

American Indian and Alaska Natives in NYC

Measuring the burden of HIV, TB, and STD disease in NYC

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Today's presentation

- Population estimates for American Indian/Alaska Natives (AI/AN) in US, New York City (NYC)
- (Very) preliminary measure of burden of HIV, TB, and STD among AI/AN in NYC
 - HIV surveillance data
 - TB surveillance data
 - STD
 - Surveillance data
 - Department of Health and Mental Hygiene (DOHMH) clinic visit data

American Indian/Alaska Native population

- 2000 Census measures of race/ethnicity
 - 64 mutually exclusive categories of race and Hispanic ethnicity (63 race categories for non-Hispanics, 64th for all Hispanics)
- US Census measures of AI/AN population
 - AI/AN alone = 2,447,989 (0.87% US population)
 - AI/AN alone OR in combination = 4,315,865 (1.53% US population)
- NYC
 - DOHMH Policy and Planning - 17,321 American Indian/Alaska Natives or 0.2% of the NYC population of >8 million
 - US Census website - 41,289 (AI/AN alone, 0.5%) or 87,241 (in combination with other races/ethnicity, 1.1%)

HIV diagnoses with and without concurrent AIDS, reported to the NYC DOHMH in 2006, by race/ethnicity*

| Race/ethnicity | Total HIV diagnoses N (%) | HIV without AIDS N (%) | Concurrent with AIDS N (%) |
|------------------------|------------------------------|---------------------------|-------------------------------|
| Black | 1899 (51%) | 1,398 (50%) | 501 (52%) |
| Hispanic | 1148 (31%) | 833 (30%) | 315 (33%) |
| White | 611 (16%) | 487 (18%) | 124 (13%) |
| Asian Pacific Islander | 74 (2%) | 54 (2%) | 20 (2%) |
| Native American | 9 (0.2%) | 8 (0.3%) | 1 (0.1%) |
| Other/Unknown | 4 (0.1%) | 3 (0.1%) | 1 (0.1%) |

*HIV surveillance data, 2006
 Column percents Column percents Column percents

HIV diagnoses, % with and without concurrent AIDS, reported to the NYC DOHMH in 2006, by race/ethnicity

| Race/ethnicity | Total HIV diagnoses N (%) | HIV without AIDS N (%) | Concurrent with AIDS N (%) |
|------------------------|------------------------------|---------------------------|-------------------------------|
| Black | 1899 (51%) | 1,398 (74%) | 501 (26%) |
| Hispanic | 1148 (31%) | 833 (73%) | 315 (27%) |
| White | 611 (16%) | 487 (80%) | 124 (20%) |
| Asian Pacific Islander | 74 (2%) | 54 (73%) | 20 (27%) |
| Native American* | 9 (0.2%) | 8 (89%) | 1 (11%) |
| Other/Unknown | 4 (0.1%) | 3 (75%) | 1 (25%) |

*97 PLWHA in NYC as of 2006
 Column percents Row percents→

TB cases reported to the NYC DOHMH, 2006*

- Total of 953 cases TB
 - 276 (29%) US born
 - No cases American Indian/Alaska Native

*TB annual report, 2006

Classification of race and ethnicity in NYC STD Surveillance data

- Hispanic ethnicity "trumps" reported race
 - YES--> "Hispanic" race/ethnicity
 - NO--> Classified by reported race

- Race
 - White
 - Black or African American
 - American Indian or Alaska Native
 - Asian
 - Native Hawaiian or Other Pacific Islander
 - Some Other Race
 - Multiple race

 - Unknown

Chlamydia reported to the NYC DOHMH in 2006, cases and case rates, by sex, and race/ethnicity

| Race/ethnicity | Male Cases | Case rate per 100,000 | Female cases | Case rate per 100,000 |
|------------------------|---------------|-----------------------|---------------|-----------------------|
| Black (non Hispanic) | 4,465 | 496 | 6,866 | 614 |
| Hispanic | 1678 | 156 | 3946 | 343 |
| White (non Hispanic) | 430 | 31 | 415 | 28 |
| Asian Pacific Isl (NH) | 138 | 34 | 371 | 92 |
| American Ind/AN (NH) | 24 | 284 | 48 | 512 |
| Other/Unknown | 6,655 | n/a | 16,642 | n/a |
| Total | 13,390 | | 28,288 | |

Gonorrhea reported to the NYC DOHMH in 2006, cases and case rates, by sex, and race/ethnicity

| Race/ethnicity | Male Cases | Case rate per 100,000 | Female cases | Case rate per 100,000 |
|-------------------------|--------------|-----------------------|--------------|-----------------------|
| Black (non Hispanic) | 2,263 | 251 | 1,571 | 251 |
| Hispanic | 455 | 42 | 439 | 38 |
| White (non Hispanic) | 347 | 25 | 69 | 5 |
| Asian Pacific Isl (NH) | 64 | 16 | 28 | 7 |
| American Indian/AN (NH) | 12 | 142 | 8 | 85 |
| Other/Unknown | 2,590 | n/a | 2,468 | N/a |
| Total | 5,731 | | 4,583 | |

P&S syphilis reported to the NYC DOHMH in 2006, cases and case rates, by sex, and race/ethnicity

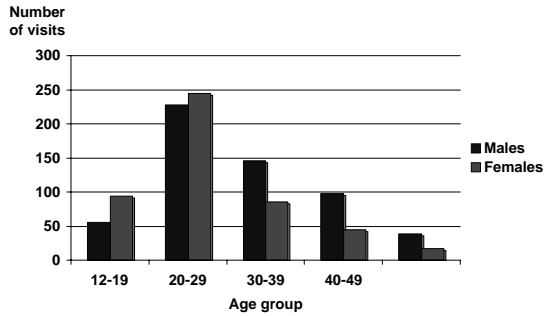
| Race/ethnicity | Male Cases | Case rate per 100,000 | Female cases | Case rate per 100,000 |
|-------------------------|------------|-----------------------|--------------|-----------------------|
| Black (non Hispanic) | 184 | 20 | 5 | <1 |
| Hispanic | 111 | 8 | 4 | <1 |
| White (non Hispanic) | 110 | 10 | 3 | <1 |
| Asian Pacific Isl (NH) | 8 | 2 | 1 | <1 |
| American Indian/AN (NH) | 1 | 12 | 0 | 0 |
| Other/Unknown | 146 | n/a | 5 | n/a |
| Total | 560 | | 18 | |

Persons reporting American Indian/Alaska Natives race and ethnicity at visits to NYC STD clinics, 2007

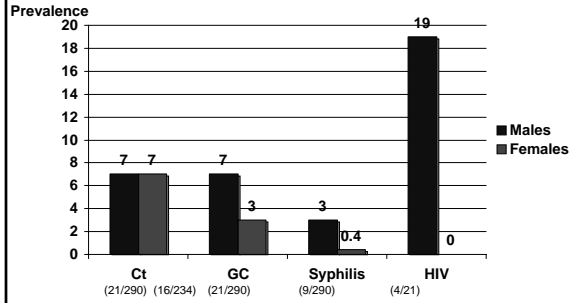
| Race/ethnicity reported | Visits by AI/AN in 2007 | | |
|---|-------------------------|--------|----------|
| | Total N (%) | Male n | Female n |
| All AI/AN | 1,059 | 570* | 488 |
| AI/AN only | 520 (49%) | 282 | 238 |
| AI/AN + another race | 293 (28%) | 150 | 143 |
| AI/AN + Hispanic ethnicity | 125 (12%) | 72 | 53 |
| AI/AN + another race + Hispanic ethnicity | 121 (<11%) | 66 | 54 |

9.8% MSM

AI/AN visits to NYC STD clinics, 2007, by age



Prevalence of STD and HIV diagnosed at first MD visit to NYC STD clinics by AI/AN in 2007



Conclusions - I

- Measures of the AI/AN population greatly affected by inclusion of multiple race, and Hispanic ethnicity
 - Size of population (denominator) impacts measured disease rates
- Measures of AI/AN race/ethnicity vary between programs
 - Different means of estimating race/ethnicity for persons diagnosed with STD (numerator) impact measured disease rates
 - Direct comparisons between programs problematic
- Over-counting numerator and under-counting denominator will elevate measured disease rates, and vis a versa
 - Biases towards over- and under-counting must be considered in interpreting surveillance data

Conclusions - II

- In NYC surveillance data, absolute numbers of STD among AI/AN are small, however rates are high, second only to Black-NH
 - interpretation hampered by missing data, differing approaches to measuring numerator and denominator for race/ethnicity
- STD clinic visit data much more complete recording of race/ethnicity and may provide more insights into disease risk
 - Ct and GC prevalence do not appear elevated on crude analysis
 - 4 of 21 men testing for HIV at MD visit were positive

Next steps

- Recalculate STD case rates using different means of classifying race/ethnicity
- Examine:
 - Effect on case rate?
 - Effect on magnitude of racial disparities?
- Review measures of race/ethnicity across DOHMH programs
