

# Spokane | Counts

2009 Update



**An Updated Summary of Selected Public Health Indicators**



**Executive Summary**

# 2009 Spokane | Counts

## An Updated Summary of Selected Public Health Indicators

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When citing this source, please use the following citation:

Spokane Regional Health District, Community Health Assessment Program, *Spokane Counts 2009*, February 2010.

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Public Health in Washington State has reached a pivotal point in history—change is inevitable and imminent. The current economic crisis of declining revenue and increasing costs has resulted in severe budget shortfalls across all sectors of government, leaving the future of public health uncertain. Insufficient funding is not the only threat public health faces. Public health is further challenged by an aging work force, recent and emerging health threats such as West Nile Virus, declining immunization rates in certain locales, an obesity epidemic, and the H1N1 influenza pandemic.

In light of this increasingly turbulent environment, the SRHD Board of Health (BOH) and Executive Management Team used a new methodology to develop the 2009-2014 Strategic Plan; a process of strategic thinking, planning, and management. This process assumes that “there is so much economic, social, political, technological and competitive change taking place that an organization must evaluate whether it should even be providing its present services, whether it should start providing different services, or whether it should be providing services in a fundamentally different way.” The 8 goals of the new strategic plan are to:

1. Increase the awareness of the value and role of public health in our community.
2. Develop and implement strategies to obtain sustainable, adequate public health funding.
3. Ensure an optimal, competent workforce to fulfill our mission.
4. Focus public health practice to address the determinants of health.
5. Practice collaborative, integrative leadership.
6. Commit to continuous quality improvement.
7. Enhance our ability to respond to emerging health issues.
8. Commit to improved, informed governance capacity through BOH education, policy development and advocacy.

The agency strategic plan will help the SRHD to rebuild the very foundation from which it serves this community—enabling a more efficient and effective response to a changing public health environment. Analysis of data remains paramount to public health programming and strategic planning efforts. Spokane Counts indicator data helps to:

- Identify emerging health issues so that the SRHD can align our funding with priority areas.
- Identify health disparities, which helps to direct the SRHD to work upstream of specific health issues by focusing on the determinants of health.
- Improve the quality of our performance.
- Be accountable to the public.

At a time when public health must compete against other legislative funding priorities, it is increasingly important to make the success of public health efforts transparent to the public and stakeholders alike. Analysis of the Spokane Counts indicator data helps us demonstrate the value of public health to our community as our efforts help change the indicators over time.

***Always working for a safer and healthier community***

# Executive Summary

Spokane Regional Health District (SRHD) published the first *Spokane Counts: A Summary of Selected Public Health Indicators* in 2003. This document provided baseline data demonstrating the health status of our community and some individual risk behaviors that contribute to health outcomes. A thorough evaluation process identified 48 indicators that can be impacted by public health and community partners. SRHD updates *Spokane Counts* indicators biennially to monitor the community's health over time.

When *Spokane Counts* is updated, the indicators are reviewed to ensure they are providing information that is appropriate and useful. The indicators may change due to definition or data source changes. *Spokane Counts* 2005 reported on 48 indicators and *Spokane Counts* 2007 and 2009 reports on 44 indicators.

Each health indicator may be affected by demographic or socioeconomic factors. Many studies support a relationship between lower socioeconomic status and poorer health outcomes. Each indicator was analyzed by age, sex, race, education, and income when these factors were available.

To determine changes in the community's health over time, the trends for *Spokane Counts* 2009 indicators were compared to the trends from *Spokane Counts* 2007. This provides a quick summary of health issues in Spokane County that are improving or getting worse. Indicators that showed improvement between 2007 and 2009 include: infant mortality; family violence; adult cigarette smoking and fruit and vegetable consumption; and youth depression, binge drinking, and obesity. Indicators that worsened between 2007 and 2009 include: adult binge drinking and obesity; youth tobacco use and fruit and vegetable consumption; mortality; chronic hepatitis C; very low birth weight infants; and unintentional injuries.

Information about the selected health indicators gives the community an accessible tool to help determine priority health issues and identify affected populations. The information may also help direct health interventions to areas of greatest need and build support for health policies, as well as educate the public, community organizations, and policymakers on the community's health.

Data for the indicators are available online at [www.srhd.org/spokanecounts](http://www.srhd.org/spokanecounts). Basic demographics of Spokane County over time are also available on the SRHD website, [www.srhd.org](http://www.srhd.org).

**TABLE 1:**  
**Changes in Trends for Spokane County**  
**From the 2007 Report to the 2009 Report**

Better	Worse
<b>Decreased over time</b>	<b>Increased over time</b>
Adult smokers	Adult binge drinking
Domestic violence	Adult obesity
Infant mortality	Chronic hepatitis C
Youth depression	Unintentional injury
Youth binge drinking	Youth smokeless tobacco use
	Youth smokers
<b>Increased over time</b>	<b>No longer decreasing</b>
Adult fruit & vegetable intake	Death rate
	Very low birth weight
<b>No longer increasing</b>	<b>No longer increasing</b>
Child abuse	Life expectancy
Youth obesity	Youth fruit & vegetable intake



## A Brief Look at Spokane County

Spokane County is located along the central portion of the eastern edge of Washington State. Spokane County was the 4th most populous county in the state in 2009 with 465,000 individuals. This accounts for 7.0% of the state's population. The city of Spokane was the second most populous incorporated city in the state with 205,500 individuals. The city of Spokane accounts for 44.2% of the county population with another 26.7% living in other incorporated municipalities in the county. The remaining 29.1% live in unincorporated areas in Spokane County. Spokane County has the eighth highest population density in the state (out of 39 counties) with a density of 264 individuals per square mile.

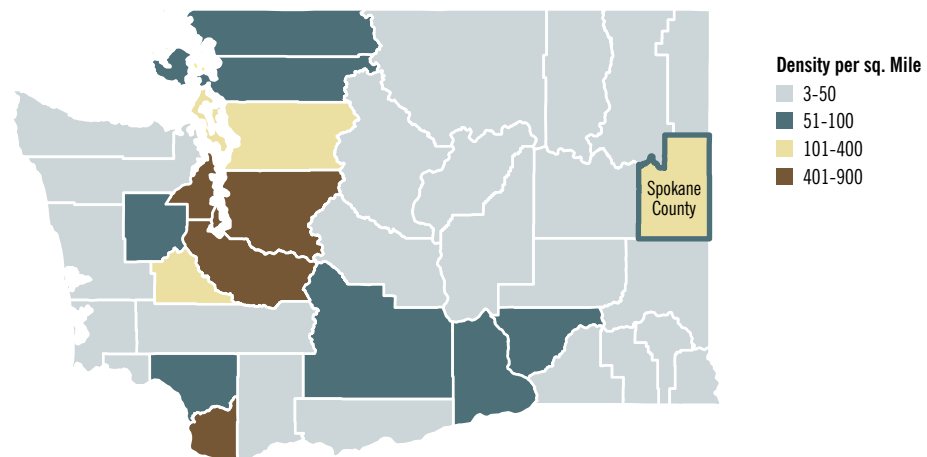
The population in Spokane County is fairly evenly distributed between age groups with the oldest age group having the smallest proportion of the population. In 2009 the population was comprised of:

- 23.6% youth (0-17 years)
- 30.1% young adults (18-39 years)
- 33.0% older adults (40-64 years)
- 13.3% seniors (65+ years)

Spokane County is not very racially diverse. Among county residents, 91.5% were White, 1.8% Black, 1.5% Native American/Alaska Native, 2.6% Asian/Pacific Islander, and 2.6% were of two or more races. Residents of Hispanic ethnicity comprised 3.3% of the population.

The projected median household income in Spokane County for 2009 was \$42,196 compared to \$52,413 statewide. In 2008, 1 in 10 individuals in the county lived below the 100% Federal Poverty Level (FPL) and 3 in 10 lived below the 200% FPL. The proportion of Spokane County residents living in poverty, below the 200% FPL, was significantly higher than the statewide proportion (29.2% and 26.0%, respectively).

### Population Density by County Washington State, 2009



Source: Washington State Office of Financial Management

# Health | Behaviors

There was a significant change in **tobacco use** among the Spokane County population. In 2008, 18% of Spokane County adults smoked cigarettes, which was a significant decrease since 2004. The proportion of **adults** who smoke was higher among those with lower income and those with less than a high school education. Among **youth**, 13% smoked cigarettes in 2008, which was a significant increase since 2004. The prevalence of youth who smoke increased with grade level and was higher among females, Blacks, and Native Americans/Alaska Natives. Use of **smokeless tobacco** in Spokane County occurred in 1 in 20 youth and adults. Among Spokane County youth, smokeless tobacco use increased since 2004, was more likely among males and Blacks, and use increased as grade level increased. In 17% of births in Spokane County, the **mothers smoked** during pregnancy. This rate is significantly higher than that for either Washington State or the nation. Differences in maternal smoking occurred by age, race, education, and income.

**Binge drinking** is a measure of alcohol misuse. In 2008, 17% of Spokane County adults reported binge drinking. Proportions were lower for females and decreased as age increased. **Youth binge drinking** in Spokane County was significantly lower than nationally, yet 15% of youth reported binge drinking. Binge drinking increased as grade level increased and was more likely among Blacks. **Motor vehicle crash (MVC) fatalities** are one severe outcome of alcohol use. In 2007, there were 9 alcohol-related MVC fatalities in Spokane County accounting for one-quarter of all fatal motor vehicle crashes.

The proportion of adults in Spokane County, who reported using **illicit drugs** in the last 30 days (6%) has not changed over the last 5 years. Drug use in the last 30 days among youth, however, increased from 16% in 2004 to 18% in 2008. Drug use increased as grade level increased and was higher among males, Blacks, and Native Americans/Alaska Natives.

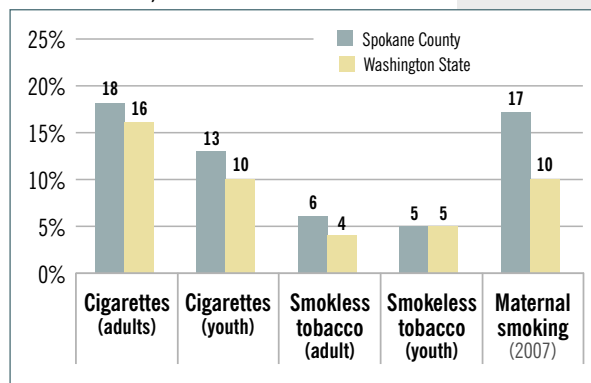
**Fruit and vegetable intake** of 5 or more servings per day increased among adults to 25%, but remained stable among youth at 24%. There were no demographic differences in adult fruit and vegetable intake. Looking at youth information, males, Native Americans/Alaska Natives, and Asian/Pacific Islanders were more likely to eat the Centers for Disease Control and Prevention's recommended 5 or more servings per day.

The proportion of adults who were moderately **physically activity** for 30 minutes on 5 or more days a week remained stable at 41%, which is significantly higher than nationally (37%). There were no demographic differences in adult physical activity. Among Spokane County youth, 44% met the physical activity guideline of any physical activity for a total of 60 minutes per day five days a week. Youth physical activity decreased as grade level increased, was higher among males, and was lower among Asian/Pacific Islanders.

## Indicators include:

- Alcohol-related motor vehicle crash fatalities
- Binge drinking ADULT
- Binge drinking YOUTH
- Fruit and vegetable intake ADULT
- Fruit and vegetable intake YOUTH
- Illicit drug use ADULT
- Illicit drug use YOUTH
- Maternal smoking
- Physical activity ADULT
- Physical activity YOUTH
- Smokeless tobacco use ADULT
- Smokeless tobacco use YOUTH
- Smokers ADULT
- Smokers YOUTH

**FIGURE 1:**  
**Tobacco Use, 2008**



Source: Behavioral Risk Factor Surveillance System; Washington State Healthy Youth Survey; Washington State Department of Health, Center for Health Statistics

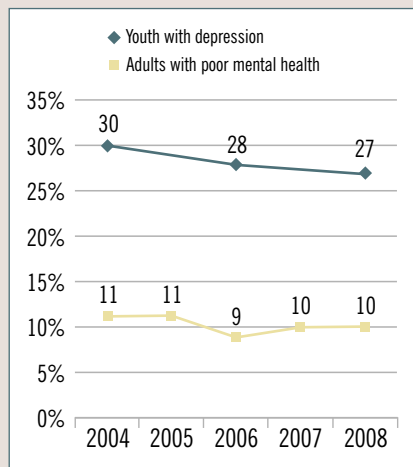


# Social and Mental Health

## Indicators include:

- Child abuse
- Depression **YOUTH**
- Domestic violence
- Hope for the future **ADULT**
- Mental health **ADULT**
- Vulnerable adult abuse

**FIGURE 2:**  
**Poor Mental Health**  
**Spokane County**

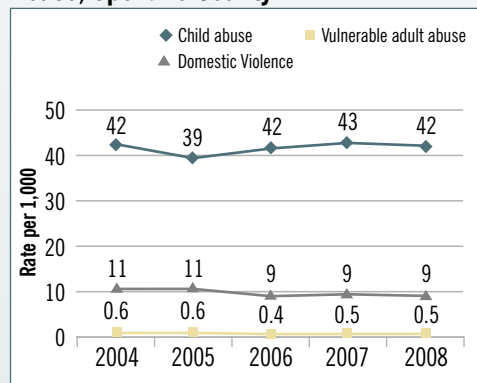


Source: Behavioral Risk Factor Surveillance System; Washington State Healthy Youth Survey

There was no significant change in the **adult mental health** indicator over time. In 2007, 1 in 10 adults reported 14 or more days of poor mental health in the last 30 days. The proportion decreased as education level and income increased. In 2008, 27% of youth reported being depressed in the last year. **Youth depression** decreased since 2004, but was more likely among older grades, those who are females, and Native Americans/Alaska Natives. Nearly three-quarters of Spokane County adults had **hope for the future**, meaning they felt they could do anything they really set their mind to. The proportion with hope for the future increased as income increased and decreased as age increased.

Overall, **child abuse** rates in Spokane County remained stable from 2004 to 2008. The rates of **domestic violence** and **vulnerable adult abuse** in Spokane County significantly decreased from 2004 to 2008. Spokane County's rates for child abuse, domestic violence, and vulnerable adult abuse were significantly higher than the Washington State rates.

**FIGURE 3:**  
**Abuse, Spokane County**



Source: Washington Association of Sheriffs and Police Chiefs; Department of Social and Health Services

## Indicators include:

- Food or waterborne diseases
- Vector-borne diseases



# Environmental Public Health

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 Spokane County from 2003 to 2007 with a 5 year rate of 37 cases per 100,000 population. The risk of contracting one of these diseases decreased as age increased. **Vector-borne diseases** occur infrequently in Spokane County, although public health vigilantly monitors for them.

# Reproductive | Health



**Pregnancy** rates in Spokane County increased from 2003 to 2007. Women in their 20's, Blacks, and Native American/Alaska Natives had the highest pregnancy rates. **Unintended pregnancies** accounted for 1 in 3 Spokane County births. This rate does not include pregnancies that terminated prior to a live birth by either induced abortion or a fetal death. Figure 4 displays pregnancy outcomes for all pregnancies. Significant differences in unintended pregnancy were present by age group, income level,

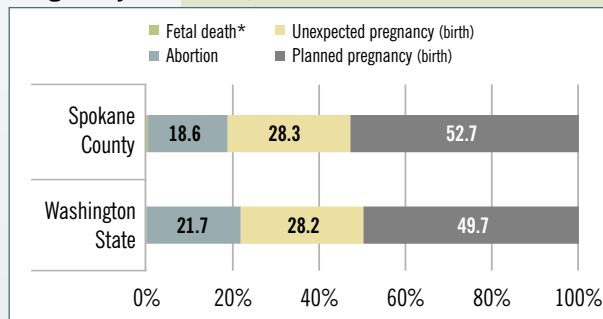
and race. In 2007, 19% of Spokane County pregnancies ended in **abortion**, which is a lower proportion than in Washington State. The proportion of pregnancies ending in abortion decreased as maternal age increased.

In 2007 among births to Spokane County women, 1% had a **very low birth weight** (<1500g) and 11% were a **preterm birth**. The rates remained stable since 2003 and no differences were present by age group, income level, education level, and race.

## Indicators include:

- Abortion
- Pregnancy
- Preterm birth
- Unintended pregnancy
- Very low birth weight

FIGURE 4:  
Pregnancy Outcomes, 2007



\*Fetal death accounted for 0.4% of pregnancies in both Spokane County and Washington State  
Source: Washington State Department of Health, Center for Health Statistics

# Mortality |

**Life expectancy** at birth remained stable from 78.3 years in 2003 to 78.9 years in 2007. Life expectancy varied by sex and race. The **death** rate varied by age and race. The leading cause of death among Spokane County residents in 2007 was cancer followed closely by heart disease. The **infant mortality** rate significantly decreased from 6 out of 1,000 births in 2003 to 4 out of 1,000 births in 2007.



Death rates from intentional injury remained stable from 2003 to 2007 in Spokane County. The 2007 **suicide** rate in Spokane County of 16 per 100,000 population was significantly higher than the statewide and national rates. The suicide rate increased as age increased, and males were more likely to commit suicide than females. The 2007 **homicide** rate in Spokane County of 3 per 100,000 population was significantly lower than the national rate.

## Indicators include:

- Death
- Life expectancy
- Homicide
- Suicide
- Infant mortality

TABLE 2:  
Leading Causes of Death  
Spokane County, 2007

Rank	Cause	Percent
1	Cancer	23.8
2	Heart disease	22.6
3	Unintentional injuries	6.6
4	Chronic lower respiratory disease	6.0
5	Stroke	5.9
6	Alzheimer's disease	5.0
7	Diabetes	3.4
8	Suicide	2.0
9	Influenza and pneumonia	1.9
10	Atherosclerosis	1.4
	All other Causes	21.4

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

# Health | Status

## Indicators include:

Cancer

Food insecurity **YOUTH**

Health status **ADULT**

Hospitalization

Obesity **ADULT**

Obesity **YOUTH**

Oral health **CHILDREN**

Unintentional injury

**TABLE 3:**  
**Leading Causes of Hospitalization**  
**Spokane County, 2007**

Rank	Cause	Percent
1	Unintentional injuries	16.0
2	Liveborn infant	12.3
3	Childbirth	12.1
4	Heart diseases	9.3
5	Digestive system disorder	8.2
6	Respiratory disease	7.7
7	Genito/urinary disease	5.2
8	Cancer	3.6
9	Fractures	3.1
10	Pregnancy complications	3.0
	All other Causes	19.4

Source: Washington State Department of Health, CHARS



Among Spokane County adults, 59% felt their **health status** was excellent or very good. The proportion decreased as age increased and increased as income and education level increased. **Food insecurity** is associated with poorer self-reported health status. Among Spokane County youth, 19% reported that at least once in the last year they or their family had to cut meal size or skip meals because there was not enough money for food. Food insecurity increased as grade level increased and was more likely among Blacks and Asian/Pacific Islanders.



**Hospitalization** rates, excluding childbirth and newborn infants, increased between 2003 and 2007 in Spokane County. In 2007, the Spokane County rate of 7,918 per 100,000 was higher than the statewide rate. The rate increased throughout adulthood, and females had a higher rate than males. The leading cause of hospitalization in 2007 was unintentional injury.

**Unintentional injury** hospitalization rates increased in Spokane County from 2003 to 2007. The 2007 Spokane County rate of 712 per 100,000 was significantly higher than the rate for Washington State. Unintentional injury rates increased as age increased.

Incidence of **cancer** in Spokane County remained stable from 2002 to 2006. The 2005 Spokane County rate of 534 per 100,000 was significantly higher than the national rate. The likelihood of developing cancer increased as age increased, and Whites were more likely to develop cancer than were other races.

In Spokane County, 1 in 4 adults and 1 in 10 youth were **obese**. Obesity among adults increased significantly from 2004 to 2008. The proportion of adults who were obese decreased as education level increased. Male youth were more likely to be obese than were female youth.

The **oral health** status of children (2nd and 3rd grade) worsened from 2000 to 2005. The proportion of Spokane County children who have experienced dental decay increased from 49% in 2000 to 62% in 2005. Decay experience was more likely among lower income children.



# Communicable Disease

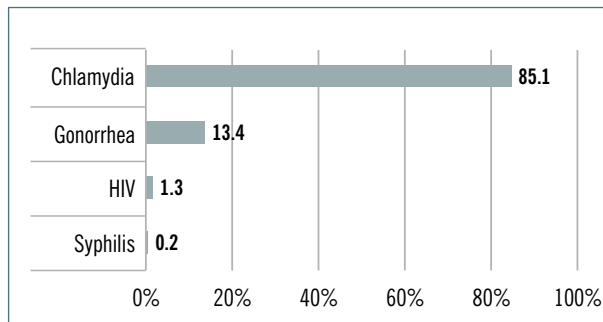
## Indicators include:

Chronic hepatitis C  
Sexually transmitted infections  
Tuberculosis  
Vaccine preventable diseases

**Vaccine preventable disease** rates in Spokane County are variable from year to year due to outbreaks. Overall there was a significant increase in these diseases from 6 per 100,000 population in 2003 to 14 per 100,000 population in 2007. Spokane County has a significantly lower rate than does Washington State. Young children were more likely to contract a vaccine preventable disease than were older age groups.

The rate of reported **sexually transmitted infections (STIs)** in Spokane County increased significantly from 297 per 100,000 in 2004 to 408 per 100,000 in 2008. Historically, rates in Spokane County have been consistently lower than those in either Washington State or the nation. However, the 2008 STI rate in Spokane County was significantly higher than the rate in Washington State. STI rates were higher among adults 18-34 years of age and females. In comparison to Whites, Blacks and Native American/Alaska Natives had higher rates. The most prevalent STI is chlamydia.

**FIGURE 5:**  
**Type of Sexually Transmitted Infections**  
**Spokane County, 2008**



Source: Washington State Department of Health

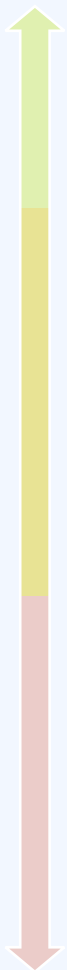
The **chronic hepatitis C** rate in Spokane County increased from 105 per 100,000 population in 2003 to 117 per 100,000 population in 2007. Adults 35-64 years of age had a higher rate than other age groups and males had a higher rate than females.

The **tuberculosis (TB)** rate in Spokane County fluctuated between 2004 and 2008. Overall, there was no significant linear trend. The 5-year Spokane County TB rate of 2 per 100,000 population was significantly lower than that of either Washington State or the United States. The likelihood of having TB increased as age increased.



# Conclusion |

## Public Health Indicator Categories Ranked by Attainment of Goals



<b>High score or meeting expectations</b>
Physical activity Infant mortality Pregnancy outcomes Tuberculosis
<b>Intermediate score</b>
Alcohol misuse Nutrition Health status (adult) Vaccine preventable diseases Life expectancy Food or waterborne diseases Weight status Family violence Mental health Tobacco use
<b>Low score or not meeting expectations</b>
Cancer Death Sexually transmitted infections Unintended pregnancies Intentional injury Illicit drug use Oral health (children) Chronic hepatitis C Hospitalization Unintentional injury

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 Spokane County residents were scored based on the trend and in comparison to the Washington State rate, the national rate, and to Healthy People 2010 goals. These scores were divided into low, intermediate, and high scores. More detail on the scoring process is available in the *Spokane Counts 2009 Methodology* document. Low scores for any particular indicator showed that Spokane County did not meet expectations of health in that category. The lowest scores were for unintentional injury, hospitalizations, and chronic hepatitis C. The highest scores were for physical activity, infant mortality, and pregnancy outcomes. 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.

Public health in Washington State is mandated to meet standards related to understanding health issues in the community. The Spokane Regional Health District meets this standard through an ongoing 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 Spokane County's residents.

You can view Washington State's Public Health Standards at [www.doh.wa.gov/phip/PerfMgmt/07stds/overview.htm](http://www.doh.wa.gov/phip/PerfMgmt/07stds/overview.htm).

↑ Rates are up/ Spokane County higher ↓ Rates are down/ Spokane County lower	↔ No difference/ no change ▲ Difference/ disparity	Blank Not able to evaluate, not available/applicable	Trend	Geographic Comparison:		Spokane County Group Comparisons:				
				State	National	Age	Sex	Race	Education	Income
<b>Communicable   Disease</b>										
			↑	↑		▲	▲			
			↑	↑	↓	▲	▲	▲		
			↔	↓	↓	▲	↔			
			↑	↓	↔	▲	↔			
<b>Environmental   Public Health</b>										
			↔	↔		▲	↔			
<b>Health   Behaviors</b>										
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<b>Health   Status</b>										
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<b>Mortality  </b>										
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<b>Reproductive   Health</b>										
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<b>Social and   Mental Health</b>										
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			↓	↑						
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