

## Increased Rates of Chlamydia and Gonorrhea among American Indians in North and South Dakota

### Potential Epi-Aid objectives:

1. To characterize increases in chlamydia and gonorrhea cases among American Indians in North and South Dakota with respect to demographics and geography.
2. To determine why rates are increasing; for example, is the increase due to increased screening and/or changes in screening test technology?
3. To understand current chlamydia and gonorrhea prevention and control measures and to identify opportunities for prevention and control.
4. To develop recommendations to assist in the control of chlamydia and gonorrhea.
5. To characterize current public health and tribal activities to increase community and provider awareness of STD rates and trends

### Possible Epi-Aid activities:

- Analyze chlamydia and gonorrhea surveillance data for trends by:
  - geography
  - age
  - sex
  - season
  - diagnosing provider type
  - pregnancy status of women
- Analyze laboratory data to determine if increases in cases could be attributed to increased screening or changes in screening test technology.
- Visit IHS clinic sites.
  - Talk to clinicians and office staff about policies and practices, including screening, diagnosis, treatment, and partner treatment
- Meetings with key personnel at health departments.
  - Talk to STD control program staff about policies and practices, including screening, diagnosis, and treatment
  - Review partner notification files

The following figures and tables are examples of the kinds of analyses we will conduct in order to determine potential reasons for the rate increases. For example, in Table 1, the female-to-male ratio of gonorrhea cases is much higher than is seen nationally, suggesting that increased screening of females may be occurring.

Figure 1. Rates of Gonorrhea among All Races and Restricted to American Indians/Alaskan Natives (AI/AN)–North and South Dakota, 2001-2010

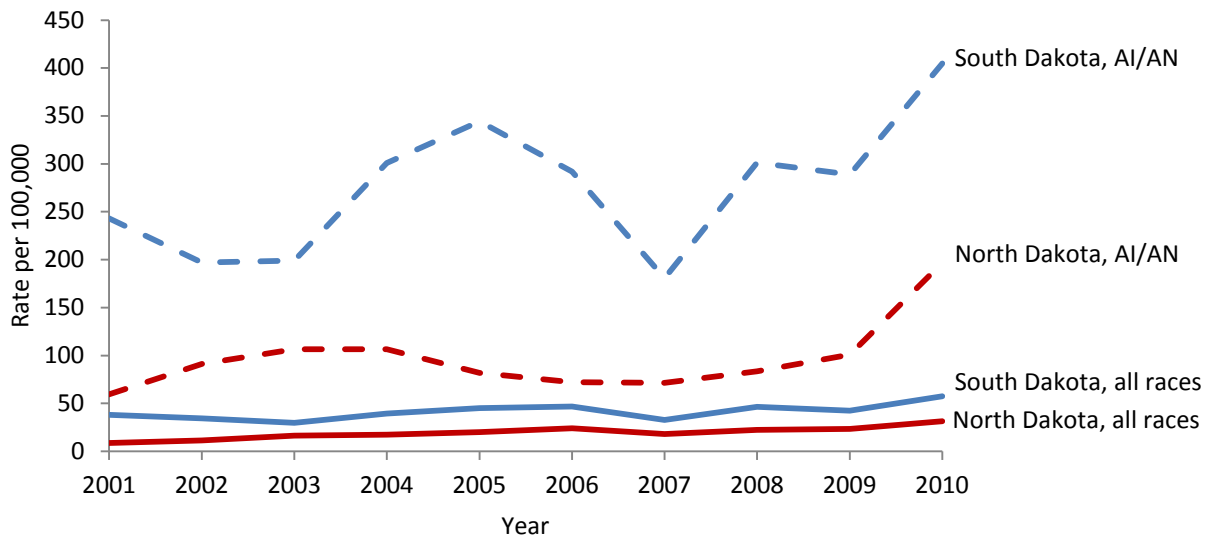


Figure 2. Rates of Chlamydia among All Races and Restricted to American Indians/Alaskan Natives (AI/AN)–North and South Dakota, 2001-2010

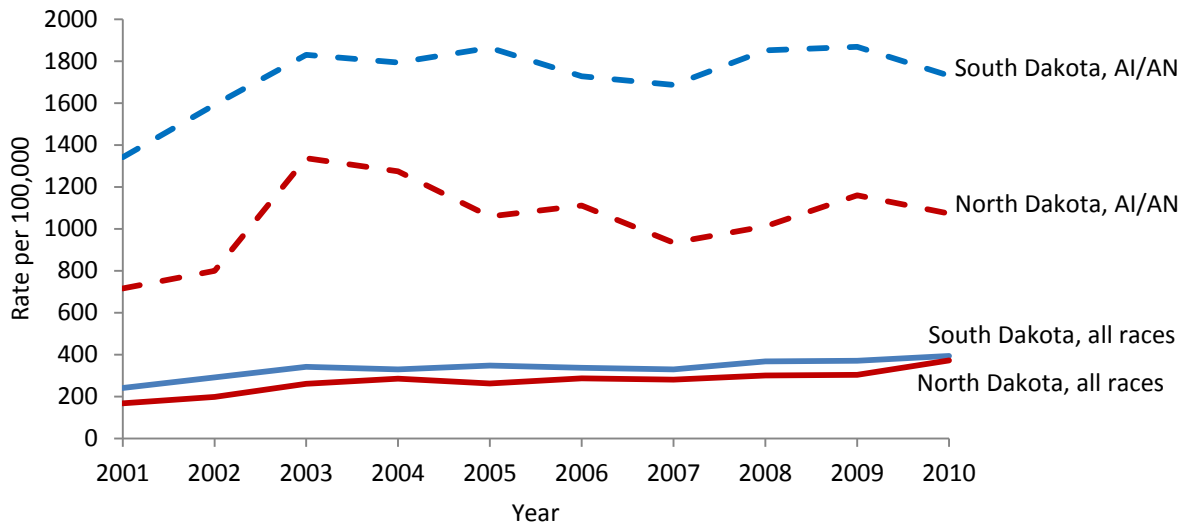


Table 1. Cases of Gonorrhea among American Indians/Alaskan Natives by Age Group and Sex—North and South Dakota, 2010

| Age group | North Dakota   |                  | South Dakota   |                  |
|-----------|----------------|------------------|----------------|------------------|
|           | Males<br>N (%) | Females<br>N (%) | Males<br>N (%) | Females<br>N (%) |
| ≤ 14      | 0 (0)          | 1 (2)            | 0 (0)          | 2 (1)            |
| 15-24     | 11 (61)        | 44 (81)          | 48 (56)        | 130 (67)         |
| 25-34     | 5 (28)         | 9 (17)           | 29 (34)        | 52 (27)          |
| 35-44     | 2 (11)         | 0 (0)            | 5 (6)          | 11 (6)           |
| 45-54     | 0 (0)          | 0 (0)            | 2 (2)          | 0 (0)            |
| 55+       | 0 (0)          | 0 (0)            | 1 (1)          | 0 (0)            |
| Total     | 18 (25)        | 54 (75)          | 85 (30)        | 195 (70)         |

Table 2. Cases of Chlamydia among American Indians/Alaskan Natives by Age Group and Sex—North and South Dakota, 2010

| Age group | North Dakota   |                  | South Dakota   |                  |
|-----------|----------------|------------------|----------------|------------------|
|           | Males<br>N (%) | Females<br>N (%) | Males<br>N (%) | Females<br>N (%) |
| ≤ 14      | 0 (0)          | 6 (2)            | 4 (1)          | 8 (1)            |
| 15-24     | 67 (66)        | 210 (72)         | 199 (72)       | 657 (72)         |
| 25-34     | 26 (26)        | 67 (23)          | 59 (21)        | 211 (23)         |
| 35-44     | 7 (7)          | 6 (2)            | 12 (4)         | 36 (4)           |
| 45-54     | 1 (1)          | 1 (0)            | 1 (0)          | 4 (0)            |
| 55+       | 0 (0)          | 0 (0)            | 1 (0)          | 0 (0)            |
| Unk       | 0 (0)          | 0 (0)            | 1 (0)          | 0 (0)            |
| Total     | 101 (26)       | 290 (74)         | 277 (23)       | 916 (77)         |

Figure 3. Gonorrhea Cases among American Indians/Alaskan Natives by County – South Dakota, 2010

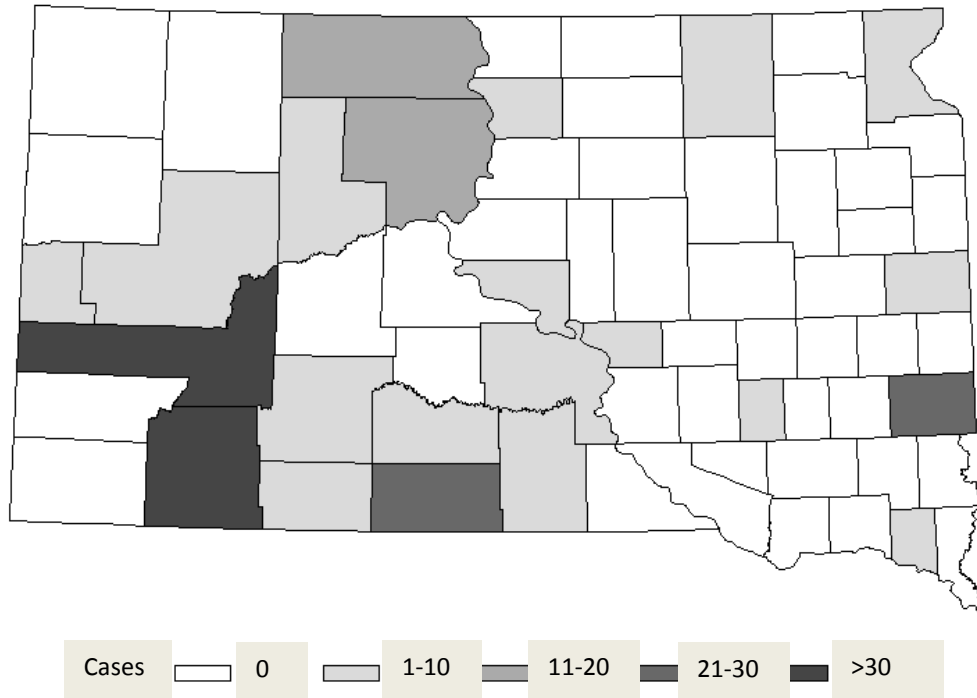


Figure 4. Gonorrhea Cases among American Indians/Alaskan Natives by County – North Dakota, 2010

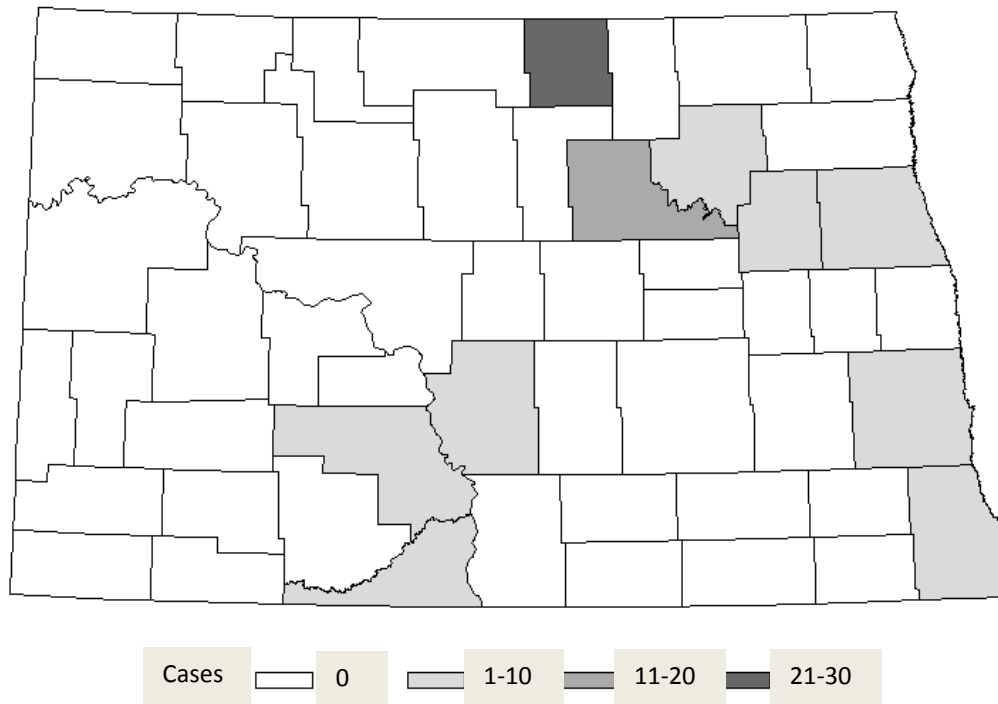


Figure 5. Chlamydia Cases among American Indians/Alaskan Natives by County– South Dakota, 2010

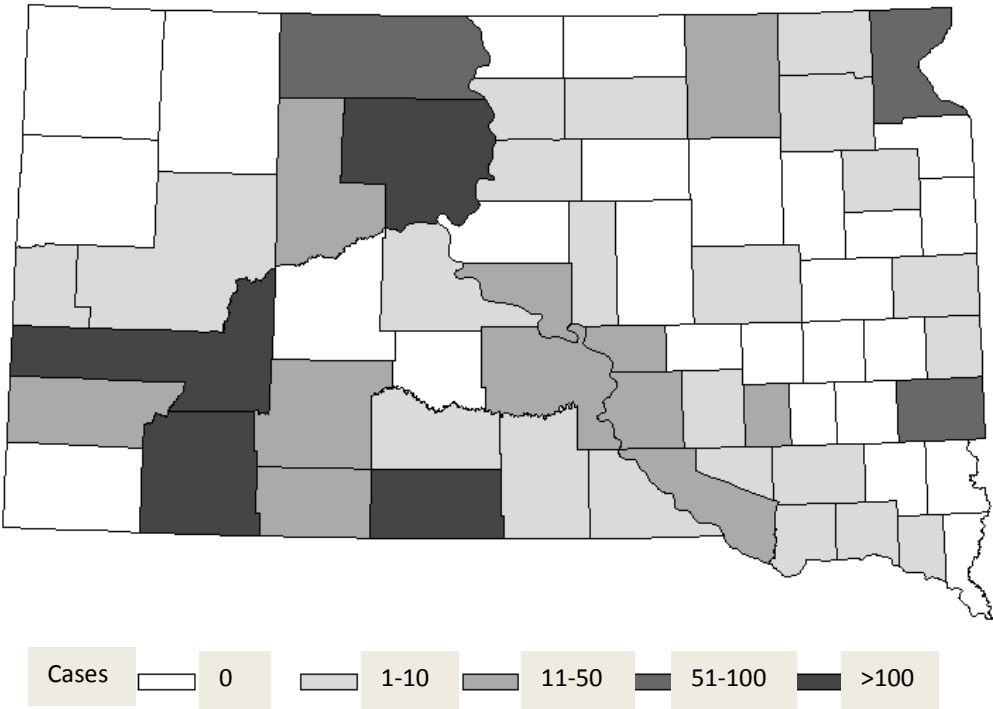


Figure 6. Chlamydia Cases among American Indians/Alaskan Natives by County– North Dakota, 2010

