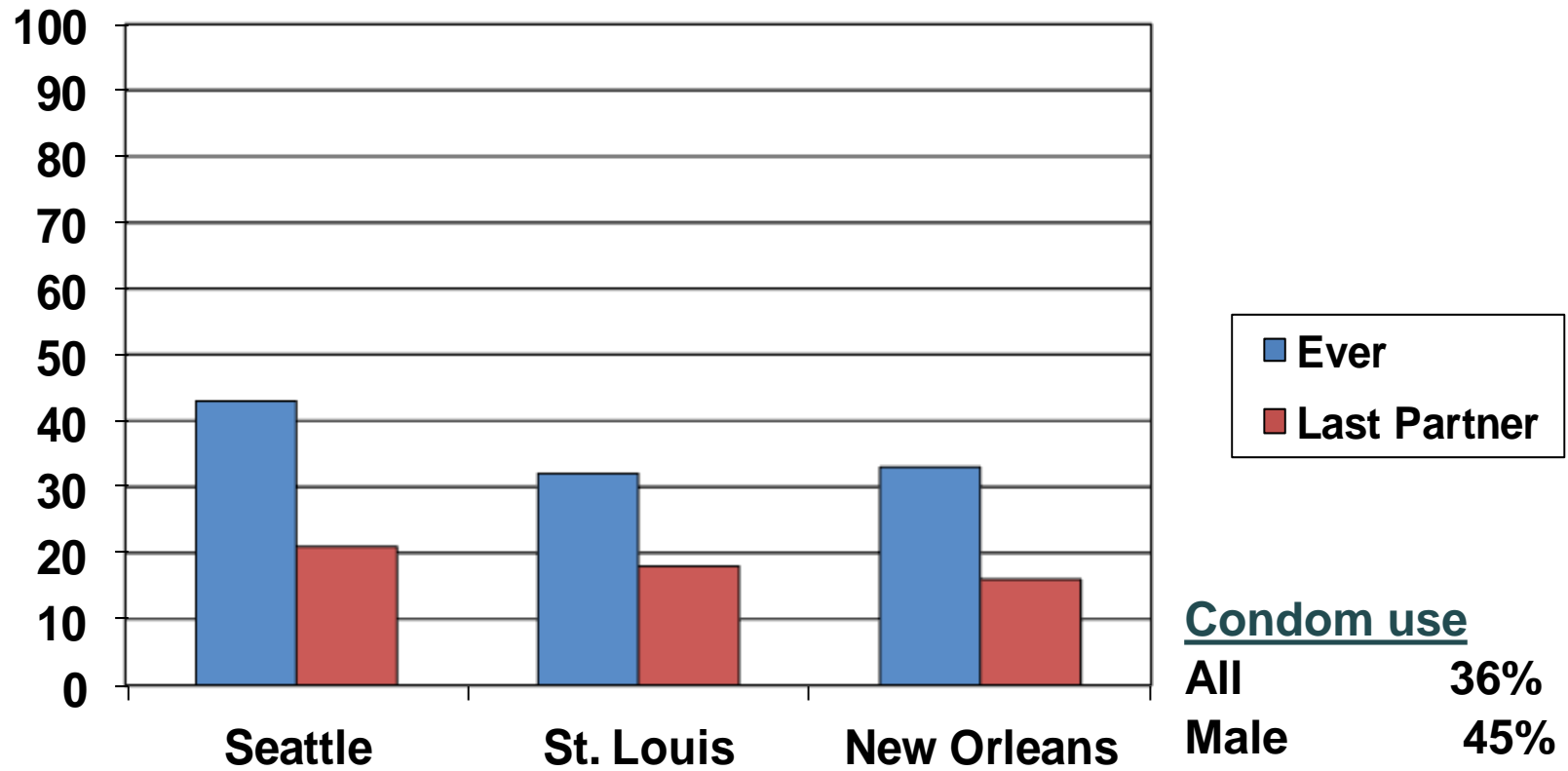
CDC NSFG 2010

	None of the time	Some of the time	Every time
Men	71.4%	6.1%	22.5%
Women	72.8%	7.4%	19.8%



Heterosexual anal intercourse

(Gorbach, STD, 2009)



Condom use

All 36%
Male 45%
Female 26%



ISIS- HPTN 064:

Women at risk for HIV acquisition in the U.S. (CROI 2012)

- **2,099 women**
- **Median age 29 years**
- **88% B, 8% W, 12% H/L**
- **10 communities in six districts**
 - **Emory, UNC-Chapel Hill, GWU -DC, Hopkins, Columbia**
- **6-12 month follow-up**
- **Seroconversion– 0.24% * (0.09, 0.65)**

*CDC 2009 annual incidence rate estimate 0.05%

- for A-A women



ISIS- HPTN 064: Risk Factors

(CROI 2012)

Education < high school graduate	37%
Income < 10K / yr	44%
Median sex partners (6 mos)	2
Cocaine use (monthly-past 6 mos.)	17%
Binge drinking	40%
Partner hx of incarceration in past 5 years	59%
Known HIV-infected partner	1%
HIV status of last sex partner unknown	41%
Condoms with last vaginal sex	18%
Anal sex past 6 mos.	38%





Conclusions---What is next?

- **Women are 24% of the HIV epidemic in the US**
- **African American Women are 19% of the US HIV epidemic (66% of women)**
- **There are epidemic “hot spots”**
 - **DC, South, Puerto Rico, USVI, ?Indian country**
 - **Don’t forget other STIs**
- **USG working group on sexual violence and HIV**
- **The condom message isn’t working**



Ensuring research priorities reflect needs of the field: Annual Trans-NIH Plan for HIV-Related Research – multidisciplinary experts



Additional information

- **Office of AIDS Research, NIH**

<http://www.oar.nih.gov/>

- **Women's Interagency HIV Study (WIHS)**

<https://statepiaps.jhsph.edu/wihs>

