Morbidity
- Highlights -

- Half of all outpatient visits in the Alaska Tribal Health System are for reasons such as follow-up, prevention, or immunizations. The leading cause of outpatient visits is for musculoskeletal diseases.

- The leading cause of hospitalizations in the Alaska Tribal Health System is pregnancy and childbirth, followed by respiratory disease, digestive disease, and injury and poisoning.

- Cancer incidence rates have increased significantly among Alaska Native people during the past 43 years.

- The leading types of cancer among Alaska Native people are colon/rectum, lung, and breast cancer.

- The prevalence of diagnosed diabetes among Alaska Native people is 5.2%, significantly lower than the U.S. White population.

- Chlamydia infection rates among Alaska Native people are more than 8 times greater than U.S. Whites, with the greatest number of infections among females aged 15-34 years.

- Gonorrhea infection rates among Alaska Native people are almost 10 times greater than U.S. Whites, with the greatest number of infections among females aged 15-34 years.

- More than half (60.5%) of Alaska Native adults have experienced tooth loss due to tooth decay or gum disease.
Outpatient Visits

Definition

*Outpatient visits* are outpatient clinic and hospital visits classified according to International Classification of Diseases, Ninth Revision (ICD-9) codes. These data are for outpatient visits by Alaska Native/American Indian people to Alaska Tribal Health System facilities statewide.

Summary

- During FY15, diseases of the musculoskeletal system or connective tissue were the most common reason for an outpatient visit statewide.
- Half (51.1%) of all outpatient visits were for reasons such as followup, prevention, or immunization.

**Top Five Reasons for Outpatient Visits by Diagnostic Groupings, Alaska Tribal Health System, Alaska Native People, FY15**

Data Source: Indian Health Service, National Patient Information Reporting System, National Data Warehouse Appendix Table C-44
**Hospitalizations**

**Definition**

*Hospitalizations* are inpatient hospital admissions categorized in FY15 according to the International Classification of Diseases, Ninth Revision (ICD-9) codes.

**Summary**

- In FY15, the leading cause of hospitalization for Alaska Native people in the Alaska Tribal Health System was complications of pregnancy and childbirth, accounting for approximately one in eight visits.

- The top five causes of hospitalization accounted for almost half (46.1%) of all inpatient visits.

**Leading Causes of Hospitalizations by Diagnostic Groupings, Alaska Tribal Health System, Alaska Native People, FY15**

Data Source: Indian Health Service, National Patient Information Reporting System, National Data Warehouse

Appendix Table C-45

![Pie chart showing the leading causes of hospitalizations]

- Complications of Pregnancy, Childbirth and the Puerperium: 13.7%
- Diseases of the Respiratory System: 9.7%
- Symptoms, Signs and Ill-defined Conditions: 9.4%
- Diseases of the Digestive System: 7.1%
- Injury and Poisoning: 6.2%
- All Others: 53.9%
Cancer Incidence

Definition

Cancer incidence is the number of new cancers diagnosed in a specified population during a specified time period. Cancers incidence rates for a specific type of cancer are based on the primary site reported or on the site of origin.

Summary

- During 2012-2013, the cancer incidence rate among Alaska Native people statewide was 477.8 cases per 100,000 population, similar to U.S. Whites (450.3).
- Cancer incidence rates increased significantly among Alaska Native people between 1970-1971 (356.7 per 100,000) and 2012-2013 (477.8 per 100,000).
- The leading cancers of all cases diagnosed among Alaska Native people statewide during 1984-2013 were colon/rectum (17.9%), lung (17.2%), breast (15.1%), and prostate (5.8%).
- Of the four leading cancers, the only significant change over time was for breast cancer incidence. Breast cancer incidence increased significantly (42.8%) during 1984-2013.
- Alaska Native cancer incidence rates vary by tribal health region, ranging from 403.9 (Yukon-Kuskokwim) to 603.9 (Copper River/Prince William Sound) per 100,000 for the time period 1984-2013.

Cancer Incidence Rate per 100,000 Population, 1970-1971 to 2012-2013

Data Source: Alaska Native Tribal Health Consortium, Alaska Native Tumor Registry; National Cancer Institute, Surveillance Epidemiology and End Results Program (SEER)

Appendix Table C-46
**Cancer Incidence**

**Cancer Incidence by Cancer Site, Alaska Native People, 1984-2013**

Data Source: Alaska Native Tribal Health Consortium, Alaska Native Tumor Registry

Appendix Table C-47

**Trends in Cancer Incidence Rate by Cancer Site, Alaska Native People, 1984-1993 to 2004-2013**

Data Source: Alaska Native Tribal Health Consortium, Alaska Native Tumor Registry

Appendix Table C-48

*Women only

**Age-Adjusted Alaska Native Cancer Incidence Rate per 100,000 by Tribal Health Region, 1984-2013**

Data Source: Alaska Native Tribal Health Consortium, Alaska Native Tumor Registry

Appendix Table C-49

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### Cancer Incidence by Cancer Site, Alaska Native People, 1984-2013

- **Colon/Rectum**: 17.9%
- **Lung**: 17.2%
- **Breast**: 15.1%
- **Prostate**: 5.8%
- **Stomach**: 4.5%
- **Kidney**: 4.4%
- **Esophagus**: 1.5%
- **Nasopharynx**: 1.5%
- **Oral/Pharynx**: 3.7%
- **All Others**: 28.3%

N=8,703

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### Trends in Cancer Incidence Rate by Cancer Site, Alaska Native People, 1984-1993 to 2004-2013

- **Lung**: 137.4, 95.1, 64.8
- **Colon & Rectum**: 91.9
- **Breast**: 172.6
- **Prostate**: 5.8

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### Age-Adjusted Alaska Native Cancer Incidence Rate per 100,000 by Tribal Health Region, 1984-2013

- **404 - 467**: Anchorage/Mat-Su
- **468 - 521**: Copper River/PWS
- **522 - 566**: Southeast
- **567 - 604**: Kodiak Area

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**Diabetes Prevalence**

**Definition**

*Diabetes mellitus* is a group of metabolic diseases characterized by high blood sugar levels during a prolonged period of time. When you have diabetes, either your body doesn’t make enough insulin or can’t use its own insulin as well as it should. This causes sugar to build up in the blood and can lead to serious health complications including heart disease, blindness, kidney failure, and lower-extremity amputations.5

*Diabetes prevalence* is the number of Alaska Native people living with diabetes during a specific time period expressed as a percentage of the Alaska Area Indian Health Service (IHS) estimated population. The estimated population is a statistical projection based on the most recent U.S. decennial census (2010).

**Summary**

- The statewide age-adjusted prevalence of Alaska Native people diagnosed with diabetes was 5.2% in 2014.
- From 2004 to 2014, the statewide Alaska Native diabetes prevalence increased 21% from 4.3% to 5.2%.
- Alaska Native people (5.2%) had a significantly lower prevalence rate of diabetes than the U.S. White population (5.8%) in 2014.
- Diabetes prevalence rate varies by IHS Service Unit area, ranging from a low of 3.2% in the Norton Sound and Yukon Kuskokwim Service Units to a high of 9.5% in the Annette Island Service Unit.

**Age-Adjusted Alaska Native Prevalence of Diagnosed Diabetes, 2004-2014**

*Data Source: Alaska Native Medical Center Diabetes Registry*

*Appendix Table C-50*
MORBIDITY

Diabetes Prevalence

Age-Adjusted Alaska Native Prevalence of Diagnosed Diabetes by IHS Service Unit, 2014

Data Source: Alaska Native Medical Center Diabetes Registry
Appendix Table C-51
**Chlamydia**

**Definition**

*Chlamydia (CT)* is a common sexually transmitted infection caused by the bacterium *Chlamydia trachomatis*. Both men and women can get CT. Most people who have CT have no symptoms. Untreated CT can lead to permanent damage to a woman’s reproductive system, making it difficult to get pregnant.

**Objective**

Reduce the incidence rate of *Chlamydia trachomatis* to 705.2 per 100,000 population.

*Healthy Alaskans 2020, Leading Health Indicator #18*

**Summary**

- In 2015 Alaska’s CT rates were the highest among all U.S. states.
- Chlamydia infection rates among Alaska Native people increased between 2001 and 2015 peaking in 2010 and decreasing to 1,650.0 per 100,000 population in 2015.
- The 2015 Alaska Native CT rate was 3.6 times greater than the Alaska non-Native rate and 8.8 times greater than the U.S. White rate.
- The greatest number of CT infections were reported among those aged 15-24 years; approximately 3 out of 4 reported cases occurred in a female.
- Chlamydia rates varied by tribal health region from 319.2 to 2,855.8 cases per 100,000 population.

**Age-Adjusted Chlamydia Incidence Rate per 100,000 Population, 2001-2015**

*Data Source: Alaska Division of Public Health, HIV/STD Program; Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) Atlas*  
*Appendix Table C-52*
Chlamydia

Reported Chlamydia Cases by Gender and Age, Alaska Native People, 2015
Data Source: Alaska Division of Public Health, HIV/STD Program

Age-Adjusted Alaska Native Chlamydia Incidence Rate Per 100,000 by Tribal Health Region, 2015
Data Source: Alaska Division of Public Health, HIV/STD Program
Appendix Table C-53
**Gonorrhea**

**Definition**

Gonorrhea (GC) is a sexually transmitted infection caused by the bacterium *Neisseria gonorrhoea*. Gonorrhea can infect both men and women. It can cause infections in the genitals, rectum, and throat. GC can lead to permanent damage to a women’s reproductive system.

**Objectives**

Reduce gonorrhea rates among females aged 15 to 44 years to 251.9 new cases per 100,000 population.

*Healthy People 2020 Goal STD-6.1*

Reduce gonorrhea rates among males aged 15 to 44 years to 194.8 new cases per 100,000 population.

*Healthy People 2020 Goal STD-6.2*

**Summary**

- In 2015 Alaska’s GC rates were ranked 8th among all U.S. states.
- Alaska Native gonorrhea incidence rates increased sharply starting in 2008 and subsequently decreased to a rate of 436.7 per 100,000 population in 2015.
- The 2015 Alaska Native gonorrhea incidence rate was more than 6 times the rate for Alaska non-Natives.
- In 2015, the greatest number of reported gonorrhea cases were among those aged 15-34 years.
- In 2015, gonorrhea incidence rates varied by tribal health region from 83.1 to 1,090.6 per 100,000 population.

**Age-Adjusted Gonorrhea Incidence Rate per 100,000 Population, 2001-2015**

Data Source: Alaska Division of Public Health, HIV/STD Program; Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) Atlas

Appendix Table C-54
MORBIDITY

Gonorrhea

Reported Gonorrhea Cases by Gender and Age, Alaska Native People, 2015

Data Source: Alaska Division of Public Health, HIV/STD Program

Age-Adjusted Alaska Native Gonorrhea Incidence Rate Per 100,000
by Tribal Health Region, 2015

Data Source: Alaska Division of Public Health, HIV/STD Program
Appendix Table C-55
Tooth Loss

Definition

Tooth loss is measured as adults who report having 1 or more of their permanent teeth removed due to tooth decay or gum disease. Tooth loss is an important indicator of overall oral health and access to dental care. Tooth loss due to tooth decay or gum disease can be prevented by good oral hygiene and regular preventive services by a dentist. Good oral health is critical for an individual’s overall health and well-being.

Summary

- More than half (60.5%) of Alaska Native adults reported tooth loss due to tooth decay in 2014.
- In 2014, tooth loss among Alaska Native adults was 1.6 times that of Alaska White adults (37.7%).
- Tooth loss ranged from 41.9% to 74.2% of Alaska Native adults by tribal health region.

Adult Tooth Loss, 1999 to 2014

Data Source: Alaska Division of Public Health, Behavioral Risk Factor Surveillance System; Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System

Appendix Table C-56
Alaska Native Adult Tooth Loss by Tribal Health Region, 2006-2014

Data Source: Alaska Division of Public Health, Behavioral Risk Factor Surveillance System
Appendix Table C-57

49% - 52%
53% - 59%
60% - 69%
70% - 74%