
Klamath County Community Health Assessment 2013



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Acknowledgements

“Healthy Klamath” Steering Committee:

- Sky Lakes Medical Center
- Klamath Open Door Family Practice
- Cascade Comprehensive Care
- Klamath County Public Health

“Healthy Klamath” Community Partners:

- OHSU School of Nursing
- Herald and News
- OSU Extension Service
- Klamath Tribal Health and Family Services

Community Organizations

Klamath County Board of Commissioners
Klamath County Mental Health
Klamath County Juvenile Department
Klamath Community College
Oregon Institute of Technology
Klamath Falls City Police
Klamath County Emergency Management
Klamath County Community Corrections
Klamath County Economic Development Association
Department of Human Services
Klamath County School District
Klamath Falls City School District
Lutheran Community Services
City of Klamath Falls
Klamath and Lake Action Services
Herald and News
Klamath Falls CASA
Citizens for Safe Schools
Commission on Children and Families

I. Introduction

This Community Health Assessment (CHA) represents over 13 months of collaborative work between Klamath County Public Health, Sky Lakes Medical Center, Klamath Open Door Family Practice, Cascade Comprehensive Care, and other various community partners. This CHA is the first of its kind to formally assess and document the health of our community utilizing a coordinated and collaborative process. It is the first step to the ongoing process of community health improvement.

“Community health is a discipline of public health that is the study and improvement to improve health-related characteristics of the relationships between people and their physical and social environments. From a community health perspective, health is not simply a state free from disease but is the capacity of people to be resilient and manage life’s challenges and changes.” –PHAB, 2011

The primary goal of our CHA is to better understand the health of our community and to develop local strategies to address our community’s specific needs and identified priority issues. The CHA will set community priorities, establish benchmarks and monitor trends in the health status of Klamath County residents and develop a platform for collaboration to improve health status.

We acknowledge that this report is not a complete collection of all of our community health needs and indicators. Our information is limited by the available data; in many instances county-level data does not exist. We highly encourage readers and community partners to contribute data and ask critical questions to enhance the understanding of our community’s health and the array of factors that contribute to it. Our CHA is a living document, allowing for us to seek continuous improvement and further analyze the data and, ultimately, improve the health of our community.

Methods

A core function of public health is to examine various indicators and describe the influence on community health. Understanding that health is a product of many conditions and factors, an adapted version of the strategic planning framework developed by the National Association of County and City Health Officials (NACCHO) in cooperation with the Centers for Disease Control and Prevention (CDC) was made to create this CHA. The strategic planning framework that was adapted for Klamath County is known as Mobilizing Action through Planning and Partnerships (MAPP). MAPP is a community-driven process that results in the identification of health issues and health improvement strategies through community member and stakeholder engagement. Facilitated by public health leaders, MAPP is intended to improve the efficiency, effectiveness, and performance of local public health systems.

MAPP allows for an enhanced understanding of the influences on community health through the analysis of population-based quantitative data, locally gathered qualitative data, and the expertise of key stakeholders. These various data-collection methods allow for a better understanding of the social determinants of health. The social determinants of health are the circumstances in which people are born, raised, live, and work, in addition to available resources. The social determinants of health provide a lens through which to view different

populations and communities and identify conditions that promote health, rather than limit it. With this information we can collectively better understand the drivers of health outcomes in Klamath County and develop strategies for health improvement.

Process

While the standard MAPP includes four assessments (Community Health Status Assessment, Community Themes and Strengths Assessment, Local Public Health System Assessment, and the Forces of Change Assessment), the Healthy Klamath Steering Committee tailored MAPP to better fit our community (see Figures 1 and 2). After collaboration and discussion with the Oregon Coalition of Local Health Officials and Multnomah County Public Health Department it was decided to combine the Local Public Health System Assessment and Forces of Change Assessment into one, single assessment. This specific combination could then increase efficiency and utilize resources most effectively. The information for this combined assessment was collected from stakeholders with the ability to speak to the current system as well as the future opportunities and uncertainties that may affect the current system.

Figure 1. Adapted MAPP Process



Utilizing the MAPP process, a comprehensive snapshot of community health in Klamath County was created. The information presented in this CHA will be used to inform the development of the Community Health Improvement Plan (CHIP).

Figure 2. Adapted MAPP Process



Adapted from Multnomah County Health Department

Community Health Status Assessment

The Community Health Status Assessment provides a traditional qualitative viewpoint of health indicators from a single point in time through the collection of secondary data. These base indicators serve as the foundation for analyzing and prioritizing community health issues and allows for comparison with like communities, state data, and national data. Calling up on using measures that are specific, quantifiable and practical enables the community to establish a baseline and track progress.

Understanding that collecting and analyzing the volume of data necessary to fully understand community health is time- and resource-intensive; Healthy Klamath partners collaboratively sought a solution to utilize resources. The steering committee agreed to utilize the Healthy Communities Institute (HCI). HCI manages and continually updates a centralized publically available web-based source of population data and community health information.

HCI provides a platform for continual monitoring and tracking on 95 indicators selected by the steering committee. These indicators were assessed on four factors: 1) comparison to Oregon and national benchmarks, 2) trends over time, 3) health disparities, 4) severity of health issue. The health indicators selected for inclusion in this report met at least three of the four conditions:

- Klamath County rate is higher than the Oregon state average and/or does not meet the Healthy People 2020 benchmark;
- The trend is worsening;
- Certain populations are experiencing a disparity;
- Long-term consequence, premature death, and/or high health-related expenditures are associated;

Community Themes and Strengths Assessment

The formulation of the CHA was strongly influenced by input from community partners and stakeholders as well as individuals in Klamath County communities. Community involvement is essential to successful public health action, and the priority areas for health improvement should reflect the problems of greatest concern to the local communities. Healthy Klamath partners sought community input via listening sessions, focus groups, and surveys.

In the period of March through June 2012, Oregon Health Sciences University School of Nursing students conducted listening sessions and focus groups in six outlying communities (Merril, Malin, Bonanza, Chiloquin, Midland, and Keno) in Klamath County (see Appendix A-B).

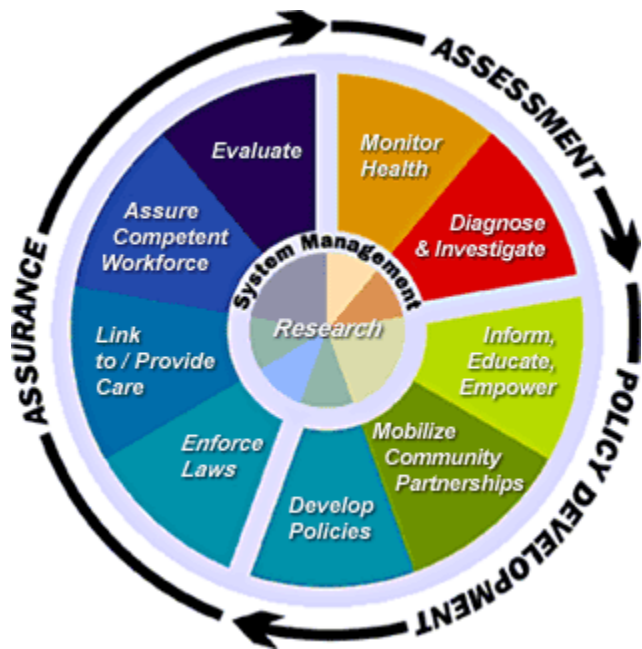
In March 2013, Herald and News distributed a community health survey prepared by Klamath County Public Health to better understand local health priorities (see Appendix C).

Local Public Health System & Forces of Change Assessment

The CHA takes into account an understanding of the environment we operate within. Understanding the strengths and weakness of the current public health system, in addition to any upcoming social, political, or economic changes that could affect the system is integral to developing priority areas of focus. Health care reform and the current economic climate are largely impacting the public health system and these structural changes must be accounted for.

The Healthy Klamath partners identified a list of key stakeholders organized by sector to interview for this assessment. The stakeholders were selected for their organization's influence on community health and their role in the public health system. For purposes of this assessment, the public health system was defined using the framework of the Ten Essential Public Health Services (see Figure 3).

Figure 3. Ten Essential Public Health Services



Relying upon a broad definition of a public health system enabled the inclusion of a diverse representation of organizations, many of which are viewed as non-traditional health partners.

Klamath County Public Health staff conducted 20 interviews with more than 25 stakeholders in the period of February through April 2013. Interviews were conducted in both one-on-one settings and in group settings with stakeholders who worked for the same organization.

Each interview began with an explanation of the CHA using the CHA Framework (Figure 2). Staff then provided the interviewee with a written and visual definition of health (Appendix D). After any questions regarding the CHA were answered, three interview questions followed.

The interview questions were developed based on the MAPP process to illicit discussion on the stakeholder’s perception of health and their organizations role, and any upcoming challenges or opportunities that may affect the organization’s scope of work.

- 1 How does your organization contribute to the health of the community?
- 2 What do you see as your organizations role in the local public health system?
- 3 What challenges do you see that may affect your work (upcoming changes in legislation, funding, technology, new collaborations, etc.)

Electronic notes were taken by staff during the interviews, with the permission of the interviewee(s). The narrative transcripts were analyzed in aggregate at the conclusion of the interviews for recurring themes and key points.

Limitations

This document is not inclusive of all health-related issues in Klamath County and relies heavily upon secondary data. There are many noteworthy gaps in the readily available state and national data systems. In many cases, data are not available at the county level or for stratification by demographic. Limitations exist for comparative analysis between Oregon counties; small population sizes in rural areas make these comparisons difficult. This document should not be considered a formal study or research document.

Likewise, limitations exist within the primary data within this document. The demographics for those who completed the Klamath County Community Health Survey were both similar and dissimilar to the U.S. Census Bureau statistics for Klamath County. Below are the demographics for the surveyed population compared to the general population.

Demographics	Survey Population	Klamath County Population	Oregon Population
<i>Sex/Gender</i>			
Male	33.70%	49.70%	49.50%
Female	66.30%	50.30%	50.50%
<i>Race/Ethnicity</i>			
African American/Black	0.00%	0.80%	2.00%
American Indian/Alaska Native	2.20%	4.40%	1.80%
Asian/Pacific Islander	1.00%	1.00%	3.90%
Hispanic/Latino	3.70%	10.90%	12.00%
White/Caucasian	93.20%	80.60%	78.10%
<i>Location</i>			
Within Klamath Falls City Limits	53.40%	31.60%	
Outside Klamath Falls City Limits	46.60%	68.40%	
<i>Age Range</i>			
25 or less	5.60%	31.60%	32.00%

26-39	19.90%	16.20%	20.30%
40-54	21.60%	20.00%	20.60%
55-64	30.70%	15.10%	13.30%
65+	22.30%	17.10%	13.90%
<i>Education</i>			
Less than high school diploma	1.10%	13.10%	11.20%
High school diploma or GED	30.70%	58.10%	51.80%
College degree or higher	68.20%	28.90%	37.10%
<i>Household Income</i>			
Less than \$20,000	9.10%		
\$20,000-\$29,000	10.30%		
\$30,000-\$49,000	22.60%		
Over \$50,000	58.00%	42.10%	49.90%
<i>Marital Status</i>			
Married/co-habiting	79.30%		
Not married/single	20.70%		

Source: Klamath County Community Health Survey, 2013 & American Community Survey 2007-2011

The surveyed population also reported higher levels of perceived health for themselves than for the general population.

II. Indicators

The indicators within this assessment were categorized in the context of the socioecological model; understanding that health is not only influenced by individual and genetic factors but also by the environment around us (see Figure 4).

Figure 4. Socioecological Model



While the socioecological model has five layers of influence, for the purposes of this assessment “community” was defined as including the model’s traditional community influences in addition to organizational and interpersonal influences. Each of the priority area indicators later discussed in the CHA are categorized under the socioecological model as system, community, or individual. The majority of the priority areas were identified in at least two of the assessments. It is imperative that a priority area within each level of the socioecological model is

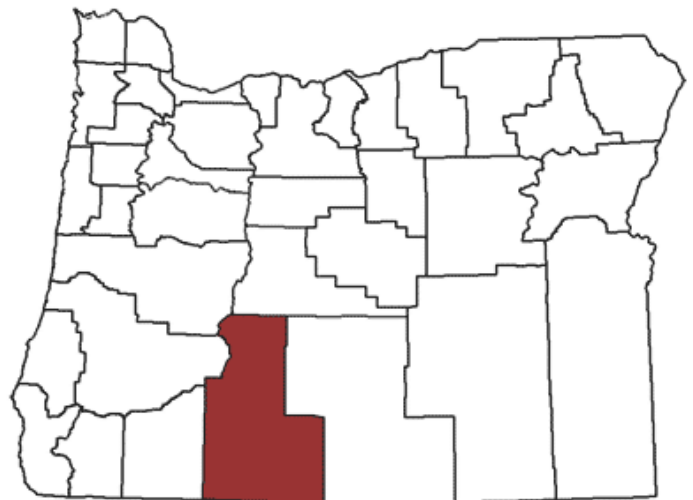
identified to change order to result in health improvement. Failing to address a level of the socioecological model will result in less noteworthy outcomes and unsustainable practices.

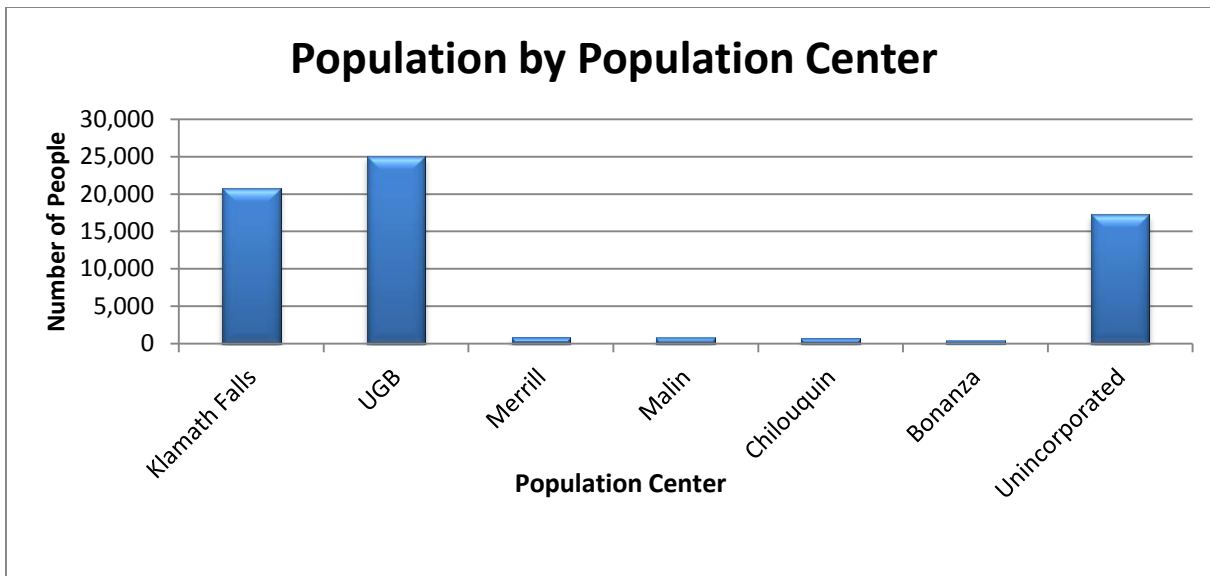
Demographics

Prior to reviewing the priority area indicators, it is important to understand the context in which Klamath County residents live.

Klamath County is a geographically large county located in south central Oregon. It spans over 5,941 square miles, making it the fourth largest county in Oregon. Located in the high desert, Klamath County has unique natural resources. These unique natural resources have contributed to the rich history of agriculture in Klamath County.

Klamath County is home to 66,580 residents, with approximately 21,000 residents residing within the city of Klamath Falls and an additional 25,000 residents residing within the urban growth boundary (UGB)¹. The population centers are Klamath Falls, Merrill, Malin, Chiloquin, and Bonanza, with over 17,294 people residing in unincorporated communities or census designated places (CDPs)¹.

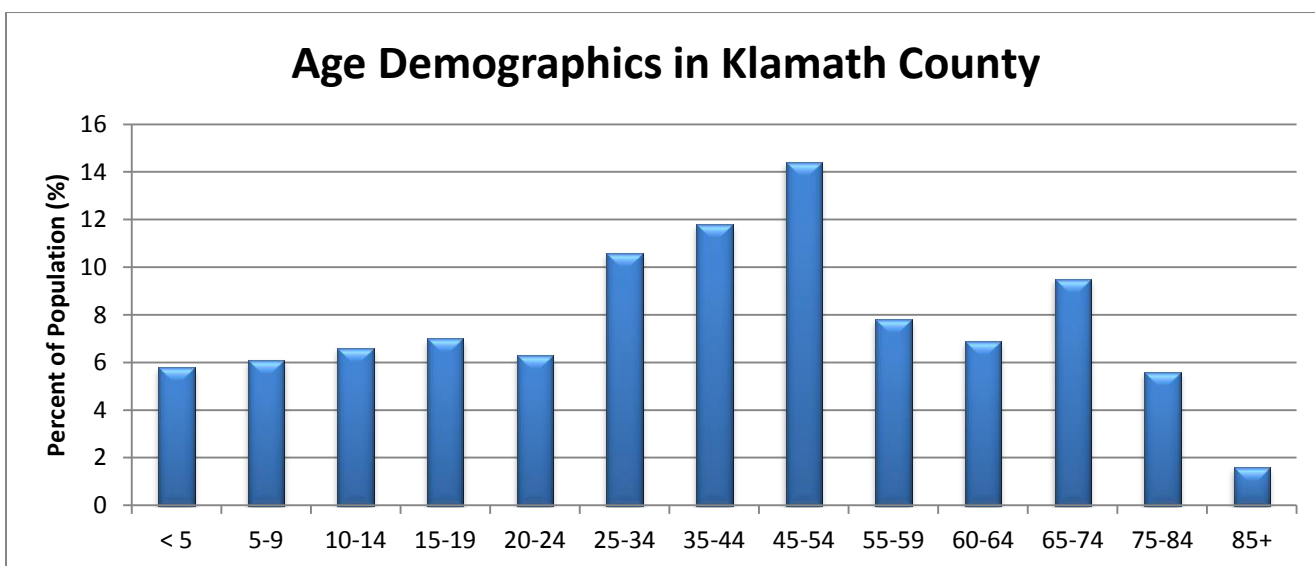




Source: The Oregon Population Research Center Annual Population Report – 2011

According to Census Data, Klamath County is experiencing a gradual decline in population size (-0.7 percent from April 1, 2010 to July 1, 2012)¹. Understanding how the Klamath County population has changed over time is integral to assessing the current infrastructure and demand on resources. Together, these demographics provide necessary information for identifying health disparities and socioeconomic factors affecting the health of the Klamath community.

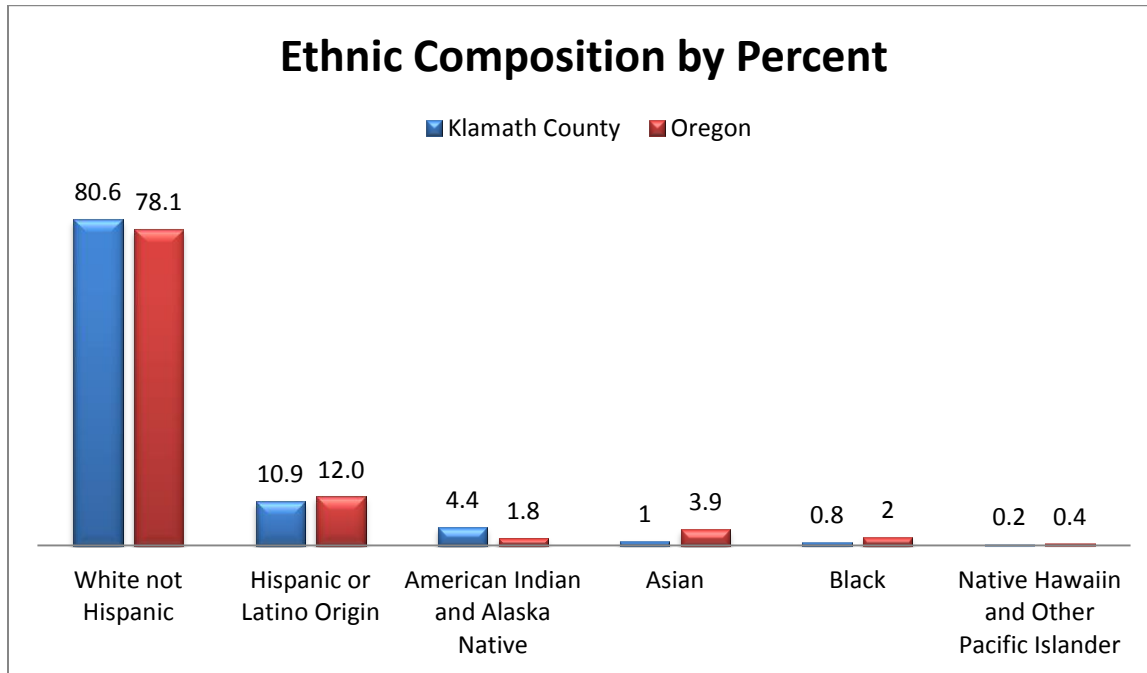
Many socioeconomic and cultural characteristics of the population living in Klamath County drive the health indicators in this report. The population for males and females remains almost equal according to the US Census Data for 2010 and the largest age groups in Klamath County are the 35-44, 45-54, and 55-64 age groups with the median age being 41.7¹.



Source: American Community Survey, 2007-2011

Diversity and Immigration

Although the majority of the population identify as White not Hispanic (80.6 percent), Klamath County continues to show an increase in diversity¹. The Hispanic/Latino community increased almost 40 percent from 2000-2010, with 10.9 percent of the population identifying as Hispanic/Latino as of 2011 according to the US Census data¹. Those who identify as American Indian Alaska Native make up 4.4 percent of the total population (Oregon 1.8 percent) and people reporting two or more races is 3.8 percent¹.



Source: U.S. Census 2012

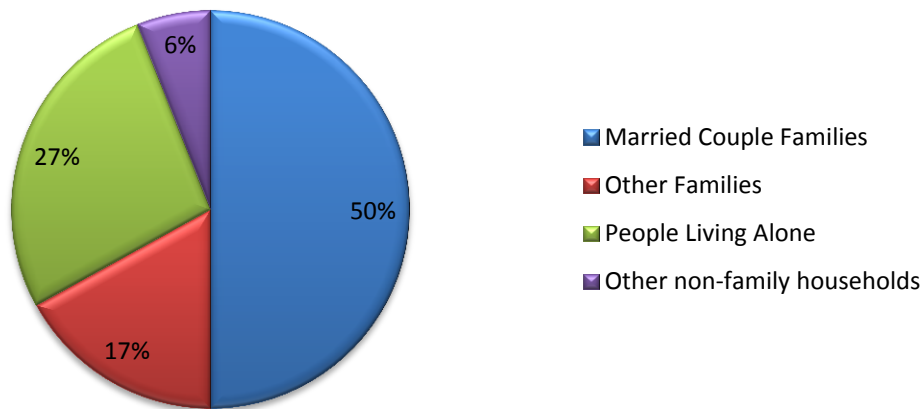
According to the United States Census 94.4 percent of people living in Klamath County are native residents of the United States with only 44.8 percent born in Oregon¹. Of the 3,242 people who are not native US residents, 57.1 percent are native residents to Latin America¹. The place of origin impacts the primary language spoken at home. While the primary language in Klamath County is English, 8.6 percent of households speak a language other than English at home, 6.4 percent of households speak Spanish¹. It is important to remain aware of the growing Hispanic/Latino population and percentage of non-English speakers in Klamath County when considering health improvement strategies.

Households

There are 27,378 households in Klamath County with the average household size at 2.39¹. The United States Census reports that 30.1 percent of households have at least one child under the age of 18 and 28.9 percent of households have at least one person over the age of 65¹.

Families are the largest household type in Klamath County with 67.3 percent of households consisting of both married couple families (51.5 percent) as well as other families (15.8 percent) where households headed by an unmarried adult with children under 18 comprises 9.7 percent (male 2.8 percent female 6.9 percent)¹.

Household Type



Source: American Community Survey, 2007-2011

Military Veteran Population

Military veterans account for a higher population proportion than the state average at 11.5 percent of the total civilian population, compared to 8.7 percent of the total Oregon civilian population¹. It is important to recognize the varying health needs of this population.

Individual

Aging Population

As the baby boomer generation continues to age, we continue to see an increase in the percentage of older adults locally and nationwide. Despite the population increase of older adults, over the past century quality of life has improved and life expectancy has increased. We know that today's adults are living longer and many with fewer disabilities than seen in past generations². Even still, the aging population presents a unique set of risk factors and health outcomes that contribute to the overall health of the population.

Pre-existing medical conditions and weakened immune systems increase the aging population's susceptibility to influenza and pneumonia. Adults aged 65 and over are more likely to suffer severe health consequences from these conditions. Vaccinations are the best way to protect the health of the aging population however, according to the Oregon Behavioral Risk Factor Surveillance System (BRFSS); only 57.8 percent of adults 65 and older received an influenza vaccine³.

Chronic Disease and Related Conditions

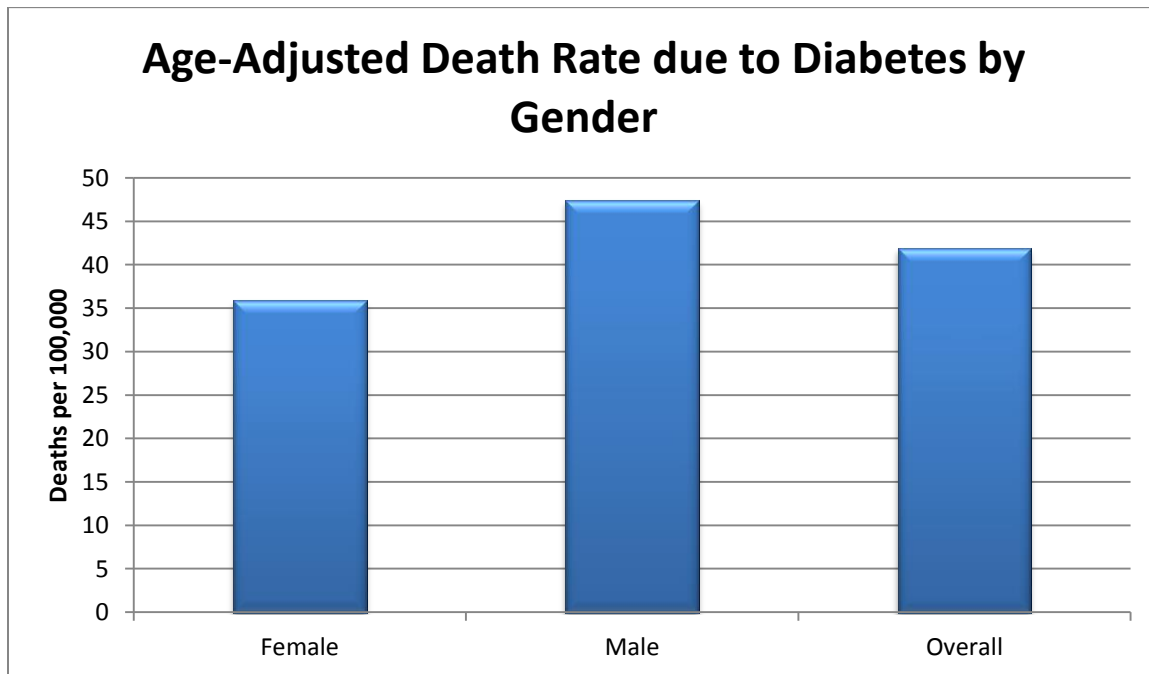
Klamath County is no exception to the nationwide epidemic of chronic disease. The leading causes of death in Klamath County are chronic conditions: heart disease, cancer, chronic lower respiratory disease (CLRD), stroke, and diabetes. The age-adjusted death rates for the leading causes of death in Klamath County are higher than the rest of the state. The modifiable risk factors for these conditions are similar.

Age-Adjusted Death Rate Per 100,000

Cause of Death	Klamath County	Oregon	Percent Difference
Heart Disease	169.0	152.2	10.5%
Cancer	188.7	177.9	5.9%
CLRD	64.5	47.3	30.8%
Cerebrovascular Disease	49.2	44.7	9.6%
Diabetes	41.9	25.9	47.2%

Source: Oregon Health Authority, Center for Health Statistics

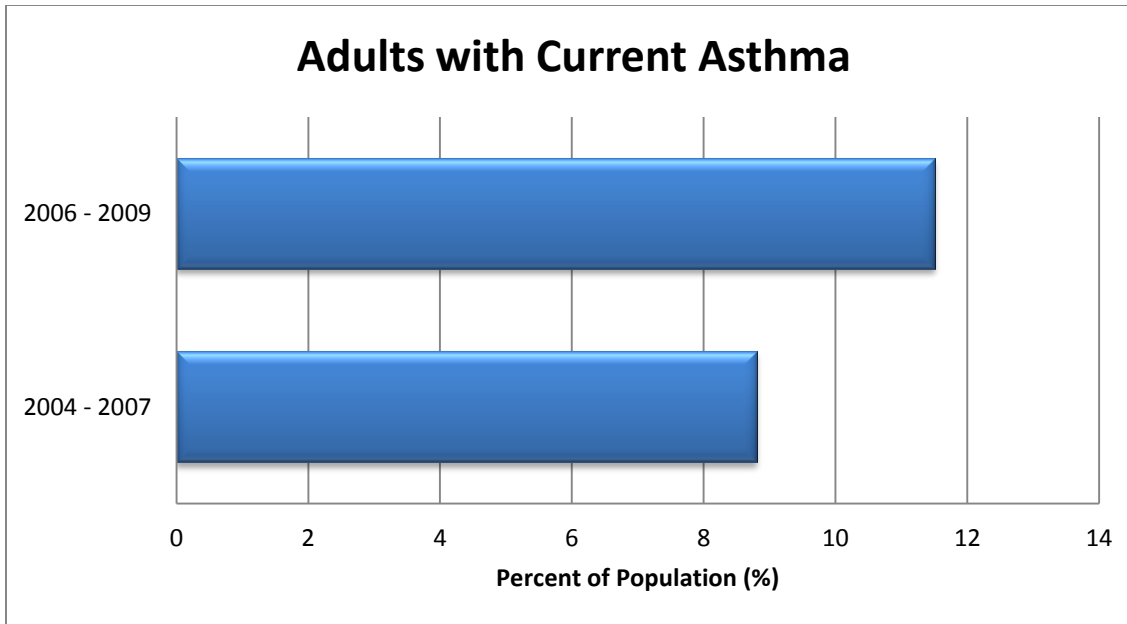
According to the BRFSS, 7.3 percent of adults in Klamath County have been diagnosed with diabetes⁴. Ultimately, in the period of 2007-2009 diabetes resulted in 41.9 deaths per 100,000 in Klamath County, an increase from 35.9 per 100,000 in the period of 2006-2008⁵. Diabetes more frequently results in death in males when compared to females⁴.



Source: Oregon Health Authority, Center for Health Statistics

The high percentage of adults with diabetes is positively correlated with cerebrovascular disease, also known as stroke. In Klamath County, 49.2 deaths per 100,000 are attributable to stroke³.

Klamath County exhibits poor respiratory health. An increasing number of adults are being diagnosed with asthma, 11.5 percent of all adults have now been diagnosed with asthma³. Symptoms of asthma are often triggered by the inhalation of allergens or particulates such as dust, particulate matter, or cigarette smoke⁶.



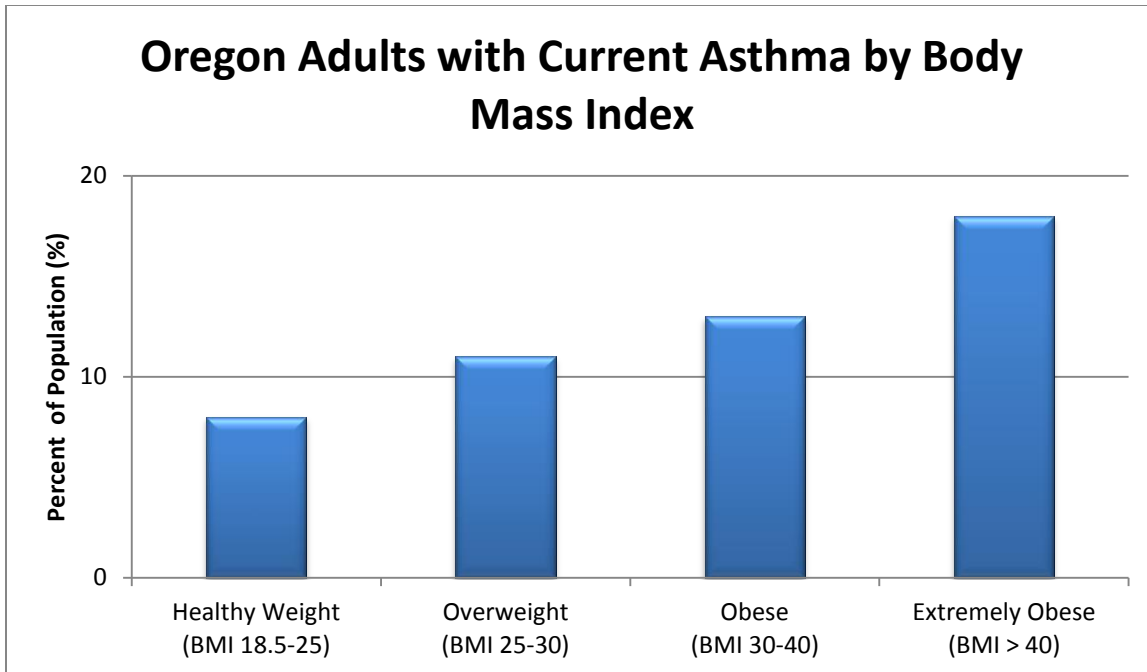
Source: Oregon Behavioral Risk Factor Surveillance System, 2006-2009

The complexity of asthma makes it difficult to detect any one risk factor to explain asthma rates in Klamath County. A host of risk factors are associated with the development of asthma, many of which are unique to each individual. Risk factors may include family history, smoking, obesity, health coverage status, and indoor and outdoor air quality.

Klamath County has a history of high levels of outdoor air pollution during the winter months, largely due to particulates emitted from woodstoves. While Klamath County’s air quality has dramatically improved since the late 1980s, Klamath County continues to experience brief periods of unhealthy particulate matter 2.5 concentrations on cold days. Inhalation of these particulates is associated with an increase in asthma prevalence⁷.

Noteworthy risks for developing asthma are also associated with smoking. According to the BRFSS, Oregonians who smoke are more likely to have asthma (12.3 percent) than those who have never smoked (9.7 percent)⁷. Exposure to secondhand smoke has similar associations. Klamath County has higher than the state average smoking rates, which may contribute to asthma prevalence.

Similarly, obesity is an identifiable and modifiable risk factor for asthma. According to Oregon BRFSS data, the prevalence of asthma increases with increasing body mass index (BMI). Asthma control worsens with increasing BMI, as obese individuals respond less favorably to asthma medication than non-obese individuals⁸. Lung function has also been shown to decrease in obese individuals, thus contributing to the development of asthma.



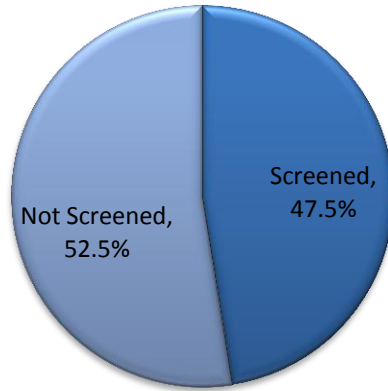
Source: Oregon Behavioral Risk Factor Surveillance System, 2006-2009

Other chronic conditions are often reported in individuals living with asthma. Among the most common reported co-morbid chronic condition is depression. In Oregon, over 35 percent of adults with current asthma report having depression⁷.

Similarly, Klamath County has high rates of chronic lower respiratory disease when compared to other Oregon counties. Examples of chronic lower respiratory diseases include asthma and emphysema. Chronic lower respiratory disease more commonly results in death in older age groups.

When compared to other Oregon counties, Klamath County has a low all cancer incidence rate. The incidence of all cancer in Klamath County is decreasing. Among the various types of cancer, evident disparities exist. Colorectal cancers is the most prevalent and deadly form of cancer in Klamath County. According to the 2006-2009 BRFSS, only 47.5 percent of Klamath County residents over the age of 50 had been screened for colorectal cancer in the past five years⁹. While colorectal cancer is the second leading cancer killer in the United States, 60 percent of colorectal cancer deaths could be prevented through early detection⁷.

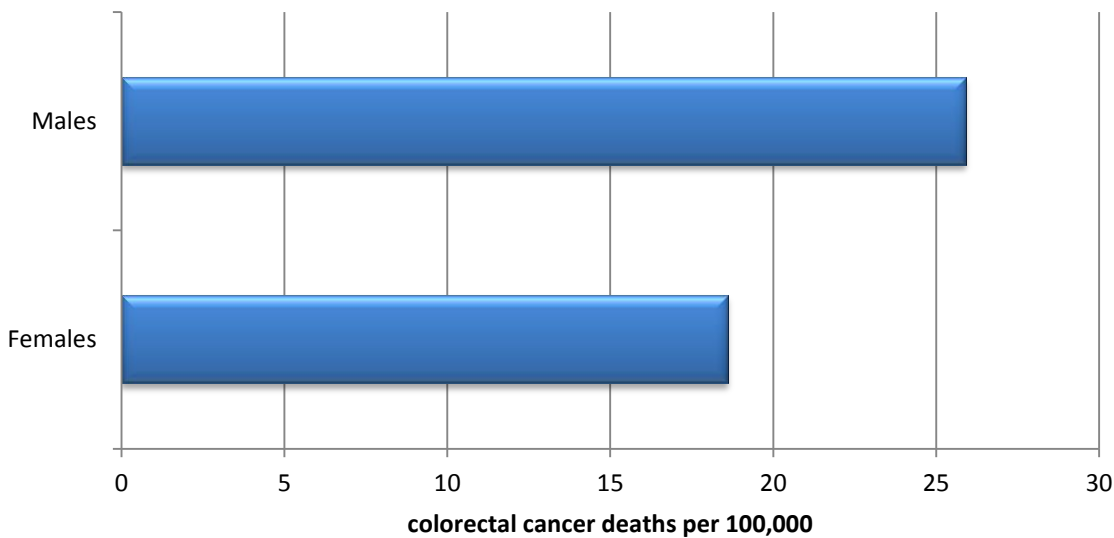
Adults (50 years or older) Colorectal Cancer Screening in Previous 5 Years



Source: Oregon Behavioral Risk Factor Surveillance System, 2006-2009

As a result of insufficient screenings, colorectal cancer results in 22.1 deaths per 100,000¹⁰. Colorectal cancer deaths account for more cancer deaths in Klamath County than any other form of cancer. In Klamath County, more deaths of colorectal cancer are observed in males (25.9) than in females (18.6). Colorectal cancer has an incidence rate of 49.7 per 100,000⁷.

Age-Adjusted Colorectal Cancer Death Rate



Source: National Cancer Institute, 2005-2009

Health Behaviors

The prevalence of modifiable health behaviors that contribute to the development of chronic disease is higher in Klamath County than in many other Oregon Counties. High blood pressure and high cholesterol are significant risk factors for chronic conditions. Many lifestyles factors contribute to the high prevalence of these conditions including tobacco use, inadequate levels of physical activity, and poor diets.

Health Behaviors in Klamath County

Health Factors		Lifestyle Factors	
High blood pressure prevalence	29.4%	Tobacco (cigarette) use	22.0%
High cholesterol prevalence	34.3%	Overweight adults	34.6%
		Obese adults	26.0%
		Adults engaging in regular physical activity	58.7%
		Adults eating 5 or more servings of vegetables daily	28.3%

Source: HealthyKlamath.org

As in Oregon, the leading cause of preventable death in Klamath County is tobacco use. Obesity is the second leading cause of preventable death¹¹. These modifiable risk factors have a significant impact on personal health and the health of our community.

“We need to teach this generation how to make smarter, healthier choices. Our adults need to model this for the next generation.” –Key Informant

Of the above stated health and lifestyle factors, respondents of the community health survey identified tobacco use as having the greatest impact on overall community health.

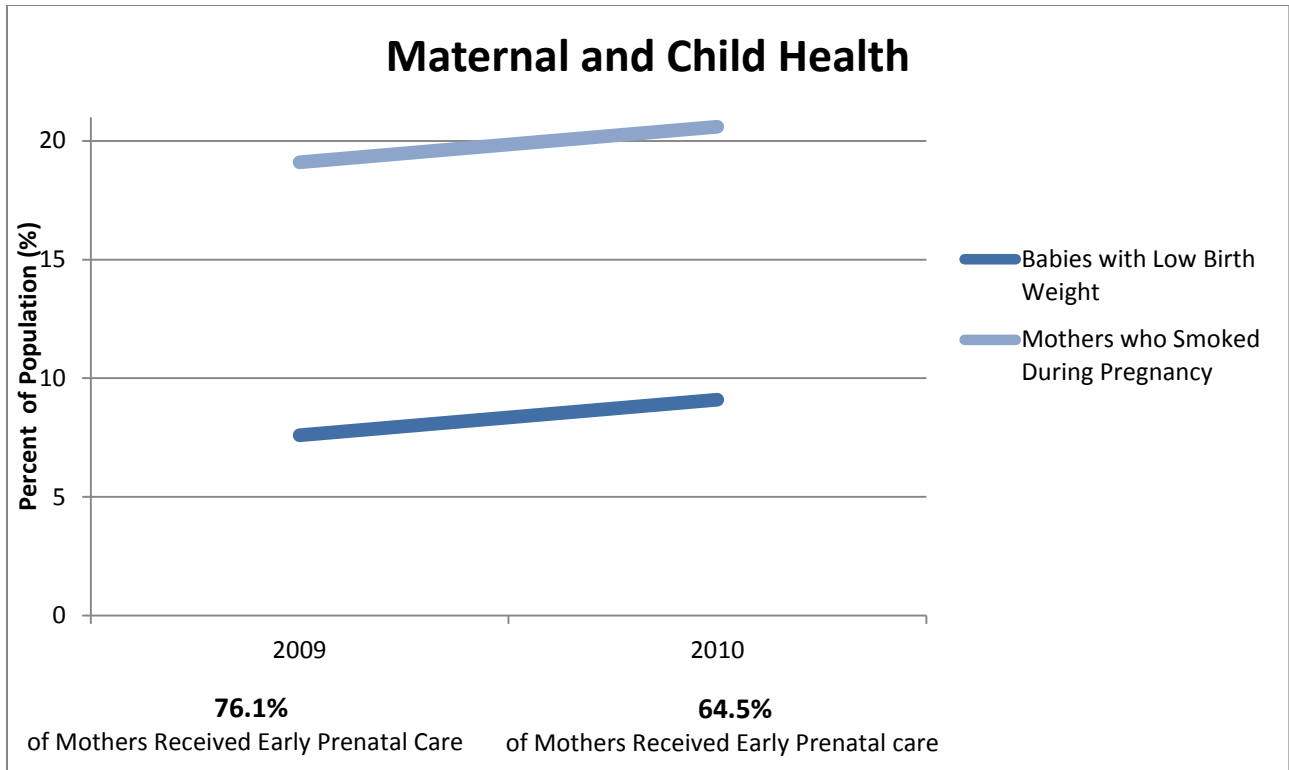
Maternal and Child Health

A healthy start for children begins with a healthy mother long before conception. A safe and healthy pregnancy are strongly associated with a balanced diet, a tobacco free lifestyle, and, most importantly, access to prenatal care.

Access to prenatal care is among the greatest predictors of a healthy pregnancy and a healthy baby. Women without access to prenatal care are three times more likely to have a low birth weight baby and five times more likely to have a baby that dies.

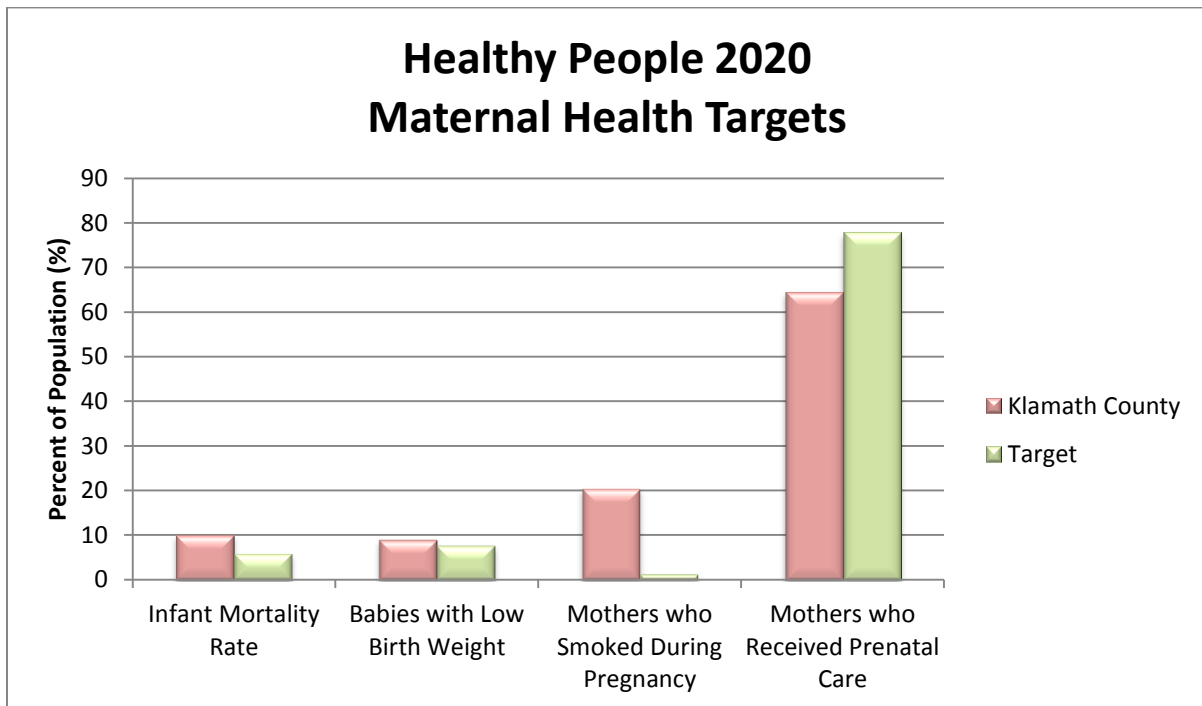
Only 64.5 percent of mothers received prenatal care in the first trimester of their pregnancy in 2010, down from 76.1 percent in 2009¹². Understandably, low birth weight babies have increased during the same time period. In 2010, 9.1 percent of newborns weighed less than 5 pounds 8 ounces¹⁰.

Infant mortality rates for 2010 are available for comparison, but in 2009 Klamath County had an infant mortality rate of 10.2 deaths per 1,000 live births within the first year of life¹⁰.



Source: Oregon Health Authority, Center for Health Statistics

Klamath County has not met any of the Healthy People 2020 maternal health targets.



Source: Oregon Health Authority, Center for Health Statistics

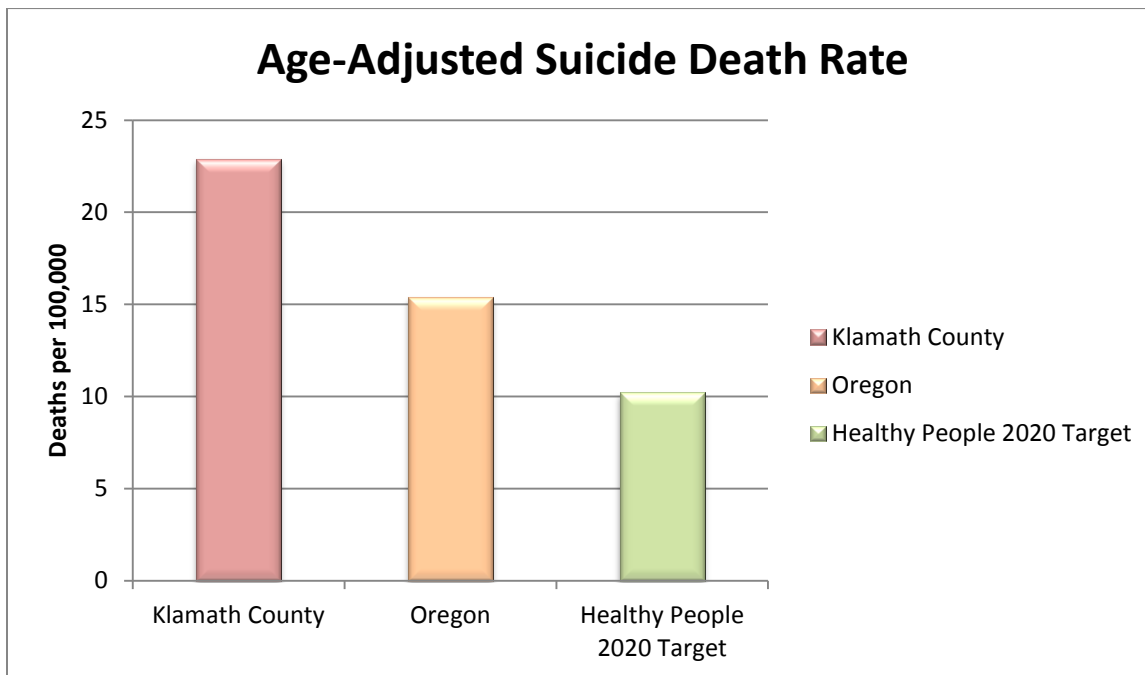
Behavioral Health & Substance Abuse

Behavioral health issues and substance abuse were identified by the community as priority areas of focus. Research shows that individuals suffering with serious mental illness die 25 years earlier than the general population¹³. Chronic disease and injury are more prevalent in individuals diagnosed with mental health conditions, contributing to the shortened life expectancy.

Through the Community Health Survey and key informant interviews, available and adequate mental health services were identified as a gap for community members. Changing funding streams associated with health care reform will greatly impact mental health services in Klamath County. At this time, it is unclear if the impact will be positive or negative.

“We have a huge need for mental health services for our kids; we are missing this component.” – Key Informant

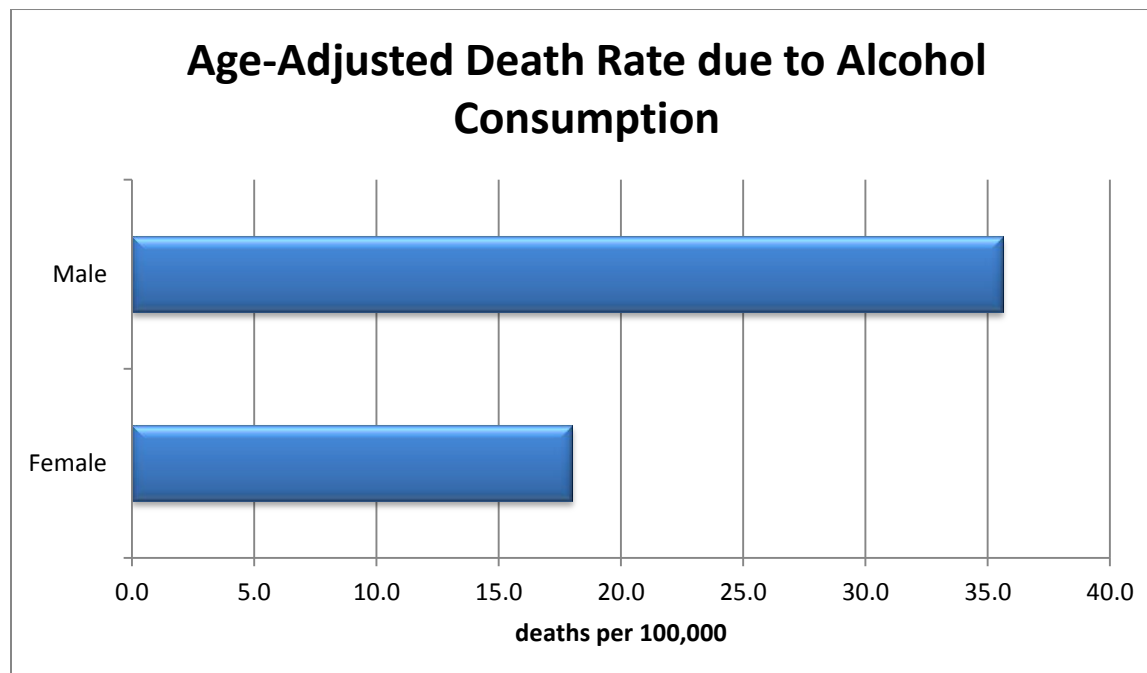
Klamath County is experiencing increasing rates of suicide, a preventable public health issue. Research indicates that for every suicide death, 8 to 25 suicide attempts are made⁹. Klamath County reports 22.9 suicide deaths per 100,000, a rate that is higher than the state average and well above the Healthy People 2020 target⁴.



Source: Oregon Health Authority, Center for Health Statistics

Alcohol and drug abuse was ranked as a top concern among community members in the Community Health Survey. In 2007-2009, alcohol consumption results in 26.7 deaths per 100,000 in Klamath County compared to 13.2 deaths per 100,000 in Oregon⁴. The majority of alcohol-related deaths are in relation to liver disease and injury from motor-vehicle crashes¹⁴. According to the Oregon Health Authority, Center for Health Statistics, Klamath County is experiencing increasing death rates due to alcohol consumption. The death rate increased from 22.6 per 100,000 in 2006-2008.

Gender inequities are present in this health outcome. Males are significantly more likely to have death due to alcohol consumption than females in Klamath County.



Source: Oregon Health Authority, Center for Health Statistics

When compared to other Oregon counties, Klamath County has low rates of adult binge drinking. Even so, 6.8 percent of adult females binge drink¹⁵ and 10.3 percent of adult males binge drink in Klamath County¹⁶. A host of adverse health effects are associated with alcohol abuse including motor vehicle accidents and injuries, employment and financial problems, and family disputes¹⁰. The adverse effects of alcohol abuse are seen in Klamath County.

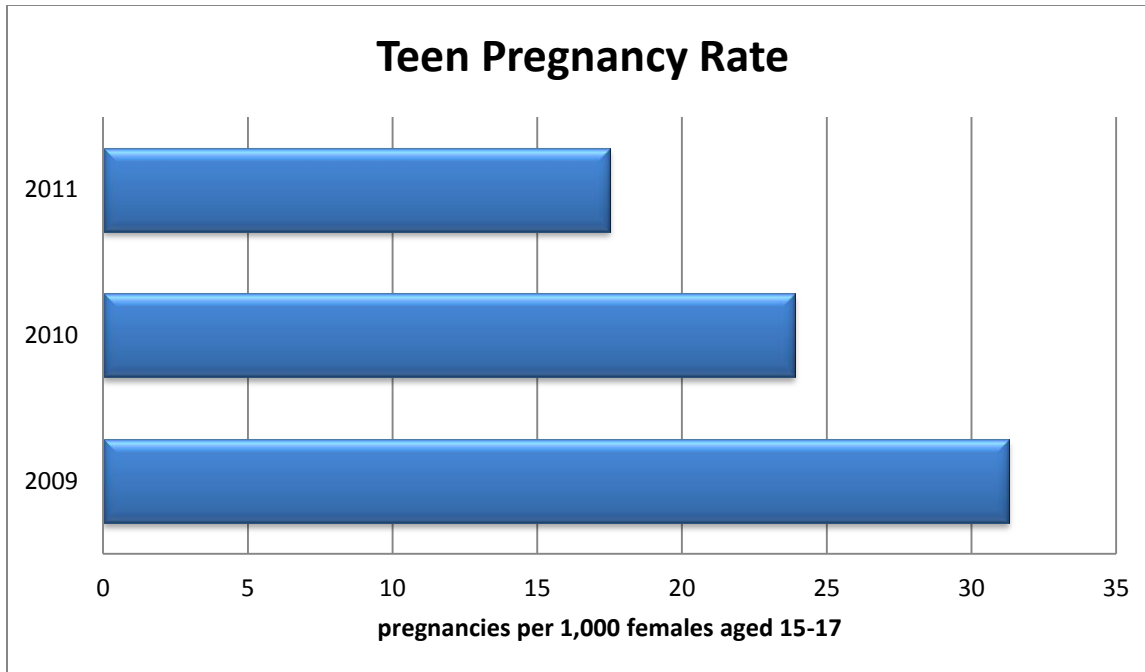
As a top community concern, more exploration and investigation on local alcohol and drug issues are needed.

Sexual Health

The World Health Organization states that sexual health is “a complete state of physical, emotional, mental, and social well-being in relation to sexuality [...] it requires a positive and respectful approach to sexuality and sexual relationships, free of coercion, discrimination, and violence.”¹⁷

Sexual health encompasses unplanned pregnancies, sexually transmitted infections (STIs), sexual violence, access to reproductive health services, and a host of other issues. Research indicates that youth sexual health and sexual behaviors are heavily influenced by structural factors such as poverty, discrimination, gender expectations, and heterosexual norms¹⁸.

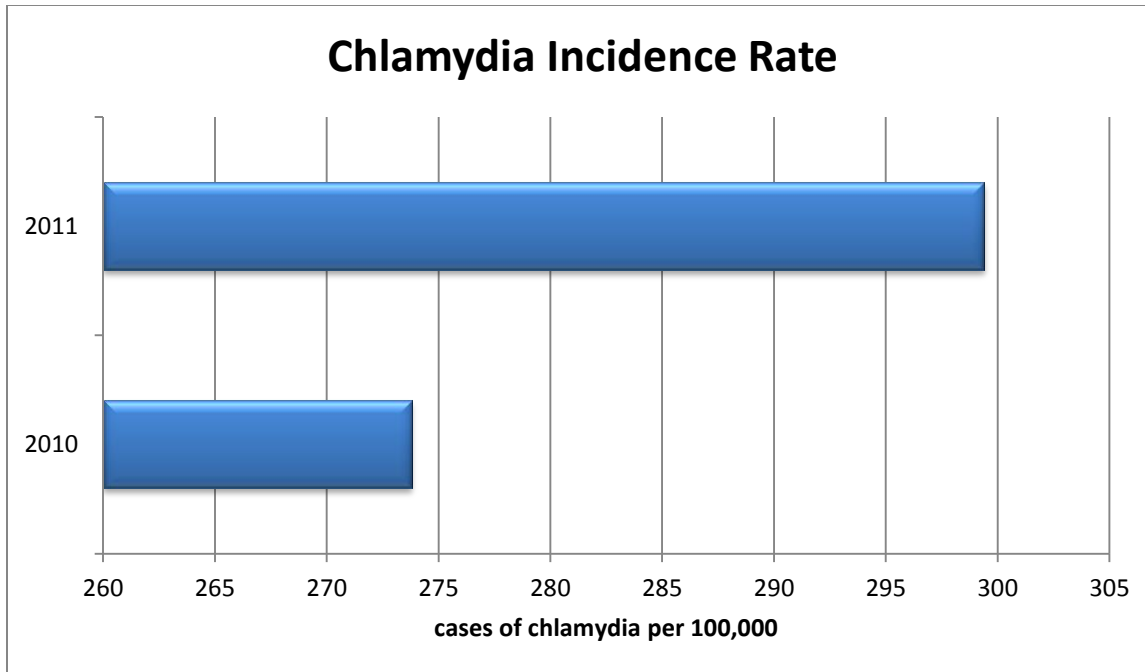
The number of teen pregnancies in Klamath County dramatically decreased between 2009 and 2011¹⁹. In 2009, increased access to no-barrier contraceptives was implemented nationwide and may be correlated with the decreasing teen pregnancy rate. Further exploration of the influences on the decreasing teen pregnancy rate in Klamath County is needed.



Source: Oregon Health Authority, Center for Health Statistics

Despite these decreases, the community continues to identify teen pregnancy as a community concern. In the 2013 Community Health Survey, respondents ranked teenage pregnancy as the fourth greatest health problem in the community. Teen pregnancy has substantial impacts on the community, both socially and economically. In 2009, infants born to females aged 15-19 cost United States taxpayers more than \$9 billion²⁰.

While teen pregnancy rates appear to be decreasing, the incidence of sexually transmitted infections are increasing. Unsafe sexual behaviors are contributing to the rising chlamydia rates in Klamath County. In 2011, Klamath County reported a chlamydia incidence rate of 299.4 cases per 100,000, up from 273.8 cases per 100,000 in 2010²¹. The lack of symptoms can cause chlamydia to go unrecognized for months. Statewide, chlamydia rates are highest among women, men and women aged 15-24, and blacks and African Americans. Chlamydia rates are nearly twice as high in women compared to men, likely a result of the current guidelines that recommend asymptomatic screening in women²².



Source: Oregon Health Authority, HIV-STD-TB Program

Community

Education

Among the greatest predictors of health is education; a positive relationship exists between education and better health. Higher education is linked with more employment opportunities and higher paying occupations. These occupations typically provide health insurance, stability, and the financial means to make healthy choices. Respondents of the community health survey ranked *good schools* as the third most important factor for a healthy community.

According to the 2007-2011 American Community Survey, the high school graduation rate in Klamath County (86.9 percent) is slightly lower than the Oregon average (88.9 percent)²³. The number of people who hold a bachelor degree or higher is almost 10 percent lower in Klamath County (19.4 percent) than the Oregon average (29 percent)¹⁹. Below is data on educational attainment for those who are 25 and older.

Educational Attainment	Klamath County	Oregon	United States
Less than high school	13.1%	11.2%	14.6%
High school diploma or GED	86.9%	88.9%	85.4%
Some college no degree	26.7%	26.6%	21.0%
Associates degree	9.4%	8.1%	7.6%
Bachelors degree	13.1%	18.4%	17.7%
Graduate level or higher	6.4%	10.6%	10.5%

Source: American Community Survey, 2007-2011

Klamath County is home to two school districts, Klamath Falls City School District and Klamath County School District. Together, the school districts have a total of 13 elementary schools, six middle schools, and five high schools.

Environment

The environment in which we live, learn, work, and play greatly contributes to our health. The quality of the air we breathe, the water we drink, the accessibility of healthy options, for example, have an impact on our health. While individual education and personal behavior change are important to improving health, we must remain cognizant of the needs to change our environment and system that structure and affect our community. Creating and fostering environments that support health is complex and requires collaborative work across sectors.

Physical Environment

The residents of Klamath County ranked a *clean environment* as the seventh most important factor of a healthy community. While Klamath County meets the annual national ambient air quality standards for particulate matter (PM) 2.5, Klamath County has been out of compliance with the daily national ambient air quality standards for particulate matter (PM) 2.5 since 2006. Klamath County currently has a single monitoring station located at Peterson Elementary School in suburban Klamath Falls. Klamath County aims to meet the national ambient air quality standards by 2014. Poor air quality, in addition to high rates of tobacco use, is correlated with the high levels of chronic lower respiratory disease and asthma in Klamath County²⁴.

Built Environment

The built environment is generally defined as the environment that is constructed by human activity. It encompasses all buildings, spaces, and products created or altered by people. Manmade structures and the resulting community infrastructure can either promote or hinder a healthy lifestyle. Zoning, transportation, land use, and community design have an impact on transportation options, accessibility of healthy food, and safe streets for walking. The health implications of community design must be accounted for in this community health assessment.

Those living in poverty have decreased accessibility to varied food options that build a nutritious diet. In Klamath County, only 12.6 percent of low-income residents live within ten miles of a supermarket or large grocery store²⁵. Research shows that the people living farther away from grocery store are more likely to consume foods that are available from convenience stores and fast food outlets and are less likely to access healthy foods on a regular basis²⁶.

During 2012 focus groups, Chiloquin and Merrill residents reported difficulty purchasing healthy, affordable groceries in their communities. The lack of access to healthy food has resulted in the need for travel to Klamath Falls to purchase nutritious groceries, however, many Chiloquin and Merrill residents lack transportation to Klamath Falls and public transportation services are reported as inadequate.

In spite of large amounts of local agricultural resources, Klamath County has a high fast-food restaurant density and a low density of farmer's markets. Studies suggest that fast-food outlet prevalence in low-income communities contribute to the high incidence of obesity and obesity-related problems²⁷. Despite

an abundance of locally grown produce, Klamath County has only 0.06 farmer markets per 1,000 people. However, the number of farmers markets in Klamath County is growing and is up from 0.02 per 1,000 in 2009²⁰.

Focus group participants reported a need for improvements to the built environment within their communities. Analysis of Midland focus group results revealed a desire to improve street lights, sidewalks, and crosswalks to improve walkability. Moreover, additional maintenance is needed at the community park.

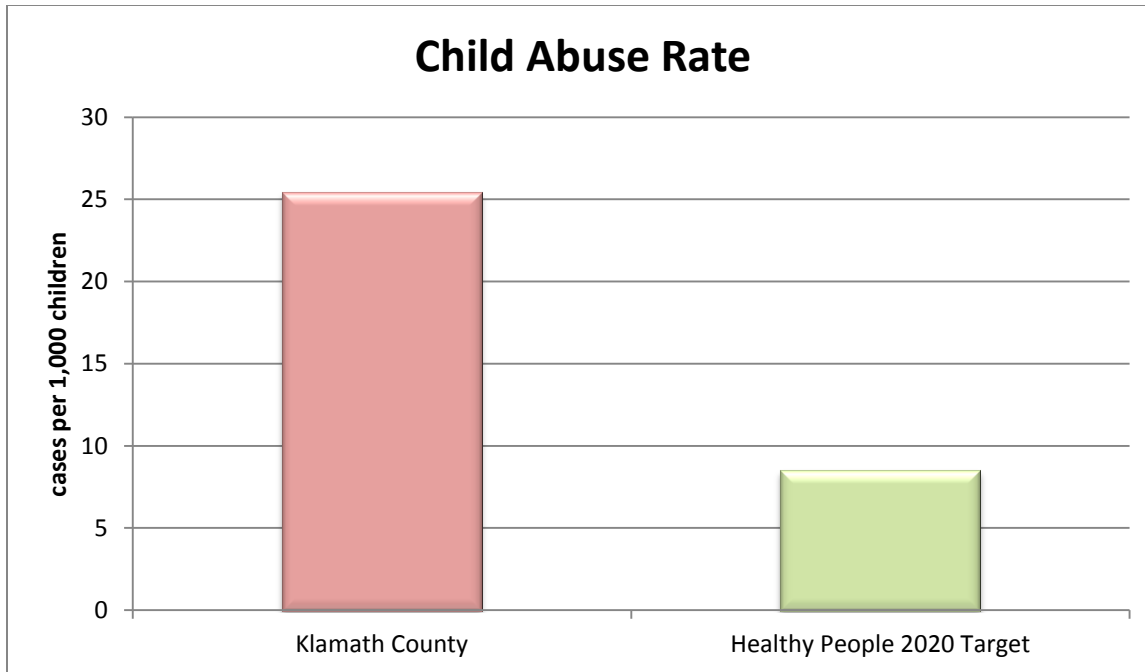
Community Safety

Feeling unsafe hinders the ability to maintain a healthy lifestyle. Violence continues to plague our community and is directly related to the high levels of poverty and low levels of education. Many key informants discussed the need for safety in order to achieve improved community health outcome.

“To have a healthy community, you have to feel safe.” – Key Informant

This key informant’s support of community safety was echoed by others in the Community Health Survey. Respondents ranked *low crime/safe neighborhoods* as the second most important factor in a healthy community. In Chiloquin, focus group participants felt similarly. Participants reported inadequate policing, resulting in negative effects on the community including the local ambulance service.

The data shows that Klamath County is plagued with violence. In 2011 Klamath County reported 25.4 cases of child abuse per 1,000 children, a rate worse than most Oregon counties²⁸. Rather than approaching the Healthy People 2020 target, Klamath County has moved farther away from the target experiencing increases in child abuse rates. Chiloquin focus group participants confirmed concern of the high rates of not only child abuse but also domestic abuse. Child abuse has enormous long-lasting effects on children throughout their lives. The repercussions of child abuse penetrate long into adolescence and adulthood²⁹.



Source: Oregon Department of Human Services

Likewise, Klamath County reports a high violent crime rate (126.2 crimes per 10,000)³⁰. Violent crime includes crimes against persons such as homicide, assault, rape, and robbery. The local economy is greatly impacted by crime rates. Crime reduces individual productivity, decreases property values, and disrupts social services.

System

Access to Health Care

The ability to access health care directly influences one's health. Lack of insurance, transportation, and rural location contribute to one's ability to access adequate health care services in Klamath County. Klamath County has been identified as a medically underserved and health professional shortage area³¹. These unmet need areas contribute to decreased access to health care services across the county.

More than 28 percent of adults aged 18-64 lack any type of health insurance coverage, placing Klamath County in the bottom 75th percentile when compared to other Oregon counties³². With the high cost of medical care, individuals without health insurance are less likely to get routine checkups and screening. These individuals are more likely to wait to seek treatment until health conditions are advanced and therefore more costly and difficult to treat.

Children are more likely than adults to have health insurance. Still, nearly 7 percent of children aged birth to 17 in Klamath County lack health insurance¹⁹.

“Only about a quarter of a person’s overall health status is affected by the health care system, the rest lies within socioeconomic factors.” –Key Informant

Lack of available, adequate health care insurance and services was a reoccurring discussion point in the focus groups conducted in the outlying communities of Klamath Falls. The outlying communities reported not only a lack of medical personnel in their communities but also within Klamath Falls. The community expressed concern about a reduced access to specialty care in Klamath Falls, resulting in a financial burden on residents who must travel to Medford or Portland for care.

The lack of adequate health care services is reported as resulting in unnecessary strains on other local resources, such as overutilization of the emergency department and local ambulatory services. Local ambulatory services are often overused due to the lack of public transportation from outlying communities to Klamath Falls. Focus group participants in Bonanza expressed a desire for home visiting physical therapists and other medical personnel across all age groups for unspecified conditions.

Economy

Just as low educational attainment impacts community health, so does low levels of employment. As with the rest of the nation, Klamath County has experienced the effects of the current economic downturn. This downturn is reflected in the seasonally adjusted unemployment rate of 11.2 percent, currently classifying Klamath County as a distressed Oregon county³³. Historically, Klamath County was known for its agriculture and timber industries, however presently natural resource based industries only account for 6.8 percent of total industry in the region. Despite the decreasing number of jobs provided in the natural resource based industries, the community continues to place value on these historic industries. Currently, Sky Lakes Medical Center, Klamath County School District, and Jeld-Wen are the largest employers in Klamath County²⁸.

Poverty

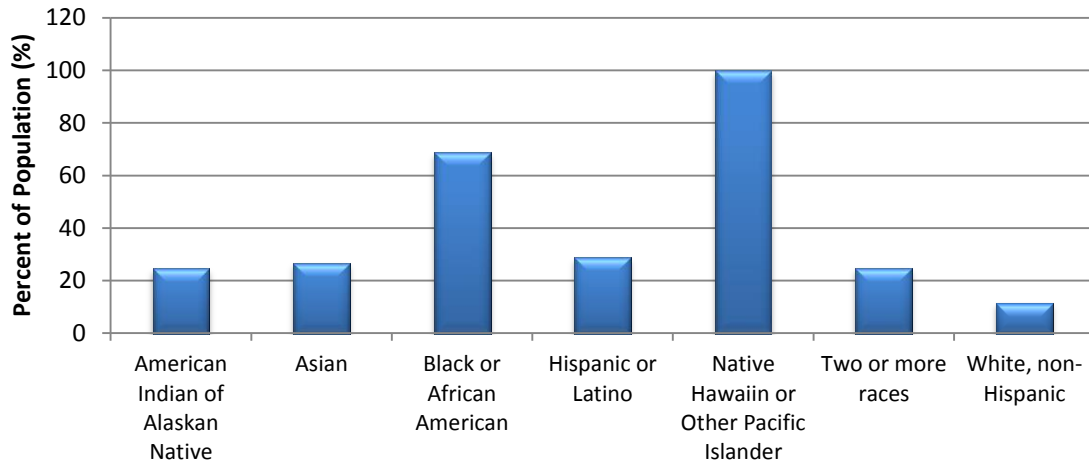
Poverty across Klamath County contributes to poor health outcomes. Families and individuals living in poverty face limited choices in education and employment and have reduced access to healthy options. Klamath County has a high rate of economically disadvantaged residents who face extreme poverty: 13.9 percent of Klamath County families and 18.1 percent of individuals are living in poverty¹⁹. These poverty statistics underpin prevalent poor health outcomes in Klamath County and reiterate the need for increased local employment and education opportunities. The income statistics illustrate that median household income of \$41,787 is significantly less than the state (\$49,850)¹⁹.

In nearly every key informant interview, issues related to poverty were discussed. The effects of poverty plague our community and affect nearly every sector.

“Poverty is the biggest factor in the work that we do.” –Key Informant

While poverty affects many people, evident disparities exist for families and individuals living in poverty. Native Hawaiian or other Pacific Islander and Black or African American families living Klamath County are more likely to live in poverty. Additionally, individuals under the age of 24 are more commonly living in poverty than people over the age of 25¹⁹.

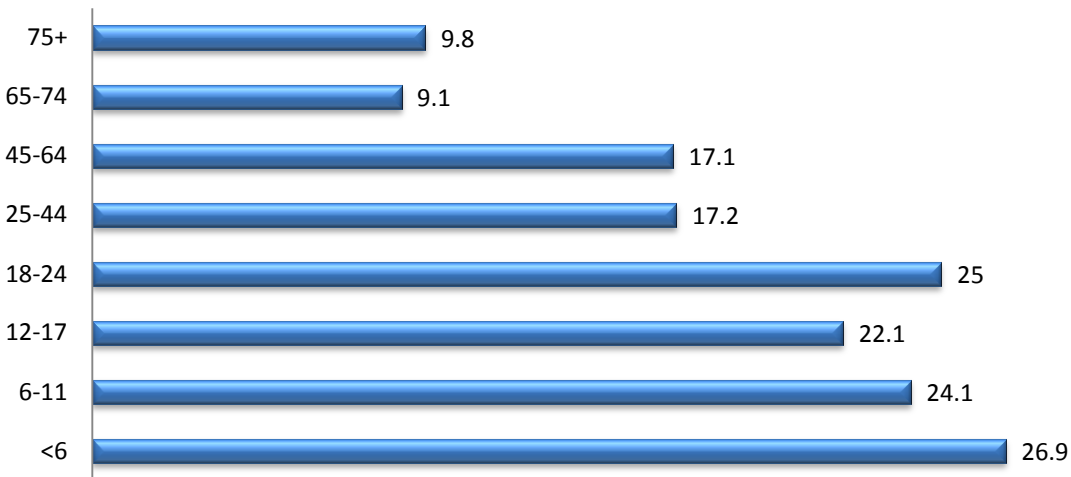
Families Living Below Poverty Level by Race/Ethnicity



Source: American Community Survey

Source:

People Living Below Poverty Level by Age (Percent)



Source: American Community Survey

The community and key informants recognize the impacts of poverty on Klamath County. Recognizing the need to break the cycle of generational poverty, Klamath Community Lake and Action Services hosted a Prosperity Summit in March 2013 to raise awareness about poverty and identify local solutions.

“More and more we are seeing issues around poverty. Not just health-related issues, but all kinds of issues and needs. And it is growing.” – Key Informant

Conclusion

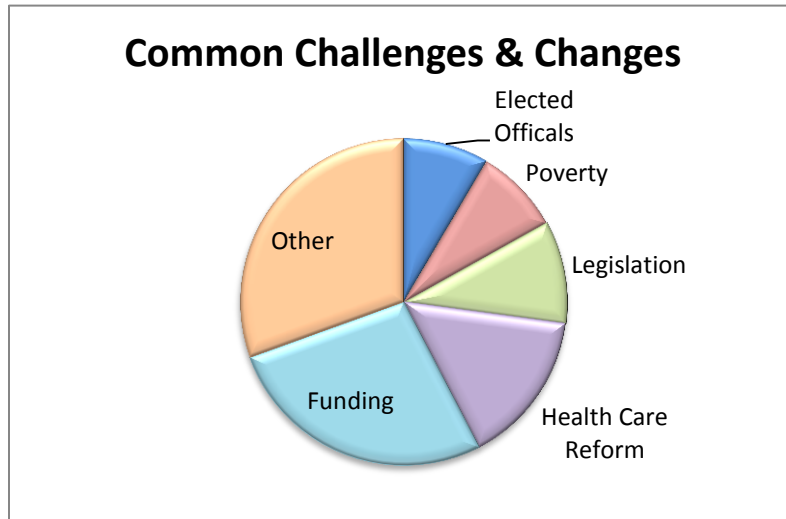
Summary of Key Findings

The following table shows each of the priority areas discussed in this assessment, categorized by the socioecological model and the assessments in which the priority area was identified.

Socioecological Model	Priority Area	HealthyKlamath.org	Community Health Survey	Stakeholder Interviews
		Community Health Status Assessment	Community Strengths and Themes	Forces of Change
System	Access to Health Care	X	X	X
	Economy	X	X	X
	Poverty	X	X	X
Community	Community Partnerships			X
	Education	X	X	X
	Physical Environment	X		X
	Safety/Crime	X	X	X
Individual	Aging	X	X	
	Chronic Disease and Related Conditions	X	X	X
	Health Behaviors	X	X	X
	Maternal/Child Health	X		
	Behavioral Health		X	X
	Personal Perception	X	X	
	Substance Abuse	X	X	X
	Sexual Health	X	X	X

Opportunities & Obstacles

The stakeholder interviews shed light on many opportunities for health improvement and the obstacles



present in Klamath County. When discussing both positive and negative changes that may affect the organization's ability to function, common themes become glaringly evident. Nearly every stakeholder mentioned that inadequate funding is becoming a growing obstacle for providing essential services within their organization. Lack of funding has resulted in insufficient levels of staffing and discontinuation or cut back of many programs that are needed in the community. State and

national health care reform and general legislation were among the next most frequently discussed issues. Funding and changes within the health care system are resulting in changing roles for organizations in our community, many roles of which are not yet clearly defined or understood.

“We should not be competing on these issues, we should be working together. We need to stop thinking about today and start thinking about tomorrow.” – Key Informant

Despite the individual interviews, stakeholder responses began to echo one another. Many of the stakeholders mentioned poverty-related issues as a growing concern and the impact of such issues on their organizations ability to function effectively. Less-commonly discussed obstacles, but present in at least five interviews included lack of mental health and substance abuse services and increasing regulatory burden.

“Our greatest challenge is helping policy makers understand the direct connection between what we do and public health outcomes.” – Key Informant

Regardless of a plethora of growing obstacles, largely due to lack of funding, every stakeholder mentioned the importance of community, community partnerships, and collaboration at some point during the interview. The vast majority of the respondents stated that their organization now focuses on prevention, understanding the return on investment for preventative services, rather than on reactive services. Most stakeholders discussed that health cannot be achieved through the work of one organization. Rather stakeholders discussed that there is a continuum of care to ensure opportunities for health, this continuum requires community partnerships and collaboration.

“As a community, we need to get together, go out together, and make change.” – Key Informant

“We started using public health prevention models.” – Key Informant

“The power of working together should not be forgotten.” – Key Informant

While decreasing levels of funding for many organizations and migrating roles are presenting challenges for the local community, the desire to work as community partners presents a bastion of hope and opportunity. The stakeholder’s voices revealed that when community partners work together, the greatest outcomes for the community will be achieved.

Next Steps

“The first step is to admit that we have a problem.” – Key Informant

This community health assessment is to be used as platform for discussion. The multi-faceted data collection and analysis allows for identification of local health issues, the community’s perception of those health issues, and local organizations ability to react to those issues.

This document is intended to be a living document, calling each of us to further investigate local health issues and better understand our local needs. OHSU School of Nursing students will continue to conduct focus groups and listening sessions to ensure the voices of every community are heard and represented.

Together, we must identify the top priority issues to change for Klamath County. Upon identifying these top priority issues, we will add a supplement document known as the Community Health Improvement Plan. This improvement plan will serve as our strategic plan and guiding document for improving the health of the community.

Appendix A

Executive Summary: Chiloquin Community Health Assessment 2012

Prepared By: Kristin Harbin, Christine Thomas, Andrey Zholnerovich

Demographics of Chiloquin

The population within the city limits is between 734 – 750 people. The majority age range is 55 – 59 years old. 40.7 percent of all residents live below the poverty line. 49.2 percent of the population identify as Native American, 40.7 percent identify as Caucasian, and 6.5 percent identify as Hispanic/Latino (Census, 2010).

Data Collection

Primary Data Collection: Key Informant Interviews, Focus Group, Surveys

Key informant interviews were conducted from various sectors of the community representing business, non-profit organizations, health care, tribal members, and religious perspective. A focus group was conducted representing administrators, educators, volunteers, and educational assistants for Chiloquin Elementary School.

Secondary Data Collection

Secondary data such was collected from the US Census Bureau, historical facts, and windshield surveys.

Key Findings: Community Strengths and Resources

Community strengths include residential pride in the community and the surrounding natural beauty. Community resources include the emergency services of Chiloquin Volunteer Ambulance Service and Chiloquin Agency Lake Rural Fire Protection District. Chiloquin Open Door Clinic and the Tribal Health and Wellness Center provide medical services. Non- profit organizations such as the Chiloquin Food Pantry and the Youth Center also provide services. Tribal Administration is also located in Chiloquin.

Key Findings: Priority Concerns

- Perception of Inadequate Policing

Many residents reported decreased safety as an important issue that affects actions outside their homes. Additionally, the lack of police services negatively affects the CVAS's ability to respond to situations involving acts of violence. *

** The city government would like to acknowledge that they have made measures to address the deficit of police services with the installment of security cameras*

- Drug and Alcohol Abuse

Many residents of the community expressed concern regarding the abuse of drug and alcohol. The CVAS report the majority of their emergency calls pertain to situations involving drugs or alcohol.

- Violence

Both domestic and child abuse have been directly witnessed by residents.

- Access to Nutrition

Local markets predominately stock convenience foods, requiring the residents to travel for groceries. This detracts from the local economy, as well as strains the individual's resources of time and fuel.

- Lack of Adequate Health Care Services

Each individual interviewed expressed strong dissatisfaction and resentment of the services provided by Chiloquin Open Door. The proposed services made by Open Door, including the promise of dental services, were never fulfilled. The resultant lack of adequate medical services causes strains of other resources, including unnecessary referral to the Sky Lakes ED and the over-utilization of the Volunteer Ambulance Service. The lack of pharmaceutical services may impact medication adherence due to interruption of refills. **

***This situation was brought to the attention of Klamath Open Door, and in the time following the assessment and presentation Open Door may have addressed some of the areas of concern. This has not been officially corroborated by the assessment team.*

Executive Summary: Bonanza Community Health Assessment 2012

Prepared by: Dusty Baker, Dayna Young and Alissa Titcomb

INTRODUCTION

Bonanza is located in the rich agricultural Lost River Valley, about 26 miles east of Klamath Falls. It is home to a population of 415 people with a median age of 34.5 years. The median income is \$38,000 with 13.5 percent of the population falling below the federal poverty line.

DATA COLLECTION

Time was spent gathering primary and secondary data regarding community concerns and strengths. Methods utilized were as follows: windshield surveys, visual assessments and U.S. Census Bureau data as well as key informant interviews, casual conversations and a focus group. Key informants were local residents such as educators, medical providers, business owners, lay persons, volunteers, retirees, and politicians.

RESULTS

- Proactive for problem resolution
- Tight knit and supportive
- Feelings of pride and ownership
- Resourceful and creative in working toward improving community health
- Such characteristics were evidenced in the following ways:
 - Multiple youth activities such as sports teams and 4H
 - 2012 Oregon School Wellness Award
 - Establishment of a seasonal farmers market
 - Presence of a nurse practitioner clinic
 - Community involvement and volunteering such as, the Lions Club, Clover Leaf Society and fire department.
- Identified community concerns were varied. Trends were identified in the following areas; no local medical specialists, lack of occupational and physical therapy, travel distance for elders to Klamath Falls, wait time to see physicians in Klamath Falls and the inability to obtain appointments with physicians in a timely manner.

RECOMMENDATIONS AND LIMITATIONS

Recommendations based on this community assessment are as follows: expanded accessibility of public transportation, availability of in home occupational and physical therapy, increased availability and decreased wait time of same day physician appointments in Klamath Falls.

Limitations to this community assessment included, lack of funding, a six week time constraint, and inexperienced personnel. It is recommended that further assessment should be made in this community for a deeper understanding of their strengths and concerns.

EXECUTIVE SUMMARY: Keno Community Health Assessment 2012

Prepared by: OHSU School of Nursing

Introduction

According to the 2012 Klamath County Health Rankings, Klamath County ranked 31st, out of 33 counties. Keno, being part of Klamath County is directly affected by these results thus; a community specific assessment was conducted in efforts to better understand the needs of this community as well as Klamath County as a whole. This assessment was accomplished over a three month time period during spring of 2012. Many of the identified areas for improvement dealt with difficulties commonly faced by small rural communities. Community needs were narrowed to centralized meeting areas and combined activities within the centralized areas. Quality and specialty healthcare were also a major concern, however due to the geographical placement of Keno this type of issue is difficult to find solutions for.

Data Collection

The information used for the assessment of Keno, Oregon consisted both of primary and secondary data. The primary data used for this project was composed of personal observations and key informant interviews as well as keno specific community surveys, a windshield survey and a focused group discussion. During the assessment, information was gathered from the local fire department, library, grocery store, school, fitness center, 3 of the 5 local churches, as well as the local Lions Club and the Keno Action Committee (KAC). The secondary data used for this project consisted of the 2010 U.S Census Bureau information and demographics of its residents. The secondary data obtained was then reinforced with the primary data in effort to better understand what living in Keno, Oregon is like for the residents.

Results of Community Input

- Medical related concerns, such as access to quality health care and access to specialized health care.
- Unemployment was a major concern discussed by many residents of Keno.
- The proposed Klamath Falls Bioenergy Plant was another area of concern for many individuals residing in and around Keno.
- Road management was mentioned on many occasions as the red-cinder roads result in high dust production and due to unsavory driving conditions in the winter.
- Lack of a local restaurant as well as a centralized community center or park where community members can gather for socialization and community activities.
- Lastly, there is a lack of activities for youth as well as adults and senior citizens within the community.

Recommend priority areas

- Medical related concerns quality health care and specialties
- Dirt / red-cinder roads and resulting dust production
- Need for local restaurant
- Need for activities for community members
- Need of a centralized community park or center

Executive Summary: Malin Community Health Assessment 2012

Methods of Research

The basic research methods used to collect information in Malin, Oregon, were observational studies, including windshield surveys, key informant interviews, focus groups, and a survey for subpopulations in Malin, Oregon. Also, data from the American Census provided information about the demographics in Malin, Oregon including total population, number of families, income levels, race/ethnicity, and home ownership. These demographics provided an overall “snapshot” of Malin, Oregon.

The windshield survey simply involved walking through the community, and observing aspects of town, like sidewalks, street signs, available resources, and the overall “feel” of the town.

Key informant interviews were given to those in the community who represented the “voice” of the community. The following key informants were interviewed throughout the term: Kay Neumeyer, the manager of Malin City Hal; Gary Zieg, the Mayor of Malin; Oregon, Robbie Grounds, a city worker; Connie Venegas, an employee of the Oregon Child Development Center and an advocate for the Hispanic community; Angie Wallin, an employee at Lost River High School; and Stan Pence and Diana Stastny, both long-term residents of Malin, Oregon.

One focus group was held at the Malin City Hall. There were six members of the community who shared their concerns, opinions, and ideas about Malin, Oregon. They wished to remain anonymous.

Lastly, in an effort to assess the Hispanic community in Malin, Oregon, a survey was generated. The survey was translated into Spanish, and it assessed the advantages and disadvantages of living in Malin, Oregon.

Results

The residents of Malin, Oregon, identified the following as concerns in their community: lack of a medical clinic, public transportation, and access to specialty medical care; physical inactivity of both children and adults; overweight/obesity in children; lack of nutritional education in the Hispanic community; lack of college preparation courses in high school; lack of jobs/careers, aside from agricultural work; and sparse funding for the Headstart program.

Priority Community Concerns

The lack of medical services in Malin, Oregon was the priority concern of community members. Some of the residents must travel to Sky Lakes Medical Center, or surrounding medical offices, to receive care. This is approximately 30 miles away from Malin, Oregon. Travelling can be a burden, due to finances and time-off-work. Also, some of the elderly residents will wait until it absolutely necessary to receive medical care before “going into town.” By the time they are seen by a doctor, the residents are sicker and require more care.

Residents of Malin and inner-city Klamath Falls, Oregon lack access to specialty care. Many residents of both areas must travel to Medford, Eugene, Salem, or Portland, Oregon to receive specialty care. This is a financial burden for those who must travel.

Another priority issue in Malin, Oregon was the lack of public transportation, specifically, a lack of transportation to and from Klamath Falls regularly.

Executive Summary: Merrill Community Health Assessment 2012

Prepared by: Rachel Channer, Gam Ngo, and Brent Powers

Background

In collaboration with local partners seeking better health, a community assessment of Merrill, Oregon was conducted spring 2012.

Data Collection Methods

The methods used to assess the community of Merrill included a windshield survey, key informant identification and interviews, and a focus group assessment. This was combined with data taken from the 2010 US Census to form the overall image of Merrill. Written surveys were also passed to members of the community.

Results of Community Input

- Several Merrill residents expressed concern regarding the lack of bike helmet use by children under age 16.
- Community members we spoke to expressed concern regarding the lack of local jobs for teenagers.
- Despite the rich agricultural resources in the community, residents often have difficulty buying affordable fresh fruits and vegetables.
- Merrill residents who are able to travel, frequently make the trip to Klamath Falls several times a week. However, concern was expressed regarding the safety of the highway due to the high traffic numbers and unsafe winter driving conditions.
- Community members would like to see the library expand and offer more computer/online availability.
- Merrill community members perceive a lack of access to primary care in Klamath Falls with some appointments scheduling months in advance and in-office wait times exceeding several hours. Some residents expressed a desire to see greater preventative services available in their community. A desire for a local dentist, an eye doctor, and a pharmacy were common themes.
- Key informants expressed a desire to see a greater variety of afterschool activities.

Recommendations

- The inclusion of school based education programs, parental involvement, and the establishment of regular community-wide bike rodeos may encourage greater bike helmet use by children under the age of 16.
- Residents expressed interest in seeing more shops open up downtown to bring in greater foot traffic, and to also provide locals with more job opportunities. Since agriculture is an important aspect of the community, it was also suggested that Oregon State University should expand to offer husbandry and other farming classes.
- Due to the rich agricultural resources in the community, it is advised that a regularly scheduled farmer's market should be developed. In addition, a community garden may also promote healthy eating and public resource sharing.
- For those unable to drive, trips to Klamath Falls for such necessities as grocery shopping and medical visits must be done as a carpool or a shared ride. Because the health of many of the older population depends on access to medical services, the extension of Dial-a-Ride service to Merrill is another recommendation.
- The library would benefit from a large area in which to offer community resources. A larger space would allow more local residents to utilize the computers and online resources.

- OIT students in the health fields could volunteer to teach health and lifestyle courses to the children. In addition, the OSU extension office could offer nutrition and cooking classes to inspire healthy eating.

Executive Summary: Midland Community Health Assessment 2012

Prepared by: Mike Hulstrom, Kaitlin Ironside, and Cindy Rice

Methods

Methods of analysis included collecting secondary data from the United States Census Bureau and other web resources as well as primary data collection using windshield surveys, door to door surveys, key informant interviews and personal observations made while attending the monthly community breakfast.

Results of secondary data analysis indicated a population of 212, median age of 44 years, 92 percent of population as white, and 85 percent of homes as owner-occupied. Returned surveys indicated that residents consider the level of “community” in Midland to be high, neighborhoods to be safe, schools to be excellent, and access to healthy food and primary health care to be strengths. Results indicated a desire for improvements to the Community Center and Park, development of infrastructure including sidewalks, crosswalks and streetlights, and increased access to specialized healthcare.

Results

The assessment found that Midland residents are generally satisfied with their community but that they would like to see improvements in specific areas. These major areas of weakness require further investigation prior to developing a plan of action for potential remediation.

Recommendations considered include

- Improved lighting, funded maintenance, and additional equipment for the community park
- Maintenance and upgrades for the community center (picnic tables acquired in October 2012)
- Development of community events utilizing the park and community center (Bunco nights started in September 2012)
- Installation of streetlights, sidewalks and crosswalks on primary streets
- Increased ability to recruit and keep quality health care specialists in Klamath Falls

Limitations

The report recognizes limitations including: difficulty engaging significant numbers of community members in the evaluation process, inability to hold a focus group, and limited availability of secondary data.

Appendix B

FOCUS GROUP QUESTIONS, 2012

BROAD QUESTIONS:

1. Tell me about your community.
 - a. What do you take pride of in your community?
 - b. What do you feel are the advantages and disadvantages of living in your community?
2. How would you describe the health of your community?
3. How would you describe the health of your family?
4. Tell me about your family.
5. Tell me about your biggest health concern in your community?

“FOCUS” QUESTIONS:

HEALTH BEHAVIOR

- TOBACCO: What are your thoughts on tobacco use in your community? Tell me...
- What factors influence your community's use of tobacco?
- DIET: Tell me about your family's diet.
- EXERCISE: What do you do for fun? Tell me about your hobbies? Do you see other members of your community participating in similar activities?
- ALCOHOL: Tell me your thoughts on alcohol use in your comm. What factors influence your community's use of alcohol?
- UNSAFE SEX: What are your thoughts on unsafe sex in your community? What factors influence your community's...

SOCIAL & ECONOMIC FACTORS

- EDUCATION: Tell me about types of education available in this community.
- INCOME: Tell me about your community's financial resources.
- EMPLOYMENT: What jobs are available in this community? Where do people work? Do they leave the community to go to work?
- FAMILY & SOCIAL SUPPORT: Tell me more about your social support.
- COMMUNITY SAFETY: Is safety a concern in your area? Have you always felt there to be a problem?

CLINICAL CARE

- QUALITY OF CARE: Tell me about you or your family's most recent medical visit. How would you describe the quality of care of your experience?
- ACCESS TO CARE: If you were to get sick or injured, tell me what you would do to seek help?
- Would seeking medical attention create a financial burden for you or your family?
- From 0 – 10, how would you rate the overall quality of care in Klamath County? Why would you score it thusly?

PHYSICAL ENVIRONMENT

- ENVIRONMENTAL QUALITY: How do you get your water? Describe the quality of your water. Do you have access to safe drinking water all year long? Tell me what you think about air quality. Tell me about your sewer system.
- BUILT ENVIRONMENT: Tell me what your community has to offer that brings you pride.

- Tell me what you see when you travel down your main street.
- Tell me how you heat and cool your homes.

Appendix C

Community Health Survey – March 2013

Please take a minute to complete the survey below. The purpose of this survey is to get your opinions about community health issues in Klamath County. Our 'Healthy Klamath' partners will use the results of this survey and other information to identify the most pressing problems which can be addressed through community action. Remember... your opinion is important! Thank you and if you have any questions, please contact us (contact information is available at the end of the survey).

1. In the following list, what do you think are the **three most important factors for a "Healthy Community?"** (Those factors which most improve the quality of life in a community.)

Rank the top three (1 = most important):

- | | |
|--|--|
| <input type="checkbox"/> Good place to raise children | <input type="checkbox"/> Excellent race relations |
| <input type="checkbox"/> Low crime / safe neighborhoods | <input type="checkbox"/> Good jobs and healthy economy |
| <input type="checkbox"/> Low level of child abuse | <input type="checkbox"/> Strong family life |
| <input type="checkbox"/> Good schools | <input type="checkbox"/> Healthy behaviors and lifestyles |
| <input type="checkbox"/> Access to health care (e.g., family doctor) | <input type="checkbox"/> Low adult death and disease rates |
| <input type="checkbox"/> Parks and recreation | <input type="checkbox"/> Low infant deaths |
| <input type="checkbox"/> Clean environment | <input type="checkbox"/> Religious or spiritual values |
| <input type="checkbox"/> Affordable housing | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Arts and cultural events | |

2. In the following list, what do you think are the **three most important "health problems"** in our community? (Those problems which have the greatest impact on overall community health.)

Rank the top three (1 = most important):

- | | |
|--|--|
| <input type="checkbox"/> Aging problems (e.g., arthritis, hearing/vision loss, etc.) | <input type="checkbox"/> Infant Death |
| <input type="checkbox"/> Cancers | <input type="checkbox"/> Infectious Diseases (e.g., hepatitis, TB, etc.) |
| <input type="checkbox"/> Child abuse / neglect | <input type="checkbox"/> Mental health problems |
| <input type="checkbox"/> Dental problems | <input type="checkbox"/> Motor vehicle crash injuries |
| <input type="checkbox"/> Diabetes | <input type="checkbox"/> Rape / sexual assault |
| <input type="checkbox"/> Domestic Violence | <input type="checkbox"/> Respiratory / lung disease |
| <input type="checkbox"/> Firearm-related injuries | <input type="checkbox"/> Sexually Transmitted Diseases (STDs) |
| <input type="checkbox"/> Heart disease and stroke | <input type="checkbox"/> Suicide |
| <input type="checkbox"/> High blood pressure | <input type="checkbox"/> Teenage pregnancy |
| <input type="checkbox"/> HIV / AIDS | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Homicide | |

3. In the following list, what do you think are the **three most important "risky behaviors"** in our community? (Those behaviors which have the greatest impact on overall community health.)

Rank the top three (1 = most important):

- | | |
|---|---|
| <input type="checkbox"/> Alcohol abuse | <input type="checkbox"/> Drug abuse |
| <input type="checkbox"/> Being overweight | <input type="checkbox"/> Lack of exercise |
| <input type="checkbox"/> Dropping out of school | <input type="checkbox"/> Poor eating habits |

- Not getting "shots" to prevent disease
- Racism
- Tobacco use
- Not using birth control

- Not using seat belts / child safety seats
- Unsafe sex
- Other _____

4. How would rate our community as a "Healthy Community?"

- Very unhealthy Unhealthy Somewhat healthy Healthy Very healthy

5. How would rate your own personal health?

- Very unhealthy Unhealthy Somewhat healthy Healthy Very healthy

6. Approximately how many hours per month do you volunteer your time to community service? (e.g., schools, voluntary organizations, churches, hospitals, etc.)

- None 1 - 5 hours 6 - 10 hours Over 10 hours

Please answer questions #7-15 so we can see how different people feel about local health issues.

7. Do you live:

- Within Klamath Falls city limits
- Outside Klamath Falls city limits

8. If you live outside of the Klamath Falls city limits, check which area you live closest to:

- | | |
|---------------------------------------|---|
| <input type="checkbox"/> Beatty | <input type="checkbox"/> Olene |
| <input type="checkbox"/> Bly | <input type="checkbox"/> Rocky Point |
| <input type="checkbox"/> Bonanza | <input type="checkbox"/> Malin |
| <input type="checkbox"/> Chiloquin | <input type="checkbox"/> Merrill |
| <input type="checkbox"/> Chemult | <input type="checkbox"/> Midland |
| <input type="checkbox"/> Cresent | <input type="checkbox"/> Sprague River |
| <input type="checkbox"/> Fort Klamath | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Keno | <input type="checkbox"/> Does not apply |

9. Age:

- 25 or less
- 26 - 39
- 40 - 54
- 55 - 64
- 65 or over

10. Sex: Male Female

11. Ethnic group you most identify with:

- African American / Black
- Asian / Pacific Islander
- Hispanic / Latino
- Native American

White / Caucasian
 Other _____

12. Marital Status:

Married / co-habiting
 Not married / Single

13. Education

Less than high school
 High school diploma or GED
 College degree or higher
 Other _____

14. Household income

Less than \$20,000
 \$20,000 to \$29,999
 \$30,000 to \$49,999
 Over \$50,000

15. How do you pay for your healthcare? (check all that apply)

Pay cash (no insurance)
 Health insurance (e.g., private insurance, Blue Shield, HMO)
 Medicaid
 Medicare
 Veterans' Administration
 Indian Health Services
 Other _____

Thank you very much for your response!
If you have any questions, please contact Molly at Klamath County Public Health.
541-882-8846

Appendix D

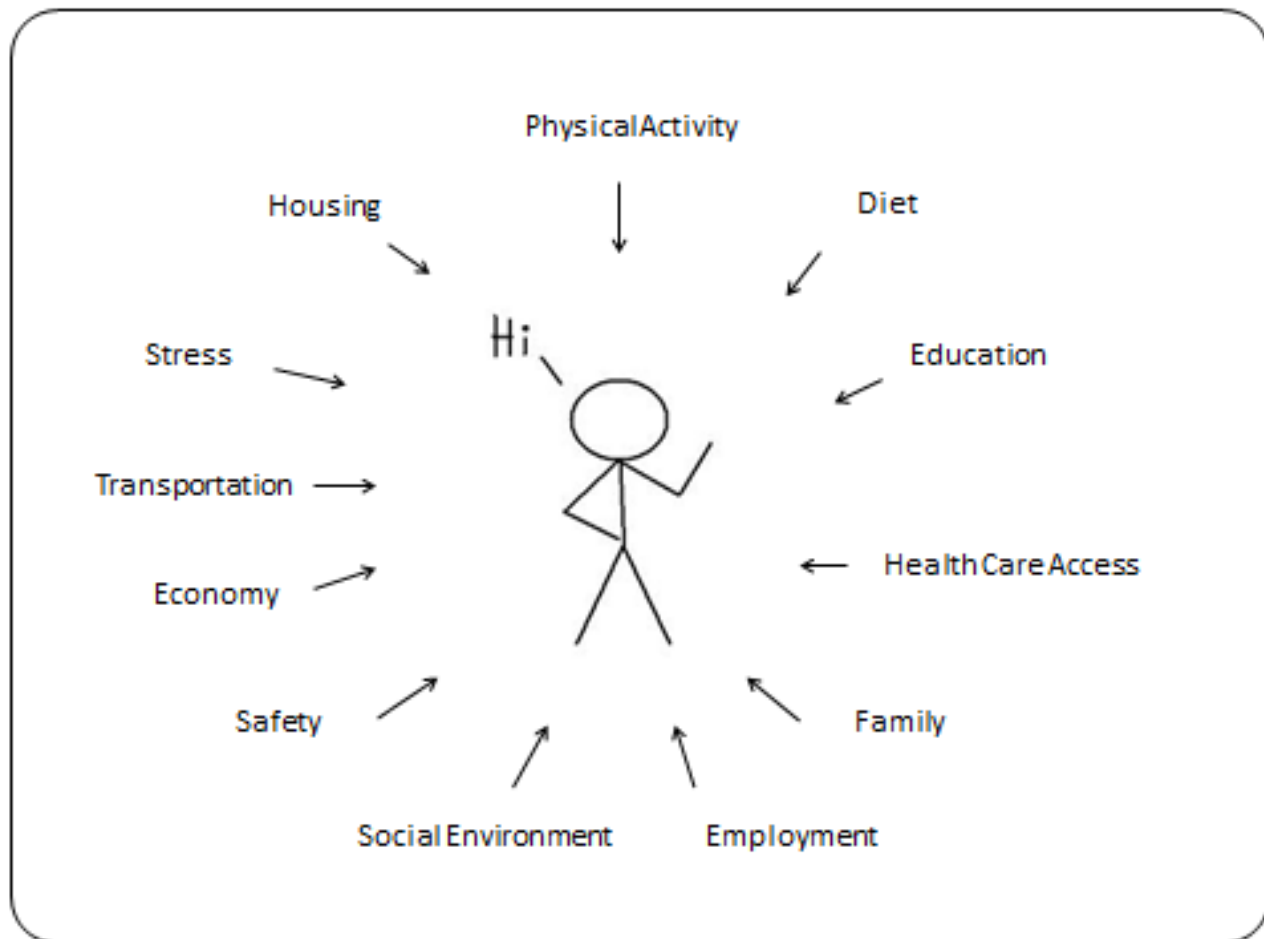
Stakeholder Interview Materials

Written Definition of Health:

Health is a state of complete physical, mental and social well-being and **not merely the absence of disease or infirmity**. –World Health Organization

Health is not simply a state free from disease but is the **capacity of people to be resilient** and manage life's challenges and changes. –Public Health Accreditation Board

Visual Definition of Health -



Endnotes

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