Chronic diseases—such as cancer, heart disease, stroke, arthritis, asthma, and diabetes—are among the most prevalent, costly, and preventable of all health problems. This annual Brief Report provides a snapshot of the burden of chronic disease in Alaska. For more information on chronic disease burden and steps being taken by the Section of Chronic Disease Prevention and Health Promotion to impact chronic disease, visit: http://dhss.alaska.gov/dph/Chronic/Pages/default.aspx. Alignment with the Alaska Division of Public Health’s Strategic Plan is noted with the icon. Alignment with Healthy Alaskans 2020 is noted with the icon.

**CHRONIC DISEASE MORBIDITY AND MORTALITY**

**Cancer**
Cancer is the leading cause of death in Alaska.
- 22% of all deaths in Alaska in 2016 were due to cancer. (AK Health Analytics and Vital Records Section [HAVRS])
- The most commonly diagnosed cancers in Alaska in 2013 are: (1) breast, (2) lung, (3) colorectal, and (4) prostate. These 4 cancers account for 48% of all cancer cases.\(^1\)

**Heart Disease and Stroke**
- Heart disease and stroke are the 2\(^{nd}\) and 5\(^{th}\) leading causes of death in Alaska. (HAVRS, 2016)
- In 2016 in Alaska, heart disease accounted for 18% of deaths; stroke accounted for 4%. (HAVRS)
- In 2016, 30% of adults in Alaska reported having high blood pressure. In 2015, 34% of Alaska adults who had their cholesterol checked reported being told it was high. (Behavioral Risk Factor Surveillance System [BRFSS])

**Diabetes**
In 2016, diabetes was the 8\(^{th}\) leading cause of death in Alaska. (HAVRS) The risk of death among people with diabetes is two to three times higher, compared to people without diabetes.\(^2\)
- 122 Alaskans died from diabetes in 2016. (HAVRS)
- In 2016, 8% of adults in Alaska reported being diagnosed with non-pregnancy related diabetes. (BRFSS)

**Arthritis**
- Arthritis is the most common cause of disability in the US, affecting more than 55 million Americans. (National Health Interview Survey, 2013-2015)
- In 2016, 24% of adults in Alaska reported being diagnosed with arthritis. (BRFSS)


<table>
<thead>
<tr>
<th>Cause</th>
<th>Alaska</th>
<th>US</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer</td>
<td>152.5</td>
<td>158.5</td>
</tr>
<tr>
<td>Heart Disease</td>
<td>136.3</td>
<td>168.5</td>
</tr>
<tr>
<td>Unintentional Injuries</td>
<td>61.9</td>
<td>43.2</td>
</tr>
<tr>
<td>Chronic Lower Respiratory Disease</td>
<td>40.4</td>
<td>41.6</td>
</tr>
<tr>
<td>Stroke</td>
<td>38.2</td>
<td>37.6</td>
</tr>
</tbody>
</table>

Data Sources: Alaska HAVRS (AK); National Center for Health Statistics (US)
**CHRONIC DISEASE RISK FACTORS**

Using tobacco, being inactive, having a poor diet, and being overweight or obese greatly increase the likelihood that one will develop, have reduced quality of life from, and ultimately die from a chronic disease. Conversely, four healthy lifestyle factors—never smoking, maintaining a healthy weight, being physically active regularly, and following a healthy diet— together appear to be associated with as much as an 80% reduction in the risk of developing the most common and deadly chronic diseases. Only 15% of Alaska adults have all 4 healthy habits.

**NUTRITION, PHYSICAL ACTIVITY, AND OBESITY**

For almost 25 years, the prevalence of obesity has continued to rise for Alaska adults. Physical inactivity and unhealthy eating contribute to overweight and obesity and a number of chronic diseases, including some cancers, heart disease, and diabetes.

- 67% of Alaska adults (2016 BRFSS) and 31% of Alaska high school students (2017 Youth Risk Behavior Survey [YRBS]) were overweight or obese. &
- 50% of high school students (2017 YRBS) and 23% of adults (2015 BRFSS) in Alaska consumed one or more sugary drinks per day.

**TOBACCO**

Tobacco use is the leading preventable cause of disease and death in the United States and smoking has been causally linked to diseases in nearly all organs of the body. In Alaska, smoking results in an estimated 680 deaths and $833 million in direct medical expenditures and lost productivity every year.

- 20% of adults (2016 BRFSS) and 11% of high school students (2017 YRBS) in Alaska currently smoke.

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### Chronic Disease Risk Factors, Alaska Compared with United States, YRBS\(^a\) and BRFSS\(^b\)

#### High School Students (YRBS)

- Overweight or obese: 31% (Alaska) vs. 30% (US)
- Drink 1+ sugary drink/day*: 50% (Alaska) vs. 57% (US)
- Not attending PE: 11% (Alaska) vs. 48% (US)
- Currently smoke cigarettes: 11% (Alaska) vs. 11% (US)

#### Adults (BRFSS)

- Overweight or obese: 67% (Alaska) vs. 66% (US)
- Drink 1+ sugary drink/day*: 23% (Alaska) vs. *no comparable US data
- No physical activity: 20% (Alaska) vs. 23% (US)
- Currently smoke cigarettes: 17% (Alaska) vs. 20% (US)
- High blood pressure: 30% (Alaska) vs. 31% (US)
- High blood cholesterol: 34% (Alaska) vs. 36% (US)

**Notes:** 
\(^a\)2015 (US), 2017 (AK); 
\(^b\)2016 except 2015 where noted with ^; *no comparable US data
Access to health services includes gaining entry into the health care system, accessing a health care location where needed services are provided, and finding a health care provider with whom the patient can communicate and trust. Access to health care impacts everything from prevention of disease and disability, quality of life, and life expectancy. Among the health care services one can access are clinical preventive services, such as routine disease screening and scheduled immunizations. Optimal provision of these services can both prevent and detect illnesses and diseases in their earlier, more treatable stages, significantly reducing the risk of illness, disability, and early death.

**No Health Care Coverage**
Uninsured adults are less likely than insured adults to receive preventive services or screenings, such as mammograms, pap smears, or prostate screening. In turn, inadequate prevention and screening increase the likelihood of preventable illness, missed diagnoses, and delays in treatment.

- In 2016, 14% of adults aged 18-64 in Alaska reported having no health care coverage. (BRFSS)

**Early Detection**
Uncontrolled blood glucose increases the risks for heart disease, stroke, kidney disease, blindness, and amputation.

- In 2016, 47% of Alaska adults had not had a blood glucose test in the past 3 years. (BRFSS)

Mammography is a screening method that has been shown to reduce mortality due to breast cancer.

- In 2016, 32% of women in Alaska between the ages of 50 and 74 reported not having had a mammogram within the last 2 years (the current recommendation). (BRFSS)

Colorectal cancer screening reduces mortality from colorectal cancer. Colorectal cancer can be prevented by removing precancerous polyps or abnormal growths, which can be identified during a sigmoidoscopy or colonoscopy.

- In 2016, among Alaskans aged 50 to 75 years, 34% did not meet colorectal cancer screening recommendations (having a fecal occult blood test within 1 year, or a sigmoidoscopy within 5 years and with a FOBT within 3 years or a colonoscopy within the past ten years. (BRFSS)

**Preventive Services, Alaska Compared with United States, BRFSS (2016)**

<table>
<thead>
<tr>
<th>Service</th>
<th>Alaska</th>
<th>US</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No mammogram in last 2 years (women 50-74)</td>
<td>32%</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td>Did not meet colorectal cancer screening recommendations (adults 50-75)</td>
<td>34%</td>
<td>33%</td>
<td></td>
</tr>
<tr>
<td>No blood glucose test in last 3 years</td>
<td>47%</td>
<td>42%</td>
<td></td>
</tr>
<tr>
<td>No health care coverage (adults 18-64)</td>
<td>14%</td>
<td>12%</td>
<td></td>
</tr>
</tbody>
</table>
HEALTH INEQUITY IN CHRONIC DISEASE AND RELATED RISK FACTORS

Health begins where we live, learn, work and play – long before we need medical care. Social and economic conditions drive population health to an equal or greater degree than do individual choice, genetic make-up, and access to health care. Consequently, to prevent chronic disease and optimize the health of all Alaskans, the focus of public health must extend beyond healthy behaviors and health insurance to ensure all Alaskans have a chance to live a healthy life.

**Chronic Disease Risk Factors, All Alaska Adults, Select Populations, BRFSS (2016)**

- **Are physically inactive**
  - All Alaska adults: 20%
  - Rural Residents: 22%
  - Alaska Native adults: 27%
  - Low SES Alaskans: 32%

- **Smoke**
  - All Alaska adults: 20%
  - Rural Residents: 35%
  - Alaska Native adults: 39%
  - Low SES Alaskans: 42%

- **Drink 1 or more sugary drinks per day (2015)**
  - All Alaska adults: 0%
  - Rural Residents: 20%
  - Alaska Native adults: 22%
  - Low SES Alaskans: 27%

Such disparity in risk factors translates to disparities in chronic disease morbidity and mortality. For example:

- In 2016, the Alaska Native age-adjusted rates of death from chronic lower respiratory disease, stroke, heart disease, and cancer (all sites) were each 1.5 to 2.3 times that of their White peers. (HAVRS)

- Age-adjusted all-site cancer mortality rates are highest in the Lake and Peninsula and North Slope Boroughs, and Nome and Yukon-Koyukuk census areas of Alaska. (HAVRS, 2012-2016)

**REFERENCES**


