

The Health of Grant County

A Community Health Assessment Report **2015**



Table of Contents

Acknov	vledgements	3
Letter i	from the Health Officer &	
Admini	strator	5
Introdu	ction and Background	7
N	Methods	8
Ι	Oata	8
L	imitations	8
F	riorities	9
Geogra	phy and Demographics	.11
C	Geography	12
F	opulation	12
A	.ge	13
F	Race	13
E	Ethnicity	14
I	ncome	14
Social a	and Physical Environment	.17
E	Conomics	18
P	Poverty	20
E	Education	21
L	anguage	22
F	`oreign Born	23
	Iousing	
	`ransportation	
A	ir Quality	26
P	Pesticides	26
	Crime	
Access	to Care	.29
I	nsurance Status	30
F	Iealth Professional Shortage Area	31
Health	Behavior	35
N	Tutrition	36
E	Exercise	36
S	Substance Use	37
F	Iealthy Communities Grant Count	y40
V	accinations	40
	Screenings	
Health	Outcomes	.43
C	Chronic Disease	44
C	Dbesity	45
L	ife Expectancy	45
Т	Seath Pate	16

Hospitalizations	.47
Notifiable Conditions	.48
Accidental Death and Preventable Injury	.54
Suicide	.58
Maternal and Child Health	.59
Summary	.63
Indicators List	65
References	.67
Appendices	73
Moses Lake Factsheet	
Ephrata Factsheet	
Quincy Factsheet	

Electric City & Grand Coulee Factsheet

Mattawa Factsheet

Acknowledgements

This community health assessment would not have been possible without the help of the key informant interviewees and advisor groups. The Grant County Health District would like to thank the following organizations for sharing their insight and perspective:

Health Care Facilities

Confluence Health—Moses Lake Clinic

Samaritan Healthcare

Moses Lake and Quincy Community Health Centers

Columbia Basin Hospital

Quincy Valley Medical Center

Columbia Basin Health Association

Mattawa Community Medical Clinic

Coulee Medical Center

Cities

Moses Lake, Ephrata, Quincy, Warden, Hartline, Mattawa, Electric City

School Districts

Moses Lake, Ephrata, Quincy, Wahluke, Grand Coulee Dam, Warden, Royal, Wilson Creek

Organizations

The Grant County Sherriff's Office

Moses Lake Police Department

Ephrata Police Department

Quincy Police Department

Mattawa Police Department

Moses Lake Fire Department

Grant County Fire Districts

Grant County Mosquito Control Districts

Moses Lake Customer Service Office, Department of Social and Health Services

Family Planning of Grant County

Housing Authority of Grant County

Grant Integrated Services

The Grant County Economic Developmental Council

The Moses Lake Chamber of Commerce

The Grand Coulee Dam Area Chamber of Commerce



Acknowledgements

Aging and Adult Care of Central Washington
The Veteran's Coalition
The Washington State Migrant Council
Family Services of Grant County
WSU Extension office for Grant/Adams County
Big Bend Community College
Worksource

And

54 Key Informant Interviewees

Health Officer & Administrator

We are pleased to present to you the 2015 Grant County Community Health Assessment. The health assessment is a systematic process in which collect data about health issues important to our communities. It was developed with the support and participation of numerous local organizations and partners. This report is an important tool: it guides us all towards the ultimate goal—a healthier Grant County.

The Grant County Health District (GCHD) was established in 1967 as the public health agency for the county. In 1970, the population of our county was 41,881. In the past 45 years that number has more than doubled to about 92,000 residents. This increase together occurred with changes in ethnicity, employment, healthcare and education. All of it has brought new challenges and responsibilities.

In the past, public health mainly enforced sanitation regulations and worked to prevent infectious diseases. Those areas remain important. However, public health has taken up new initiatives against chronic diseases, such as heart disease and diabetes. We study and act against poor nutrition, inactive living, and tobacco use. We also work to monitor and address threats to our communities from Ebola, pandemic flu, and economic or climate changes. We intervene in the area of the negative social factors: it is poverty, low education, and crime that impact the health of Grant County residents the most.

A community relies on the health and vitality of its members to thrive. That is why public health work is not done in isolation. We rely heavily on a multitude of partners in our community including schools, healthcare, local governments, public safety agencies, service clubs, churches, employers, and many others. Together, with the information provided in this document, we can transform Grant County into a healthier place to live, work, learn, and play.

Sincerely,

Dr. Alexander Brzezny, Grant County Health Officer

&

Jefferson Ketchel, MA, RS, Grant County Health District Administrator "Always Working for a Safer and Healthier Grant County"





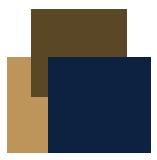


Jefferson Ketchel, MA, RS





Assessment is one of three core public health functions. Data collected through community health assessment inform both policy development and assurance activities by providing information for problem identification and policy formulations, as well as implementation and evaluation of prevention and intervention activities. ⁷³



Introduction and Background

Community health assessment is a collaborative process of collecting, analyzing, and distributing information about the health needs of a community. This assessment report is a record of statistics on health status, needs, and local resources available to overcome barriers to being the healthiest community possible. The Grant County Health District used a rigorous process to analyze and choose health indicators that provide a full and accurate view of the health of Grant County residents. Health indicators represent a snap shot in a particular timeframe that describe the overall health of Grant County. Indicators are available at the national, state, county, and city levels and are reported where appropriate throughout this report. This report is used to determine priority areas for the Grant County Health District and community partners' activities around improving population level health outcomes.

Methods

This community health assessment was conducted using the Healthy People 2020 MAP-IT Framework. The MAP-IT Framework is a set of steps designed to mobilize, assess, create and implement a plan to address health issues in a community and to track the community's progress. Advisor groups consisting of the Grant County Health District, city leaders, leaders of healthcare organizations, local business owners, school districts, and community organizations were established in 5 cities in Grant County. These advisor groups were established to help direct the process of the health assessment.

Data

Primary data was collected through key informant interviews and community forums to add context, identify the assets and needs of the community, and guide the collection of secondary data. Quotes from these interviews are included throughout the report. Secondary data was collected from a wide variety of sources listed in the reference section of this document. Where data at the city or zip code level are available and considered valid, the data will be presented. Where data is not available or valid at the zip code geographic level, city, county, or state data is

Limitations

There are many limitations to the data that are available to assess rural populations. Comparisons that would identify health inequities, differences in the social determinants of health, and differences in health indicators between populations are limited. Limitations to Grant County population data include small population sizes, fewer data collection opportunities, small and isolated population centers, and small sample sizes. The reasons for this include urban areas have more organizations that collect primary data on health and resources available for data collection,

the cost of primary quantitative data collection in rural areas can be more expensive, and data collected on smaller populations may not be as valuable or necessary for state and urban agencies that collect data. Furthermore, many state and national surveys do

Introduction and Background

not include sufficient numbers of surveyed people to make valid conclusions about population based health outcomes in Grant County.

Priorities

Advisor groups from all cities expressed an interest in including data on indicators identified as important by state or national organizations. A survey of national initiatives was completed and three organizations and their priorities were chosen to be highlighted by this report. Additionally, Washington State's Results Washington initiatives were included. As data included from these programs are presented, specialized logos will appear.

HP 2020

Healthy People 2020

Healthy People 2020 provides science-based, 10-year national goals for improving the health of all Americans. Overall, Healthy People encompasses 42 topic areas with nearly 600 objectives and 1,200 measures. Leading Health Indicators (LHI) are a small subset of the larger objectives and measures that were selected to communicate high priority issues and actions that can be taken to address them. When data on a LHI is presented in this report, the HP 2020 icon will appear. ¹



CDC Winnable Battles

To keep pace with emerging public health challenges and to address the leading causes of death and disability, the Centers for Disease Control and Prevention (CDC) has begun an effort to quickly achieve measurable impact in a few targeted areas. The CDC Winnable Battles are public health priorities with large-scale impact on health and with known, effective strategies to intervene. Whenever data on a Winnable Battle target is presented, this CDC WB icon will appear. ²



County Health Rankings

The County Health Rankings program is a collaboration between the Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute. This program ranks the health of counties within a state and describes what affects the health of residents. When health factors or outcomes from the County Health Rankings program are included, this logo will appear. ³



Results Washington

Washington State's Governor, Jay Inslee, used an innovative and data driven approach to set administrative goals for his agenda "Building a Working Washington". Goal 4 in Results Washington addresses Healthy and Safe Communities and incorporates topics around healthy, safe, and supported people. Throughout this report you will see this icon indicating a Results Washington outcome or indicator. ⁴

Introduction and Background

The Grant County Health District

The Grant County Health District is responsible for conducting public health activities for Grant County, Washington. The 3 main divisions, Environmental Health, Community Public Health, and Administration, are staffed by a total of 26 employees who serve county residents with excellence to assure the safety and health of the population.

The Health District is lead by the Grant County Board of Health made up of Grant County Commissioners and representatives of city governments within the county. In 2013 The Grant County Board of Health was selected to be the recipient of the Board of Health Gold Award by the National Association of Local Boards of Health (NALBOH). This award is presented to boards of health who demonstrate outstanding leadership and commitment in the areas of board development, public health policy, or public health priorities.

Current members of the Grant County Board of Health are:

Tony Massa, Chair - Warden Mayor (George, Warden, Royal City, and Mattawa)

Richard Stevens - Grant County Commissioner

Cindy Carter - Grant County Commissioner

Carolann Swartz - Grant County Commissioner

Mark Wanke, Vice Chair - Ephrata City Council

John Hillman – Soap Lake City Council (Wilson Creek, Krupp, and Soap Lake)

David Curnel - Moses Lake City Council

Tom Harris - Quincy City Council

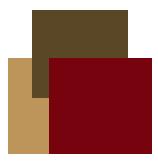
Marie Chuinard - Electric City Council (Electric City, Coulee City, Grand Coulee, and Hartline)

Representative Laurie
Jinkins (left) and Mayor
Tony Massa (right)
receive their awards from
the National Association
of Local Boards of Health.





"Where we are born, live, study, and work directly influences our health experiences: the air we breathe, the food we eat, the viruses we are exposed to, and the health services we can access." 70



Geography

Grant County is a rural, agricultural county covering 2,679 square miles in central Washington State, making it the 4th largest county in the state. ⁵ It takes 2 hours to travel from the southernmost city of Mattawa to the northernmost city of Grand Coulee. ⁶ Transportation throughout the county happens mostly in cars; approximately 94% of Grant County residents have cars. ⁷

Grant County in Washington State



US Census Bureau

Population

Approximately 91,000 people call Grant County home. Grant County ranks as the 13th most populous county of Washington's 39 counties. Of all Grant County residents, 55% live in an incorporated city or town while the remaining 45% live in unincorporated areas. The population of Grant County is increasing faster than the population of Washington State. Since the 2000 census, Grant County has seen a 23% increase in population. Mattawa had the greatest increase in population with 73% followed by Moses Lake with a 42% increase. The table to the right lists the populations of

the cities in Grant County for the years 2000, 2010, and 2013.

Population by City, 2000, 2010, & 2013

Area Counts	2000	2010	2013
Grant County	74,698	89,120	91,800
Unincorporated Grant County	35,766	40,134	40,956
Coulee City	600	562	570
Electric City	922	968	1,010
Ephrata	6,808	7,664	7.870
George	528	501	720
Grand Coulee	897	988	1,045
Hartline	134	151	155
Krupp	60	48	50
Mattawa	2,609	4,437	4,540
Moses Lake	14,953	20,366	21,250
Quincy	5,044	6,750	7,000
Royal City	1,823	2,140	2,190
Soap Lake	1,733	1,514	1,530
Warden	2,544	2,692	2,750
Wilson Creek	277	205	209

US Census Bureau 2014

Age

The median age of Grant County's population is younger than that of Washington State. There is wide variation in the median age of cities within Grant County, from a low of 22 in Mattawa to a high of 52 in Krupp. Additionally, the 10 year trend shows large increases in the median age in some cities in Grant County. ¹⁰

Median Age, 2000 & 2010

Area	2000	2010
United States	35.3	37.2
WA State	35.3	37.3
Grant County	31.1	32.1
Coulee City	42.3	49.1
Electric City	46.0	50.5
Ephrata	35.7	34.7
George	22.9	24.8
Grand Coulee	45.3	47.1
Hartline	41.0	41.8
Krupp	42.0	52
Mattawa	22.5	22
Moses Lake	32.3	32.1
Quincy	27.3	26.2
Royal City	23.6	22.4
Soap Lake	43.6	48.8
Warden	25.0	24.9
Wilson Creek	41.6	50.8

US Census Bureau 2014

Race

Ethnicity, 2010 (percent)

Race	United States	Washington	Grant County
White	72.4	77.3	72.8
Black or African American	12.6	3.6	1.1
American Indian and Alaska Native	0.9	1.5	1.2
Asian	4.8	7.2	0.9
Native Hawaiian and Other Pacific Islander	0.2	0.6	0.1
Some other race	6.2	5.2	20.4
Two or More Races	2.9	4.7	3.5

US Census Bureau 2014

The majority, approximately 73%, of Grant County residents identify themselves as white, which is similar to the rate in the United States.

Approximately 20%, of Grant County Residents identify themselves as being of some other race, which is significantly higher than the Washington State and United States rates. This identifies the notable intersection of race, ethnicity, and culture that is seen across Grant County. ¹⁰ There is a small number of

residents that identify themselves as American Indians or Alaska Native, Black or African American, and Asian in Grant County. The chart shows the racial make up of the county.



Ethnicity

The Hispanic culture is woven throughout Grant County, where more than a third of the residents identify as Hispanic or Latino (38.3%). There is a wide range of ethnicity between the cities of Grant County. There is a higher rate of Hispanics in Grant County than both Washington State and the United States. The chart below shows the Hispanic ethnic make up of the cities in Grant County. ¹⁰

Ethnicity, 2010 (percent)

Area	Hispanic or Latino	Non Hispanic
United States	16.3	83.7
WA State	11.2	88.8
Grant County	38.3	61.7
Coulee City	3.4	96.6
Electric City	4.0	96.0
Ephrata	16.7	83.3
George	75.0	25.0
Grand Coulee	8.9	91.1
Hartline	11.9	88.1
Krupp	2.1	97.9
Mattawa	95.7	4.3
Moses Lake	30.1	69.9
Quincy	74.3	25.7
Royal City	88.7	11.3
Soap Lake	11.8	88.2
Warden	77.1	22.9
Wilson Creek	9.3	91.7

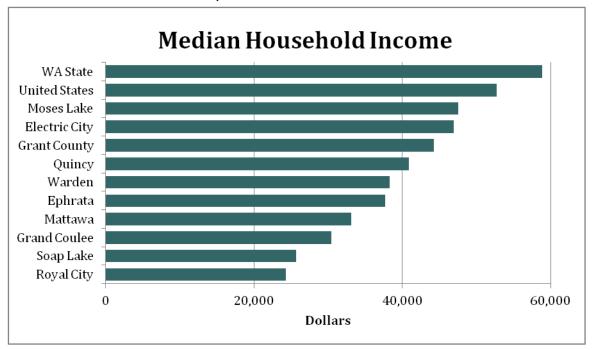
US Census Bureau 2014

Income

Current research shows that life expectancy increases with income. Income is the indicator that most directly measures material resources that can influence health by its direct affect on living standards; specifically, access to higher quality food, housing, and health care services. For 2007-2011 the median household income in Grant County was \$44,237, this is lower than the WA median household income during the same time frame. ⁷ The graph on the following page shows the median household incomes for 2007-2011 in cities in Grant County.



Median Household Income, 2007-2011



American Community Survey 2013





The World Health Organization defines social determinants of health as "conditions in which people are born, grow, live, work and age and the systems put in place to deal with illness. These circumstances are in turn shaped by a wider set of forces: economics, social policies, and politics. These social determinants of health are mostly responsible for the unfair and avoidable differences in health status seen within and between areas." ¹¹



Economics

The August 2009 Issue Brief by the Robert Wood Johnson Foundation described the impact of the economy on healthcare. Jill Bernstein writes, "In the United States, the economy shapes the complex interactions among employment, health coverage and costs, and financial access to care and health outcomes." ¹²

I wish there were more opportunities for young people to work in the county. So many of them leave to work elsewhere.

–Key Informant

Employment

One major reason employment is important to health is that many people have health insurance through their employer. When more people are unemployed, more people are likely to be without health insurance. Unemployment is also associated with higher mortality rates, especially from cardiovascular disease and suicide. The stress of joblessness can lead to anxiety, depression, substance abuse, and poor mental health.

Unemployment can also affect a neighborhood's wellbeing. As the levels of joblessness increase, sociability, collective participation, and commitment to solving

Unemployment in Grant County & Washington State 2009-2012 (percent)

Year	Grant County	Washington State
2009	9.9	9.3
2010	10.8	9.9
2011	10.0	9.2
2012	9.5	8.2

Employment Security
Department 2013

neighborhood problems weaken. Grant County unemployment rate in 2012 was 9.5%. 75

Employers

The economy of Grant County is heavily centered on agriculture, with approximately 22% of workers in agriculture, forestry, fishing and hunting. There are many things that attract large employers to the area, including: an international airport, a foreign trade zone, low industrial power rates, fiber optic network, proximity to a major interstate (I-90) and rail lines,

and an abundance of inexpensive land. The table to the right presents the top

Top 10 Grant County Employment Sectors, 2011 (percent)

Sector	2011
Agriculture, Forestry, Fishing & Hunting	21.72
Government	17.85
Manufacturing	10.24
Retail Trade	8.98
Healthcare and Social Assistance	6.30
Accommodation and Food Services	5.83
Construction	4.85
Other Services except Public Administration	4.46
Real Estate and Rental Leasing	3.92
Transportation and Warehousing	3.57

Grant County Economic Development Council 2012

Largest Employers in Grant County, 2012

Employer	City	Number of Employees
Genie Industries, Inc	Moses Lake	1250
Moses Lake School District	Moses Lake	951
Grant County PUD	Ephrata	722
Grant County Government	Ephrata	633
Wal-Mart	Moses Lake and Ephrata	615
REC Silicon	Moses Lake	500
Lamb Weston, BSW	Warden	500
Samaritan Healthcare	Moses Lake	473
ConAgra Foods, Inc	Quincy	400
J.R. Simplot Co.	Moses Lake	375
Quincy Foods, LLC	Quincy	370
Quincy School District	Quincy	369
Takata Corp	Moses Lake	353
Ephrata School District	Ephrata	315
National Frozen Foods	Moses Lake and Quincy	275

employees in 2012. 14

Land Cover Categories

10 employment sectors in in Grant County in 2011. 13

The table to the left shows the largest employers in Grant County, where they

(by decreasing acreage)

AGRICULTURE*

are located, and the approximate number of

Winter Wheat
Pasture/Grass

Alfalfa

Fallow/Idle Cropland

Apples

Com

Potatoes

Other Hay/Non Alfalfa

Spring Wheat

Grapes

Pasture/Hay

Dry Beans

Peas

Sweet Com

Chemies

Herbs

NON-AGRICULTURE**

Shrubland

Open Water

Developed/Open Space

Developed/Low Intensity

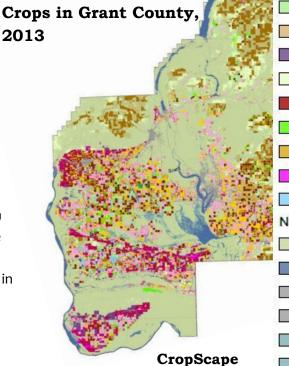
Herbaceous Wetlands

Woody Wetlands

Grant County Economic Development Council, 2012

Thanks to plentiful sunshine and water from the Bureau

of Reclamation's Columbia Basin Project, agriculture thrives in Grant County. The \$1.7 billion dollar market value of products produced in Grant County in 2012 is the highest dollar value of agricultural products in the state. This represents a 48% increase in value since 2007. There are 1,552 farms in Grant County. Farmland accounts for approximately 963,784 acres in Grant County. 16 The CropScape map to the right is a visual representation of crops grown in Grant County in 2013. 17



Employment, continued

The Grant County International Airport is home to a variety of services for the aerospace industry. Its 5 runways, the largest of which is 13,500 by 200 feet, can accommodate the largest aircraft. Boeing and other test flight companies use the Grant County International Airport for ongoing testing and training. The Pacific Northwest Unmanned Aircraft System Flight Center also operates here. Fairchild Air Force Base, Joint Base Lewis McChord, and Naval Air Station Whidbey Island use the Grant County International Airport for military flight testing and training.¹⁸

Poverty

People Living below FPL, 2007-2011 (percent)

\ <u>-</u>	•
Area	Residents
United States	14.3
WA State	12.5
Grant County	20
Electric City	10.6
Ephrata	19.7
Grand Coulee	15.4
Mattawa	28.6
Moses Lake	14.6
Quincy	30.1
Royal City	48.0
Soap Lake	35.2
Warden	31.1

Health is strongly linked to income. People in poverty are more likely to be less healthy than those who are not. In Grant County 20% of residents are living below the federal poverty level (FPL), compared with 12.5% of residents in Washington State and 14.3% of residents in the United States. ⁷

FPL Guidelines, 2014

1 11,670 2 15,730 3 19,790 4 23,850 5 27,910 6 31,970 7 36,030 8 40,090	Persons in fam- ily/household	Annual Income Guideline
3 19,790 4 23,850 5 27,910 6 31,970 7 36,030	1	11,670
4 23,850 5 27,910 6 31,970 7 36,030	2	15,730
5 27,910 6 31,970 7 36,030	3	19,790
6 31,970 7 36,030	4	23,850
7 36,030	5	27,910
_	6	31,970
8 40,090	7	36,030
	8	40,090

For families/households with more than 8 persons, add \$4,020 for each additional person.

Federal Register 2014

American Community Survey 2013

Basic Food Program

Residents Participating in Basic Food Program, 2010-2012 (percent)

			_
Area	2010	2011	2012
WA State	18.4	20.7	21.6
Grant County	27.4	30.4	31.3
Electric City	16.4	19.0	15.3
Ephrata	27.8	30.7	31.2
Grand Coulee	33.9	33.7	37.2
Mattawa	26.8	30.2	32.7
Moses Lake	30.9	35.1	35.9
Quincy	32.4	36.8	36.6
Royal City	22.2	26.0	26.3
Soap Lake	35.9	41.9	48.2
Warden	39.9	41.7	42.3

Washington State DSHS 2013

Washington State Department of Social and Health Services (DSHS) administers a food and nutrition program for all people who meet income guidelines. Many people know this program as EBT or SNAP. The program helps people afford nutritious foods by providing eligible households with an electronic benefits card and monthly benefits to buy food. In 2012, 31% of Grant County residents participated in the Basic Food Program. ¹⁹

Other Assistance Programs for Families

Residents Participating in TANF and SFA (percent)

Area	2010	2011	2012
WA State	4.0	4.1	3.8
Grant County	6.1	6.7	6.1
Electric City	1.3	0.9	1.6
Ephrata	5.3	6.3	5.5
Grand Coulee	5.2	3.5	4.5
Mattawa	6.6	7.4	6.0
Moses Lake	7.1	7.7	7.7
Quincy	8.2	8.6	7.7
Royal City	3.4	4.6	3.9
Soap Lake	10.4	8.5	9.3
Warden	9.7	12.2	9.3

financial times are the Temporary
Assistance for Needy Families (TANF) and
State Family Assistance (SFA) programs that
provide cash assistance to qualified families
with dependent children through the
United States Department of Health and
Human Services. These cash benefits are
often referred to as "welfare". In 2012 6% of
Grant County residents participated in the
TANF and State Family Assistance Program.
The requirements for these programs are

more strict than the requirements for the

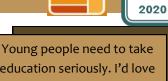
Other programs to help families in difficult

Washington State DSHS 2013

Education

Evidence suggests that the level of education attained indirectly affects and influences a person's health and life expectancy. In Grant County there is a wide range of educational levels between the 15 cities. Education and its relationship to health is a complex issue. However, people with a higher level of education are more likely to have higher paying jobs and are more likely to be employed than people with a lower level of education. The graph below shows the highest level of education attained by adults

over 25 in Grant County. Approximately 25% of Grant County adults have less than an high school diploma. On the other end of the spectrum only 15% of people have a bachelors degree or higher. ⁷

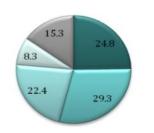


education seriously. I'd love
to hire local, but I can't hire
someone who didn't
graduate from high school to
do my accounting.

–Key Informant

Level of Education in Grant County, 2010 (percent)

Basic Food Program. 19



US Census 2013



Education, continued

The Healthy People 2020 Leading Health Indicator for the social determinants of health is high school graduation. The goal is for 82.4% of students to graduate with a regular diploma 4 years after

Adult Educational Attainment, 2007-2011 (percent) entering the ninth grade.

Area	Less than High School	High School	Some College	Associates Degree	Bachelor's Degree or Higher
United	14.6	28.6	21.0	7.6	28.2
States	17.0	20.0	2.110	7.0	20.2
WA State	10.3	23.9	25.1	9.4	31.4
Grant County	24.8	29.3	22.4	8.3	15.3
Electric City	4.4	39	20.3	16.8	19.6
Ephrata	16.7	34.7	22.1	9.4	17.1
Grand Coulee	9	30.9	31.9	6.9	21.3
Mattawa	80.9	11.2	6.0	0	1.9
Moses Lake	14.6	28.7	26.0	8.7	22.1
Quincy	38.7	27.2	17.2	6.9	9.9
Royal City	73.6	12.4	4.9	1.7	7.3
Soap Lake	26.8	38	22.1	6.6	6.4
Warden	48.1	21.6	21.3	4.7	4.3

Washington State has an adjusted 4 year cohort graduation rate of 77.2%. High schools in Grant County have a graduation rate range of 61%- 100%. ²⁰

Many of Grant County's problems are education related. Education is the basis of being able to make good decisions and solve problems. Lower education can mean more health problems.

—Key Informant

American Community Survey 2013

Language

Some cities in Grant County have a large percentage of the population who speak a language other than English at home. In the United States and Washington State this accounts for 20.3% and 17.8% respectively. Grant County's rate is 32.2% of people who speak a language other than English at home. These rates vary widely within Grant County from a high of 99% in Mattawa to a low of 3.7% in Grand Coulee and Electric City. Often this language is Spanish, but other Indo-European languages (such as Russian and Ukrainian) and Asian and Pacific Islander languages are

also spoken. Many of these individuals do not speak English very well. ⁷

Language Characteristics, 2007-2011 (percent)

Area	Speak Language other than English at home	Speak English less than very well
United States	20.3	8.7
WA State	17.8	17.8
Grant County	32.2	17.2
Electric City	3.7	0
Ephrata	14.0	10.0
Grand Coulee	3.7	1.1
Mattawa	99.0	68.7
Moses Lake	19.8	7.6
Quincy	69.2	36.6
Royal City	89.5	63.2
Soap Lake	22.4	9.0
Warden	62.1	23.1

American Community Survey 2013

Foreign Born

Foreign Born Residents, 2007-2011 (percent)

Area	Foreign Born	Entering the US Before Year 2000
United States	12.8	78.3
WA State	12.8	65.1
Grant County	17.1	65.6
Electric City	1.7	72.0
Ephrata	6.1	80.5
Grand Coulee	3.3	77.4
Mattawa	58.1	55.6
Moses Lake	9.8	48.7
Quincy	30.4	63.4
Royal City	55.8	54.5
Soap Lake	14.6	45.5
Warden	24.3	76.4

Residents of Grant County were more likely to be born abroad than residents of Washington State and the United States. Mattawa and Royal City have a majority of residents who were born outside of the United States. Most of the foreign born residents of Grant County, approximately 66%, came to the US before the year 2000. ⁷

American Community Survey 2013

Housing

Poor housing and indoor environments contribute to preventable diseases and injuries, such as respiratory diseases, nervous system diseases, cardiovascular diseases, and cancer. Access to affordable housing can lead to housing stability. When people and families have stable housing there is a greater sense of safety, privacy and control which can contribute to overall health. Furthermore, lack of a basic needs such as safe and affordable housing consumes time and energy in finding and securing basic needs, time and energy that could be used to increase and maintain health. Based on a hierarchy of needs, securing the very basics for life is required to impact population health outcomes.

From 2007 to 2011, 84% of Grant County residents were living in the same house they lived in one year ago. This is similar to the state and national rates of 82% and 85%

Homes Occupied by Renters, 2007-2011 (percent)

Area	Renter Occupied Homes
	nomes
United States	33.9
WA State	35.6
Grant County	39.5
Electric City	30.3
Ephrata	36.8
Grand Coulee	42.2
Mattawa	69.3
Moses Lake	44.6
Quincy	35.8
Royal City	66.3
Soap Lake	48.7
Warden	43.6

American Community Survey 2013

respectively. This range between cities is 80%-92% depending on city. From 2007 to 2011 renters occupied approximately 39.5% of the housing in Grant County. The amount of renter occupied housing varies widely across Grant County cities from 30.3% to 69.3%. ⁷

Homelessness

Grant County has a Homeless Taskforce made up of members of various organizations. This taskforce oversees a variety of programs aimed at preventing homelessness and assisting those who are homeless. The true number of homeless people in Grant County is difficult to measure. Every year on the 3rd Thursday of January the Homeless Taskforce completes a Point in Time Homeless Count. In January 2014, the Homeless Taskforce and many volunteers counted over 461 people that were unstably housed, and 177 people who were without any type of shelter.

Housing Programs

Housing Authority of Grant County

The mission of the Housing Authority of Grant County is to provide, maintain, and develop quality housing and neighborhoods for people facing barriers. To accomplish this, the Housing Authority provides rent subsidies, manages properties, and develops and constructs new housing. The following programs are currently offered by the Housing Authority:

- Public Housing Program
- Housing Choice Voucher (Section 8) Rental
 Assistance
- Section 8 Larson
- Farm Labor Housing in Mattawa
- Developmental Disabled Demonstration
 Project

- Mental Health Housing Project
- Esperanza Migrant Farm Worker Housing
- Larson Regular Rentals
- Low Income Housing Tax Credit
- Homeless Programs

Catholic Charities

Catholic Charities operates 5 housing properties in Grant County and serves 225 households and over 800 residents. In 2013 Catholic Charities opened a new apartment complex in Quincy that offers 51 low cost housing units. Remaining Grant County facilities are listed below:

- Reino Del Cielo—Royal City
- St. Martha Plaza—George
- La Amistad—Warden
- Villa Santa Maria—Mattawa



Transportation

Grant County is rural, with 2,679 square miles making it the 4th largest county in the state. ⁵ The County maintains approximately 2,500 miles of road. ²³ About 94% of Grant County families have access to a car. ⁹

Healthcare providers are unevenly distributed across the county, making transportation a very necessary component of access to care in the county. Quincy, Moses Lake, Ephrata, Grand Coulee, Coulee City, Mattawa, and Royal City all have healthcare providers while Warden, Soap Lake, Electric City, Krupp, Hartline, George, and Wilson Creek do not. It takes 2 hours to travel from the southernmost city of Mattawa to the northernmost city of Grand Coulee. ⁶ Transportation throughout the county happens mostly in cars.

In addition to cars, there are other transportation options in Grant County. The Grant County Transit Authority (GTA) offers 9 routes. It takes 1 hour and 40 minutes to go from Moses Lake to Grand Coulee on the bus, and there are two round trips starting in Moses Lake just after 5 am and again at 2 pm. The buses do not go to the most southwestern city of Mattawa and the routes leave out smaller cities throughout the county. GTA also has a van pool for groups of 5 to 12 who travel to work or go to school in a similar area who could share a ride.

Another service, offered in partnership by GTA and People for People, is SNAP. SNAP is for people whose disability makes it impossible for them to ride a fixed route bus. They also offer the Health Express Shuttle from Quincy, Moses Lake, and Ephrata to the Wenatchee Valley Clinic in Wenatchee. In 2011, Grant Transit Authority counted 212,757 trips on bus routes, 21,211 trips on SNAP, and 44,464 trips in vanpools. Bus fare is \$1.00 upon boarding a bus with the exception of the fares for rider programs.

People for People offers transportation options for many different groups. Seniors can use People for People to access nutrition sites, health care, social services, recreation and educational opportunities. They also offer transportation for people with disabilities to travel to workshops, job training, and communities activities. ²⁴

Medicaid does offer transportation to medical appointments, but medical transportation must be scheduled at least 48 hours in advance of a scheduled appointment. If there is an urgent need to see a doctor, Medicaid transportation services will not be useful. Medicaid transportation only allows for transport of the patient, children and other family members are not allowed to accompany the patient.



Air Quality

The Washington State Department of Ecology maintains more than 70 ambient air monitoring stations throughout Washington State. There is one station in Grant County located on Balsam Street in Moses Lake. Stations measure fine particulate matter less than 2.5 micrometers in diameter (PM_{2.5}). Most particles of this size come from fires, dust, wood stoves, fire places, outdoor burning, vehicles or factories. ²⁵ These particles are easily inhaled deep into the lungs and have been linked to significant health problems such as aggravated asthma, decreased lung function, irregular heart beat, nonfatal heart attacks, and premature death in people with heart and lung disease. ²⁶

In late September and early October of 2012, Central Washington experienced numerous wildfires. The Air Quality monitor in Moses Lake sensed some of this activity, as seen in the table below. The Moses Lake ambient air monitoring station data indicates that in 2012, the particulate matter did

Air Quality, Particulate Matter at Moses Lake Station

did not exceed the Air Quality Index goal for Healthy People 2020. However, the fires did make an impact on air quality in other areas of Grant County where the particulate matter in the air was not measured. Reports from residents across the county provided visibility and air quality information.

rise, but the air in Moses Lake

Washington State Department of Ecology 2013

Pesticides

Pesticides and chemicals are used regularly in Grant County. People may not even be aware of their potential for exposure. Pesticide issues are reported to several state departments depending on the circumstances. The departments potentially involved are: Agriculture, Ecology, Health, Labor and Industries, and/or Poison Control.

Pesticide Complaints and Violations 2004-2009 (counts)

Voor	Washington	Grant County	Washington State
Year	State Complaints	Complaints	Violations
2004	200	20	122
2005	193	16	113
2006	206	19	137
2007	177	13	104
2008	172	17	108
2009	148	N/A	85

Pesticide complaints for

Washington State Pesticide Data Report 2010

Grant County are recorded by the Washington State Department of Agriculture. As is shown in the chart above, not every complaint results in a violation.²⁷

Crime

Many Key Informant Interviewees mentioned that crime, gang activity and/or safety were major concerns they had about their community. The Washington Association of Sheriffs and Police Chiefs collect crime statistics from local law enforcement and make it available to the public. This information comes from the National Incident-Based Reporting System. ²⁸ The top offense in Grant County is Larceny. The top reason for arrest among Grant County adults and youth is simple assault.

Top Five Offenses Reported by the Grant County Sheriff's Office and Moses Lake, Ephrata, and Quincy Police Departments, 2012

Rank	Grant County Sheriff	Moses Lake PD	Ephrata PD	Quincy PD
1	Larceny	Larceny	Larceny	Vandalism
2	Vandalism	Vandalism	Burglary	Larceny
3	Burglary	Simple Assault	Simple Assault	Burglary
4	Simple Assault	Burglary	Vandalism	Simple Assault
5	Motor Vehicle Theft	Drug/Narcotic Violations	Drug/Narcotic Violations	Drug/Narcotic Violations

National Incident-Based Reporting System 2013

Top Five Adult Arrests by the Grant County Sheriff's Office and Moses Lake, Ephrata, and Quincy Police Departments, 2012

Rank	Grant County Sheriff	Moses Lake PD	Ephrata PD	Quincy PD	
1	Simple Assoult	Lausanu	Simple Assoult	Driving under the	
	Simple Assault	Larceny	Simple Assault	Influence	
2	Drug & Equipment	Simple Assoult	Larcany	Simple Assoult	
	Violations	Simple Assault	Larceny	Simple Assault	
3	Driving under the	Driving under the	D. wellows	Aggravated Aggavit	
	Influence	Influence	Burglary	Aggravated Assault	
4	Liquor Law	Drug & Equipment	Drug & Equipment	Drug & Equipment	
	Violations	Violations	Violations	Violations	
5	Aggravated Aggavit	Dunglani	Driving under the	D. wellow.	
	Aggravated Assault	Burglary	Influence	Burglary	

National Incident-Based Reporting System 2013

Gang activity and crime is a problem. People feel less safe.

-Key Informant

Crime, continued

Top Five Juvenile Arrests by the Grant County Sheriff's Office and Moses Lake, Ephrata, and Quincy Police Departments, 2012

Rank	Grant County Sheriff	Moses Lake PD	Ephrata PD	Quincy PD
1	Simple Assault	Larceny	Drug & Equipment Violations	Burglary
2	Liquor Law Violations	Simple Assault	Simple Assault	Simple Assault
3	Burglary	Drug & Equipment Violations	Larceny	Drug & Equipment Violations
4	Motor vehicle theft	Liquor Law Violations	Stolen Property offenses	Larceny
5	Drug & Equipment Violations	Burglary		Liquor Law Violations

National Incident-Based Reporting System 2013

Gang Activity

The Grant County Sheriff's Office collects data from each police department on gang crimes. The classification of whether or not an incident is gang related is up to the discretion of the officer that responds. The top table shows the gang related offenses by type for four years. The bottom table shows the total number of gang related calls for service and the average number of gang related calls per month for four years. ²⁹

Grant County Gang Offenses, 2009-2012

Offense Counts	2009	2010	2011	2012
Total Weapon Offenses	29	73	37	28
Homicide	1	4	4	2
Assault with firearm	4	11	26	11
Assault with knife	3	0	2	6
Assault with Other Weapons	4	5	3	10
Robbery	1	2	1	1

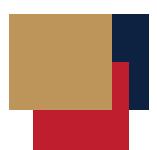
Grant County Sheriff's Office 2013

table shows the total number of **Grant County Gang Related Calls 2013**

Call Counts	2009	2010	2011	2012
Total calls for service (gang related)	344	633	540	475
Average number of calls per month (gang related)	28.6	52.7	45.0	39.5

Grant County Sheriff's Office 2013





While having health insurance is a crucial step toward accessing needed primary care, health care specialists, and emergency treatment, health insurance by itself does not assure access. It is also necessary to have comprehensive coverage, providers that accept the individual's health insurance, relatively close proximity of providers to patients, and primary care providers in the community. ³⁰



Washington State struggles to maintain the number of healthcare providers needed to serve rural communities and underserved populations.

Although Grant County has a variety of medical facilities available, there are six cities in the county without any medical services and most cities that have medical facilities do not offer specialty care. With such limited care, it is not unusual for the facilities that offer specialty services to have appointments that are booked weeks and even months out. Grant County meets the Washington State criteria for being a health care shortage area due to the migrant population and the lack of primary medical providers, dental providers, and mental health care providers.

We are in a rural area and services can be isolated. Even if people can't get services where they live they at least need local contacts for some of these programs and facilities.

- Key Informant

Insurance Status







A major part of being able to access medical care is the financial means to see a doctor. Insurance assists people to be able to afford their medical and pharmaceutical needs. Approximately 31% of Grant County adults are uninsured ³² and 13% of adults in Grant County report that they have delayed a visit to the doctor because they could not afford it. ³¹

We see people who end up in the ER because they don't have the insurance to maintain their health with a family physician.

- Key Informant

Uninsured Population, 2011 (percent)

-			•
Area	Adults (18-64)	Children (<18)	Healthy People 2020 Goal
Grant County	31.7	7.6	0
Washington State	19.6	6.5	0
United States	21.1	7.9	0

US Census Bureau & Small Area Health Insurance Estimates 2011

Healthcare Exchange

The Affordable Care Act is dramatically changing the way that healthcare system operates. As part of this national health care reform, the Washington Health Benefit Exchange has created *Washington Healthplanfinder*. The Washington Healthplanfinder is an easily accessible, online marketplace for individuals, families and small businesses to compare and enroll in health insurance plans. It is estimated that 5,700 uninsured residents of Grant County will qualify for

Medicaid and about 7,800 will qualify for a subsidy towards the cost of health insurance.

³³ In Grant County, there are a number of organizations providing assistance with the Washington Healthplanfinder sign up.

Health Professional Shortage Area (HPSA)



Due to the low number of providers and the uneven distribution of health resources around the county, Grant County has been designated a Health Professional Shortage Area (HPSA) by the Health Resources and Services Administration. There are three types of HPSAs; primary care providers, mental health providers, and dental health providers. A region or a facility can be designated a HPSA in one or more areas. Grant County has areas that qualify as HPSAs in all three categories.

The table below shows the ratios of residents to the categories of providers, according to the County Health Rankings. ³⁴

Number of Residents per Provider, 2014

Provider Ratios	Primary Care Provider	Mental Health Provider	Dentist
Grant County	1:1,984	1:834	1:2,352
Washington State	1:1,216	1:533	1:1,354
National Benchmark	1:1,051	1:521	1:1,392

County Health Rankings 2014

Primary Care Providers and Primary Care





The 2014 County Health Rankings reports that Washington State had 1 primary care provider for every 1,216 people. The Grant County ratio is 1 provider for every 1,984 people. ³⁵ The number of primary care providers includes non federal practicing physicians (MDs and DOs) under age 75 specializing in general practice medicine, family medicine, internal medicine, and pediatrics.

About 73% of Grant County adults report that they have a regular doctor, compared to Washington State's rate of 78% and the US rate of 81%. ³¹ Healthy People 2020 goal is for 83.9% of people to have a steady primary care physician. ³⁶ About 10,000 more Grant County residents would have to be insured and choose a primary doctor to meet this goal. Without a regular doctor, residents may use walk in clinics, urgent care centers, and emergency rooms for care that could best be provided by a self-selected primary care provider. Between 2006 and 2010, Washington State residents reported having 3.6 unhealthy days in the past 30 days while Grant County residents reported having 4.1 unhealthy days in the past 30 days. ³¹ Being sick without a primary care doctor to provide appropriate and timely care can increase the length of time someone experiences poor health.

On the next page is a list of hospitals, medical clinics, and federally qualified health clinics where people can receive care in Grant County.

Hospitals, Clinics, and Federally Qualified Health Centers

Hospitals

- Samaritan Hospital, Moses Lake
- Columbia Basin Hospital, Ephrata
- Quincy Valley Medical Center, Quincy
- Coulee Medical Center, Grand Coulee

Medical Clinics & Federally Qualified Health Centers

- Confluence Health Moses Lake Clinic
- Confluence Health Royal City Clinic
- Wahluke Family Health Center* -Mattawa
- Mattawa Community Medical Clinic* -Mattawa
- Samaritan Family Physicians & Parkview Pediatrics – Moses Lake
- Columbia Basin Family Medicine Ephrata

- Comprehensive Family Care Moses Lake
- Moses Lake Community Health Center* –
 Moses Lake
- Quincy Community Health Center* Quincy
- Sage View Family Care Quincy
- Coulee City Medical Clinic Coulee City
- Coulee Family Medicine Clinic Grand Coulee
- Individual Physician Offices

FQHCs include all organizations receiving grants under Section 330 of the Public Health Service Act. They qualify for enhanced reimbursement from Medicare and Medicaid, as well as other benefits. The centers must serve an underserved area or population, offer a sliding fee scale, and provide comprehensive services and other requirements. ³⁴

Mental Health Providers and Mental Health



Grant County is considered a shortage area for mental health providers. There is 1 mental health provider for every 834 Grant County Residents, these include psychiatrists, psychologists, licensed clinical social workers, counselors, and advanced practice nurses specializing in mental health care. Mental health status impacts how people think, feel, and act. It also helps determine how we handle stress and decision making. Between 2006 and 2010 Washington State residents

What I really think needs to be mentioned is mental health needs. I don't even think the people here realize they need it. There are people living in extremely high stress and high poverty environments, they need someone to talk with to help them cope.

- Key Informant

reported having 3.3 mentally unhealthy days in the past 30 days while Grant County residents reported having 2.9 mentally unhealthy days in the past 30 days. ³¹

^{*}Denotes a Federally Qualified Health Center (FQHC) or a FQHC look alike.

Grant Integrated Services

The main provider of mental health services in Grant County is Grant Integrated Services. Grant Integrated Services is a collection of five services that reach out to all areas in Grant County.

- Grant Mental Health- Grant Mental Healthcare has five offices providing mental healthcare in Grant County: They are located in Moses Lake, Quincy, Grand Coulee, Mattawa and Royal City.
- New Hope- Domestic violence and sexual assault service. Their goal is to empower
 individuals by providing a safe, confidential and nonjudgmental environment for healing
 from abuse. New Hope has one location in Grant County.
- Prevention and Recovery Center (PARC)- Provides drug and alcohol prevention, education, and treatment services to Grant County in Moses Lake.
- Directions in Community Living- Serves people with disabilities to become as independent
 as possible. They are located in Moses Lake and offer services to individuals where they are
 located.
- City View- A 16 bed residential assisted living community located in Moses Lake that is the
 ideal solution for individuals who value their independence, yet need some help with daily
 activities.

Dentist and Dental Care

Grant County is also considered a shortage area for dentists. According to the 2014 County Health Rankings there is approximately 1 dentist for every 2,352 people in the County, compared to 1 dentist for every 1,354 people in Washington State. In Grant County 39% of adults report that they have not had an appointment with a dentist, dental hygienist, or dental clinic within the past year. This is significantly higher than 28% of WA state residents that report not having dental care in the past year. About 15% of Grant County adults report that 6 or more of their permanent teeth have been removed due to decay, gum disease or infection. ³¹

Children's Oral Health and ABCD



The 2010 Smile Survey results show that 50.8% of Grant County kindergarteners and 65.5% of third graders experience dental cavities and these rates are Significantly higher than Washington State rates. Less third graders in Grant County have dental sealants than

third graders state wide, fewer by almost 5%. The Health District receives funding for the Access to Baby and Child Dentistry Program (ABCD) from the Washington State Health Care Authority to detect and prevent early childhood dental decay by engaging dentists to increase the number of children ages 0 to 6 years on Medicaid who see the dentist. ⁷¹

Long Term Care Facilities

In 2013 there were 19 adult homes, 7 assisted living facilities, and 4 nursing home facilities registered with the Washington State Department of Social and Health Services in Grant County. Long term care facilities are important to adults who cannot live on their own and to their families. The Washington State Department of Health assures appropriate care to Grant County residents through regulation of facilities and staff. The Grant County Health District protects the health of residents in long term care facilities by providing information about disease prevention, maintaining working relationships, and providing assistance during disease outbreaks .

Adult Homes

Moses Lake:

- Blue Goose Care Center
- Cascade Valley Home Care
- Crystal Springs I and II
- Easy Street Care Home
- Faith Larkin Home Care
- Golden Age
- Lakeview Home Care I and III
- Larks Haven
- Love and Care Adult Home

Assisted Living

Moses Lake:

- City View Residential
- Emeritus at Hearthstone
- Monroe House Retirement and Care Center
- Moses Lake Assisted Living community
- SummerWood Alzheimer's Special Care Center

Ephrata:

Garden Oasis

Quincy:



The Cambridge

- Mekonen Inc
- Sun Ridge Home Care LLC
- The House of Serenity
- Touch of Love LLC
- Valley Road Residential Care
- Wisteria Cottage Adult Family Home

Ephrata

Coolidge House Adult Family Home

Quincy

Sage Cottage

Nursing Homes

Moses Lake:

- Columbia Crest Care and Rehabilitation Center
- Lake Ridge Solana Alzheimer's Care Center

Ephrata

• Columbia Basin Hospital

Soap Lake

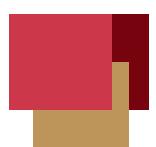
• McKay Healthcare & Rehab Center

Grand Coulee

• Coluee Medical Center Long Term Care

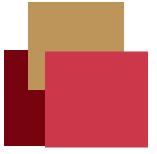
Quincy

Quincy Valley Long Term Care



Health Behavior

There are many actions that people can take to control their health. Health behaviors such as maintaining a healthy weight, not using tobacco, not abusing alcohol and other drugs, and being vaccinated are all positive behaviors that people can adopt to reduce their risk of disease. ⁷²



Health Behavior

Nutrition

HP CDC WB

Four out of 5 (80%) Grant County adults ³⁷ and 77% of Grant County adolescents ³⁸ do not eat enough fruits and vegetables. Also, 13% of Grant County households run out of food, skip meals, eat less, eat a poor diet, or go hungry due to the inability to afford food. These rates are slightly higher than the state rate.

The My Plate guidelines from the United States Department of Agriculture say that half of your plate should be filled with fruits and vegetables at every meal. The nutritional



We need a real change in the way we look at food.

- Key Informant

indicator for Healthy People 2020 is measured by a ratio of vegetable

consumption to total calories. This data has not been collected in Grant County and there is not direct comparison between the county and the national goal at this time.

Federal guidelines for school lunches have progressively become more stringent to assure that students have access to healthy foods and meals that include fruits, vegetables, and limited

amounts of fat and sodium. Grant County schools have implemented some of these changes. These guidelines will continue to change for the next couple of school years to acclimate students to the taste of less fattening and lower sodium foods. Changes to school meals are an integral part of reducing and preventing obesity and chronic conditions in Grant County. Among Grant County school districts, a range of 60% to 99.7% of students receive free or reduced lunches. ²⁰

Some people don't know that chips and pop aren't good for kids. Or maybe they know it, but give it anyway

- Key Informant

Exercise

HP 2020 CDC WB

Physical activity is anything that gets your body moving. Two

types of physical activity each week is needed to improve your health–aerobic and muscle-strength. Children between the ages of 6 and 18 need at least 60 minutes (1 hour) or more of physical activity each day. Adults 18-65 need at least 150 minutes of physical activity each week and at least 2 days a week that works all major muscle groups. As an older adult (65+), regular physical activity is one of the most important things you can do for health and it is important to get 150 minutes of physical activity followed by at least 2 days a week of strength training at this age. In Grant County, 36% of

adults do not get enough physical activity ³⁷ and 46% of Grant County's 10th graders do not get enough physical activity. ³⁸ The Healthy People 2020 goal is for 20.1% of adults to meet the standards for aerobic and strength exercise. ³⁹

Substance Use

HP 2020

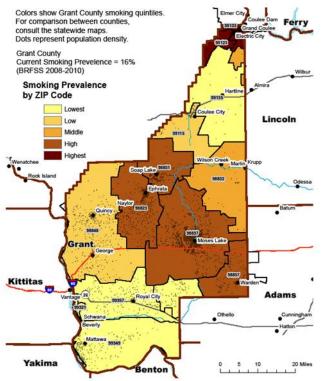
The use of mind and behavior altering substances makes an impact on the health of individuals, families, and communities. Substance abuse is associated with family disruptions, financial problems, lost productivity, failure in school, domestic violence, child abuse, and crime. Substance abuse is one of the most complex public health issues. 40

Tobacco Use



Smoking Quintiles by Zip Code, 2003-2010

Estimates from the Behavioral Risk Factor
Surveillance System show that approximately
1 in 6, or 16%, Grant County Adults smoke
tobacco. This is the same rate as Washington
State. 41 The Healthy People 2020 goal is to
reduce the number of adults age 18 and over
smoking to 12%. 1



Tobacco free living is one focus area of the Health District's Healthy Communities
Program. Through support and encouragement, all hospitals in Grant County have adopted tobacco free campus policies and do not allow tobacco product use, including cigarettes, on their properties. Healthy Communities staff also worked to implement a smoking in designated areas policy at the Grant County Fairground and a smoke free policy in all low income public housing in Grant County. Ongoing tobacco free living policy work continues with Big

Behavioral Risk Factor Surveillance System 2013

Bend Community College and various employers throughout the county. In 2014 the Grant County Board of Health adopted an E-Cigarette ordinance.

Youth Tobacco



Estimates from the 2012 Healthy Youth Survey show that 8% of Grant County 8th graders have smoked cigarettes in the past 30 days. This number is significantly higher than the 5% of WA state 8th graders who have smoked. This number rises to 10% for Grant County 10th graders and has remained relatively constant over the past 10 years.



Youth Tobacco, continued

Approximately 17% for Grant County high school seniors smoke cigarettes. In all grades, boys are more likely to smoke than girls. ³⁸ The Healthy People 2020 goal for adolescents in grades 9-12 who

Students that Reported any Smoking in the Past 30 days, 2012 (percent)

Grade	Washington State	Grant County
8 th Graders	5.1	8
10 th Graders	9.5	10
12 th Graders	15.6	17

Washington State Healthy Youth Survey 2012

smoked cigarettes in the past 30 days is 16%. ¹The data available for Grant County youth indicates that the rate of smoking in the past 30 days for grades 9-12 may be less than the national goal. ³⁸ Tobacco products newly introduced into the market, such as e-cigarettes, may

2020

2020

make an impact on the smoking rates among youth.

Alcohol

Heavy drinkers have a greater risk of liver disease, heart disease, sleep disorders, depression, stroke, bleeding from the stomach, sexually transmitted infections from unsafe sex, and several types of cancer. They may also have problems managing diabetes, high blood pressure, and other conditions. ⁴² Between 2006 and 2010, 13.3% of Grant County adults reported heavy drinking as opposed to 17% for Washington State. Heavy drinking is defined as more than two drinks per day on average or 5 or more drinks during a single occasion for men and more than one drink per day on average or 4 or more drinks during a single occasion for women. ³¹ The Healthy People 2020 goal is to reduce the number of adults 18 and over engaging in binge drinking in the past 30 days to 24.4%.

Data suggests that binge drinking in Grant County may already be lower. ¹

Youth Alcohol

Alcohol and other drug use among youth is another public health problem. Substance use and abuse can increase the risk for injuries, violence, HIV infection, and other diseases. ⁴³ In 2012, 59% of Grant County 10th graders report having ever had alcohol, even 1 sip. That same year, 27% of Grant County 10th

Students that Reported any Alcohol use in the Past 30 days, 2012 (percent)

Grade	Washington State	Grant County
8 th Graders	12	17
10 th Graders	23	27
12 th Graders	36	39

Washington State Healthy Youth Survey 2012

graders reported using alcohol within the last 30 days and 16% of Grant County 10th graders reported binge drinking. A significantly higher percentage of 8th and 10th graders in Grant County

have had alcohol in the last 30 days compared to the state rate. ³⁸ The goal for Healthy People 2020 is to reduce the percentage of adolescents that report the use of alcohol or any illicit drugs in the past 30 days to 16.6%. Grant County is already lower than this goal. ¹

Other Substances

Data about substance abuse in Grant County is difficult to obtain. One measure is the number of admissions to a substance abuse treatment program. The Department of Behavioral Health and Recovery shows that over a ten year period from 2003-2012, an average of 643 Grant County residents were admitted to a treatment program for substance abuse each year. This includes outpatient, intensive inpatient, recovery house, long-term residential, and opiate substitution admission for Medicaid, Department of Corrections, and some private pay patients.

The majority of people are placed in an outpatient treatment program. Over the same ten year period, 65% of admissions to outpatient treatment were for alcohol. A significant number of people were also admitted for drug use, 15% were admitted for marijuana and 12% were admitted for methamphetamine. 44

Youth Other Substances

With the passage of Initiative 502, marijuana possession and use has been decriminalized in Washington State for those aged 21 and older. It is still illegal for those under 21. ⁶⁹ This leads some people to think that marijuana is safe, but there are poor health effects associated with marijuana use. The brains of teenagers are still developing and therefore may be more vulnerable to the effects of substance use. Adolescents who use marijuana can have an increased difficulty memorizing things, distorted thinking and perception, hallucinations, paranoia, and even permanent decrease in IQ. ⁴⁵

The Healthy People 2020 goal for adolescents aged 12 to 17 years who report use of alcohol or any illicit drugs during the past 30 days is 16.6%. ¹ A greater percentage of Grant county youth in 8th, 10th, and 12th grade self reported alcohol or other drug use in the past 30 days. As can be seen in the table below, a higher percentage of Grant County 8th graders have used marijuana in the past 90 days than the state rate. ³⁸

The PARC program at Grant Integrated Services facilitates a coalition to prevent substance abuse and create safe, healthy environments for youth in Moses Lake. The Grant County Health District

Students that Reported Marijuana Use in the Past 30 Days, 2012 (percent)

Grade	Washington State	Grant County
8 th Graders	9	13
10 th Graders	19	19
12 th Graders	27	25

Washington State Healthy Youth Survey 2012

facilitates the Communities that Care Program in Quincy that works with youth and the community to assure an environment that supports healthy choices about substance abuse.

2020

Healthy Communities Grant County

The Health District's Healthy Communities Program works with communities to implement policy, systems, and environmental changes to reduce the risks of chronic diseases. The Health District assists community members, planners, and elected officials make the healthy choice the easy choice for residents where they live, work, learn and play. The Healthy Communities Program concentrates on healthy eating, active living, and smoke free environments.

The main focus of active living is to prevent chronic disease by giving all Grant County residents a safe and equal opportunity to be physically active. This includes safe and active education for students in schools such as providing safe routes to school, implementing school wellness policies, and planning at the city or county level to make streets safe for all users. The healthy eating priority includes community gardens, mobile food bank assistance, farm to school produce, and community food bank assistance. The goal is to provide easy affordable access to fresh produce. The tobacco free priority includes developing policies and procedures for organizations and agencies that wish to pursue smoke or tobacco free environments.

Vaccinations

Vaccinations are the most important prevention measure to keep people from becoming ill with vaccine preventable diseases. Vaccine preventable diseases are rare and people who cannot be vaccinated are protected when the most people possible are vaccinated in communities. Vaccinations are the best way to put an end to serious symptoms and death due to vaccine preventable diseases.

The Health District works with 17 different providers and clinics in Grant County to assure all children, regardless of ability to pay, receive vaccines to keep them safe and healthy. The Immunization Program at the Health District also provides vaccines for adults in the Moses Lake

I don't think people know how important their shots really are. Adults too, shots aren't just for kids.

- Key Informant

office on Tuesdays. Adults can come to the Health District for travel vaccines, vaccines required for employment, and routine vaccines to maintain their health. In 2013 the Health District facilitated the distribution of over \$100,000 of adult vaccine throughout the county to be given for free to adults that do not have insurance or have a health plan that does not cover vaccine.

2020

2020

Adult Vaccination

Washington State maintains a state immunization registry called the Washington State
Immunization Information System (WSIIS). This is a secure, web-based tool for healthcare providers
to document immunizations given to people of all ages. Currently the system is not
widely used to track adult vaccinations. Providers should use this system to allow
tracking of adult vaccine status and reliable data on adult vaccination.

Flu and Pneumococcal Vaccination

Healthy People 2020 goal for flu vaccine coverage is 80% for adults 18-64 and 90% for adults 65 and over. ⁴⁶ The CDC estimates that approximately 47.5% of all

Healthy People 2020 goal for Adults 65 and Over Vaccinated, 2006-2010 (percent)

Vaccine	Grant County	Washington State	Healthy People 2020 Goal
Flu	68.6%	70.6%	90%
Pneumococcal	65.8%	70.8%	90%

Behavioral Risk Factor Surveillance Survey 2006-2010

Washington State Residents (ages 6 months and older) received a flu shot in the 2012-2013 flu season. This is higher than the national estimate of 45%. ⁴⁷ In 2006-2010 about 69% of adults 65 and over received the flu vaccine. ³¹

People 65 years and older are at greater risk of serious complications from the flu and pneumonia compared with young, healthy adults. This is because human immune defenses become weaker with age. Healthy People 2020 goal for pneumococcal vaccine coverage is 90% for adults 65 and over. 48

Childhood Vaccination

Grant County Health District works with the Washington State Department of Health and 17 Grant County providers to increase vaccination rates of children by conducting site visits, providing updated information, and being an expert resource in childhood vaccinations.

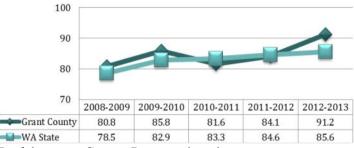
Grant County has an excellent vaccination rate, 74% of children ages 19-35 months have been completely vaccinated with all vaccine recommended for their age. This is significantly better than the state average of 50%. ⁴⁹ The Healthy People 2020 goal is for 80% of children in this age group to be immunized. ¹ The Health District facilitated distribution of 53, 105 doses of child vaccine in 2013.

Kindergarten

In the 2012-13 school year, 91.2% of
Grant County kindergarteners had
received their school required
vaccinations, this is above the
Washington State Rate. As the graph
to the right shows, the 2012-13 school
year also represents a steady increase
since 2008. ⁴⁹ School districts with
greater than 90% of kindergarteners in
compliance in 2013 were CouleeHartline, Ephrata, Grand Coulee Dam,
Quincy, Royal City, Wahluke, and Warden.

Kindergarteners with Complete Immunization Status, 2008-2013 (percent)

2020



Washington State Immunization Information System 2014

6th Grade

In the 2012-13 school year 83% of Grant County 6th graders were current on their immunizations. This is a substantial increase from the 59% reported the year before. The table on the right shows that even though more Grant County 6th graders are complete on their immunizations, our out of

6th Grade Vaccination Status, 2012-2013 (percent)

Area	Complete	Exempt	Out of Compliance
Grant County	83.0	2.4	14.4
WA State	82.4	5.5	11.3

Grant County 6th graders are complete on their immunizations, our out of System 2014

2020

compliance rate is higher than the State. ⁴⁹ School districts with greater than 80% of students in compliance were Moses Lake, Royal City, Wahluke, Warden and Wilson Creek.

Screenings

Regular screening for cancer before symptoms appear may find breast, cervical, and colorectal (colon) cancers early, when treatment is likely to work best. Mammograms are recommended every 2 years for women ages 50 to 70. The Papanicolaou test or pap smear is a method of cervical screening used to detect potentially pre-cancerous and cancerous processes in the female reproductive system. Pap smears are recommended for all women between ages 21 and 65. Colonoscopies and sigmoidoscopies are screening tests that look for markers of colon cancer. It is recommended that people begin having these tests at age 50, or earlier if their physician recommends. Grant County has slightly lower rates of screening than Washington State and many more residents will have to be screened to meet the Healthy People 2020 Goals. ³¹

Residents Receiving Appropriate Screenings, 2006-2010 (percent)

Screening	Grant County	Washington State	Healthy People 2020 Goal
Mammogram	78.8	79.3	81.1
Papanicolaou test (pap smear)	73.3	76.1	93
Colonoscopy	59.1	67.0	70.5

Behavioral Risk Factor Surveillance System 2013



Health outcomes represent how healthy a county is. They are indicators of the health issues that are experienced by the population. Grant County is ranked 23 out of 39

Washington State Counties for health outcomes of the population. ⁵⁰



Chronic Disease

In the United States 75% of all healthcare spending goes to the treatment of preventable chronic diseases. ⁶⁶ Almost half of all Americans have a least one chronic condition. Health behaviors such as physical activity, nutrition, tobacco use, and consumption of alcohol impact the number and severity of chronic diseases experienced by individuals.

Chronic diseases, in most cases, are preventable. The Grant County Health District has implemented community interventions that impact residents through policy, environment, and systems to increase the number of adults that exercise and eat enough fruits and vegetables and to decrease the number that smoke. Interventions to prevent obesity, hypertension (or high blood pressure), and high cholesterol are proven to decrease chronic diseases including heart disease, stroke, and diabetes. In Grant County approximately 28% of adults have high blood pressure, 40% have high cholesterol, and 32% are obese. ³⁷

Heart Disease and Stroke

Major cardiovascular diseases, including heart disease and stroke, are the top cause of death in Washington State and Grant County. Heart disease is the first and stroke is the third leading cause of death in Americans, accounting for more than 30% of all U.S. deaths. In Grant County, about 7% of adults have had a heart attack, coronary heart disease, or a stroke. ³⁷

Diabetes

Diabetes is the leading cause of kidney failure, non-traumatic lower limb amputations, and new cases of blindness in the United States. Additionally, diabetes is a major cause of heart disease and stroke. Approximately 1 in 12, or 8.3%, of Grant County adults 18 years of age and older have diabetes, the county's rate is similar to the state rate of 7.3%. Biabetes is the 6th leading cause of death in Grant County.

Asthma

About 9%, or 1 in 11, Grant County adult residents have asthma.

Asthma has no cure and is controlled by preventing environmental triggers that cause an attack, these triggers could be air pollution, tobacco smoke, and air allergens (such as pollen or mold). To prevent

Grant County is always on the list of health disparities for diabetes, diabetes complications, and uncontrolled diabetes.

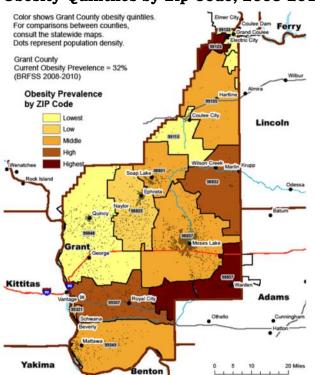
- Key Informant

asthma attacks in people enjoying public places, the Grant County Health District collaborated with the Grant County Fairgrounds to implement non-smoking policies, works to protect residents from tobacco smoke in other public venues, monitors air quality, and issues alerts when residents with asthma or other health problems may need to stay indoors.

Obesity

HP 2020 Heathy and St Communities

Obesity Quintiles by Zip Code, 2003-2010



Approximately 1 in 3, or 32%, adults in Grant County are obese, this is higher than the 26% of Washington State adults that are obese. The map to the left estimates obesity rates for places within Grant County. Being overweight or obese increases the risk of serious health problems such as high blood pressure, high cholesterol, type 2 diabetes and heart disease.

41 The Healthy People 2020 goal for obesity is 30.5% of people 20 years of age and over. 1

In Grant County, 35% of 10th graders reported being overweight or obese and 23% of WA state 10th graders reported the same. ³⁸ The Healthy People 2020 goal for obesity in children age 2-19 years is 13.5%. ¹

Behavioral Risk Factor Surveillance System 2013

I want to see a greater emphasis on encouraging people to adopt an active, healthy lifestyle and achieve healthy weight.

-Key Informant

Life Expectancy

Life Expectancy, 2011

Area	Male	Female
Washington State	78.2	82.2
Grant County	77.5	79.9
Ephrata	77.4	83.6
Moses Lake	75.9	78.3
Quincy	80.6	83.3
Soap Lake	75.9	83.6
Warden	83.4	77.3
Mattawa	86.0	80.3
Royal City	77.2	81.0

Washington State

Department of Health 2013

Life expectancy is a population health measure that combines mortality data with morbidity or health status data to estimate expected years of life. Washington state males who were under the age of 1 in 2011 have a life expectancy of 78.15 years and Grant County males that were under the age of 1 in 2011 have a life expectancy of 77.53. Washington state females who were under the age of 1 in 2011 have a life expectancy of 82.23 years and Grant County females that were under the age of 1 in 2011 have a life expectancy of 79.91. ⁵¹ The table to the left includes life expectancy by city in 2011.

Death Rate

The death rate for Grant County in 2006-2010 was 753.2 per 100,000 population, Washington's was 719.1, and the nation's was 767.4. ⁵² In 2011, five major causes of death (heart disease, cancer, chronic lower respiratory diseases, stroke, and accidents) accounted for 62% of all deaths in the United States. ⁵³ As you can see from the Top 10 Causes of Death tables below, and on the following page, Washington State and Grant County follow the national trend. ⁵¹

Top 10 Causes of Death, Washington State and Grant County, 2007-2011

Rank	Washington State	Rate per 100,000	Grant County	Rate per 100,000
1	Major Cardiovascular Diseases	211.12	Major cardiovascular diseases	224.3
2	Cancer	173.01	Cancer	180.34
3	Alzheimer's Disease	44.02	Chronic lower respiratory diseases	51.92
4	Chronic Lower respiratory diseases	43.49	Accidents	51.05
5	Accidents	38.82	Alzheimer's disease	37.86
6	Diabetes mellitus	22.84	Diabetes mellitus	30.73
7	Intentional self-harm (suicide)	13.4	Influenza and pneumonia	12.58
8	Influenza and pneumonia	10.48	Intentional self-harm (suicide)	12.13
9	Chronic liver disease and cirrhosis	10	Chronic liver disease and cirrhosis	11.74
10	Parkinson's disease	8.16	Parkinson's disease	7.55

Washington State Department of Health, Center for Health Statistics 2013

Top 10 Causes of Death, Moses Lake and Ephrata, 2007-2011

Rank	Moses Lake	Rate per 100,000	Ephrata	Rate per 100,000
1	Major cardiovascular diseases	240.59	Major cardiovascular diseases	213.23
2	Cancer	200.17	Cancer	154.17
3	Chronic lower respiratory diseases	63.86	Chronic lower respiratory diseases	48.43
4	Alzheimer's disease	55.86	Accidents	44.83
5	Accidents	49.99	Alzheimer's disease	32.24
6	Diabetes mellitus	34.44	Diabetes mellitus	29.62
7	Intentional self-harm (suicide)	15.06	Chronic liver disease and cirrhosis	18.49
8	Influenza and pneumonia	14.81	Intentional self-harm (suicide)	13.59
9	Chronic liver disease and cirrhosis	10.93	Influenza and pneumonia	8.94
10	Parkinson's disease	6.12	Parkinson's disease	7.54

Washington State Department of Health, Center for Health Statistics 2013

Top 10 Causes of Death, Quincy and Mattawa, 2007-2011

Rank	Quincy	Rate per 100,000	Mattawa	Rate per 100,000
1	Cancer	162.56	Major cardiovascular diseases	208.99
2	Major cardiovascular diseases	161.06	Cancer	104.82
3	Accidents	44.35	Accidents	54.97
4	Chronic lower respiratory diseases	35.74	Parkinson's disease	15.49
5	Diabetes mellitus	14.54	Chronic liver disease and cirrhosis	11.15
6	Alzheimer's disease	12.98	Influenza and pneumonia	11.06
7	Influenza and pneumonia	12.98	Chronic lower respiratory diseases	8.6
8	Parkinson's disease	8.67	Alzheimer's disease	8.56
9	Chronic liver disease and cirrhosis	7.68	Diabetes mellitus	6.98
10	Intentional self-harm (suicide)	5.81	Intentional self-harm (suicide)	4.17

Washington State Department of Health, Center for Health Statistics 2013

Hospitalizations

Residents of Grant County are most often hospitalized for labor and delivery of a child with or without complications and complications during the perinatal period (the twentieth week of gestation to the twenty-eighth day of newborn life). Following these conditions is diseases of the circulatory system, including hypertension, heart attacks, blocking of major arteries, and stroke. ⁵⁴ The table below presents the top 10 causes of hospitalization in Grant County.

Top 10 Causes of Hospitalization of Grant County Residents, 2007-2011

Rank	Diagnosis Group	Rate per 100,000
1	Complications of pregnancy, childbirth and the puerperium (includes normal childbirth)	1955.9
2	Certain conditions originating in the perinatal period	1452.9
3	Diseases of the circulatory system	1265.0
4	Injury and poisoning	769.7
5	Diseases of the respiratory system	759.2
6	Diseases of the digestive system	724.2
7	Diseases of the musculoskeletal system and connective tissue	668.9
8	Diseases of the genitourinary system	445.2
9	Neoplasms (tumors)	423.4
10	Endocrine, nutritional, and metabolic diseases and immunity disorders	262.5

Washington State Department of Health, Center for Health Statistics 2013

Hospitalizations, continued

The Agency for Healthcare Research and Quality developed prevention quality indicators as a screening tool to identify hospitalizations which may have been preventable with access to proper healthcare and cooperation from the patient. These conditions include uncontrolled diabetes, complications from diabetes, chronic obstructive pulmonary disease, asthma, hypertension, congestive heart failure, dehydration, bacterial pneumonia, urinary tract infection, and angina without procedure. In Grant County, these conditions cost over \$50 million dollars or approximately \$558 per resident. ⁵⁵

Notifiable Conditions

Notifiable conditions are communicable diseases with public health significance. Communicable diseases can have a significant impact on the population, so surveillance and control of notifiable conditions is an important part of public health. Most of the time spent on notifiable conditions by Grant County Health District staff is used investigating how someone got sick and preventing others from getting sick. Notifiable conditions are chosen by the Centers for Disease Control for the nation and by Washington State Department of Health for Washington State. Healthcare providers, clinics,

healthcare facilities are required to report diseases on the Washington State Department of Health Notifiable Conditions List, any outbreaks of disease, and any rare or unidentifiable disease of public health importance.

labs, and other

The table to the right lists the notifiable conditions that were reported to the Grant County Health District

in 2012 and 2013.

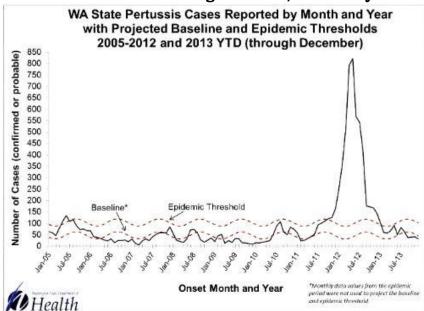
DISEASE/CONDITION	2013	2012	DISEASE/CONDITION	2013	2012
Blood Lead - Child	<5	<5	Listeriosis	0	0
Campylobacter	14	25	Malaria	0	0
Chlamydia	369	334	Measles	0	0
Cryptosporidium	<5	0	Meningococcal	0	0
Shiga toxin E. coli	5	5	Mumps	0	0
(STEC)					
Giardia	<5	<5	Pertussis	58	55
Gonorrhea	35	50	Rabies PEP	<5	<5
Hepatitis A	<5	<5	Relap. Fever/Lyme	0	0
Hepatitis B	0	<5	Rubella	0	0
Hepatitis C (chronic)	33	51	Salmonella	13	15
Hantavirus	0	<5	Shigella	<5	<5
Herpes Simplex	8	15	Syphilis	8	<5
HIV	0	0	Tuberculosis	<5	<5
Influenza Deaths	<5	0	Yersiniosis	0	0
Influenza H1N1	0	0	West Nile Virus	0	0
Totals Reported to DO	Н			558	567

Grant County Health District 2014

Pertussis

Pertussis, or whooping cough, is a bacterial infection easily spread by coughing and sneezing. In April of 2012 the Washington State Department of Health declared a pertussis epidemic. In 2011, 965

Pertussis Cases in Washington State, 2005-July 2013



cases of pertussis were reported throughout the state, but case counts spiked in 2012 to 4,918 (as the graph to the left shows). Grant County declared an outbreak of pertussis in 2010 and continued to have one of the highest rates of pertussis of all counties in the state between 2010 and 2012. Grant County had 25 cases in 2010, 30 cases in 2011, and 55 cases in 2012. In 2013, Grant County remained the highest pertussis incidence county in Washington State. 56

Washington State Department of Health 2013

Influenza and Pneumonia

Influenza is a virus that infects hundreds of people in Grant County every year, more than any other notifiable condition. Flu is not a notifiable condition unless the virus type is new to the population, there is an outbreak in a facility, or there is a death or hospitalization due to flu. The number of people infected every year at the state and national levels are estimated based on visits to doctor's offices and emergency rooms, the number of hospitalizations and deaths due to the flu that occur, and laboratories, clinics, and doctor's offices that volunteer to report the number of positive flu tests they encounter every week. Still, many people simply do not go to their doctor when they feel ill and doctors do not always test for flu. In the three flu seasons between 2011 and 2013/14, the Health District has increased the number of clinics reporting positive flu tests and had 1 death due to influenza.

Infection with viral pneumonia is commonly caused by infection with flu and can attack the most vulnerable residents of Grant County. To prevent flu and pneumonia, healthcare providers, pharmacies, businesses, and the public need to promote vaccine to patients, employees, family, and be vaccinated themselves.

Tuberculosis

Tuberculosis (TB) is an infection of Mycobacterium tuberculosis that is normally found in the lungs, but the bacteria can attack other parts of the body as well. The Health District is particularly interested in TB when a person has symptoms of tuberculosis and the bacteria is in the lungs and throat. TB in the

Grant County Tuberculosis Activity 2009-2012

Tuberculosis (TB) Activity	2009	2010	2011	2012	2013
Counts					
Newly Diagnosed Active* TB	4	5	0	1	1
Active TB Treatment	4	2	2	1	4
Directly Observed Therapy	369	167	108	10	166
Visits					
TB Case Investigations	8	12	19	15	10
TB Contact Evaluations	38	48	0	0	21
TB Skin Tests	224	166	110	83	67
Sputa Collection and Testing	5	14	6	9	10
TB Referrals Received from	147	146	85	92	76
Providers					
Health Officer Evaluations	109	142	82	72	92
LTBI* Care Referred to	74	91	55	55	67
Patient's Provider					

Grant County Health District 2014

lungs is spread through the air from one person to another and can cause many people to become infected as the bacteria can linger in the air for several hours.

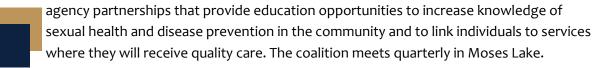
Between 2009 and 2013 there was a range of 0-10 newly diagnosed cases. While there are few actual cases of tuberculosis reported each year in Grant County, the Health District has an average of 435 visits for tuberculosis every year between 2009 and 2013. The number of visits at the Health District for tuberculosis has dropped every year since 2008. This decrease demonstrates the burden that providers in the county are taking to test and manage treatment of latent tuberculosis cases and that tuberculosis rates have been decreasing in Grant County, as they have statewide.

Sexually Transmitted Infections



Sexually transmitted diseases are the most common type of diseases reported to the Health District. The most commonly reported notifiable sexually transmitted diseases include Chlamydia, Gonorrhea, Syphilis, and Genital Herpes. The Health District's Communicable Disease Program works closely with healthcare providers, educators, and community partners to initiate community actions to lower the rates of these preventable and treatable diseases.

The Health District facilitates the Grant County Sexual Health Prevention and Education Coalition (SHAPE). The goal of SHAPE is to promote the health of Grant County residents through multi-



The Grant County Health District receives notification for and investigates five sexually transmitted diseases: Chlamydia, Gonorrhea, Syphilis, Herpes, and HIV. The counts for these conditions can be found on page 46. The two most common sexually transmitted diseases are presented here in more detail.

Chlamydia

Chlamydia is a sexually transmitted infection caused by Chlamydia trachomatis bacteria and is the most commonly reported notifiable condition in the United States. It is also the most reported notifiable condition to the Health District, with 369 cases reported in 2013. Chlamydia rates increased between 2009 and 2013 and the rate was slightly higher than Washington State in 2012. Below is a table that shows the Chlamydia rate for selected cities in Grant County.

Chlamydia Rates (per 100,000), 2009-2013

Area	2009	2010	2011	2012	2013
Grant County	280.43	325.40	312.99	360.44	404.14
Ephrata	220.56	190.84	162.54	367.12	300.22
Mattawa (including Beverly)	343.59	443.75	241.99	228.31	291.81
Moses Lake	317.95	377.62	392.03	473.69	508.52
North (Grand Coulee and Electric City)	90.14	180.67	172.58	352.15	43.55
Quincy (including George)	331.28	317.65	309.57	296.67	426.03
Royal City	383.35	432.35	330.07	177.35	606.56
Soap Lake	24.92	149.48	247.18	344-93	171.23
Warden	281.13	381.49	482.42	202.68	454.92

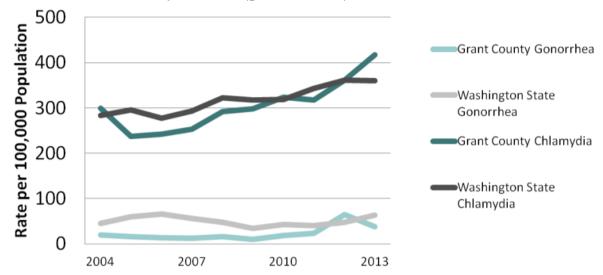
Grant County Health District 2014

Gonorrhea

Gonorrhea is a treatable sexually transmitted infection caused by Neisseria gonorrhea bacteria. It is the second most commonly reported notifiable disease in the United States, with 321,849 cases reported in 2011. This is a national rate of 104.2 cases per 100,000. ⁵⁷ In 2012 Grant County had a gonorrhea case rate of 64.8 per 100,000 and the state had a rate of 48.1 per 100,000. Reviewing historical data for trends shows a precipitous rise in Gonorrhea cases, with numbers almost tripling from 2011 to 2012 and surpassing the state rate in 2012. Adding to the complexity of preventing gonorrhea, in 2012 the CDC announced a change in the guidelines for gonorrhea due mostly to evidence that gonorrhea is becoming resistant to the most common drug regimen. Most of the gonorrhea cases in Grant County occur in Moses Lake, with less than 5 cases each in the other cities. The graph at the top of the next page presents the Grant County Gonorrhea rates compared to the Washington State rates in a ten year trend.

Sexually Transmitted Diseases, continued

Gonorrhea and Chlamydia Rate (per 100,000) Trend, 2004-2013



Grant County Health District 2014

Zoonotic and Vector Borne Diseases

Zoonotic and vector borne diseases are spread to humans through physical contact with an animal, contact with the urine or feces of an animal, being bitten by an animal or bug, and through eating, drinking, or inhaling something that has been infected with a disease from an animal. Many Grant County residents interact with animals and live in environments where animals freely move around or are being raised in controlled space. Zoonotic and vector related diseases that are reported and/ or actively surveyed for include rabies, hantavirus, west nile virus, and other rare diseases.

Rabies

Rabies is a preventable viral disease, most often transmitted to humans through an animal bite. The Grant County Health Officer recommended preventive treatment for rabies to 2 residents in 2012 and to 3 residents in 2011. In 2012 there were 8 samples of animals sent to the Washington State Public Heath Lab for rabies testing, all samples came back negative. This does not mean that rabies does not exist in Grant County. Residents who are exposed to a bat or bitten by an animal should seek medical attention so their risk of exposure to rabies can be assessed and appropriate treatment can be administered. The Health District is available for consultation to help in assessing and making recommendations for anti-rabies treatment. The Health District also facilitates the testing of animals for rabies when appropriate.

Hantavirus

Hantavirus is a virus carried by some rodents and causes acute respiratory distress. In Grant County Hantavirus is associated with deer mice. Two deaths caused by Hantavirus were reported in Grant County in 2012.

West Nile Virus

West Nile Virus is spread to humans through mosquito bites. Many people have been infected with west nile virus and do not know because they do not get sick, only 1 in 5 people infected with the virus do get sick. As of the end of 2014, the last human case of West Nile Virus in Grant County was in 2010 when one case was reported and the last time the virus was reported in the county was in 2014 when three mosquito samples tested positive. In 2012 there were 4 human cases of the virus in Washington. ⁵⁸

Grant County is served by three mosquito control districts. Mosquito districts attract and collect mosquitoes to monitor for mosquito borne diseases. Mosquito districts also spray to control the population of mosquitoes and to protect residents from disease. The Health District receives results of mosquito testing from the mosquito control districts.

Food and Water Borne Diseases

Diseases spread by food or water can make many people sick in a short amount of time. Preventing, identifying, and stopping these diseases is a critical function of public health. Diseases spread by uncooked or improperly prepared foods are most common in Grant County. The Grant County Health District does routine inspections of all food establishments to check the safety of foods through storage, handling, and delivery. The Health District conducted 993 food establishment inspections and reinspections in 2013.

The table below reports the most commonly reported food and water related diseases in Grant County. The most commonly reported food and water borne disease in 2013 was campylobacteriosis. Campylobacteriosis is found in raw or undercooked poultry, unpasteurized dairy products, and produce that are not prepared or cleaned according to food safety regulations.

Food & Water Borne Diseases in Grant County Rate (per 100,0000), 2007-2013

Disease	2007	2008	2009	2010	2011	2012	2013
Campylobacteriosis	14.33	17.45	19.38	19.08	33.30	35.16	15.25
E. Coli	0	*	*	*	7.77	5.49	*
Giardiasis	*	*	5.70	5.61	*	*	*
Listeriosis	0	*	0	0	0	0	0
Salmonellosis	28.66	16.28	7.98	13.46	*	16.48	14.16
Shigellosis	*	5.82	*	*	*	*	*

Grant County Health District 2014 (*less than 5 cases)

Accidental Death and Preventable Injury

HP 2020

"Motor vehicle crashes, debilitating falls, poisonings, and violence against women occur on such a regular basis that people accept them as a tragic, yet unavoidable part of life. This is not true. Our biggest challenge in Washington State is to change the way our residents and communities view injuries. The vast majority of injuries are predictable and preventable. They are not accidents." ⁵⁹

Reducing Fatal and nonfatal injuries has been identified by Healthy People 2020 as a Leading Health Indicator. The target for 2020 is to reduce the national deaths from fatal injuries from 59.2 deaths per 100,000 (in 2007) to 53.3 deaths per 100,000 by 2020. ¹ The 2007-2011 rate of fatal injury for Grant County is 69.2 per 100,000, this is higher than the Washington State rate of 58.4 per 100,000. ⁵⁹ The tables below identify the top three causes of unintentional fatal injuries and hospitalizations due to unintentional injuries in Grant County. Addressing these issues will assist Grant County in meeting the Healthy People 2020 objective. ⁵⁴

Top 3 Reasons for Unintentional Fatal Injuries in Grant County, 2007-2011

Injury Counts	2007	2008	2009	2010	2011
Falls	8	9	12	10	7
Motor Vehicle – Occupant	9	14	20	12	12
Poisoning	14	11	17	8	5
Total (including other unintentional)	40	42	61	38	31

Washington State Department of Health, Center for Health Statistics 2012

Top 3 Reasons for Hospitalization from Unintentional Injuries in Grant County, 2007-2011

Injury Counts	2007	2008	2009	2010	2011
Falls	269	249	201	228	223
Motor Vehicle – Occupant	59	63	50	61	48
Poisoning	27	23	16	26	17
Total (including other unintentional)	534	490	412	467	430

Washington State Department of Health, Center for Health Statistics 2012



Drowning

Grant County is known for the wide variety of outdoor activities, many of these activities involve water such as boating, swimming, and water skiing. Just like any other activity, there are always risk factors involved. There is no single device or activity to prevent drowning, but the 'four wisdoms' of water safety are key – supervision, environment, gear, and education. ⁵⁹ The Grant County drowning rate varies widely from year to year. A 5 year rate death rate for drowning, from 2007-2011, in Grant County is 2.5 per 100,000 compared to 1.5 per 100,000 for the State of Washington. ⁵⁴

It is estimated that 85% of Washington State's boating related drowning deaths could have been prevented if the person had been wearing a life jacket. In 2011, alcohol was involved in about 20% of all reported boating fatalities. ⁵⁹

Safe Kids Life Jacket Loaner Stations

Safe Kids Grant County is a community coalition lead by the Grant County Health District. The Coalition is committed to reducing childhood drowning by maintaining 12 life jacket loaner stations.

Life Jacket Loaner stations are located at:

- Billy Clapp Lake—Bureau of Reclamation
- Blue Heron Park—City of Moses Lake
- Blue Lake—Washington State Fish and Wildlife
- Cascade Park—City of Moses Lake
- Connelly Park—Moses Lake Irrigation and Rehabilitation District
- Coulee City Park—City of Coulee City
- Sun Lands Estate—Washington State Fish and Wildlife
- Steamboat Rock—Washington State Parks (2 Stations)
- Lower Peninsula Park—City of Moses Lake
- Priest Rapids Recreation Area—Desert Aire
- Potholes—Washington State Parks



Safe Kids Life Jacket Loaner Station

Falls

In 2010, falls were the leading cause of injury related hospitalization and the third leading cause of injury related death in Washington State. As seen in the tables of unintentional injuries, falls are the top cause of death and hospitalization from unintentional injuries in Grant County. The majority of these falls occur in those over age 65. Falls are a major health problem among older adults as they are a significant cause of death, disability, loss of independence, and admission to nursing homes. ⁵⁹

The Moses Lake Senior Center offers exercise classes Monday through Friday that incorporate skills needed to maintain and improve balance that help prevent life threatening falls. Each class focuses on a different group of muscles that can lead to better balance and stabilization. Grand Coulee and Ephrata senior centers offer similar classes.

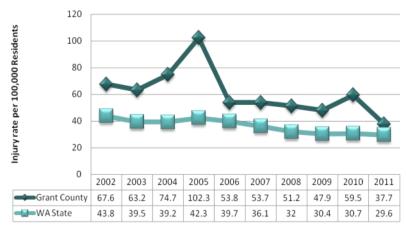
Firearm

Unintentional injuries from firearms represent less than 2% of all firearm deaths in the U.S. Unintentional deaths from firearms are relatively rare in Grant County, with only 1 occurring from 2002-2011. ⁵⁹

Motor Vehicle Fatalities and Injuries

In 2011 motor vehicle crashes were the leading cause of unintentional injury death in Grant County. Grant County is consistently higher in the number of motor vehicle occupant deaths than the state. Most fatalities occur in people between ages 20-24. Driver and occupant behavior is responsible for the majority of motor vehicle crashes. Most traffic fatalities involve one or more of these elements: driver

Motor Vehicle Occupant Injuries, 2002-2011



Washington State Department of Health, Center for Health Statistics 2013

impairment, speed, and/or run off the road collisions.

Like motor vehicle fatalities, Grant County is consistently higher than the state for the number of hospitalizations due to motor vehicle crashes. "Washington State Route 17 (SR-17) is a major arterial highway between Moses Lake and the Tri-Cities. Disabling and fatal

collisions occur at rates significantly higher on this two-lane highway between Bench Road (approximately one mile south of the intersection with SR-26) and where SR-17 crosses Interstate 90. As a result, this 23.5-mile stretch of SR-17 has been designated as a Washington Traffic Safety Corridor Project in an effort to improve public safety." ⁶⁰

The Central Basin Traffic Safety Task Force, sponsored by the Moses Lake Police Department, collaborates with community members, organizations, and law enforcement to provide traffic safety education and enforcement throughout Grant and Adams counties. Their goal is to reduce the number of serious injuries and fatalities due to traffic collisions. ⁶¹

Safe Kids Grant County works to reduce injuries in children from infancy through age 14 due to motor vehicle and bike incidents. Safe Kids Grant County is a coalition of public, private, and voluntary organizations working to prevent accidental injuries to children 14 and under by stimulating changes in attitudes, behavior, and the environment. This work includes promotion of car seats and bike helmets. Car seats are sold at reasonable rates throughout the county at events and by referral where residents learn which type of car seat is correct for their child's size, learn how to properly install car seats, and receive information about future car seat needs. Safe Kids Grant County distributed 54 car seats in 2013.

Helmets are distributed around the county at schools and city bike rodeos where children learn how to wear a helmet and safely ride their bicycles. Helmets are also being distributed by emergency responders and law enforcement throughout the county when they see a child without a helmet. The City of Moses Lake passed a bicycle helmet ordinance in 2013 for all residents under the age of 16. Safe Kids Grant County distributed 1,245 helmets in 2013.

Safe Kids also works to help children get to and from school safely by providing assistance in planning safe routes to school and Walk to School events. With these activities parents, schools, and the community work together to identify safe routes to school for children. During Walk to School day events, children are taught safety tips for walking to school and then practice what they learned while walking to school.

Poisoning



In a 5 year rate from 2007-2011, poisoning was the number one cause of injury death in Washington and the number two cause of injury death in Grant County. Poisoning does include drug overdoses. The majority of fatal poisonings occurred in people from 40 to 64 years of age. ⁵¹

Quincy Policy Chief Bob Heimbach next to the Safe Medicine Return Box in Quincy.



Poisoning (continued)

The Grant County Health District and Safe Kids Grant County worked with the Moses Lake, Ephrata, and Quincy Police Departments to install and maintain Safe Medicine Return Boxes. Residents can return unused or unwanted medications to these boxes to be disposed of properly.

Washington State Poison Center

The Washington State Poison Center operates a telephone line to provide free and immediate assistance and treatment advice in case of exposure to poisonous, hazardous, or toxic

Top 10 Reasons for Calls to the Poison Center, 2012

Rank	Substance
1	Analgesic (pain killers)
2	Cosmetics/Personal Care Products
3	Cleaning Substances (household)
4	Foreign Bodies/Toys/Miscellaneous
5	Sedative/Hypnotics/Antipsychotics
6	Topical Preparations
7	Antidepressants
8	Cardiovascular Drugs
9	Plants
10	Antihistamines (allergy medications)

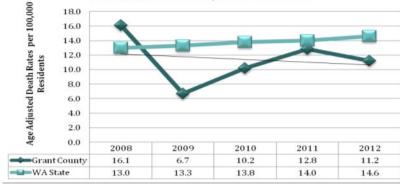
Washington State Poison Center 2013

substances. The majority of their calls are managed over the telephone and do not end in hospitalization. Anyone needing assistance is welcome to call the Poison Center at 1-800-222-1222. Calls are free, except for calls that require a veterinarian. Over the past 5 years, calls to the Poison Center have been in a general decline. In the table above, the Washington Poison Center reports that 5 out of 10 of the top categories for calls in 2012 were related to medications. ⁶²

Suicide







Washington State Department of Health 2013

In 2011, 992 Washington state residents, including 11 Grant County residents, committed suicide. The most common method of suicide in Grant County is by firearm. ⁵¹ Over a 10 year period, 2002-2011, the suicide rate in Grant County exceeded the Healthy People 2020 goal of 10.2 suicides per 100,000 residents in most years. ¹ The five year trend of

suicide rates in Grant County and Washington State are shown in the graph to the right.



Grant Mental Healthcare, a division of Grant Integrated Services, has a 24/7 crisis line to assist people dealing with mental health crises, including suicide. The number is 509-765-1717 or 1-877-467-4303. There is also a National Suicide Hotline at 1-800-273-TALK (8255).

Maternal and Child Health

"Improving the well-being of mothers, infants, and children is an important public health goal. Their well-being determines the health of the next generation and can help predict future public health challenges for families, communities, and the health care system. The objectives of the Maternal, Infant, and Child Health topic area address a wide range of conditions, health behaviors, and health systems indicators that affect the health, wellness, and quality of life of women, children, and families." ⁷⁴

Birth Rate

Over the three years of 2009 through 2011 there was an average of 1,618 births per year to Grant County residents. In 2011, the birth rate for Grant County was 92.9 per 1,000 women age 15-44. This is higher than the Washington State rate. ⁵¹

2020

Teenage Pregnancy and Birth

During the three year period from 2008 through 2010, Grant County had the third highest teenage pregnancy rate in the state. Babies born to teenage mothers are at greater risk for low birth weight, preterm birth, and death in infancy compared with babies born to women in their twenties and older.

In 2011, Grant County had the second highest teenage birth rate in Washington State. The rate of births to teenagers age 15-19 in Grant County is 63.3 per 1,000 compared with 24.9 per 1,000 for the state. ⁵¹

The graph to the right shows the 5 year teen birth rate trend in Grant County and Washington State.

The Healthy People 2020 goal for teen pregnancy is 36.2 pregnancies per 1,000 females age 15-17 years. Grant County's rate was 45.8 in 2011.¹

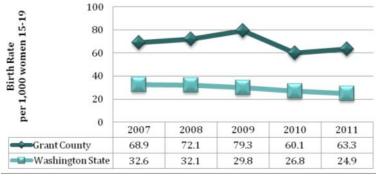
The Health District was awarded a grant from the Washington State Department of Health in 2013 to

girls getting pregnant. I see young pregnant women in the store sometimes. They need to know that having a baby so young is really going to affect the rest of their lives.

I hear a lot about teenagers

- Key Informant

Teenage Birth Rate (per 100,000), 2007-2011



Washington Department of Health 2013

provide sexually transmitted infection and teenage pregnancy prevention at two sites in the county. The Health District continues to work with the Sexual Health and Prevention Education Coalition and schools to implement evidence based sexual health curriculums.

Infant Mortality

HP 2020

2020

The loss of a baby remains a sad reality for some families and takes a serious toll on the health and well-being of families and communities. The infant mortality rate of Grant County exceeds the rate of Washington State, the state rate is 4.83 per 1,000 live births and the Grant County average rate is 6.08 per 1,000 live births for 2007-2011. ⁵¹ The Healthy People 2020 goal is 6.0 per 1,000 live births, the county rate is not different than this goal. ¹

Grant County has multiple services for the prevention of infant mortality, including Women, Infant, and Children Nutrition Services (WIC), Maternity Support Services (MSS), obstetric and family care providers, pediatricians, and an array of limited capacity services for those infants born with special needs.

The Health District provides case management services for prevention of infant mortality and childhood outcomes to families whose child is born with special needs including physical, behavioral, emotional, and developmental conditions (i.e. cleft lip and palette, birth defects, etc). In 2013 the Health District served 133 families.

Risk Factors for Infant Mortality

Pregnancy and childbirth have an impact on the health of women, newborns, and families.
Pregnancy-related health outcomes are

influenced by factors

ethnicity, age, income, and most

such as race,

Birth Risk Factors for Infant Mortality in Grant County, 2007-2012 (percent)

Factor	2007	2008	2009	2010	2011	2012
Babies Born With Low Birth Weight (<5.5 pounds)	6.7	7.2	5.7	6.0	6.4	7.14
Babies Born Preterm (<37 weeks)	9.7	11.4	8.8	9.8	9.3	10.5
Women Who Received Prenatal Care in the 1st Trimester	74.4	78	77.7	81.5	80.5	80.6
Women Who Did Not Smoke During Pregnancy	89.5	91.1	91.7	93.5	92.7	92.7

Washington State Department of Health 2013

importantly a woman's health. Some factors related to infant mortality that can be prevented include low birth weight, preterm birth, lack of early prenatal care (in first trimester), and smoking during pregnancy. Grant County women who gave birth from 2007 through 2011 closely matched state rates in these indicators. The infant mortality Leading Health Indicator for Healthy People 2020 is to reduce preterm births to 11.4%. ¹ Grant County's rate is better than the national goal. ⁵¹

The table above shows the birth risk factors for Grant County women and babies from 2007 through 2012. ⁵¹ The table on the next page presents birth risk factors for 2008-2012 for Washington State, Grant County, and cities. ⁵¹

As can be seen in these city specific factor charts for birth risk factors to the right, there

is much to be done in some cities to assure that infants are born healthy and to healthy women. Increasing smoking cessation opportunities to women before they are pregnant will decrease the number of mothers who smoke during pregnancy, but clearly intervention also needs to occur during pregnancy. Sharing the importance of prenatal care starting in the first trimester and continuing throughout pregnancy is important to reaching those populations in cities and towns without easy access to prenatal care and birthing facilities. ⁵¹

City Specific Birth Risk Factors for Infant Mortality, 2008-2012 (percent)

2008-2012	Babies Born With Low Birth Weight (<5.5 pounds)	Babies Born Preterm (<37 weeks)	Women Who Received 1st Trimester Prenatal Care	Women Who Did Not Smoke During Pregnancy
Washington State	6.2	10.0	79.0	90.7
Grant County	6.4	9.6	79.7	92.3
Moses Lake	7.0	8.7	81.8	89.3
Ephrata	6.0	9.3	79.5	89.0
Quincy	5.2	8.0	81.2	97.4
Mattawa	5.4	12.8	73.7	99.1
Electric City & Grand Coulee	9.4	10.4	85.0	58.1
Warden	6.7	10.8	75.6	97.8
Soap Lake	8.0	8.0	72.1	80.3

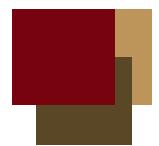
Washington State Department of Health 2013

Breastfeeding

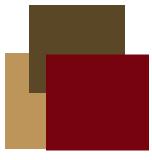
The American Academy of Pediatrics recommends exclusive breastfeeding for 6 months, followed by continued breastfeeding as foods are introduced, with continuation of breastfeeding for 1 year or longer as mutually desired by mother and infant. ⁶³ Breast milk provides the most wholesome nutrition for infants.

According to birth certificate information, 91.6% of Grant County mothers initiated breastfeeding while in the hospital, which is the same rate of Washington State mothers. ⁵¹ In the United States only 16.3% of mothers reach the recommendation for exclusive breastfeeding at 6 months and only 19.9% of Washington State mothers do so. ⁶⁴

The Baby-Friendly Hospital Initiative (BFHI) is a global program sponsored by the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) to encourage and recognize hospitals and birthing centers that offer an optimal level of care for lactation based on the WHO/UNICEF Ten Steps to Successful Breastfeeding for Hospitals. As of 2013, there were two hospitals in Grant County that deliver babies; neither hospital has received the Baby Friendly designation. ⁶⁵



Summary



Summary

This Grant County Community Health Assessment (CHA) and the five City Fact Sheets in the appendix reference 75 national, state, and local sources of demographic, geographic, social and physical environment, access to care, health behaviors, and health outcome indicators. These sources have been used to describe Grant County's health. The CHA process included 54 key leader informant interviews and participation from more than 40 agencies to guide the work of the Health District. These documents were also reviewed by over 30 people who provided information about clarity, national priorities, missing information, additional resources, and comments that improved usability and assured a comprehensive collection of data related to the health of Grant County residents.

Indicators significant to our nation and state, including Healthy People 2020 Goals, County Health Rankings, CDC Winnable Battles, and Governor Jay Inslee's Results Washington indicators provide guidance on how to prioritize issues to concentrate resources and set goals. There are also key informant interviewee quotes throughout the report that indicate a significant topic identified by the key informants. Their top five indicators identified were crime, sexually transmitted infections, teenage pregnancy, behavioral health, and education.

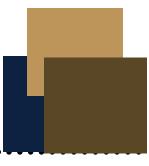
Key informants provided local perspectives about health issues and while key informants spoke about similar topics, each community had diverse perspectives on the issue including different needs and resources available to address it. Available resources are presented throughout the report and are included to assist communities identify gaps and overlaps.

In addition to county indicators of health, there are places where city specific data is presented. Analyzing county rates and counts increases the complexity of the data, but it also identifies community level information that can be used by local organizations. An example of this level of detail is the maternal and child health indicator of smoking during pregnancy. In Grant County between 2008 and 2012, 92% of women reported not smoking during pregnancy, but in Electric City and Grand Coulee only 58% of the women reported not smoking during pregnancy during the same time frame. Grant County has a rate, that is better than Washington's rate, but both pregnant women and women of child bearing years living in Grand Coulee and Electric City have a rate that is too low. Also, some indicators in Grant County already meet or exceed the nation's Healthy People 2020 Goal, such as the percentage of students in 9th through 12th who have smoked in the past 30 days. Grant County meets the national goal, but will the community accept that 10% of Grant County 10th graders smoke?

The work of choosing Grant County health indicator priorities is the job of a large body of people. Existing and new partners will meet to start the Community Health Improvement Process. Together, the group will agree on 3-5 top issues for the county and for their communities. In the next community health assessment report there will be a CHIP section to report on the work completed and the progress toward a healthier Grant County. Until then, each leader and resident can think about what they can do to make Grant County a safer and healthier place.

Summary Indicators

	Grant County	Washington	Benchmark
Social and Physical Environment			
Less than High School Education (pg 19)	24.8%	10.3%	_
Residents in Poverty (pg 18)	20%	12.5%	HP Monitoring
Access to Care			
Uninsured Adults (pg 28)	31.7%	19.6%	o HP Goal
Uninsured Children (pg 28)	7.6%	6.5%	o HP Goal
Primary Care Provider to Patient Ratio (pg 29)	1:1984	1:1216	1:1,051 CHR
Mental Health Provider to Patient Ratio (pg 30)	1:834	1: 533	1: 521 CHR
Dentist to Patient Ratio (pg 31)	1:2618	1:1402	1:1516 CHR
Health Behavior			
Enough Fruit and Vegetable Intake	20%	26%	Not comparable
Enough Fruit and Vegetable Intake	23%	24.5%	Not comparable
Enough physical activity (adults) (pg 34)	64%	62%	Not comparable
Enough physical activity (10th grade) (pg 34)	54%	51.5%	Not comparable
Tobacco Use (adults) (pg 35)	16%	16%	12% HP Goal
Tobacco Use (10th grade) (pg 35)	10%	9.5%	16% HP Goal
Heavy Drinking (adults) (pg 36)	13.3%	17%	10% CHR
Alcohol Use (10th grade) (pg 36)	27%	23%	16.6% HP Goal
Health Outcomes			
Life Expectancy (male., 2011) (pg 43)	77.5	78.2	77.4
Life Expectancy (female, 2011) (pg 43)	79.9	82.2	82.2
Adult Obesity (pg 43)	32%	26%	30.5% HP Goal
Overweight or Obese Children (10th Grade) (pg 43)	35%	23%	13.5% HP Goal
Adult Diabetes (pg 42)	8.3%	7.3%	_
Accidental Death/Unintentional Injury (pg 52)	69.2	58.4	53.3 HP Goal



- 1. Healthy People 2020. Leading Health Indicators. Retrieved from: http://www.healthypeople.gov/2020/LHI/default.aspx
- 2. Center for Disease Control and Prevention. Winnable Battles. Retrieved from: http://www.cdc.gov/winnablebattles/
- 3. Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute. County Health Rankings and Roadmaps. Retrieved from: http://www.countyhealthrankings.org/about-project
- 4. Results Washington. Goal 4: Healthy & Safe Communities. Retrieved from: http://www.results.wa.gov/whatWeDo/measureResults/communitiesGoalMap.aspx
- 5. Washington State Office of Financial Management. Population Density. Retrieved from: http://www.ofm.wa.gov/pop/popden/default.asp
- 6. Google Maps. Retrieved from: https://www.google.com/maps/preview
- 7. United States Census Bureau. American Community Survey 2007-2011.
- 8. Washington State Office of Financial Management. April 1 Official Population Estimates. Retrieved from: https://www.google.com/maps/preview
- 9. United States Census Bureau. Fast Facts 2010 (Generated and Accented by the Grant County Health District). Retrieved from: http://quickfacts.census.gov/qfd/maps/washington map.html
- 10. United States Census Bureau. 2010 American Fact Finder. Retrieved from: http://factfinder2.census.gov/faces/nav/jsf/pages/community_facts.xhtml#none
- 11. World Health Organization. Key Concepts and Social Determinants of Health 2013. Retrieved from: http://www.who.int/social_determinants/thecommission/finalreport/key_concepts/en/
- 12. Robert Wood Johnson Foundation. August 2009, Issue Brief Impact of the Economy on Health Care. Retrieved from: http://www.academyhealth.org/files/HCFO/findingso809.pdf
- 13. Grant County Economic Development Council. Grant County Labor Force 2011. Retrieved from: http://www.grantedc.com/demographics/labor-force
- 14. Grant County Economic Development Council. Largest Employers 2012. Retrieved from: http://www.grantedc.com/demographics/largest-employers
- 15. United States Department of the Interior, Bureau of Reclamation. Reclamation, Managing Water in the West—The Story of the Columbia Basin Project. Retrieved from: http://www.usbr.gov/pn/project/index.html
- 16. United States Department of Agriculture. 2012 Census of Agriculture. Retrieved from:
- 17. http://www.agcensus.usda.gov/Publications/2012/Online Resources/County Profiles/

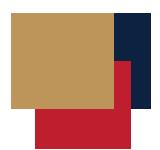
- Washington/cp53025.pdf
- 18. United States Department of Agriculture. National Agricultural Statistics Service Cropland Data Layer 2013. Published crop-specific data layer. Retrieved from: http://nassgeodata.gmu.edu/CropScape/
- 19. Port of Moses Lake. Retrieved from: http://www.portofmoseslake.com/
- 20. Washington State Department of Social and Health Services, Research and Data Analysis Division. Client Counts and Service Costs. Retrieved from: http://clientdata.rda.dshs.wa.gov/
- 21. Washington State Office of Superintendent of Public Instruction. School Report Card. Retrieved from: http://reportcard.ospi.k12.wa.us/summary.aspx?year=2012-13
- 22. Housing Authority of Grant County. Retrieved from: http://www.hagc.net/
- 23. Catholic Charities, Diocese of Yakima. Retrieved from: http://www.cchsyakima.org/
- 24. Grant County Commissioners Office. Retrieved from: http://www.co.grant.wa.us/MISC/PDF/2013 -Code-of-the-West-Publication-2013-07-02.pdf
- 25. People for People, Moses Lake. Retrieved from: http://www.wsdot.wa.gov/publications/manuals/fulltext/moooo/TransitSummary/PeopleForPeople%E2%80%93MosesLake.pdf
- 26. Washington Tracking Network, Air Quality. Retrieved from: https://fortress.wa.gov/doh/wtn/WTNPortal/error/?aspxerrorpath=/wtnportal/Content/Tier2_SharedLandingPage.aspx
- 27. United States Environmental Protection Agency. Particulate Matter. Retrieved from: http://www.epa.gov/airquality/particlepollution/fastfacts.html
- 28. Washington State Department of Health. 2010 Pesticide Data Report. Retrieved from: http://www.doh.wa.gov/Portals/1/Documents/Pubs/334-301.pdf
- 29. Washington State Association of Sheriffs and Police Chiefs. Statistics 2012 Local Agency NIBERS dashboard.
- 30. Grant County Sheriff's Office. Retrieved from: http://www.co.grant.wa.us/sheriff/
- 31. Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute. County Health Rankings and Roadmaps, Access to Care. Retrieved from: http://www.countyhealthrankings.org/our-approach/health-factors/access-care
- 32. Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System 2006-2010.
- 33. United States Census Bureau. Small Area Health Insurance Estimates. Retrieved from: http://www.census.gov/did/www/sahie/
- 34. Washington State Office of the Insurance Commissioner. The State of the Uninsured and Under-

- insured 2010-2014. Retrieved from: http://www.insurance.wa.gov/about-oic/commissioner-reports/2009-present/documents/state-of-the-uninsured.pdf
- 35. United States Department of Health and Human Services, Health Resources and Services Administration. Shortage Designation: Health Professional Shortage Areas & Medically Underserved Areas/Populations. Retrieved from: http://www.hrsa.gov/shortage/
- 36. Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute. County Health Rankings and Roadmaps, Primary Care Providers. Retrieved from: http://www.countyhealthrankings.org/app/washington/2014/measure/factors/4/map
- 37. Healthy People 2020. Access to Health Services. Retrieved from: http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=1
- 38. Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System 2007 & 2009.
- 39. Washington State Healthy Youth Survey 2012. Retrieved from: http://www.askhys.net/
- 40. Healthy People 2020. Physical Activity. Retrieved from: http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=33#204239
- 41. Healthy People 2020, Substance Abuse. Retrieved from: http://healthypeople.gov/2020/lhi/substanceabuse.aspx
- 42. Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System 2003-2010.
- 43. National Institutes of Health, the National Institute on Alcohol Abuse and Alcoholism. Rethinking Drinking. Retrieved from: http://pubs.niaaa.nih.gov/publications/RethinkingDrinking/Rethinking Drinking.pdf
- 44. Centers for Disease Control and Prevention. Adolescent and School Health, Alcohol and Other Drug Use. Retrieved from: http://www.cdc.gov/healthyyouth/alcoholdrug/
- 45. Washington State Division of Behavioral Health and Recovery . The System for Communicating Outcomes, Performance & Evaluation. Retrieved from: http://www.scopewa.net
- 46. Seattle Children's Hospital and the Social Development Research Group. A parent's guide to preventing underage marijuana use. Retrieved from: http://www.preventionworksinseattle.org/uploads/Parent-handbook Oct2013.pdf
- 47. Healthy People 2020. Immunization and Infectious Disease. Retrieved from: http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=23
- 48. Centers for Disease Control and Prevention. FluVaxView. Retrieved from: http://www.cdc.gov/flu/fluvaxview/reports/reporti1213/trends/index.htm

- 49. Healthy People 2020. Immunization and Infectious Disease. Retrieved from: http://www.healthypeople.gov/2020/topicsobjectives2020/objectiveslist.aspx?topicId=23
- 50. Washington State Department of Health, Washington State Immunization Information System.
- 51. Robert Wood Johnson Foundation & University of Wisconsin Population Health Institute.

 County Health Rankings and Roadmaps. Retrieved from: http://www.countyhealthrankings.org/app/washington/2014/overview
- 52. Washington State Department of Health, Center for Health Statistics 2011. Community Health Assessment Tool.
- 53. National Center for Health Statistics. Health Indicators Warehouse Retrieved from: http://www.healthindicators.gov/
- 54. Centers for Disease Control and Prevention Data. Brief Number 99, July 2012 Death in the United States, 2010. Retrieved from: http://www.cdc.gov/nchs/data/databriefs/db99.htm#Ref1
- 55. Washington State Department of Health, CHARS, Accessed via CHAT The Community Health Assessment Tool
- 56. United States Department of Health and Human Services, Agency for Healthcare Research and Quality. Prevention Quality Indicators. Retrieved from: http://www.qualityindicators.ahrq.gov/Modules/pqi resources.aspx
- 57. Washington State Department of Health. Pertussis in Washington. Retrieved from: http://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/WhoopingCough.aspx#cough
- 58. Centers for Disease Control and Prevention. Cases of Sexually Transmitted Diseases Reported by State Health Departments and Rates per 100,000 population, United States 1941-2012. Retrieved from: http://www.cdc.gov/std/stats12/tables/1.htm
- 59. Washington State Department of Health. West Nile Virus Surveillance Maps. Retrieved from: http://www.doh.wa.gov/DataandStatisticalReports/DiseasesandChronicConditions/ WestNileVirus.aspx
- 60. Washington State Department of Health. Injury and Violence Prevention Guide, January 2013. Retrieved from: http://www.doh.wa.gov/Portals/1/Documents/2900/InjuryReportFinal.pdf
- 61. Washington State Patrol. Moses Lake—Grant County Detachment. Retrieved from: http://www.wsp.wa.gov/traveler/d6detach.htm
- 62. City of Moses Lake. The Central Basin Traffic Safety Taskforce. Retrieved from: http://www.cityofml.com/index.aspx?NID=421
- 63. Washington Poison Center. Retrieved from: https://www.wapc.org/

- 64. American Academy of Pediatrics. (2012). Policy Statement: Breastfeeding and the use of human milk. Retrieved from: http://pediatrics.aappublications.org/content/129/3/e827.full#content-block
- 65. Centers for Disease Control and Prevention. Breastfeeding Report Card 2012. Retrieved from: http://www.cdc.gov/breastfeeding/pdf/2012BreastfeedingReportCard.pdf
- 66. Baby-Friendly USA. Retrieved from: http://www.babyfriendlyusa.org/
- 67. Centers for Disease Control and Prevention. Chronic Disease. Retrieved from: http://www.cdc.gov/chronicdisease/resources/publications/aag/chronic.htm
- 68. Centers for Disease Control and Prevention. Diabetes Public Health Resource. Retrieved from: http://www.cdc.gov/diabetes/pubs/estimates11.htm
- 69. Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System 2008-2010.
- 70. Washington State Liquor Control Board. Initiative 502's Impact on the Washington State Liquor Control Board. Retrieved from: http://liq.wa.gov/marijuana/fact_sheet
- 71. Drummer, T. (2008). Health Geography: supporting public health policy and planning. Canadian Medical Association Journal. Retrieved from: www.ncbi.nlm.nih.gov/pmc/articles/PMC2292766
- 72. Washington State Department of Health. Washington State Smile Survey 2010. Retrieved from: www.doh.wa.gov/Portals/1/Documents/Pubs/160-099 SmileSurvey2010.pdf
- 73. United States Department of Health and Human Services. Surgeon General National Prevention Strategy 2011. Retrieved from: www.surgeongeneral.gov/initiatives/prevention/strategy
- 74. National Association of Count & City Health Officials. Community Health Assessment & Improvement Processes. Retrieved from: www.naccho.org/topics/infrastructure/CHAIP/upload/CHA-and -CHIP-Processes-JJE.pdf
- 75. Healthy People 2020. Maternal, Infant, and Child Health. Retrieved from: https://www.healthypeople.gov/2020/topics-objectives/topic/maternal-infant-and-child-health
- 76. Washington State Employment Security Department. Grant County Profile. Retrieved from: https://fortress.wa.gov/esd/employmentdata/reports-publications/regional-reports/county-profiles/grant-county-profile



Appendices

