

# Lincoln County

## *Health Matters*

2012 Community Health Assessment

*Lincoln County Health Coalition*



*Lincoln Hospital Dist. 3*



# Lincoln County Community Health Partners

## *Lincoln County Health Coalition*

Lincoln County Public Health Department  
Lincoln Hospital & North Basin Medical Clinics  
Odessa Memorial Healthcare Center

## *Lincoln County Board of Health*

Scott Hutsell  
Dennis D. Bly  
Rob Coffman

## *Lincoln County Health Department*

**Health Officer:** Marshall Thompson, MD  
**Administrator:** Ed Dzedzy, RS  
**Personal Health Director:** Sherri Bartlett, RN  
**Communication & Public Relations:** Carey Guhlke-Falk

## *Lincoln County*

### *Public Hospital District #1*

#### **Commissioners**

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Sandra Libsack  
Lani Schorzman  
Debbie Walter  
Carol Kniola

**Administrator:** Gary DelForge

## *Lincoln County*

### *Public Hospital District #3*

#### **Commissioners**

Deral D. Boleneus  
Susan Els  
Gerald Krause  
Carl Sorensen  
Phil Falk  
Eileen Millikan  
RoxAnn Sherwood

**Administrator:** Tom Martin, MBA, MHA

*This document was prepared with assistance from:*

## *Spokane Regional Health District*

**Program Manager:** Stacy Wenzl, MHPA  
**Epidemiologist:** Amy Riffe, MA, MPH  
**Assessment & Evaluation Assistant:** Briann Satterfield, BS

# Message from the Board of Health

A community relies on the health and vitality of its members to thrive. Creating and maintaining a healthy community is a team effort in which community members and community agencies put forth a vast amount of effort, time and dedication to support such an initiative.

A community health assessment is a systematic process in which data is collected regarding the public's health issues that present the most concern for community members and leaders. The health assessment results are an important reference when attempting to develop strategies to mobilize communities and address critical public health issues. Releasing the community health assessment findings is an important step in creating healthier communities within Lincoln County. In conjunction with community members, leaders and organizations, the Health Department will utilize this report to mobilize communities to achieve the desired outcome – a healthier Lincoln County.



Lincoln County Board of Health  
Rob Coffman  
Scott Hutsell  
Dennis D. Bly

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# Executive Summary

## COMMUNICABLE DISEASE

Lincoln County had only one case of a **vaccine-preventable disease** during 2006-2010.

Chlamydia is the major contributor to **sexually transmitted infections (STIs)**. In Lincoln County, the Chlamydia rate significantly increased from 38 per 100,000 in 2006 to 142 per 100,000 in 2010. Lincoln County's Chlamydia rate was significantly lower than the statewide and national rates in 2010. Chlamydia was more likely diagnosed among adults 18-34 years of age and females.

## ENVIRONMENTAL

Air quality and food and water safety are environmental factors that impact the health of a community. In 2011, Lincoln County had 10 days where the **air quality** exceeded the standard for particulate pollution. The number of poor air quality days increased from zero days in 2010.

The true prevalence of **food and waterborne diseases** is unknown because of the many factors that affect the reporting of cases. The rate of reported cases of food and waterborne diseases remained stable in Lincoln County from 2006 to 2010 with a five-year rate of 23 cases per 100,000 population. The risk of contracting one of these diseases was highest among children. In 2010, 99% of food service establishments in Lincoln County had fewer than the critical number of violations when inspected.

## HEALTH BEHAVIOR

In 2010, 9% of Lincoln County adults **smoked cigarettes**, which was a significant decrease since 2006. The proportion of adults who smoked decreased as education level and income increased. Among youth, 12% smoked cigarettes in 2008/2010. The proportion was stable from 2004 to 2010. The prevalence of youth who smoked increased as age increased and was higher among males.

**Binge drinking** is a measure of alcohol misuse. In 2010, 11% of Lincoln County adults reported binge drinking. Proportions were higher for males and decreased as age increased.

**Youth binge drinking** in Lincoln County was significantly lower than nationally, yet 13% of youth reported binge drinking in 2008/2010. For youths, binge drinking increased as age increased up to age 18 and decreased as maternal education level increased. It was also more likely among male youths.

**Illicit Drug use** in the last 30 days among youth decreased from 18% in 2004 to 8% in 2010. Drug use increased as age increased and decreased as maternal education level increased.

The proportion of adults who were **physically active** for 150 minutes per week increased from 49% in 2005 to 73% in 2009. Physical activity decreased as age increased. Among Lincoln County youth, 66% met the physical activity guideline of 60 minutes of physical activity on five or more days per week. Male youth were more likely to meet the physical activity guideline.

## HEALTH CARE

Having access to and using medical resources can improve one's health. Among adults in Lincoln County in 2010, 82% of adults had **health insurance** and 80% had a **personal doctor**. There was no significant change from 2006 to 2010 in the proportion with insurance or those with a personal doctor. Having health insurance and having a personal doctor both increased as age increased. Having health insurance increased as education level and income increased. Females were more likely than males to have health insurance.

Use of **preventive health screenings** can minimize poor health outcomes through early identification of health problems. In 2010, 79% of adults had visited a dentist in the last year and 56% had a medical check-up in the last year. Visiting the dentist in the last year increased as education level and income increased. Having a medical check-up in the last year increased as age increased and was higher among females.

One in ten Lincoln County residents were **hospitalized** in 2011, excluding those for childbirth. The hospitalization rate decreased from 2007 to 2011. The likelihood of a hospitalization increased as age increased and was higher among females. The 2011 **unintentional injury** hospitalization rate in Lincoln County was significantly higher than the rate for Washington State. Unintentional injury rates increased as age increased. The leading cause of unintentional injury hospitalizations was a fall-related injury.

## HEALTH STATUS

**Life expectancy** in Lincoln County for 2010 was 79 years. Females had a higher life expectancy than males. Among Lincoln County adults in 2010, 67% felt their health status was excellent or very good. The proportion increased as education level and income increased.

In Lincoln County, 25% of adults were **obese** in 2010 and 23% of adolescents were overweight or obese in 2010. Among youth, being overweight decreased as age increased and was more likely among males. Among adults, those 45-64 years of age were more likely to be obese.

Among adults in 2010, 8% had **diabetes**, 4% had a history of **angina or coronary heart disease**, and 26% had a history of **high blood pressure**. Heart disease history was more likely among adults 65 years of age or older and among those with lower incomes. High blood pressure history increased as age increased. There were no demographic disparities in diabetes prevalence.

The incidence of **cancer** in Lincoln County was stable from 2005 to 2009. In 2009, seven in 1,000 Lincoln County residents developed cancer; a rate significantly higher than the state or national rate. The likelihood of developing cancer increased as age increased and was more likely among males.

The 2010 **death rate** in Lincoln County was 1,230 per 100,000, or a little more than one in 100 residents. The county rate was significantly higher than the statewide and national rates. The death rate

was similar for males and females, but varied by age. The leading cause of death during 2006-2010 was cardiovascular disease, accounting for 45% of all deaths.

## MENTAL HEALTH AND VIOLENCE

The 2010 rate of domestic violence offenses reported to law enforcement was significantly lower in Lincoln County, 5 per 1,000 population, compared to Washington State, 7 per 1,000 population.

**Being bullied** in the last month was reported by 35% of Lincoln County adolescents in 2008/2010. Being bullied decreased as age increased and was more likely among youth whose mother had less than a high school education.

In 2010, 10% of adults had **poor mental health**, reported as 14 or more days of poor mental health in the last 30 days. The proportion decreased as education level and income increased. Among youth in 2008/2010, 28% reported being **depressed** in the last year. The proportion of youth depression was highest among 12<sup>th</sup> grade students, females, and youth whose mother had less than a high school education.

During 2010, 97% of adults in Lincoln County reported they were very satisfied or **satisfied with their life**. Satisfaction was more likely among adults 18-34 years of age and satisfaction increased as income increased. Among Lincoln County youth, 57% reported they were very satisfied or satisfied with their life in 2008/2010. Satisfaction decreased as age increased, increased as maternal education level increased, and females were less likely to be satisfied with their life.

## REPRODUCTIVE HEALTH

During 2006-2010, an average of 11 pregnancies per year occurred among females 15-19 years of age. There were too few **teen pregnancies** to examine demographic disparities.

In 12% of births in Lincoln County in 2010, the mother smoked during pregnancy. This rate decreased significantly since 2008. **Smoking during pregnancy** decreased as age and education level increased. Women on Medicaid were more likely to smoke during pregnancy.

Four percent of births to Lincoln County residents in 2010 had no **prenatal care** or began prenatal care in the last trimester. Women not receiving timely prenatal care decreased as education level increased.

In 2010 among singleton births to Lincoln County women, 8% had a **low birth weight** (<2500g) and 4% were a **preterm birth**. The rates remained stable since 2006. There were no demographic disparities in low birth weight or preterm birth among singleton births.

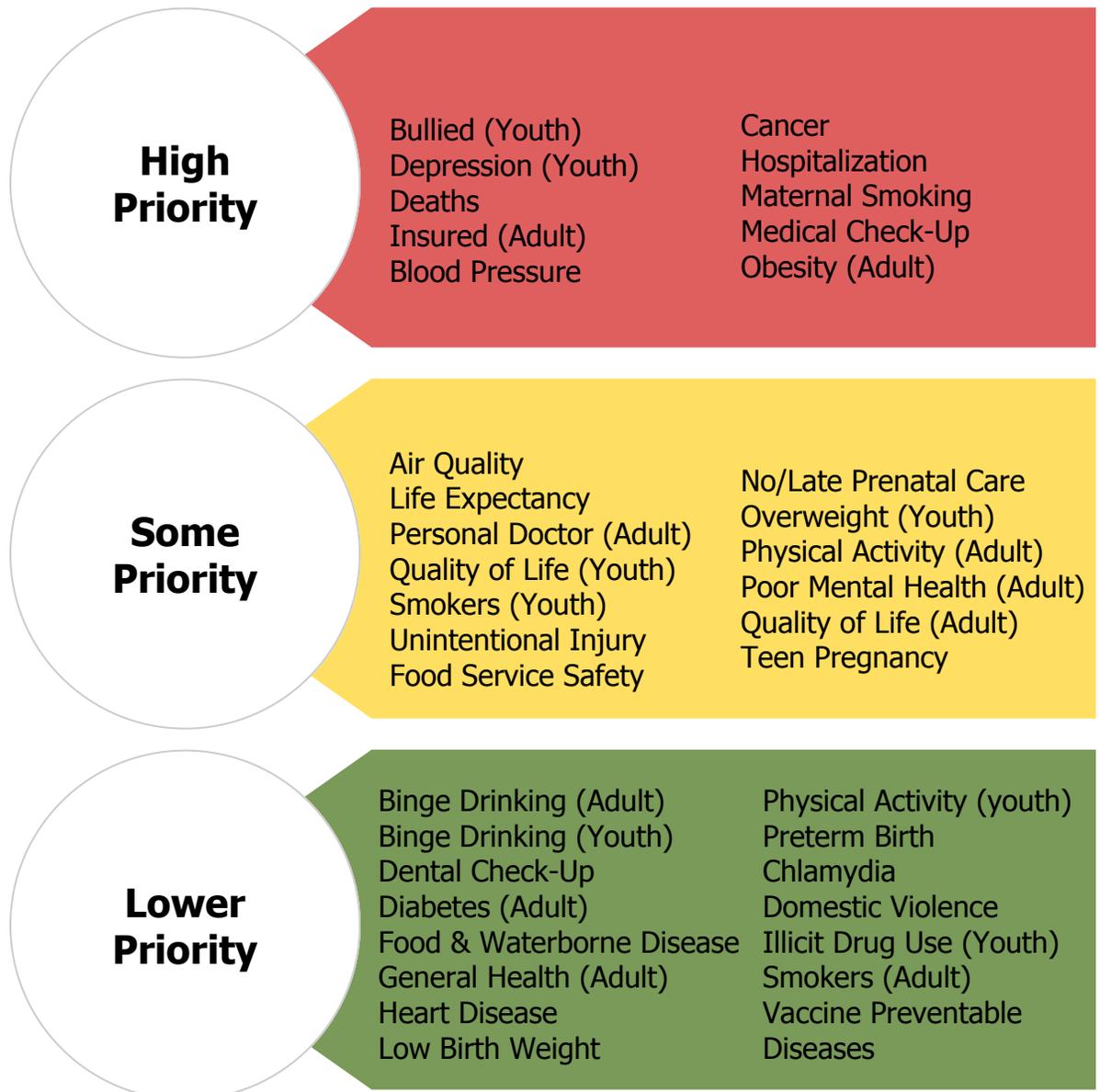
# Introduction

The purpose of this report is to update the 2001 health assessment of Lincoln County (*Lincoln County Community Health Assessment, 2001*) as well as assess the current state of health for Lincoln County so health partners can implement measures throughout the county to overcome critical indicators and achieve health goals. The primary goal for conducting the assessment was to provide a systematic analysis of a broad range of health, health care and demographic information that can guide strategic planning in Lincoln County. An important outcome of the assessment is to apprise health care providers, public health officers, voluntary organizations and residents about Lincoln County's current health needs and to improve the health of Lincoln County.

Data from the BRFSS, DOH, CHS databases as well as information from the Washington State Office of Financial Management, U.S. Census Bureau, American Community Survey and the U.S. 2010 Census were compiled to complete the report. Data is compared to Washington State and national outcomes to provide a context for the data from Lincoln County. The Lincoln County Public Health Coalition contracted with the Spokane Regional Health District to compile and translate data.

# Health Indicator Scores

Each health indicator was assigned a score based on their trend, comparison state-wide and nation-wide, disparities and the total population impacted. Individual indicators of health for Lincoln County residents were scored on a three point scale: for the trend; in comparison to the Washington State rate, the national rate, and to Healthy People 2020 goals; and the level of disparities present. The magnitude of the indicator in the community was scored on a five point scale. Indicators that did not have one of these measures (e.g. having no comparable Healthy People goal) were allocated a score of 2 for that measure. High scores for any particular indicator showed that Lincoln County did not meet expectations of health in that category. All indicators remain important to address for the public's overall health.

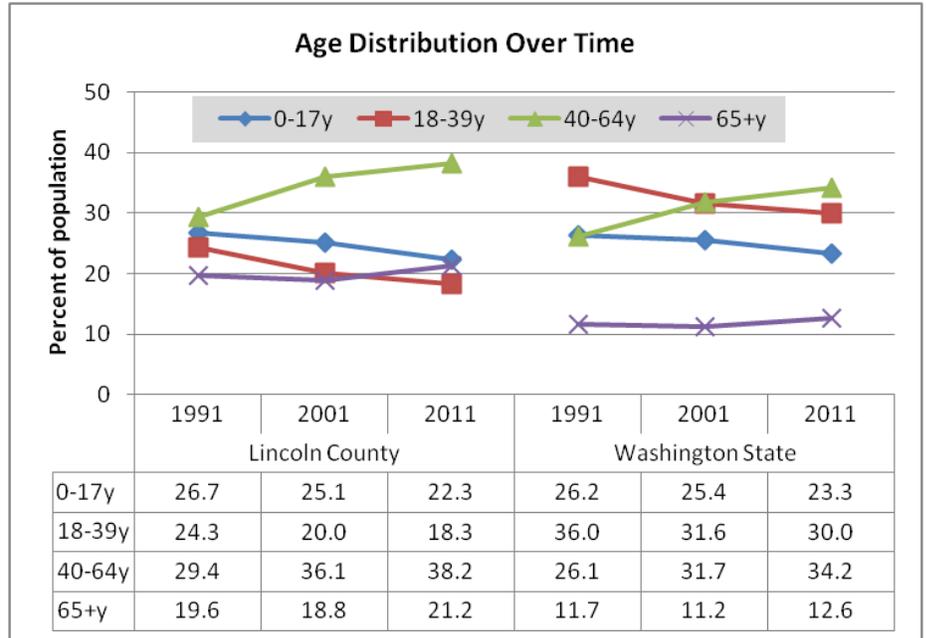


# Demographics & Social Characteristics

Lincoln County is located in the central portion of eastern Washington State. Lincoln County was the fifth least populous county in the state in 2012 with 10,675 individuals. This accounts for 0.15% of the state's 6.8 million residents. The city of Davenport, the largest incorporated city in Lincoln County, accounts for 16.2% of the county population with another 35.2% living in other incorporated municipalities in the county. The remaining 48.6% live in unincorporated areas in Lincoln County. Lincoln County has the seventh largest land area in the state with 2,300 square miles. However, it has the third lowest population density in the state (out of 39 counties) with a density of 4.6 individuals per square mile.

The population in Lincoln County is unevenly distributed between age groups with young adults having the smallest proportion of the population. Adults 40-64 years of age represented the largest proportion of the population.

Over time, the age distribution in Lincoln County has shifted. The proportion of youth and young adults has decreased while the proportion of adults 40-64 years of age has increased. The proportion of the population that is 65 years of age or older has remained stable.



The projected median household income in Lincoln County for 2011 was \$44,936 compared to \$55,500 statewide. During 2006-2010, more than one in 10 individuals (12.1%) in the county lived below the 100% federal poverty level (FPL) and three in 10 lived below the 200% FPL. Among children, nearly one in four (21.5%) lived below 100% FPL. The proportion of Lincoln County residents living in poverty, below the 200% FPL, was significantly higher than the 2010 statewide proportion (33.0% and 30.0%, respectively).

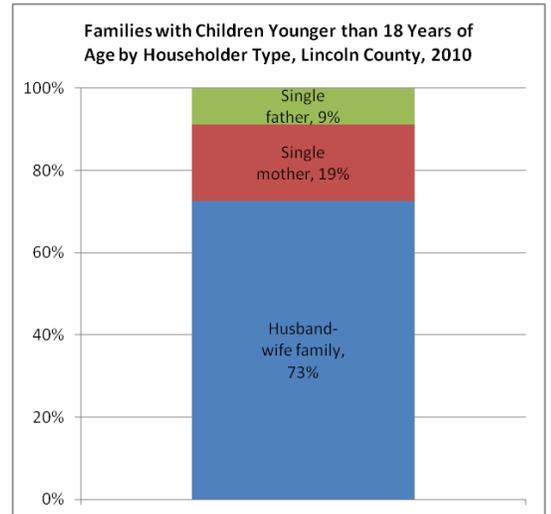
Lincoln County is not racially diverse. Among county residents in 2010, 95.0% were White, 0.3% Black, 1.6% American Indian/Alaska Native, 0.4% Asian/Pacific Islander, and 2.2% were of two or more races. Residents of Hispanic ethnicity comprised 2.3% of the population.

Population by Race, Lincoln County 2010					
Total	10,570	100%	Two or more races:	236	2.2%
White	10,038	95.0%	White: AIAN	127	1.2%
American Indian & Alaska Native	173	1.6%	White: Asian/Pacific Islander	40	0.4%
Asian / Pacific Islander	46	0.4%	White: Black	18	0.2%
Black	28	0.3%	White: Other race	25	0.2%

Sources: Washington State Office of Financial Management. US Census Bureau, American Community Survey. US Census, 2010 census.

In 2010, seven in 10 households were occupied by a family. A family is defined as two or more related individuals living in the same place. The proportion of family households has been fairly consistent over time. However, the proportion of households with a family with a child decreased from 31% in 1990 to 24% in 2010. The proportion of single parent households was stable at 4% from 1990 to 2010 for a single mother and increased from 1% in 1990 to 2% in 2010 for a single father.

One in three households had an individual 65 years of age or older living there. More than one in 10 (12.6%) households have a senior living alone in the house.



Household by Type, Lincoln County	2010		2000		1990	
	Count	%	Count	%	Count	%
<b>Total Households</b>	4,422	100	4,151	100	3,605	100
<b>Family Households (families)</b>	3,059	69.2	2,914	70.2	2,603	72.2
With own children under 18 years	1,042	23.6	1,216	29.3	1,108	30.7
Husband—Wife family	2,533	57.3	2,528	60.9	2,328	64.6
With own children under 18	757	17.1	955	23.0	936	26.0
Male Householder, no wife	185	4.2	121	2.9	86	2.4
With own children under 18	91	2.1	89	2.1	41	1.1
Female Householder, no husband	341	7.7	265	6.4	189	5.2
With own children under 18	194	4.4	172	4.1	131	3.6
<b>Nonfamily Households</b>	1,363	30.8	1,237	29.8	1,002	27.8
Householder living alone	1,199	27.1	1,079	26.0	937	26.0
Male	623	14.1	511	12.3	400	11.1
65 years & over	221	5.0			133	13.3
Female	336	7.6	568	13.7	537	14.9
65 years & over	557	12.6			516	14.3
Households with individuals 65 years & over	1,507	34.1	1,296	31.2	1,172	32.5

Source: US Census, 1990, 2000, and 2010 Census.

During 2006-2010, 40.1% of Lincoln County residents 16 years of age or older were not in the labor force. These individuals may be retired, students, disabled and unable to work, or choose not to work. Among the 59.9% who are in the labor force (5,055 individuals), 94.9% were employed and 5.1% were unemployed.

Among students who began ninth grade, 88.7% graduated from high school on time during the 2010/2011 school year. Another 4.7% of this class continued in high school beyond the traditional graduation date in order to complete high school. The 2010/2011 high school dropout rate was 6.7%.

**Educational Attainment Among Adults 25 Years of Age or Older  
Lincoln County, 2006—2010**

	<b>Count</b>	<b>%</b>
Population 25 years of age or older	7,488	100.0
Less than 9th grade	156	2.1
9-12th grade, no diploma	492	6.6
High school graduate / GED	2,337	31.2
Some college, no degree	2,123	28.3
Associate's degree	861	11.5
Bachelor's degree	1,046	14.0
Graduate or professional degree	473	6.3

Source: US Census Bureau, American Community Survey.

Each year, approximately 100 infants are born to Lincoln County residents. A small number of those births are born within Lincoln County and nine out of 10 births occur in Spokane County. Very few births are to teen mothers 15-17 years of age. During 2006-2010, the Lincoln County teen birth rate was 4.3 per 1,000 compared to the Washington State rate of 15.0 per 1,000.

**Infant mortality** is a widely used measure which is an indication of a basic level of community health. It is affected by environmental and socioeconomic factors and is impacted by the availability or quality health care, maternal factors, and birth outcomes. During 2006-2010, the infant mortality rate was 7.9 per 1,000 births. While this rate is higher than the state rate of 4.9 per 1,000 births, the difference is not statistically significant due to the inherent variability of data analysis with small numbers. There were not enough births that were non-white to evaluate infant mortality by race. Similarly, there were too few infant deaths to report a rate when stratified by perinatal mortality, neonatal mortality, and post-neonatal mortality. In Lincoln County during 2006-2010, there were no deaths among children 1-14 years of age from any cause. There were also no deaths from suicide among youth 15-19 years of age.

**Adverse Childhood Experiences**, termed ACEs, are stressful or traumatic events during childhood. ACEs include: lived with a person with mental illness, lived with a person who abused drugs or alcohol, crime in the home, parental discord, witnessing domestic violence, physical abuse, emotional abuse, or sexual abuse. ACEs disrupt neurodevelopment and can have lasting effects on brain structure and function. The cumulative impact of the stressful events is captured in the ACE score, and has been demonstrated in a graded, or “dose-response” relationship between the number of ACEs and a variety of social and health problems.<sup>1</sup> A high ACE score includes individuals with 4-8 of the adverse childhood experiences. In 2010, 19.9% of Lincoln County adults had a high ACE score. In Washington State, 26.9% of adults had a high ACE score. The difference between Lincoln County and Washington State was not statistically significant.

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<sup>1</sup>Anda RF, Brown DW. *Adverse Childhood Experiences & Population Health in Washington: The Face of a Chronic Public Health Disaster. Prepared for the Washington State Family Policy Council. July 2, 2010.*

# Communicable Diseases

Communicable diseases, also known as transmissible or infectious diseases, are illnesses resulting from the infection, presence and growth of pathogenic biological agents in an individual. These diseases can be passed between individuals.

## Chlamydia

**Definition:** Rate of reported cases of Chlamydia per 100,000 individuals.

**Why this is important:** Engaging in unsafe sexual activity can have lasting and unintended consequences. Sexually transmitted infections can harm reproductive and general health and cause psychological and emotional harm. *The reported rate of STIs underestimates the true prevalence of disease because many diagnosis are asymptomatic and undiagnosed.*

**Where we are now:** In 2010 in Lincoln County, there were 15 new cases of Chlamydia. There was a significant increase in the Chlamydia rate from 2006-2010. The 2010 Chlamydia rate in Lincoln County was significantly lower than that of Washington State and the U.S.

### Health Disparities:

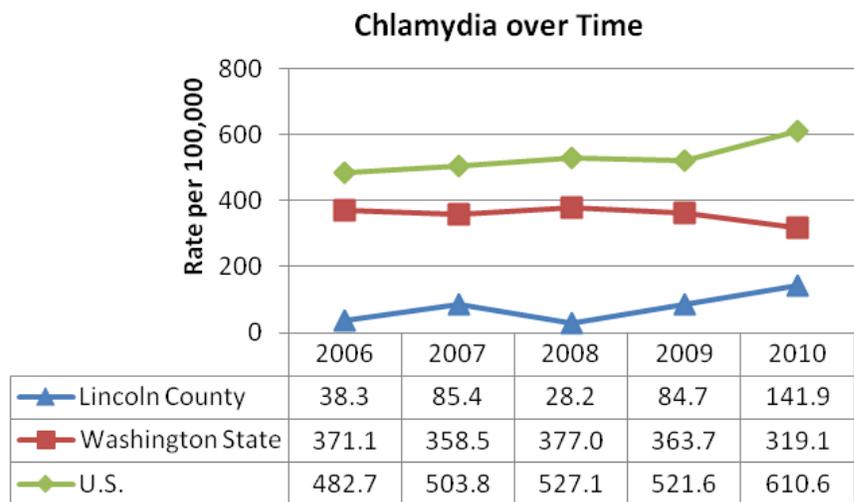
Among Lincoln County residents in 2006-2010:

- 18-34 year olds were more likely to have Chlamydia than other age groups.
- Females had a significantly higher diagnosis rate than males.

**Additional Information:** Chlamydia is the most frequently reported STI. The prevalence is likely much higher as approximately three-quarters of infected women and 50% of infected men have no symptoms. If left untreated, Chlamydia may cause reproductive or other health problems.

It is also important to note that women are selectively screened for Chlamydia. Because active case-finding is preferentially limited to women, the incidence of Chlamydia in men may be under-reported by comparison.

*Data Source: Washington State Department of Health, Center for Health Statistics.*



## **Vaccine-Preventable Disease**

**Definition:** Rate of reported cases of vaccine-preventable diseases per 100,000 individuals; this measure includes Haemophilus influenza, acute hepatitis A, acute hepatitis B, measles, mumps, pertussis, rubella, tetanus, and meningococcal disease.

**Why this is important:** Disease prevention is key to public health. Vaccines have been able to control many infectious diseases, thereby decreasing the morbidity and mortality associated with those diseases.

**Where we are now:** Between 2006-2010, there was 1 case of Hepatitis B reported. The 2006-2010 vaccine preventable disease rate in Lincoln County was lower than that of Washington State and the U.S. as a whole.

**Health Disparities:**

Due to insufficient numbers, we are unable to evaluate vaccine-preventable disease by age, sex, or race.

*Data Source: Washington State Department of Health, Center for Health Statistics.*

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# Environmental

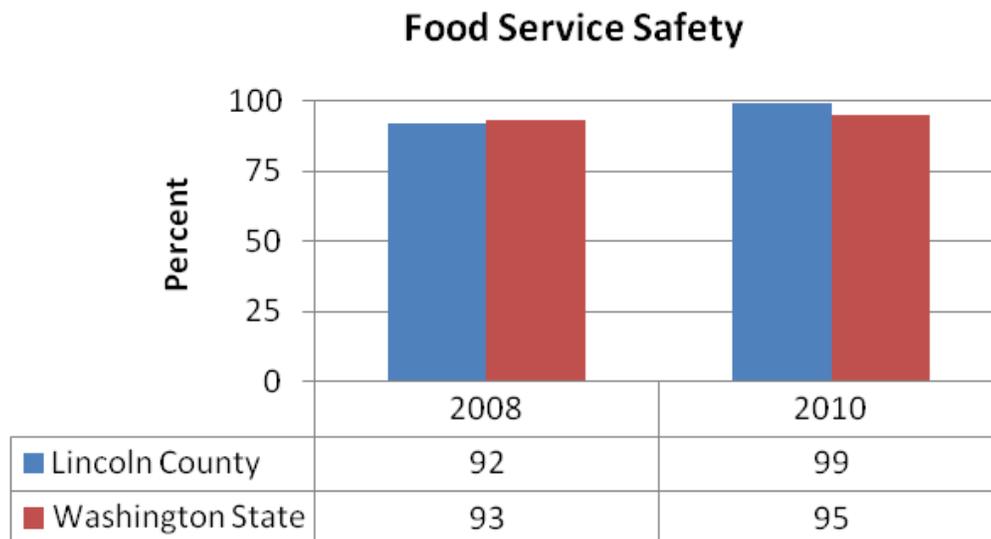
The environmental safety of Lincoln County residents is a top priority of the Lincoln County Health Department. Environmental factors are anything within the Lincoln County environment that could adversely affect residents including food, water and air.

## Food Service Safety

**Definition:** Percent of permanent food service establishments that received a routine inspection and were found to have fewer than 36 critical violation points. Follow-up inspections and temporary food service establishments are excluded.

**Why this is important:** Inspection of food service establishments has been shown to reduce the risk factors associated with food-borne illness. Critical violations involve important food safety items such as proper heating and cooling, cross contamination, hand washing, and proper food storage. Food service establishments with a high level of violations pose the highest risk for causing food-borne outbreaks.

**Where we are now:** In 2010 in Lincoln County, there were 92 routine inspections of food establishments. Of those, 99% had fewer than 36 critical violations. The proportion of Lincoln County inspections below the critical violation threshold was better than that of Washington State in 2010.



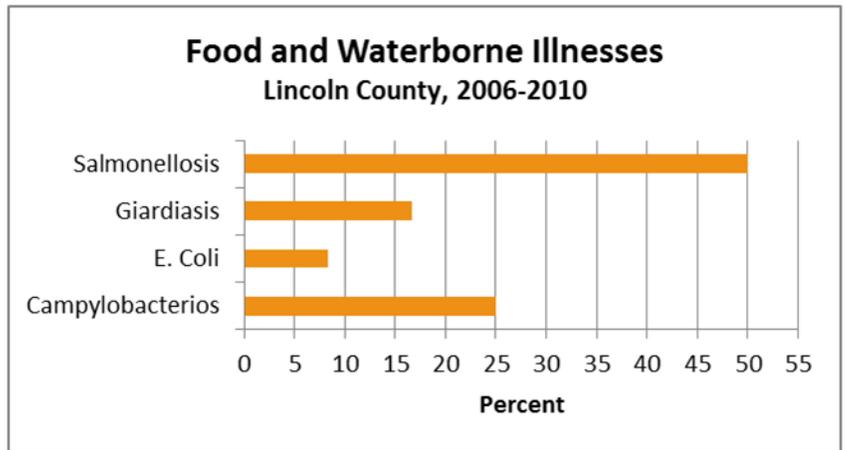
*Data Source: Washington State Department of Health, Division of Environmental Health. Washington State Local Public Health Indicators.*

## Food & Waterborne Illnesses

**Definition:** Rate per 100,000 for campylobacteriosis, E. coli, giardiasis, and salmonellosis.

**Why this is important:** Over time, environmental public health efforts have greatly reduced the occurrence of food and waterborne illness. In the U.S., enteric illnesses were the fourth leading cause of death 100 years ago, but today they are not usually life threatening. Still, many individuals contract food or waterborne illness each year. Preventing food and waterborne disease remains a major public health challenge.

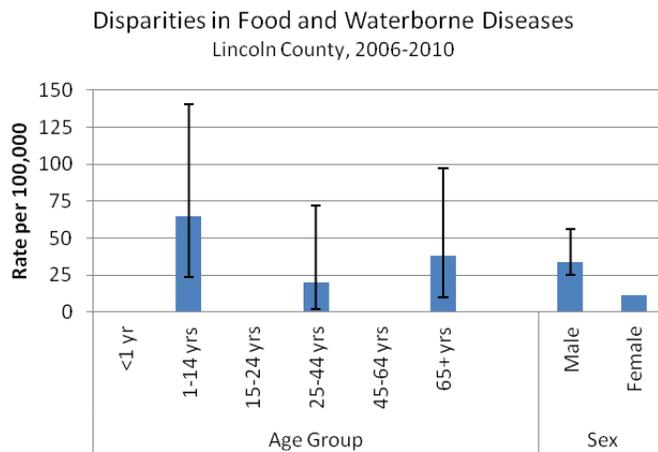
**Where we are now:** From 2006-2010 in Lincoln County, there were 12 reported cases of food and waterborne illnesses. The rate of food and waterborne disease in Lincoln County fluctuated between 2006-2010, with a spike in 2008, possibly due to a food or waterborne disease outbreak. The rate of food and waterborne disease in Lincoln County during 2006-2010 was significantly lower than Washington State.



### Health Disparities:

Among Lincoln County residents in 2006-2010:

- Food and waterborne illnesses affected only 3 of the 6 age groups. 1-14 year olds had the highest rate of food and waterborne illness.
- Males were more likely to contract a food or waterborne illness than females.



### Additional Information:

Salmonellosis caused half of all food and waterborne illnesses in Lincoln County between 2006-2010.

Data Source: Washington State Department of Health, Center for Health Statistics.

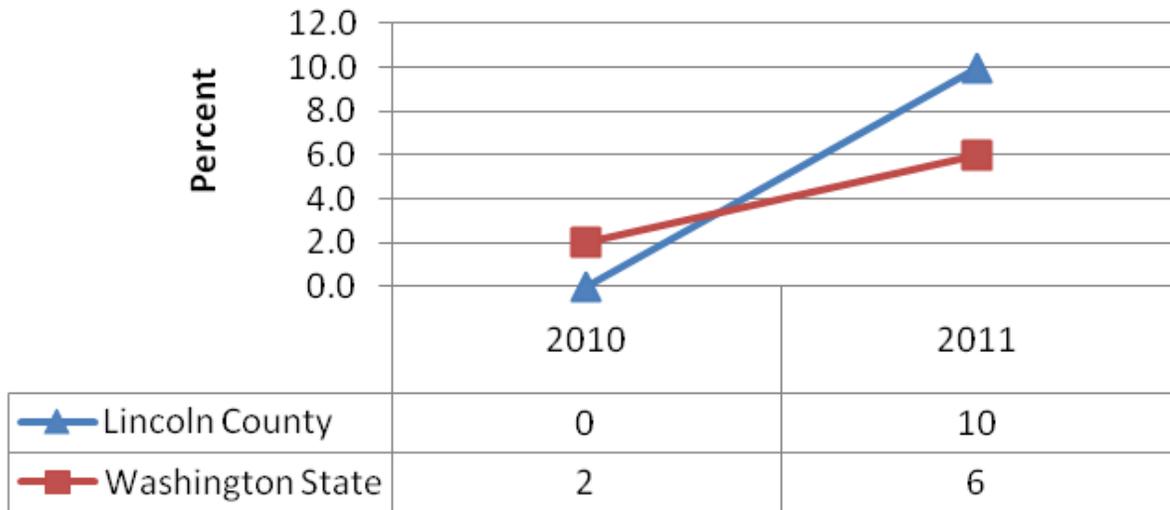
## Air Quality

**Definition:** Annual number of unhealthy air quality days due to fine particulate matter (PM 2.5).

**Why this is important:** All particles found in the air, such as dust, dirt, soot, smoke, and liquid droplets are particulate matter. Exposure to particulate matter, especially PM 2.5 (i.e. fine particulate matter) has been linked to causing or worsening lung disease (including asthma) and cardiovascular disease (heart disease and stroke). People with these diseases, adults age 65 and older, and infants and children are more likely to be affected by breathing PM 2.5, especially as levels rise.

**Where we are now:** During 2011 in Lincoln County, 10 days out of the year had an air quality that was unhealthy for sensitive populations due to fine particulate matter. The rate of poor air quality increased from 2010 to 2011.

**Days of Unhealthy Air Quality due to Fine Particulate Matter**



**Data Source:** Air Quality System (AQS), Office of Air Quality Planning and Standards, U.S. Environmental Protection Agency Accessed through the Washington Tracking Network.

# Health Behaviors

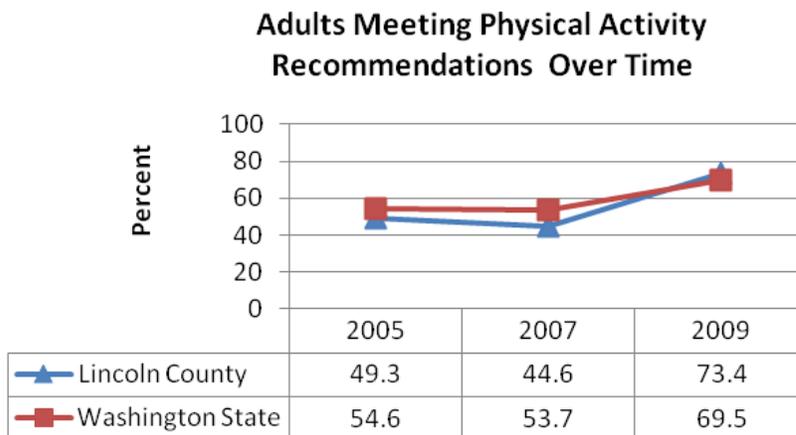
Health behaviors are actions that help to prevent illness and promote health. They are also actions that can be done to regain health. A community's health behaviors are often a collective representation of their health priorities. Assessing health behaviors can guide health stakeholders throughout the community in developing health improvement programs.

## Physical Activity (Adults)

**Definition:** Percent of adults doing 150 minutes or more of physical activity per week.

**Why this is important:** Regular physical activity reduces the risk of chronic disease, helps control weight, reduces symptoms of anxiety and depression, and improves physical health.

**Where we are now:** In 2009 in Lincoln County, 73% of adults met the recommendation of being physically active for 150 minutes in a week. The proportion meeting the physical activity recommendation increased from 2005 to 2009. Lincoln County had a proportion of physically active adults similar to that of Washington State in 2009.



### Health Disparities:

Among adults in Lincoln County in 2009:

- Physical activity decreased as age increased.
- There was no difference in adult physical activity by sex, education level, or income.

**Additional Information:** For even greater health benefits, adults should increase their activity to 300 minutes each week. In Lincoln County in 2009, 37.0% of adults were physically active for 300 or more minutes each week. This proportion was significantly lower than that of Washington State, 47.9%.

**Data Source:** Washington State Department of Health, Center for Health Statistics, Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2005, 2007, 2009. Calculations and presentation of data by Spokane Regional Health District, Community Health Assessment.

## Physical Activity (Youth)

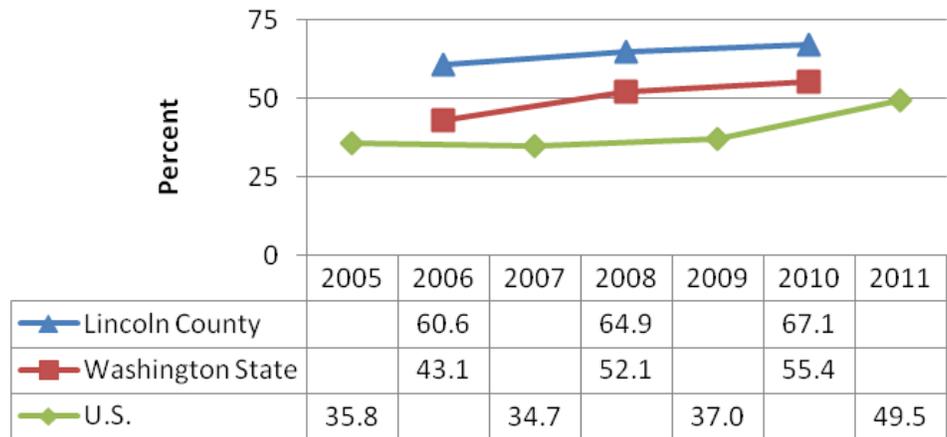
**Definition:** Percent of youth in grades 6, 8, 10, and 12 who are physically active 60 minutes or more on five or more days per week.

**Why is this important:** Regular physical activity in adolescence helps build healthy bones and muscles, increases self-esteem, helps control weight, reduces symptoms of anxiety and depression, and lowers the risk of chronic disease later in life.

**Where are we:** In 2008/2010 in Lincoln County, 65.9% of adolescents reported meeting the recommendation for physical activity. From 2006 to 2010, there was an increase in the proportion of adolescents meeting the physical activity recommendations. The proportion of physically active Lincoln

County youth was significantly higher than that of Washington State in 2006, 2008, and 2010. The percent of physically active youth was significantly higher than that of the United States.

**Youth Physical Activity Over Time**



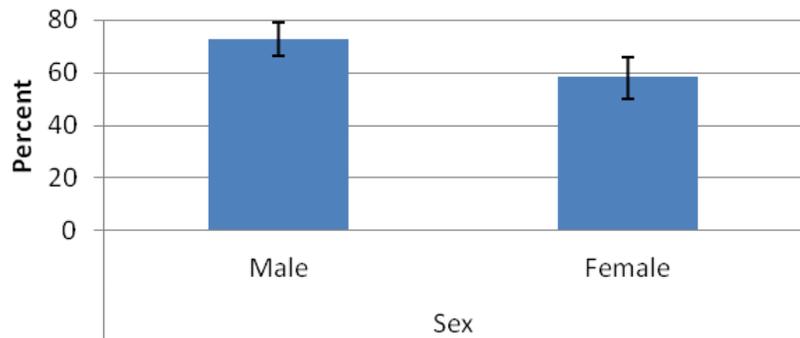
### Health Disparities:

Among youth in Lincoln County in 2008/2010:

- Males were significantly more physically active than females.

**Data Source:** Health Youth Survey. Washington State Department of Health. Calculations and presentation of data by Spokane Regional Health District, Community Health Assessment. Youth Risk Behavior Surveillance System Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.

**Disparities in Youth Physical Activity  
Lincoln County, 2008/2010**

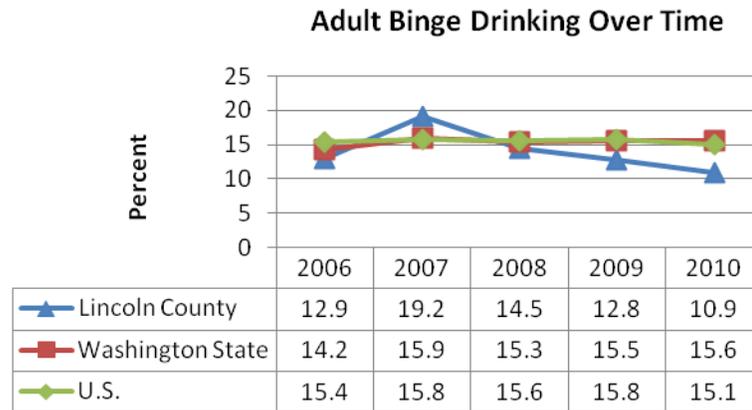


## Binge Drinking (Adults)

**Definition:** Percent of adults who binge drank on at least one occasion in the last 30 days; 5 or more drinks for men and 4 or more drinks for women.

**Why this is important:** Binge drinking is associated with unintentional injuries and health problems.

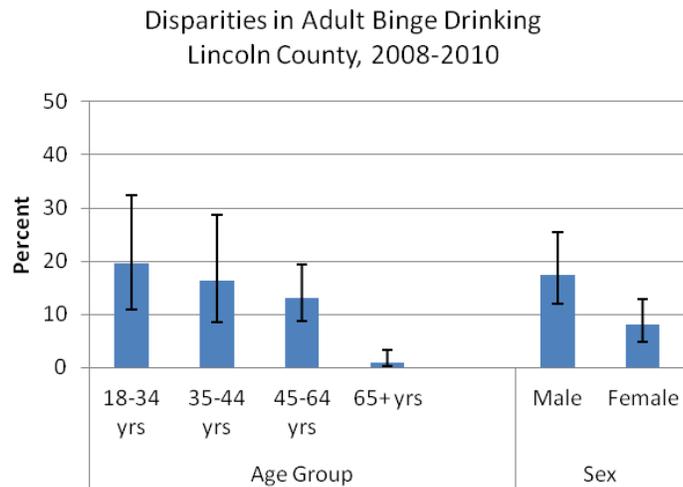
**Where we are now:** Eleven percent of adults in Lincoln County reported binge drinking in 2010. The proportion of binge drinkers showed no significant trend from 2006 to 2010. Lincoln County had a rate of adult binge drinking similar to that of Washington State and the U.S.



### Health Disparities:

Among adults in Lincoln County in 2008-2010:

- Binge drinking decreased as age increased.
- Males were more likely to binge drink than were females.
- There was no difference in adult binge drinking by education level or income.



*Data Source: Washington State Department of Health, Center for Health Statistics, Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2006-2010. Calculations and presentation of data by Spokane Regional Health District, Community Health Assessment.*

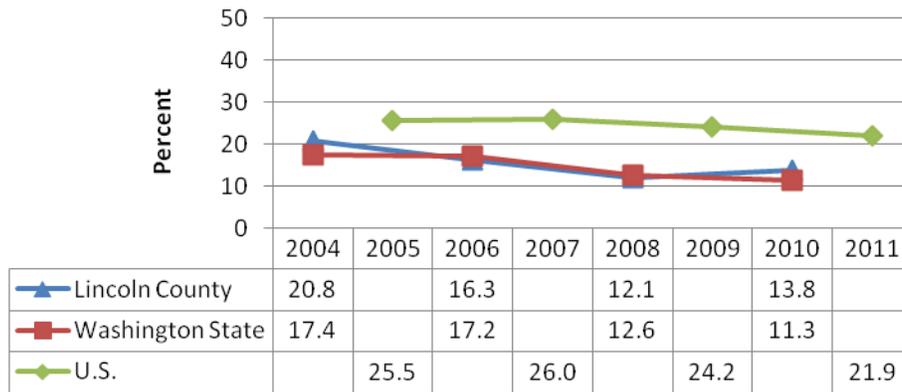
## Binge Drinking (Youth)

**Definition:** Percent of youth in grades 6, 8, 10, and 12 who have had five or more drinks in a row on one or more occasions in the last two weeks.

**Why this is important:** Binge drinking accounts for over 90% of alcohol consumed by people who are under the legal drinking age of 21. The effects of binge drinking among youth may include school or social problems, abuse of other drugs, and an increased risk of unintentional and intentional injury.

**Where we are now:** In 2008/2010 in Lincoln County, 12.9% of adolescents reported binge drinking in the prior 2 weeks. From 2004 to 2010, there was a significant decrease in the proportion of adolescents binge drinking. The proportion of Lincoln County youth who reported binge drinking was higher than that of Washington State in 2008/2010, but significantly lower than that of the U.S. in 2011.

Youth Binge Drinking Over Time

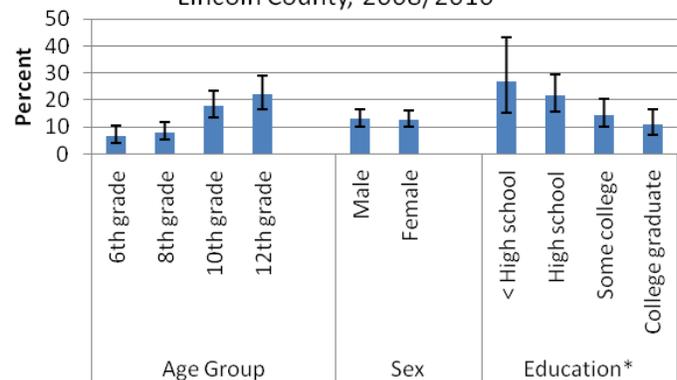


### Health Disparities:

Among youth in Lincoln County in 2008/2010:

- Binge drinking increased as age increased.
- Males were more likely to have binge drank than females.
- Binge drinking decreased as maternal education increased.

Disparities in Youth Binge Drinking  
Lincoln County, 2008/2010



*Data Source: Health Youth Survey. Washington State Department of Health. Calculations and presentation of data by Spokane Regional Health District, Community Health Assessment. Youth Risk Behavior Surveillance System Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.*

\*Education reflects the mother's highest education level

## Illicit Drug Use (Youth)

**Definition:** Percent of youth in grades 6, 8, 10, and 12 who have used any illicit drug one or more times in the last 30 days.

**Why this is important:** Drug use among youth may be physically harmful and may lead to other dangerous or unhealthy behaviors.

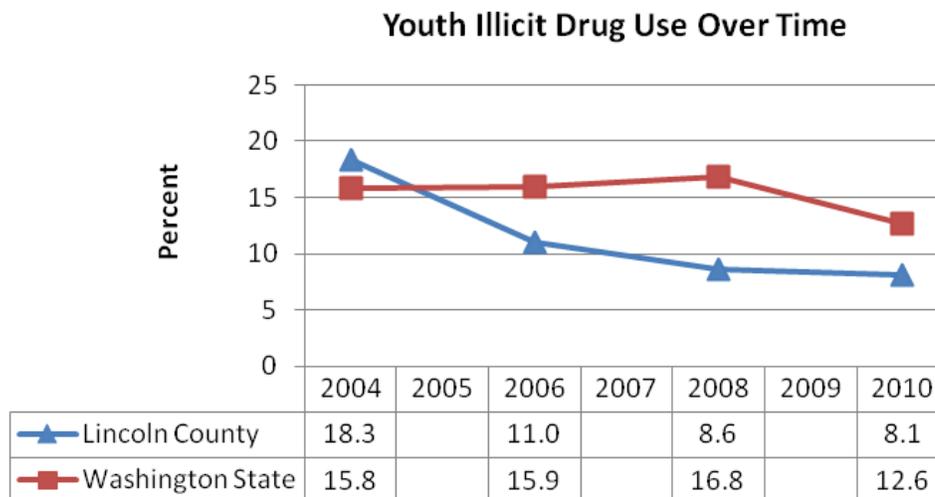
**Where we are now:** In 2008/2010 in Lincoln County, 8.3% of adolescents reported using an illicit drug in the last month. From 2004 to 2010, there was a significant decrease in the proportion of adolescents using illicit drugs. The proportion of Lincoln County youth using illicit drugs was significantly lower than that of Washington State in 2010.

### Health Disparities:

Among youth in Lincoln County 2008/2010:

- Illicit drug use increased as age increased.
- Drug use decreased as maternal education level increased.
- There was no difference in illicit drug use between males and females.

**Additional Information:** The illicit drug with the highest proportion of youth using it in the last 30 days was marijuana with 8% of youth in grades 6, 8, 10 and 12 having used it in the last 30 days.



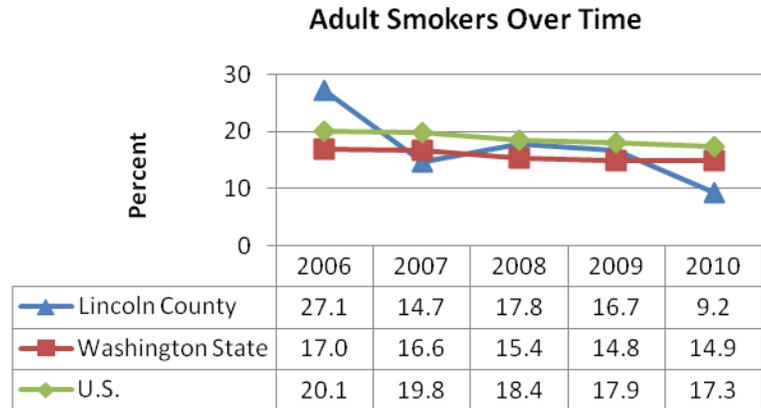
*Data Source: Health Youth Survey. Washington State Department of Health. Calculations and presentation of data by Spokane Regional Health District, Community Health Assessment.*

## Smokers (Adults)

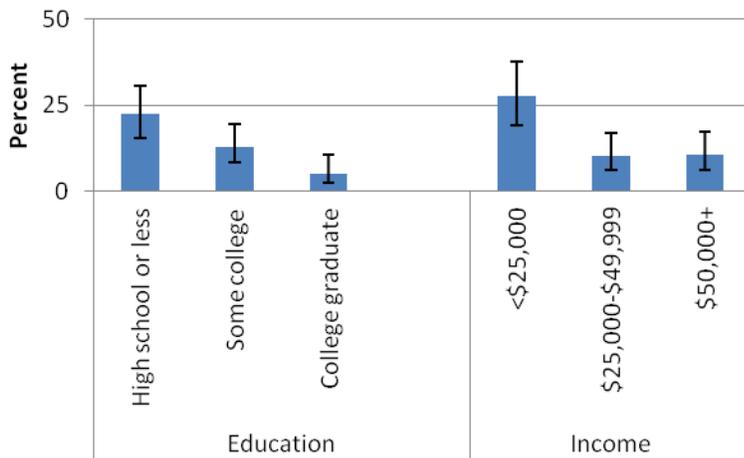
**Definition:** Percent of adults who smoked cigarettes every day or some days in the last 30 days.

**Why this is important:** Tobacco use is the leading cause of preventable death. Public health promotes a healthy lifestyle through efforts to help prevent youth from starting to smoke, providing smoking cessation assistance, monitoring sales of cigarettes to youth, and working for environmental changes to limit exposure to second-hand smoke.

**Where we are now:** In 2010 in Lincoln County, 9% of adults reported they were current smokers. The proportion of adults smoking significantly decreased from 2006 to 2010. Lincoln County had a rate of adult smoking similar to that of Washington State, but lower than that of the U.S in 2010.



Disparities in Adult Smokers  
Lincoln County, 2008/2010



**Health Disparities:**

Among adults in Lincoln County in 2008-2010:

- Smoking decreased as education level increased.
- Smoking decreased as income increased.
- There was no difference in smoking by age group or between males and females.

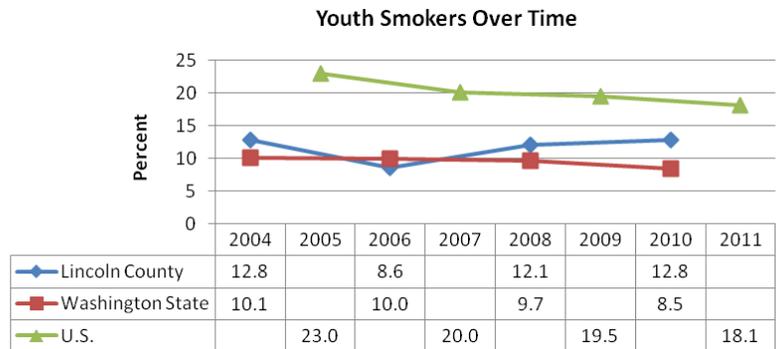
*Data Source: Washington State Department of Health, Center for Health Statistics, Behavioral Risk Factor Surveillance System, supported in part by Centers for Disease Control and Prevention Cooperative Agreements U58/CCU022819-2 (2005), U58/CCU022819-3 (2006), U58/CCU022819-4 (2007), U58/CCU022819-5 (2008), U58/CCU022819-6 (2009). Calculations and presentation of data by Spokane Regional Health District, Community Health Assessment.*

## Smokers (Youth)

**Definition:** Percent of youth in grades 6, 8, 10, and 12 who smoked cigarettes on one or more days in the last 30 days.

**Why this is important:** Tobacco use is the leading cause of preventable death. The majority of adult smokers began smoking before the age of 18.

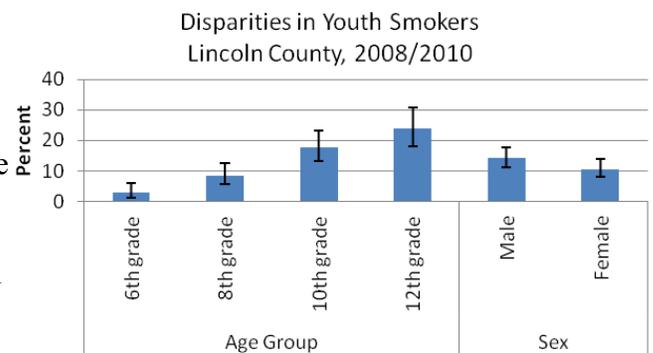
**Where we are now:** In 2008/2010 in Lincoln County, 12.4% of adolescents were current smokers. From 2004 to 2010, the proportion of adolescents who smoked remained stable, with a slight drop in 2006. The proportion of youth smokers in Lincoln County was significantly higher than that of Washington State in 2008/2010, but significantly lower than that of the U.S. in 2011.



### Health Disparities:

Among youth in Lincoln County in 2008/2010:

- Smoking increased as age increased. Rates were significantly higher for high schoolers than those in middle school (6<sup>th</sup>/8<sup>th</sup> grade).
- Males were more likely to smoke than females.
- There was no difference in smoking by maternal education.



**Additional Information:** Other forms of tobacco can also have negative health effects. Among youth, using chewing tobacco and smoking cigars increased as age increased.

Alternative tobacco use in the last 30 days		Lincoln County, 2008/2010			
	6th grade	8th grade	10th grade	12th grade	Total
<b>Smokeless tobacco</b>	2.8%	4.1%	14.0%	12.8%	8.0%
<b>Cigars</b>	Not asked	8.6%	14.3%	33.3%	16.7%

*Data Source: Health Youth Survey. Washington State Department of Health. Calculations and presentation of data by Spokane Regional Health District, Community Health Assessment. Youth Risk Behavior Surveillance System Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.*

Access to health care is often an overall indicator of health throughout the community. Access to health insurance, personal doctors and regular check-ups can prevent serious ailments and manage chronic illnesses. Information on hospitalizations and unintentional injuries can guide the focus of health care stakeholders within the community.

## Insured (Adults)

**Definition:** Percent of adults who currently have medical insurance.

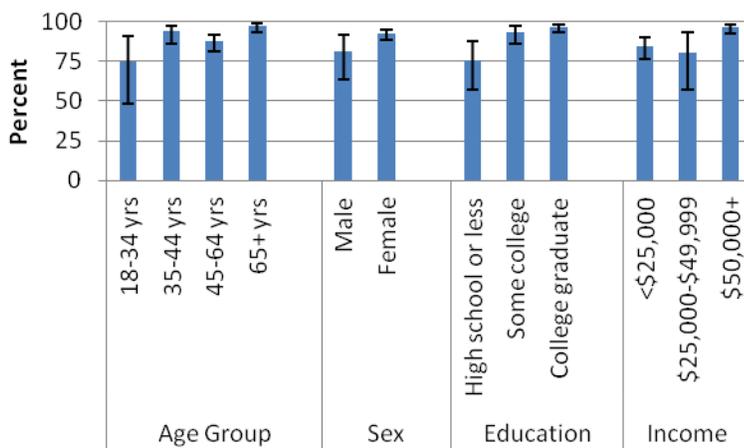
**Why this is important:** Having health insurance is associated with health care access; timely access can reduce complications from illness and avoidable long-term health expenditures. Health insurance allows individuals to develop and maintain a good relationship with a health care provider. This is especially important for individuals with chronic health conditions that benefit from consistent monitoring and a continuity of care.

**Where we are now:** In 2010 in Lincoln County, 82% of adults reported they had health insurance. The proportion was stable from 2006 to 2010. Lincoln County had an insured rate similar to that of Washington State and the U.S.

Insured Adults Over Time



Disparities in Insured Adults  
Lincoln County, 2008-2010



### Health Disparities:

Among adults in Lincoln County in 2008-2010:

- Having health insurance increased as age increased.
- Females were more likely to have health insurance than males.
- Having health insurance increased as education level increased.
- Having health insurance increased as income increased.

*Data Source: Washington State Department of Health, Center for Health Statistics, Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveil-*

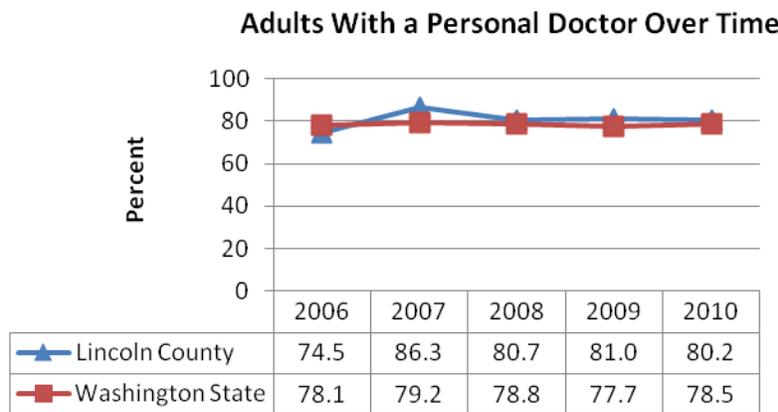
*lance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2006-2010. Calculations and presentation of data by Spokane Regional Health District, Community Health Assessment.*

## Personal Doctor (Adults)

**Definition:** Percent of adults who have one or more personal doctor or health care provider.

**Why this is important:** Individuals with a usual source of care, or a medical home, are more likely to receive preventive health services. Having a usual source of care provides a consistent relationship with a health care provider, produces better health outcomes, and reduces costs.

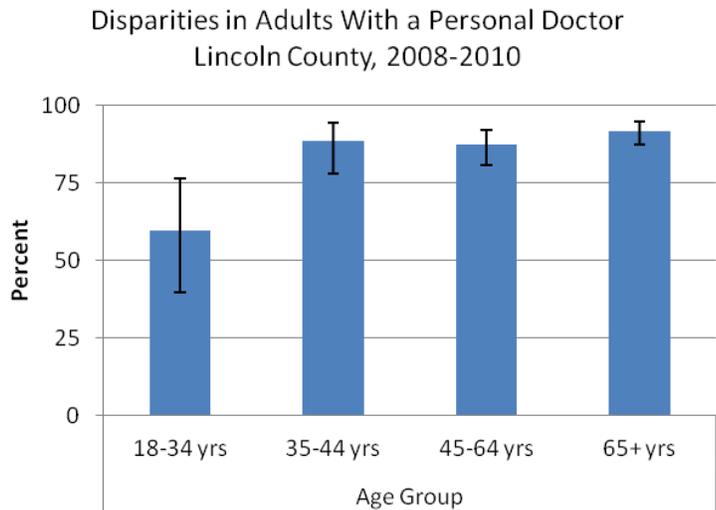
**Where we are now:** In 2010 in Lincoln County, 80% of adults reported they had one or more doctor or health care provider they considered as their personal doctor. The proportion of adults with a personal doctor was stable from 2006 to 2010. Lincoln County has a proportion of adults with a personal doctor similar to that of Washington State.



### Health Disparities:

Among adults in Lincoln County in 2008-2010:

- Having a personal doctor increased as age increased.
- There was no difference in having a personal doctor by sex, education level, or income.



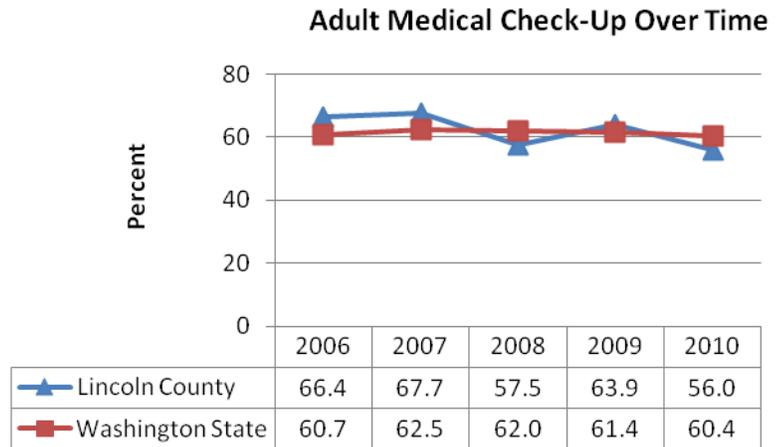
*Data Source: Washington State Department of Health, Center for Health Statistics, Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2006-2010. Calculations and presentation of data by Spokane Regional Health District, Community Health Assessment.*

## Medical Check-up in the Last Year (Adults)

**Definition:** Percent of adults who had a check-up in the last 12 months.

**Why this is important:** Regular health exams and tests can help find problems before they start. They also can help find problems early, when chances for treatment and cure are better. By getting the right health services, screenings, and treatments, chances for living a longer, healthier life improve.

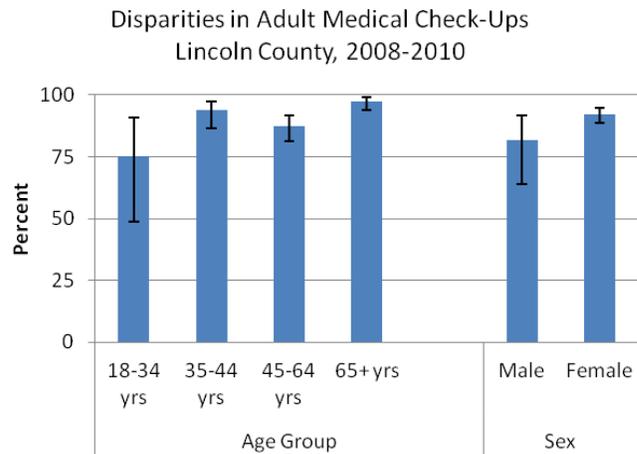
**Where we are now:** In 2010 in Lincoln County, 56% of adults reported they had a medical check-up in the last year. The proportion of adults having a check-up in the last year was stable from 2006 to 2010. Lincoln County had a similar proportion of adults having a check-up in the last year as that of Washington State.



### Health Disparities:

Among adults in Lincoln County in 2008- 2010:

- Having a medical check-up in the last year increased as age increased.
- Females were more likely than males to have a check-up in the last year.
- There was no difference in having a check up in the last year by education level or income.



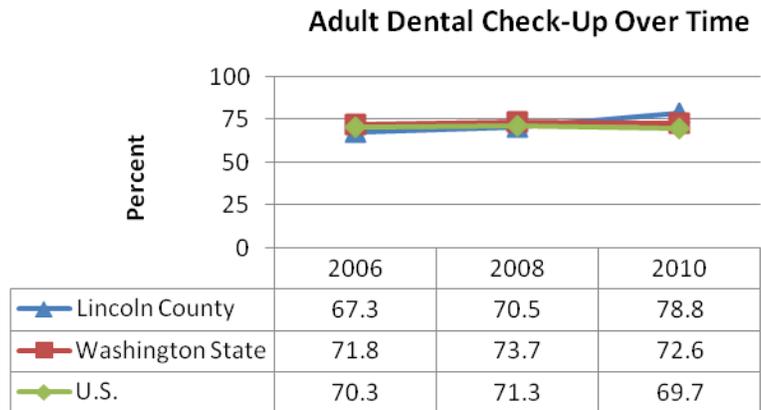
*Data Source: Washington State Department of Health, Center for Health Statistics, Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2006-2010. Calculations and presentation of data by Spokane Regional Health District, Community Health Assessment.*

## Dental Check-up (Adults)

**Definition:** Percent of adults who visited the dentist in the last 12 months.

**Why this is important:** The American Dental Association recommends that individuals visit the dentist at least two times per year. Dental check-ups allow the dentist to clean the teeth, identify any oral health problems, and provide education on improving or maintaining good oral health.

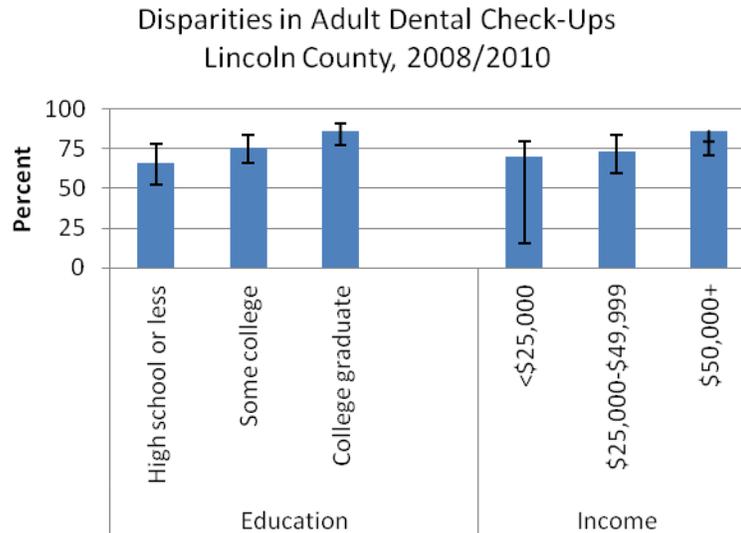
**Where we are now:** In 2010 in Lincoln County, 79% of adults reported they had visited the dentist in last year. The proportion of adults visiting the dentist was stable from 2006 to 2010. Lincoln County had a similar proportion of adults visiting the dentist in the last year as that of Washington State, but had a significantly higher proportion than the U.S.



### Health Disparities:

Among adults in Lincoln County in 2008/2010:

- Visiting the dentist in the last year increased as education level increased.
- Visiting the dentist in the last year increased as income increased.
- There was no difference in visiting the dentist in the last year by age group or between males and females.



*Data Source: Washington State Department of Health, Center for Health Statistics, Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2006, 2008, 2010. Calculations and presentation of data by Spokane Regional Health District, Community Health Assessment.*

## Hospitalizations

**Definition:** Hospitalizations are counted as the number of inpatient discharges, excluding childbirth and newborn infants, per 100,000 individuals.

**Why this is important:** Hospitalizations represent morbidity in our community that require a higher level of medical care.

**Where we are now:** In 2011, approximately 1,200 Lincoln County residents were hospitalized. Hospitalizations significantly decreased from 2007 to 2011. The 2011 hospitalization rate in Lincoln County was significantly higher than that of Washington State.

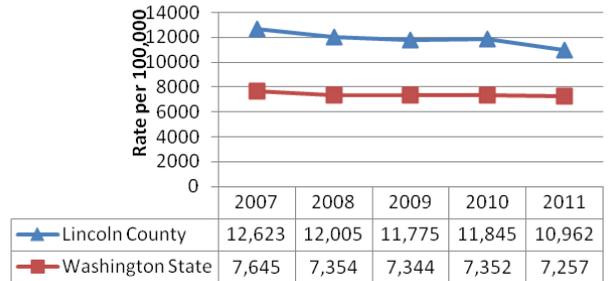
### Health Disparities:

Among Lincoln County residents in 2011:

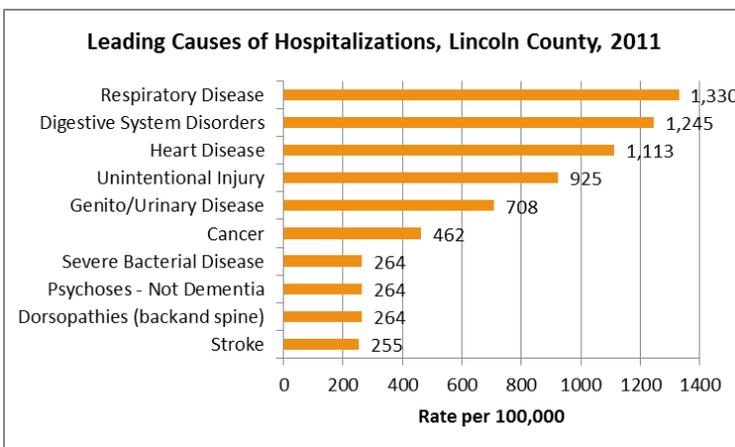
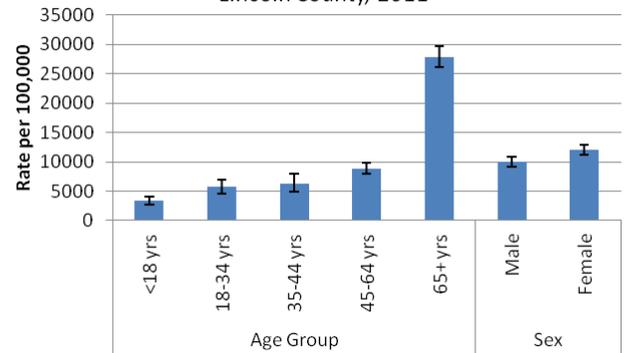
- The likelihood of hospitalization increased as age increased.
- Women were more likely to be hospitalized than were men.

**Additional Information:** In 2011, approximately one in six hospitalizations (15.6%) were for childbirth, the leading cause of hospitalization. Excluding childbirth, the leading causes of hospitalization were chronic conditions and or injuries.

Hospitalizations over Time



Disparities in Hospitalizations  
Lincoln County, 2011



Data Source: Washington State Department of Health, Center for Health Statistics.

## Unintentional Injury

**Definition:** Rate of inpatient hospitalizations due to unintentional injuries per 100,000 individuals. This number underestimates the prevalence of unintentional injuries because it does not capture the less severe injuries where hospitalization was not necessary.

**Why this is important:** This is a measure of morbidity that may have been preventable by taking additional precautions or under different circumstances. Physical injury may limit an individual's ability to fully interact with or contribute to the community. Additionally, community resources are used to provide medical care to these individuals.

**Where we are now:** In 2011 in Lincoln County, there were 93 hospitalizations for unintentional injuries. There was no significant trend in the unintentional injury rate from 2007 to 2011. The 2011 unintentional injury rate in Lincoln County was significantly higher than that of Washington State.

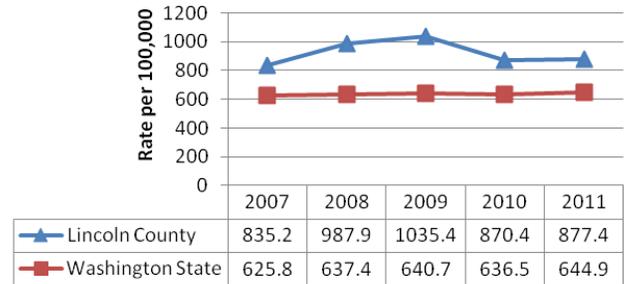
### Health Disparities:

Among Lincoln County residents in 2011:

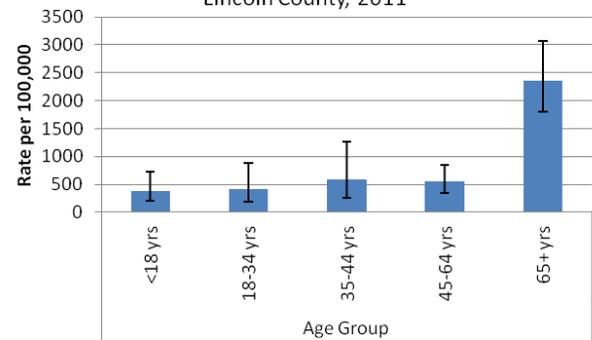
- Unintentional injury rates increased as age increased.
- There was no difference in unintentional injury between males and females.

**Additional Information:** During 2007-2011, the leading causes of unintentional injury hospitalizations were falls (50.0%), motor vehicle crashes (13.9%), and poisonings (4.9%). Half of the unintentional injury hospitalizations were among seniors 65 years of age or older. Seniors accounted for three-fourths of fall injuries. Younger adults (18-34 years) accounted for one-fourth of motor vehicle crash injuries and older adults (45-64 years) accounted for one-third of motor vehicle crash injuries. Three in five unintentional injuries from poisonings occurred among seniors.

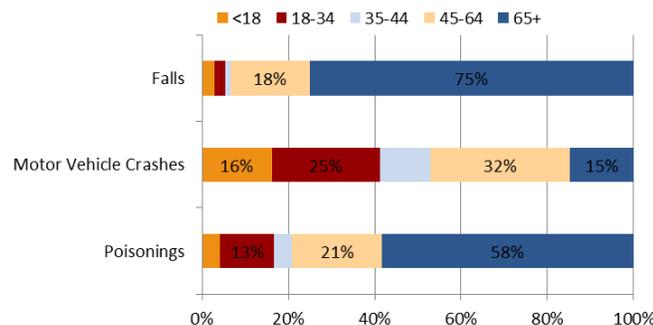
Unintentional Injury over Time



Disparities in Unintentional Injury  
Lincoln County, 2011



Age Distribution of Hospitalizations by Type of Injury  
Lincoln County, 2007-2011



Data Source: Washington State Department of Health, Center for Health Statistics.

# Health Status

Health status refers to the level of health of the Lincoln County population by assessing specific health indicators. Knowing this information allows health partners throughout the county to focus on addressing problem areas.

## Deaths

**Definition:** Rate of deaths per 100,000 individuals.

**Why this is important:** Tracking death rates may identify groups that are at an increased risk for premature death. The leading cause of death for infants is perinatal conditions that make survival difficult, such as preterm birth or congenital defects. Children and young adults are more likely to die from intentional or unintentional injury. Leading causes of death among older adults are more likely to be related to physical health conditions.

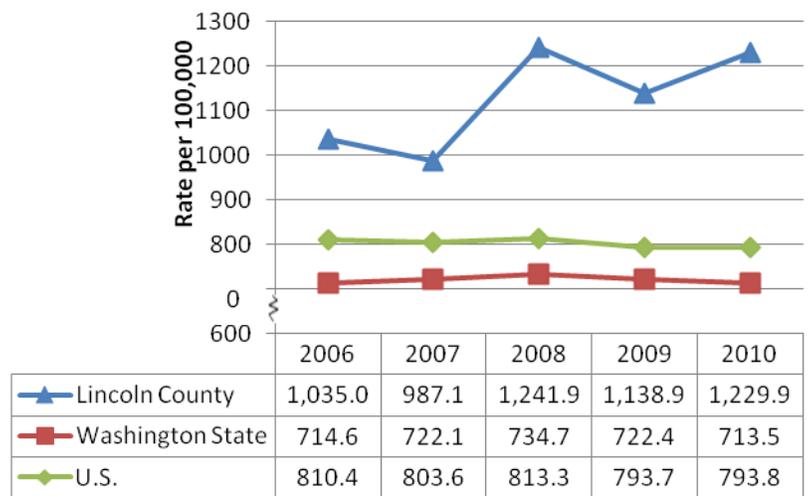
**Where we are now:** In 2010, there were 130 deaths in Lincoln County. There was no significant change in the death rate between 2006-2010. The 2010 death rate in Lincoln County was significantly higher than that of Washington State and the U.S.

### Health Disparities:

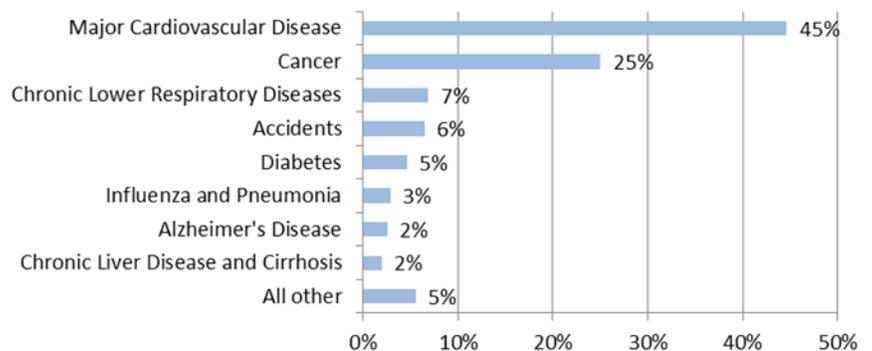
Among Lincoln County Residents in 2006-2010:

- As expected, death rates increased as age increased.
- There was no difference in death rates between males and females.

Deaths over Time



Leading Causes of Death, Lincoln County, 2006-2010



**Death (continued)**

**Additional Information:** Chronic conditions are the leading cause of death. Nearly half of all deaths in Lincoln County from 2006-2010 were from major cardiovascular disease.

*Data Source: Washington State Department of Health, Center for Health Statistics.*

Leading Causes of Deaths by Age Groups—Lincoln County, 2006 - 2010				
Age Group	Cause of Death	# of Deaths	% of Total	Cumulative %
< 1 year *	All Causes	4	100.00%	100.00%
	Total		100.00%	
15 - 24 years	Accidents	5	100.00%	100.00%
	Total	5	100.00%	
25 - 44 years	Accidents	7	36.8%	36.8%
	Major Cardiovascular Disease	5	26.3%	63.1%
	All Other Causes	7	36.9%	100.00%
	Total	19	100.00%	
45 - 64 years	Cancer	27	35.1%	35.1%
	Major Cardiovascular Disease	25	32.5%	67.5%
	Accidents	10	13.0%	80.5%
	Chronic Lower Respiratory Dis.	5	6.5%	87.0%
	All Other Causes	10	13.0%	100%
	Total	77	100.00%	
65+ years	Accidents	10	13.0%	80.5%
	Major Cardiovascular Disease	25	32.5%	67.5%
	Accidents	10	13.0%	80.5%
	Major Cardiovascular Disease	25	32.5%	67.5%
	Accidents	10	13.0%	80.5%
	Total	77	100.00%	

\*\*There were no deaths for the age group 1-14 during the years 2006-2010

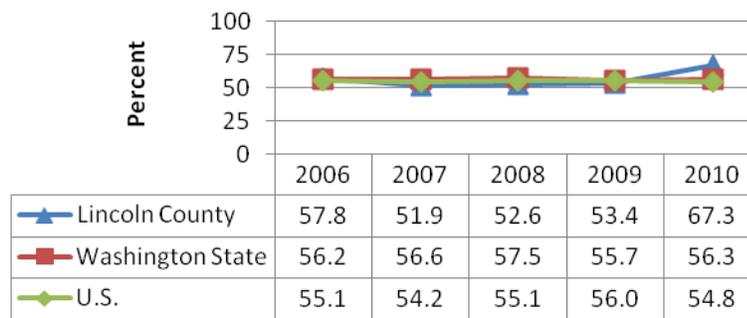
## General Health (Adults)

**Definition:** Percent of adults reporting their general health status as excellent or very good.

**Why this is important:** Response to this broad question covers one's perception of physical, mental, and social well-being, which has been shown to be a good predictor of mortality.

**Where we are now:** In 2010 in Lincoln County, 67% of adults reported their health as excellent or very good. The proportion of adults reporting in good health significantly increased from 2006 to 2010. Lincoln County had a significantly higher proportion of adults in good health than that of Washington State and the U.S.

Adults With Excellent or Very Good Health Over Time

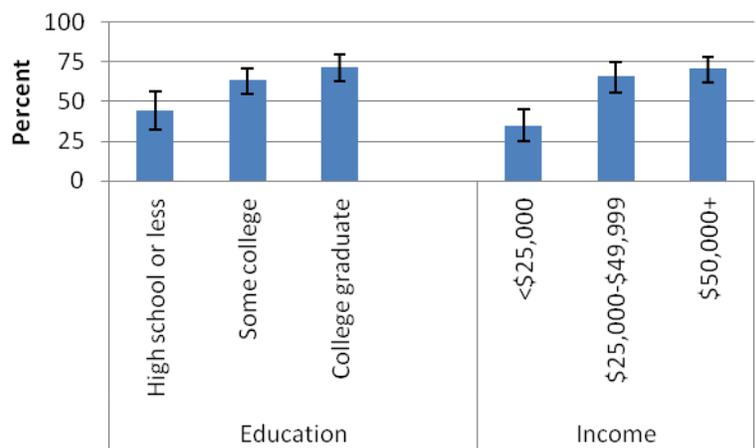


### Health Disparities:

Among adults in Lincoln County in 2008-2010:

- Good general health increased as education level increased.
- Good general health increased as income increased.
- There was no difference in good general health by age group or between males and females.

Disparities in Adults With Excellent or Very Good Health, Lincoln County, 2008-2010

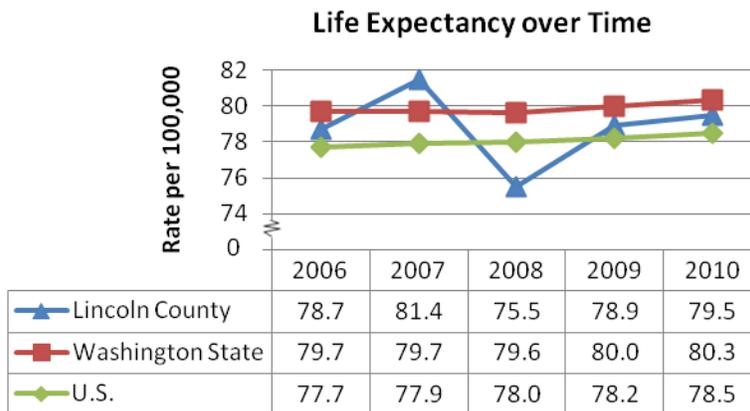


*Data Source: Washington State Department of Health, Center for Health Statistics, Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2006-2010. Calculations and presentation of data by Spokane Regional Health District, Community Health Assessment.*

## Life Expectancy

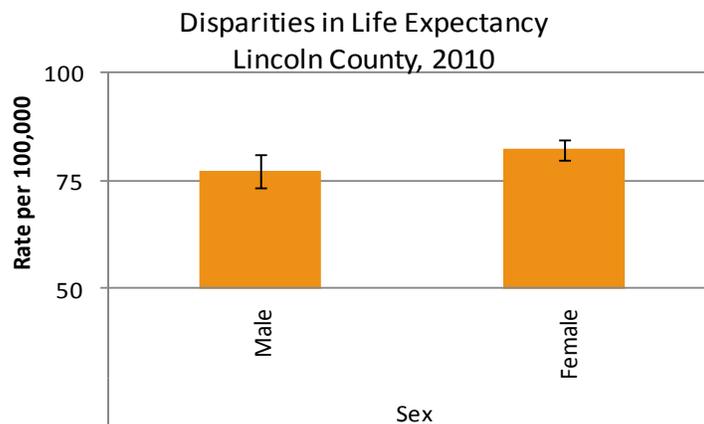
**Definition:** Life expectancy is the number of years an individual is expected to live if current age-specific death rates continue into the future.

**Where we are now:** Individuals born in 2010 in Lincoln County are expected to live for approximately 79 years. The number of years of expected life fluctuated between 2006-2010. Life expectancy in 2010 in Lincoln County was lower than Washington State, but higher than the United States.



### Health Disparities:

Females were expected to live longer than were males among Lincoln County residents in 2010.



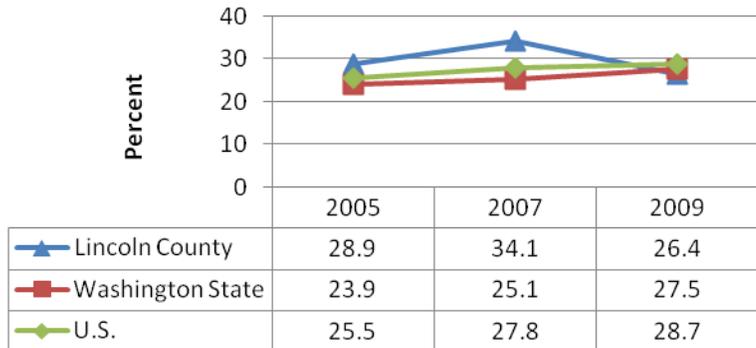
*Data Source: Washington State Department of Health, Center for Health Statistics.*

## Hypertension

**Definition:** Percent of adults who have been told by a health care provider that they have high blood pressure.

**Why this is important:** High blood pressure often has no warning signs or symptoms, and many people don't realize they have it. High blood pressure increases the risk for heart disease and stroke. Eating a healthy diet, exercising, and not smoking can help lower blood pressure. Medications are also available to help control high blood pressure.

Adult Hypertension Over Time



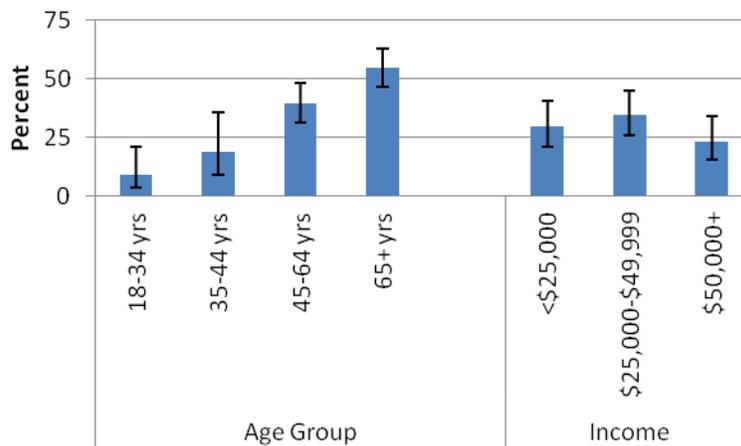
**Where we are now:** In 2009 in Lincoln County, 26% of adults had been diagnosed with hypertension. The proportion of adults reporting high blood pressure was stable from 2005 to 2009. Lincoln County had a proportion of adult heart disease similar to that of Washington State and the U.S. in 2009.

### Health Disparities:

Among adults in Lincoln County in 2007/2009:

- Hypertension increased as age group increased.
- There was no difference in heart disease by education level, income, or between males and females.

Disparities in Adult Hypertension  
Lincoln County, 2008-2010



*Data Source: Washington State Department of Health, Center for Health Statistics, Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2005-2009. Calculations and presentation of data by Spokane Regional Health District, Community Health Assessment.*

## Cancer

**Definition:** Rate of new diagnosed cases of cancer per 100,000 individuals.

**Why this is important:** Cancer was the second leading cause of death in Lincoln County between 2005-2009. Many deaths from cancer could be avoided if more people received screenings. A cancer diagnosis not only imposes a physical burden on the individual, there is also a financial burden.

**Where we are now:** In 2009 in Lincoln County, there were 71 new cases of cancer diagnosed. The cancer rate increased from 2005-2009, but not significantly. The 2009 cancer rate in Lincoln County was significantly higher than that of Washington State and the U.S.

**Health Disparities:**

Among Lincoln County residents in 2005-2009:

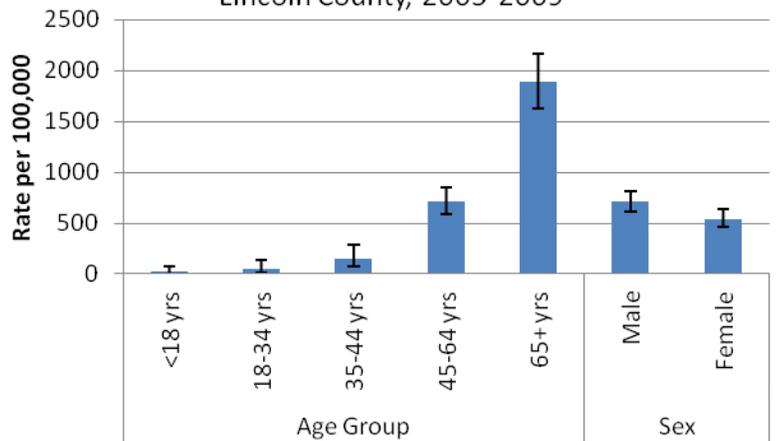
- The likelihood of developing cancer increased as age increased.
- Males had a higher cancer incidence rate than females.

**Cancer Incidence over Time**



	2005	2006	2007	2008	2009
Lincoln County	549.8	670.8	664.4	573.9	668.3
Washington State	542.3	537.2	512.7	534.9	555.9
U.S.	501.2	507.1	515.2	507.4	462.1

**Disparities in Cancer Incidence  
Lincoln County, 2005-2009**



**Additional Information:** The leading type of cancer was lung cancer, followed by prostate cancer in males and breast cancer in females.

Leading types of cancer, Lincoln County, 2005-2009			
Rank	Site of Cancer	Count	Rate per 100,000
1	Lung	65	123.6
2	Prostate (Male)	61	116.0
3	Breast	35	66.6
4	Colorectal	27	51.3
5	Non-Hodgkin Lymphoma	20	38.0

Data Source: Washington State Department of Health, Washington State Cancer Registry.

## Adult Diabetes

**Definition:** Percent of adults who have been diagnosed with diabetes.

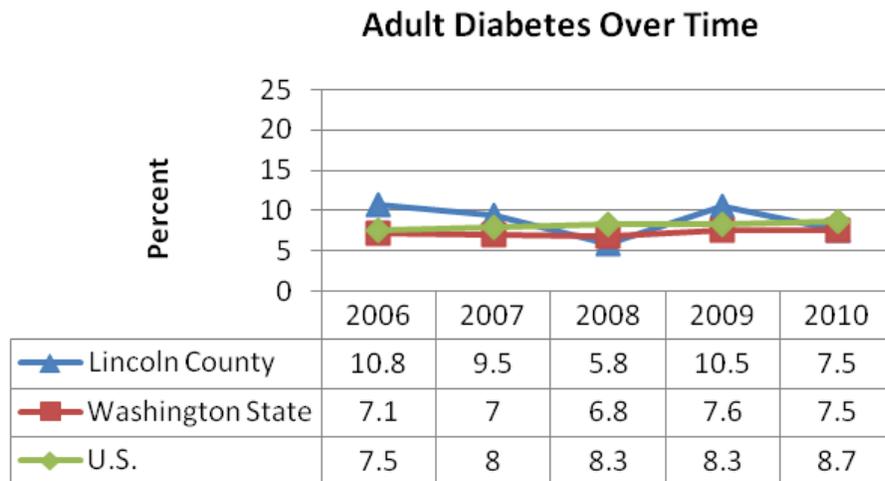
**Why this is important:** Diabetes is a disease that can have serious complications, such as blindness, kidney damage, and lower-limb amputation. Appropriate diagnosis, care, and management of the disease can lower the risk of complications.

**Where we are now:** In 2010 in Lincoln County, 8% of adults reported having diabetes. The proportion of adults with diabetes was stable from 2006 to 2010. Lincoln County had a proportion of adult diabetes similar to that of Washington State and the U.S. in 2010.

### Health Disparities:

Among adults in Lincoln County in 2008-2010:

- There was no difference in diabetes by age group, education level, income, or between males and females.



*Data Source: Washington State Department of Health, Center for Health Statistics, Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2006-2010. Calculations and presentation of data by Spokane Regional Health District, Community Health Assessment.*

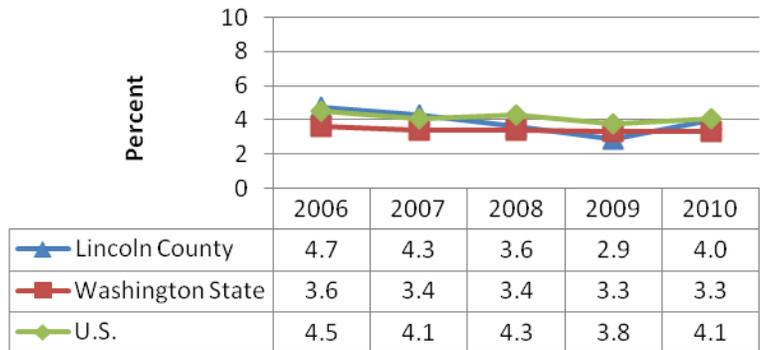
## Heart Disease

**Definition:** Percent of adults who have been diagnosed with angina or coronary heart disease.

**Why this is important:** Heart disease was the leading cause of death in Lincoln County in 2010. Eating a healthier diet, exercising, and not smoking lower the risk of having a heart attack. Medications are also available to treat some heart disease risk factors.

**Where we are now:** In 2010 in Lincoln County, 4% of adults had been diagnosed with coronary heart disease or angina. The proportion of adults reporting having been diagnosed with heart disease was stable from 2006 to 2010. Lincoln County had a proportion of adult heart disease similar to that of Washington State and the U.S. in 2010.

Adult Heart Disease Over Time

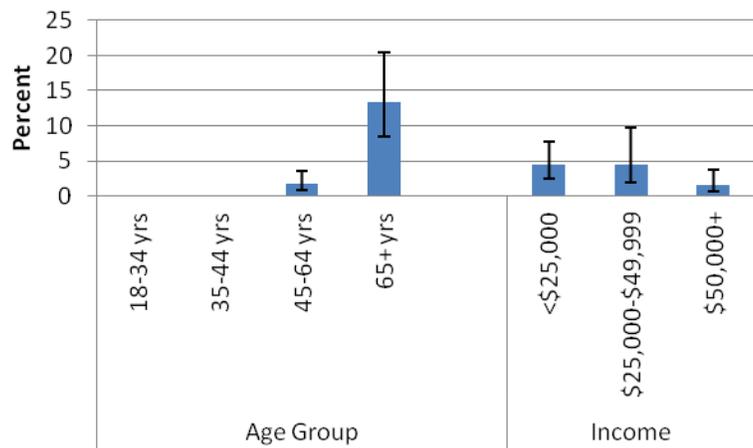


### Health Disparities:

Among adults in Lincoln County in 2008-2010:

- Heart disease increased as age group increased.
- Heart disease decreased as income level increased.
- There was no difference in heart disease by education level or between males and females.

Disparities in Adult Heart Disease  
Lincoln County, 2008-2010



*Data Source: Washington State Department of Health, Center for Health Statistics, Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2006-2010. Calculations and presentation of data by Spokane Regional Health District, Community Health Assessment.*

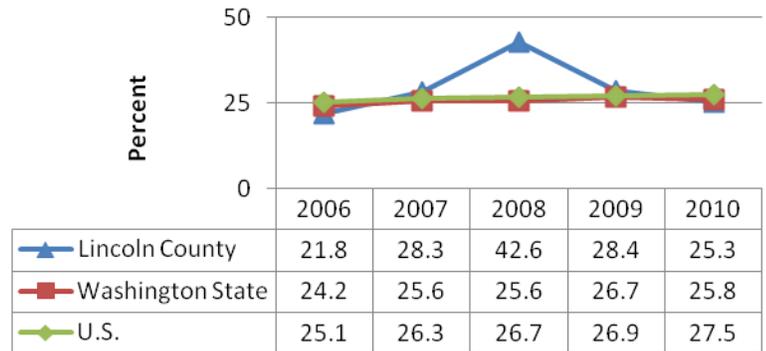
## Obesity (Adults)

**Definition:** Percent of adults with a Body Mass Index (BMI) of 30 or higher. BMI is based on height and weight and is calculated as:  $BMI = (\text{weight in pounds} / \text{height in inches}) \times 703$ .

**Why this is important:** Obesity increases the risk of respiratory problems and chronic health conditions, such as hypertension and diabetes.

**Where we are now:** In 2010 in Lincoln County, 25% of adults were obese. The proportion of obese adults showed no significant trend from 2006 to 2010. Lincoln County had a proportion of obese adults similar to that of Washington State and the U.S. in 2010.

Adult Obesity Over Time

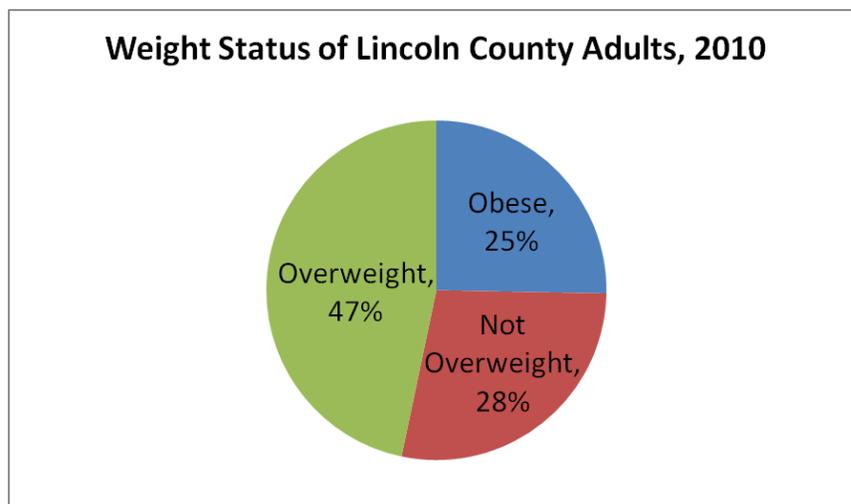


### Health Disparities:

Among adults in Lincoln County in 2008-2010:

- Adults 45-64 years of age had a significantly higher proportion who were obese compared to other age groups.
- There was no difference in obesity by education level, income, or between males and females.

**Additional Information:** More than one-third of adults in Lincoln County in 2010 were overweight. A similar proportion of adults were overweight compared to those who were not overweight or obese.



*Data Source: Washington State Department of Health, Center for Health Statistics, Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2006-2010. Calculations and presentation of data by Spokane Regional Health District, Community Health Assessment.*

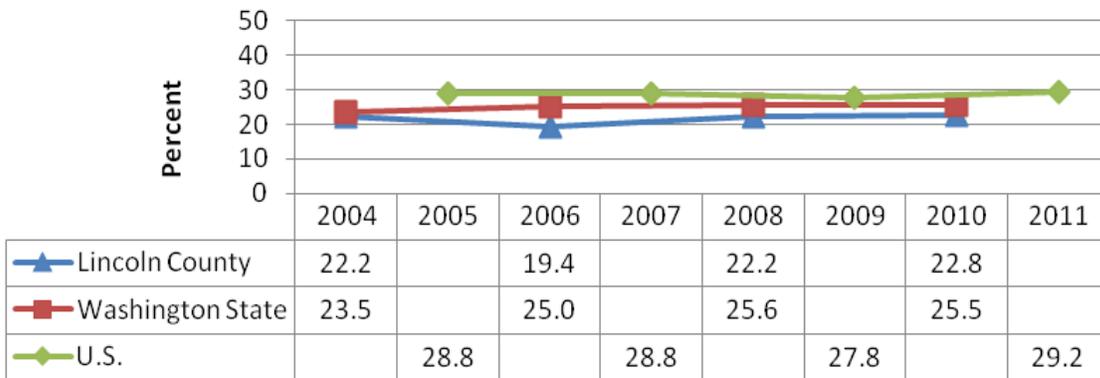
## Overweight (Youth)

**Definition:** Percent of youth in grades 8, 10, and 12 who were overweight or at risk for becoming overweight.

**Why this is important:** Youth who are overweight are at greater risk for physical, social, and psychological problems and are more likely to become overweight or obese adults.

**Where we are now:** In 2008/2010 in Lincoln County, 22.5% of adolescents were overweight or at risk for becoming overweight. From 2004 to 2010, there was no significant change in the proportion of overweight adolescents. The proportion of overweight youth in Lincoln County was similar to that of Washington State in 2010, but lower than that in the U.S. in 2011.

Overweight Youth Over Time

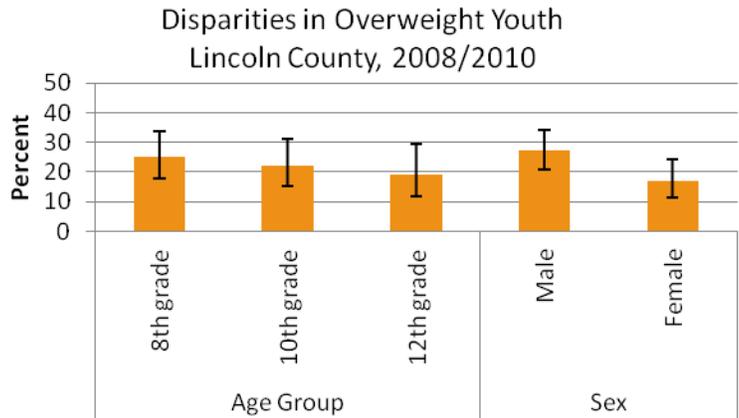


**Overweight (Youth) continued**

**Health Disparities:**

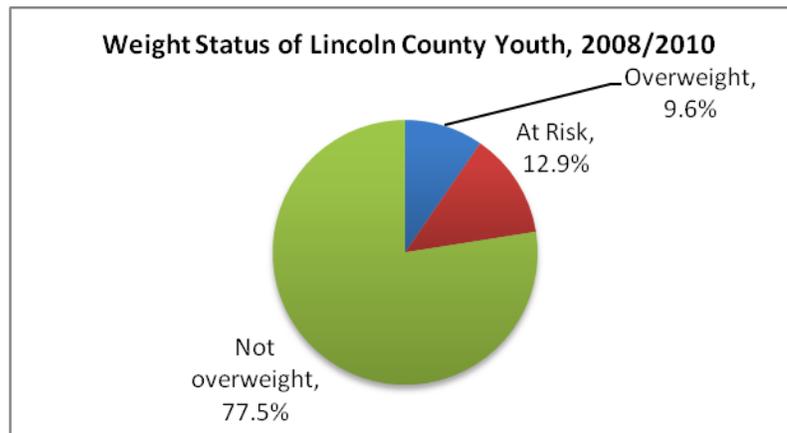
Among youth in Lincoln County in 2008/2010:

- Males were significantly more likely to be overweight or at risk than females.
- Being overweight decreased as age increased.



\*Education reflects the mother's highest education level

**Additional Information:** The majority of youth are at a healthy weight. Among the nearly one-quarter who are overweight, one in ten are obese.



Data Source: Health Youth Survey. Washington State Department of Health. Calculations and presentation of data by Spokane Regional Health District, Community Health Assessment.  
 Youth Risk Behavior Surveillance System Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.

# Mental Health / Violence

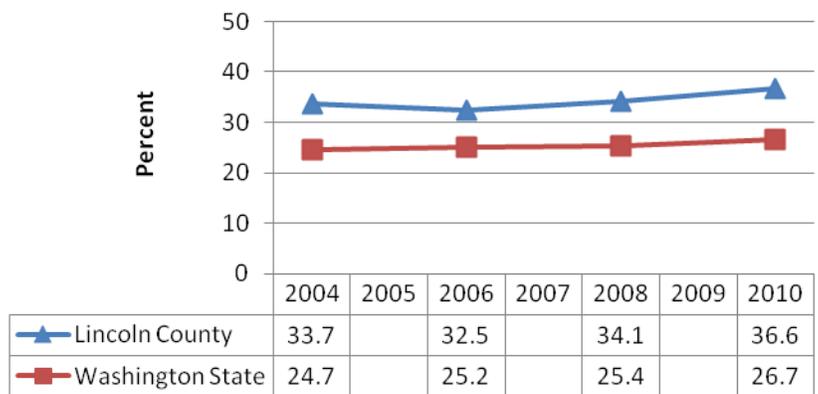
Mental health refers to the overall psychological state of the Lincoln County population. Mental health agencies and education facilities can use this information to better address the health issues represented by the indicators that rank high in mental health and violence in Lincoln County.

## Bullying (Youth)

**Definition:** Percent of youth in grades 6, 8, 10, and 12 who have been bullied one or more times in the last 30 days.

**Why this is important:** Bullying is a form of youth violence and can result in physical injury, social and emotional distress, and even death. Victimized youth are at increased risk for mental health problems such as depression and anxiety, psychosomatic complaints such as headaches, and poor school adjustment. Youth who bully others are at increased risk for substance use, academic problems, and violence later in adolescence and adulthood.

**Bullied Youth Over Time**



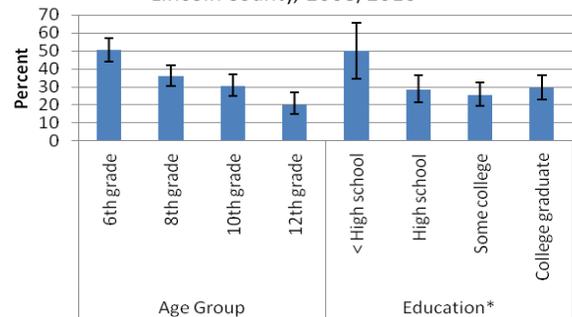
**Where we are now:** In 2008/2010 in Lincoln County, 35.2% of adolescents reported being bullied on one or more occasions in the last month. From 2004 to 2010, there was a slight increase in the proportion of adolescents being bullied. The proportion of Lincoln County being bullied was significantly higher than Washington State from 2004 to 2010.

### Health Disparities

Among youth in Lincoln County in 2008/2010:

- Being bullied decreased as age increased.
- Those having maternal education of less than high school were bullied significantly more than those with maternal education of high school and beyond.

**Disparities in Bullied Youth  
Lincoln County, 2008/2010**



*Data Source: Health Youth Survey. Washington State Department of Health. Calculations and presentation of data by Spokane Regional Health District, Community Health Assessment.*

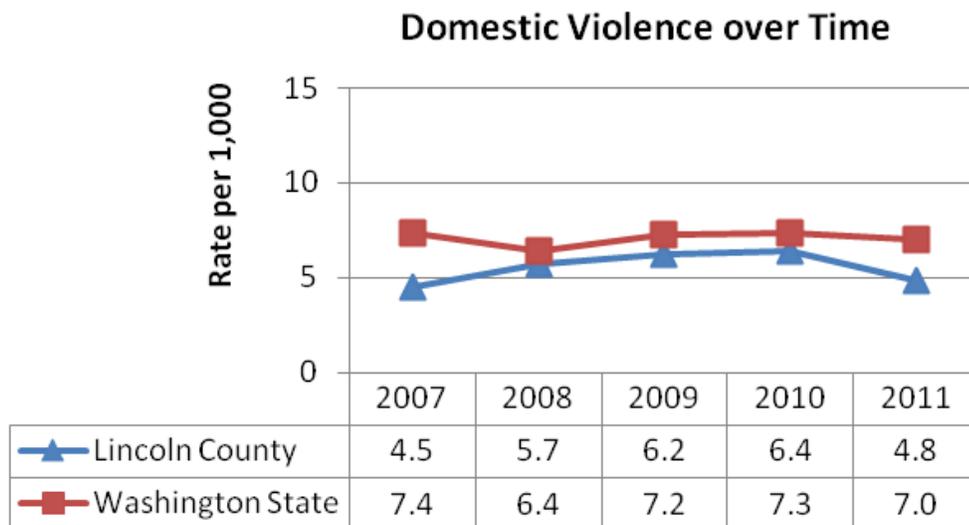
## Domestic Violence

**Definition:** Rate of domestic violence offenses reported to law enforcement per 1,000 population.

**Why this is important:** Domestic violence includes: physical assault or battery; sexual assault; or other abusive behavior that results in physical injury, psychological trauma, and/or death. The rate under-represents the real level of domestic violence in our community because not all incidents are reported to law enforcement.

**Where we are now:** In 2011 in Lincoln County, there were 51 domestic violence offenses. The domestic violence rate was stable from 2007 to 2011. The 2011 domestic violence rate in Lincoln County was significantly lower than that of Washington State.

**Additional Information:** The greatest proportion of domestic violence offenses in Lincoln County in 2011 was simple assault (88.2%). There were no violations of a protection order. The most severe outcome of domestic violence is murder, of which there were none in the county during 2011.



*Data Source: Washington Association of Sheriff and Police Chiefs.*

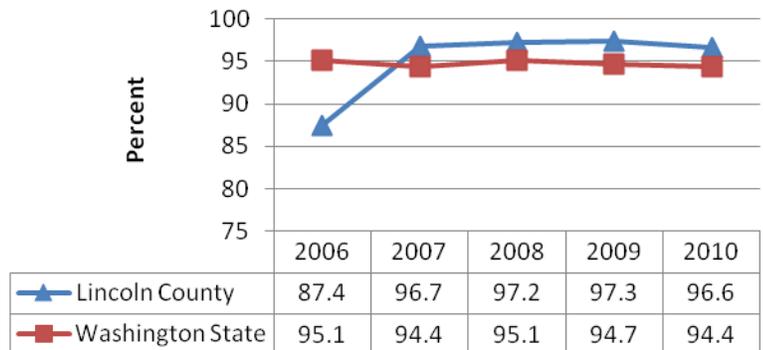
## Quality of Life (Adults)

**Definition:** Percent of adults that are very satisfied or satisfied with their life.

**Why this is important:** Life satisfaction, or well-being, is associated with self-perceived health, health behaviors, mental and physical illness and recovery, social connectedness, and productivity.

**Where we are now:** In 2010 in Lincoln County, 97% of adults reported they were satisfied with their life. The proportion of satisfied adults significantly increased from 2006 to 2007, then remained stable through 2010. Lincoln County had a rate of satisfied adults similar to that of Washington State in 2010.

Adult Life Satisfaction Over Time

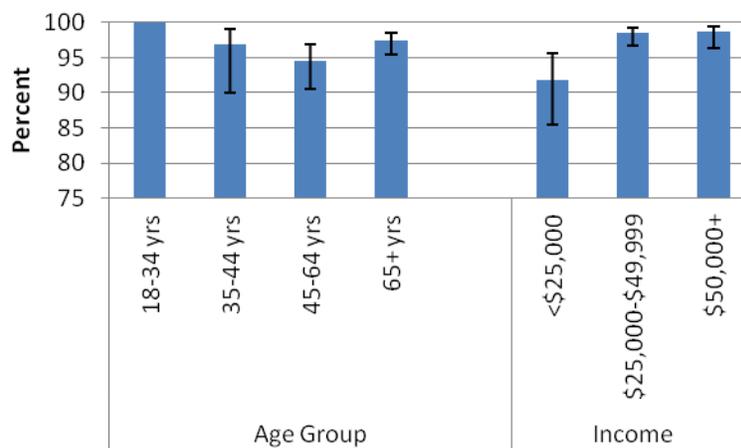


### Health Disparities:

Among adults in Lincoln County in 2008-2010:

- Adults 18-34 years of age were more likely to be satisfied with their life than older age groups.
- Life satisfaction increased as income increased.
- There was no difference in life satisfaction by education level or between males and females.

Disparities in Adult Life Satisfaction  
Lincoln County, 2008-2010



*Data Source: Washington State Department of Health, Center for Health Statistics, Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2006-2010. Calculations and presentation of data by Spokane Regional Health District, Community Health Assessment.*

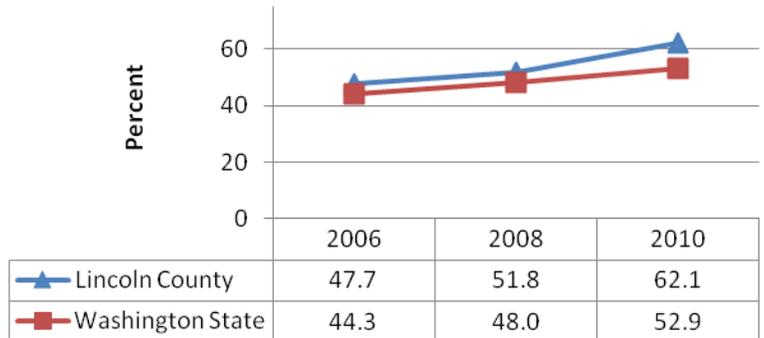
## Quality of Life (Youth)

**Definition:** Percent of youth that are very satisfied or satisfied with their life.

**Why this is important:** Life satisfaction, or well-being, is associated with self-perceived health, health behaviors, mental and physical illness and recovery, social connectedness, and productivity.

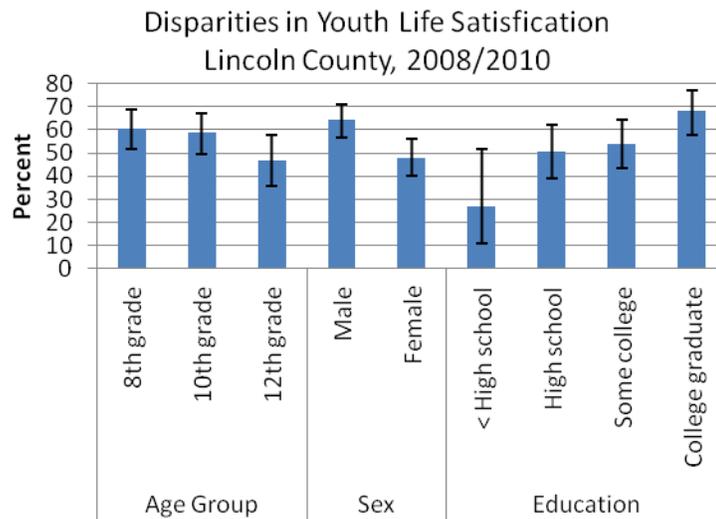
**Where we are now:** In 2008/2010 in Lincoln County, 56.6% of youth were very satisfied or satisfied with their lives. From 2006 to 2010, there was an increase in the proportion of youth very satisfied or satisfied with their lives. In 2010, the proportion of youth satisfied with their lives in Lincoln County was significantly higher than that of Washington State.

Youth Life Satisfaction Over Time



### Health Disparities:

- Life satisfaction decreased as age increased.
- Females were significantly less satisfied with life than males.
- Life satisfaction increased as maternal education increased.



*Data Source: Washington State Department of Health, Center for Health Statistics, Behavioral Risk Factor Surveillance System, supported in part by Centers for Disease Control and Prevention Cooperative Agreements U58/CCU022819-2 (2005), U58/CCU022819-3 (2006), U58/CCU022819-4 (2007), U58/CCU022819-5 (2008), U58/CCU022819-6 (2009). Calculations and presentation of data by Spokane Regional Health District, Community Health Assessment.*

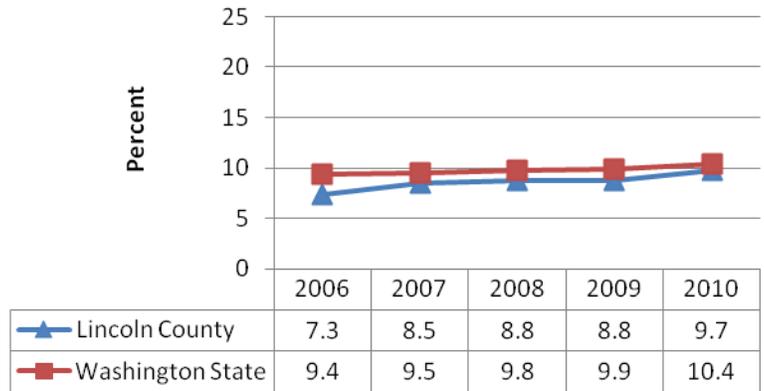
## Poor Mental Health (Adults)

**Definition:** Percent of adults who self-reported that their mental health was not good on 14 or more days in the last 30 days.

**Why this is important:** Good mental health enables a person to think and act productively, to cope with adversity, and to build strong relationships. Individuals with 14 or more days of poor mental health in a month would likely benefit from an intervention.

**Where we are now:** In 2010 in Lincoln County, 10% of adults reported 14 or more poor mental health days in the last 30 days. The proportion was stable from 2006 to 2010. The proportion adults with poor mental health in Lincoln County was similar to that of Washington State in 2010.

Adults With Poor Mental Health Over Time

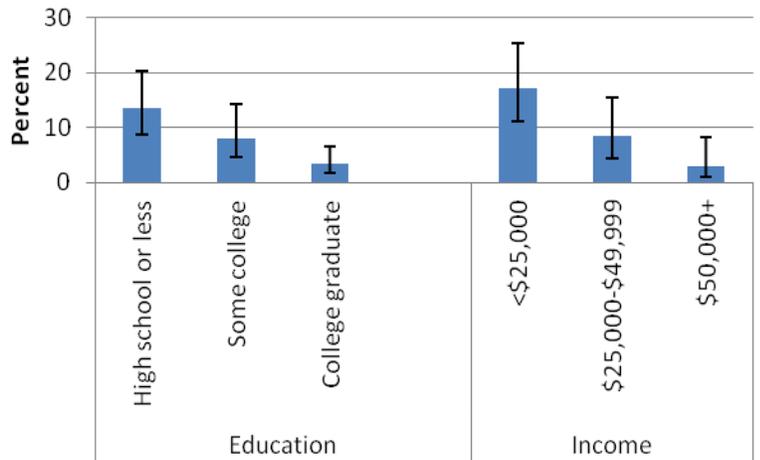


### Health Disparities:

Among adults in Lincoln County in 2008-2010:

- Poor mental health decreased as education level increased.
- Poor mental health decreased as income increased.
- There was no difference in poor mental health by age group or between males and females.

Disparities in Adults With Poor Mental Health  
Lincoln County, 2008-2010



*Data Source: Washington State Department of Health, Center for Health Statistics, Centers for Disease Control and Prevention (CDC). Behavioral Risk Factor Surveillance System Survey Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2006-2010. Calculations and presentation of data by Spokane Regional Health District, Community Health Assessment.*

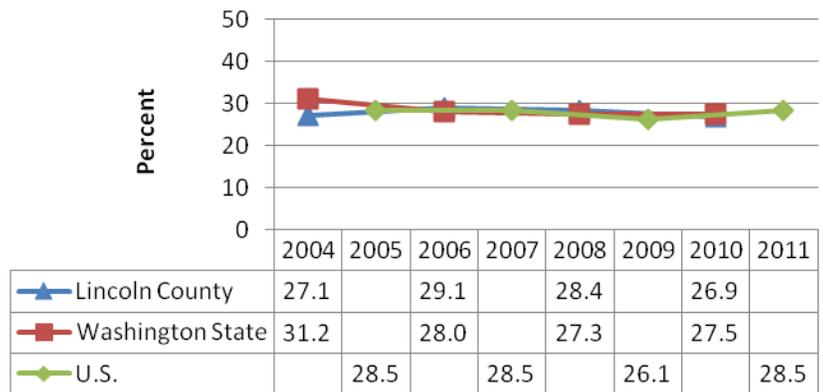
## Depression (Youth)

**Definition:** Percent of youth in grades 8, 10, and 12 who felt so sad or hopeless almost every day for 2 weeks or more in a row, that they stopped doing some of their usual activities.

**Why this is important:** Depression among youth may lead to failure in school, alcohol or drug use, suicide or other negative outcomes. Although depression is treatable, research estimates two-thirds of children with mental health problems do not get the help they need.

**Where we are now:** In 2008/2010 in Lincoln County, 27.7% of youth reported being depressed. From 2004 to 2010, the proportion of depressed youth has remained stable. The proportion of Lincoln County youth who were depressed was similar to that of Washington State in 2010 and the U.S. in 2011.

Youth Depression Over Time

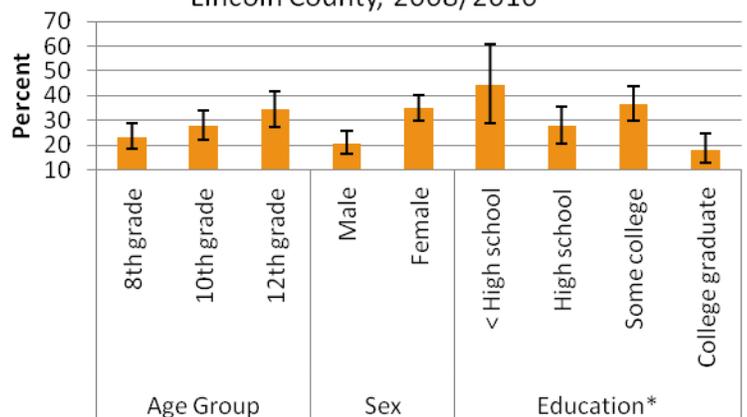


### Health Disparities:

Among youth in Lincoln County in 2008/2010:

- Depression was more likely among youth in 12<sup>th</sup> grade than youth in either 8<sup>th</sup> or 10<sup>th</sup> grade.
- Females had a significantly higher depression rate than males.
- Youth depression was significantly higher with a maternal education of less than high school, than for those with a college degree.

Disparities in Youth Depression  
Lincoln County, 2008/2010



*Data Source: Health Youth Survey. Washington State Department of Health. Calculations and presentation of data by Spokane Regional Health District, Community Health Assessment. Youth Risk Behavior Surveillance System Data. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.*

\*Education reflects the mother's highest education level

# Reproductive Health

## Teen Pregnancy

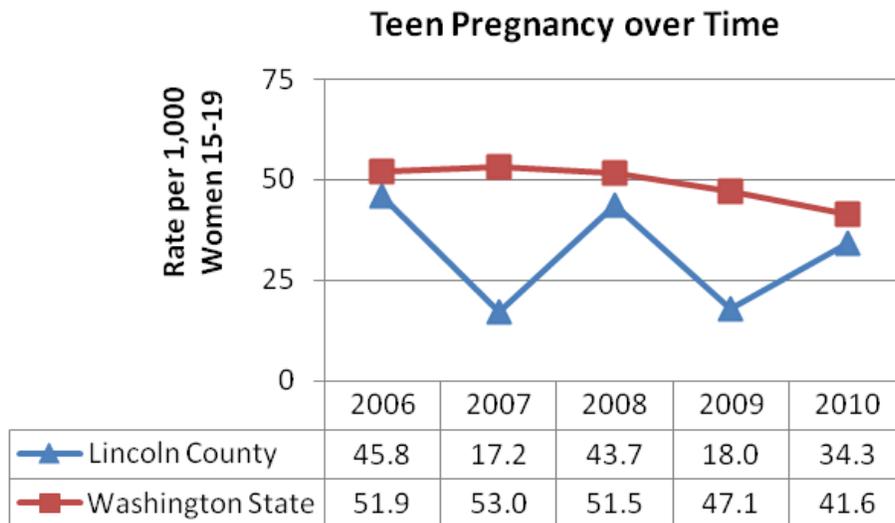
**Definition:** Rate of births and abortions per 1,000 women 15-19 years of age.

**Why this is important:** Infants born to teen mothers have an increased risk of poor health outcomes, such as low birth weight or death in infancy. Both the mother and the child will likely face fewer educational, economic, and social opportunities. Teen pregnancy is a strong risk factor for high school dropout, and the children of teenage mothers are more likely to drop out of school as well.

**Where we are now:** During 2006-2010 in Lincoln County, there was an average of 11 pregnancies per year among teens 15-19 years of age. There was no significant change in the teen pregnancy rate from 2006 to 2010. The teen pregnancy rate in Lincoln County was similar to that of Washington State in 2010.

### Health Disparities:

There were too few teen pregnancies in Lincoln County during 2006-2010 to evaluate differences by race.



*Data Source: Washington State Department of Health, Center for Health Statistics.*

## Preterm Birth

**Definition:** Percent of singleton births with an estimated gestation age <37 weeks.

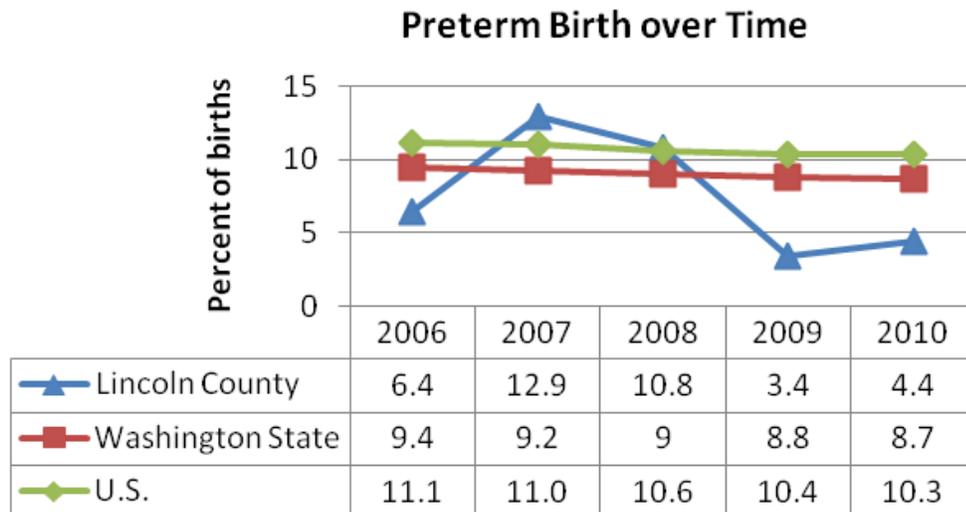
**Why this is important:** Preterm births are a leading cause of infant mortality. Although medical advances have helped to improve infant survival, these infants are at a higher risk for respiratory, gastrointestinal, immune system, central nervous system, hearing, and vision problems.

**Where we are now:** In 2010 in Lincoln County, 4% of singleton births were born preterm. There was no significant change in the proportion of preterm singleton births from 2006 to 2010. The preterm birth rate in Lincoln County was similar to that of Washington State and the U.S. in 2010.

### Health Disparities:

Among Lincoln County women who gave birth in 2006-2010:

- There was no difference in singleton low birth weight by age group, education level, or between women on Medicaid and those who are not on Medicaid.
- There were too few non-white births to be able to analyze for disparities.



Data Source: Washington State Department of Health, Center for Health Statistics.

## Low Birth Weight

**Definition:** Percent of singleton births with a birth weight <2500 grams (5.5 pounds).

**Why this is important:** Low birth weight infants are at an increased risk of dying within the first year of life, experiencing delayed motor and social development, and having a learning disability. The risk of these outcomes increases as birth weight decreases, with very low birth weight infants (<1500 grams, or 3.3 pounds) having the greatest risk.

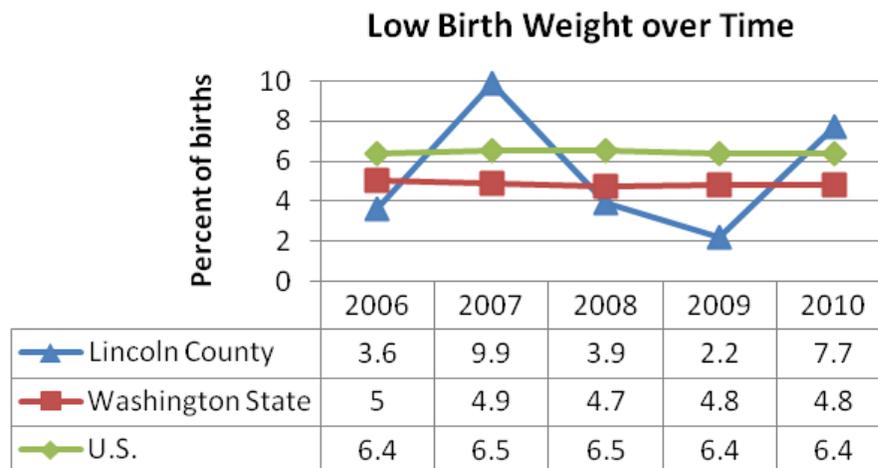
**Where we are now:** In 2010 in Lincoln County, 8% of singleton births had a low birth weight. There was no significant change in the proportion of singleton births with a low birth weight from 2006 to 2010. The low birth weight rate in Lincoln County was not statistically different from that of Washington State and the U.S. in 2010.

### Health Disparities:

Among Lincoln County women who gave birth in 2006-2010:

- There was no difference in singleton low birth weight by age group, education level, or between women on Medicaid and those who are not on Medicaid.
- There were too few non-white births to be able to analyze for disparities.

**Additional Information:** Infants at greatest risk for poor health outcomes are those with a very low birth weight; <1500 grams or <3.3 pounds. During 2006-2010 in Lincoln County, there were no births with a very low birth weight.



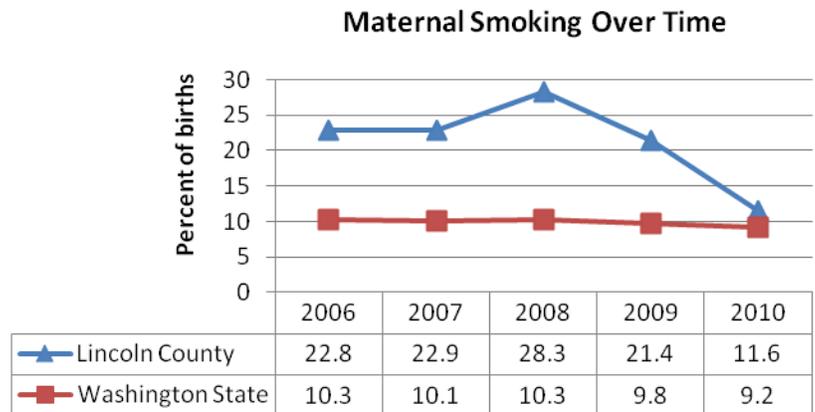
Data Source: Washington State Department of Health, Center for Health Statistics.

## Maternal Smoking

**Definition:** Percent of births where the mother smoked during pregnancy.

**Why this is important:** Not only is smoking harmful to the mother, smoking during pregnancy increases the risk of poor birth outcomes, such as low birth weight and preterm birth.

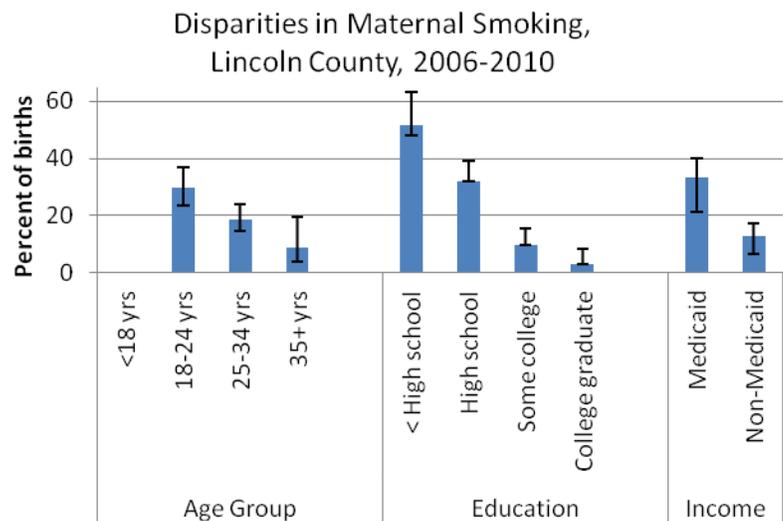
**Where we are now:** In 2010 in Lincoln County, 12% of births were to women who smoked during pregnancy. Maternal smoking significantly decreased from 2008 to 2010. The maternal smoking rate in Lincoln County was similar to that of Washington State in 2010.



### Health Disparities:

Among Lincoln County women who gave birth in 2006-2010:

- Smoking during pregnancy decreased as age increased.
- Smoking during pregnancy decreased as education increased.
- Women on Medicaid were more likely to smoke during pregnancy.
- There were too few non-white births to be able to analyze for disparities.



**Additional Information:** In 2010, 9.5% of births were to women who smoked during the third trimester of pregnancy. This decrease represents 18% of pregnant women who were smoking at the start of the pregnancy had quit smoking by the third trimester.

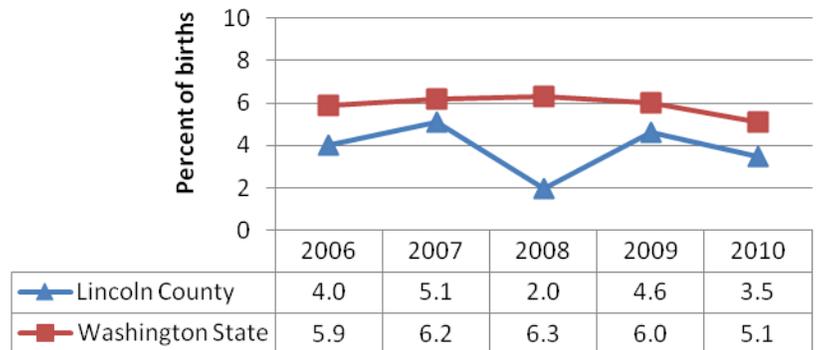
*Data Source: Washington State Department of Health, Center for Health Statistics.*

## Late or No Prenatal Care

**Definition:** Percent of births where the mother began prenatal care in the third trimester or had no prenatal care.

**Why this is important:** Late or no prenatal care significantly decreases the likelihood of a pregnant mother delivering a healthy infant of normal birth weight. In addition, late or no prenatal care postpones or eliminates the opportunity for health care providers to educate expectant mothers on high-risk behaviors and to detect and treat pregnancy-related conditions or complications that may affect fetal development.

Late or No Prenatal Care Over Time



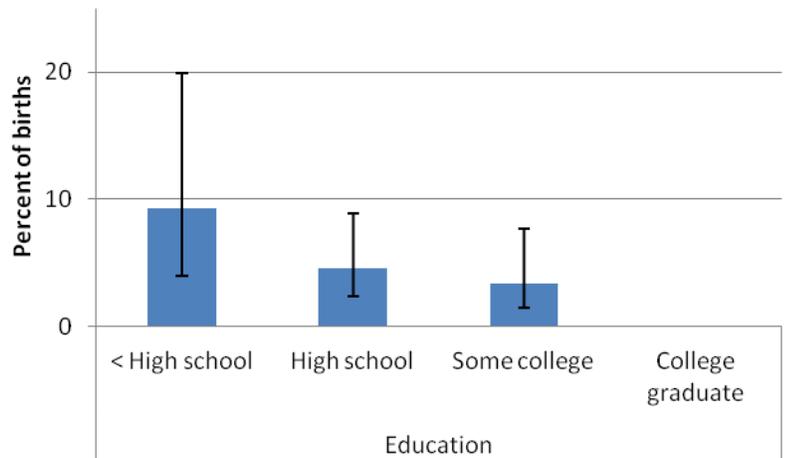
**Where we are now:** In 2010 in Lincoln County, 4% of births were to women who did not receive timely prenatal care. The rate of late or no prenatal care remained stable from 2006 to 2010. The late or no prenatal care rate in Lincoln County was similar to that of Washington State in 2010.

### Health Disparities:

Among Lincoln County women who gave birth in 2006-2010:

- Late or no prenatal care decreased as education increased.
- There was no difference in late or no prenatal care between women on Medicaid and women not on Medicaid.
- There were too few non-white births to be able to analyze for disparities.
- There were too few births with late or no prenatal care to be able to analyze by age group.

Disparities in Late or No Prenatal Care, Lincoln County, 2006-2010



**Additional Information:** In 2010, 82.2% of births to Lincoln County mothers began prenatal care in the first trimester. This proportion was stable from 2006-2010 and was similar to the Washington State rate of 80.1%.

Data Source: Washington State Department of Health, Center for Health Statistics.

# Conclusion

Some health areas have changed over time, either positively or negatively, and show disparities among groups. Knowledge about these indicators can aid in monitoring public health issues and in targeting interventions to groups at greatest risk.

Individual indicators of health for Lincoln County residents were scored on a three point scale: for the trend; in comparison to the Washington State rate, the national rate, and to Healthy People 2020 goals; and the level of disparities present. The magnitude of the indicator in the community was scored on a five point scale. Indicators that did not have one of these measures (e.g. having no comparable Healthy People goal) were allocated a score of 2 for that measure. High scores for any particular indicator showed that Lincoln County did not meet expectations of health in that category. The highest scores were for youth being bullied in the last 30 days, youth experiencing depression, the death rate, and adults having health insurance. The lowest scores were for vaccine-preventable diseases, adults smoking cigarettes, youth using illicit drugs, and domestic violence.

Although some indicators scored better than others, all indicators continue to be important to ongoing efforts to improve the health of the population. The scoring process helps identify areas where public health potentially could focus greater attention. For example, having ever been diagnosed with heart disease was ranked low. However, the death rate ranked as a high health concern. In Lincoln County, nearly half of all deaths are due to major cardiovascular disease. This cause was the second leading cause of death for adults 25-64 years of age and the leading cause for those 65 years of age or older. Health behaviors can greatly impact health status. As such, efforts for early recognition, lifestyle changes, and treatment to improve cardiovascular health could help decrease the number of heart disease-related deaths.

Public health in Washington State is mandated to meet standards related to understanding health issues in the community. The Lincoln County Health Department meets this standard through an assessment process of health indicators in the community. The information is disseminated to community partners to help guide policy decisions and improve the health status of Lincoln County's residents.