

# Executive Summary

Sexually Transmitted Diseases cause significant physical, social, and economic harm to Tribal communities in the Pacific Northwest. In 2003, American Indians were nearly six times more likely than Whites to get chlamydia, over three times more likely to get gonorrhea, and twice as likely to have syphilis.<sup>1</sup> These infections compromise not only individual well being, but the well being of the community as a whole. Sexually transmitted infections are associated with a range of considerable health outcomes, including chancres, pain, infertility, cancer, and even death. Further, direct medical costs associated with STDs can cause a substantial economic burden to NW Tribes.<sup>2</sup>

- **Chlamydia:** In Oregon, Washington, and Idaho, American Indian and Alaska Native (AI/AN) women are nearly three times more likely to be diagnosed with Chlamydia than non-Native women, and AI/AN men are twice as likely to be diagnosed. Both nationally and regionally, AI/ANs are disproportionately impacted by chlamydia infection.
- **Gonorrhea:** In the U.S. as a whole, gonorrhea rates among AI/ANs are slightly lower than gonorrhea rates reported for “All Races” combined. This success is not demonstrated in the NW however, where AI/AN gonorrhea rates are nearly twice that of the total population.
- **Syphilis:** Prior to 1995, syphilis rates among AI/ANs in Idaho, Oregon, and Washington were higher than rates observed for the total Northwest region. Since 1997, AI/AN rates in the Northwest states have been lower than rates for the total population.
- **HIV / AIDS:** At 10.4 cases per 100,000, American Indians and Alaska Natives had the 3rd highest AIDS rate in 2003, in relation to other ethnic groups.
- **Hepatitis:** In 2002, the Hepatitis B rate among AI/ANs was second only to non-Hispanic blacks. Hepatitis C rates have declined in all racial groups since 1995, but non-Hispanic blacks and AI/ANs continue to have higher incidence rates than other racial/ethnic groups.

Fortunately, with improved community awareness and access to prevention services, the risk of acquiring or transmitting a sexually transmitted infection can be greatly reduced. In support of this effort, Tribes in Oregon, Washington, and Idaho are now uniting to address this common concern. The Red Talon STD Profile is their first step towards developing an inter-tribal plan to eliminate STD-related disparities among American Indians in the Pacific Northwest.



# Red Talon STD Profile

STD Treatment & Prevention Capacity within  
Idaho, Oregon, and Washington Tribes

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**...and the 43 Tribes of Idaho, Oregon, and Washington.**

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***In 2003, American Indians were nearly six times more likely than Whites to have chlamydia, over three times more likely to have gonorrhea, and twice as likely to have syphilis.***

# 1. Introduction

It has been recognized for some time that American Indians and Alaska Natives (AI/AN) are disproportionately impacted by high rates of sexually transmitted diseases (STDs). In 2003, American Indians were nearly six times more likely than Whites to have chlamydia, over three times more likely to have gonorrhea, and twice as likely to have syphilis.<sup>1</sup> While STD rates vary by region and by Tribe, this issue clearly compromises the health of Natives throughout the U.S.

As is true among other racial and ethnic populations, chlamydia and gonorrhea rates in Indian Country are typically highest among those aged 15-29. Given the “young” demographic distribution in many AI/AN communities, this disparity is particularly troubling to those affiliated with the prevention of HIV/AIDS. Research now shows that those infected with STDs are 2 - 5 times more likely to acquire HIV when exposed through sexual contact. Consequently, elevated STD rates among AI/AN youth put them at heightened risk for the transmission of HIV.

Contributing to this challenge, racial health disparities often mark the presence of other social inequities, including poverty, inadequate access to quality healthcare, and residing in communities with a high existing burden of STDs.

Broadly generalized, many Tribes are further affected by factors that promote STD/HIV transmission (geographic isolation, early sexually debut, small populations, alcohol and substance use, and close knit social and sexual networks). Consequently, many predict that HIV/AIDS could have the same devastating consequences to Native communities that smallpox, typhus, and measles had in the 1800's.<sup>3</sup>

Acknowledging the devastating potential that sexually transmitted infections could have on tribal well being, Tribes in Oregon, Washington, and Idaho are now joining together to address this common concern.



In 2005, the Red Talon STD/HIV Coalition was established to: “...reduce the prevalence of STDs among American Indians and Alaska Natives in the Pacific Northwest by uniting to share wisdom, data, and resources, identify and address common priorities, and develop strategies to eliminate STD-related disparities.”

To achieve this goal, the NW tribes have chosen to develop an **STD/HIV Tribal Action Plan**. Before this could be done, an evaluation was needed to document current prevention efforts and identify activities that would most effectively reduce STD transmission in Native communities. This Profile is a product of that effort.

To identify STD testing, treatment, and prevention services currently provided by the NW tribes, Project Red Talon developed a comprehensive Capacity Assessment that was administered to over 90 tribal clinic and health program

personnel in May-July 2005. Each survey sought information regarding systems for promoting STD awareness, identified populations needing services, identified barriers to access, assessed service utilization, and identified prevention priorities and training needs.

Included in this review, Project Red Talon worked with the Centers for Disease Control and Prevention and the Indian Health Service to obtain current and historical STD case and prevalence rates for American Indians living in Idaho, Oregon, and Washington. These rates were stratified by gender, age, state, and county, and include comparisons with other racial/ethnic groups.

It is our hope that the Red Talon STD Profile will serve as a valuable resource for tribal health advocates and decision makers in the design and implementation of effective STD prevention initiatives.

## Data - Sources:

**Data Sources.** Unless otherwise noted, all STD screening and treatment guidelines that appear in Chapters 4-8 are selected passages from the *Sexually Transmitted Diseases Treatment Guidelines 2002*.<sup>4</sup>

Unless otherwise noted, cases, rates, and figures included in Chapters 4, 5, and 6 were provided to Project Red Talon by the Division of STD Prevention within the Center for Disease Control and Prevention (CDC).<sup>5</sup> According to the CDC, each State is required to report new cases of Chlamydia, Gonorrhea, Syphilis, and HIV/AIDS to the agency, allowing regional and national trends to be identified and monitored. Until recent years, States aggregated cases by sex, race, and age group on an annual basis, and submitted these records to CDC on hard-copy forms. Today, States transmit case-specific records on a weekly basis. These records are aggregated to obtain

age-specific case counts by race and gender.

Using these records, data by age, race, and sex are available from 1981-2003 for gonorrhea (GC) and primary and secondary syphilis (P/S), and for chlamydia (CT) since 1996.

**Race/Ethnicity.** On hard-copy forms, states coded race/ethnicity as White non-Hispanic, Black non-Hispanic, Hispanic, Asian/PI, AI/AN, or Unknown race. The electronic format has Hispanic as a separate variable. Prior to 1981, cases were reported only as White, non-White and Unknown race. Following the race/ethnicity “category” change in 1981, some states remained unable to accurately report each of the Race categories for several years. Consequently, national STD rates for AI/ANs may be underestimated in earlier years.

**Age groups.** Hard-copy forms combined cases in 5-year increments for ages 0-44 years (0-4, 5-9, 10-14, etc.). For years 45-64, age-groups were categorized in 10-year increments, and one category was used for those 65 and over. The electronic form allows ages to be reported in 1-year increments, which are converted to the original increments to track demographic trends.

**Sex.** Sex is coded as Male or Female. The electronic system has an Unknown Sex category.

**Areas.** The following five areas are included in this report: (1) total United States, (2) states in the Northwest Portland Area Indian Health Board service area (including Idaho, Oregon, and Washington – also referred to as the Northwest or NW), (3) Idaho, (4) Oregon, and (5) Washington state. All counties within these states are included.

**Groups.** Cases and rates are reported for all persons in each geographic area and for cases coded as AI/AN. To improve accuracy, cases coded as Unknown are re-distributed into known race categories based on the percentage of known race. For example, if 10% of the cases with a known race were coded as AI/AN then 10% of the unknowns are added to the AI/AN cases prior to computing the rates. This will increase the rate for each race/ethnic group, making states with different unknown rates more comparable.

**Rates.** Rates are computed as cases in a given group per 100,000 population. The rates were computed with unknowns re-distributed. Population estimates used for the rates were obtained from the Census Bureau. The 2000 multi-race populations were bridged to match the old race/ethnicity categories in a joint effort by the National Centers for Health Statistics and the Census Bureau.



**1981-2003 Trends.** Total adjusted cases and rates by sex of CT, GC and P/S syphilis were computed for all persons and for AI/ANs. Rates were computed annually from 1981 to 2003.

**Rates by Age.** Rates for total persons and for AI/ANs were computed by age group. Age groups are presented for ages 10 years through 65 and over. STDs below the age of 10 are often a result of misclassification and are omitted.

**Rates by Age and Sex.** Rates for total males and females and for AI/AN males and AI/AN females were computed by age groups. Age groups are presented for years from 10 years through 65 and over.

**Cases and rates by county.** Total and AI/AN cases were summed for each county in Idaho, Oregon and Washington.

***State and national surveillance data significantly underestimate the true prevalence of STDs among American Indians and Alaska Natives.***

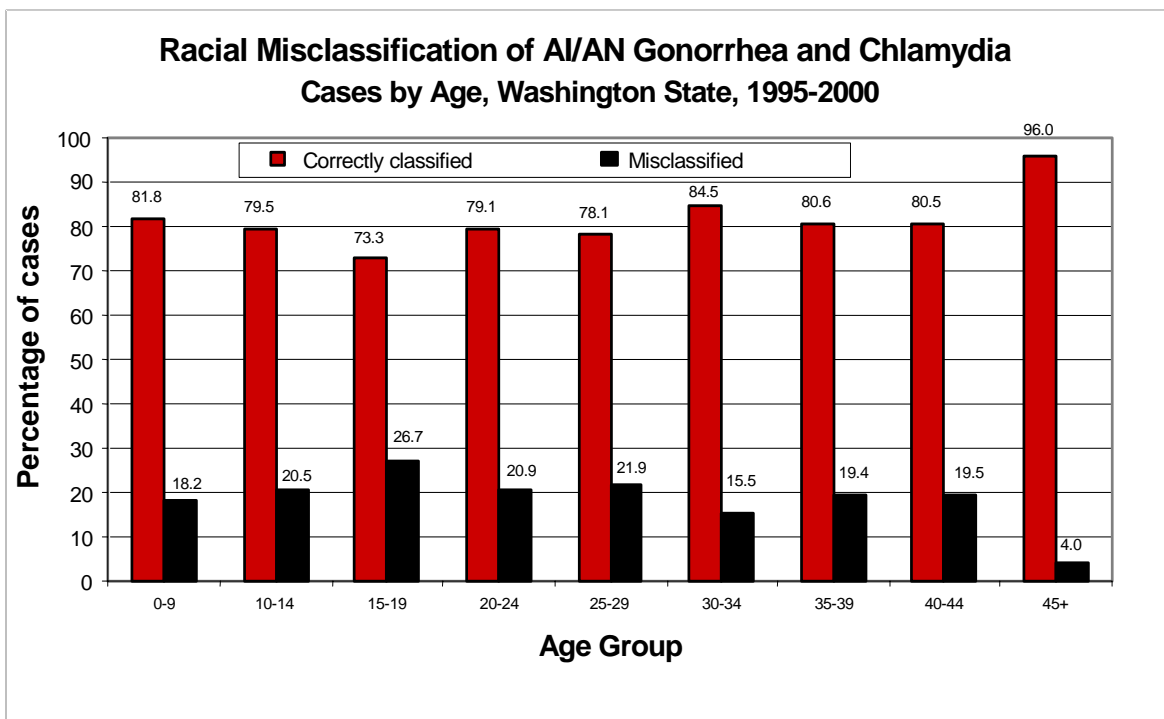
## Data Limitations:

**STD Screening.** Because sexually transmitted infections often produce no discernable symptoms, many AI/AN infections remain undiagnosed. Consistent screening protocols must be implemented to improve accurate case identification and treatment.

**STD Reporting.** Due to tribal sovereignty, tribally operated health facilities are not tied to the same reporting requirements that are mandated by states.<sup>6</sup> Consequently, if tribally operated facilities choose not to voluntarily report STD cases to the State or County surveillance system, this will lead to an underestimation of morbidity rates. Previous studies indicate that only 85% of tribally-operated and urban Indian healthcare facilities report HIV/AIDS cases to their state or county health department, and a smaller percentage report chlamydia and gonorrhea (71%), hepatitis C (67%), hepatitis B (65%), or hepatitis A (62%).<sup>7</sup> In the NW, reporting rates ranged from a high of 70% for

gonorrhea and syphilis, to a low of 43% for HIV. Low rates of STD screening and case reporting at tribal health facilities contribute to a significant underestimation of the true burden of disease in Indian Country as a whole.

**Racial Misclassification.** Despite attempts to improve data accuracy by re-categorizing cases of “unknown race,” errors in racial/ethnic classification and population estimates significantly impair the accuracy of state and national data.<sup>8</sup> Racial misclassification occurs when AI/AN STD cases are reported to the CDC in a different racial/ethnic category. Research suggests that AI/AN racial misclassification frequently occurs for a number of reportable conditions, including cancer, injuries, cardiovascular disease, and mortality. Misclassification most often occurs as a result of “racial observation” by healthcare professionals, rather than more accurate “self-reports” of racial/ethnic identity.<sup>9</sup>



Racial misclassification almost always results in AI/AN persons being misclassified as non-AI/AN, and thus can contribute to the underestimation of STDs affecting Native communities.<sup>9</sup>

**Correcting Racial Misclassification.** A growing body of literature now demonstrates the value of record linkage studies for improving Native morbidity and mortality rates.<sup>9</sup> To reduce racial misclassification within STD rates, the Northwest Tribal Registry Project, a project within the NPAIHB's *EpiCenter*, conducted STD linkage studies in Washington state in 2002 and in Oregon state in 2003.<sup>10,11</sup>

In all, over 22% (738 of 3,235) of the AI/AN cases were found to be misclassified as non-native in the WA State STD Registry.<sup>10</sup> Among AI/AN 15-19 year olds, over 26% of chlamydia and gonorrhea cases in the WA State Registry were racially misclassified prior to the study. Misclassification rates

ranged from 4% to over 26% among the various age groups.

In the Oregon State STD Registry, nearly 55% of AI/ANs were racially misclassified. The linkage identified a total of 1,338 STD cases among AI/ANs (including 579 newly identified AI/AN cases).<sup>11</sup> This linkage increased accurate case ascertainment by 76%.

Though record linkage studies are an effective tool for improving data accuracy, the NPAIHB has not corrected STD records in Idaho or repeated this process in subsequent years.

To design and target effective STD intervention programs, and to support adequate resource allocation, timely and accurate health status data is of vital importance.<sup>9</sup> This requires the identification and correction of AI/AN STD misclassification using record linkage analyses in the Pacific Northwest. Unfortunately, funding limitations have compromised this undertaking.





## 2. Tribal Clinic STD Testing and Treatment Practices

In order to understand the types of STD and HIV prevention services available within local tribal communities, Project Red Talon (PRT) and the Northern Plains Tribal Epidemiology Center (NPTEC) collaborated to develop a comprehensive Tribal STD/HIV Capacity Assessment Survey. The survey was administered to tribes in Idaho, Oregon, Nebraska, North Dakota, South Dakota, and Washington.

Two survey tools were developed to encapsulate the various prevention efforts available at the clinic and community level. The “provider” survey targeted STD screening and treatment practices among Indian Health Service (IHS) & tribal clinicians. The “community” survey targeted STD prevention efforts of tribal health directors, health program managers, and community health educators. Each survey sought information regarding systems for promoting STD awareness, populations needing services, barriers to access, service utilization, prevention priorities, and training needs.

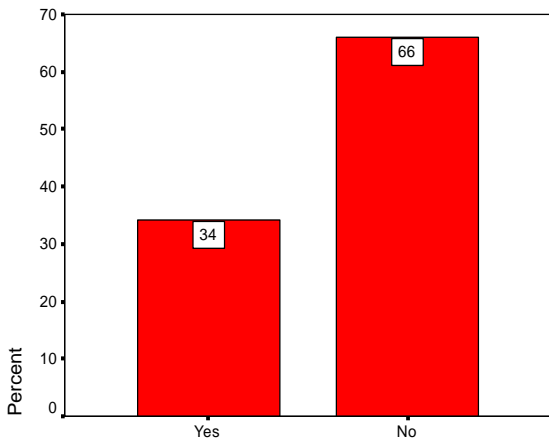
**Methods:** Both surveys were designed to illicit information about each tribe’s capacity for STD and HIV screening, treatment, and prevention, guided by the *Community Readiness Model*.<sup>1</sup> The Readiness Model was designed to improve community-based prevention efforts by acknowledging and responding to a tribe’s culture, resources, and current level of readiness.

After obtaining approval from each Area’s IHS IRB (Portland and Aberdeen), the survey tools were pre-tested with key informants to assure comprehension and identify potential problems. Following pre-test revisions, both surveys were self-administered using paper-based and internet formats (via SurveyMonkey.com). Each respondent was sent a packet with a cover letter, a paper copy of the survey form, and a self-addressed stamped envelope. This message was also sent via email with links to the survey imbedded in the message.

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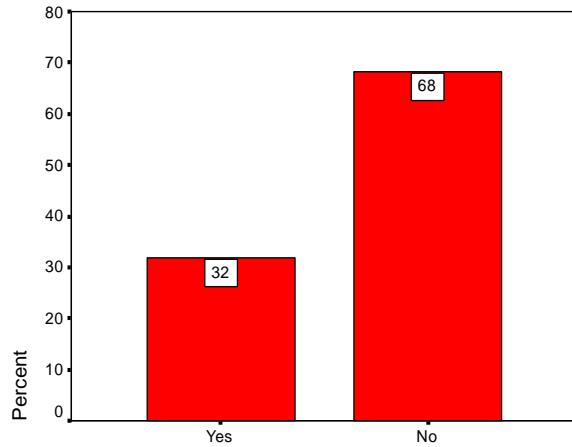
<sup>1</sup> B Plested, RW Edwards, and P Jumper-Thurman. *Community Readiness Model*. Tri-Ethnic Center for Prevention Research. Colorado State University. November 2004.

### Chlamydia Screening



Does your clinic offer testing/screening for Chlamydia?

### Gonorrhea Screening



Does your clinic offer testing/screening for gonorrhea?

## Assessing Tribal Capacity:

The *Community Readiness Model* identifies six dimensions of readiness, which influence a community's ability to take action to prevent STDs/HIV.

**1. Community Efforts:** To what extent are there efforts, programs, and policies that address STDs/HIV?

**2. Community Knowledge of the Efforts:** To what extent do community members know about local efforts and their effectiveness, and are the efforts accessible to all segments of the community?

**3. Leadership:** To what extent are appointed leaders and influential community members supportive of STD/HIV prevention?

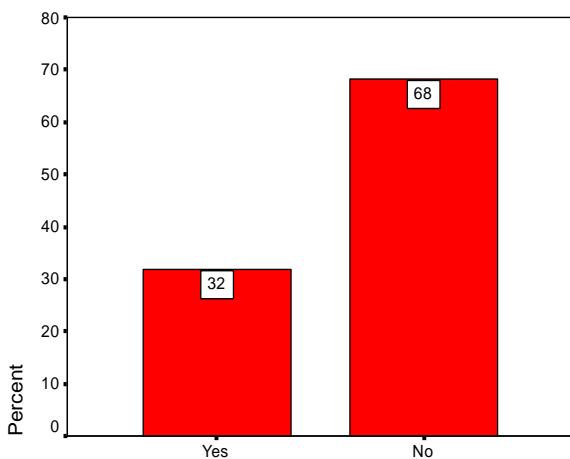
**4. Community Climate:** What is the prevailing attitude of the community toward STDs/HIV and early detection and testing? Is it one of helplessness or one of responsibility and empowerment?

**5. Community Knowledge about the Issue:** To what extent do community members know about or have access to information on STDs/HIV, STD/HIV testing, consequences, and local implications?

**6. Resources Related to the Issue:** To what extent are local resources – people, time, money, space, etc. – available to support efforts?

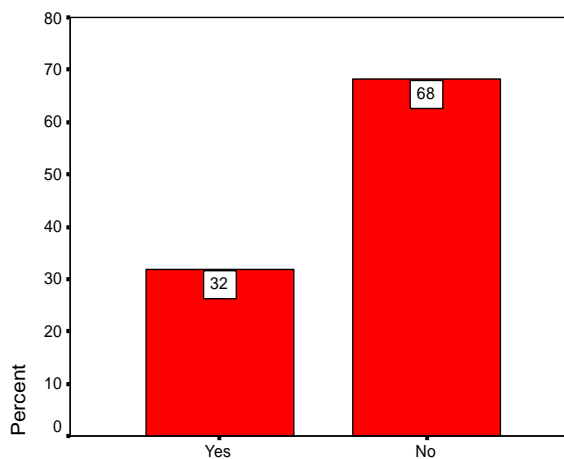
By obtaining information on each of these capacity indicators, the Red Talon STD/HIV Coalition will be better able to develop health promotion strategies in response to identified needs.

### HIV Screening



Does your clinic offer testing/screening for HIV infection?

### Hepatitis C Screening



Does your clinic offer testing/screening for hepatitis C?

The following information was obtained from 44 respondents to the “provider” *Tribal STD/HIV Capacity Assessment*, which was conducted by Project Red Talon from May-July 2005.

### Clinic STD/HIV Efforts

**Disease Priorities:** Survey respondents were asked whether or not various sexually transmitted diseases were priority conditions for their tribal health clinics. The results indicate that, overall, sexually transmitted diseases are not considered to be priorities for tribal clinics. Of greatest significance, 27% of clinicians felt that chlamydia was an important clinical condition, 25% ranked HIV as important, and 20% felt that gonorrhea and hepatitis C were important. The lowest STD priorities were shigella, giardia, entamoeba, and cryptosporidium (5% each).

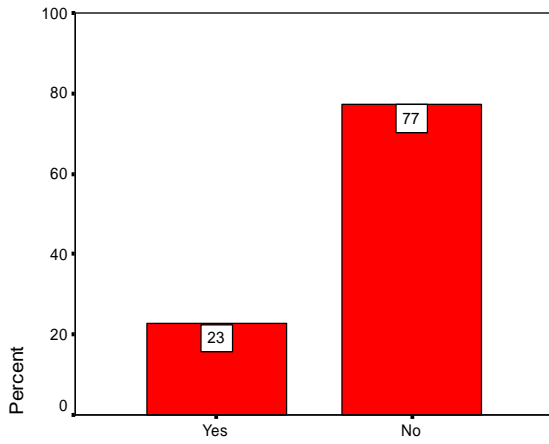
**Screening and Testing:** While clinicians reported that, for the most part, tribal health clinics do not consider the majority

of sexually transmitted diseases clinical priorities, almost all clinics represented in the survey provide at least some screening or testing for sexually transmitted diseases. Among the highest priority diseases, there were correspondingly high rates of testing and treatment.

The above graphs show proportions of STD screening or testing for the four diseases that were identified as highest priorities among respondents overall: Chlamydia, gonorrhea, HIV infection, and hepatitis C. STD treatment rates are reported on the following page.

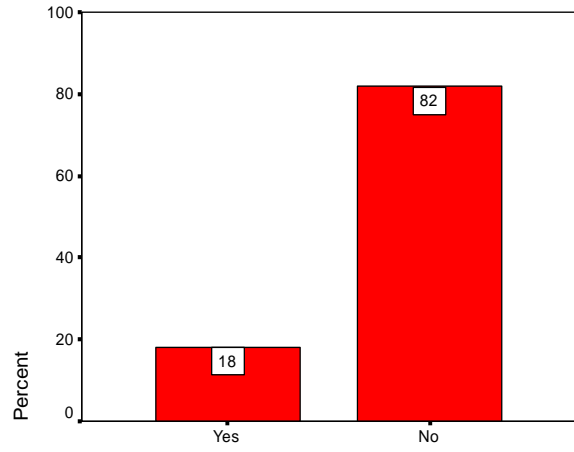
In all of the highest priority cases, treatment rates lagged well behind STD screening/testing rates. For example, only a third of those who reported testing for Hepatitis C also provided treatment for the disease. On average, three-quarters of clinicians reported that their clinic regularly tests for a variety of sexually transmitted diseases, while only 40% reported capacity to treat the conditions.

### Chlamydia Treatment



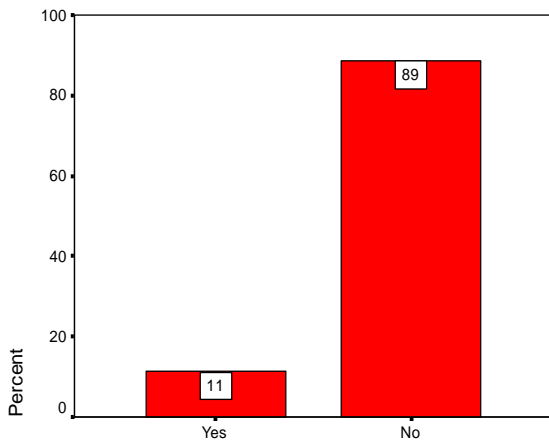
Does your clinic offer treatment for Chlamydia?

### Gonorrhea Treatment



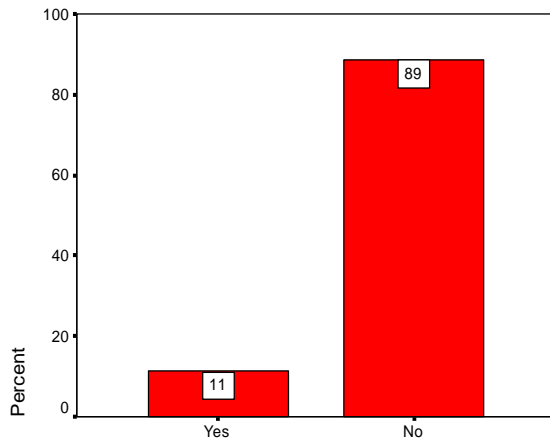
Does your clinic offer treatment for gonorrhea?

### HIV Treatment



Does your clinic offer treatment for HIV infection?

### Hepatitis C Treatment



Does your clinic offer treatment for hepatitis C?

***Less than two-thirds of Tribal clinics in the Pacific Northwest maintain comprehensive protocols to reduce STD transmission.***

**Test result wait-time:** Eight out of ten respondents indicated that patients must wait 2-9 days to obtain STD test results. Lengthy wait-times were slightly more common for HIV results, where 90% of respondents said patients must wait 2-9 days for results.

**Clinic-Based Policies and Protocols:**

The Centers for Disease Control and Prevention have identified a number of clinical policies that can reduce the transmission of STDs within the local population. When asked about eleven such protocols, 60% of respondents reported the use of at least 8 of the 11 policies listed.

**Effective policies include:**

- Conducting STD exams and treatment
- Conducting serologic testing for STDs/HIV
- Conducting STD morbidity reporting for defined diseases
- Conducting STD laboratory reporting for defined diseases
- Maintaining strict confidentiality of records
- Utilizing a Partner Notification System

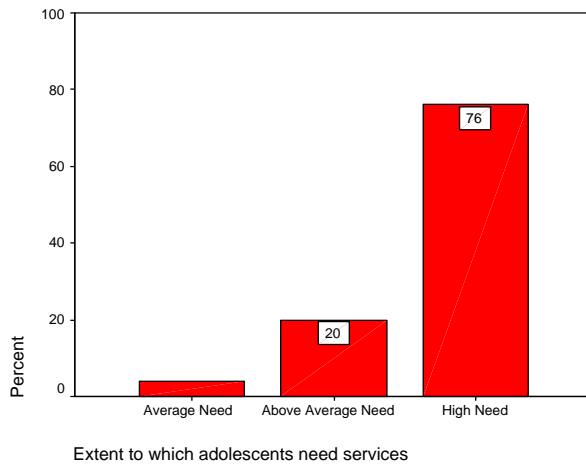
- Utilizing Partner Delivered Therapy
- Performing prenatal STD tests
- Establishing policies that allow minors to access STD services without parental consent
- Universal precautions for Blood-borne pathogens

Respondents reported that almost all clinical protocols in place were adapted from a state or national guidelines.

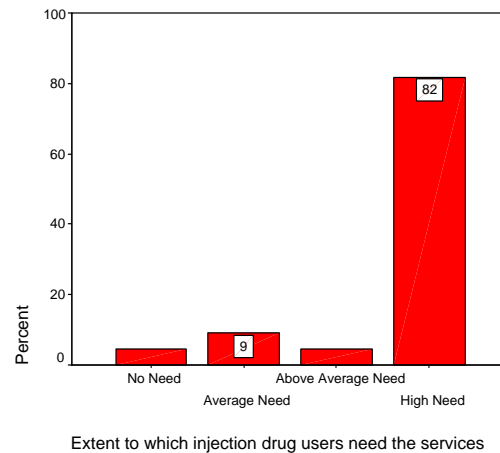
**Reporting:** Only 56% of respondents indicated that their clinic upheld a clinical protocol to report STD cases to the local or state STD registry. STD cases were more often reported by tribal clinics to the State or County Health Department than the Indian Health Service.

Reporting rates ranged from a high of 70% for gonorrhea and syphilis, to 67% for chlamydia, 64% for AIDS, 50% for Hepatitis C, and 43% for HIV.

### STD Service Need Among Adolescents



### STD Service Need Among IDUs



**Clinic Education and Outreach:** On average, about 70% of clinicians reported that patients receive STD/HIV-related education during reproductive health exams.

About 80% of tribal health clinics provide STD pre- and post-test counseling, and nearly two-thirds provide HIV pre- and post-test counseling.

Health fairs were identified as the most often common STD and HIV/AIDS prevention activity provided by tribal clinics - most clinics sponsored few other prevention activities.

### Knowledge about Services

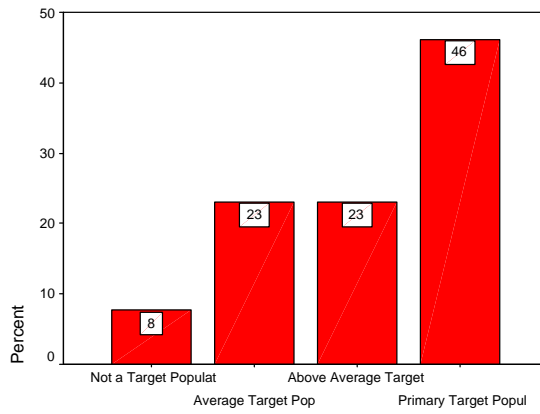
**Populations in Need of STD Services:** Survey respondents were asked to indicate the extent to which sub-groups within the tribal population were in need of the STD treatment and prevention services offered by the tribal clinic.

Responses ranged from “Not in Need” to “Significant Need.”

The results indicate that 96% of those surveyed believe adolescents are in greatest need of STD treatment and prevention services. Seventy-six percent of clinicians reported that teens “Significantly Needed” services, and 20% reported “Above Average Need”. In terms of “Significant Need” alone, however, a greater proportion of survey respondents (80%) reported that injection drug users need STD treatment and prevention services. Those with alternative lifestyles were believed to have the lowest level of need, according to those surveyed.

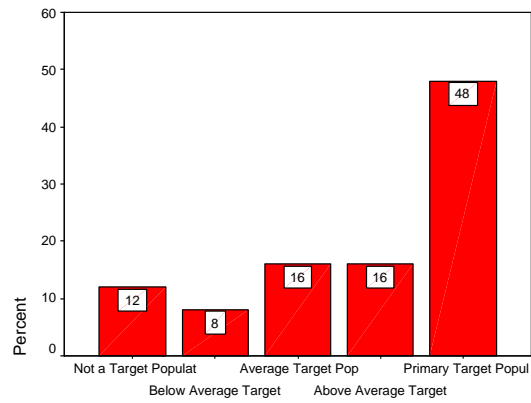
**Populations Targeted for STD Services:** Similarly, respondents were asked to rate the extent to which sub-groups were targeted for STD services by the clinic, with answers ranging from “Not Targeted” to “Highly Targeted.”

## Extent to Which Adolescents are Targeted by the Tribal Clinic



Extent to which adolescents are a target population

## Extent to Which Pregnant women are Targeted by the Tribal Clinic



Extent to which pregnant women are a target population

The majority of respondents (69%) surveyed said their health clinic considers adolescents to be an “Above Average” to “Highly Targeted” population. 64% of clinicians also reported pregnant women were a primary target. According to 38% of survey respondents, two-spirit (L/G/B/T/Q)<sup>ii</sup> community members were “Not a Target Population” for STD treatment and prevention services.

### Leadership

Respondents were asked to report on the extent to which various groups supported prevention activities sponsored by the tribal health clinic. Respondents were asked to rate the level of support they received from each group, ranging from “No Support” to “High Support.”

Respondents reported that Health Clinic staff (69%) and Community Health Care

<sup>ii</sup> Lesbian, Gay, Bisexual, Transgender, and Questioning

Professionals (62%) provided the highest level of support for tribal STD prevention activities. Tribal leaders (27%) provided the least amount of support. In fact, 58% of respondents reported that tribal leaders provide “Below Average” or “No Support” for STD prevention activities.

### Clinic Climate

According to those surveyed, adults are the most frequent users of tribal health clinic services.

### Clinic Knowledge about STD/HIV

Over 95% of clinicians reported having received training on STD and HIV/AIDS issues, and 90% felt their STD and HIV/AIDS training was adequate for their needs.

**Similar Research** - In May 2004, the Council of State and Territorial Epidemiologists (CSTE) conducted a survey of tribally-operated and urban Indian healthcare facilities to assess their STD case reporting practices and identify barriers to tribal participation in public health surveillance. Of the 66 survey respondents, 29% were from facilities located in the Pacific Coast region (CA, WA, OR, ID). Key findings from this assessment include:

- More than half (65%) of respondents were familiar with their states' STD reporting and surveillance guidelines, but only 18% were familiar with their states' reportable disease list.
- Overall, 85% of respondents whose facilities have diagnosed HIV/AIDS among their clientele indicated that HIV/AIDS case reports are sent to a state or county/municipal health department.
- A smaller percentages of respondents indicated that their facilities report chlamydia and gonorrhea (71%), hepatitis C (67%), hepatitis B (65%), and hepatitis A (62%).
- Less than a third of tribal/urban clinics receive state *or* county/municipal surveillance reports for sexually transmitted infections, but 75% receive notification during outbreaks.
- Only 23% of respondents reported that a process exists to address surveillance issues with the state or county/municipal health department.
- To improve identification and reporting of infectious diseases, tribally-operated and urban facilities need training in disease surveillance and reporting, case investigation and follow-up, and surveillance coordination; personnel for counseling; and help with laboratory costs for standard and alternative diagnostic testing (e.g., rapid testing for HIV).



*Tribal clinicians expressed high interest in receiving additional STD/HIV training, particularly in STD Treatment Guidelines and Women's Health.*

### Resources Related to STD/HIV

**Clinic Staffing:** While the majority of clinicians reported having several years of experience working with their local tribe (about 60% of respondents had been employed more than 3 years in their current position), 9 out of 10 respondents estimated that less than 10 hours per week of their time was dedicated to prevention activities.

**Prevention Priorities:** Respondents were asked to report on tribal health clinic prevention priorities in two ways: first, by rating the level of interest in training on prevention topics; and second, by rating the extent to which prevention capacity activities are a priority for the clinic.

Despite assurance in their current level of training, respondents expressed high interest in receiving additional training across all STD prevention areas, but particularly in STD Treatment Guidelines (79%) and Women's Health Issues (78%).

In terms of prevention priorities, respondents reported that access to services for adolescents and adults, and increasing community awareness were the top priorities for tribal health clinics.

**Partnerships:** Seventy-five percent of respondents said their clinic is interested in partnering with other agencies to secure cheaper STD treatment medications.



## 3. Tribal STD Prevention Activities

As discussed in Chapter 2, Project Red Talon surveyed tribal health directors, health program managers, and community health educators to evaluate NW Tribal capacity around STD and HIV prevention. Each survey sought information regarding systems for promoting STD awareness, populations needing services, barriers to access, service utilization, prevention priorities, and training needs. (See page 17 for complete methodology.)

**The following information was obtained from 45 respondents to the “community” *STD/HIV Tribal Capacity Assessment*, which was conducted from May-July 2005. Responses represent a total of 27 NW Native communities.**

### Community Efforts

**STD Outreach:** To prevent STD/HIV transmission among community members, Tribal health programs most often distribute condoms (94%), provide education (81%), and promoted clinic-based screening (69%).

To reduce transmission, information about the signs and symptoms of infection and about clinic confidentiality were the most common messages used to encourage STD and HIV/AIDS screening.

***Only one-third of NW Tribes have passed community policies to reduce STD and HIV transmission.***

About 90% percent of respondents said information was available within the community about modes of transmission and risk reduction strategies, and one-third of respondents said information about the prevalence of STDs was available to tribal members.

While fewer than half of respondents reported that their tribal health department had an STD and/or HIV/AIDS program, 87% indicated that they'd like additional help developing and utilizing STD/HIV educational materials.

**STD-Related Policies:** Nearly two-thirds of respondents said that their tribe has not passed any policies to reduce STD and HIV rates within the community.

**Knowledge about Services**

**Populations in Need of STD prevention Services:** Adolescents and injection drug users were viewed as the groups most in need of prevention activities and services by respondents.

**Populations targeted for STD prevention Services:** Adolescents were the group most targeted for STD and HIV/AIDS prevention activities and services. Two-Spirit (L/G/B/T/Q)<sup>iii</sup> and injection drug users were reported to be the least targeted groups for prevention activities.

**Service utilization:** Respondents reported low utilization of STD and HIV/AIDS prevention services among all populations.

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<sup>iii</sup> Lesbian, Gay, Bisexual, Transgender, and Questioning



### **Leadership**

Nearly seven out of 10 survey respondents (74%) believed that STD and HIV/AIDS prevention is a low priority for tribal leaders. Correspondingly, only 24% of these health advocates felt that tribal leaders supported STD and HIV/AIDS prevention activities in their communities.

### **Community Climate:**

**Prevention Priorities:** Respondents reported that “Increasing youth outreach”, “Decreasing rates of injection drug use”, “Increasing age of first intercourse”, and “Increasing knowledge about screening and treatment” were the most significant STD and HIV/AIDS program priorities for tribal health programs.

### **Knowledge about STD/HIV**

Nearly all (93%) of the health directors, health program managers, and health educators surveyed by Project Red Talon had received earlier training on STD and HIV/AIDS issues. Additional training is still needed, however, as nearly one-third indicated that the training was not adequate for their needs.

Youth prevention and intervention workshops were viewed as the most critical training areas of need.

### **Resources Related to STD/HIV**

**Clinic Staffing:** While the majority (60%) of respondents indicated that they had been employed more than 3 years in their current position, nearly all of the health advocates (97%) estimated that less than 10 hours of their time per week was dedicated to prevention activities.

***The majority of tribes in Oregon, Washington, and Idaho (85%) uphold moderate to high levels of STD prevention capacity.***

**Partnerships:** Ninety percent of respondents said that their tribe has a tribal health clinic or center, and 80% of respondents reported engaging in collaborations with other agencies on STD and HIV/AIDS issues.

**Funding:** The vast majority of respondents (72%) indicated that funding for their STD and HIV/AIDS prevention program is inadequate. Sixty-percent had not applied for external STD and HIV/AIDS funding.

**Youth Involvement:** 60% of respondents said that their program does not engage in youth leadership activities related to STD and HIV prevention.

**Overall STD Prevention Capacity Rating**

To evaluate the overall, STD screening, treatment, and prevention capacity of the NW Tribes, results from the two surveys were used to generate three index scores measuring each tribe's:

1. Participation in prevention activities,
2. Utilization of clinical protocols, and
3. Breadth of screening and treatment services.

An index score for each of these categories was then generated using responses from a number of questions throughout the survey. Once generated, the three index scores were averaged to produce a total **STD Capacity Rating** for each tribe. Based on the number of items used to generate each index score, and the method used to calculate the final score, "Capacity Ratings" could range from 0 to 9.0

Dividing the scale into three segments (with 0-3 indicating low capacity, 4-6 indicating moderate capacity, and 7-9 indicating high capacity), the majority of tribes (85%) currently maintain moderate to high levels of STD prevention capacity.

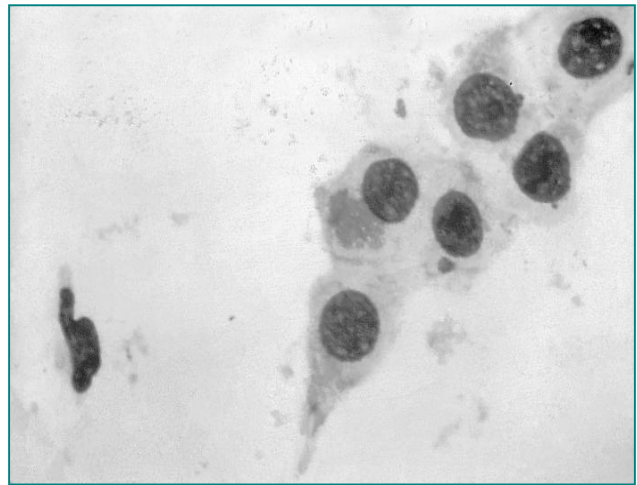
To obtain your own Tribe's score, please contact Project Red Talon.

## Tribal STD Capacity Ratings

<b>Tribes represented in the survey</b>	<b>STD Capacity Rating</b>
Tribe A	6.33
Tribe B	3
Tribe C	6.5
Tribe D	2.33
Tribe E	7.7
Tribe F	5
Tribe G	6.67
Tribe H	7
Tribe I	6.8
Tribe J	3.33
Tribe K	6
Tribe L	7.67
Tribe M	6.33
Tribe N	4.67
Tribe O	6.33
Tribe P	6.33
Tribe Q	7.67
Tribe R	8
Tribe S	8
Tribe T	0.33
Tribe U	4.8
Tribe V	4.67
Tribe W	1.33
Tribe X	4.5
Tribe Y	3.67
Tribe Z	5.67
Tribe A2	5.67







Photomicrograph of *Chlamydia trachomatis*, taken from a urethral scrape.

## 4. Chlamydia

*Chlamydia trachomatis* infection is the most commonly reported sexually transmitted disease (STD) in the United States, with an estimated 2.8 million infections occurring annually. Timely diagnosis and treatment of chlamydial infection is critical to preventing both complications and transmission.<sup>13</sup>

### Screening:<sup>14</sup>

In the United States, chlamydial infection occurs frequently among sexually active adolescents and young adults. Among both men and women, infections are commonly asymptomatic. As a result, sexually active adolescent women should be screened for chlamydia at least annually, even if symptoms are not present. Annual screening of all sexually active women aged 20--25 years is also recommended, as is screening of older women with risk factors (e.g., those who have a new sex partner and those with

multiple sex partners). An appropriate sexual risk assessment should always be conducted and may detect the need for more frequent screening for some women.

### Complications:<sup>14</sup>

Several important complications can result from *C. trachomatis* infection in women; the most serious include pelvic inflammatory disease (PID), ectopic pregnancy, and infertility. A recent investigation of patients in a health maintenance organization demonstrated that screening and treatment of cervical infection can reduce the likelihood of PID. Chlamydial infection in men can manifest as urethritis and epididymitis.

### Treatment:<sup>14</sup>

Treating infected patients prevents further transmission to sex partners. In addition, treatment of chlamydia in pregnant

***Chlamydia is the most common bacterial STD in the United States. Around 40% of women with untreated chlamydia infections develop pelvic inflammatory disease, and 20 percent of those become infertile, according to CDC. Chlamydia-infected patients are also three to five times more likely to acquire HIV if exposed.***

women usually prevents transmission of *C. trachomatis* to infants during birth. Treatment of sex partners helps to prevent re-infection for the original patient and new infections among other sex partners.

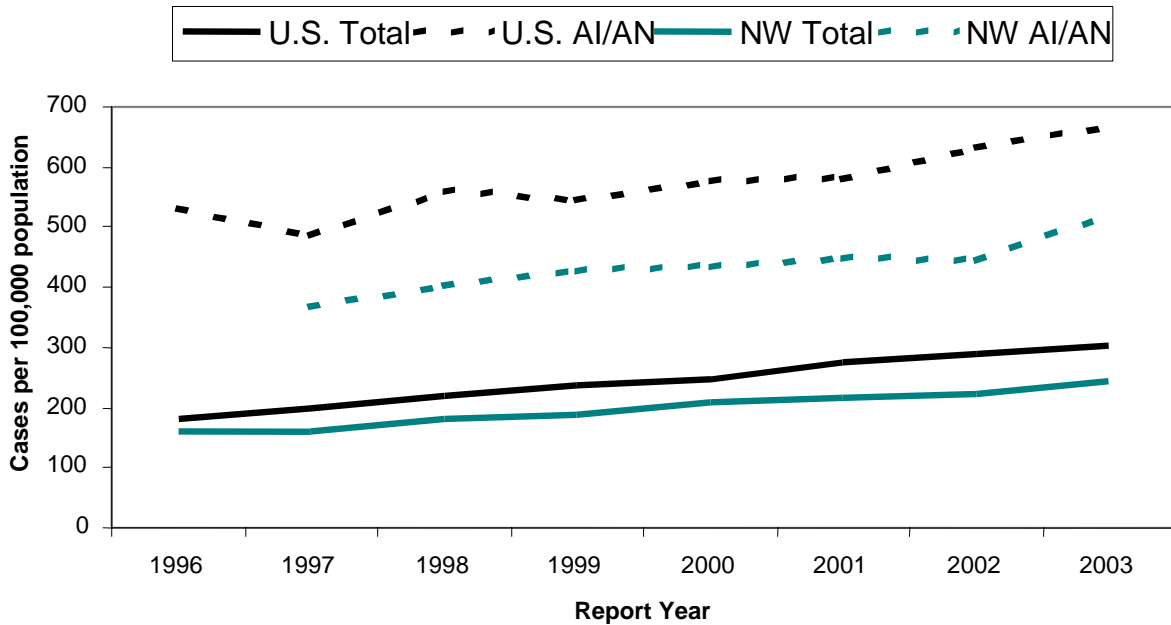
Coinfection with *C. trachomatis* often occurs among patients who have gonococcal infection; therefore, presumptive treatment of such patients for chlamydia is appropriate. For detailed information on appropriate treatment regimens, refer to the *2002 Sexually Transmitted Diseases Treatment Guidelines*, which are available on the CDC's web site:

<http://www.cdc.gov/std/treatment>.

#### **Chlamydia Facts:**<sup>15</sup>

- Chlamydia is the most frequently reported bacterial sexually transmitted disease in the United States.
- Women are frequently re-infected if their sex partners are not treated.
- Untreated, chlamydia can cause severe, costly reproductive health problems with both short- and long-term consequences, including pelvic inflammatory disease (PID), infertility, and tubal pregnancy (potentially fatal).
- An estimated 2.8 million Americans are infected with chlamydia each year.
- Under-reporting is substantial because most people with chlamydia are not aware of their infections and do not seek testing or treatment.

**Total and AI/AN Chlamydia Rates, 1996-2003  
United States and NW States (ID, OR, WA)**



## National Chlamydia Trends – All Races: <sup>5</sup>

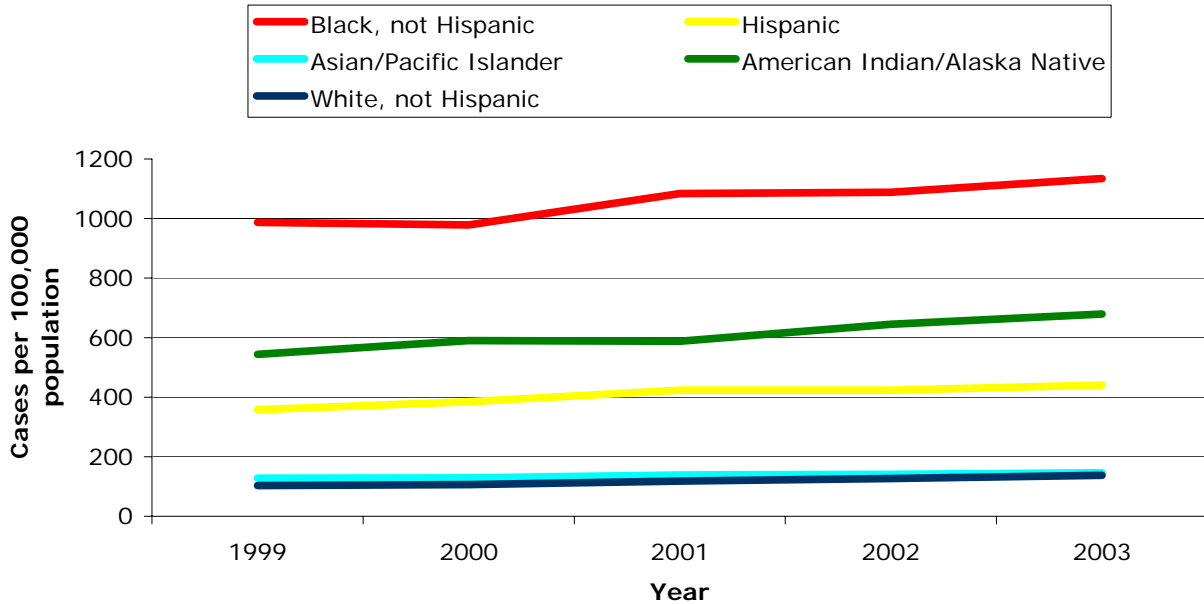
Both the number of chlamydia cases and the rate of infection for the Total U.S. population have increased since 1996, primarily due to improved screening rates over the last decade.

***In America, chlamydia rates have gradually increased since 1996.***

In the U.S., chlamydia rates gradually increased from 183 cases per 100,000 in 1996 to 302 cases of chlamydia per 100,000 in 2003.

The total number of chlamydia cases and the rate of infection in the Northwest (Idaho, Oregon, and Washington) also increased during this period, ranging from 162 cases per 100,000 in 1996 to 243 cases per 100,000 in 2003. These rates were slightly higher in Washington and Oregon than in Idaho.

### Chlamydia Rates by Race/Ethnicity United States, 1999-2003



## National Chlamydia Trends – By Race: <sup>16</sup>

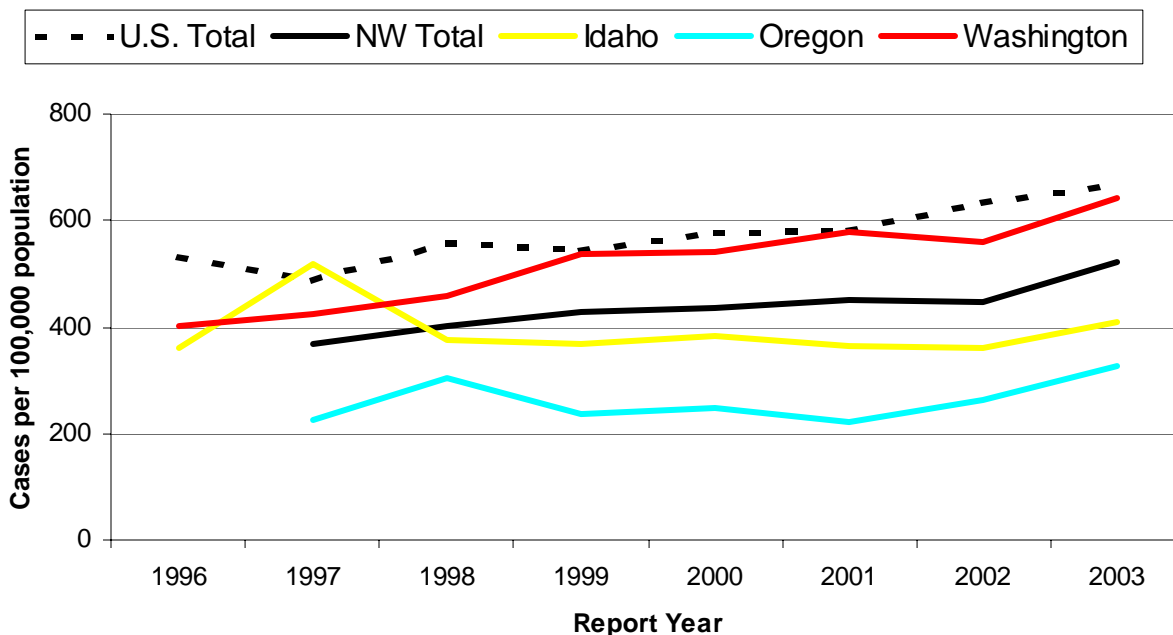
***When comparing rates by ethnicity, American Indians have the second highest chlamydia rate in the US.***

When broken down by race and ethnicity, non-Hispanic blacks in the United States had the highest rates of chlamydia from 1999-2003.

Rates among American Indians and Alaska Natives (AI/AN) were the second highest.

Rates among non-Hispanic whites are typically the lowest of all racial/ethnic groups.

### Total Chlamydia Rates among AI/ANs, 1996-2003 United States and NW States (ID, OR, WA)



## National Chlamydia Trends – Among AI/ANs: <sup>5</sup>

In the U.S. as a whole, AI/AN chlamydia rates are about 2.5 times higher than the rates reported among all persons, ranging from 533 cases per 100,000 to 667 cases per 100,000.

***Both nationally and regionally, AI/ANs are disproportionately impacted by chlamydia infection.***

In the U.S., AI/ANs make up approximately 1.5% of the total population and account for approximately 2% of all reported chlamydia cases.

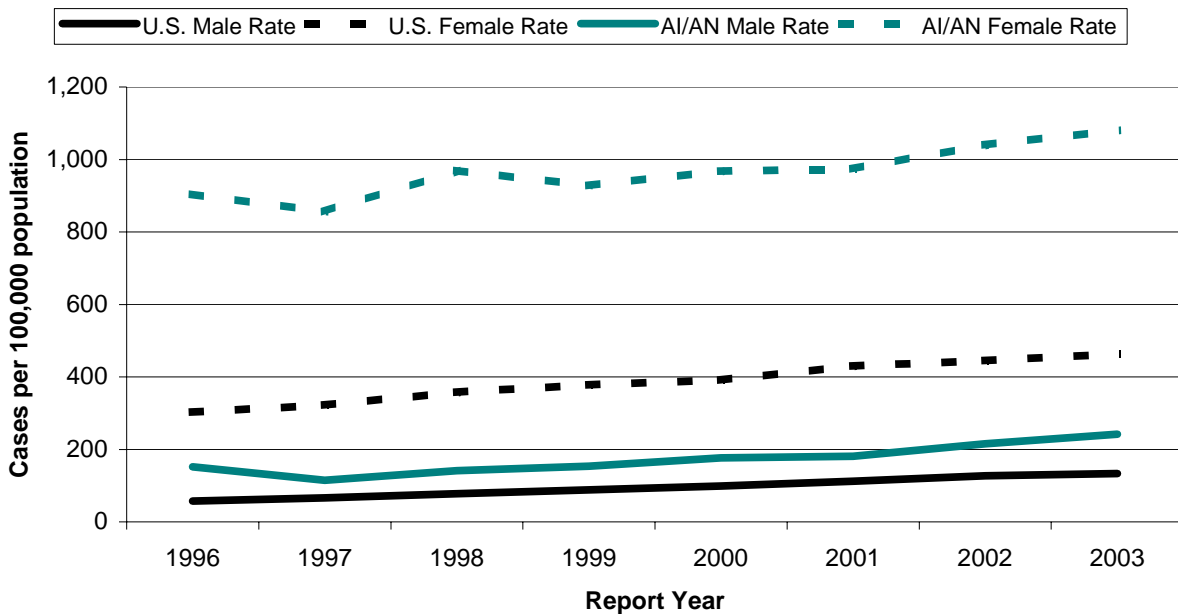
In Idaho, Oregon, and Washington, American Indians and Alaska Natives

make up 2.1%, 2.5%, and 2.7% of the total population (respectively), and account for approximately 3% of all reported chlamydia cases.

American Indian chlamydia cases and rates have increased since 1997 at a rate similar to those reported for the rest of the U.S.

.....  
**NOTE:** In 1996 (point not shown), Oregon shows approximately three times the number of chlamydia cases among American Indians than reported in later years. This may be due to a special screening effort or an isolated coding error.

### Total and AI/AN Chlamydia Rates by Sex, 1996-2003 United States



## Chlamydia Trends – AI/AN, By Gender: <sup>5</sup>

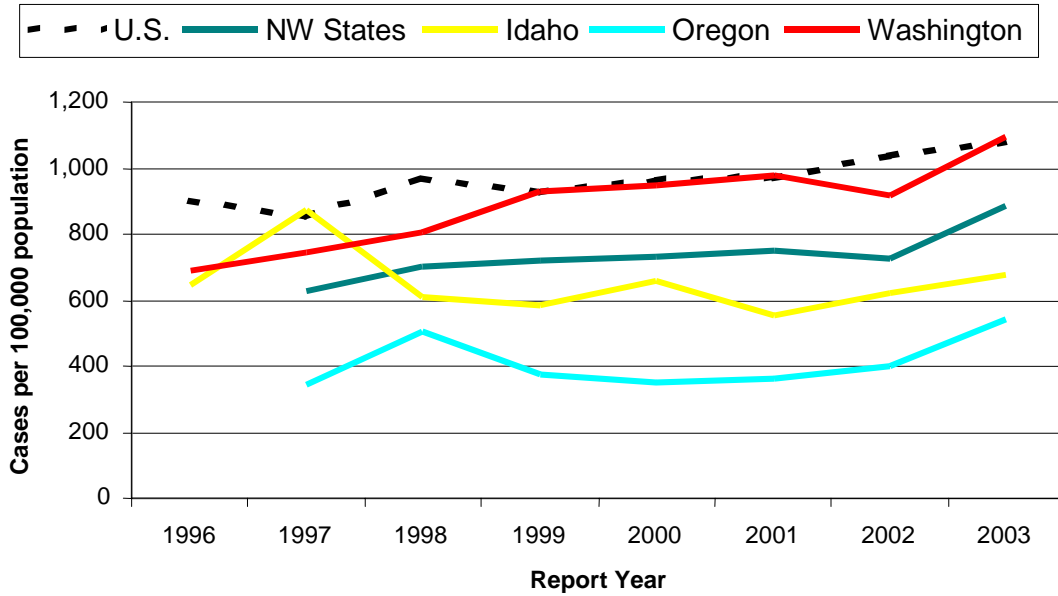
STD rates among females are typically higher than rates among males due to intentional screening policies that target women to reduce chlamydia-related complications. Women of childbearing age are also more likely to visit a health clinic than men, and thus are more likely to receive STD testing and treatment.

For both males and females, the number of chlamydia cases has increased in the United States since 1996. Chlamydia rates among U.S. females increased from 303 cases per 100,000 in 1996 to 467 cases per 100,000 in 2003. U.S. male chlamydia rates increased from 57 cases per 100,000 in 1996 to 133 cases per 100,000 in 2003.

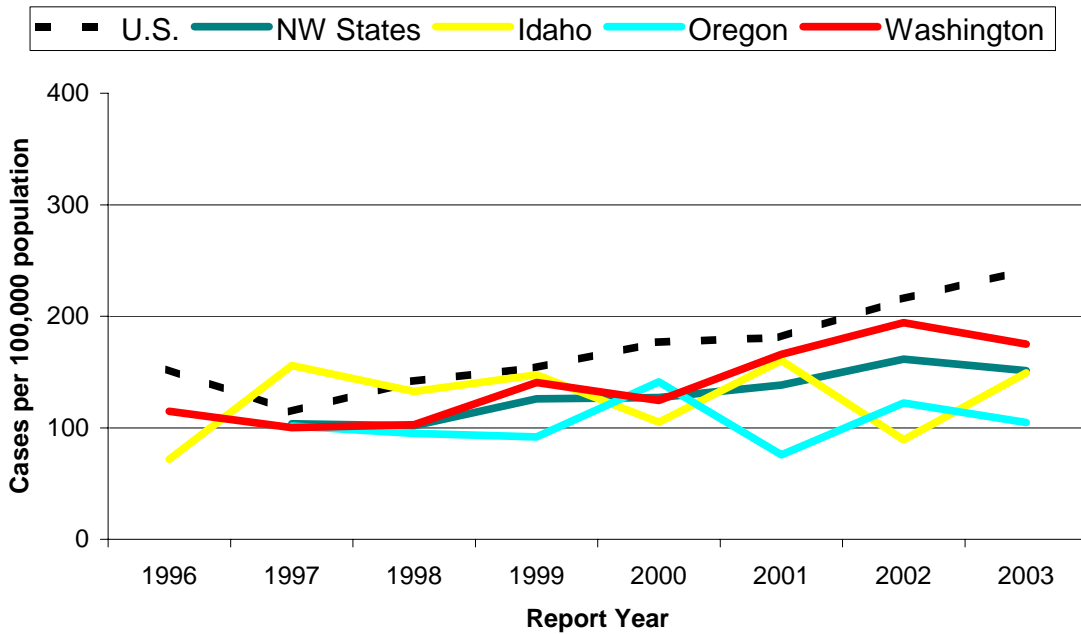
***In the U.S. as a whole, AI/AN males are diagnosed with chlamydia at nearly twice the rate reported among all males. And among females, AI/ANs are diagnosed with chlamydial infection at nearly three times the rate found among all females.***

The chlamydia rates among AI/AN males and females in Idaho, Oregon, and Washington follow a similar trend, but exhibit a less significant rate difference than observed when comparing national rates.

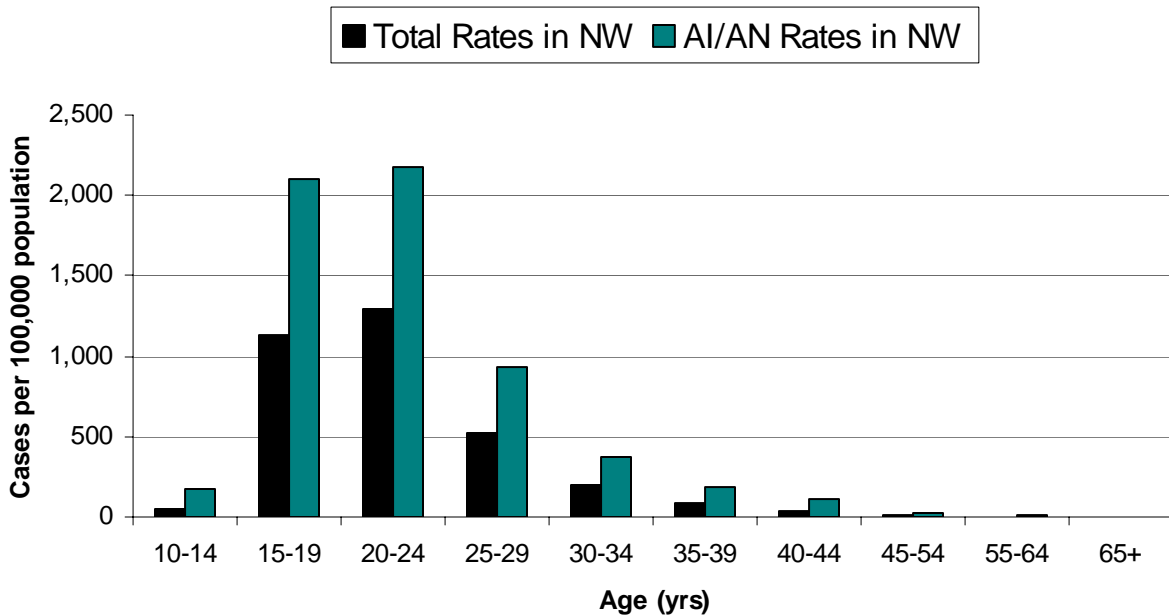
**Chlamydia Rates among AI/AN Females , 1996-2003  
United States and NW States (ID, OR, WA)**



**Chlamydia Rates among AI/AN Males, 1996-2003  
United States and NW States (ID, OR, WA)**



## Total and AI/AN Chlamydia Rates by Age Group, 2003 NW States (ID, OR, WA)



### Chlamydia Trends – AI/AN, By Age: <sup>5</sup>

In 2003, chlamydia rates produced similar age distribution patterns for both “All Races” (designated as “Total Rates”) and AI/ANs in the Pacific Northwest, with the highest rates occurring among 15-24 year olds.

While the general age distribution was similar for both groups, the rates among AI/AN teens and young adults clearly exceeded the rates observed for the total population in that age group.

When comparing case rates for the NW States individually (OR, WA, ID), chlamydia rates in each state displayed similar distributions between age groups,

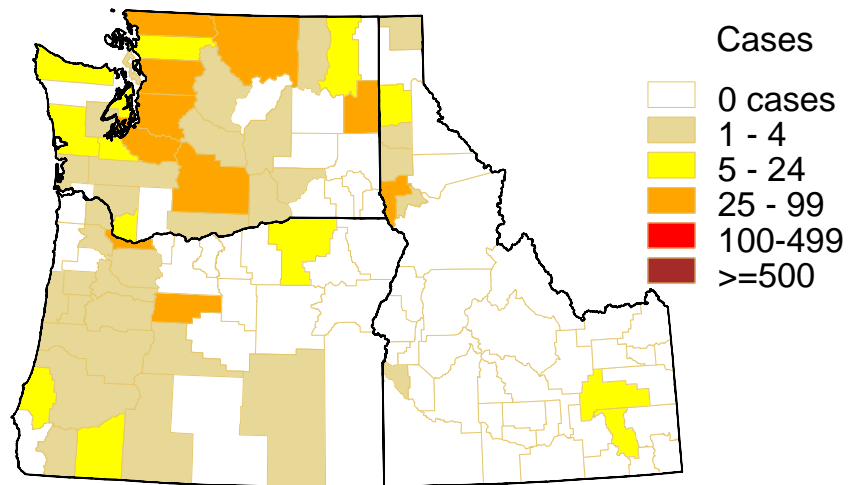
with some variation in the magnitude of infection.

The highest rates occurred among 15-24 year olds for each geographic population.

***In the Northwest, 15-24 year olds are most likely to get chlamydia.***



**2003 County  
Chlamydia  
Cases among  
Northwest  
AI/ANs.<sup>5</sup>**





## 5. Gonorrhea

Gonorrhea is caused by *Neisseria gonorrhoeae*, a bacterium that can grow and multiply in the warm, moist areas of the reproductive tract, including the cervix (opening to the womb), uterus (womb), and fallopian tubes (egg canals) in women, and in the urethra (urine canal) in women and men. The bacterium can also grow in the mouth, throat, eyes, and anus.<sup>17</sup>

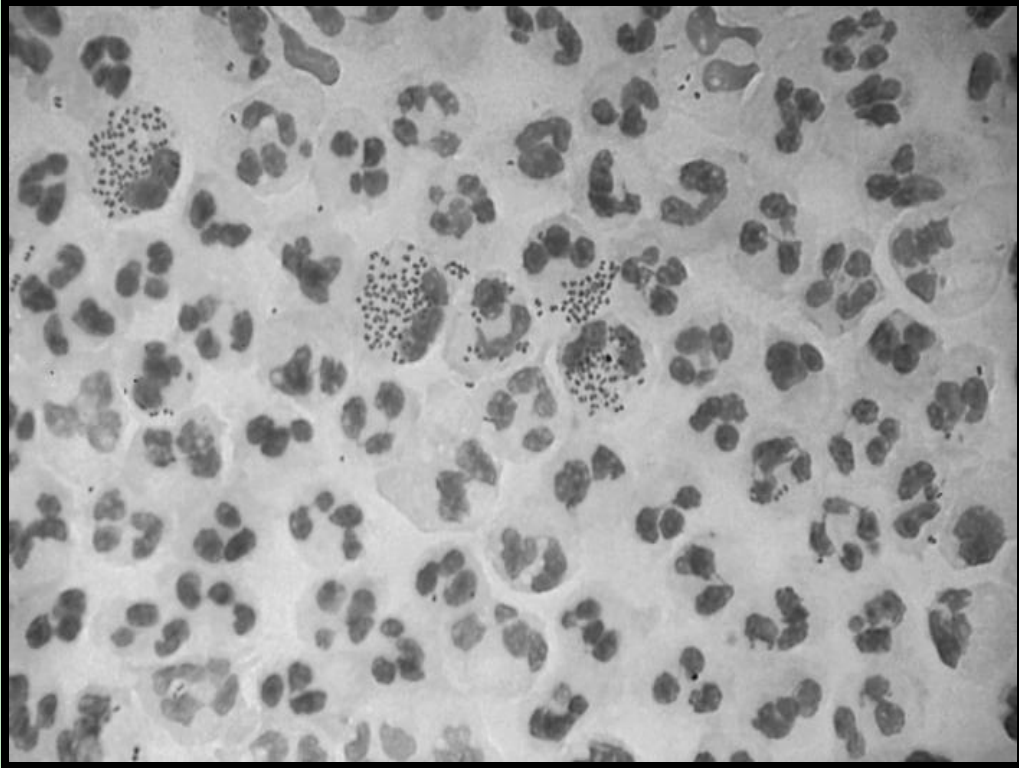
### Symptoms and Screening:<sup>4</sup>

In the United States, an estimated 700,000 new *N. gonorrhoeae* infections occur each year. Most infections among men produce symptoms that prompt them to seek curative treatment soon enough to prevent serious repercussions, but this may not be soon enough to prevent transmission to others. Among women, many infections do not produce recognizable symptoms until complications (e.g., PID) have already occurred. Both symptomatic and asymptomatic cases of PID can result in

tubal scarring that can lead to infertility or ectopic pregnancy. Because gonococcal infections among women often are asymptomatic, an important component of gonorrhea control in the United States continues to be the screening of women at high risk for STDs.

### Dual Therapy:<sup>4</sup>

Patients infected with gonorrhoea often are coinfecting with chlamydia. Because of this finding, it is now recommended that patients treated for gonorrhea also be treated for uncomplicated genital *C. trachomatis* infection. Routine dual therapy without testing for chlamydia can be cost-effective for populations in which chlamydial infection accompanies 10%-30% of gonococcal infections, because the cost of therapy (e.g., \$0.50-- \$1.50 for doxycycline) is less than the cost of testing. Some specialists believe that the routine use of dual therapy has resulted in substantial decreases in the prevalence of chlamydial infection.



This photomicrograph reveals the histopathology of an acute case of gonococcal urethritis.<sup>12</sup>

***If left untreated, gonorrhea can cause infertility in men and women.***

Because most gonococci in the United States are susceptible to doxycycline and azithromycin, routine co-treatment may hinder the development of antimicrobial-resistant *N. gonorrhoeae*.

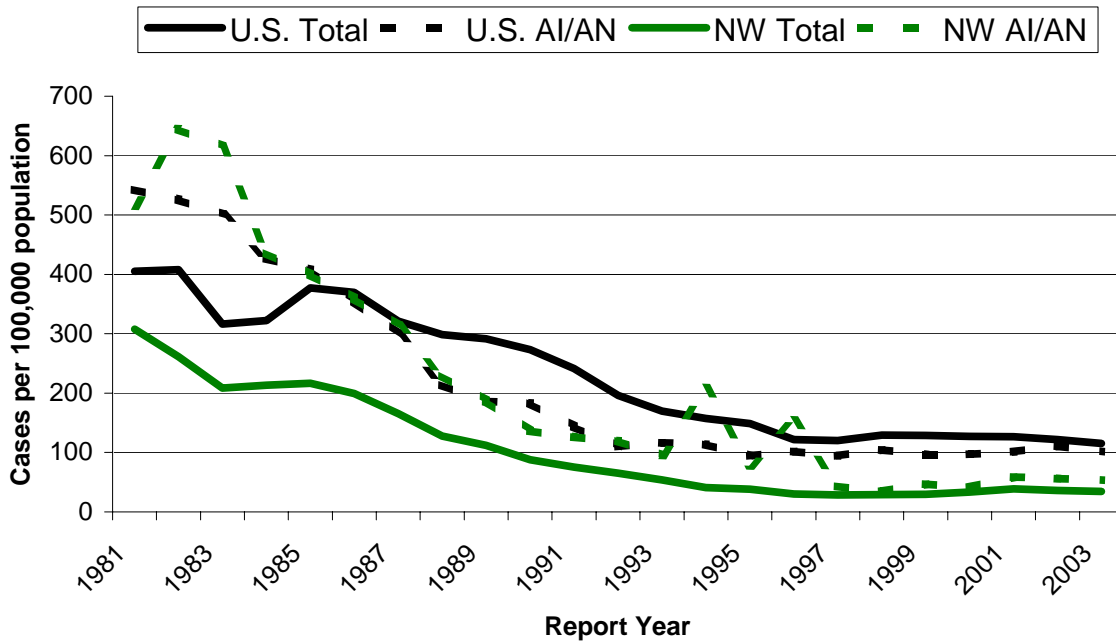
**Gonorrhea Facts:** <sup>17</sup>

- Gonorrhea is a very common infectious disease. CDC estimates that more than 700,000 people in the U.S. get new gonorrheal infections each year. Only about half of these infections are reported to CDC.
- In women, gonorrhea is a common cause of pelvic inflammatory disease (PID). About one million women each year in the United States develop PID. Women with PID do not necessarily

have symptoms. When symptoms are present, they can be very severe and may include abdominal pain and fever. PID can lead to internal abscesses and long lasting, chronic pelvic pain, and can damage the fallopian tubes enough to cause infertility or ectopic pregnancy. Gonorrhea can also be passed from mother to child during delivery.

- In men, gonorrhea can cause epididymitis, a painful condition of the testicles that can lead to infertility if left untreated.

**Total and AI/AN Gonorrhea Rates, 1996-2003  
United States and NW States (ID, OR, WA)**



## National Gonorrhea Trends – All Races: <sup>5</sup>

The total number of gonorrhea cases for the U.S. population has decreased a dramatic 64% since 1981 (from 929,256 cases in 1981 to 335,104 cases in 2003). The total gonorrhea rate thus decreased from 405 cases per 100,000 in 1981 to 115 cases per 100,000 in 2003.

While the gonorrhea burden of disease has improved considerably in the last decade, these rates still remain well above the Healthy People 2010 goal of 19 cases per 100,000.

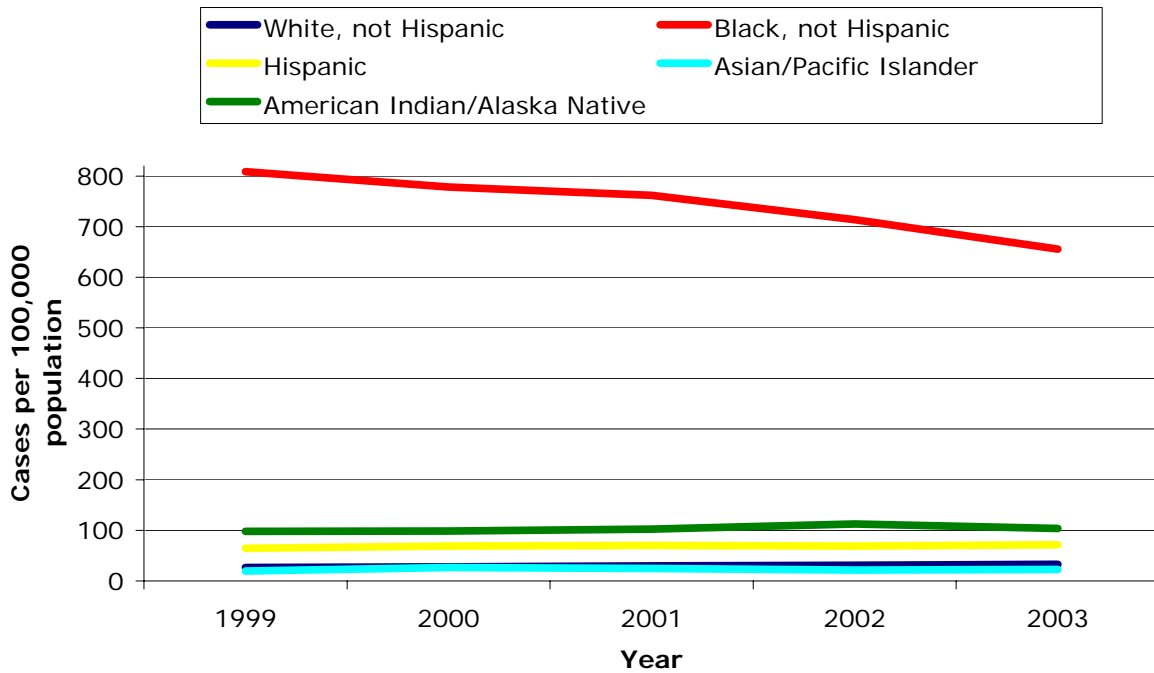
Looking specifically at gonorrhea rates in the Pacific Northwest, the total gonorrhea rate in Idaho, Oregon, and Washington is

lower than the total U.S. rate, and has decreased from nearly 308 cases per 100,000 in 1981 to under 35 cases per 100,000 in 2003.

***AI/AN gonorrhea rates are lower in the Northwest than in the United States as a whole.***

While national gonorrhea rates among AI/ANs are slightly lower than rates reported for “All Races” combined, this favorable trend is not present in the Northwest, where AI/AN gonorrhea rates have been higher than total population rates since 1981.

## Gonorrhea Rates by Race/Ethnicity United States, 1999-2003



## National Gonorrhea Trends – By Race: <sup>18</sup>

***When comparing rates by ethnicity, American Indians have the second highest Gonorrhea rate in the US.***

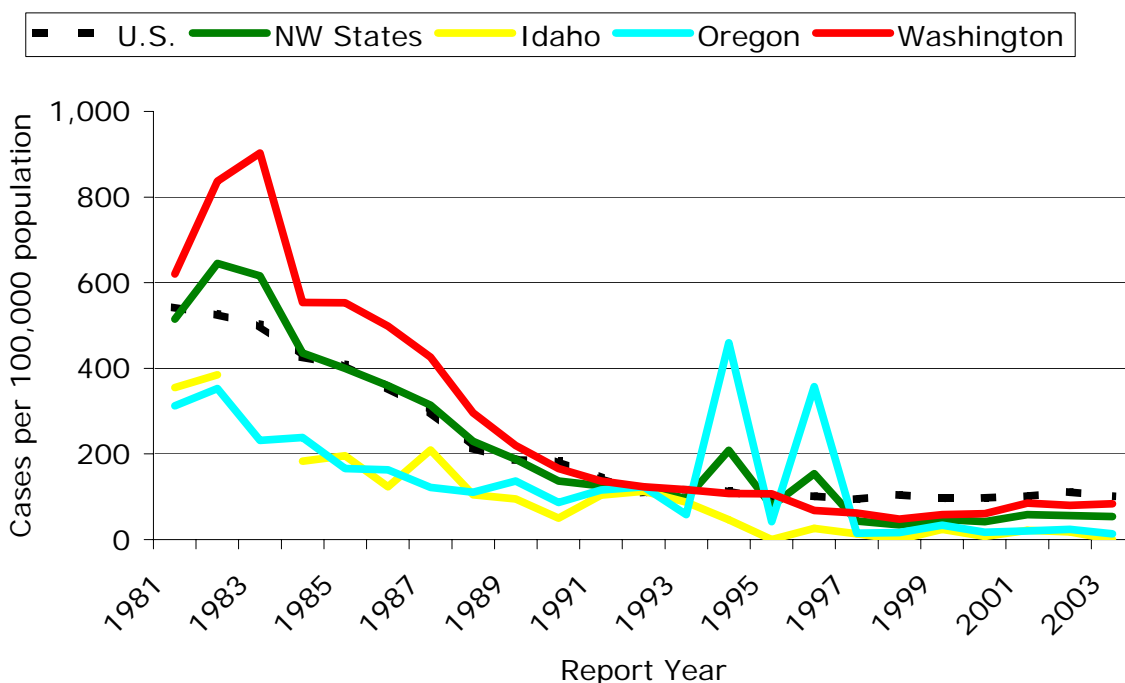
In the United States, gonorrhea rates separated by race and ethnicity follow a similar pattern as rates observed for chlamydia.

Non-Hispanic blacks have by far the highest rates, which have gradually decreased since 1999.

Gonorrhea rates among American Indians and Alaskan Natives were the second highest, gradually increasing from 1999 to 2003.

Non-Hispanic whites and Asian/Pacific Islanders had the lowest rates.

## Total Gonorrhea Rates among AI/ANs, 1981-2003 United States and NW States (ID, OR, WA)



### National Gonorrhea Trends – Among AI/ANs: <sup>5</sup>

Nationally, AI/ANs make up approximately 1.5% of the total population and account for less than 1.3% of all gonorrhea cases reported.

This percentage is higher in the Northwest states (ID, OR, WA), where the percentage of AI/AN cases is typically between 2% and 3% of the area's total.

Disparities in infection rates are particularly evident in Washington, where AI/ANs are nearly twice as likely to be diagnosed with gonorrhea than the total population. Oregon's AI/AN gonorrhea rates, on the other hand, are generally slightly lower than rates observed for Oregon's total population.

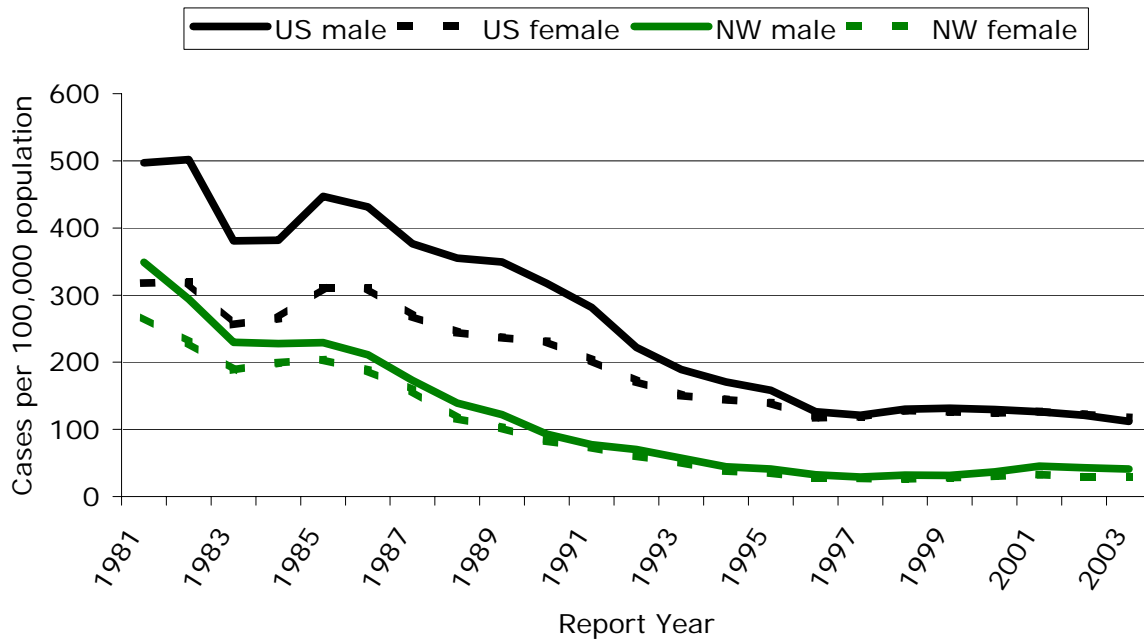
Natives in Washington have had a higher burden of disease than Natives in Oregon, except in 1994 and 1996, when 18%-19% of Oregon's gonorrhea cases were among AI/ANs.

In an unusual shift, the number of gonorrhea cases reported among AI/ANs was very low in 2003, with Idaho reporting zero gonorrhea cases, Oregon only 7 cases, and Washington State reporting 85.

More research is needed on tribal testing and reporting practices to verify if this change is due to a true decrease in AI/AN infection rates, or whether this irregularity reflects insufficient reporting, screening, or treatment services.



## Total Gonorrhea Rates by Sex, 1981-2003 United States and NW States (ID, OR, WA)



### National Gonorrhea Trends - By Gender: <sup>5</sup>

In the United States, male gonorrhea cases and rates decreased between 1981 and 2003, from 497 to 112 cases per 100,000. Female gonorrhea rates decreased from 1981-1996, from 318 to 118 cases per 100,000, and then leveled off.

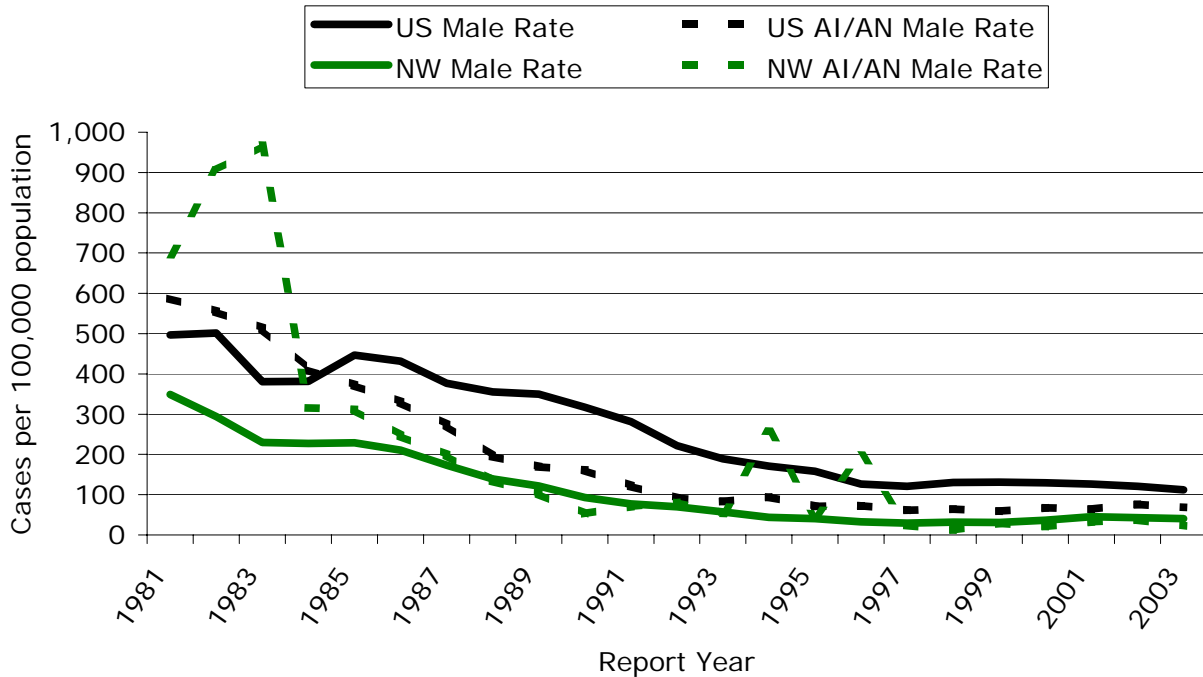
***Gonorrhea rates for both males and females in the NW are lower than the national average.***

In the Northwest states (ID, OR, WA), male gonorrhea rates decreased from 349 to 29 cases per 100,000 from 1981 to 1997, then increased to 45 cases per 100,000 in 2001. Among females in this

region, gonorrhea rates decreased from 267 cases per 100,000 in 1981 to 26 cases per 100,000 in 1998, and have slightly risen in recent years (up to 33 cases per 100,000 in 2001).

In 1981, the U.S. male-to-female gonorrhea rate ratio was 1.6 to 1. The difference between rates decreased until 2001 when female rates exceeded male rates. In the Northwest states (ID, OR, WA), male rates have remained slightly higher than female rates, though the difference has been fairly small (1.3:1).

**Total and AI/AN Male Gonorrhea Rates, 1981-2003  
United States and NW States (ID, OR, WA)**



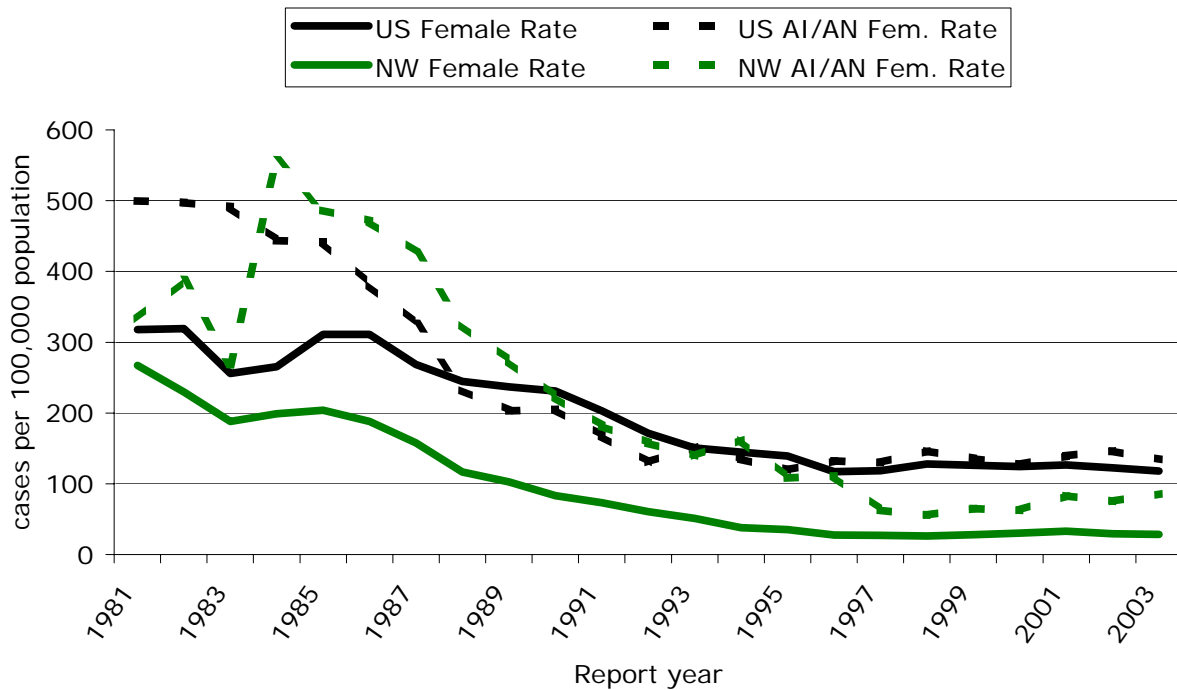
**Trends Among Male AI/ANs: <sup>5</sup>**

***In Idaho, Oregon, and Washington, gonorrhea rates for American Indian males are typically lower than rates found for the total male population.***

Nationally, approximately 0.5% of all male gonorrhea cases are among AI/ANs. In the Northwest states (ID, OR, WA) the percentage ranged from 0.5% up to 9% between the years 1989 and 2003. In most years, AI/AN men made up about 1.5% of the total caseload.

Nationally from 1985-2003, gonorrhea rates among AI/AN men were nearly half those found among “all men,” with a caseload ranging from 59 to 372 cases per 100,000. Similarly, since 1987, rates for AI/AN men have typically been lower than rates reported for all men in the Pacific Northwest (ID, OR, WA).

**Total and AI/AN Female Gonorrhea Rates, 1981-2003  
United States and NW States (ID, OR, WA)**



**Trends Among Female AI/ANs: <sup>5</sup>**

Nationally, gonorrhea rates among AI/AN females have been higher than rates found among “all females,” except between 1988 and 1995, when AI/AN rates were reported to be lower.

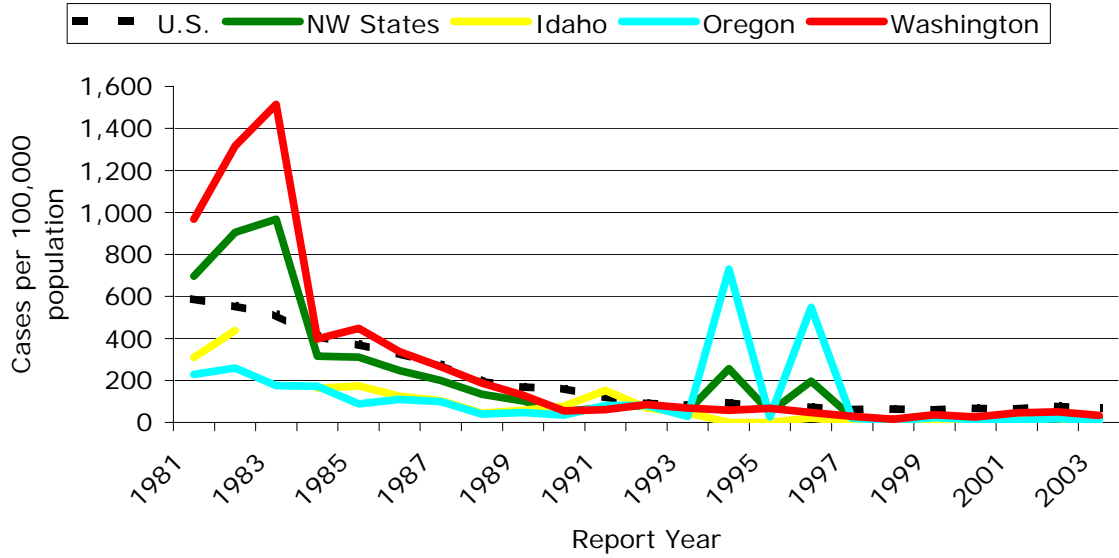
AI/AN women typically accounted for less than 1.0% of all gonorrhea cases among U.S. women. In Idaho, Oregon, and Washington, however, AI/AN women typically account for 2.0% to 6.3% of the region’s total.

Since 1990, Northwest AI/AN females have had gonorrhea rates lower than the national average. Compared to the total population in the NW however, AI/AN

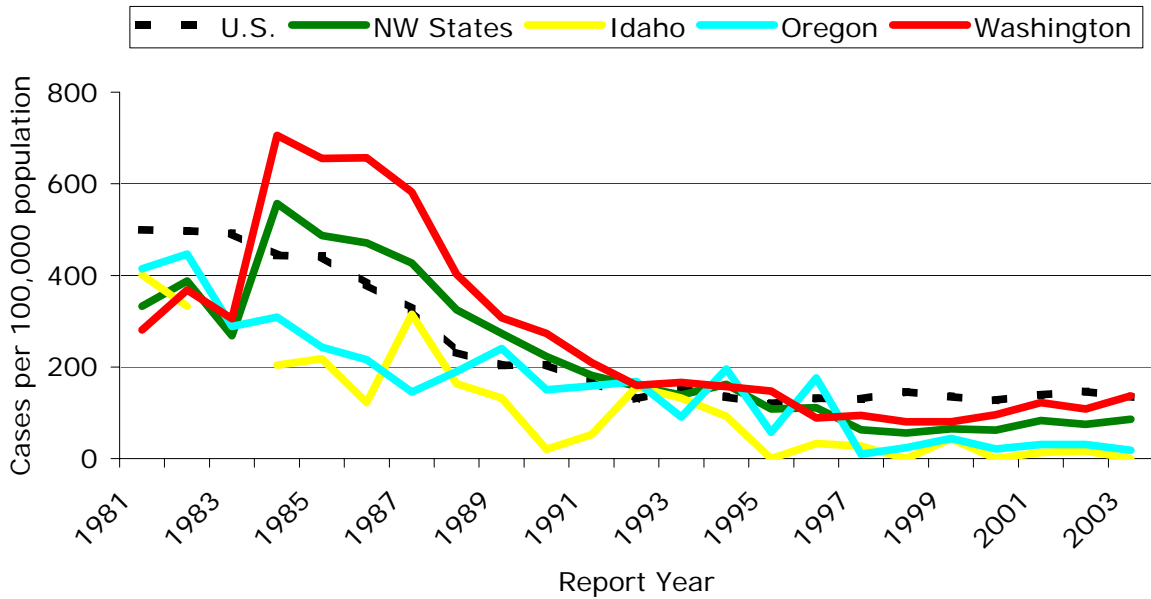
women have had disproportionately high rates since 1981.

***In Idaho, Oregon, and Washington, gonorrhea rates for American Indian females significantly exceed rates found for the total female population.***

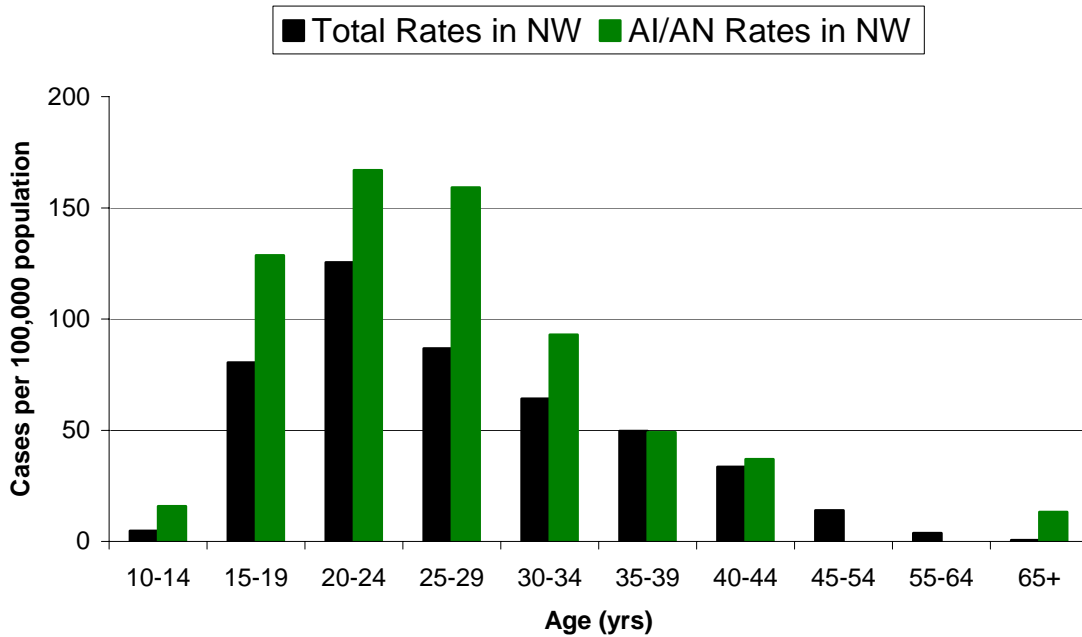
**Total Gonorrhea Rates among AI/AN Males  
1981-2003  
United States and NW States (ID, OR, WA)**



**Total Gonorrhea Rates among AI/AN Females  
1981-2003  
United States and NW States (ID, OR, WA)**



**Total and AI/AN Gonorrhea Rates, by Age Group,  
NW States (ID, OR, WA), 2003**



**Gonorrhea Trends – AI/AN, By Age: <sup>5</sup>**

In 2003, gonorrhea rates showed a similar age distribution for both “All Races” and “AI/ANs” in the Pacific Northwest, with the highest rates occurring among 20-24 year olds. While the general age distribution pattern is similar in both groups, gonorrhea rates among AI/AN teens and young adults clearly exceed rates observed among all races.

In 2003, Northwest AI/AN and Washington AI/AN rates followed the same general distribution pattern, with the highest rates occurring among teens and young adults, age 15-29.

In comparison, Oregon’s AI/ANs had much lower gonorrhea rates, and cases were distributed fairly evenly between those aged 20-34.

Idaho reported 0 cases per 100,000 in 2003.



## 6. Syphilis

Syphilis is a systemic disease caused by *T. pallidum*. Syphilis has often been called “the great imitator” because many of its signs and symptoms are indistinguishable from those of other diseases.

### **Phases and Complications:**<sup>4</sup>

Patients who have syphilis may seek treatment for symptoms related to primary infection (i.e., ulcer or chancre at the infection site), secondary infection (i.e., skin rash, mucocutaneous lesions, and/or lymphadenopathy), or tertiary infection (e.g., cardiac, ophthalmic, auditory abnormalities, and gummatous lesions). Latent infections (i.e., those lacking clinical manifestations) are detected by serologic testing.

### **Management of Sex Partners:**<sup>4</sup>

Sexual transmission of *T. pallidum* occurs only when mucocutaneous syphilitic lesions are present; such manifestations are uncommon after the first year of

infection. However, persons exposed sexually to a patient who has syphilis in any stage should be evaluated clinically and serologically according to the recommendations of the *2002 Sexually Transmitted Diseases Treatment Guidelines*, which are available on the CDC’s web site:

<http://www.cdc.gov/std/treatment>.

All patients who have syphilis should be tested for HIV infection. In geographic areas where the prevalence of HIV is high, patients who have primary syphilis should be retested for HIV after 3 months if the first HIV test result is negative.

### **Screening:**<sup>4</sup>

All women should be screened serologically for syphilis at the first prenatal visit. No infant should leave the hospital if maternal serologic status has not been determined at least once during pregnancy and preferably again at delivery.



An electron photomicrograph of two spiral-shaped *Treponema pallidum* bacteria, magnified 36,000X.<sup>12</sup>



***Syphilis rates are increasing among men who have sex with men.***

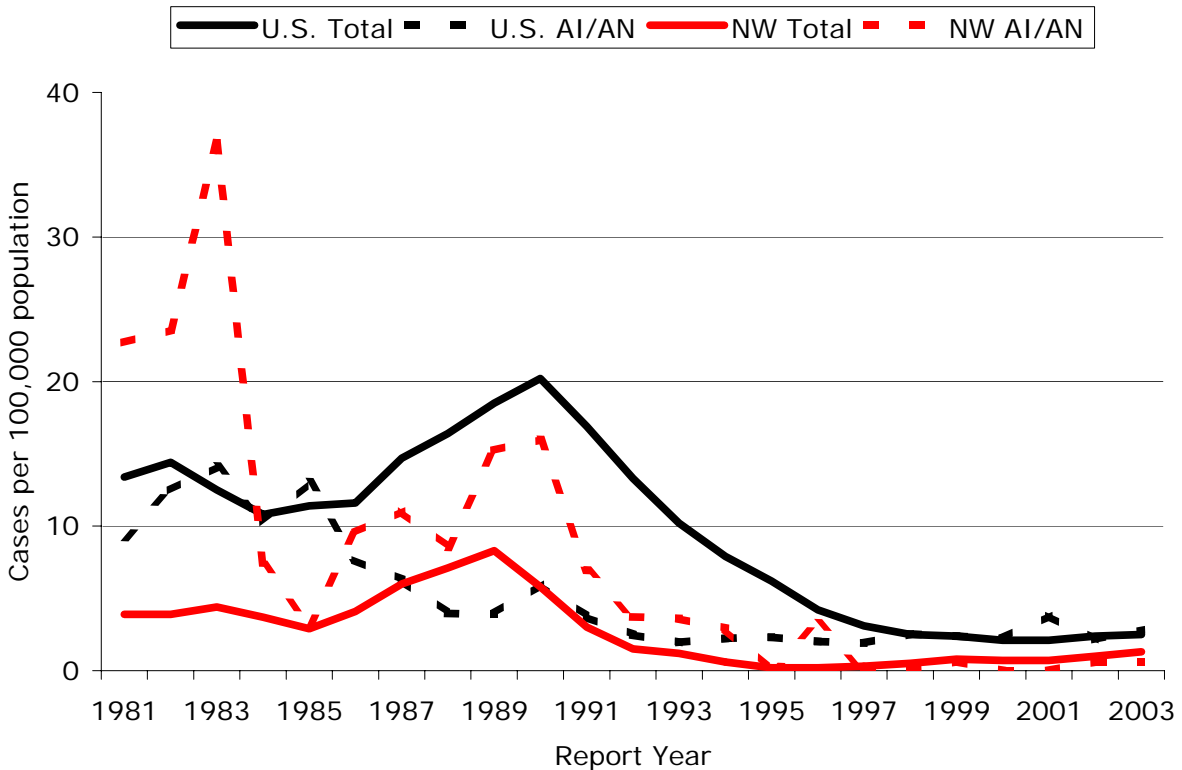
**Syphilis Facts:** <sup>19</sup>

- In the United States, health officials reported over 32,000 cases of syphilis in 2002, including 6,862 cases of primary and secondary (P&S) syphilis.
- In 2002, half of all P&S syphilis cases were reported from 16 counties and 1 city; and most P&S syphilis cases occurred in persons 20 to 39 years of age. The incidence of infectious syphilis was highest in women 20 to 24 years of age and in men 35 to 39 years of age.
- Reported cases of congenital syphilis in newborns decreased from 2001 to 2002, with 492 new cases

reported in 2001 compared to 412 cases in 2002.

- Between 2001 and 2002, the number of reported P&S syphilis cases increased 12.4 percent. Rates in women continued to decrease, and overall, the rate in men was 3.5 times that in women. This, in conjunction with reports of syphilis outbreaks in men who have sex with men (MSM), suggests that rates of syphilis in MSM are increasing.
- Genital sores (chancres) caused by syphilis make it easier to transmit and acquire HIV infection sexually. There is an estimated 2- to 5-fold increased risk of acquiring HIV infection when syphilis is present.

### Total and AI/AN P&S Syphilis Rates, 1981-2003 United States and NW States (ID,OR, WA)



### National Syphilis Trends – All Races: <sup>5</sup>

Total P&S syphilis cases in the United States increased from 30,668 cases in 1981 to over 50,000 cases in 1990. This number decreased to 5,973 cases in 2000, and rose to 7,177 cases in 2003.

Total P&S syphilis rates in the U.S. are much lower than chlamydia and gonorrhea rates, ranging from a peak of 20 cases per 100,000 (in 1990) to a low of 2 cases per 100,000 (in 2000).

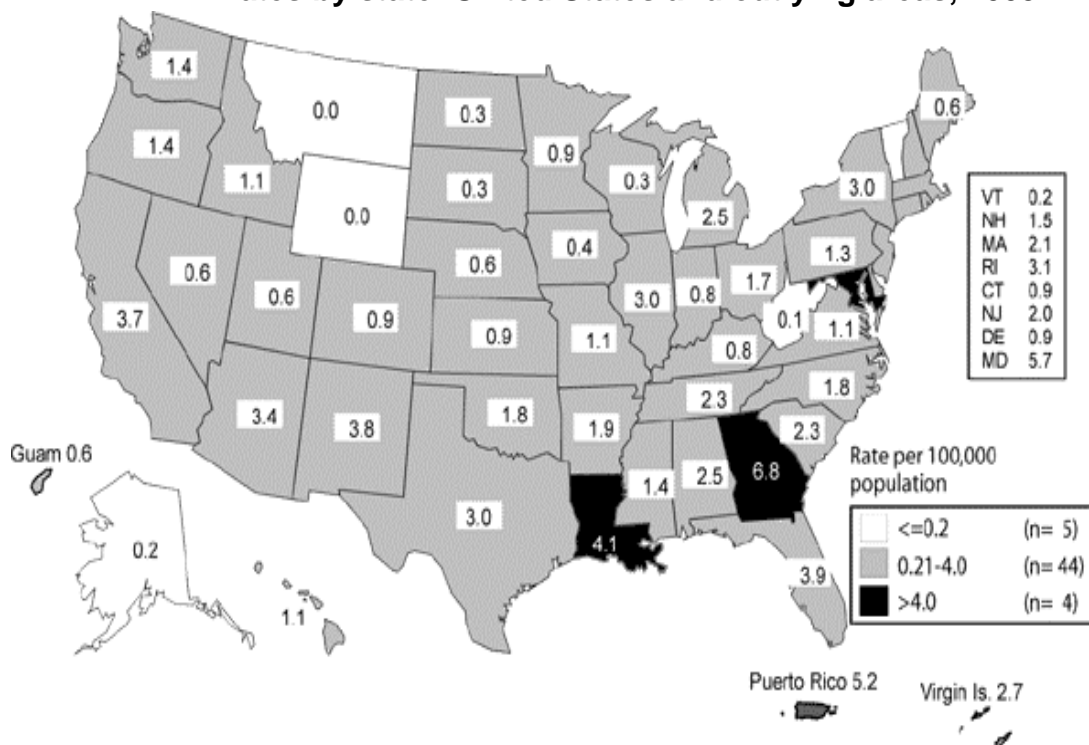
The total number of syphilis cases in ID, OR, and WA has periodically peaked, increasing from 235 cases in 1985 to 705 in 1989, then decreasing to a low of 22

cases in 1996. The number of cases increased to 145 in 2003.

***The total Syphilis rate in the Northwest is lower than the total rate observed nationally.***

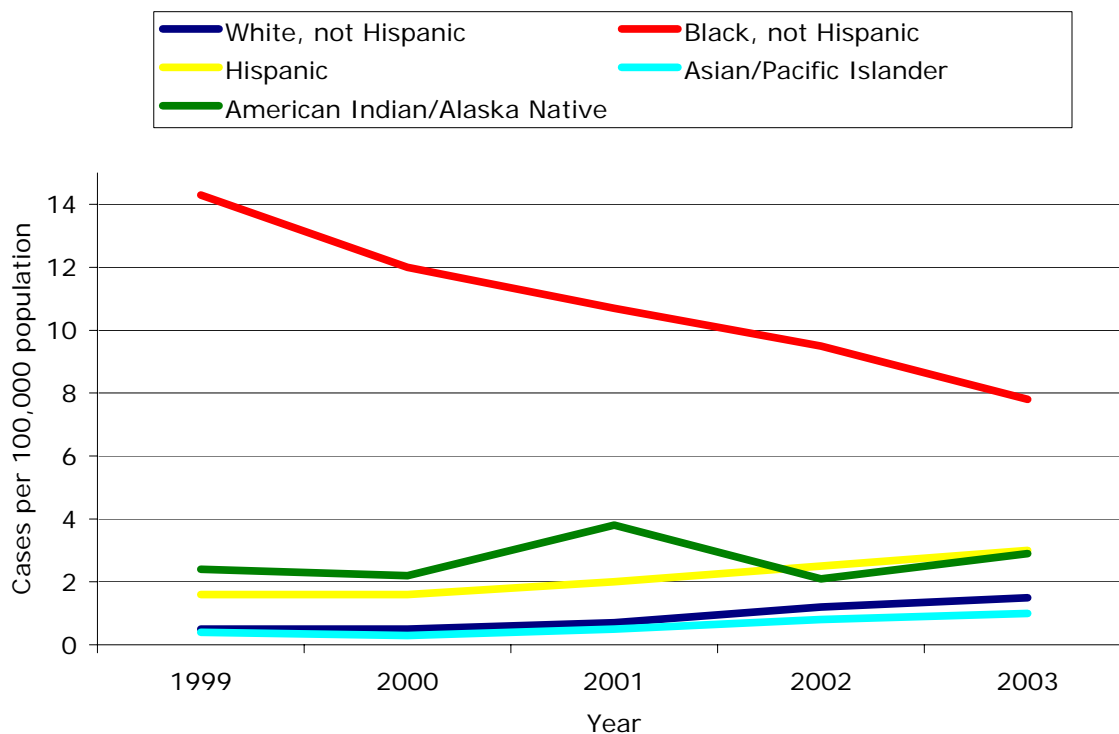
When comparing rates by ethnicity, American Indians have the second or third highest syphilis rate for the years between 1999 and 2003. Non-Hispanic blacks continue to have the highest rate, and non-Hispanic whites and Asian/Pacific Islanders consistently have the lowest rates.<sup>20</sup>

**Primary and secondary syphilis  
Rates by state: United States and outlying areas, 2003**



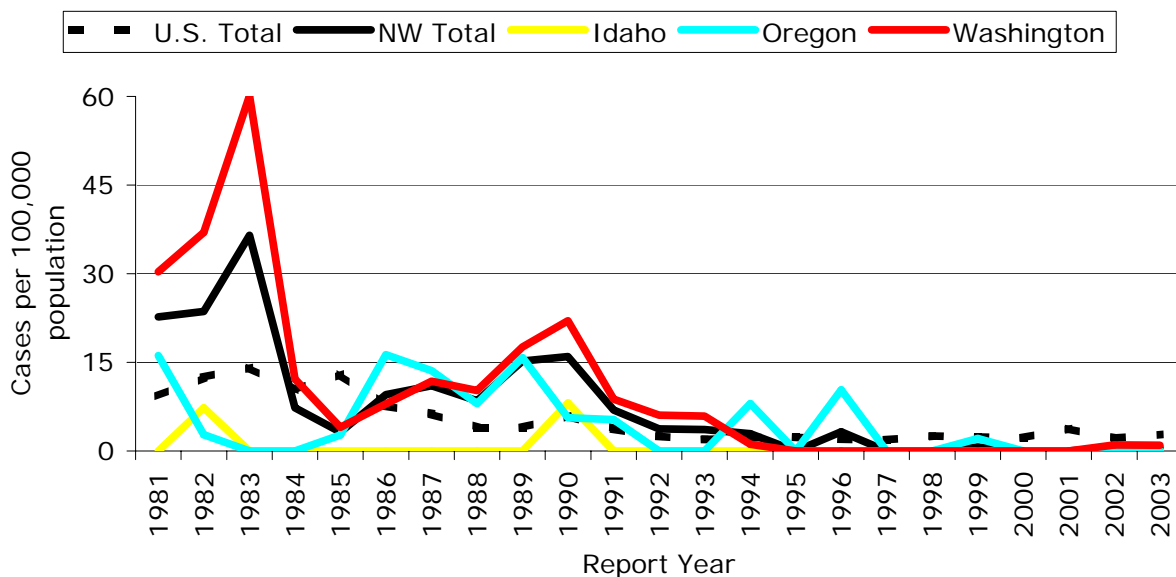
21

**P&S Syphilis Rates by Race/Ethnicity U.S. 1999-2003**



22

**Total P&S Syphilis Rates Among AI/ANs  
1981-2003  
United States and NW States (ID, OR, WA)**



## National Syphilis Trends - Among AI/ANs: <sup>5</sup>

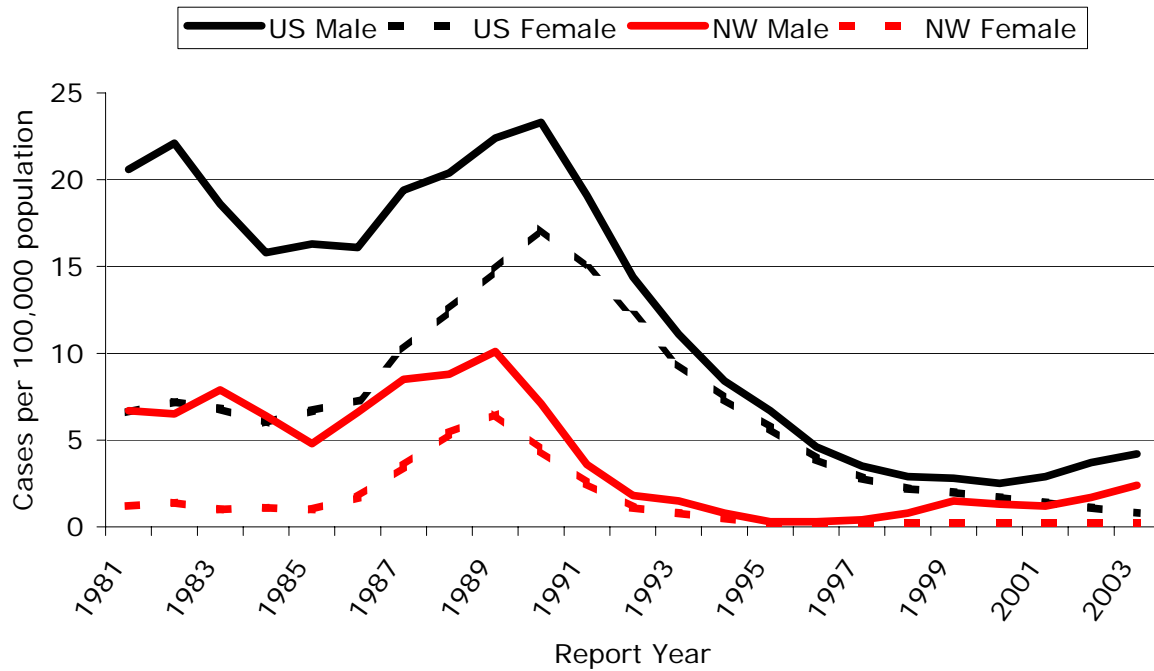
In the U.S., less than 1% of all P&S syphilis cases are among AI/ANs. The one exception was in 2001, when a large number of AI/AN cases were reported from the Navajo region and Robeson County, North Carolina. The percentage of AI/AN cases in the NW region (ID, OR, WA) has been more variable, ranging from 0% to 23%.

In the U.S., P&S syphilis rates among AI/ANs do not always follow the same pattern as “total” P&S syphilis rates. Rates among AI/ANs decreased during the 1990 syphilis outbreak among African-American drug-users in large urban cities. Since 1995, AI/AN rates have been equal to or slightly higher than total P&S syphilis rates. Prior to 1995,

rates among AI/ANs in the Northwest were higher than total rates for the region.

***Moving in a positive direction, syphilis rates for AI/ANs in the Pacific NW have been lower than rates reported for the total NW population since 1997.***

## Total P&S Syphilis Rates by Sex, 1981-2003 United States and NW States (ID, OR, WA)



### National Syphilis Trends – Among Males:<sup>5</sup>

Male syphilis cases and rates in the United States peaked several times between 1981 and 2003. Rates decreased from 1982-1984 from 22 cases per 100,000 to 16 cases per 100,000, increased to 23 cases per 100,000 in 1990, decreased to 2.5 cases per 100,000 in 2000, and increased to 4.2 cases per 100,000 in 2003.

In the Northwest states, male rates have had a similar pattern, decreasing from 8 to 5 cases per 100,000 from 1983 to 1985, then increasing to 10 cases per 100,000 in 1989. Rates were lowest in 1995 (0.3/100,000) and increased to 2.4 cases per 100,000 in 2003.

***In all years, the total male syphilis rate in the Northwest was lower than the rate observed nationally.***

Idaho reported fewer than 5 syphilis cases per year from 1987-2002 but reported 10 cases (2/100,000) in 2003. Oregon’s male P&S syphilis rate peaked in 1987 with 17 cases per 100,000, decreased to 0.2 cases per 100,000 in 1999, then climbed back to 2.5 cases per 100,000 in 2003. Washington’s rates have followed a similar pattern.

***In the Pacific Northwest syphilis is 10 times more common among men than among women.***

## National Syphilis Trends – Among Females: <sup>5</sup>

Female P&S syphilis rates have also periodically peaked, primarily due to a large outbreak in 1990. In the United States, total female rates increased from 7 to 17 cases per 100,000 from 1981 to 1990. Rates decreased to a low of 1 case per 100,000 in 2003.

In the Northwest states (ID, OR, WA), total female syphilis rates increased from 1 to 7 cases per 100,000 from 1981 to 1989. They decreased to 0.2 cases per 100,000 in 1995, and remained consistent through 2003. Idaho reported 6 or fewer female P&S syphilis cases from 1981-2003, and in 2002, reported cases for the first time in five years.

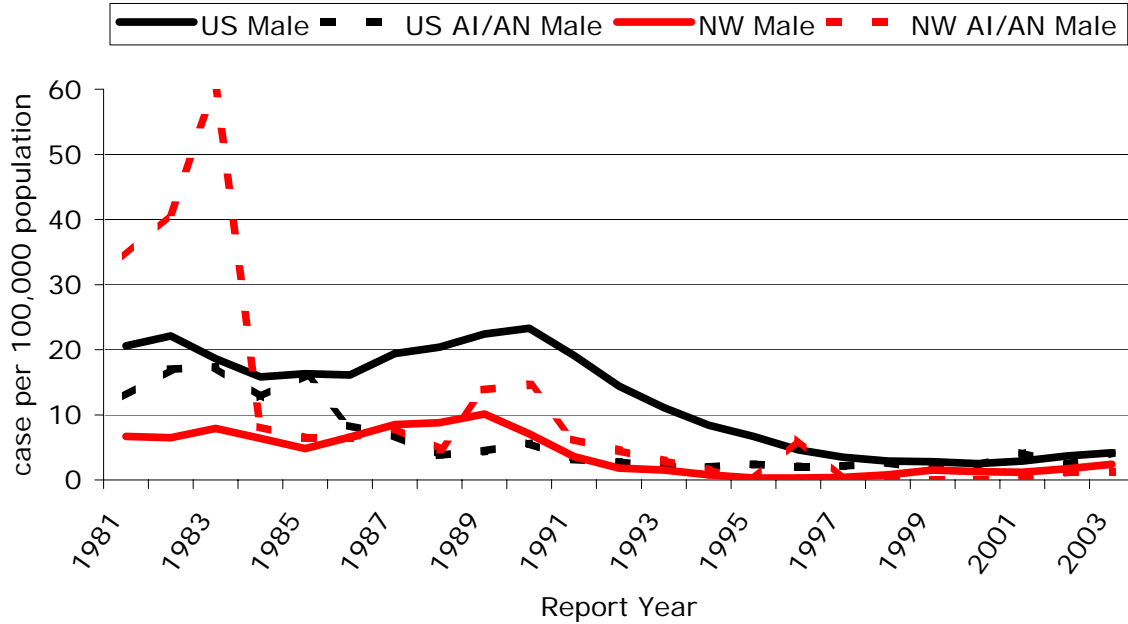
The ratio of male to female P&S syphilis rates is significantly impacted by the type

of outbreaks that occur in a given year. The ratio is normally high when men who have sex with men (MSM) constitute a large percentage of the outbreak demographic. Lower ratios are found during heterosexual outbreaks.

In the United States, male-to-female ratios were above 2:1 prior to 1985 and after 2000. During major outbreak in the 1990s, male-female rate ratios approached 1:1. In the Northwest states, male-to-female ratios were higher than U.S. ratios through 1986, but were nearly 1:1 by 1997.

The male-to-female syphilis ratio is now around 5:1 for the total U.S. population and 10:1 for the total Northwest population.

**Total and AI/AN Male P&S Syphilis Rates, 1981-2003**  
**United States and NW States (ID, OR, WA)**



**Syphilis Trends – AI/AN Males:**<sup>5</sup>

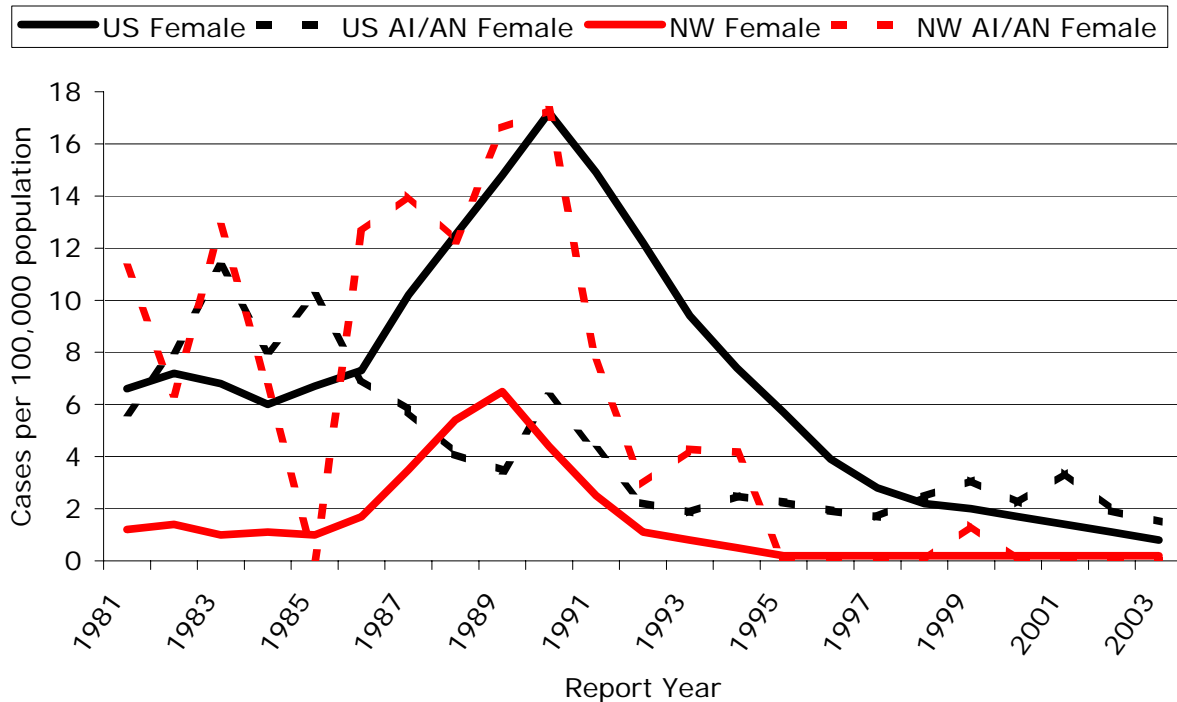
In the U.S., male AI/AN P&S syphilis case percentages ranged from 0.1% to 1.2%. 2001 was the only year in which the percentage exceeded 1%. In the Northwest region (ID, OR, WA), the percentage of male AI/AN P&S cases ranged from 0% to 36% in 1996, and was usually in the 2%-4% range.

In the U.S., P&S syphilis rates among AI/AN males have been slightly lower than total male rates, and were much lower (about 1:5) during the 1990s outbreak that was primarily among African-Americans. After this outbreak began to subside, the total U.S. male population rates and U.S. AI/AN male rates became fairly close.

In the Northwest states (ID, OR, WA), male AI/AN rates were higher than total Northwest male rates in early years, with nearly a 6:1 difference. This trend continued but was less pronounced in the 1990s. Since 1997, with only a few AI/AN male cases reported, the total Northwest male population rate has been higher.

Since 1996, male AI/AN cases have only been reported in 2002 and 2003. Idaho has reported no male P&S syphilis cases since 1981 when reporting by race began, and Oregon has reported no AI/AN male cases since 1996. Washington reported 1 male case in 2002 and 1 in 2003, after eight years of no male AI/AN cases of P&S syphilis.

## Total and AI/AN Female P&S Syphilis Rates, 1981-2003 United States and NW States (ID, OR, WA)



### Syphilis Trends – AI/AN Females:<sup>5</sup>

From 1986 to 1999, the percentage of female P&S syphilis cases among AI/AN women was less than 1%. From 1999, the percentage has varied from 1.1% to 2.1%, due both to outbreaks among AI/ANs and fewer cases among other races.

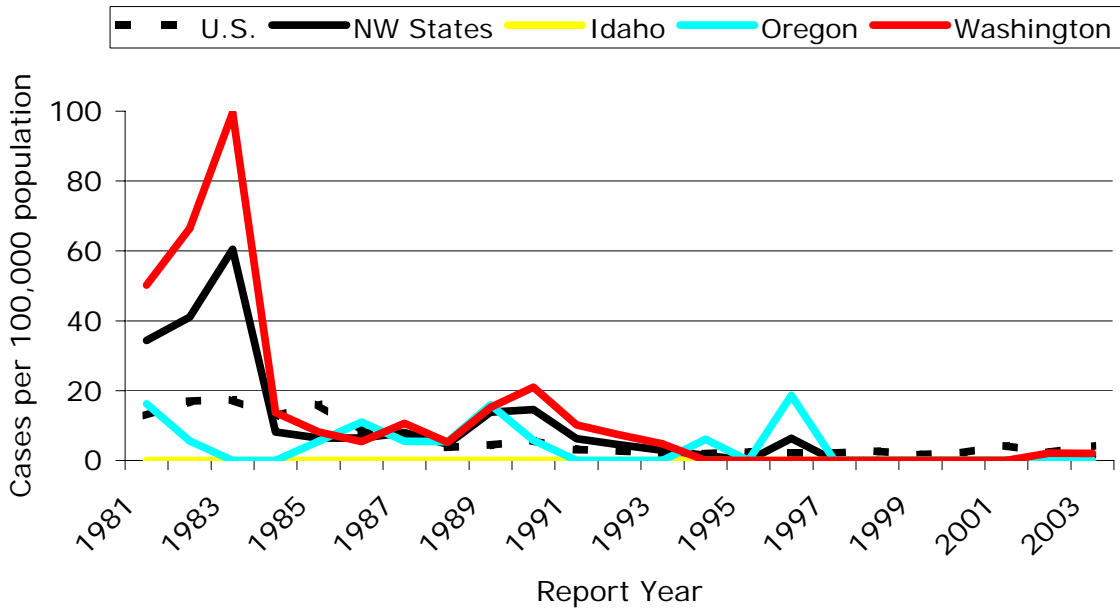
While female syphilis rates have varied significantly over time, since 1997, AI/AN rates have been slightly higher than rates reported among all U.S. women.

In Idaho, Oregon and Washington, AI/AN rates were than U.S. rates until 1994. Since then, only one female AI/AN P&S case has been recorded.

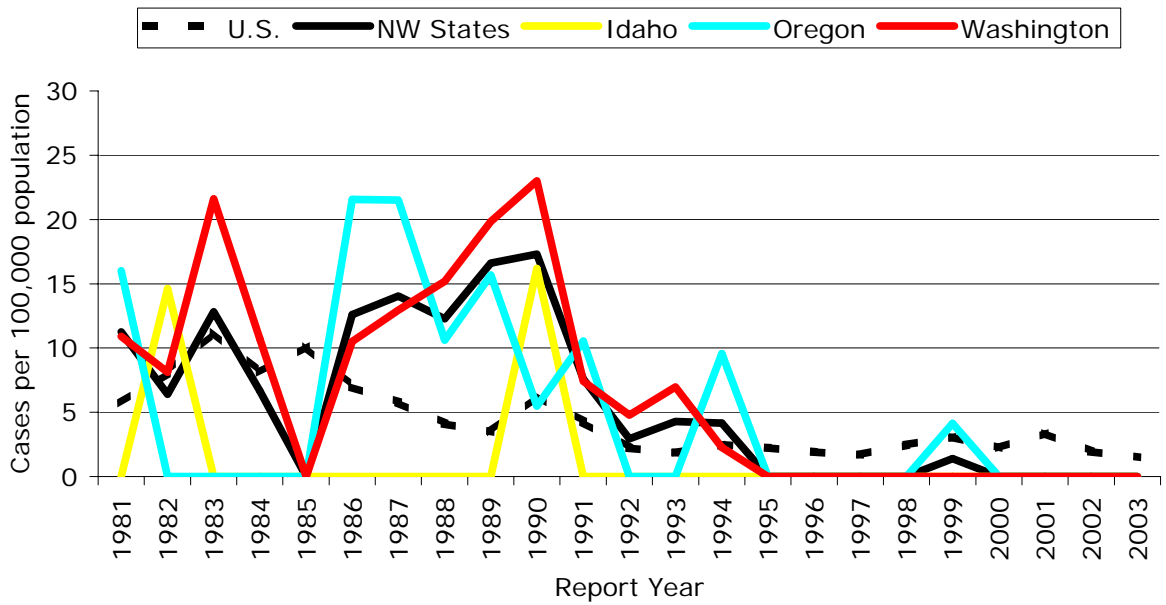
Idaho has had only two reported P&S syphilis cases among AI/AN females since 1981. Oregon's rate ranged from 0 to 22 cases per 100,000 before 1992. Only three cases have been reported since then. Washington female AI/AN rates peaked at 23/100,000 in 1990; since 1995, no cases have been reported.



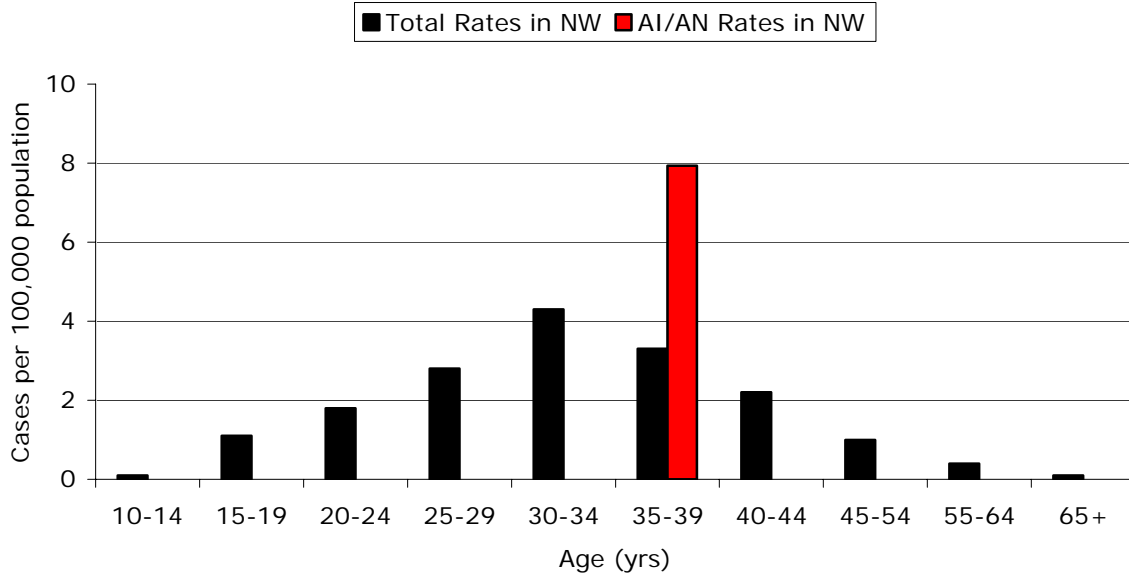
**P&S Syphilis Rates among AI/AN Males, 1981-2003  
United States and NW States (ID, OR, WA)**



**P&S Syphilis Rates among AI/AN Females, 1981-2003  
United States and NW States (ID, OR, WA)**



**Total and AI/AN P&S Syphilis Rates, by Age Group,  
2003  
NW States (ID, OR, WA)**



**Syphilis Trends – AI/AN, By Age:** <sup>5</sup>

Only one P&S syphilis case among AI/ANs in the Northwest states (ID, OR, WA) was reported in 2003. This case falls into the 35-39 yr old age bracket, and the AI/AN rate clearly exceeds the total Northwest states rate in that category. The highest total “All Races” rate for Idaho, Oregon and Washington is found in the 30-34 yr old category.







Transmission electron micrograph of human immunodeficiency virus (HIV), co-cultivated with human lymphocytes.<sup>12</sup>

## 7. HIV/AIDS

AIDS (acquired immunodeficiency syndrome) was first reported in the United States in 1981 and has since become a major worldwide epidemic. AIDS is caused by HIV (human immunodeficiency virus). This virus may be passed from one person to another when infected blood, semen, or vaginal secretions come in contact with broken skin or the mucous membranes of an uninfected person. Pregnant women can also pass HIV to their baby during pregnancy or delivery, or through breast-feeding. By killing or damaging cells of the body's immune system, HIV progressively destroys the body's ability to fight infections and certain cancers.<sup>23</sup>

### **HIV Infection:**<sup>4</sup>

Greater awareness about the risk factors associated with HIV transmission, both among patients and health-care providers, has led to increased HIV

testing and earlier diagnosis of the infection, often before symptoms develop. Prompt diagnosis of HIV infection is important for several reasons. Treatments are available that slow the decline of the immune system; use of these therapies has been associated with substantial declines in HIV-associated morbidity and mortality in recent years.

### **Detection of HIV: Diagnostic Testing:**<sup>4</sup>

HIV Testing is recommended and should be offered to all persons who seek evaluation and treatment for STDs. Counseling before and after testing (i.e., pretest and posttest counseling) is an integral part of the testing procedure. Informed consent must be obtained before an HIV test is performed. Some states require written consent.

***Testing for HIV should be offered to all people who seek evaluation and treatment for STDs.***

**The following are recommendations for diagnostic testing:**<sup>4</sup>

- HIV testing is recommended and should be offered to all persons who seek evaluation and treatment for STDs.
- Patients who have positive HIV test results must receive initial counseling on-site and should either a) receive behavioral, psychosocial, and medical evaluation and monitoring services or b) be referred for these services.

Diagnosis of HIV infection reinforces the need to counsel patients regarding high-risk behaviors, because the consequences of such behaviors include the risk of acquiring additional STDs and transmitting HIV (and other STDs) to other people. Providers should be able to refer patients for prevention and risk-reduction counseling to address high-risk behaviors (e.g., substance abuse and high risk sexual behavior).

**Partner Notification:**<sup>4</sup>

Clinicians evaluating HIV-infected persons should collect information to determine whether any partners should be notified about possible exposure to HIV. The term "partner" includes not only sex partners but also injection-drug users who share syringes or other injection equipment. The rationale for partner notification is that the early diagnosis and treatment of HIV infection in these partners possibly reduces morbidity and provides the opportunity to encourage risk-reducing behaviors.

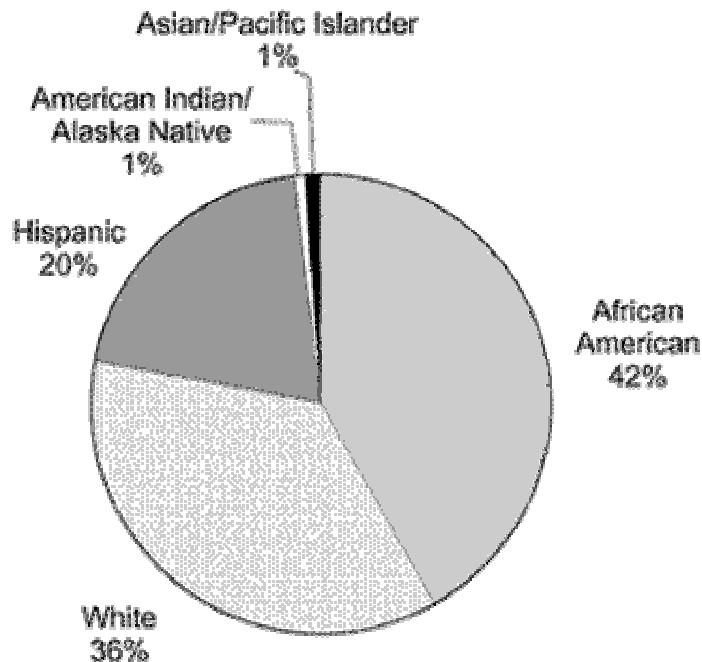
***CDC estimates that nearly 40,000 people become infected with HIV each year.***

**HIV/AIDS Facts:**<sup>24</sup>

- More than 900,000 cases of AIDS have been reported in the United States since 1981. At the end of 2003, an estimated 1,039,000 to 1,185,000 persons in the United States were living with HIV/AIDS, with 24-27% undiagnosed and unaware of their HIV infection. (HIV/AIDS includes persons with a diagnosis of HIV infection (not AIDS), a diagnosis of HIV infection and a later diagnosis of AIDS, or concurrent diagnoses of HIV infection and AIDS.)
- In 2003, 32,048 cases of HIV/AIDS were reported from 32 states and the US Virgin Islands, with long-term, confidential name-based HIV reporting. When all 50 states are considered, CDC estimates that approximately 40,000 persons become infected with HIV each year.
- In 2003, men who have sex with men (MSM) represented the largest proportion of HIV/AIDS diagnoses (63% of all male cases), followed by adults and adolescents infected through heterosexual contact.
- Almost three quarters (73%) of HIV/AIDS diagnoses were made for male adolescents and adults in 2003.
- During the mid-to-late 1990s, advances in treatment slowed the progression of HIV infection to AIDS and led to dramatic decreases in AIDS deaths. Although the decrease in AIDS deaths continues (3% decrease from 1999 through 2003), the number of AIDS diagnoses increased an estimated 4% during that period.
- Better treatments have also led to an increasing number of persons in the United States who are living with AIDS. From the end of 1999 through the end of 2003, the number of persons in the United States who were living with AIDS increased from 311,205 to 405,926—an increase of 30%.

## Race/ethnicity of persons living with AIDS, 2003

25



## National HIV/AIDS Trends – All Races: <sup>26,27</sup>

In 1982, the rate of AIDS cases among the total U.S. population was 1.4 per 100,000. This number increased to 3.4 cases per 100,000 in 1984, then doubled to 7 cases per 100,000 in 1985. By 1992, the rate was 18 cases per 100,000.

A change in the AIDS case definition led to a spike in AIDS case numbers in 1993, causing an artificial peak early in 1993. The temporary distortion almost entirely waned by 1996.

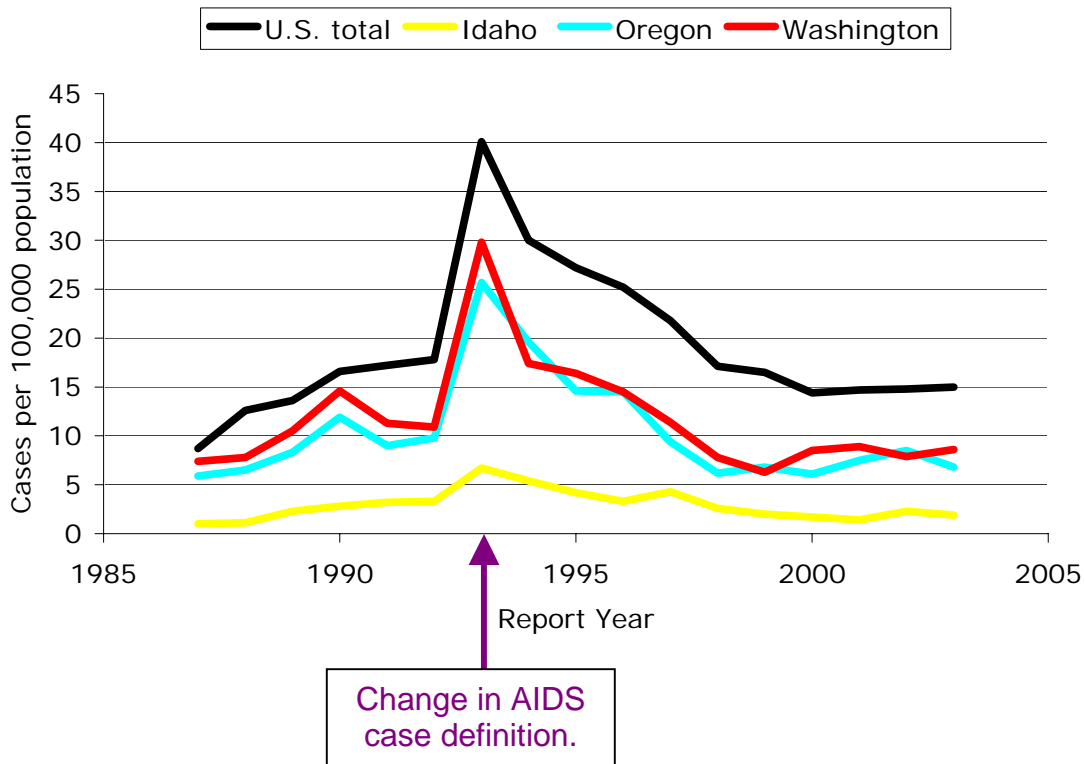
The total U.S. AIDS case rate peaked at 40 cases per 100,000 in 1993, then dropped to 14 cases per 100,000 in 2000.

The 2003 AIDS case rate was 15 cases per 100,000 for the total U.S. population.

In 2003, an estimated 43,1120 adults and adolescents were diagnosed with AIDS, with a cumulative total of 929,985 diagnoses living in the U.S.



## Total AIDS Rates, 1987-2003 United States and ID, OR & WA



## Regional HIV/AIDS Trends – All Races: <sup>26,27</sup>

The “All Race” AIDS case rates in Idaho, Oregon, and Washington have been lower than the national rate since 1987.

Idaho has had the lowest rate, increasing from 1 to 7 cases per 100,000 from 1987 to 1993, and dropping back to 2 cases per 100,000 in 2003. From 1986 to 2003, 573 HIV cases and 555 AIDS cases were diagnosed in Idaho.<sup>28</sup>

In 1987, Oregon’s AIDS case rate was 6 cases per 100,000, which rose to 26 cases per 100,000 in 1993. In 2000 there were 6 cases per 100,000; this number increased to 7 cases per 100,000 in

2003. The cumulative number of HIV/AIDS cases diagnosed between 1981 and 2003 totaled 6,794 Oregon residents.<sup>29</sup>

Washington’s AIDS case rates have been similar to Oregon’s, if slightly higher. Seven cases per 100,000 were reported in 1987. This number increased to 30 cases per 100,000 in 1993, dropped to a low of 6 cases per 100,000 in 1999, then increased to 9 cases per 100,000 in 2003. Washington has reported 15,182 new cases of HIV/AIDS from 1982 to mid-2005.<sup>30</sup>

## ***American Indians and Alaska Natives are diagnosed with AIDS at a younger age than other populations.***

### **AI/AN Trends:** <sup>26,27</sup>

**An analysis of HIV/AIDS data for American Indians and Alaska Natives (from 1981-1997) highlights a number of trends:**

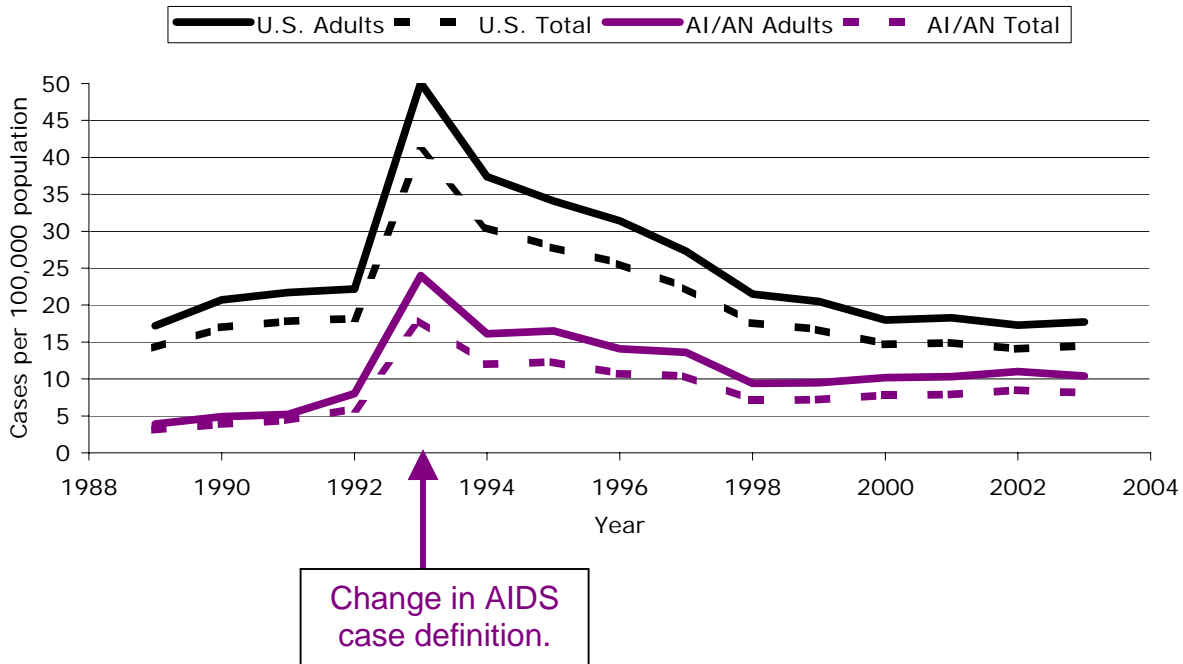
- Compared with the total number of persons with reported cases of AIDS in the United States, a higher percentage of AI/ANs with AIDS were aged 20-29 years (23% versus 17%, respectively), and a lower percentage were aged 40-49 years (21% versus 25%). AI/ANs who had AIDS were relatively younger than all persons with AIDS. The higher percentage of AI/ANs aged 13-29 years who had HIV (without AIDS) suggests that these persons were infected more recently than AI/ANs who had AIDS.<sup>31</sup>
- More than half (53%) of AI/ANs with AIDS resided in five states at the time of their AIDS diagnosis: California (25%), Oklahoma (11%), Washington (7%), Arizona (6%), and Alaska (4%).<sup>31</sup>
- Compared with all persons who have AIDS, a lower proportion of AI/ANs resided in metropolitan areas with populations greater than 1,000,000 (56% versus 77%, respectively), and a higher proportion resided in rural areas with populations less than 50,000 (19% versus 6%, respectively). Compared with all persons with AIDS in the United States, AIDS among AI/ANs was geographically clustered in selected areas in the West and in smaller cities and rural areas.<sup>31</sup>

***American Indians in Oregon, Washington, and Idaho are disproportionately impacted by AIDS. Nationally, the number of AIDS cases among AI/ANs has increased since 1998.***

- The same increase in case reporting that was observed nationally after the 1993 case definition change was observed among AI/ANs, when U.S. AI/AN AIDS rates rose to 24 cases per 100,000 for adults/adolescents. This number dropped to a low of 9 cases per 100,000 in 1998, and has increased gradually since then. The 2003 rate among U.S. AI/ANs was 10.4 cases per 100,000 adults/adolescents.
- In 2003, the AI/AN AIDS case rate for adults and adolescents in Idaho, Oregon, and Washington were all slightly higher than the 2003 U.S. AI/AN case rate. Oregon's AI/ANs had an AI/AN AIDS case rate of 13 cases per 100,000. The AI/AN rate in Idaho was 14 cases per 100,000. Washington's AI/ANs had the highest rate of the three states, at 19 cases per 100,000. Washington was the only state of the three to have a rate higher than the total adult/adolescent U.S. rate for all races (18/100,000).
- AI/ANs make up 1.5% of the total U.S. population. Idaho, Oregon and Washington are 2.1, 2.5 and 2.7% AI/AN respectively. In 2003, 7.7% of Idaho's new AIDS cases were AI/AN. The percentage in Oregon was 2.1%; in Washington, it was 2.9%. (Note: Case numbers can be small.)
- The rate of AIDS diagnoses among AI/ANs has been higher than that for whites since 1995. Of persons who have received a diagnosis of AIDS since 1995, AI/ANs have survived for a shorter time than have Asians and Pacific Islanders, whites, and Hispanics. After 9 years, 64% of AI/ANs were alive, compared with 60% of African Americans, 68% of Hispanics, 70% of whites, and 77% of Asians and Pacific Islanders.

### Total and AI/AN AIDS Rates, 1989-2003 United States

("Adults": Rate for adults/adolescents only . "Total": Rate for all ages.)



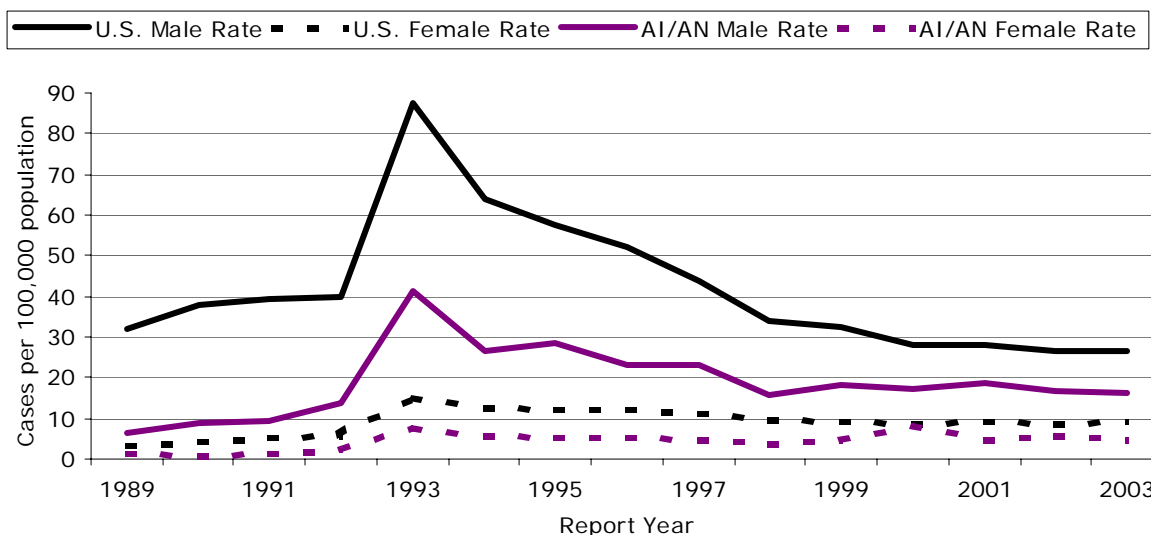
### National HIV/AIDS Trends – Among AI/ANs: <sup>26,27</sup>

In 2003, approximately 0.5% of all new AIDS cases diagnosed in the U.S. were among AI/ANs. At that time, an estimated 1,498 AI/ANs were living with AIDS.<sup>25</sup>

**At 10.4 cases per 100,000, American Indians and Alaska Natives had the 3<sup>rd</sup> highest AIDS rate in 2003 in relation to other ethnic groups.**

The highest rate was among African American adults / adolescents (75.2 per 100,000), followed by Hispanic adults / adolescents (26.8 per 100,000). The estimated AIDS diagnosis rate was 7.2 per 100,000 for white adults/adolescents. The U.S. total case rate was 15 cases per 100,000.

### Total and AI/AN AIDS Rates by Sex, 1989-2003 United States



## National HIV/AIDS Trends – By Gender: <sup>26,27</sup>

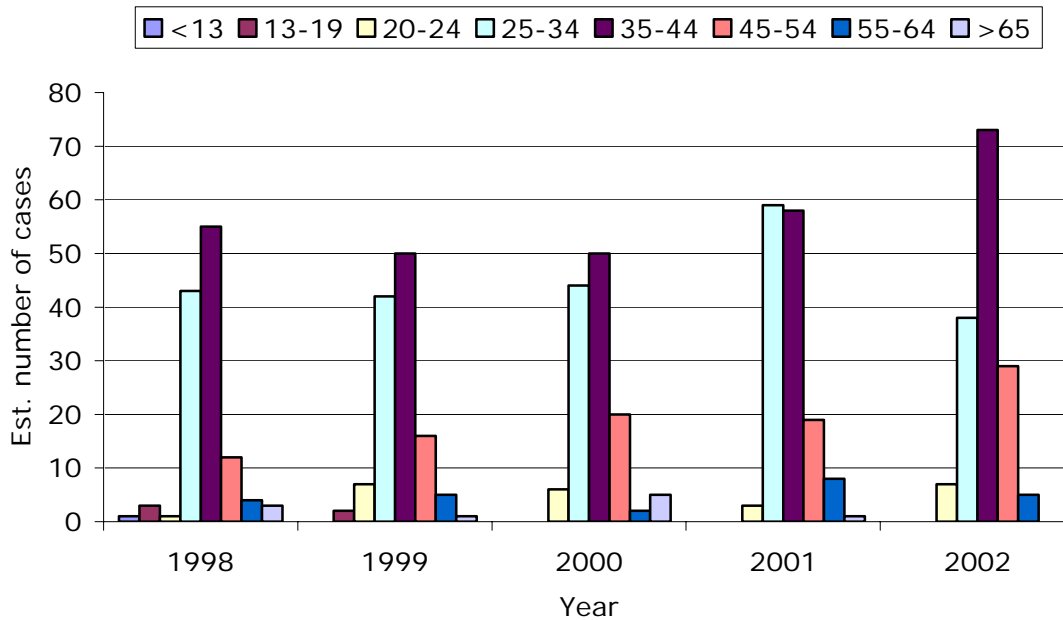
In 2003, an estimated 43,171 AIDS diagnoses were made in the United States. Of those, nearly 73% were among males and 27% among females.

In 1989, the national male AIDS case rate was 32 cases per 100,000, almost 10 times higher than the female rate of 3.5 cases per 100,000. In 1993, the U.S. male and female rates were 87 cases per 100,000 and 15 cases per 100,000, respectively. U.S. female AIDS case rates decreased slowly to slightly less than 9 cases per 100,000 in 2000, then increased slightly through 2003. U.S. male rates have also declined, ranging from 26 to 28 cases per 100,000 between 2000 and 2003.

Male and female AIDS cases rates in Idaho, Oregon and Washington have followed the same pattern as national

rates, though on a smaller scale. Washington's male and female AIDS case rates are the highest of the three states, followed closely by Oregon. Idaho had the lowest rates.

**Estimated Number of AIDS Cases Among Male U.S. AI/AN by Age Group, 1998-2002**



**HIV/AIDS Trends among AI/AN Males:** <sup>26,27</sup>

The national AIDS rate among American Indian and Alaska Native males in 1989 was 7 cases per 100,000. The rate peaked at 41 cases per 100,000 in 1993, reflecting the AIDS definition change, and dropped to 16 cases per 100,000 in 1998.

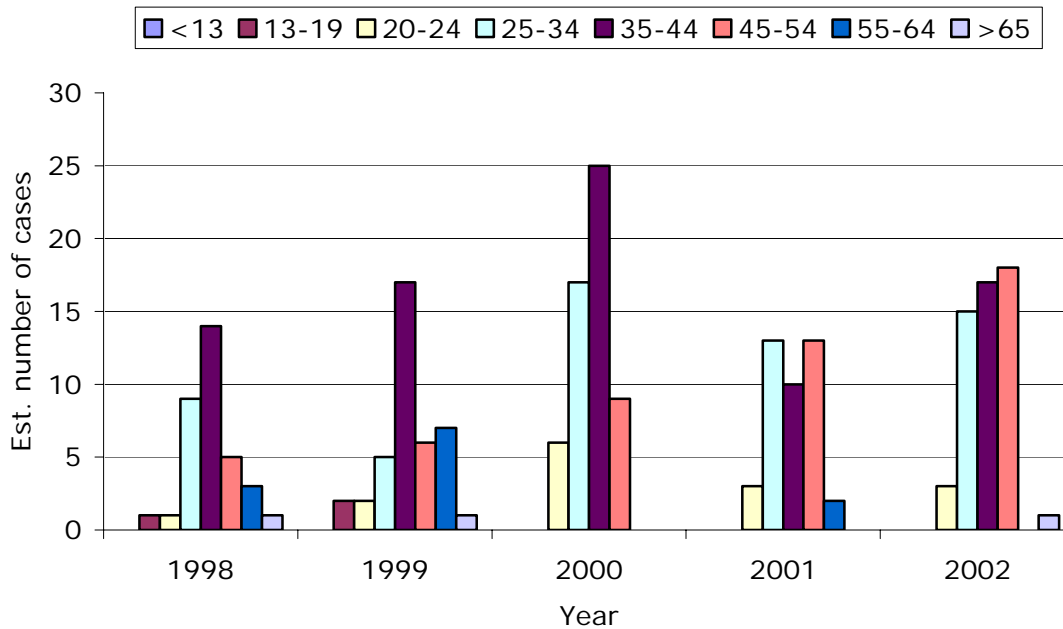
***The AIDS rate among AI/AN males has increased since 1998.***

Nationally, male AI/AN AIDS cases can also be evaluated by age group and by year.

Note: These are total case numbers and **not** rates per 100,000 population.

Among male AI/AN AIDS cases from 1998 to 2002, the highest numbers of AIDS cases were found in the 25 to 44 year old age groups. There were no cases in those under 20 years of age from 2000 to 2002.

**Estimated Number of AIDS Cases Among Female U.S.  
AI/AN by Age Group, 1998-2002**



**HIV/AIDS Trends among AI/AN Females:** <sup>26,27</sup>

Among AI/AN females, the AIDS rate rose from 1 case per 100,000 in 1989 to 8 cases per 100,000 in 1993. The rate fell to slightly below 4 cases per 100,000 in 1998, and ranged from 4 to 8 cases per 100,000 through 2003.

Nationally, female AI/AN AIDS cases can also be evaluated by age group and by year.

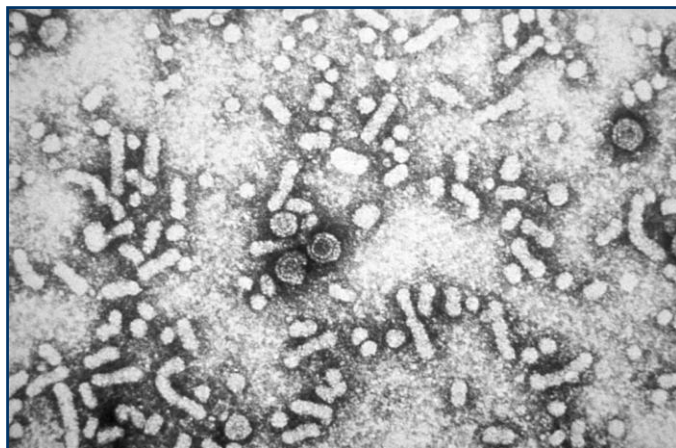
Note: These are total case numbers and **not** rates per 100,000 population.

Among female AI/AN AIDS cases from 1998 to 2000, 35-44 year olds had the highest numbers of AIDS cases. 2001-

2002 saw similar AIDS case numbers for all AI/AN women ages 25-54. There were no cases in those under 20 years of age from 2000 to 2002.







This electron micrograph reveals the presence of hepatitis-B virus HBV "Dane particles", or virions.<sup>12</sup>

## 8. Hepatitis A, B, and C

### **Prevention:**<sup>4</sup>

The most effective means to prevent transmission of infectious diseases, including STDs, is through pre-exposure immunization. Vaccines are available for Hepatitis A and B, both of which can be transmitted sexually.

Every person seeking treatment for an STD should be considered a candidate for hepatitis B vaccination, and some persons (e.g., MSM and injection-drug users) should be considered for hepatitis A vaccination. Evaluation for vaccination is most effectively done through a screening and education process that both inquires about risk factors for infection (e.g., sex partners and use of illegal drugs), educates patients about the

importance of vaccination, and excludes persons who are not candidates for vaccination (e.g., laboratory confirmed diagnosis of infection and previous vaccination).

### **Hepatitis A:**<sup>4</sup>

Hepatitis A, caused by infection with the hepatitis A virus (HAV), has an incubation period of approximately 4 weeks (range: 15--50 days) from time of exposure to onset of symptoms. HAV replicates in the liver and is shed in high concentrations in feces from 2 weeks before to 1 week after the onset of clinical illness. The fecal-oral route is the most common means of transmission. Bloodborne transmission of HAV is uncommon.

***Hepatitis A infection does not result in chronic infection. Vaccination is the most effective means of preventing HAV transmission.***

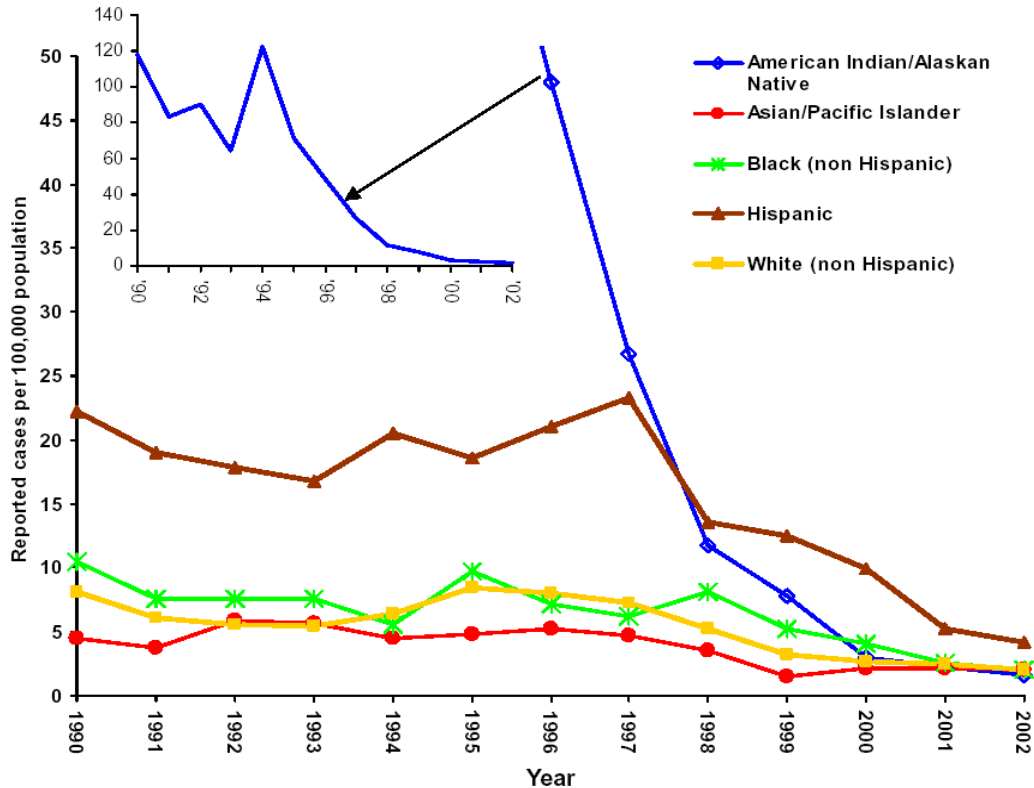
HAV infection produces a self-limited disease that does not result in chronic infection or chronic liver disease. However, 10%--15% of patients may experience a relapse of symptoms during the 6 months after acute illness. Acute liver failure from hepatitis A is rare (0.3% overall case-fatality rate), but occurs more frequently in older persons (1.8% case fatality rate in adults >50 years of age) and persons with underlying chronic liver disease.

Approximately 33% of the U.S. population has serologic evidence of prior HAV infection, which increases directly with age and reaches 75% among persons aged >70 years. Most cases of hepatitis A result from person-to-person transmission during community-wide outbreaks. The most frequently reported source of infection (12%--26%) is either household or sexual contact with a person who had hepatitis A.

In addition, outbreaks regularly occur among users of injection and non-injection drugs, and among MSM. Unlike most other STDs, HAV-infected persons are infectious for only a relatively brief period of time. However, many sexual practices facilitate fecal-oral transmission of HAV. Measures typically used to prevent the transmission of other STDs (e.g., use of condoms) do not prevent HAV transmission, and maintenance of "good personal hygiene" has not been successful in interrupting outbreaks of hepatitis A.

Vaccination is the most effective means of preventing HAV transmission among persons at risk for sexual transmission of this virus and among persons who use injection and non-injection illegal drugs, many of whom may seek services in STD clinics.

**Incidence of Reported Hepatitis A, by Race and Ethnicity,  
United States, 1990-2002**



## Hepatitis A Trends among AI/ANs:

Historically, hepatitis A rates have differed by race, with the highest rates occurring among American Indians and Alaska Natives, and the lowest rates occurring among Asian/Pacific Islanders.

However, rates among AI/ANs, which were greater than 60 cases per 100,000 prior to 1995, have decreased dramatically following widespread vaccination in this group, and in 2002 were approximately the same or lower than those in other races. Rates among Hispanics have also decreased since

1997 but remain higher than those for Non-Hispanics.<sup>32</sup>

In 1999, CDC recommended routine vaccination for children residing in 11 states (including Idaho, Oregon and Washington) where the average annual hepatitis A incidence during 1987--1997 was at least 20 cases per 100,000 population (twice the national average). In 2003, vaccination coverage levels for children aged 24--35 months were 43%, 33% and 27% for Idaho, Oregon and Washington respectively.<sup>33</sup>

***In the United States, most cases of Hepatitis B are transmitted sexually.***

**Hepatitis B:**<sup>4</sup>

Hepatitis B is caused by infection with hepatitis B virus (HBV). The incubation period from time of exposure to onset of symptoms is from 6 weeks to 6 months. HBV is found in highest concentrations in the blood, and is found in lower concentrations in other body fluids (e.g., semen, vaginal secretions, and wound exudates). HBV infection can be self-limited or chronic. In adults, only 50% of acute HBV infections are symptomatic, and about 1% of cases result in acute liver failure and death.

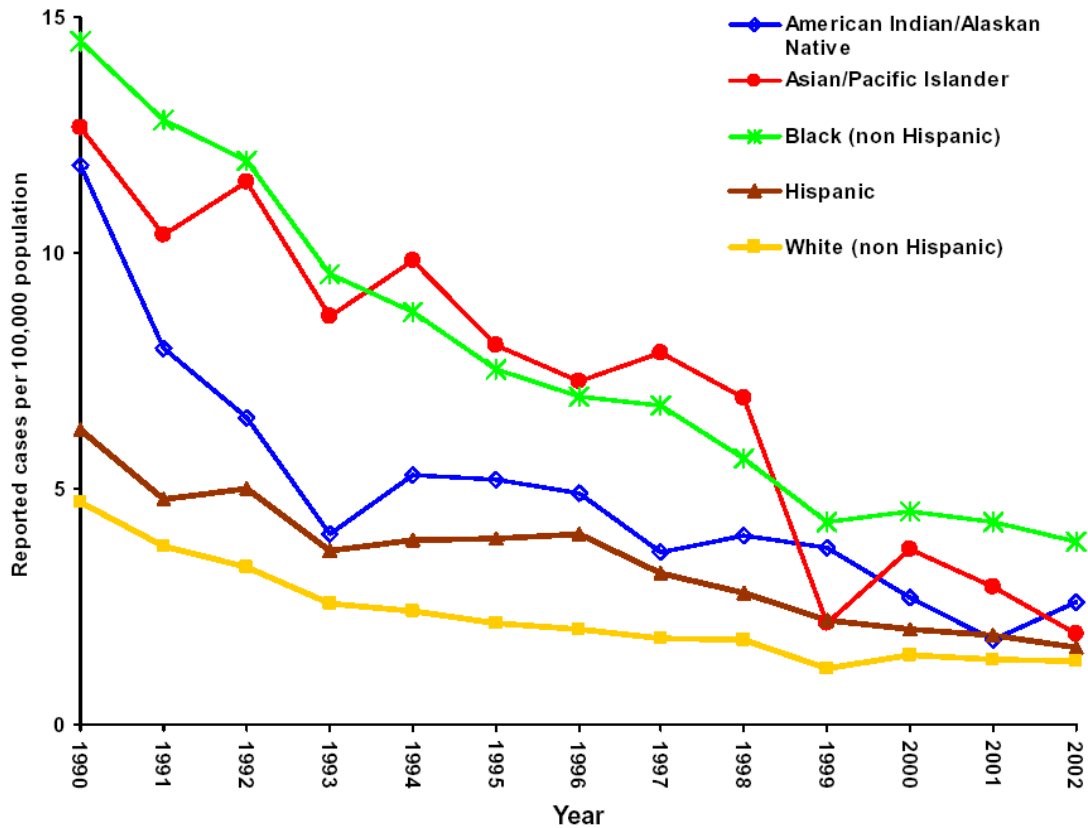
In the United States, an estimated 181,000 persons were infected with HBV in 1998, and about 5,000 deaths occurred from HBV-related cirrhosis or hepatocellular carcinoma. An estimated 1.25 million people are chronically infected with HBV, which makes them a reservoir for infection and at increased risk for death from chronic liver disease.

HBV is efficiently transmitted by percutaneous or mucous membrane

exposure to infectious body fluids. Sexual transmission among adults accounts for most HBV infections in the United States. In the 1990s, transmission among heterosexual partners accounted for about 40% of infections, and transmission among MSM accounted for another 15% of infections. The most common risk factors for heterosexual transmission include having multiple sex partners (i.e., more than one partner in a 6-month period) or a recent history of an STD. Risk factors for infection among MSM include having multiple sex partners, engaging in unprotected receptive anal intercourse, and having a history of other STDs.

Laboratory testing should be used to confirm suspected acute or chronic HBV infection, and infected persons should be referred for medical follow-up and possible treatment of chronic infection. In addition, contacts should be vaccinated and receive post-exposure prophylaxis. No specific therapy is available for persons with acute HBV infection; treatment is supportive.

## Incidence of Reported Acute Hepatitis B, by Race and Ethnicity, United States, 1990-2002



### Hepatitis B Trends among AI/ANs:

Rates of hepatitis B continue to decline among all racial and ethnic groups. However, rates of hepatitis B remain highest among non-Hispanic blacks (3.9/100,000) and lowest (1.4/100,000) among non-Hispanic whites.

***In 2002, the Hepatitis B rate among AI/ANs was second only to non-Hispanic blacks.***

The downward trend in the rate among Asians/Pacific Islanders continues, and in 2002, was approaching the rate among non-Hispanic whites. In contrast, the rate among non-Hispanic blacks has remained unchanged since 1999.<sup>32</sup>

## ***Hepatitis C infection is the most common chronic blood borne infection in the United States***

### **Hepatitis C:**<sup>4</sup>

Hepatitis C virus (HCV) infection is the most common chronic bloodborne infection in the United States; an estimated 2.7 million persons are chronically infected. More than two thirds of all infected persons are less than 50 years of age. Persons with acute HCV infection typically are either asymptomatic or have a mild clinical illness. The average time from exposure to seroconversion is 8--9 weeks, and antibodies to HCV (anti-HCV) can be detected in >97% of persons by 6 months after exposure.

Chronic HCV infection develops in most persons (75%--85%) after acute infection; 60%--70% have evidence of active liver disease. Most infected persons may not be aware of their infection because they are not clinically ill. However, infected persons serve as a source of transmission to others and are at risk for chronic liver disease or other HCV-related chronic diseases for at least 2 decades after infection.

HCV is most efficiently transmitted by direct percutaneous exposure to infected blood (e.g., by receipt of blood transfusion from an infected donor or through use of injection drugs). Although less efficient, occupational, perinatal, and sexual exposures also can result in transmission of HCV.

### **Sexual Activity:**<sup>4</sup>

Although the role of sexual activity in the transmission of HCV remains controversial, results from several studies indicate that sexual activity is associated with HCV transmission. These studies reported independent associations between HCV infection and:

- a) exposure to an infected sex partner,
- b) increasing numbers of partners,
- c) failure to use a condom,
- d) history of STD,
- e) heterosexual sex with a male IDU, and
- f) sexual activities involving trauma.

Although inconsistencies exist between studies, data indicate overall that sexual transmission of HCV can occur and accounts for up to 20% of HCV infections.

***Patients who use illegal drugs or have multiple sex partners should be provided with information about how to reduce their risk for acquiring sexually transmitted infections.***

**Prevention of Hepatitis C:**<sup>4</sup>

No vaccine for hepatitis C is available, and prophylaxis with immune globulin is not effective in preventing HCV infection after exposure. Reducing the burden of HCV infection and disease in the United States requires implementation of both primary and secondary prevention activities.

Primary prevention reduces or eliminates HCV transmission; secondary prevention activities reduce liver and other chronic diseases in HCV-infected persons by identifying them and providing appropriate medical management and antiviral therapy, if necessary.

Persons seeking care in STD clinics or other primary-care settings should be screened for risk factors for HCV infection, and those with the following risk factors should be offered counseling and testing:

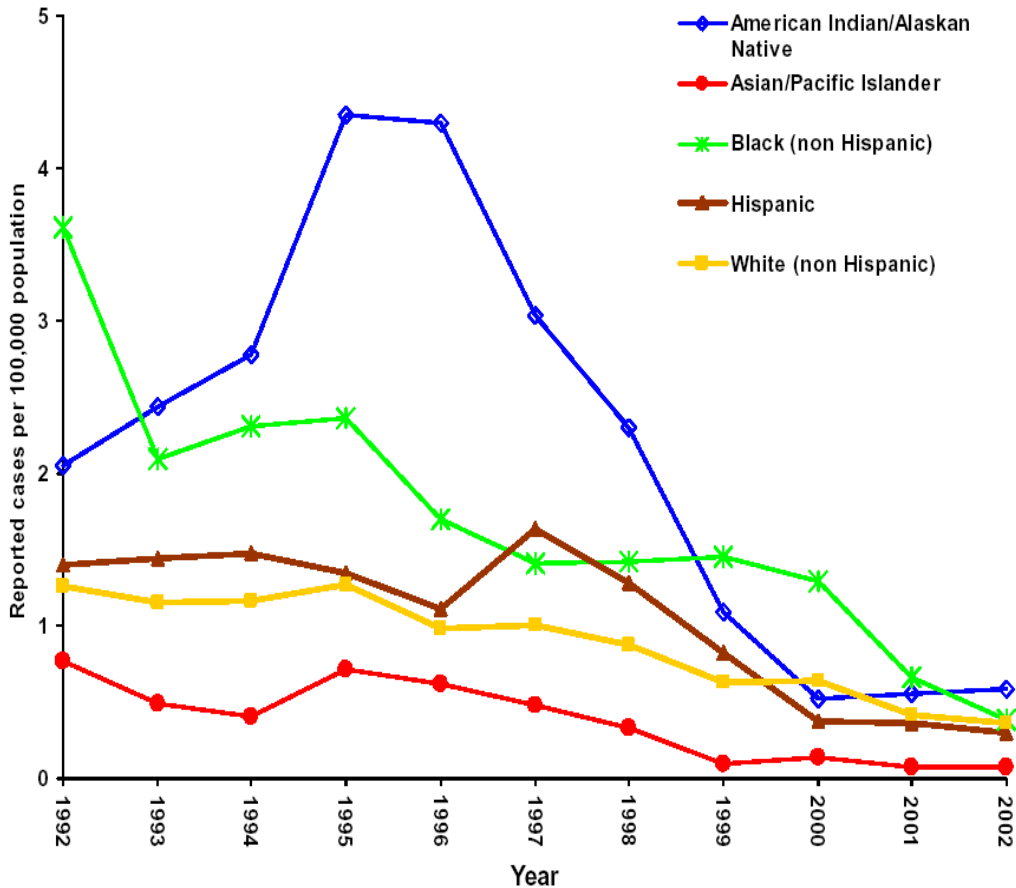
- illegal injection drug use, even once or twice many years ago;
- blood transfusion or solid organ transplant before July 1992;

- receipt of clotting factor concentrates produced before 1987; and
- long-term hemodialysis.

Regardless of test results, persons who use illegal drugs or have multiple sex partners should be provided with information regarding how to reduce their risk for acquiring bloodborne and sexually transmitted infections, and how to avoid transmitting infectious agents to others (e.g., through vaccination against hepatitis B and, if appropriate, hepatitis A).

Persons who inject drugs should be counseled to stop and obtain treatment. If they continue the use of these drugs, they should be counseled on how to inject safely (i.e., use of sterile, single-use equipment, including needles, syringes, cookers, cottons, and water each and every time they inject). Persons with multiple sex partners should be counseled regarding how to reduce the transmission of STDs (e.g., through abstinence or by decreasing the number of sex partners).

**Incidence of Reported Acute Hepatitis C/NANB, by Race and Ethnicity,  
United States, 1992-2002**



## Hepatitis C Trends among AI/ANs:

The incidence of hepatitis C varies by race and ethnicity. Rates have declined in all racial groups since 1995 but non-Hispanic blacks and **American Indians and Alaska Natives continue to have higher incidence rates than other racial/ethnic groups.**

Rates among Hispanics have historically been higher than among non-Hispanic whites (but lower than for non-Hispanic blacks) but since 2000 have been lower than any other racial/ethnic group except Asian or Pacific Islanders (APIs). Each year, APIs have had the lowest incidence of hepatitis C since 1992.<sup>32</sup>







***“The work we do now will be seen by those ancestors yet to be.”***

*As is true of other racial health disparities, the disproportional prevalence of STDs among American Indians does not reflect any biological difference in infection susceptibility, but rather inequalities that exist within the social and behavioral determinates of health.*<sup>34</sup>

## 9. NW Tribal STD Priorities and Recommendations

Having completed the comprehensive STD/HIV capacity assessment administered by Project Red Talon, the NW Tribes now have the baseline information needed to design an effective, inter-tribal response. Using this data, the NW tribes will work together to produce a three-year **STD/HIV Tribal Action Plan**.

By uniting to share wisdom, data, and resources, Red Talon Coalition members will identify and address common priorities and develop culturally relevant strategies to eliminate STD-related disparities. The Tribal Action Plan will provide strategic direction and guidance to the prevention activities implemented by each individual tribe. By establishing a common agenda, the NW Tribes hope to learn from one another's challenges and successes, conserve resources by

replicating activities, and spread consistent STD/HIV messages that reverberate throughout Indian Country.

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The mission of the Red Talon STD/HIV Coalition is to “reduce the prevalence of STDs among American Indians and Alaska Natives in the Pacific Northwest.” To achieve this valuable goal, NW Tribal members have identified three essential objectives:

1. **Increase community awareness about STDs.**
2. **Strengthen local capacity to prevent STDs.**
3. **Improve STD screening and treatment in Tribal clinics.**



## Needs Assessment

### Findings:

Recognizing the six dimensions of STD Prevention Capacity, as described by the *Community Readiness Model*, the Red Talon Coalition will frame each of their Action Plan strategies around the three priority objectives. Drawing from the results of the NW Tribal STD Capacity Assessment, the following recommendations can be made:

#### **Priority #1: Increase community awareness about STDs.**

##### **Community Efforts:**

- Develop and implement a comprehensive media strategy using consistent messages and images.
- Identify and mentor peer-to-peer educators that can extend the reach of out-reach messages to high risk populations (youth, injection drug users (IDU), MSM, social networks etc.)
- Partner with other tribal programs (WIC, Family services, A&D programs, etc.) to increase outreach and improve support for prevention activities.

##### **Community Knowledge of the Efforts:**

- Use the STD/HIV media campaign to promote available prevention and treatment services.
- Improve and broaden community access to native-specific and culturally relevant educational materials – fact sheets, brochures, risk reduction kits, etc.

##### **Leadership:**

- Present fact sheets to Tribal Counsel members to increase awareness about sexually transmitted diseases and the STD/HIV Tribal Action Plan.

##### **Community Climate and Knowledge about STD/HIV:**

- The media campaign and per-to-peer educators should: Increase community knowledge about STDs and available treatments, reduce stigma around testing, increase willingness to participate in screening efforts, improve attitudes about accessing services.

#### **Priority #2: Strengthen local capacity to prevent STDs.**

##### **Community Efforts:**

- Develop community-based policies to prevent STD transmission.
- Develop and/or strengthen skill- and behavior-based intervention programs targeting high-risk populations. (Priority outcomes include “Decreasing rates of injection drug use” and “Increasing age of first intercourse”)

- Foster networking and sharing by inviting additional partners to join the Red Talon STD/HIV Coalition.

#### **Community Climate and Knowledge about STD/HIV:**

- Increase training among tribal health advocates, particularly addressing youth prevention strategies and culturally appropriate interventions.

#### **Leadership:**

- Propose a tribal resolution providing support for the Tribal Action Plan and other STD/HIV prevention initiatives.

#### **Resources Related to the Issue:**

- Work with State and County health departments and partner agencies to increase tribal funding for STD and HIV initiatives.

### ***Priority #3: Improve STD screening and treatment in Tribal clinics.***

#### **Community Efforts:**

- Develop clinic-based policies to improve tribal screening rates, increase case reporting to the state or county registry, reduce test result wait-times, improve the confidentiality/anonymity of testing, improve service access for adolescents and IDU, and reduce partner-to-partner transmission.
- For most clinics, STD treatment rates lag well behind screening and testing rates. Establish a workgroup to identify actions that can be taken to improve STD treatment rates at tribal clinics.

- Work with State and County STD registry personnel to improve Tribal clinic case reporting. This will in turn improve the accuracy of state and national data.

#### **Community Climate and Knowledge about STD/HIV:**

- Utilize the media campaign to improve community awareness about clinic services, particularly among adolescents, IDU, and MSM.

#### **Leadership:**

- Work collaboratively with clinic personnel to improve STD services and attitudes about prevention priorities.

#### **Community Climate and Knowledge about STD/HIV:**

- Work collaboratively with clinicians to reduce STD prevalence and improve attitudes around screening and prevention priorities.
- Increase training among tribal clinic personnel, particularly addressing updates in STD treatment guidelines and women's health.

#### **Resources Related to the Issue:**

- Three-quarters of clinicians said their clinic would be interested in partnering with other agencies to secure cheaper STD treatment medications. The STD Treatment workgroup should explore this important barrier to treatment.

## STD/HIV Prevention Priorities

### Identified by the Red Talon STD/HIV Coalition

#### **Increase Community Awareness about STDs:**

1. Build awareness among Tribal Council Members and decision-makers.  
(Present information and propose tribal resolutions.)
2. Educate community members at community gatherings.  
(Elders programs, youth leadership programs, parents.)
3. Develop and implement a comprehensive, culturally appropriate STD media campaign.  
(Increase knowledge about STDs and available treatments, reduce stigma around testing, increase willingness to participate in screening efforts, improve attitudes about the confidentiality of services.)

#### **Strengthen Local Capacity to Prevent STDs:**

1. Increase funding available for tribal prevention and treatment activities.
2. Improve collaboration and networking among tribes, clinics, schools, law enforcement, treatment programs, traditional healers, decision-makers, youth leadership programs, training centers, partnering agencies.  
(Involve others in the Red Talon STD/HIV Coalition, highlight tribal programs in the monthly Newsletter, establish inter-tribal program shadowing.)
3. Increase STD training among tribal health advocates.  
(Train-the-trainer workshops, STD 101, STD screening and treatment updates for clinicians, Teen peer-to-peer trainings)
4. Develop and circulate an STD "speaker resource list."
5. Support programs that address behaviors that contribute to STD transmission: Teen pregnancy, drug and alcohol abuse, condom distribution, needle exchange, social/sexual norms.  
(Improve adolescent reproduction health education: Develop and implement Native appropriate curricula, support teen peer-to-peer outreach.)

#### **Improve STD Screening and Treatment in Tribal Clinics:**

1. Strengthen clinic screening and treatment policies.  
(Educate clinic providers, develop and implement appropriate protocols)
2. Increase community participation in screening campaigns.  
(Provide incentives to participants, screen during: Youth Sports physicals, work health physicals, at tribal Jails, in Substance treatment/Rehab programs, Celebrate National Testing Day)
3. Minimize barriers to testing and treatment.  
(Confidentiality concerns, transportation, funding.)


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**One of the primary considerations in building any Native health or prevention program is the need to develop a clear understanding of the core cultural values of the community that the program is designed to serve.**

**Prevention programs that respect cultural values, encourage healthy relationships, and are planned with the investment and ownership of Native community members, have been demonstrated to be the most successful and sustainable over time.**

*HIV/STD Prevention Guidelines for Native American Communities.*<sup>35</sup>

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## STD Prevention Interventions and Strategies:

Many of the prevention strategies identified by the Red Talon Coalition are consistent with the recommendations set forth by the *HIV/STD Prevention Guidelines for Native American Communities*.<sup>35</sup>

By increasing community awareness about STDs, strengthening local capacity to prevent STDs, and improving STD screening and treatment practices in Tribal clinics, tribal health advocates will reduce the prevalence of STDs among American Indians and Alaska Natives in the Pacific Northwest. To achieve this, the STD/HIV Tribal Action Plan will reflect cultural values while promoting positive, strength-based prevention strategies.

This work will not only reduce STD transmission, but will also prevent teen pregnancy, improve reproductive health,

reduce drug and alcohol use, strengthen self-efficacy and leadership skills, and will promote positive attitudes and behaviors among native communities.

According to Project Red Talon's capacity indices, 85% of our NW tribes currently maintain a moderate to high level of STD prevention capacity. It is our hope that the Tribal Action Plan will empower additional tribes to reach this domain.

Native people have a long history of planning for the well being of future generations. Thanks to the commitment of the Red Talon Coalition, efforts to ensure the social, emotional, and reproductive health of the *seventh generation* are presently at hand.

***“The work we do now will be seen by those ancestors yet to be.”***





# 10. Related Definitions, Tables, and Appendices

## Definitions:

**AI/AN:** American Indian and Alaska Natives

**Cases:** Number of infections reported in a given year or time-period.

**MSM:** Men who have Sex with Men

**Northwest (NW):** Includes Idaho, Oregon, and Washington states.

**NW Total:** Cases or rates labeled “NW Total” include infections from the total population of Idaho, Oregon, and Washington combined, to provide regional comparisons.

**Rates:** Number of cases reported per 100,000 population. Rates are particularly useful when comparing populations of unequal size.

**STD:** Sexually Transmitted Disease

**STI:** Sexually Transmitted Infection

**U.S. Total:** Cases or rates that are labeled “U.S. Total” include infections from all ethnic groups combined, providing a national average. This is also referred to as “All Races.”

## Factors that contribute to elevated STD rates among American Indians and Alaska Natives:

**Social and Behavioral factors.** Poverty, inadequate health services, substance use, and social norms most significantly contribute to the prevalence of STDs in Indian Country. The following list describes a few of the many factors that contribute to elevated STD rates among American Indians and Alaska Natives:

**Access to healthcare.** Access to high-quality healthcare is essential for early detection, treatment, and counseling for sexually transmitted diseases. Unfortunately, populations with high STD rates often have limited access to appropriate health services.<sup>36</sup> Among these, the Indian Health Service is significantly under-funded and over-burdened with need. An investigation by the Government Accountability Office in September 2005 concluded, "American Indians often do not have adequate access to healthcare."<sup>37</sup> Research suggests that an IHS budget of \$9 to 10 billion dollars would be needed to meet the true healthcare requirements of Indian people in 2006. This level of funding is not anticipated however, as the annual budget in 2005 was just under 3 billion dollars.<sup>38</sup> Transportation, long wait times, few specialist, and rural geography further contribute to poor access.

**Clinic-Based Policies.** According to the STD capacity assessment, only 60% of respondents reported the presence of comprehensive STD screening and treatment protocols in Tribal clinics. Because many STDs are asymptomatic, tribal health centers must develop and implement screening and treatment policies to improve case identification and

reduce partner-to-partner transmission. Such policies include: implementing CDC screening guidelines, providing STD counseling, implementing STD case reporting for defined diseases, ensuring strict confidentiality of records, implementing a partner notification system, providing Partner-Delivered-Therapy, implementing prenatal STD tests, and/or allowing minors to access services without parental consent.

**Screening.** While clinicians reported that, for the most part, tribal clinics do not consider STDs to be a clinical priority, almost all clinics provide at least some STD screening or testing. STDs disproportionately affect people who are in social networks where high-risk sexual behavior is common. Such networks are frequently associated with substance abuse, which is a common cause for arrest and detention. Studies have shown that comprehensive screening among incarcerated populations can be effective and safely administered within the criminal justice system.<sup>36</sup> Guidelines for **STD Screening in Tribal Jails** were collaboratively developed by the IHS and CDC, and are available through the Northwest Portland Area Indian Health Board. [Contact Project Red Talon for more information: 503-228-4185.]

Tribes have also successfully conducted screening campaigns during youth sports physicals, within school-based settings, during employee health physicals, and in substance treatment/rehab programs.

**Confidentiality.** In small, isolated communities where clinic personnel and

community members know one another, clinic users may worry about anonymity and the confidentiality of STD services. Because this is a common concern at tribal clinics, a variety of strategies must be developed to alleviate this concern. To improve service utilization, appropriate outreach messages must then be created and circulated throughout the community.

**Substance abuse.** Numerous studies have documented the association between drug and alcohol use and sexually transmitted diseases. Illicit substances, including alcohol, inhalants and methamphetamines, can reduce inhibitions and drastically alter sexual behavior in high-risk sexual networks, leading to further STD transmission.

Based on combined data from SAMHSA's 1999-2001 National Household Survey on Drug Abuse, AI/ANs were more likely than Blacks or Asians to have engaged in binge or heavy drinking<sup>iv</sup> in the past 30 days, and in 2001, had the highest rate of past year dependence/abuse of illicit drugs or alcohol of any other group.

Particularly concerning for our young people, studies targeting those admitted to treatment also reveal that AI/ANs are more likely to initiate substance use at age 14 or younger (46% vs. 32%), when compared with other racial/ethnic groups.<sup>39</sup>

**Sexual coercion.** Sexual violence against women contributes both directly and indirectly to STD transmission. Directly, women experiencing sexual

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<sup>iv</sup> Binge drinking is defined as drinking five or more drinks on the same occasion. Heavy drinking is defined as drinking five or more drinks on the same occasion on five or more days in the past 30 days.

violence are less able to protect themselves from STDs or pregnancy. Indirectly, research demonstrates that women with a history of involuntary sexual intercourse are more likely to have voluntary intercourse at earlier ages — a known risk factor for STDs — than women who are not sexually abused.<sup>36</sup>

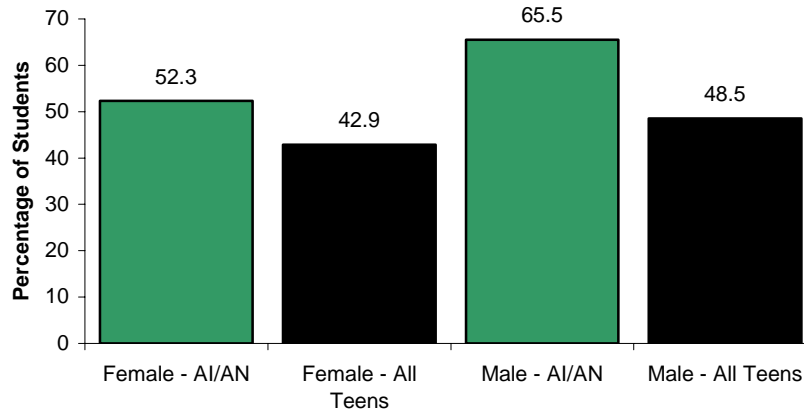
**Sexuality and Social Norms.** Perhaps the most important factor that contributes to the spread of STDs in Indian Country is the prevalence of unhealthy sexual social norms.

*According to a report produced by the Institute of Medicine, "...secrecy surrounding sexuality impedes sexuality education programs for adolescents, open discussion between parents and their children and between sex partners, balanced messages from mass media, education and counseling activities of health care professionals, and community activism regarding STDs."<sup>36</sup>*

Changing sexual behaviors to reflect traditional values and beliefs will be an important component of any long-term strategy for STD prevention. Social behavior change should focus on:

- Delaying intercourse - Increase adolescent abstinence rates
- Increasing monogamous relationships - decrease number of lifetime sexual partners
- Increasing use of risk reduction strategies: condoms, etc.
- Increasing balanced media messages about sexual health and sexual activity.
- Improving communication between sexual partners.
- Fostering open discussion between parents and youth.

**Students Grades 9-12 -- YRBS, 2001.  
More Native American Teens Report  
ever having had Sexual Intercourse.**



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**Teen Sexual Health.** Early sexual debut, multiple sex partners, and infrequent condom use puts AI/AN youth at heightened risk for STDs, HIV, and teen pregnancy.

While teen pregnancy rates for Native American youth are not available from national data sets (due to a lack of available abortion data), in 2002 the birth rate for Native American 15- to 19- year-olds was 53.8 per 1,000, much higher than the national rate of 43.0 per 1,000.<sup>40</sup> Teen birth rates among American Indians vary substantially by tribe and region, ranging from 13.4 per 1,000 in Illinois to 112.5 per 1,000 in South Dakota for teens aged 15 to 19.<sup>40</sup>

According to a 2001 Youth Risk Behavior Survey (YRBS), which involved a nationally-representative sample of 8,500 BIA high school students, youth attending BIA-funded schools were more likely to have had sex than the national sample.

Slightly more than half (52.3%) of Native American female high school students reported having had sex, compared to 42.9% of all female high school students, and 65.5% Native American male students reported having had sex, compared to the 48.5% of all male high school students.<sup>40</sup>

Increasing their risk for STDs and HIV, female Native American students reported less condom use at last sex than the total student population (45.0% vs. 51.3%). Among males, however, condom use at last sex is equally likely among Native American students and the general high school male population (64.8% vs. 65.1%).<sup>40</sup>

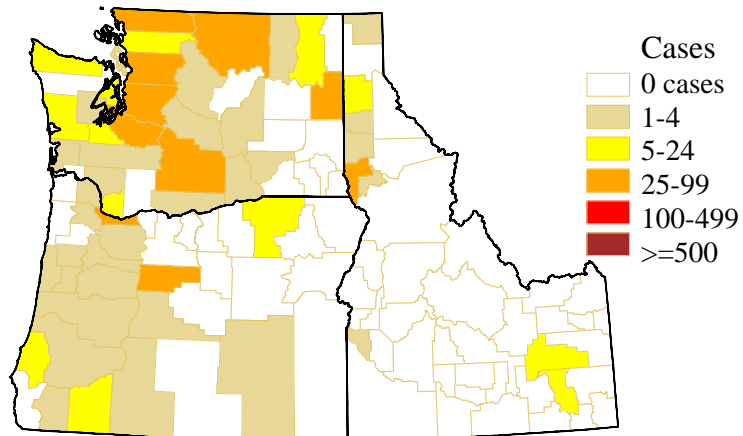
Overall, 55.9% of the sexually experienced BIA students reported using a condom at last sex, and only 8.3% of AI/AN students report using birth control pills at that time, compared to 18.2% of high school students nationally.<sup>40</sup>

**TABLE 1. Estimated lifetime cost per case, number of new cases among persons aged 15–24 and total direct medical costs of eight major STDs, United States, 2000**

STD	Average life-time cost per case* (\$)	No. of new cases in 2000†	Total direct medical cost* (\$)
<b>Total</b>	<b>na</b>	<b>9.1 million</b>	<b>6.5 billion</b>
HIV	199,800	15,000	3.0 billion
HPV	1,228 (women) 27 (men)	> 4.6 million	2.9 billion
Genital herpes	417 (women) 511 (men)	> 640,000	292.7 million
Hepatitis B	779	7,500	5.8 million
Chlamydia	244 (women) 20 (men)	> 1.5 million	248.4 million
Gonorrhea	266 (women) 53 (men)	> 431,000	77.0 million
Trichomoniasis	18	1.9 million	34.2 million
Syphilis	444	8,200	3.6 million

\*In year 2000 dollars. †Excludes infections that were not sexually acquired. Notes: To calculate total costs, we assumed that men accounted for 50% of new HPV infections, 43% of new cases of genital herpes, 35% of new chlamydial infections and 41% of new cases of gonorrhea in this age-group (references 1, 2, 26 and 58). Totals may not match sum of individual items because of rounding. na=not applicable. Source: For incidence estimates, see reference 1.

### 2003 County Chlamydia Cases among Northwest AI/ANs

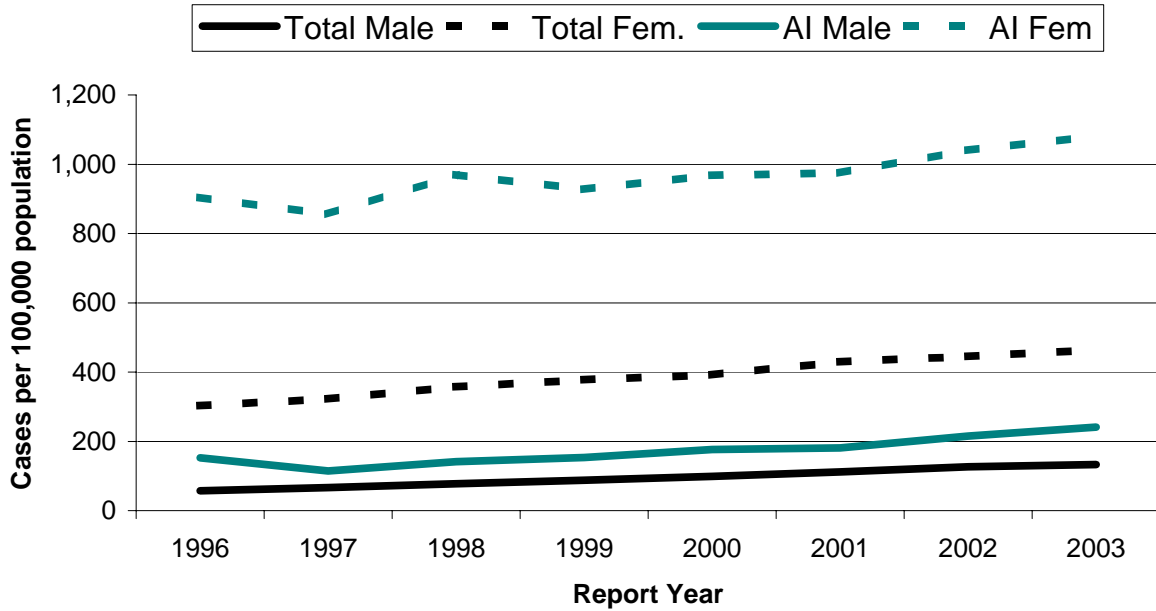


### Chlamydia – Adjusted Cases and Rates, 1996, 2000 & 2003 U.S. and NW States (ID, OR, WA)

Cases are reported for all persons and AI/ANs  
Cases are adjusted by re-distributing cases with unknown race  
SOURCE: ANAL2638 Age-Race-Sex Morbidity Files, 1996-2003

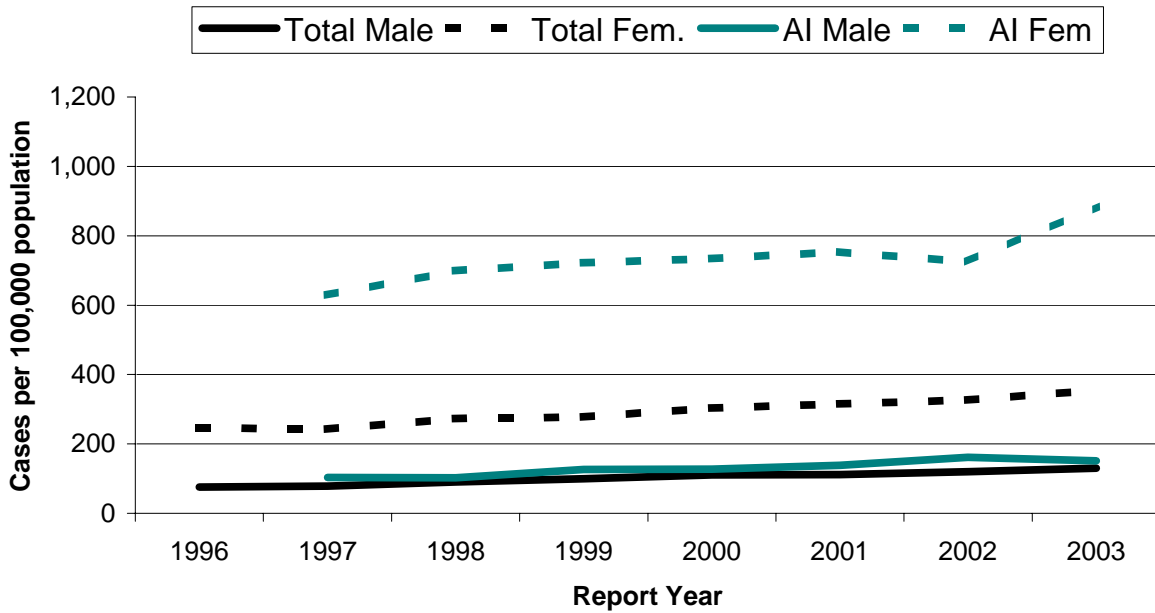
Region	Year	Total Cases	Total Rate	AI/AN Cases	AI/AN # Adj.	AI Rate Adj.	AI % of Known	Total % Unk Race
U.S. Total	1996	492,084	<b>182.7</b>	7,375	11,197	<b>533.0</b>	2.3%	34.1%
	2000	701,339	<b>248.5</b>	9,609	13,583	<b>577.4</b>	1.9%	29.3%
	2003	877,478	<b>301.7</b>	11,735	16,198	<b>667.1</b>	1.8%	27.6%
NW States	1996	16,183	<b>161.5</b>	1,239	1,473	<b>985.1</b>	9.1%	15.9%
	2000	22,080	<b>207.5</b>	634	718	<b>434.2</b>	3.3%	11.7%
	2003	26,851	<b>242.8</b>	747	885	<b>522.7</b>	3.3%	15.6%
Idaho	1996	1,505	<b>125.1</b>	30	53	<b>361.7</b>	3.5%	43.3%
	2000	1,907	<b>146.7</b>	56	68	<b>382.7</b>	3.6%	18.1%
	2003	2,366	<b>173.2</b>	58	77	<b>411.5</b>	3.3%	24.6%
Oregon	1996	5,442	<b>167.6</b>	893	1,010	<b>2317.9</b>	18.6%	11.6%
	2000	7,107	<b>207.1</b>	110	120	<b>247.8</b>	1.7%	8.6%
	2003	7,688	<b>216.0</b>	141	160	<b>327.2</b>	2.1%	12.1%
Washington	1996	9,236	<b>165.8</b>	316	367	<b>402.0</b>	4.0%	13.9%
	2000	13,066	<b>221.0</b>	468	535	<b>539.5</b>	4.1%	12.5%
	2003	16,797	<b>273.9</b>	548	651	<b>640.2</b>	3.9%	15.9%

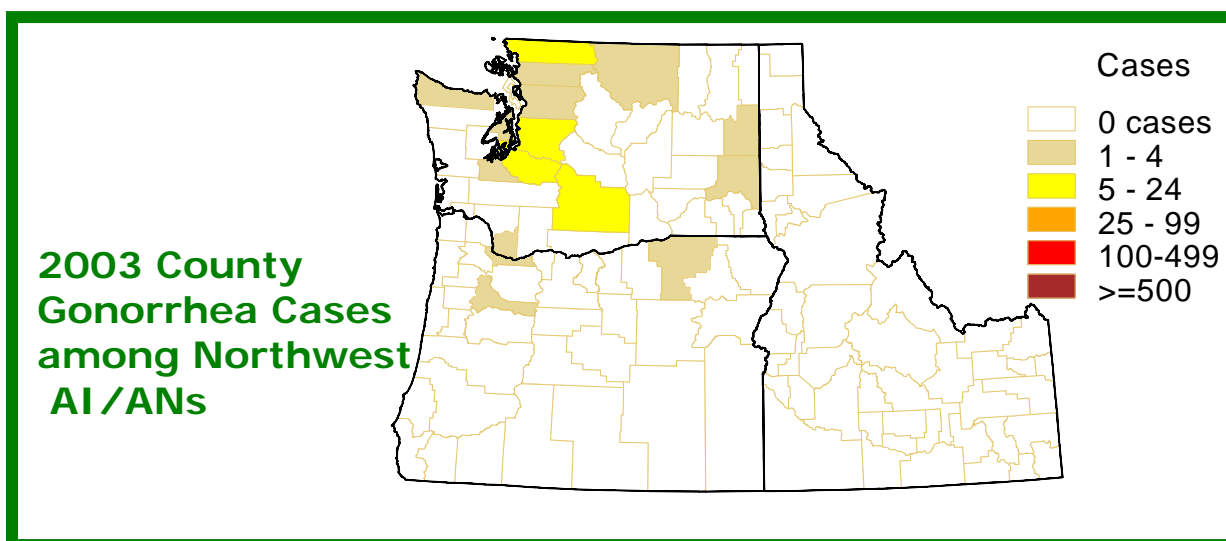
**Total and AI Chlamydia Rates, by Sex  
1996-2003  
United States**



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**Total and AI Chlamydia Rates, by Sex  
1996-2003  
Northwest States (OR, WA, ID)**





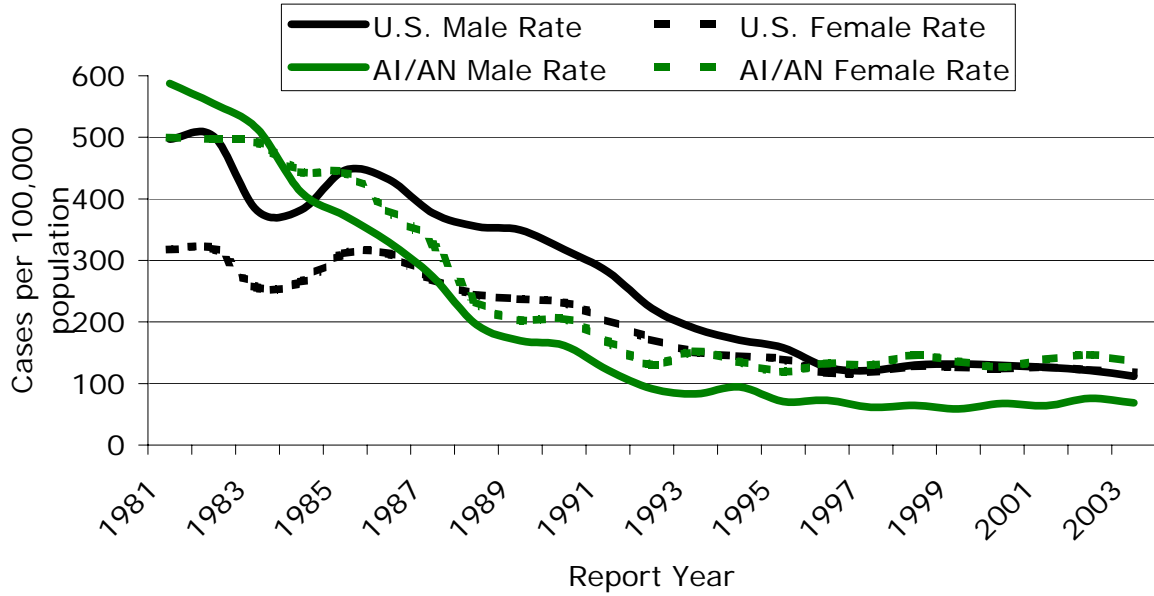
**Gonorrhea – Adjusted Cases and Rates, 1981, 1992 & 2003  
U.S. and NW States (ID, OR, WA)**

Cases are reported for all persons and AI/ANs  
Cases are adjusted by re-distributing cases with unknown race  
SOURCE: ANAL2638 Age-Race-Sex Morbidity Files, 1981-2003

Region	Year	Total Cases	Total Rate	AI/AN Cases	AI/AN # Adj.	AI Rate Adj.	AI % of Known	Total % Unk Race
<b>U.S. Total</b>	1981	929,256	<b>405.0</b>	7,947	9,722	<b>542.6</b>	1.0%	18.3%
	1992	503,168	<b>196.2</b>	1,739	2,079	<b>109.9</b>	0.4%	16.4%
	2003	335,104	<b>115.2</b>	1,883	2,455	<b>101.1</b>	0.7%	23.3%
<b>NW States</b>	1981	24,195	<b>307.6</b>	593	635	<b>514.8</b>	2.6%	6.7%
	1992	6,029	<b>65.4</b>	154	161	<b>119.9</b>	2.7%	4.1%
	2003	3,821	<b>34.6</b>	76	91	<b>53.8</b>	2.4%	16.1%
<b>Idaho</b>	1981	1,802	<b>187.3</b>	46	48	<b>352.8</b>	2.7%	4.7%
	1992	120	<b>11.2</b>	10	15	<b>116.1</b>	12.5%	31.7%
	2003	68	<b>5.0</b>	0	0	<b>0.0</b>	0.0%	35.3%
<b>Oregon</b>	1981	9,189	<b>344.4</b>	97	116	<b>311.7</b>	1.3%	16.6%
	1992	1,768	<b>59.1</b>	42	48	<b>123.9</b>	2.7%	11.9%
	2003	1,000	<b>28.1</b>	6	7	<b>14.3</b>	0.7%	9.7%
<b>Washington</b>	1981	13,204	<b>311.7</b>	450	450	<b>620.4</b>	3.4%	0.0%
	1992	4,141	<b>80.2</b>	102	102	<b>123.5</b>	2.5%	0.0%
	2003	2,753	<b>44.9</b>	70	85	<b>83.6</b>	3.1%	17.9%

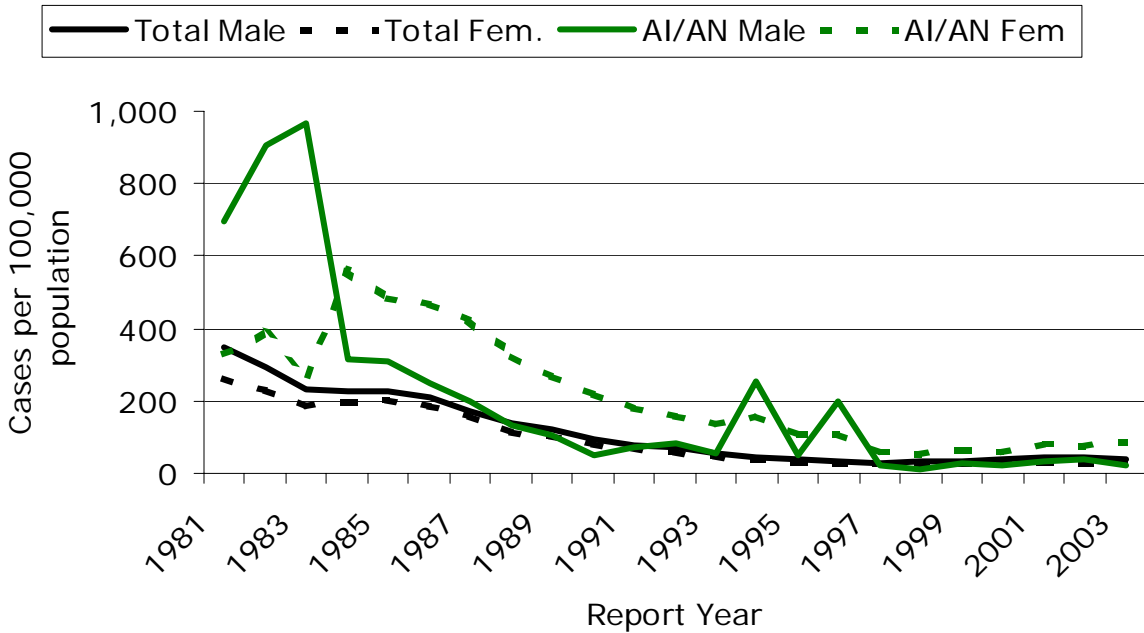


Total and AI/AN Gonorrhea Rates by Sex, 1981-2003  
United States

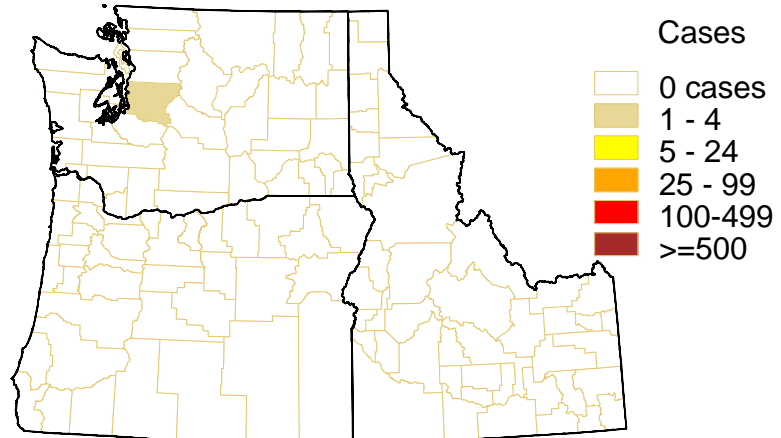


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Total and AI/AN Gonorrhea Rates by Sex, 1981-2003  
NW States (ID, OR, WA)



### 2003 County Primary and Secondary Syphilis Cases among Northwest AI/ANs

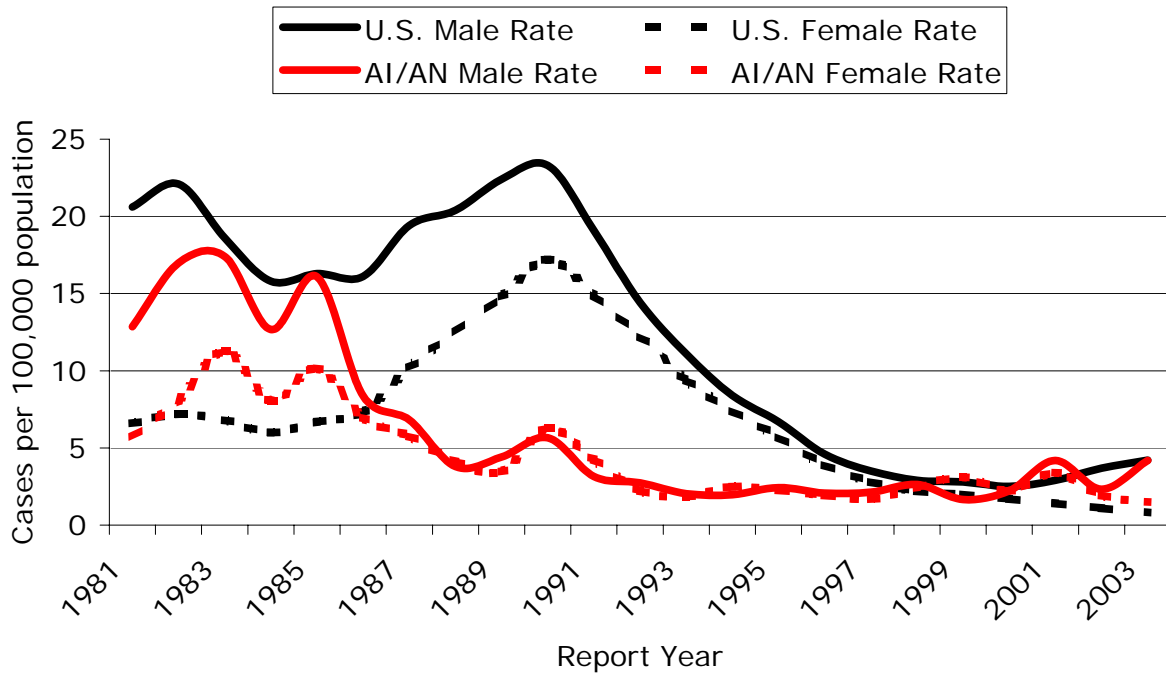


### P&S Syphilis – Adjusted Cases and Rates, 1981, 1990 & 2003 U.S. and NW States (ID, OR, WA)

Cases are reported for all persons and AI/ANs  
Cases are adjusted by re-distributing cases with unknown race  
SOURCE: ANAL2638 Age-Race-Sex Morbidity Files, 1981-2003

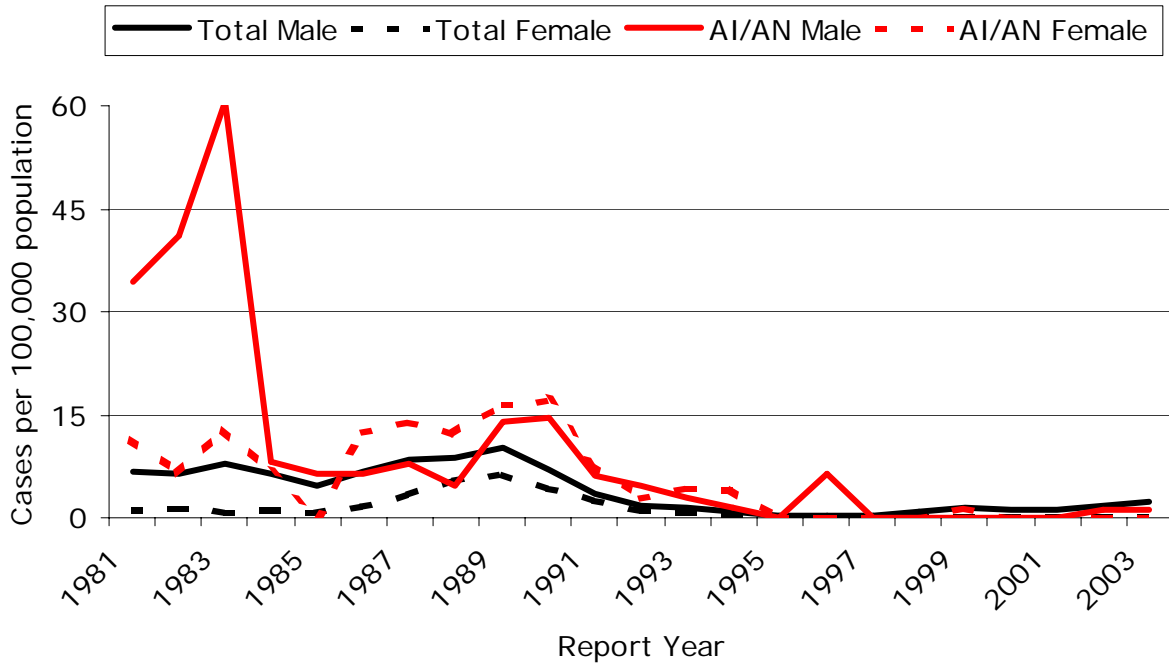
Region	Year	Total Cases	Total Rate	AI/AN Cases	AI/AN# Adj.	AI Rate Adj.	AI % of Known	Total % Unk Race
U.S. Total	1981	30,688	<b>13.4</b>	162	166	<b>9.3</b>	0.5%	2.1%
	1990	50,318	<b>20.2</b>	105	107	<b>6.0</b>	0.2%	2.1%
	2003	7,177	<b>2.5</b>	65	69	<b>2.8</b>	1.0%	5.5%
NW States	1981	310	<b>3.9</b>	28	28	<b>22.7</b>	9.0%	0.0%
	1990	505	<b>5.8</b>	20	20	<b>15.9</b>	4.0%	0.4%
	2003	145	<b>1.3</b>	1	1	<b>0.6</b>	0.7%	1.4%
Idaho	1981	20	<b>2.1</b>	0	0	<b>0.0</b>	0.0%	0.0%
	1990	11	<b>1.1</b>	1	1	<b>8.1</b>	9.1%	0.0%
	2003	15	<b>1.1</b>	0	0	<b>0.0</b>	0.0%	0.0%
Oregon	1981	123	<b>4.6</b>	6	6	<b>16.1</b>	4.9%	0.0%
	1990	140	<b>4.9</b>	2	2	<b>5.5</b>	1.4%	1.4%
	2003	48	<b>1.3</b>	0	0	<b>0.0</b>	0.0%	2.1%
Washington	1981	167	<b>3.9</b>	22	22	<b>30.3</b>	13.2%	0.0%
	1990	354	<b>7.2</b>	17	17	<b>22.0</b>	4.8%	0.0%
	2003	82	<b>1.3</b>	1	1	<b>1.0</b>	1.2%	1.2%

Total and AI/AN P&S Syphilis Rates by Sex, 1981-2003  
United States



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Total and AI/AN P&S Syphilis Rates by Sex, 1981-2003  
NW States (ID, OR, WA)





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