Epidemiology of STD, HIV and Hepatitis C among AI/AN Populations

Melanie Taylor MD, MPH
Centers for Disease Control and Prevention
National STD Program, Indian Health Service
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Overview

• Surveillance overview
  • HIV
  • STD
  • Viral Hepatitis

• New STD/HIV Provider Tools
  • National guidance and recommendations
  • Sample Policies/Protocols
  • Partner management including EPT

• Resources
Data Limitations

• Limited data on urban AI/AN populations
• Racial Misclassification
  • Data frequently underestimate AI/AN rates
  • Misclassification identified through evaluation of birth record data among HIV and STD cases
    • Rates were 30-50% higher than recorded among AI/AN
• Intended Use of Data
• Data Resources
• Data Interpretation
Survival After an AIDS Diagnosis during 1998–2005, by Months Survived and Race/Ethnicity — United States and Dependent Areas

- American Indian/Alaska Native
- Asian
- Black/African American
- Hispanic/Latino
- Native Hawaiian/Other Pacific Islander
- White
- Multiple races

Note: Data exclude persons whose month of diagnosis or month of death is unknown.

* Includes Asian/Pacific Islander heritage.

** Hispanics/Latinos can be of any race.
Chlamydia by Race, 2009

Rate (per 100,000 population)

Year

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009

American Indians/Alaska Natives
Asians/Pacific Islanders
Blacks
Hispanics
Whites
Chlamydia Rates by IHS Area, 2009*

*Source: IHS STD Surveillance Report, 2009 – Preliminary data
Chlamydia by Gender, Age, 2009  

<table>
<thead>
<tr>
<th>Age</th>
<th>Rate (per 100,000 population)</th>
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<tbody>
<tr>
<td></td>
<td>Men</td>
</tr>
<tr>
<td></td>
<td>3,800</td>
</tr>
<tr>
<td>10-14</td>
<td>13.8</td>
</tr>
<tr>
<td>15-19</td>
<td>735.5</td>
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<tr>
<td>20-24</td>
<td>1,120.6</td>
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<tr>
<td>25-29</td>
<td>573.3</td>
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<tr>
<td>30-34</td>
<td>286.0</td>
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<tr>
<td>35-39</td>
<td>141.3</td>
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<td>40-44</td>
<td>81.9</td>
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<td>45-54</td>
<td>36.0</td>
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<tr>
<td>55-64</td>
<td>11.0</td>
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<tr>
<td>65+</td>
<td>2.9</td>
</tr>
<tr>
<td>Total</td>
<td>219.8</td>
</tr>
</tbody>
</table>
Gonorrhea Rates by IHS Area, 2009*

<table>
<thead>
<tr>
<th>IHS Area</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aberdeen</td>
<td>+ 4.2</td>
</tr>
<tr>
<td>Alaska</td>
<td>+ 88.9</td>
</tr>
<tr>
<td>Albuquerque</td>
<td>- 8.0</td>
</tr>
<tr>
<td>Bemidji</td>
<td>+ 10.5</td>
</tr>
<tr>
<td>Billings</td>
<td>- 20.0</td>
</tr>
<tr>
<td>California</td>
<td>- 128.6</td>
</tr>
<tr>
<td>Nashville</td>
<td>-11.1</td>
</tr>
<tr>
<td>Navajo</td>
<td>+ 1.0</td>
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<tr>
<td>Oklahoma City</td>
<td>+ 8.8</td>
</tr>
<tr>
<td>Phoenix</td>
<td>- 26.9</td>
</tr>
<tr>
<td>Portland</td>
<td>- 69.1</td>
</tr>
<tr>
<td>Tucson</td>
<td>- 15.4</td>
</tr>
<tr>
<td>Total IHS Areas</td>
<td>+ 10.7</td>
</tr>
</tbody>
</table>

*Source: IHS STD Surveillance Report, 2009 – Preliminary data
Morbidity and Mortality Weekly Report (MMWR) February 19, 2010 / 59(06);158-161
Major IHS HIV Initiatives

- National Expanded HIV Testing Initiative (I/T/U)
- Effective Behavioral Interventions (NARCH)
- Data Collection/ Quality Improvement
  - Universal HIV Screening
  - HIV screening following STD diagnosis
  - Prenatal HIV Screening
- Site Specific Pilot projects (GIMC, PIMC, Pine Ridge) related to provision of care and prevention
- New Media projects
- Collaborations with multiple partners (Fed, Tribal)
- ~ 30+ activities ongoing
Hepatitis C
Hepatitis C
Prevalence, U.S.

- Overall prevalence of anti-HCV from NHANES (1999-2002)
  3.8 million (1.6%)

- Overall prevalence of chronic infection derived from NHANES III (1988-1994)
  2.7 million (1.3%)

- Correcting for patient groups under-represented in NHANES (incarcerated, homeless, hospitalized, active duty military, and nursing home residents)
  5 million (~2.4%)

1Armstrong et al. AASLD 2004; poster 31. Edlin, AASLD 2005
Prevalence of HCV in Select Populations

- Incarcerated: ~330,000-860,000 (16-41%)¹
- IVDU: ~300,000 (80% to 90%)²,³
- Alcoholics: ~240,000 (11% to 36%)⁵
- Homeless: ~175,000 (22%)⁷
- Veterans: ~280,000 (8%)⁹
- HIV-infected: ~300,000 (30%)⁴
- Children (6-18 years old): ~100,000 (.1%)⁸
- Living below poverty level: ~940,000 (2.4%)⁶

Adapted From the following:

Prevalence of Anti-HCV, United States, 1999-2002 (NHANES)

Overall prevalence: 1.6% (4.1 million)

- Men
- Women

Age Group (years)

- 6-19
- 20-34
- 35-39
- 40-44
- 45-49
- 50-54
- 55+

* Until 1995, acute hepatitis C was reported as acute hepatitis non-A non-B

Source: National Notifiable Diseases Surveillance System (NNDSS)
Incidence of Acute, Symptomatic Hepatitis C/Non-A, Non-B Hepatitis* by Sex —
United States, 1992–2008

* Until 1995, acute hepatitis C was reported as acute hepatitis non-A non B
Note: The bars indicate the rate per 100,000 (the left y-axis) by sex; the line is the ratio (right y-axis) of the incidence rate among males to that among females
Source: National Notifiable Diseases Surveillance System (NNDSS)

* Until 1995, acute hepatitis C was reported as acute hepatitis non-A non-B

Source: National Notifiable Diseases Surveillance System (NNDSS)
HCV in AI/AN Populations

- In 2009, American Indian/Alaska Natives were almost twice as likely to be diagnosed with Hepatitis C, as compared to the White population.
- In 2008, American Indian/Alaska Natives ages 40 years and over, were 2.5 times more likely to have Hepatitis B, than non-Hispanic Whites.
- Death rates from viral hepatitis are 2x greater than for non-Hispanic whites.
- Limited data on chronic HCV
- DHHS, Office of Minority Health
HCV Prevalence in Urban AI Clinic

- 243 AI patients representing 30 different tribes presenting to an urban clinic were screened for HCV antibodies
- Omaha, Nebraska
- Anti-HCV antibodies found in 11.5%
- Risk factors
  - IVDU
  - Cocaine use
  - Tattoos
  - Having a sexual Partner with HCV

Rural AI and HCV

- Ft Peck Reservation, Blackfeet Tribe, Montana
- 2009
- Population 11,000,
- 500 cases (4.5% positivity)
- Risk
  - IVDU
- Intervention
  - Needle exchange program
  - http://missoulian.com/news/local/article_52e17ec6-b622-11de-be68-001cc4c002e0.html
Risk Factors for Remote and Recent HCV Infection

Remote (>~20 yrs ago)
- Injection Drug Use
- Transfusion
- Unknown
- Other*
- Sexual

Recent (<~20 yrs ago)
- Injection Drug Use
- Transfusion
- Unknown
- Other*
- Sexual

*Nosocomial, occupational, perinatal
HCV Screening

- 75% of people chronically infected with HCV are unaware of their diagnosis
  - Blood borne and sexual transmission
- High burden of morbidity and mortality associated with chronic HCV infection
  - Higher rates among AI/AN populations
- Effective treatment is available
- Treatment more effective the shorter the duration of infection
New IHS/CDC Policy

• Purpose: To expand opportunities for confidential STD/HIV screening and treatment among AI/AN populations

• Rationale:
  • Compliance with national standards and IHS performance measures
  • High STD rates among AI/AN populations
  • Differences in time to treatment
  • Limited partner treatment in some areas
  • Late HIV diagnoses
  • Provider turnover within IHS
IHS/CDC Protocol

- Clear step by step clinical guidance:
  - STD/HIV screening in pregnancy
  - HIV screening in general populations
  - STD screening in women and special populations
  - STD treatment
  - Partner management
    - Presumptive treatment of partners
    - Patient delivered partner therapy (PDPT)
  - Vaccination (HPV, HBV)
IHS/CDC Guidance

• Supplements:
  • IHS STD/HIV screening recommendations (chart)
  • Performing a sexual risk assessment
  • Patient delivered partner therapy
    • Patient information sheet (chlamydia & gonorrhea)
    • Partner information sheet (chlamydia)
    • Partner information sheet (gonorrhea)
Expedited Partner Therapy (EPT)

- EPT is permissible in 27 states:
- EPT is potentially allowable in 15 states:
- EPT is prohibited in 8 states:
IHS/CDC Protocols

• Timeline
  • Development 2010-2011
    • TON Model following syphilis outbreak
    • Material for inclusion
    • Medical review
  • CDC Clearance May 2011
  • IHS OGC Review, Approval and Clearance May 2011
  • HHS, IHS, CDC branding May 2011
  • Printing, Web Placement, Distribution, June 2011
IHS/CDC Protocols

- Intended for use and/or adaptation by:
  - IHS Service Units
  - Remote or village-level clinics
  - Regional IHS medical centers
  - Tribal corporation medical facilities
  - 638 facilities
  - Urban Indian health centers
Sample Policy

POLICY FOR SYphilis, CHLAMYDIA, GONORRHEA, AND HIV SCREENING AND PATIENT AND PARTNER MANAGEMENT WITHIN IHE, TRIBAL, AND URBAN INDIAN HEALTHCARE FACILITIES

IMPLEMENTATION DATE:  
REVIEW INTERVAL: YEARLY
POINT OF CONTACT: CLINICAL SITE:

PURPOSE
To expand opportunities for confidential STD screening and treatment among AI/AN populations.

BACKGROUND
Sexually transmitted diseases (STDs) including chlamydia, gonorrhea, and syphilis continue to impose a significant health burden on American Indian and Alaska Native (AI/AN) people as compared to other racial/ethnic groups. In 2009, among all races and ethnicities, AI/AN had the second highest rates of chlamydia and gonorrhea and the third highest rates of primary and secondary (P&S) syphilis. In 2009, reported case rates of chlamydia and gonorrhea among AI/AN were 2-4 times higher than comparable rates for whites. Early diagnosis, treatment, and partner management can reduce STD transmission and manifestations of untreated infections.

High rates of STDs in AI/AN communities mainly affect adolescents. Adolescents are at higher risk for STDs due to a number of factors including treatment in higher risk sexual partnerships, multiple sex partners, and challenged access to sensitive and comprehensive sexual and reproductive health care. Moreover, unprotected sexual practices among adolescents can also next to increased risk of unwanted pregnancy and HIV infection. High STD rates can also be indicators of limited knowledge, unclear perceptions of risk, and lack of, inconsistent, or incorrect use of prevention methods, such as condoms. These challenges support the need for increased efforts to improve access, quality, and delivery of STD testing and partner management and to encourage safer sex practices, including condom use, among populations at risk within AI/AN communities.

Because there are standard recommendations for chlamydia, gonorrhea, syphilis and HIV screening and treatment, the provision of these confidential services can be incorporated into standard protocols to ensure that patients and their sex partners receive care that follows national guidelines. Standard protocols of this type may expand and facilitate STD screening and treatment opportunities for AI/AN communities.

May 2011
Patient Management

Client Information

Patient Delivered Partner Treatment

Why am I getting extra medicine (or an extra prescription)?

You have Chlamydia or Gonorrhea, diseases that are transmitted through sexual contact. It is not common to get a second or third STD, but it is a possibility. You should get your partner(s) tested for any other STIs that you may have.

How do I tell my sex partner(s) I have an STD?

Tell your partner about your diagnosis and that you have been treated. They may want to be tested for other STIs.

What if I don’t give the medicine to all of my sex partner(s)?

If you do not give the medicine to all of your sex partner(s), they may be at risk for an infection. If you give it to them, they may be at risk for the same infection. You should encourage them to use condoms and get tested for other STIs.

What do I need to do?

1. Get tested.
2. Tell your partner(s) you have an STD.
3. Give your partner(s) the medicine.
4. Encourage them to get tested.
5. Take your medicine as prescribed.

Partner Information

Partner Treatment for Gonorrhea

Partner Treatment for Chlamydia

Partner Information

Partner Treatment for Gonorrhea

Why am I getting this medicine (or an extra prescription)?

You have been treated for Gonorrhea. If you are pregnant, your doctor may prescribe extra medicine to prevent infection in your baby.

What should I do after taking the medicine?

Avoiding STD infections

STDs are common and can cause lasting damage. Partner treatment is important to prevent your partner from getting infected. If you have had sex with someone who has had an STD, you should get tested for other STIs.

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## STD Screening Recommendations, 2010

<table>
<thead>
<tr>
<th>Population</th>
<th>STD Screening Recommendations</th>
<th>Frequency</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Women</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Women 25 years of age and younger<sup>1-3</sup> | Chlamydia (CT)  
Gonorrhea (GC)  
Other STDS according to risk  
HIV | Annually  
Annually  
At least once, then repeat annually only if high-risk | CT/GC: consider screening more frequently for those at increased risk |
| Women over 25 years of age<sup>4</sup> | No routine screening for STDS  
HIV | Screen according to risk  
At least once prior to age 64, then repeat annually only if high-risk | Targeted CT/GC screening recommended for women with risk factors. |
| **Pregnant women**<sup>5-7</sup> | CT  
GC  
Syphilis  
HIV  
Hepatitis B Surface Antigen (HBsAg) | First trimester  
First trimester  
First trimester  
First trimester  
First trimester | Repeat screening for CT, GC, syphilis, HIV, HBsAg in third trimester if at increased risk.  
(In areas with elevated syphilis morbidity, an additional test should be performed at delivery.) |
| HIV positive women<sup>8-7</sup> | CT  
GC  
Syphilis  
Trichomoniasis  
HSV 2  
Hepatitis B Surface Antigen (HBsAg)  
Hepatitis C | Annually  
Annually  
First visit  
First visit  
First visit  
First visit  
First visit  
Repeat screening every 3-6 months, as indicated by risk | CT:  
• urine/cervical  
• rectal (if exposed)  
GC:  
• urine/cervical  
• rectal and pharyngeal (if exposed) |
# Risk Assessment Tools

## Performing a Sexual Risk Assessment

### Past STDs/Personal Risk
- Are you currently sexually active? If not, have you ever been sexually active?
- Have you had unprotected vaginal, oral or anal sex?
- Have you ever been diagnosed with an STI?
- Have you ever been tested for HIV or other STIs?
- Have you had sex with someone who has an STI?
- Have you had a new sex partner in the past three months?
- Have you had more than one sex partner?
- Have you had sex with someone who may have had more than one partner?
- Have you exchanged sex for drugs, money and/or other things?

### Partners
- In recent months, how many sex partners have you had?
- Have you had sex with men, women or both?

### Practices
- Do you have vaginal sex (penis in vagina)?
- Do you have anal sex (penis in anus/butt)?
- Do you have oral sex (penis in mouth or vagina/vulva)?
- Have you ever used needles to inject/shoot drugs?

### Prevention
- What do you do to prevent STIs and HIV?
- Do you and your partner(s) use any protection against STDs?
- If so, what kind of protection do you use?
- How often do you use this protection?
- In what situations or with whom?
- Tell me about your use of condoms with your recent partner.

### Pregnancy plans and prevention
- How would it be for you if you get pregnant now?
Community Partners

- Valuable resource
  - Help build organizational capacity
  - Complimenting/enhancing data
- Potential partners
  - State/local Health Departments
    - County Health/STD Departments
  - State/Regional Infertility Prevention Programs (IPP)
  - I/T/U partners – Project Red Talon
  - Tribal Epidemiology Centers
  - Centers for Disease Control and Prevention
  - IHS National STD/HIV Programs
Resources

• IHS STD Surveillance Report
  • Area-level profiles
• Chlamydia Screening Guidelines
  • Screening in Schools
  • Screening in Tribal Jails
• STD/HIV Peer Educator Curriculum adapted for Native youth
• Project Red Talon
  • Tribal Advocacy Kit
  • Educational materials
  • Technical Assistance
Thank you

Melanie Taylor, MD, MPH
CDR, US Public Health Service
Medical Epidemiologist
Centers for Disease Control and Prevention

Phone 602-372-2544
mdt7@cdc.gov