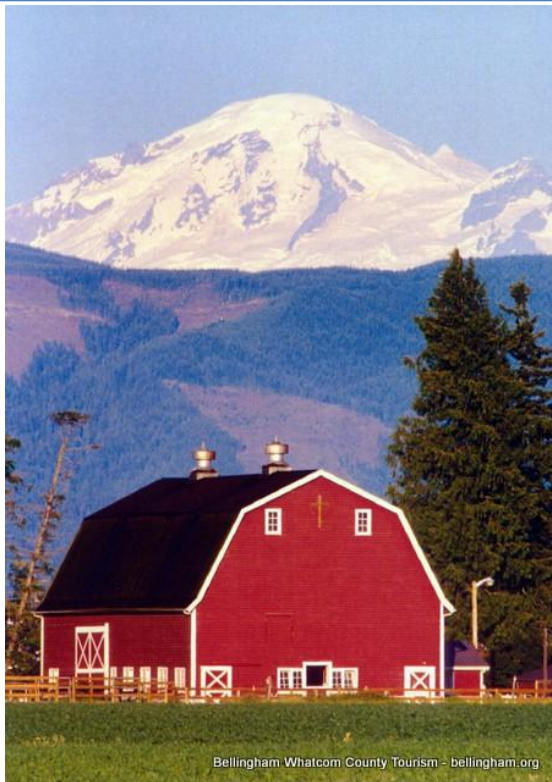


# 2011

## Whatcom County Community Health Assessment



PeaceHealth  
St. Joseph  
Medical Center



Whatcom County Health Department  
October 2011 - Revised April 2013

# Acknowledgements

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## **Project Funded by:**

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ACHIEVE Community Health Action Response Team (CHART)

City of Bellingham

Community to Community Development (Comunidad a Comunidad)

Interfaith Community Health Center

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Northwest Indian College

Northwest Indian Health Board

Northwest Regional Council

Opportunity Council/ Prosperity Project

Pain Management and Opiate Dependence Task Force

PeaceHealth St. Joseph Medical Center

- Community Benefit Board

SeaMar Community Health Centers

St. Luke's Foundation

Washington State University (WSU) Whatcom County Extension

Western Washington University (WWU)

- Student Health Center
- Physical Education, Health, and Recreation
- Psychology

Whatcom Alliance for Healthcare Access (WAHA)

Whatcom Community Foundation (WCF)

Whatcom Council of Governments

Whatcom County Council on Aging

Whatcom County Health Department

Whatcom County

- Health Board/County Council
- Mental Health Advisory Board
- Public Health Advisory Board

Whatcom County Medical Society

Whatcom Family and Community Network (WFCN)

United Way of Whatcom County

Community members and/or professionals from the following groups:

- Hispanic / Latino community
- Lummi Nation
- Nooksack Tribe
- Pregnant and parenting teens and chemically dependent mothers
- Substance use treatment providers

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**Section One:**

# **Introduction and Overview**

Whatcom County  
Community Health  
Assessment - 2011

## Overview:

This introductory section provides a general overview of the Community Health Assessment Project. The section includes project background, a synopsis of the assessment methodology, a description of the Health Equity Framework used to consider assessment information, a summary of Key Assessment Findings, and an outline of Strategic Issues identified for community health improvement.

## Project Background:

In the fall of 2010, Whatcom County Health Department (WCHD) and PeaceHealth St. Joseph Medical Center (PHSJMC) established a public-private partnership to complete a comprehensive community health assessment and planning process. Undertaken in collaboration with a wide range of community partners, the overall aim of this work was to identify key areas where the community can take action to improve community health and reduce health disparities and inequities.

The purpose of the assessment and planning process was also to fulfill public health accreditation and federal health care reform regulatory requirements.

- The national Public Health Accreditation Board (PHAB) Standard 1.1 requires local health jurisdictions to participate in or conduct a collaborative process resulting in a comprehensive community health assessment. This is to be accomplished through several measures (PHAB, 2011).
  - Participate in or conduct a local partnership for the development of a comprehensive community health assessment of the population served by the health department.
  - Complete a local community health assessment.
  - Ensure that the community health assessment is accessible to agencies, organizations, and the general public.
- The 2010 Affordable Care Act requires hospitals with Section 501 (c)(3) non-profit status to (OSU, 2011):
  - Conduct a community health needs assessment not less frequently than every three years and adopt an implementation strategy to meet the community health needs identified through the assessment.
  - A community health needs assessment must include input from persons represent[ing] the broad interests of the community served by the hospital facility, including those with special knowledge of or expertise in public health.
  - The assessment must be made widely available to the public.

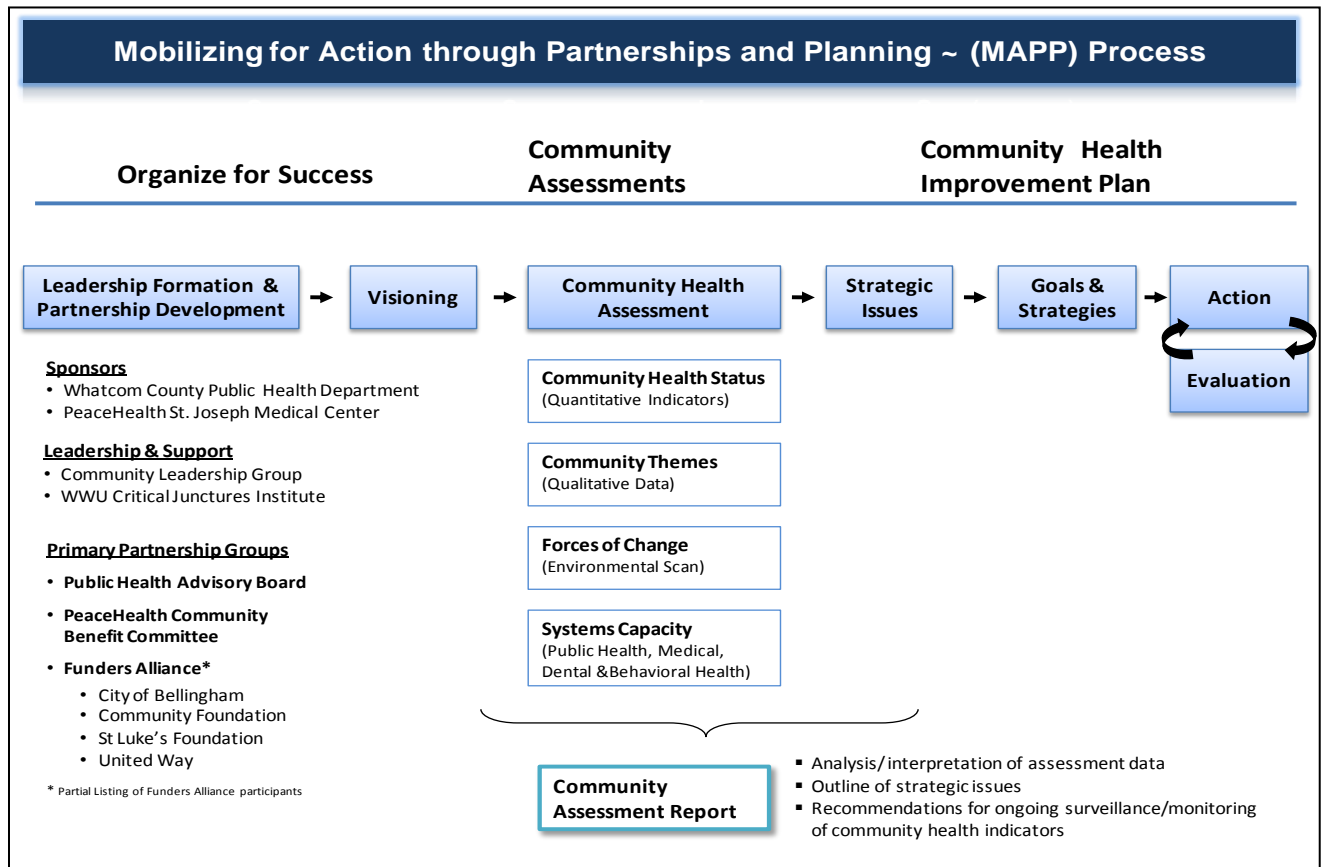
This report includes findings from the assessment phase of the project. The second phase of the project includes development of a *Community Health Improvement Plan* that will focus on strategic issues emerging from this assessment. The desired outcome is community consensus as to priorities and opportunities for channeling collective energy into a few strategic areas for community health improvement, rather than creating many new health or social programs.

## Methodology:

WCHD and PHSJMC chose to build the assessment and planning process on an existing planning framework, referred to as the *Mobilizing for Action through Planning and Partnerships* (MAPP) model. This model is an evidence-based community-wide strategic planning process for improving community health that is supported by national public health organizations, e.g., National Association of County and City Health Officials (NACCHO) and Centers for Disease Control and Prevention (CDC). WCHD and PHSJMC contracted with the Critical Junctures Institute at Western Washington University (WWU) for data collection, analysis and project support.

The process has included partnership and leadership group development, a community visioning process, four assessment components, and identification of strategic issues. Next steps include development and implementation of a *Community Health Improvement Plan* that includes goals, strategies, action steps, and evaluation methods.

Throughout the assessment process, project leadership has worked to build on existing or recent initiatives and assessment projects in the community to avoid duplication and to highlight the many strengths of the Whatcom County community.



*MAPP planning process, Whatcom County, 2011*

## Summary of Assessment Process:

Assessment Phase	Methods
<b>Organizing for Success</b>	<ul style="list-style-type: none"> <li>○ Create public-private partnership between WCHD and PHSJMC. Contract with Western Washington University (Critical Junctures Institute) for technical assistance and data collection/analysis. (<i>Summer 2010</i>)</li> <li>○ Establish Community Leadership Group. (<i>October 2010</i>)</li> </ul>
<b>Visioning</b>	<ul style="list-style-type: none"> <li>○ Convene partners and interested community members to create vision for community health. (<i>December 2010</i>)</li> </ul>
<b>Assessments</b>	
<i>Community Health Status Assessment</i>	<ul style="list-style-type: none"> <li>○ Compile and review MAPP core indicators plus additional indicators of interest. Review <i>County Health Rankings</i>. Intentionally focus on social and economic factors that impact health. Include health care system capacity. (<i>November 2010-March 2011</i>)</li> </ul>
<i>Community Themes and Strengths Assessment</i>	<ul style="list-style-type: none"> <li>○ Review reports and findings from a variety of recent assessment activities.</li> <li>○ Convene Themes and Strengths Forum. Include presentations by groups and entities involved in community initiatives and assessments. (<i>March 2011</i>)</li> <li>○ Convene several focus groups and conduct key informant interviews.</li> <li>○ Participate in community meetings/events.</li> </ul>
<i>Forces of Change Assessment</i>	<ul style="list-style-type: none"> <li>○ Brainstorm and discuss factors, trends, and events that impact or potentially impact community health at Community Leadership Group meeting (<i>April 2011</i>)</li> </ul>
<i>Public Health Systems Capacity Assessment</i>	<ul style="list-style-type: none"> <li>○ Review public health capacity/standards indicators, including discussion at Public Health Advisory Board meeting (<i>April 2011</i>)</li> </ul>
<b>Sharing Assessment Findings/ Identifying Strategic Issues</b>	<ul style="list-style-type: none"> <li>○ Convene community forum: <i>From Assessment to Action</i> (<i>October 2011</i>). Invite people who had participated in vision session and other interested parties.</li> <li>○ Create Community Health Assessment <i>Executive Summary</i> document and share with multiple community groups (<i>December 2011-ongoing</i>)</li> </ul>
<b>Developing Community Health Improvement Plan (CHIP)</b>	<ul style="list-style-type: none"> <li>○ Convene two full-day Community Leadership Group retreats to discuss and prioritize strategic issues and set stage for action planning (<i>March-April 2012</i>)</li> <li>○ Next steps: Identify CHIP goals, strategies, initiatives, and evaluation methodology (<i>May 2012 → onward</i>)</li> </ul>

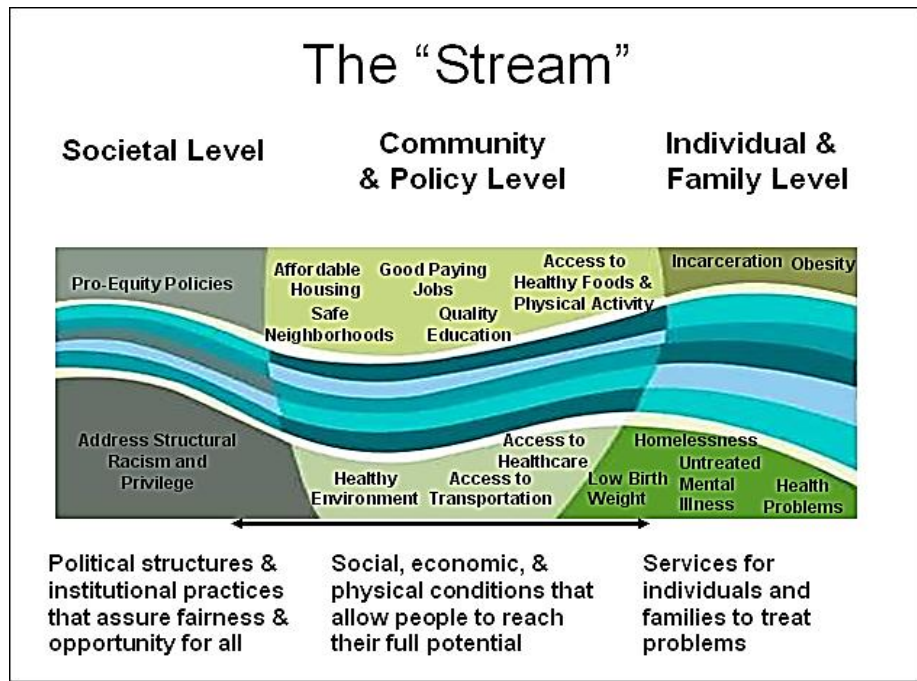


## Health Equity Framework:

Throughout the assessment process, primary consideration was given to issues related to health disparities (differences in health status due to race, ethnicity, gender, socioeconomic status, or sexual orientation) and health inequities (differences in health status or health opportunities that are unnecessary, unfair, and unjust). Project staff and leadership recognized the need to view data and information through a “determinants of health” lens and to consider “upstream” approaches, including interventions in early childhood, to have the greatest impact on health improvement.

### Determinants of Health

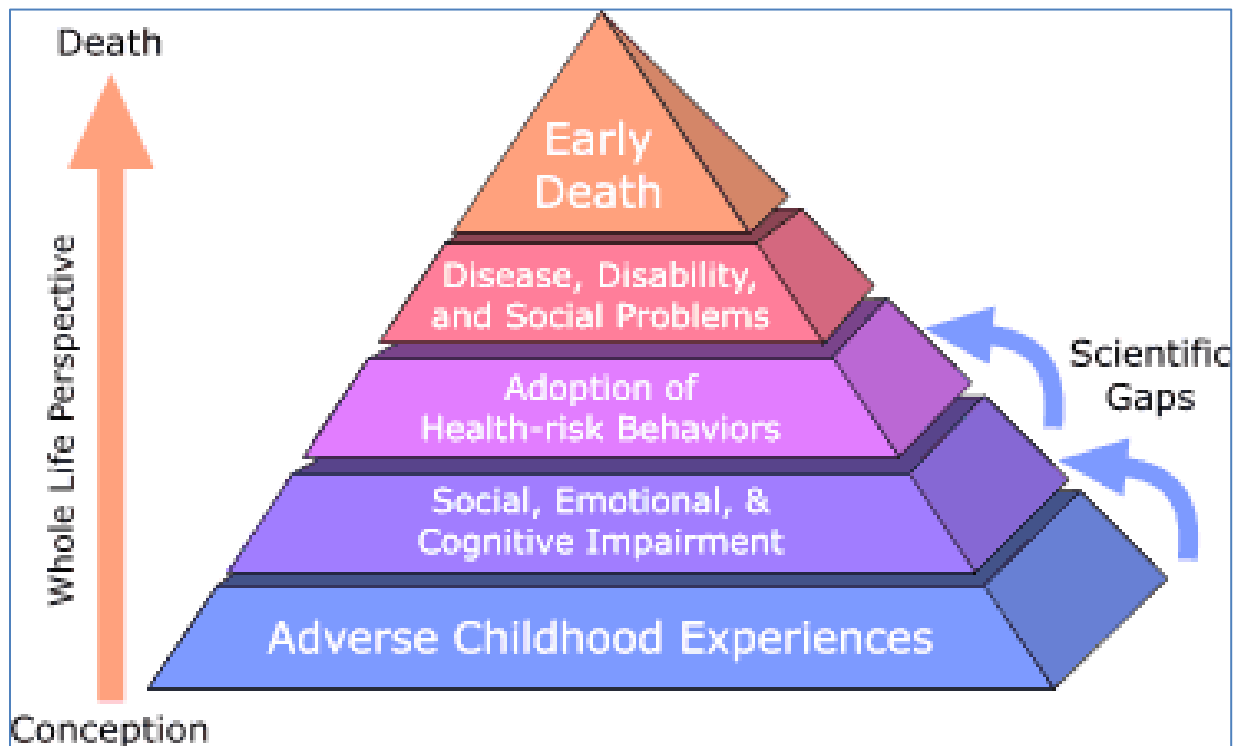
A range of factors influence and determine health status: personal, social, economic and environmental factors. A growing understanding of these “determinants of health” worldwide has refined the ways we think about health and informs the strategies used to improve health in communities. Entities such as the CDC, Healthy People 2020, and the World Health Organization place determinants of health at the heart of discussions about health. This approach to thinking about why some people are healthier than others addresses the relationships between health status, policy, social factors, health services, individual behavior, and biology. The following image provides graphic representation of how policies and social factors can flow into the “downstream” experiences of individual health conditions and problems that lead to poor health status. For example, while obesity may be a problem experienced by an individual, that individual’s access to healthy foods and physical activity may be shaped by social and environmental factors such as income or housing. Social and environmental factors put some populations at greater risk for negative health outcomes, leading to health disparities.



(King County, 2011)

## Life Course Perspective

An upstream approach to health also recognizes the critical importance of early life experience in developing good health across the lifespan. Mounting evidence points to factors such as the health of mothers prior to pregnancy, in-utero exposures during the prenatal period, and social and physical environments during a child's first years of life as key contributors to long term health. The landmark *Adverse Childhood Experiences Study* (Felliti et al., 1998) demonstrates compelling associations between a child's social environment (family dysfunction, household mental illness, substance abuse, child abuse and neglect, divorce and other stressors) and future health behaviors (e.g., substance use, risky sexual behavior) and health outcomes (e.g., depression, diabetes, heart disease, obesity).



(ACE Pyramid, CDC)

Acknowledging the determinants of health and the fact that certain populations are more likely to experience poor health due to contribution of these factors across the lifespan helps us set a course for community change and a healthier future for everyone.

## Key Assessment Findings:

The following statements represent a high level synthesis of data and information collected through the assessment process:

- **People in Whatcom County are generally healthy.** Data show that the county does well in comparison to many other places on numerous health-related indicators, including general health status and life expectancy.
- Despite good overall health, **challenges and disparities are hidden among the averages.** Not all populations experience the same level of good health nor have the same access to health opportunities. **Income, education, geography** and other factors **contribute to differences** in health status.
- **Poverty and adversity** threaten the health and well-being of a significant proportion of county residents, especially **children and young families.** The current **economic recession** increases **stress** on individuals and families and the **service systems** designed to support them.
- **Racial/ethnic minority groups experience disparities** in conditions that promote good health (i.e., income, education, stable family life) and in health outcomes. Groups and communities that are **disproportionately impacted** by health and social issues have **limited voice** in community decisions, and have **much to offer.**
- **Substance use and mental health** are frequently identified as **high priority** issues with significant impacts on children, families and community and **data** suggest the community is **doing less well** than national or state **benchmarks.** These issues **cross socio-economic and cultural boundaries.**
- Access to **healthy food,** safe affordable **housing,** and health-promoting **living environments** are increasingly recognized as contributing to good health. Some population groups and geographic areas have **less access to these amenities.**
- Whatcom County's **beautiful natural environment** and **land and water-based industries** are key **community assets.** At times, issues related to community development and growth and protection of the natural environment become sources of **conflict** between community members, but also opportunities for **civic engagement.**
- The county is **well-positioned** for federal **health care reform,** but basic issues of **access, availability and organization of health services** remain for some populations. The county's population is **getting older** and more **culturally diverse,** creating the need for **appropriate health services** and supports.
- The local **public health system** is **strong and well-connected,** but challenged by **budget cuts** and **resource limitations.** Improved **data systems** and **communication** strategies are priorities for improvement.

## Strategic Issues for Community Health Improvement:

After consideration of the assessment findings and community input, project leadership identified the following six issues as areas for strategic intervention as our community works to address the overarching question: *How do we improve health, reduce disparities and advance equity in Whatcom County?* The list of issues is intentionally selective, and does not represent all of the important issues identified in the assessment process.

1. **Community voice and engagement:** *Foster a more inclusive community where all people feel their voices are heard and they can actively participate in community life without fear and stigmatization*
2. **Healthy child, youth and family development:** *Reduce and mitigate adverse childhood experiences and optimize healthy child, youth and family development*
3. **Healthy living in neighborhoods and communities:** *Increase opportunities for people to live healthy active lifestyles and enhance social connections within neighborhoods and communities*
4. **Health care access and service delivery:** *Reduce barriers to health care and improve service delivery to better meet health the needs of vulnerable populations throughout the county*
5. **Substance abuse and mental health:** *Reduce use and abuse of harmful substances and optimize mental health and well-being.*
6. **Health data and metrics:** *Improve measurement and monitoring of community health status and ensure progress towards community health improvement*

## Next Steps:

The strategic issues identified through the assessment process will serve as the basis for development of a *Community Health Improvement Plan*. The goal is to create an engaging process and plan that can guide local organizations and individuals in making a difference collectively and individually in the health of our community---***so that all people will have the opportunities they need to thrive in a safe and healthy community.***

**Section Two:**

# **Shared Vision for Community Health**

Whatcom County  
Community Health  
Assessment - 2011

## **Overview:**

The section highlights the Shared Vision for Community Health that was created through an interactive process with multiple community partners. The purpose of the vision is to set the direction for the community health assessment and improvement planning process.

## **Methodology:**

In December 2010, the Core Team sponsored a half-day visioning session with 44 community partners. Ms. Sue Sharpe, a Community Leadership Group member, facilitated the process. Individuals and organizations were asked to bring their own vision statements which were displayed on the wall. Participants viewed these statements and then worked in smaller groups to identify key themes. Project staff compiled input, created a draft vision, solicited feedback from visioning participants and then finalized the following statement.

***We are Whatcom County, a people and a place,  
culturally and geographically diverse, united in our vision of a healthy and vibrant  
future where:***

- ***Every child** grows in a safe and nurturing environment;*
- ***Every person** has access to comprehensive and integrated health services and social supports across the lifespan and spectrum of needs;*
- ***Every population** shares in the abundance of opportunities for healthy active living, outstanding education, satisfying employment, and meaningful community participation;*
- ***We all** flourish through our connections and commitments to each other and to the air, land, and waters that surround and sustain us.*

**To accomplish our vision, we will act with these guiding values:**

- Collaborate to connect and maintain health and social support systems that are accessible, efficient, accountable and culturally relevant;
- Strive for equity, fairness and justice in all that we do;
- Work with one another with integrity, humility, compassion and respect;
- Invest effectively to improve our community with careful planning and evaluation;
- Build on community assets and strengths;
- Honor diversity and inclusiveness, fostering a sense of place and belonging for everyone;
- Risk being innovative, action-oriented, and resourceful;
- Address past and present issues that divide us with a sense of openness and spirit of healing;
- Promote shared leadership and collective responsibility for the health of our community;
- Preserve, protect and replenish our wealth of shared natural resources and social resources for future generations.

**Key resources needed to achieve our vision include:**

- Leadership and commitment
- Community engagement that is intergenerational and cross-cultural
- Public and private funding sources collaborating in unprecedented ways
- Shared, accurate data and information exchange
- People's time, talent, creativity, wisdom and flexibility

**The types of involvement needed:**

- Engagement of people across all walks of life
- Sustained leadership of people in government, business, health, education, and the non-profit sectors, as well as professional, labor and social associations, communities of faith and neighborhood associations,
- Engagement of established and new media to carry messages and help give voice to people and communities in Whatcom County

**Section Three:**

# **Community Health Status Assessment**

Whatcom County  
Community Health  
Assessment - 2011



## **Overview:**

The purpose of this section is to provide a comprehensive review of community health status indicators that were available at the time of this assessment (2011). The section is broken down into subsections including: Health Status Overview, Demographics, Social Factors, Basic Needs, Health Care System Capacity and Access, Community Environments, Maternal and Child Health, Adolescent and Adult Health Behaviors, and Selected Health Conditions.

## **Methodology:**

In order to assess community health status, we relied on sources of health indicators. The methodology used for this assessment involved compilation, review, analysis and presentation of health indicators and information from the following sources including but not limited to:

- City of Bellingham Strategic Legacies (COB, 2009)
- Department of Health and Human Service's Healthy People 2020 Topics & Objectives
- National Association of City and County Health Officials' Mobilizing for Action through Planning and Partnerships (MAPP) Community Health Status Assessment- Core Indicator Lists
- Robert Wood Johnson Foundation and University of Wisconsin's County Health Rankings (2009, 2010, 2011)
- Washington State Department of Health Local Public Health Indicators (2009)
- Whatcom County Health Department's 2010 Indicator Report for Whatcom County
- United States Census and American Community Survey (2000-2011)
- United Way National Performance Measures

## **Caveats and Considerations:**

Data are limited due to time factors and small population sizes for some sub-groups.

The source of most health behavior data is the Washington State Behavioral Risk Factor Surveillance System (BRFSS). This telephone survey is completed annually at the state level, but an oversample for Whatcom County is only performed every 5 years. The last oversample was conducted in 2007. Health behavior data for most racial/ethnic minority populations is limited by small population size.

## HEALTH STATUS OVERVIEW

### SYNOPSIS

Whatcom County is one of the healthiest counties in Washington and compares favorably with other communities across the nation (RWJF, 2011). Despite overall good health status, significant health disparities exist for some populations. Native Americans, Hispanic/Latinos, and people with less income or less education have higher risk of poor health status compared with the general population (BRFSS, 2007). Substance use and mental health issues are particular health challenges for Whatcom County.

### WHY IS THIS IMPORTANT?

Nationally, health disparities are linked to poverty, discrimination and isolation, as well as limitations in educational and employment opportunities (NACCHO, 2006). Improving the health of the whole population requires expanding opportunities for all people to lead healthy lives.

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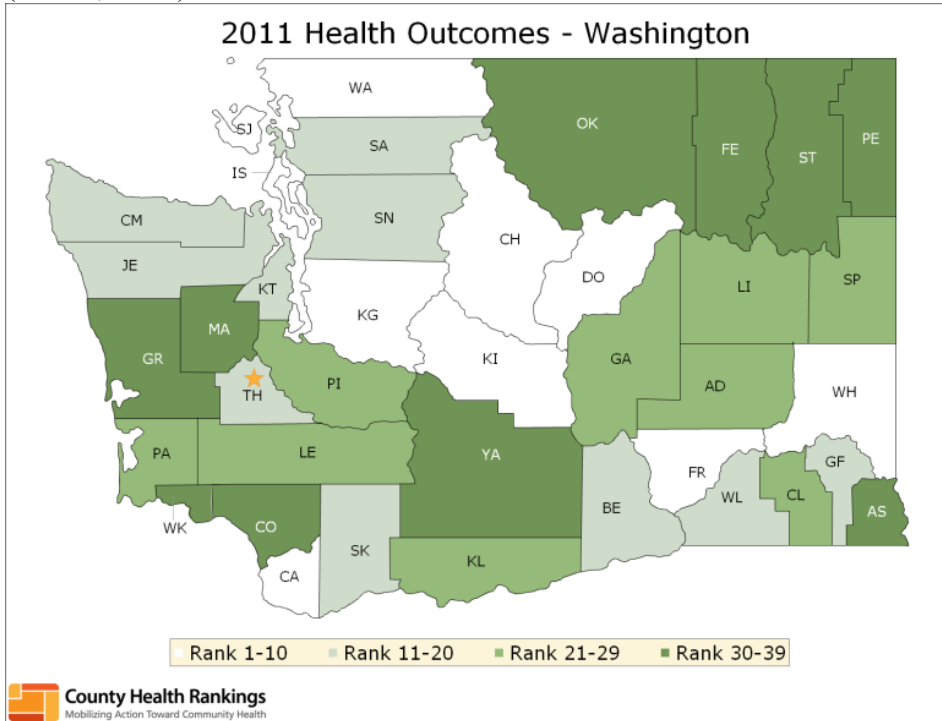
### GENERAL HEALTH STATUS

In 2011, Whatcom County was ranked the sixth healthiest county among 39 counties in Washington State in the annual County Health Rankings, a project of the Robert Wood Johnson Foundation and University of Wisconsin Population Health Institute. The County ranked in the top 10 best counties for health outcomes and health factors (RWJF, 2011). Health outcomes represent how healthy a county is while health factors are what influences the health of the county.

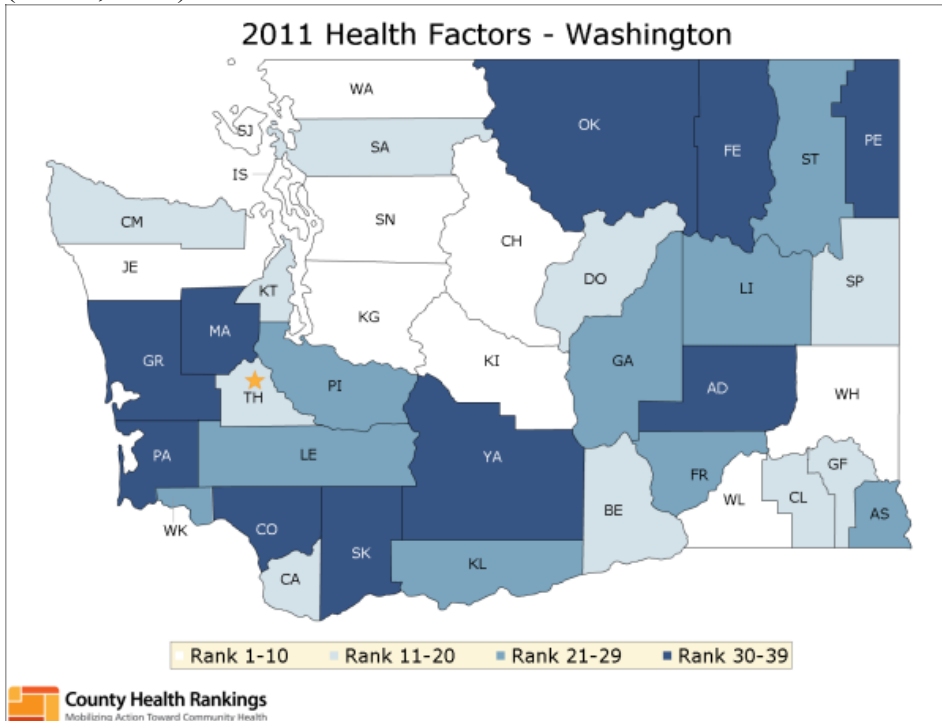
**Table 1. County Health Rankings: Top Washington State Counties, Washington State, 2011** (RWJF, 2011)

Rank	Health Outcomes	Rank	Health Factors
1	San Juan	1	San Juan
2	Kittitas	2	King
3	Whitman	3	Whitman
4	Island	4	Kittitas
5	King	5	Chelan
6	Whatcom	6	Whatcom
7	Chelan	7	Island
8	Douglas	8	Jefferson
9	Clark	9	Walla Walla
10	Franklin	10	Snohomish

**Figure 1. County Health Rankings: Health Outcomes Map, Washington State, 2011 (RWJF, 2011)**



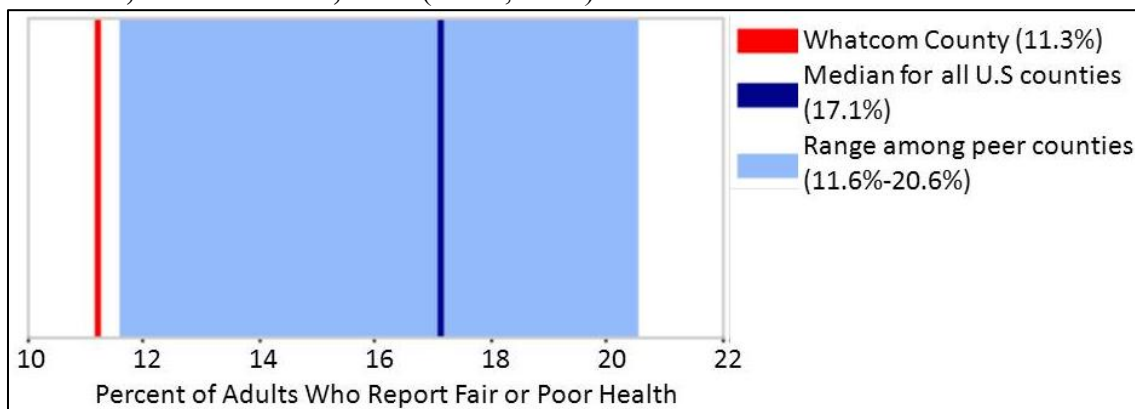
**Figure 2. County Health Rankings: Health Factors Map, Washington State, 2011 (RWJF, 2011)**



**Fewer people report fair or poor health status.**

Residents of Whatcom County are less likely to report their health fair or poor than residents in comparable counties across the nation (RWJF, 2011).

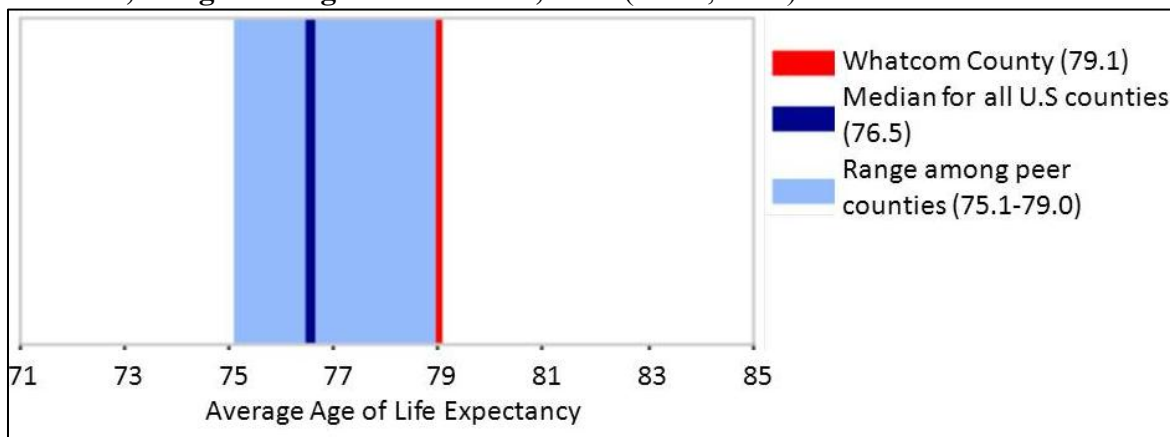
**Figure 3. Fair or Poor Health Status Among Adults, Whatcom County, U.S. Counties, Peer Counties, 2009 (CHSI, 2009)**



**People generally live longer.**

Positive personal assessment of health is affirmed by objective measures of life expectancy that indicate residents, on average, outlive residents in comparable counties in the nation.

**Figure 4. Average Life Expectancy, Whatcom County, Median For All U.S. Counties, Range Among Peer Counties, 2009 (CHSI, 2009)**



**HEALTH CHALLENGES AND DISPARITIES**

**Disparities hidden among the averages.**

Several conditions and disparities that are cause for concern are highlighted throughout this report. Socioeconomic factors (such as low income and limited education), community

environmental conditions, and mental health and substance use are primary challenges impacting the health of Whatcom County residents.

The Community Health Leadership Group of the CHA categorized and analyzed the health indicators of the 2011 County Health Rankings (RWJF, 2011). The following table demonstrates the group members’ analysis of outcomes. *Strengths* are defined as health indicators that were better than the state and national averages or benchmarks. Indicators listed under *Room for Improvement* were similar to the state averages, but may be areas of concern for some population groups. *Challenges* reflect areas where Whatcom County is worse than state and national averages and benchmarks, and where additional focus is likely warranted.

**Table 2: Analysis of County Health Rankings Among CHA Leadership Group, Whatcom County, 2011 (RWJF, 2011)**

Strengths	Room for Improvement	Challenges
<p>Mortality:</p> <ul style="list-style-type: none"> <li>• Low rate of premature death</li> </ul> <p>Health Behaviors and Outcomes:</p> <ul style="list-style-type: none"> <li>• Adult physical activity</li> <li>• Smoking</li> <li>• Obesity</li> <li>• Diabetes</li> <li>• Teen birth rate</li> <li>• Low birth weight</li> <li>• Motor vehicle crash rate</li> </ul> <p>Clinical Care:</p> <ul style="list-style-type: none"> <li>• Preventable hospital stays</li> <li>• Diabetic screening</li> <li>• Colorectal cancer screening</li> </ul>	<p>Socioeconomics:</p> <ul style="list-style-type: none"> <li>• Unemployment</li> <li>• Affordable housing</li> <li>• Children in poverty</li> <li>• Inadequate social support</li> <li>• Single parent households</li> <li>• Violent crime rate</li> <li>• High school graduation</li> </ul> <p>Health Behaviors and Outcomes:</p> <ul style="list-style-type: none"> <li>• Teen physical activity</li> <li>• Influenza vaccination</li> <li>• Childhood immunization</li> <li>• STDs (Chlamydia rate)</li> </ul> <p>Clinical Care:</p> <ul style="list-style-type: none"> <li>• Uninsured adults</li> <li>• Adults with unmet medical need</li> <li>• Adult dental care</li> <li>• First trimester prenatal care</li> <li>• Availability of primary care providers</li> <li>• Availability of mental health providers</li> <li>• Breast and cervical cancer screening</li> </ul>	<p>Socioeconomics</p> <ul style="list-style-type: none"> <li>• Median income (low)</li> </ul> <p>Environment:</p> <ul style="list-style-type: none"> <li>• Liquor store density</li> <li>• Access to healthy foods (grocery stores)</li> <li>• Air pollution (particulate matter)</li> </ul> <p>Health Behaviors and Outcomes:</p> <ul style="list-style-type: none"> <li>• Poor mental health days</li> <li>• Excessive drinking/binge drinking</li> </ul>

# I. DEMOGRAPHICS

## SYNOPSIS

Whatcom County is the 9<sup>th</sup> most populous county in Washington State, with approximately 3% of the state population (Census, 2010). The county is growing steadily, both in its cities as well as rural areas. Diversity is expanding, as populations of older adults and racial and ethnic minorities are increasing. A significant percentage of the County population speaks a language other than English as a first language. The unique geography of the county presents barriers for access to services and promotes isolation of some population groups.

## WHY IS THIS IMPORTANT?

Population trend information helps communities identify and meet current and future health needs, including culturally appropriate and geographically accessible health services and social supports as well as adequate community infrastructure.

---

## POPULATION CHANGE

### Population growing in both urban and rural areas.

The population of Whatcom County has been increasing, faster than the state as whole. Between 2000 and 2010, the county population increased 21% from 166,814 to 201,140, compared to a population increase of 14% for Washington State (Census, 2010). Forty percent of the population lives in Bellingham (80,885), 43% lives in unincorporated Whatcom County (87,085).

- All cities have increased in population size in past decade, except Acme. Small cities have experienced the most growth.
- Whatcom County has more than tripled in population since 1950.
- Population increases are due to both births as well as inward migration.

### Population getting older.

The population of adults aged 65 and older is increasing from 11.6% (19,400) of the population in 2000 to 12.5% (25,899) of the population in 2009. Median age was 36.1 years old in 2010, up from 34 in 2000. Children younger than 5 made up 5.8% population in 2009 (ACS, 2005-2009).

**Table 1: Population Trends by Age Group, Whatcom County, 2000 and 2010**  
(Census, 2010)

	2000	2010	Trend
Children < 5 years old	10,210, (6.1%)	11,669 (5.8%)*	↓
Adults > 65 years old	19,400 (11.6%)	25,899 (12.8)*	↑
Median Age	34	36.1	↑
Total Population	166,814	201,140	↑

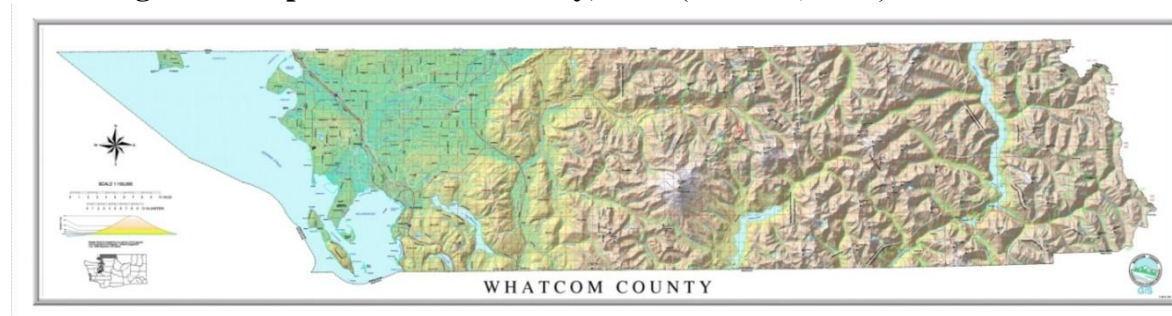
\*2009, Census.

## GEOGRAPHIC DISTRIBUTION

### Large county with distinct land and water features.

Whatcom County has a land area of 2,107 square miles (ranked 12<sup>th</sup> in state for size) and a population density of 95.92 people per square mile (ranked 10<sup>th</sup> in the state for density). (WA OFM, 2011) The county has several prominent geographic features including Puget Sound to the west, North Cascade mountains to the east, and the southern Canadian border to the north.

**Figure 1: Map of Whatcom County, 2010 (WCPDS, 2009)**



### Population dispersed throughout the county.

The county has one primary urban area (Bellingham) in the southwest corner of the county, six small cities, and several urban growth areas within the unincorporated areas of the county.

**Table 2: Geographic Populations, Whatcom County, 2010 (Census, 2010)**

	2010
Bellingham	80,885
Lynden	11,951
Ferndale	11,415
Blaine	4,684
Everson	2,481
Nooksack	1,338
Sumas	1,301
Whatcom Unincorporated	87,085
Total	201,140

**Table 3: Population in Other Geographic Areas, Whatcom County, 2010 (Census, 2010)**

	2010
Birch Bay	8,413
Sudden Valley	6,441
Peaceful Valley	3,324
Point Roberts	1,314
Lummi Island	964
Lummi Reservation	4,706

**Geographic barriers and distance isolate some Whatcom County communities.**

Bellingham is the largest population center with the majority of health and social services. Point Roberts, Lummi Island, and eastern Whatcom County (Kendall/Maple Falls) are particularly isolated. Nooksack Tribe and Lummi Nation reservation lands are distinct geographic areas, though include primary access routes to other areas of the county (e.g., Lummi Island and Mt Baker recreation areas).

**Figure 2: Partial Map of Whatcom County with Population Areas, 2010 (WCPDS, 2009)**



**Pockets of vulnerable populations.**

A greater percentage of older adults live in Lynden than other parts of the county. Russian speaking immigrant populations are concentrated in eastern Whatcom County. Hispanic populations are concentrated in agricultural areas of Lynden and Everson/Nooksack as well as in north Bellingham. American Indian tribal populations live primarily on reservation lands on Lummi Peninsula and Deming areas. Pockets of poverty are distributed throughout the county, however percentages of families living in poverty are higher in the eastern part of the county as well as in central and northern Bellingham and Ferndale.

**RACIAL AND ETHNIC DIVERSITY**

**Cultural diversity increasing; Hispanic population growing.**

Whatcom County remains primarily White, but racial and ethnic minorities are increasing (ACS, 2005-2009). The Hispanic population is growing faster compared to other populations.

- The Hispanic population is 8% of the total population, compared to 5% in 2000.
- Approximately 3% of the total population is Native American. Most are affiliated with one of two federally recognized local tribes (Lummi Nation and Nooksack Tribe).
- 10% of the Whatcom County population (19,906) was born in a country other than the United States.



**Table 4: Race & Ethnicity, Whatcom County and Washington State, 2011** (Census, 2010)

	Whatcom County	Washington State
White	88.0%	82.0%
Hispanic	8.2%	11.6%
Asian	3.9%	7.5%
American Indian/ Alaska Native	3.1%	1.8%
Black	1.2%	3.8%
Native Hawaiian/ Pacific Islander	0.3%	0.7%
Two or more races	3.6%	4.3%

**One out of ten residents does not speak English as a first language.**

English is not the first language for 11% of population. Nearly 5% of Whatcom County population is non-English speaking (speaks English less than “very well”). 2.2% of Whatcom County households are linguistically isolated: no one age 14 or older in the household speaks English “very well” (ACS, 2005-2009).

- Approximately 4.7% of the population speaks Spanish at home.
- One percent of the population speaks Slavic languages at home.

**Table 5: Language Spoken at Home, Whatcom County, 2009** (ACS, 2005-2009)

	Number	Percent of Population
English only	167762	88.9%
Language other than English	21003	11.1%
Speak English less than “very well”	8934	4.7%

**EDUCATION ATTAINMENT AND ENROLLMENT**

**Almost one third of county residents are enrolled in school.**

The population of residents enrolled in an educational institution is 29% (57,724 people), including pre-school. Of those enrolled, 25,002 were attending college or graduate school (ACS, 2005-2009).

**Most adults have completed high school level education or higher.**

Less than 10% of adults aged 25 and older have not completed a high school level education. More than 30% of adults have a Bachelor’s degree or higher (ACS, 2005-2009). These percentages are comparable with the state.

**Table 6: Educational Attainment, Whatcom County, 2010 (ACS, 2005-2009)**

	Number	Percent of Population
Persons Aged 25 Or Older Without High School Diploma	11,827	9.5%
High School Graduate (Including Equivalency)	29,344	23.5%
Some College, No Degree	29,871	23.9%
Associate's Degree	14,622	11.7%
Bachelor's Degree	26,662	21.4%
Graduate Or Professional Degree	12,399	9.9%

## VULNERABLE POPULATIONS

### One out of seven people has a disability or special health need.

Populations with special needs include:

- **People with a disability:** 13.0% of population (ACS, 2005-2009)
- **Seniors:** 12.5% of population (ACS, 2005-2009).
- **Veterans:** Nearly 10% of Whatcom County population (ACS, 2005-2009)
- **Children with special health care needs:** 12.8% of children (3463 children ages 3-21) enrolled in Whatcom County public schools receive school services for one or more disability--health, emotional/behavioral, developmental, learning disorder (OSPI, 2009-2011). Approximately 150 children ages birth to 3 years are served by County early intervention services each month (WA ESIT, 2011).
- **Caregivers:** 14% of the adult population provides care for another person, either on a part-time or full-time basis (BRFSS, 2007). Caregiving can be associated with high levels of stress and lack of rest.

**Table 7: Vulnerable Populations, Whatcom County, 2009 (ACS, 2005-2009)**

	Number	Percent of Population
Has Disability (ACS, 2005-2009)	25,815	13.0%
Veteran (ACS, 2005-2009)	15,435	9.8%
Seniors with Disability (NRC, 2009)		29%
Children with Special Health Needs (3-21 enrolled in public schools) (OSPI-Special Needs)	3,463	12.8%

## II. SOCIAL FACTORS

### SYNOPSIS

In Whatcom County, as in other communities, health status is closely correlated with a number of social factors including income, poverty, employment status, education level and race/ethnicity. These factors are sometimes referred to as *social determinants of health*. Individuals who have lower incomes, less education, are unemployed and/or who are American Indian, Black or Hispanic are more likely to experience poorer health status, have higher rates of health conditions such as obesity and diabetes, and lower life expectancy compared with individuals who have higher income, higher education levels, stable employment and are White. Women are more likely than men to be impacted by poverty and low socio-economic status. Single mothers and their children are at particularly high risk for poverty.

### WHY IS THIS IMPORTANT?

Efforts to improve the social determinants of health (e.g., increasing family economic stability, increasing educational attainment, and reducing racial and ethnic discrimination) have the potential to positively impact many health outcomes for individuals and families, especially children. Having adequate, stable financial resources is critical for individuals and families to meet their basic needs. Poverty creates stressors that impact all individuals and family members, but are especially detrimental to young children. Race and ethnicity are correlated with many health disparities among U.S. populations. Health disparities among racial and ethnic groups are believed to be a result of complex relationships between genetic variability, environmental factors, and specific health behaviors (CDC-OMHD, 2011).

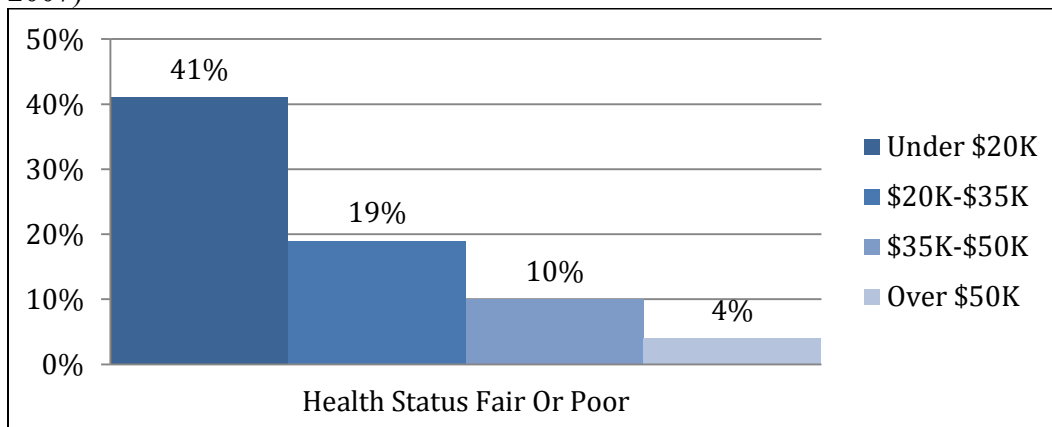
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### INCOME AND HEALTH

#### Income correlates with health outcomes and risk factors.

Whatcom County data demonstrate strong associations between income level and self-reported health status of adults, with significant percentage of people in households at lower income levels reporting poorer health status than those with higher household income.

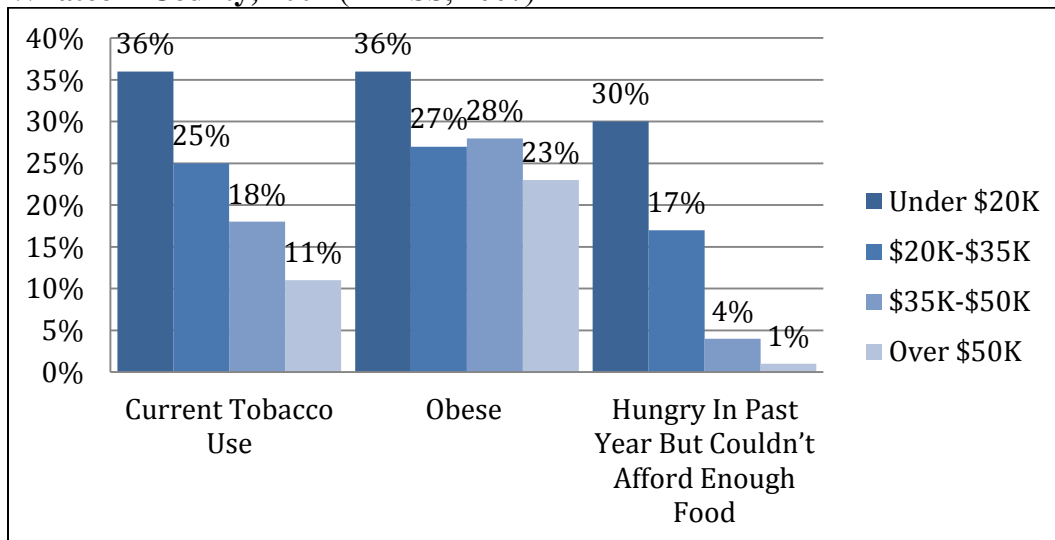
**Figure 1: Fair or Poor Health Status by Income, Whatcom County, 2007 (BRFSS, 2007)**



**Table 1: Health Outcomes and Risk Factors by Income, Whatcom County, 2007**  
(BRFSS, 2007)

	Under \$20K	\$20K-\$35K	\$35K-\$50K	Over \$50K	Whatcom Overall
Health Status Fair Or Poor	41%	19%	10%	4%	13%
Some Days Physical Health Not Good	58%	43%	25%	35%	36%
Very Satisfied With Life	24%	28%	43%	59%	46%
Health Insurance Coverage	76%	78%	84%	95%	86%
Current Tobacco Use	36%	25%	18%	11%	18%
Obese	36%	27%	28%	23%	26%
Hungry In Past Year But Couldn't Afford Enough Food	30%	17%	4%	1%	9%
Physical Activity In Last 30 Days	69%	76%	87%	91%	85%
Cardiovascular Disease	11%	5%	3%	2%	3%
Diabetes	10%	10%	4%	4%	6%

**Figure 2: Current Adult Tobacco Use, Obesity and Hunger by Income Group, Whatcom County, 2007** (BRFSS, 2007)



**Median income is lower than state.**

Overall, Whatcom County has a significantly lower median income than the Washington State median income (ACS, 2005-2009).

**Table 2: Median Income, Whatcom County and Washington State, 2009 (ACS, 2005-2009)**

	Median Income (2009)
Whatcom County	\$46,490
Washington State	\$56,548

**Income disparities exist by race and ethnicity.**

Per capita, mean income is highest for people defined in U.S. Census as White (by race and not of Hispanic/Latino origin). Hispanic/Latino origin individuals have less income than any other race or ethnicity in Whatcom County (ACS, 2005-2009).

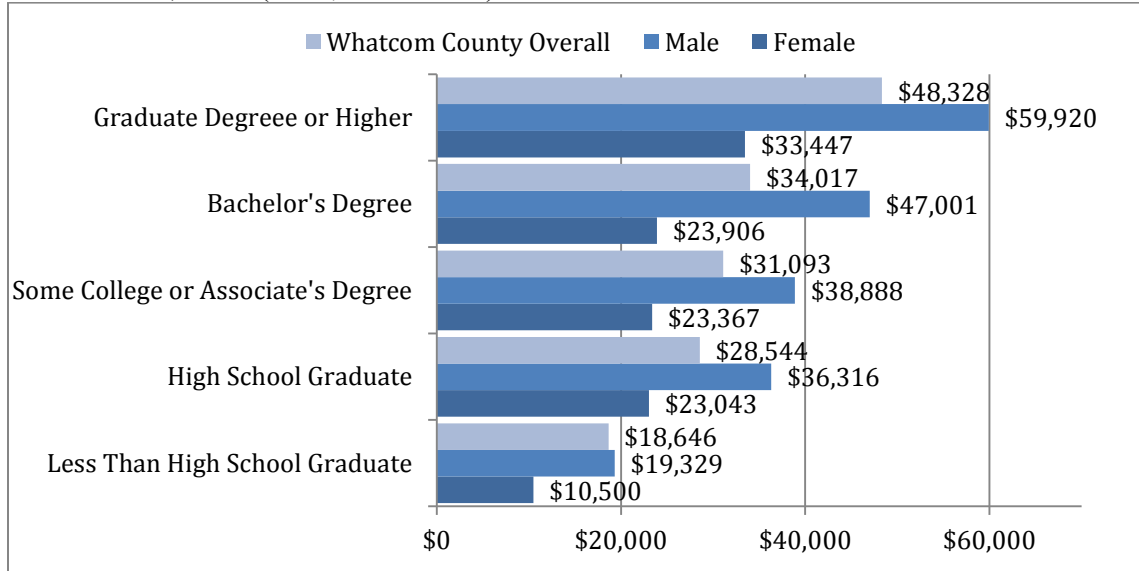
**Table 3: Per Capita Mean Income by Race/Ethnicity, Whatcom County, 2009 (BRFSS, 2007)**

	Income
White	\$25,165
Asian	\$19,254
American Indian/Alaska Native	\$18,566
Black	\$17,473
Two or more races	\$16,943
Hispanic	\$13,657
Other Races	\$12,825
Whatcom County Total	\$24,149

**Median earnings vary significantly by education attainment and by gender.**

Median earnings for the Whatcom County population 25 years and older in 2009 was \$39,885 for men and \$23,044 for women (ACS, 2005-2009). For men, having less than a high school education means the difference in median earnings of \$19,329, compared to male high school graduates median earnings of \$36,316 (ACS, 2005-2009). Females earnings are consistently low: \$18,500 for less than high school education compared to females with high school degree: \$23,043 (ACS, 2005-2009). Having a bachelor's degree increases median earnings of males to \$47,001 compared to a very slight increase among females to \$23,906 (ACS, 2005-2009).

**Figure 3: Whatcom County Median Household Income by Educational Attainment and Gender, 2009 (ACS, 2005-2009)**



**POVERTY AND HEALTH**

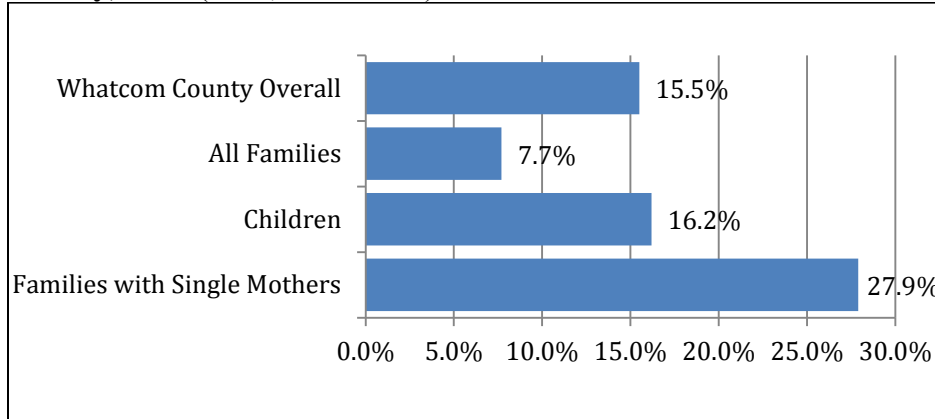
**One in every six people in Whatcom County lives below the poverty line.**

In 2009, 15.5% of people in Whatcom County had income levels below the poverty line in the past year. 16.4% of children under 18 (more than 6000 children and youth) were living in poverty; 18.5% of women. Federal Poverty level in 2009 was \$10,830 for one person, \$22,050 for a household of 4 people (ACS, 2005-2009).

**Families with single mothers at high risk for poverty.**

Nearly a third of all families with single mothers live in poverty (27.9% of families with single mothers in 2009). Nearly two-thirds of female headed households with young children live in poverty (62.6% of families with single mothers and children under age 5 in 2009). Non-white families have higher rates of poverty among families with a female householder and no partner present. Families with single mothers who are American Indian/Alaska Native, Asian, or of Hispanic/Latino origin, have the highest rates of poverty in Whatcom County (ACS, 2005-2009).

**Figure 4: Percent of Population Groups Living Below Poverty Level, Whatcom County, 2009 (ACS, 2005-2009)**



**Table 4: Population Groups Living Below Poverty Level, Whatcom County, 2009 (ACS, 2005-2009)**

	Total Number in Whatcom County	Number in Poverty	Percent of Population
Children (under 18)	41,388	6,678	16.2%
Families	45,682	3,518	7.7%
Families with Single Mothers	6,239	1,741	27.9%
Whatcom County Overall	200,434	30,351	15.5%

**Table 5: Families Living Below Poverty by Female Households, No Husband Present, with Related Children Under 18 Years by Race, Whatcom County, 2007-2011 (ACS, 2007-2011)**

	Female Households Actual	Female Households Percent	All Families Actual	All Families Percent
White	1,589	77%	3,134	68.2%
Black or African American	0	0%	58	1.3%
American Indian and Alaska Native	182	8.8%	320	7%
Asian	43	2.1%	118	2.6%
Native Hawaiian and Other Pacific Islander	0	0%	0	0%
Some Other Race	32	1.6%	263	5.7%
Two Or More Races	52	2.5%	87	1.9%
Hispanic or Latino	166	8.1%	615	13.4%
Total	2064	NA	4595	NA

## EMPLOYMENT, JOBS AND HEALTH

### Employment status linked to health status and ability to meet health care needs.

- In 2007, adults who were unemployed were more likely to report fair/poor health status (20.4% compared to 7.3% for those who are employed and not retired) and to have unmet health needs (20% compared to 16% overall) (BRFSS, 2007).
- In 2007, 22% of adults who were unemployed had no health insurance, compared with 14% of all adults (BRFSS, 2007).

### Signs of economic recovery, but unemployment still high.

As of 2011, the county's jobless rate is continuing to trend downward, but there is a lack of job growth. County annual unemployment for 2010 was 8.3%, up from 7.9% in 2009, and 5.0% in 2008 (WAESD, 2010-2011).

**Table 6: Employment Status, Whatcom County, 2009** (ACS, 2005-2009)

	Number	Percent of Population
Civilian labor force	108,136	66%
Employed	96,792	59%
Unemployed	11,344	7%
Not in Labor Force	55,095	34%

### Many low paying service jobs without benefits.

The service sector has experienced the most growth in recent years in Whatcom County. Retail, accommodation and food service jobs tend to be lower paid (near minimum wage) and without benefits such as health insurance. The industry categories with the most workers in Whatcom County in the first quarter of 2011 (WAESD, 2010-2011) were:

1. Government
2. Health care and social assistance
3. Retail trade
4. Manufacturing
5. Accommodation and food service

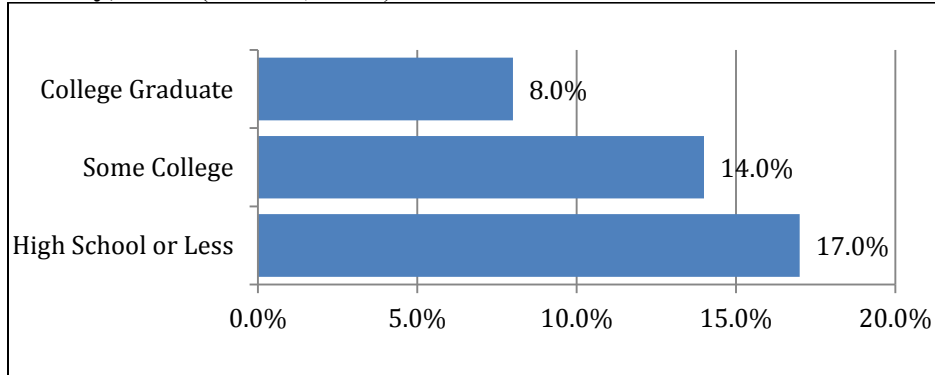
## EDUCATION, ACADEMIC PERFORMANCE AND HEALTH

### Educational attainment associated with health status.

In Whatcom County, individuals who have a high school diploma or less are more likely to have fair or poor health status than individuals with a college degree who report better health status. Nearly 10% of the Whatcom County adult population has not completed high school (ACS, 2005-2009).



**Figure 5. Percent Reported Fair or Poor Health Status by Education, Whatcom County, 2007 (BRFSS, 2007)**



**Whatcom County high school graduation comparable to state.**

Over the past several years, the percentage of students graduating from Whatcom County high schools on time has been variable, but similar to state rates. In 2010, 78% of 12<sup>th</sup> grade students in Whatcom County graduated from high school on time. The proportion of county students graduating on time was slightly higher than the state average.

**Table 7. On-Time High School Graduation Rates, Whatcom County and Washington State, 2007-2010 (OSPI, 2009-2011)**

	2006-2007	2007-2008	2008-2009	2009-2010
Whatcom County	74.1%	70.1%	72.5%	77.9%
Washington State	72.5%	72%	73.5%	76.5%

**Significant achievement gaps for racial/ethnic minority and Limited English students.**

High school completion, on-time graduation, and drop-out rates vary based on race/ethnicity and English language competency. Drop-out rates are high for students who are American Indian/Native Alaskan, Hispanic, and Limited English status. Less than 60% of Hispanic and American Indian/Native Alaskan students and less than 50% of Limited English students graduated high school on-time in 2009-2010 (OSPI, 2009-2011).

**Table 8. High School Annual Drop-Out and Graduation Rates by Race and Ethnicity, Whatcom County, 2009-2010 (OSPI, 2009-2011)**

	Drop-out Rates	On-Time Graduation	All Graduation
White	3.2%	81.4%	86.1%
Asian/ Pacific Islander	3.8%	77.7%	83.4%
Hispanic	7.2%	59.7%	69.2%
American Indian/Native Alaskan	8.6%	58.9%	69.0%
Black*	2.8%	80.4%	83.0%
Whatcom Overall	3.9%	77.9%	83.3%
WA State Overall	4.6%	76.5%	82.6%

\*Cohort included only 37 Black students

**Table 9. High School Graduation by Limited English, Special Education and Low Income, Whatcom County, 2009-2010 (OSPI, 2009-2011)**

	Drop-out Rates	On-Time Graduation	All Graduation
Limited English*	10.4%	41.1%	48.8%
Special Ed	3.5%	47.4%	60.8%
Low Income	4.0%	74.2%	80.3%
Whatcom Overall	3.9%	77.9%	83.3%

\*Cohort included 39 students who were Limited English

**Graduation and drop-out rates vary by school district.**

During the 2009-2010 school year, the percentage of students graduating from high school on time varied from 72.4% (Bellingham Public Schools) to 90% (Blaine School District) (OSPI, 2009-2011). The annual drop-out rate was highest in Mt. Baker School District (4.6%) and lowest in Lynden School District (2.1%).

**Table 10. Student Distribution By Race And Ethnicity, Free-Reduced Lunch Eligibility, Annual Drop Out And High School Graduation By School District, Whatcom County, 2010 (OSPI, 2009-2011)**

	Bellingham	Blaine	Ferndale	Lynden	Meridian	Mt. Baker	Nooksack Valley
Overall Enrollment	10,919	2,200	5,299	2,833	2,287	2,120	1,598
Race/Ethnicity							
<i>American Indian /Alaskan Native</i>	1.37%	1.14%	13.23%	0.6%	0.57%	5.57%	4.26%
<i>Asian</i>	5.85%	0.73%	2.47%	2.79%	2.84%	0.9%	1.06%
<i>Pacific Islander</i>	0.27%	2.27%	0.08%	0.07%	0.26%	0.14%	0.06%
<i>Asian/Pacific Islander</i>	6.12%	3.0%	2.55%	2.86%	3.1%	1.04%	1.13%
<i>Black</i>	3.14%	2.23%	0.85%	1.02%	1.14%	0.52%	0.63%
<i>Hispanic</i>	13.82%	8.59%	14.63%	21.64%	12.07%	9.06%	27.28%
<i>White</i>	75.5%	79%	63.82%	70.84%	80.45%	80.4%	60.89%
Free-Reduced Lunch Eligibility	39.5%	34.2%	51.3%	36.8%	9.9%	53.1%	54.0%
Drop-Out Rate	4.2%	2.4%	4.1%	2.1%	4.0%	4.6%	4.0%
On-Time Graduation Rate	72.4%	90.7%	81.6%	86.5%	73.6%	81.6%	82.8%

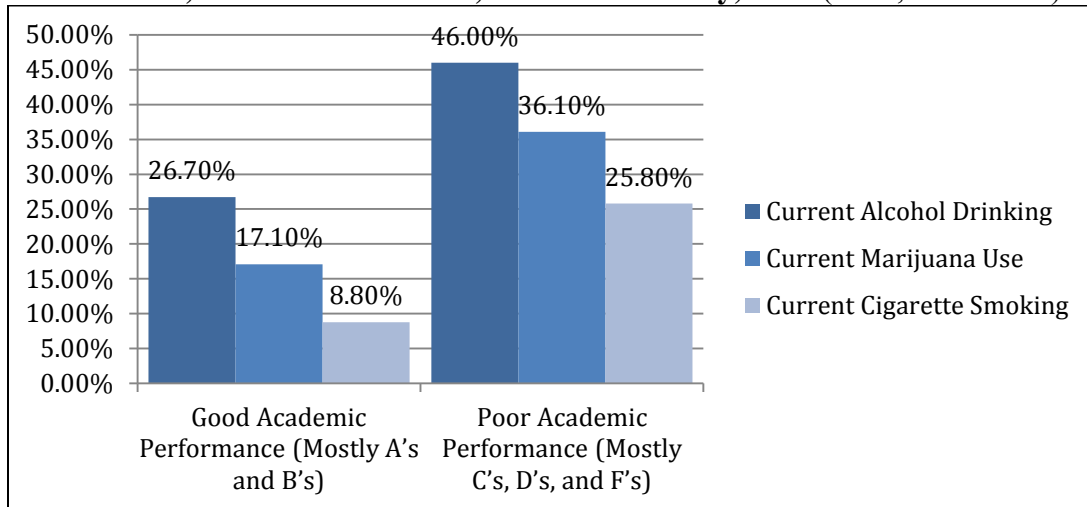
**Academic performance and health behaviors are correlated.**

Poor academic performance (mostly Cs, Ds and Fs in high school) is associated with higher rates of substance use, mental health concerns, and other health issues (HYS, 2008-2010). Students with lower grades are more likely to drink alcohol, smoke cigarettes, use marijuana, be depressed and be overweight or obese (HYS, 2008-2010).

**Table 11. Academic Performance by Student Health Behavior(s) and Condition(s), 10<sup>th</sup> Grade Students, Whatcom County, 2010 (HYS, 2008-2010)**

	Good Academic Performance (Mostly A's and B's)	Poor Academic Performance (Mostly C's, D's, and F's)
Current Alcohol Drinking	26.70%	46.00%
Current Cigarette Smoking	8.80%	25.80%
Current Marijuana Use	17.10%	36.10%
Depression	24.80%	38.20%
Obese/Overweight	21.80%	30.90%

**Figure 6. Current Student Alcohol, Cigarette and Marijuana Use by Academic Performance, 10<sup>th</sup> Grade Students, Whatcom County, 2010 (HYS, 2008-2010)**



**Academic progress and achievement in younger students vary.**

In the past few years, Whatcom County has had a consistently higher percent of students in grades 4, 7, and 10 with good academic performance as indicated by the Washington Assessment of Student Learning (WASL), in comparison to similar counties and Washington as a whole. Overall, Whatcom County students in grades 3<sup>rd</sup>-8<sup>th</sup> and 10<sup>th</sup> grade generally were equal to or often greater than the state's percent of students meeting standards in reading and writing as measured by the Measurements of Student Progress. There is greater variability in meeting state standards for math and science (OSPI, 2009-2011).

**At least one third of young children may not be ready for kindergarten.**

In 2010, a pilot test of the Washington Kindergarten Inventory of Developing Skills (WaKIDS) kindergarten readiness assessment demonstrated that more than one third of kindergarten students assessed were below expected skill levels as revealed by three different assessment instruments (DEL, 2011). One Whatcom County school participated in the pilot. Assessments are now being implemented across the state, including several Whatcom County districts, so improved data will be available in future years.

## RACE, ETHNICITY AND HEALTH

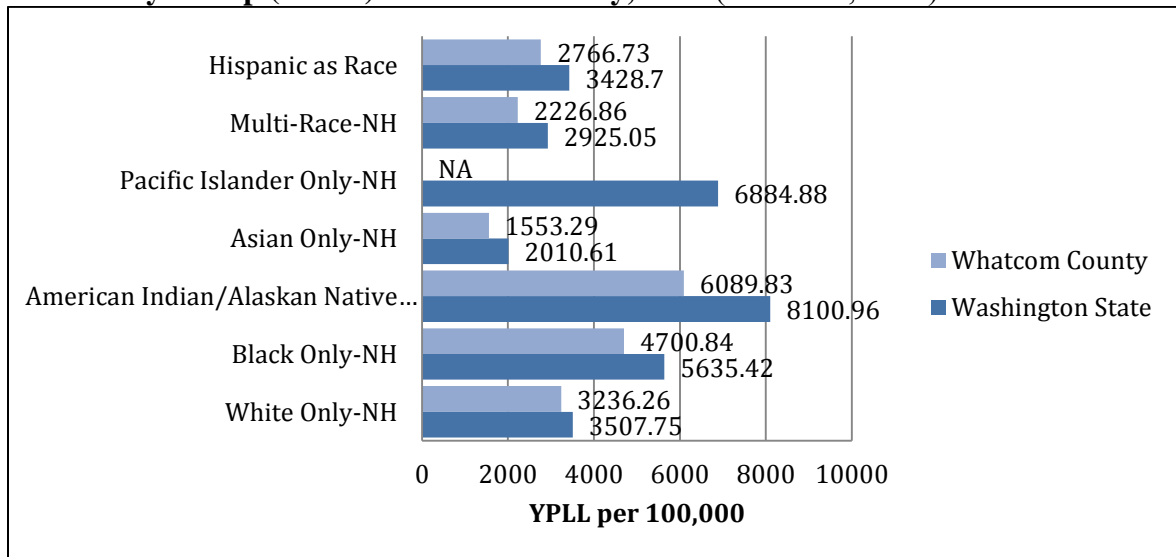
### Local data on racial and ethnic health disparities limited.

Relatively small population sizes limit the availability of local health data for racial/ethnic subpopulations. Data that are available on the local or state level demonstrate disparities.

### American Indians and Blacks more likely to die early.

Years of potential life lost (YPLL) is a measure of premature death that estimates the average years a person would have lived had he or she not died prematurely (Gardner & Sanborn, 1990). Data from Whatcom County demonstrate that American Indian/Alaska Natives and Blacks have significantly more years of potential life lost than Whites, Asians, and Hispanics (WADOH, 2009).

**Figure 7. Rate of Years of Potential Life Lost Before Age 65 by Population Race/Ethnicity Group (YPLL) Whatcom County, 2010 (WADOH, 2009)**

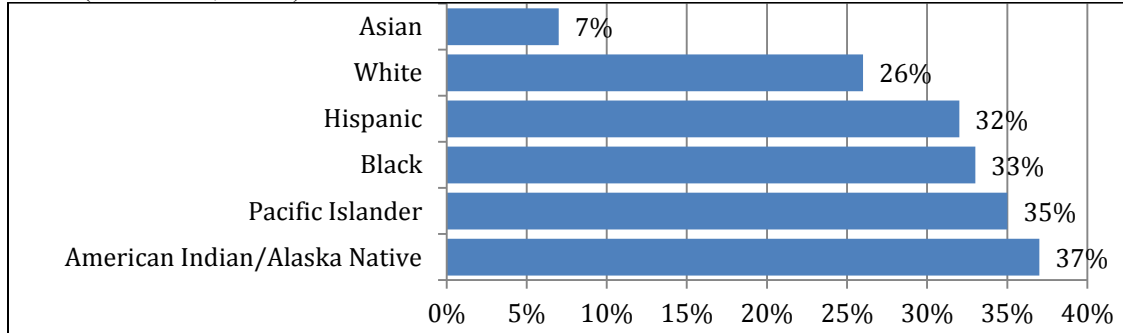


Note: NH=Non-Hispanic

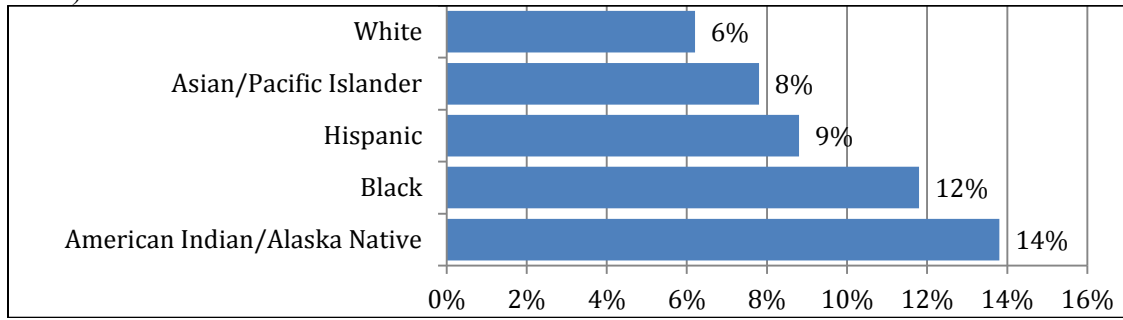
### Racial/ethnic minorities disproportionately impacted by obesity and diabetes.

Washington state data demonstrate racial/ethnic disparities for certain health conditions including obesity, diabetes, and substance use. Statewide rates of obesity and diabetes are higher among American Indian/Alaskan Native, Black, Hispanic and Pacific Islander populations. A relatively small percent of Asian population experiences obesity and diabetes.

**Figure 8. Obesity Among Adults by Race & Hispanic Origin, Washington, 2007-2009 (WADOH, 2009)**



**Figure 9. Diabetes Prevalence by Race/Ethnicity, Washington, 2003-2004 (WADOH, 2006)**



**Mental health and substance use more prevalent in American Indian/Alaska Native (AI/AN) populations.**

Locally, tribal populations are particularly hard hit by substance use issues. In 2008, 2790 DSHS clients in Whatcom County received publicly funded Alcohol and Substance Abuse services. Of those, 59.5% were White and 28.4% were AI/AN (DSHS, 2008). For comparison purposes, only 3% of the total population is AI/AN.

### **III. BASIC NEEDS**

#### **SYNOPSIS**

Basic needs include housing, food, transportation, social support, rest, and access to health services. Many individuals and families in Whatcom County, especially those with limited economic resources have challenges meeting basic needs. A significant number of individuals rely on assistance programs to meet needs.

#### **WHY IS THIS IMPORTANT?**

Meeting basic needs is critical for good health. Individuals with limited resources often must choose between the most pressing needs (i.e., paying for housing at the expense of paying for healthy food or medical care.)

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#### **HOUSING**

##### **Affordable housing out of reach for many.**

Housing is considered affordable when households spend no more than 30% of their income on housing. By this standard, almost half of all Whatcom County residents do not have affordable housing. Fifty-five percent Whatcom County renters spend more than a third of their income on housing. Forty-four percent of owners with mortgages in Whatcom County spent 30 percent or more of their household income on housing (ACS, 2005-2009).

- In 2010, an estimated 50 percent of renters were unable to afford the Fair Market Rent for a two-bedroom rental--\$814 per month, equaling a housing wage equivalent of 1.3 full-time minimum wage jobs (HUD, 2011).
- More affordable housing can often be found outside of Bellingham compared to within the city limits. This means that Whatcom County residents may locate themselves further from jobs, community resources, health care, and social opportunities in order to find affordable housing.

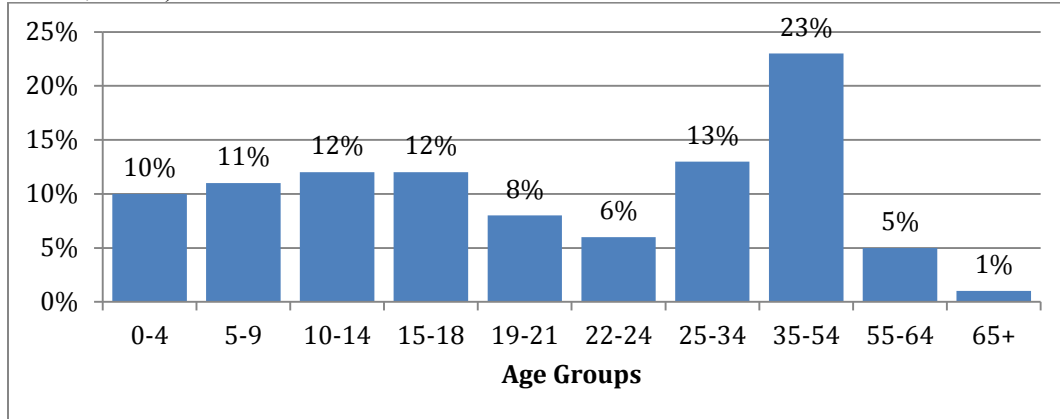
##### **Homelessness decreasing, but still a challenge for some.**

The 2011 Point-in-Time Homeless Count indicated at least 1,311 people in Whatcom County were homeless. Nearly 40% of all homeless persons in Whatcom County are under 18 years. This amounts to more than 500 children and youth.

The top five reasons that people report being homeless in Whatcom County are (WCHD & OC, 2011):

1. Inability To Pay Rent Or Mortgage (34%)
2. Lost Job (32%)
3. Alcohol Or Drug Abuse (28%)
4. Mental Illness (24%)
5. Family Break-Ups (20%)

**Figure 1. Age Distribution Of Homeless Persons, Whatcom County, 2011.** (WCHD & OC, 2011)



Chronic homelessness dropped nearly 50% in Whatcom County since 2008. Based on the U.S. Department of Housing and Urban Development definition of chronic homelessness, 82 people, or 10% of all homeless households are chronically homeless in Whatcom County. This represents a 48 percent decrease from 158 persons counted in 2008 (WCHD & OC, 2011).

## **FOOD AND NUTRITION**

### **One in six people experience food insecurity.**

In 2007, 15% of households said they sometimes or often did not have enough food to eat during the past 12 months (BRFSS, 2007). Fourteen percent said they sometimes or often could not afford to eat balanced meals. Nine percent of households said that during the past year they had to cut the size of their meals or skip meals because there was not enough to eat.

People who are more likely to be affected by hunger or food insecurity included those who were unemployed, had a high school education or less, had no health care coverage, said their health was fair or poor, incomes less than \$35,000/year, and younger than 40. Up to 30% of those with incomes less than \$20,000/year reported hunger (BRFSS, 2007).

### **More people receiving food assistance.**

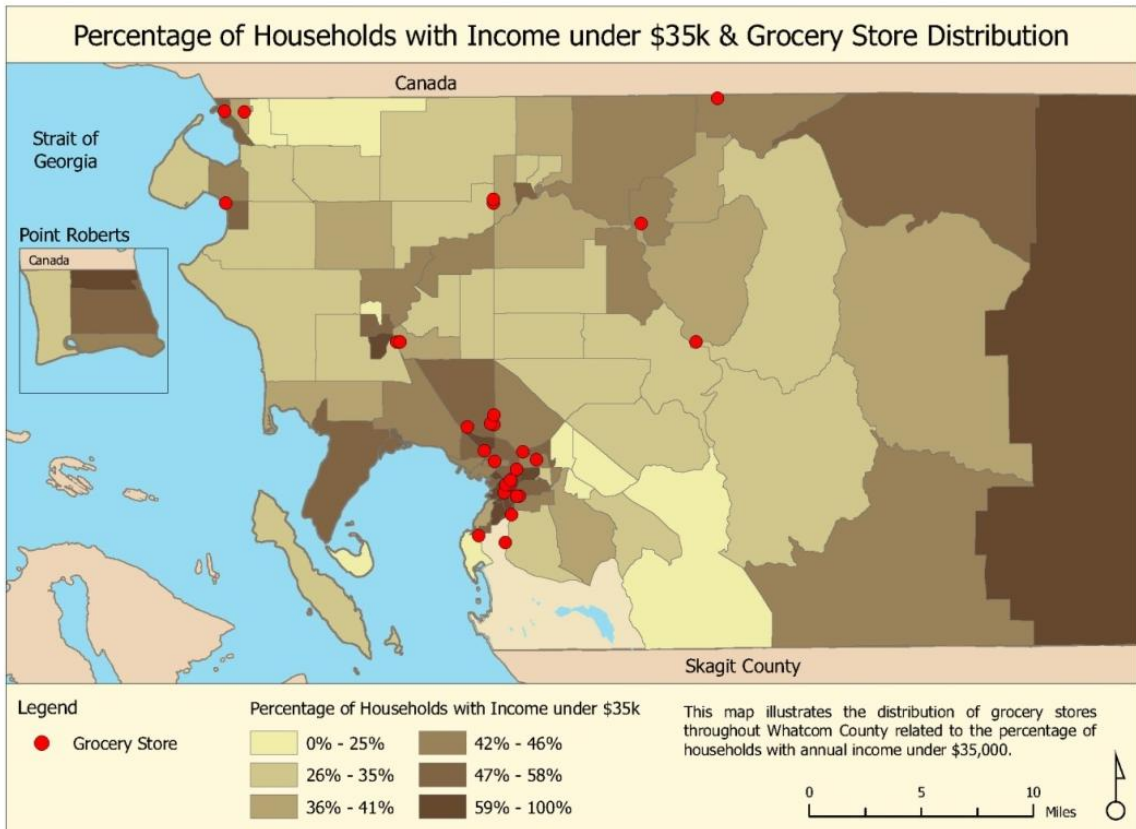
In 2009, 11.3% of Whatcom County households received food assistance (Basic Food Program) up from 7.8% in 2008. In 2010, there were 188 Basic Food recipients per 1,000 people, up from 162 per 1,000 in 2009. This rate is also slightly higher than the state rates (ACS, 2005-2009).

### **Food less accessible in rural and outlying areas.**

In 2011, the Whatcom County Extension of Washington State University published a Community Food Assessment. A series of maps assessed how some segments of the Whatcom County population often have barriers and limited access to food sources to meet recommended nutritional intake.

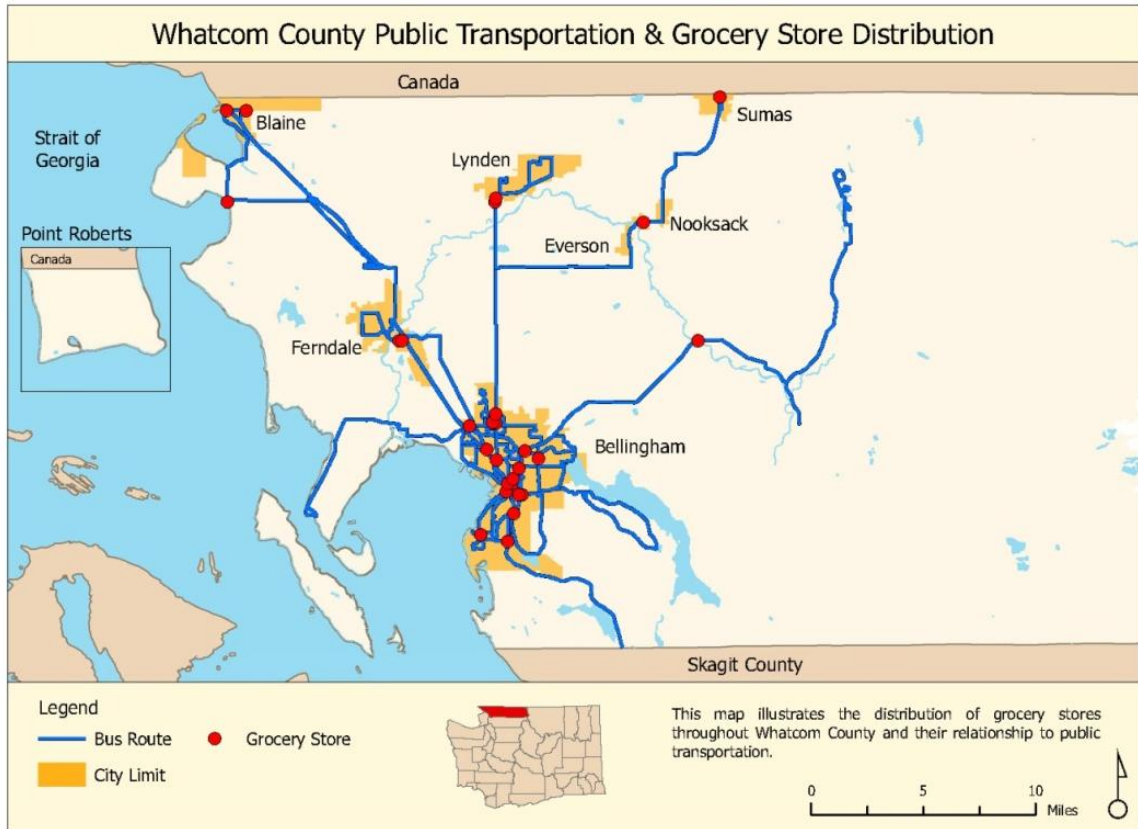
Rural residents (living in unincorporated Whatcom County – approximately 44% of County residents) are most likely to have convenience stores, rather than grocery stores as the closest place to buy food (WSU Extension, 2011). Transit access to grocery stores is limited.

**Figure 2. Distribution of Grocery Stores & Households with Income of Under 35k, Whatcom County 2011** (WSU Extension, 2011)





**Figure 3. Distribution of Grocery Stores & Public Transportation Routes, Whatcom County 2011 (WSU Extension, 2011)**



## SOCIAL SUPPORT AND REST

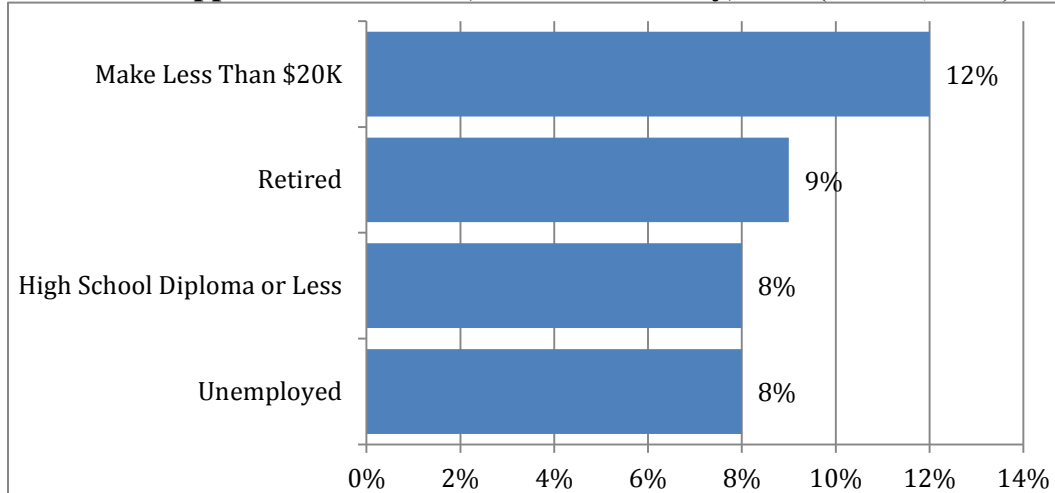
**Most adults get support when needed; low income less likely to get adequate social support.**

The majority of adults in Whatcom County indicate that they always or usually receive the support they need, however certain sub-populations are more likely not to have support.

**Table 1. Percentage of Adults Who Receive Social And Emotional Support When Needed, Whatcom County, 2010 (BRFSS, 2007)**

	Percentage of Adults
Always	46%
Usually	36%
Sometimes	12%
Rarely/Never	6%

**Figure 4. Characteristics of Adults Who Rarely Or Never Receive Social And Emotional Support When Needed, Whatcom County, 2010 (BRFSS, 2007)**



**Sleep and rest essential to health; data limited.**

Currently we do not have population measures to determine adequacy of sleep and rest for populations in Whatcom County, though insufficient sleep has been identified as a significant health risk factor by the Centers for Disease Control and Prevention (CDC). Some states have included sleep questions on the annual Behavioral Risk Factor Surveillance System (BRFSS) survey. Inadequate rest is a common issue for individuals and families with caregiving responsibilities (i.e., families of children with special health care needs) or who must work multiple jobs to provide for their families).

**BASIC HEALTH NEEDS**

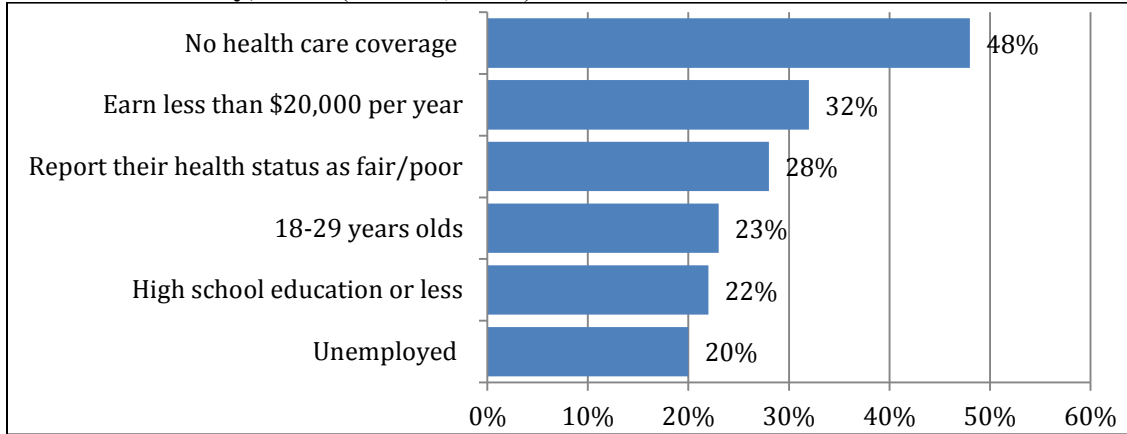
**Most adults with personal health care provider.**

In 2007, 85% of adults indicated that they had one or more personal doctors (BRFSS, 2007). Those less likely to say that they have no personal doctor or health care provider included those without health care coverage (46%) and those aged 18-29 (BRFSS, 2007).

**Unmet health needs increasing due to cost.**

In 2007, 16% of adults indicated they needed health care in the past year but were unable to see a doctor due to cost (BRFSS, 2007), compared with 8% in 1996 and 9% in 2002.

**Figure 5. Characteristics of Adults Who Were Unable to Afford to go to the Doctor, Whatcom County, 2010 (BRFSS, 2007)**



## **IV. HEALTH CARE SYSTEM CAPACITY AND ACCESS**

### **SYNOPSIS**

Whatcom County is served by abundant health service resources including primary care providers, medical specialists, and a community hospital. Whatcom County is, however, designated a Health Professional Shortage Area as defined by the Federal Government. Selected census tracts are also designated Medical Under -Served Areas. These designations are based on a shortage of primary care providers, particularly in rural communities and in communities where poverty and homeless rates are highest. In addition to primary care providers, structural needs in the delivery system include selected subspecialty providers.

Barriers to health care include lack of or inadequate health insurance, mal-distribution of primary care providers, and the limited number of current providers accepting new patients. Adult dental care is identified as a top priority need of low income populations.

Based on national performance reporting requirements, local hospital processes are on par with best practices in the nation, though some clinical outcomes rank in the average range. People's perception of care ranks below average for the nation and below that of other community hospitals in the region.

### **WHY IS THIS IMPORTANT?**

Access to affordable quality health care is essential for residents to maximize health status and quality of life. Access to health services is determined by several factors including demand for and supply of services and providers, ability to pay for services, geographic distribution of services, and availability of transportation. Barriers to access result in missed screening opportunities, delayed diagnoses, and poorer prognoses. Without access to appropriate primary care, consumers are more likely to utilize the emergency room for care and to require hospitalization for conditions that are avoidable. These circumstances result in an inappropriate utilization of health care resources and drive up the costs of care. Health insurance coverage does not necessarily lead to health care access, as some providers may not accept various insurance plans, there may be limitations on coverage (plans that only cover certain services or costs), or co-payment requirements may exceed an individual's ability to pay (particularly for expensive long-term treatments).

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### **AVAILABILITY OF HEALTH CARE RESOURCES**

#### **One community hospital.**

PeaceHealth St Joseph Hospital, located in Bellingham, WA, is the only hospital located in Whatcom County. The hospital is accredited by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), has 253 beds and is a Trauma Level III acute care hospital (PeaceHealth SJMC, 2011).

**Variety of medical professionals.**

Twenty-seven medical and surgical subspecialty services provide secondary and most tertiary care services in the community, though pediatric specialty services are limited (Camden Group, 2011).

**Some provider shortages, particularly in primary care specialties.**

Whatcom County is designated a Health Professional Shortage Area as defined by the Federal Government (population to primary care physician ratio > 3000:1) (HRSA, 2011). Several census tracts in the county where poverty and homelessness are concentrated (Downtown Bellingham, Sumas, and Pt. Roberts) are designated Medical Underserved Areas/Populations.

**Primary care access more challenging in rural areas.**

The ratio of population to primary care providers in Whatcom County is 1784:1 which approaches ‘stress levels’ (ideal level is 1200:1). The ratio in rural Whatcom County is 4000:1.

**Projected need for more primary care physicians county-wide.**

Based on projections of changing county demographics, the Camden Report of 2011 concluded that the most immediate need for additional health services resources will be primary care providers that include family care providers, internists, and pediatricians and that accept Medicare and Medicaid patients into their practices (Camden Group, 2011).

**Limited formal data on complementary and alternative medicine provider capacity and needs.**

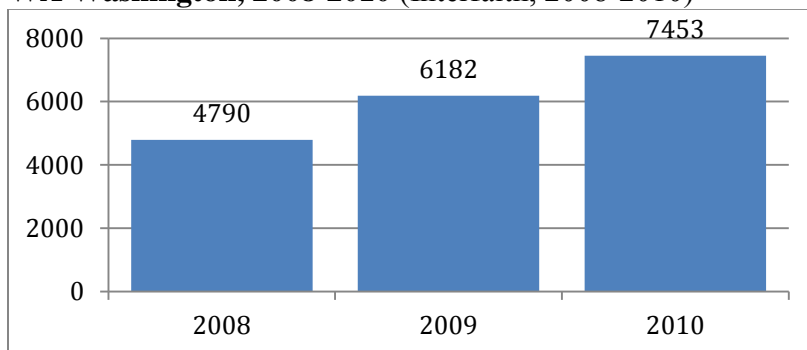
Information about community capacity and projected need for complementary and alternative medicine providers is not readily available.

**HEALTH INSURANCE COVERAGE**

**Uninsured health visits increasing.**

The figure below illustrates the impact of increasing rates of uninsured on demand for care at one local federally funded community health center, Interfaith Community Health Center in Bellingham (Interfaith, 2008-2010).

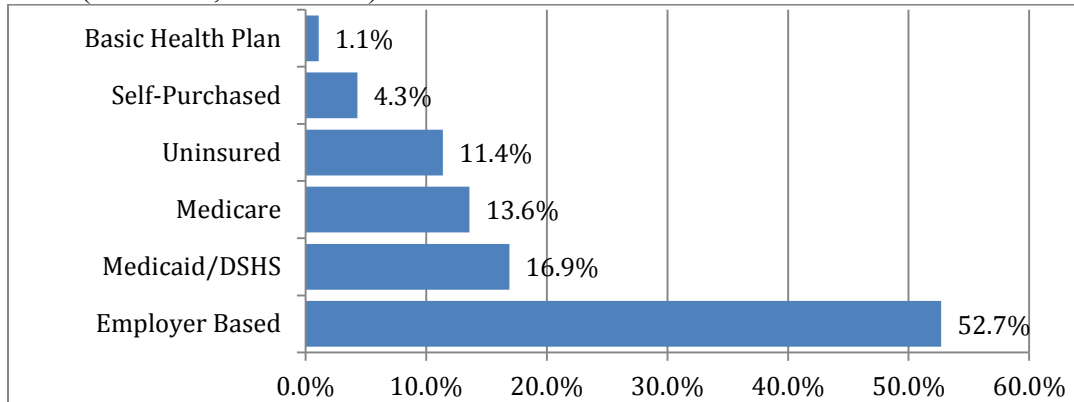
**Figure 1. Uninsured Visits at Interfaith Community Health Center, Bellingham, WA Washington, 2008-2010 (Interfaith, 2008-2010)**



**More than ten percent of adults uninsured; many others may be underinsured.**

An estimated 11.4% of Whatcom County adults were uninsured in 2010 (WAOFM, 2000-2008). In 2007, 37% of adults did not have dental insurance coverage (BRFSS, 2007).

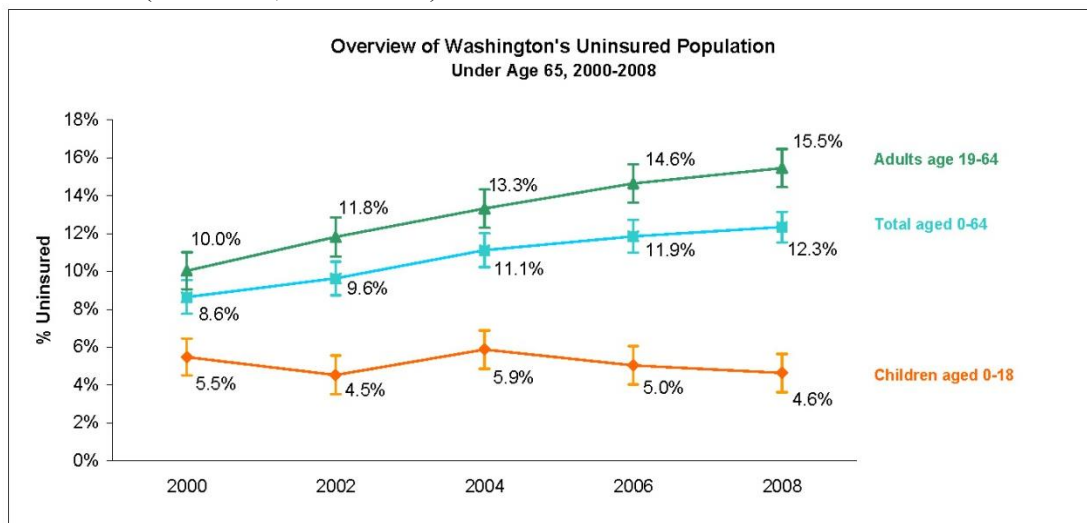
**Figure 2. Adult Health Insurance Status by Type of Coverage, Whatcom County, 2010 (WAOFM, 2000-2008)**



**Higher percentage uninsured in young and middle age adults.**

State data indicate that lack of health insurance primarily impacts 19-64 age group.

**Figure 3. Uninsured Population by Age Groups Under 65 years old, Washington, 2000-2008 (WAOFM, 2000-2008)**



**Most children with health coverage.**

Child health insurance coverage has improved over the past several years. In 2010, only 3% of Whatcom County children did not have health insurance (Kids Count, 2011)

**Table 1. Uninsured Children Under 18, Whatcom County, 2008-2010** (Kids Count, 2011)

Year	Percentage	Number
2008	6.4%	2,724
2009	8.8%	3,656
2010	3.1%	1,301

**Many rely on publicly funded medical assistance programs.**

Approximately 31% of Whatcom County residents are covered on some form of public insurance that includes Medicaid and/or Medicare (WAOFM, 2000-2008).

**Coverage may not lead to care.**

The table below illustrates that while a large proportion of physicians in the community provide care for patients with publicly funded insurance, less than one-half accept new patients with public insurance.

**Table 2 . Providers Accepting Public Insured New Patients, Whatcom County, 2010** (WADOH, 2010)

Public Insurance	Currently Provide Care	Accept New Patients
Medicare	83%	44%
Medicaid	93%	41%

Some people have catastrophic care only or high-deductible health care plans that may limit access to affordable care. Whatcom County data on proportion of people with these plans are not readily available.

**Medicaid patients overrepresented in ER visits.**

The table below summarizes the volume of annual emergency room visits relative to insurance coverage. Patients covered by Medicaid account for 27-29% of ER visits per year while only 17% of county residents are insured under Medicaid. Patients who are uninsured or self-pay (Private Pay) account for 12% of annual ER visits (PeaceHealth SJMC, 2011).

**Table 3. Annual ER Visits by Insurance Provider, Whatcom County, 2006-2010** (PeaceHealth SJMC, 2011)

Insurance Provider	2006	2007	2008	2009	2010
Commercial	16,590	17,129	17,797	17,425	16,372
Medicaid (DSHS)	15,789	15,209	15,531	15,481	16,634
Medicare	12,681	12,958	13,519	13,880	14,660
Other	3,831	3,988	3,612	3,469	3,016
Private Pay	6,905	7,064	6,629	6,452	6,721
Total	55,796	56,348	57,088	56,707	57,403

## DENTAL CARE

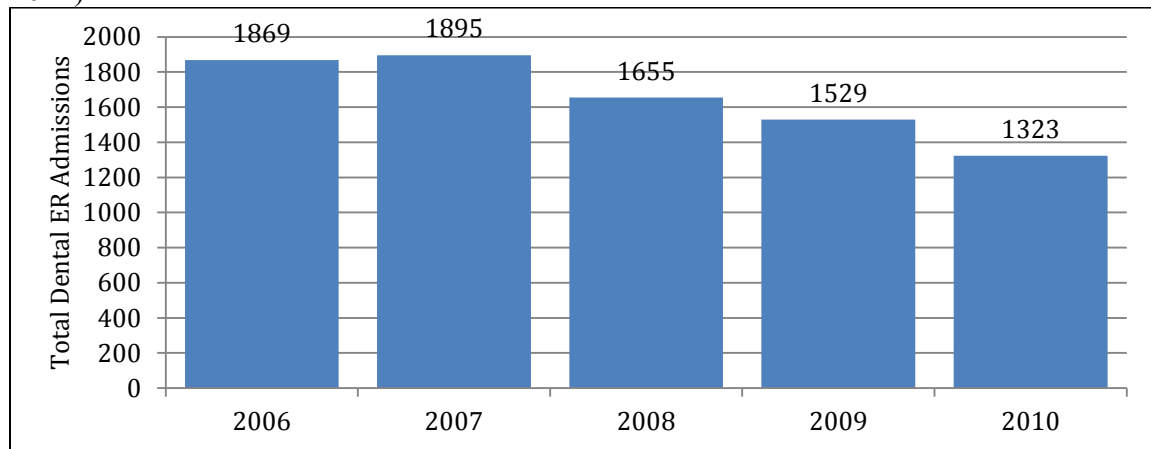
### **Adult dental care most needed, but least available service for low income.**

According to the 2011 Prosperity Project, survey respondents ranked dental care as the most needed but least available service for low income adult populations in Whatcom County (Opportunity Council, 2011)

### **Dental emergencies decreasing, but still room for improvement.**

The graphic below reports the volume of dental visits to the emergency department by fiscal year. While the overall number of visits per year is decreasing, most of the visits are probably avoidable and would be better managed by dentists in ambulatory visits. Dental visits account for approximately 2.5% of ER visits per year (PeaceHealth SJMC, 2011).

**Figure 4. Total Dental Admissions to Emergency Department, PeaceHealth-St. Joseph Medical Center, Bellingham, Washington, 2006-2010 (PeaceHealth SJMC, 2011)**



### **Children more likely to receive preventive dental sealants.**

Whatcom County dental providers routinely offer dental sealants to children that reduce the risk of tooth decay. According to 2010 Whatcom County Smile Survey, over 56% percent of third graders have preventive dental sealants (WCOHC, 2010). This exceeds Healthy People 2010 objectives (28%) and is likely a result of targeted school based sealant programs.

## BEHAVIORAL HEALTH CARE

### **High level of unmet need for behavioral health care services.**

In the state of Washington visits for substance abuse in federally qualified community health centers has increased 27.8% from 2007 to 2009 (HRSA, 2009). An estimated 70.5% of adults eligible for treatment for substance abuse do not receive care.



### **Behavioral health concerns common reason for ER visits.**

In 2010, there were 9,638 visits to PeaceHealth St. Joseph Medical Center's emergency department for behavioral health care (PeaceHealth SJMC, 2011). This number has not changed significantly in the past 5 years. Many of these visits may be avoidable and could be prevented if people had ready access to affordable services in the community.

## **QUALITY OF HEALTH CARE SERVICES**

### **Health care spending and utilization of services for Medicare beneficiaries appropriate.**

Per capita spending for Medicare patients in Whatcom County ranks in the lowest quartile for the nation (Dartmouth Atlas, 2007). This suggests appropriate utilization of health care resources and is consistent with best practices in the nation.

Compared with the average utilization of services per Medicare beneficiary across the nation Whatcom County utilizes 85% of average services suggesting relatively prudent use of medical resources when caring for older patients (Dartmouth Atlas, 2007). (Miami, FL, the highest utilizer in the nation utilizes 140% of average services per beneficiary while La Crosse, WI the lowest utilizer in the nation utilizes only 75% of average services per beneficiary).

### **Hospital clinical processes on par with best providers and hospitals nationally.**

Measures of processes of clinical care indicate that providers and the hospital are performing at a high standard (CMS, 2011).

- Appropriate and timely administration of pre-operative antibiotics – the process achieves national standards of care for 98% of procedures (state average is 95%).
- Appropriate assessment of left ventricular function for patients with congestive heart failure - the process achieves national standards of care for 99% of patients (state average is 98%).

### **Outcomes of hospital clinical care rank in average range.**

Several clinical health outcome measures rank in the average range when compared to other hospitals nationwide (CMS, 2011):

- Post-operative deep sternal wound infections following cardiac surgery – the hospital ranks in the 51<sup>st</sup> to the 90<sup>th</sup> percentile relative to hospitals performing cardiac surgery in the US. The higher the percentile ranking, the lower the risk of post-operative infection.
- Composite adverse outcomes following cardiac catheterization (death, stroke, emergency CABG, or repeat target vessel revascularization) – the hospital ranks between the 51<sup>st</sup> and 75<sup>th</sup> percentile relative to hospitals performing cardiac catheterization in the US. The higher the percentile ranking, the lower the risk of adverse outcomes.

### **Patient perception of hospital care quality below average.**

When patients were asked to score the quality of care received at PHSJMC on a scale of 1-10, only 59% of respondents assigned the hospital a score of 9-10. When compared with the nation, the hospital ranks at the 19<sup>th</sup> percentile. Perceptions of care are compared with performance of comparable hospitals nationally and with other hospitals in northwest Washington, performance is ranked below average (CMS, 2011).

**Table 4. Patient’s View of Care at PeaceHealth St Joseph Medical Center, Bellingham, WA (CMS, 2011)**

	PeaceHealth SJMC	National Percentile	National 90 <sup>th</sup> Percentile
Do You Recommend This Hospital?	72%	63	82%
Overall Hospital Rating?	59%	19	78%

**Routine preventive health services regularly offered by local providers.**

According to the 2011 County Health Rankings, preventable hospital stays are lower, and diabetic screening and colorectal cancer screening rates are higher than comparable communities. Breast and cervical cancer screenings have room for improvement (RWJF, 2011).

**Opportunity to enhance utilization of end-of-life supportive care.**

In Whatcom County, approximately 50% of patients with cancer are admitted to hospice care, but spend only one week in care. In areas of the nation where hospice services are well utilized, more than 66% of patients with cancer spend their final days in hospice care, many receiving care for more than two weeks before death (Dartmouth Atlas, 2007).

**HEALTH INFORMATION TECHNOLOGY**

**Widespread use of electronic medical records (EMRs) and immunization registry.**

There is widespread diffusion of EMR technologies in Whatcom County. The hospital has 100% adoption of EMRs. Among primary care providers in the county, 94% utilize EMRs. More than 80% of all providers in Whatcom County utilized EMRs (PeaceHealth SJMC, 2011).

More than 90% of clinical providers utilize web-based links with the state immunization Child Profile registry. Pharmacies that offer immunizations are also linked with the registry via web based interfaces. School districts have read-only access to Child Profile records for students enrolled in their schools (WCHD, Immunization Program, 2011).

**Availability of Health Information Exchange capabilities.**

Using broadband technologies, HINET connects the local hospital, all local physician offices, all skilled nursing facilities, the local health department, community health services, and payers with confidential information exchange. The service does not yet provide for easy exchange of consumer information between providers, however (PeaceHealth SJMC, 2011).

## V. COMMUNITY ENVIRONMENTS

### SYNOPSIS

Whatcom County has a beautiful and vibrant natural environment; however environmental health indicators suggest several areas of challenge. Water quality of the primary drinking source for half the County population has been on a continuing declining trend. Air quality is variable. Potential exposure to environmental contaminants (such as agricultural pesticides) may also be a concern for some populations. Lack of fluoridated water is an issue for dental health. Though the county has abundant recreational areas and opportunities, all populations do not have equal access. Some areas of the county, particularly rural and outlying areas are less likely to have access to health promoting built environments. In general the social environment in Whatcom County is good with active neighborhood associations, relatively low crime rates, and above average community engagement and civic participation. Some populations, however, are more likely to experience fear, isolation, and disconnection in their communities. Pockets of crime and social unrest are present within the county.

### WHY IS THIS IMPORTANT?

Community environments include the natural environment (water, air, land), the built environment (buildings, roads, parks), and social environments (neighborhood relationships, community safety, crime). Environments have a significant impact on health and play an important role in producing and maintaining health disparities. Having access to clean water and clean air and preventing exposure to environmental toxins are essential for good health. The built environment influences health by providing or limiting opportunities for healthy active living, including access to safe areas to be physically active, access to nutritious foods, and access to community gathering spaces for social connections. Ability to get places without cars has an impact on air quality as well as physical activity and quality of life. Access to tobacco and alcohol retailers can influence substance use. The social environment also has a significant impact on health and well-being, as social connections, inclusion, and sense of safety are important for good health.

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### NATURAL ENVIRONMENTS

#### **Water quality deteriorating.**

The health of Lake Whatcom, the main drinking water source for nearly 100,000 Whatcom County residents (about half the County population) shows signs of decline (DOE, 2008).

- In 2010, trihalomethane (THM) contaminant level was 35.4 mg/Liter in the City of Bellingham's water supply. This level was above the levels in 2006 (28.4), 2007 (34.1) and 2009 (31.7). This continues the general upward trend of THM levels since 1998. Chlorophyll levels (an indirect indicator of phosphorus) have been on a general increasing trend since 1996. Excess phosphorus contributes to algae growth, which increases levels of chemicals needed to treat the water to make it safe for drinking as well as harming fish and wildlife (COB, 2011).
- Eleven tributaries flowing into Lake Whatcom have fecal coliform levels that are too high, typically caused by pet waste and faulty septic systems (DOE, 2008).

The health of other water sources, i.e., Lake Samish and Bellingham Bay/Puget Sound are also of potential concern.

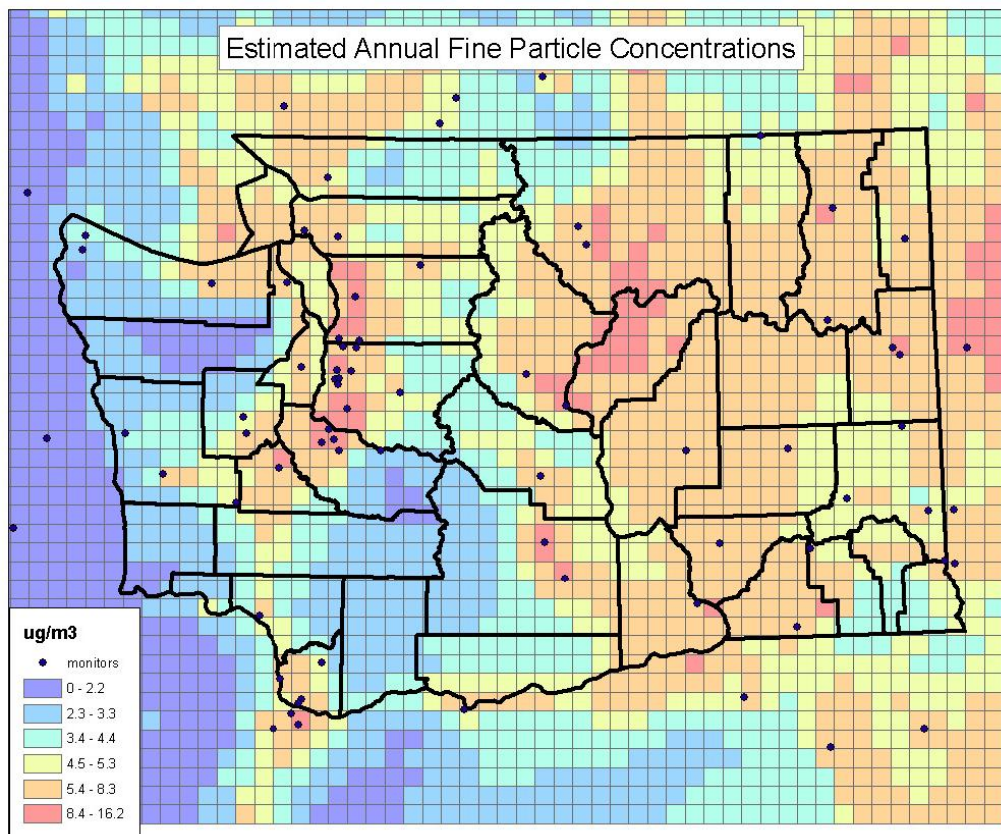
**Air generally clean but pockets of poor air quality.**

Compared to some urban counties with larger populations, Whatcom County is considered to have good air quality. However, air quality is measured in very few locations across the County and can be variable. There can be “pockets” of poor air quality in Whatcom County. For example, the Kendall area has higher concentrations of Particulate Matter in the winter months when wood stoves are used extensively as a chief source of heat (NCAA, 2007-2010). Air quality is categorized on a four point scale with ranges of Particulate Matter concentrations: good, moderate, unhealthy for sensitive groups, and unhealthy.

**Table 1. Number of Days with Moderate Levels of Particulate Matter, Bellingham, WA, 2007-2009** (NCAA, 2007-2010)

Air Quality Indicators	2007	2008	2009
Number of moderate days in year: measuring Particulate Matter at Bellingham Station	17 days	5 days	18 days

**Figure 1. Estimated Annual Fine Particle Concentrations, Washington State, 2006-2008** (NCAA, 2007-2010)



**Pesticide use and contamination difficult to track.**

Quantifying pesticide exposure and related illness in Whatcom County is difficult due to lack of tracking and regulation of pesticide use, non-recognition of pesticide-related illnesses, and limited health care access of farm workers and their families. In addition to direct exposure, pesticide use is an ecological concern for run-off into the watershed (WADOH, 2010).

**Limited access to fluoridated water.**

Few people have access to fluoridated water systems in Whatcom County. When added to community water systems, fluoride is a safe and effective tool to prevent tooth decay and promote optimal oral health. In Whatcom County, only people who live in Lynden and those who receive water through the Lummi Tribal Sewer and Water District (974 water meters) benefit from flouridated water.

**HEALTH PROMOTING BUILT-ENVIRONMENTS**

**Variability in access to safe walking and biking facilities.**

County geographic areas vary significantly in terms of potential “walkability” or “bikeability”– the ability to live reasonably well without a car. Using the Walk Score (WalkScore, 2009) tool, Bellingham is rated as a “Walker’s Paradise,” Ferndale is considered “very walkable”, Lynden is “somewhat walkable,” and all other areas were “car-dependent”.

**Table 2. Walkability Scores Among Whatcom County Communities, 2009**  
(WalkScore, 2009)

City/Town/Community	Walk Score	Category
Bellingham	94	Walker’s Paradise
Ferndale	77	Very-Walkable
Lynden	60	Somewhat Walkable
Blaine	38	Car-Dependent
Laurel	32	Car-Dependent
Deming	26	Car-Dependent
Nooksack	17	Car-Dependent
Acme	15	Car Dependent
Lummi Nation Reservation	15	Car-Dependent
Birch Bay	14	Car-Dependent
Everson	14	Car-Dependent
Kendall	14	Car-Dependent
Maple Falls	3	Car-Dependent
Sumas	2	Car Dependent

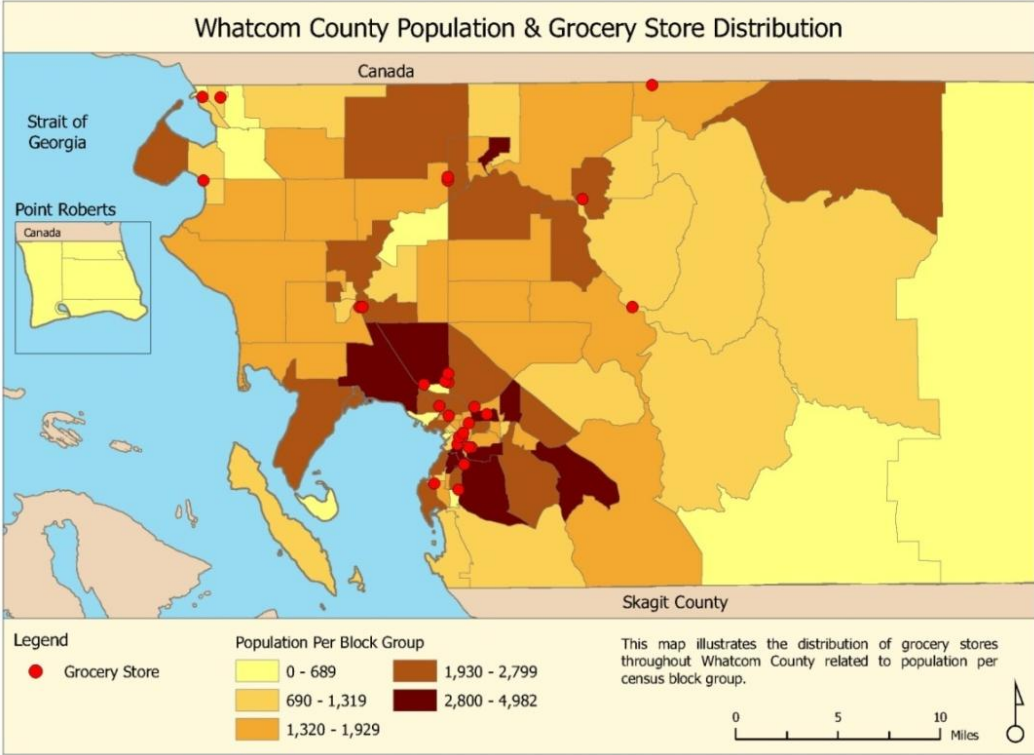
Walk Score is a number between 0 and 100. The Walk Score algorithm awards points based on the distance to the closest amenity in each category. 90–100: Walkers' Paradise: Most errands can be accomplished on foot. 70–89: Very Walkable: It's possible to get by without owning a car. 50–69:

Somewhat Walkable: Some stores and amenities are within walking distance, but many everyday trips still require a bike, public transportation, or car. 25–49: Car-Dependent: Only a few destinations are within easy walking range. For most errands, driving or public transportation is a must. 0–24: Car-Dependent (Driving Only): Virtually no neighborhood destinations within walking range. You can walk from your house to your car.

**Limited access to healthy foods in grocery stores in some areas.**

Rural and remote areas are less likely to have access to full-service grocery stores selling fresh fruits and vegetables, which creates a barrier to healthy eating for those living in these areas (CFA, 2011).

**Figure 2. Population per Census Block Group and Grocery Store Distribution, Whatcom County, 2011 (WSU Extension, 2011)**



**Greater access to alcohol and tobacco retail.**

Whatcom County has a higher number of retail alcohol and tobacco licenses that are active during the year compared with other similar counties and the state (LCB, 2011).

- In 2009, 2.21 active alcohol licenses per 1000 Whatcom County population compared to 1.70 in similar counties and 1.99 in the state (LCB, 2011).
- In 2009, 1.08 tobacco retail and vending licenses compared to 0.88 for similar counties and 1.00 in the state (LCB, 2011).

### **Ongoing exposure to second-hand smoke.**

Despite state laws limiting tobacco use in businesses and worksites, a significant number of people living in Whatcom County, including children, are exposed to second-hand smoke in home and community environments.

- An estimated 29% of Whatcom households with children under age 18 have at least one smoker in the home (BRFSS, 2007).
- The PeaceHealth St. Joseph Medical Center campus and all public school (K-12) campuses are smoke-free; however, other large campuses (Western Washington University, Whatcom Community College, County government) are not. There are no designated smoke-free parks or play areas in the County.

## **SOCIAL ENVIRONMENTS**

### **Active neighborhood associations and groups.**

In 2011, there were 25 designated Bellingham neighborhoods. Twenty-three Neighborhood Associations participate in the City of Bellingham's Mayor's Neighborhood Advisory Commission (COB, 2010).

Other areas of the county also have active community groups, such as Birch Bay Waterfront Group and Ferndale Community Resource Network (WCHD, Personal Communication).

### **Better than average voter participation.**

Whatcom County has higher rates of voter registration and participation compared to similar counties and the state. 76% of the population is registered to vote, compared with 70.68% in similar counties and 70.46% in Washington State (WA OSS, 2010).

### **Active involvement in community events.**

Whatcom County has active community involvement in countywide annual events, such as the Ski to Sea festival, the Scottish Highland Games in Ferndale, and the Northwest Washington Fair in Lynden.

### **Many give back to the community through charitable donations and volunteerism.**

More than 80% of individuals who itemized tax returns reported charitable giving (WCF, 2003). In 2010, the Whatcom Volunteer Center reports more than 1,652 individuals/groups volunteered 410,457 hours with 125 different organizations in the community (WVC, 2010).

### **Most with positive perception of community safety.**

In a survey of City of Bellingham residents, 57% reported feeling safe walking alone at night in their neighborhoods (COB, 2010). In a community prioritization process conducted through the Whatcom ACHIEVE initiative, enhancing community and perceived safety (traffic and crime) was identified as the top priority for improving physical activity among children and families (Whatcom ACHIEVE Project, 2010).

**Violent crime increasing; substance use plays a role.**

Overall arrest rates of adults are higher in Whatcom County than similar counties but lower than in Washington State. Drugs and/or alcohol are involved in 85-90% of all criminal arrests in Whatcom County (DSHS, 2010).

- Between 2009 and 2010, total crimes in the County went down 3.4%, while violent crime (rape, robbery and aggravated assault) went up 22.3% (WASPC, 2009-2010).
- In 2009, Whatcom County's domestic violence per capita rate was 6.5 offenses for every 1000 residents (compared to 7.2 for the state). 13.5% of all reported criminal offenses in 2009 were domestic violence related; 60% of all domestic violence offenses were assaults (WCDVC, 1998-2011).



## VI. MATERNAL AND CHILD HEALTH

### SYNOPSIS

Overall Whatcom County has a healthy population, which starts with a foundation of good health in early life. The health and well-being of most mothers and young children in Whatcom County is good, however a substantial minority of mothers and children who, because of limited resources and/or compromised social circumstances, are at risk of not achieving their full potential. Maternal substance use is increasing. Children, in general, are healthy, though a significant number of children experience abuse, neglect and other adversity, are not adequately immunized for childhood diseases, and have preventable dental health problems.

### WHY IS THIS IMPORTANT?

Considering health across the life course is important as mounting evidence demonstrates the connections between early life experience and health in later life. Adversity and challenges in early childhood are reflected in health behaviors and health outcomes later in life. Recognizing health needs at various life stages helps communities plan for needed services and supports.

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### MATERNAL AND INFANT HEALTH

#### **Birth numbers fairly stable.**

Every year, approximately 2200 babies are born in the county (WADOH, 2009). The majority of these births occur in the hospital, though out of hospital births (home or birthing center) have grown in recent years.

#### **Teen pregnancy and teen birth rates low, though considerably higher among racial/ethnic minority groups.**

Births to adolescents aged 15-17 years represented only 2.3% of births from 2007-2009 compared with 2.4% of births for the State of Washington (WADOH, 2009). There were no births to adolescents under age 15 years during that same period.

**Table 1. Total Live Births with Teen Births and Pregnancies, Whatcom County, 2007-2009 (WADOH, 2009)**

	Total Whatcom Births	Teen Births	Teen Pregnancies
<b>2007</b>	2210	49	97
<b>2008</b>	2181	57	103
<b>2009</b>	2269	49	91

Between 2005 -2009, Hispanic females ages 15-19 yrs. had a birth rate of 30.1 (per 1000), higher than the WA state rate of 27.4. This is also seven times greater than the white birth rate of 4.3 (per 1000). For American Indian/Alaska Native females age 15-19, the birth rate was 24.5 as compared to the WA State rate of 18.9 (CHAT, 2009).

**Nearly half of all births to lower income mothers.**

In 2008, 46.8% of births were to lower income women who qualify for Medicaid (185% FPL). These proportions have remained stable over past several years. (DSHS, 2000-2008).

**Table 2. Percentage of Births with Medicaid-paid Maternity Care, Whatcom County and Washington, 2005-2008 (DSHS, 2000-2008)**

	2005	2006	2007	2008
Whatcom County	48.4%	47.0%	46.7%	46.7%
Washington State	47.9%	47.1%	47.2%	47.8%

**Lower income and minority women less likely to receive early prenatal care.**

Women on Medicaid are less likely than non-Medicaid recipients to get care during the first trimester of pregnancy, and more likely to have late or no prenatal care during pregnancy. This increases risk of preventable pregnancy complications (WADOH, 2009).

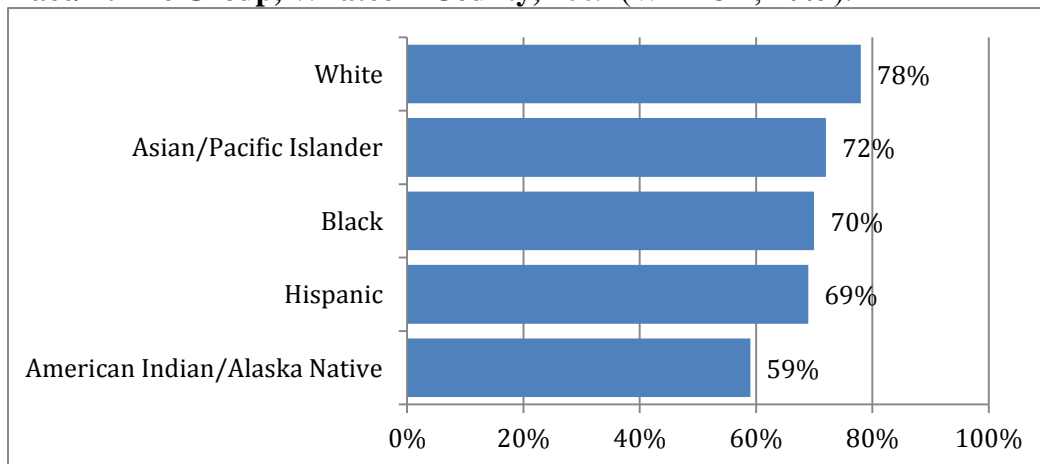
**Table 3. Percent of Mothers who Received First Trimester Prenatal Care Among Medicaid and Non-Medicaid Mothers, Whatcom County, Washington State, 2005-2008 (WADOH, 2009)**

	2005	2006	2007	2008	State
Medicaid	64.1	63.2	63.8	63.0	66.6
Non-Medicaid	85.5	87.6	86.2	87.1	87.0

**Table 4. Percent of Mothers who Received Late or No Prenatal Care Medicaid and Non-Medicaid Mothers, Whatcom County, Washington State, 2005-2008 (WADOH, 2009)**

	2005	2006	2007	2008	State
Medicaid	6.8	6.3	5.9	7.8	8.4
Non-Medicaid	1.6	2.6	2.2	3.3	3.1

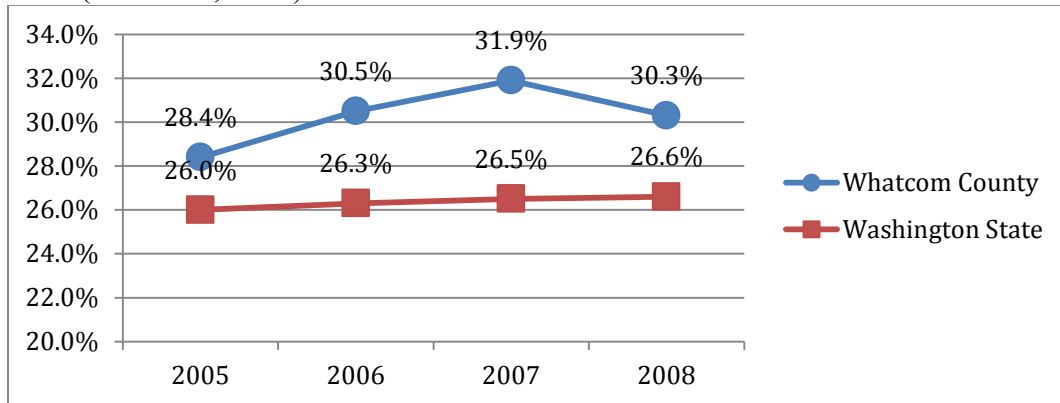
**Figure 1. Percent of Mothers who Received First Trimester Prenatal Care by Race/Ethnic Group, Whatcom County, 2009 (WADOH, 2009).**



**Higher C-section rates.**

Pregnant mothers in Whatcom County are more likely to undergo primary and secondary C-sections at the time of delivery relative to the national goal of 15% C-sections and current clinical recommendations. This increases risk for maternal complications from surgery (WADOH, 2009).

**Figure 2. Percent of Cesarean Section Births, Whatcom County, Washington State, 2009 (WADOH, 2009)**



**Low birth weight and other poor birth outcomes relatively infrequent.**

In 2008, infant mortality rates in Whatcom County were 3.2 per 1000 births compared to 5.4 per 1000 births for the state. In the same year, 5.3% of infants were low birth weight compared with 6.4% for the state (WADOH, 2009).

**Maternal substance use and drug-affected infants increasing.**

The majority of pregnant women do not use alcohol or other illicit drugs during pregnancy, but the hospital has seen an increase in drug-affected infants born at the hospital over the past 2-3 years (PeaceHealth SJMC, 2011).

**Table 5. Number of Drug Affected Neonatals (0 and 28 Days of Age) Admitted to Hospital, PeaceHealth St. Joseph Medical Center, Bellingham, Washington, 2006-2010 (PeaceHealth SJMC, 2011)**

	2006	2007	2008	2009	2010
Total Number Births	2728	2498	2277	2387	2478
Number Drug Affected	10	10	15	25	34
Medicaid Number Births	1174	1078	968	1057	1128
Number Drug Affected	9	10	13	22	33

**Higher need for maternal substance use treatment and post-partum support; low income more impacted.** In 2008, 17.4% of mothers who received coverage for prenatal care from DSHS (Medicaid) required treatment for substance abuse (DSHS, 2000-2008). The rate of treatment for substance abuse in Washington was 12.6% (DSHS, 2008). Most women do not smoke during

pregnancy, but rate is higher among Medicaid recipients, 13.3% compared with non-Medicaid rate is 7.4% (DSHS, 2000-2008). Approximately **15% of low income pregnant and postpartum women** enrolled in the WCHD WIC program report **depression** symptoms. (WCHD, 2011)

**Breastfeeding initiation high, but many women discontinue breastfeeding earlier than recommended.**

In 2010, a Whatcom County Maternity Care Practices assessment demonstrated that the majority of women begin breastfeeding, but a substantial percentage discontinue within the first month. (WCHD, 2010). Data from Whatcom County WIC Programs demonstrate that 88.5% of WIC mothers initiate breastfeeding, but only 73.8% are breastfeeding at 4 weeks (WADOH, 2010).

**CHILD HEALTH RISK FACTORS**

**Child abuse and neglect rates higher than in other communities.**

In 2010, at least 1,592 children (0-17 years) were victims of child abuse and neglect in Whatcom County. The rate of accepted referrals to Child Protective Services in Whatcom County was 37.72 per 1000 children, compared to the Washington rate of 29.80 per 1000 children (DSHS, 2010). Whatcom County rates of abuse have been consistently higher than state rates since 2004.

**Children from racial/ethnic minorities disproportionately impacted by adverse childhood experiences.**

In 2008, 17,098 youth in Whatcom County received one or more service from the state Department of Social and Health Services (DSHS), such as medical assistance or child protective services. The following table demonstrates that two-thirds (66%) of American Indian/Alaska Native youth who received DSHS services in 2008 were exposed to three or more Adverse Childhood Experiences (such as parental arrest/incarceration, mental illness or substance use, domestic violence, child abuse/neglect referral), compared with 28% of White and 29% of Hispanic youth. (DSHS, 2008) The table also shows that 44% of DSHS youth are from minority/non-White populations, compared with only 18% of the general population.

**Table 6. Adverse Childhood Experiences Among DSHS Youth Clients by Race/Ethnicity, Whatcom County, 2008 (DSHS, 2008)**

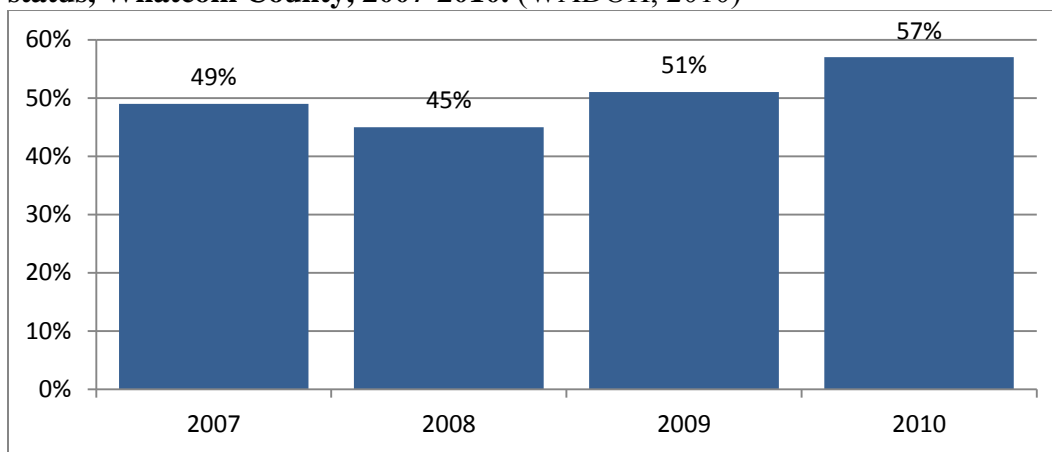
	White	Hispanic	American Indian/Alaska Native	Other	Whatcom County Overall
0 ACEs	3332 (35%)	1099 (31%)	150 (8%)	NA	5751
1-2 ACEs	3531 (37%)	1353 (40%)	513 (26%)	NA	6139
3 or > ACEs	2734 (28%)	988 (29%)	1307 (66%)	NA	5208
Total	9597 (56%)	3440 (20%)	1975 (12%)	2086 (12%)	17098

**Childhood immunization rates below national goals.**

In 2007-2008, approximately 68.8% (+/-8.4) of 2-year-olds (19-35 months) in Whatcom County had received the full-series of recommended immunizations (4:3:1:3:3:1:4) (CDC, 2010). Overall, 67.4% of 2-year-olds in the US were up-to-date. Nationally, the proportion of fully immunized 2 year olds ranged from 50.9% to 80.1%. The Healthy People 2010 goal is 80% vaccination coverage.

The following figure shows immunization trends for 2-year olds based on records from Washington State Child Profile Immunization registry which likely underestimates immunization coverage.

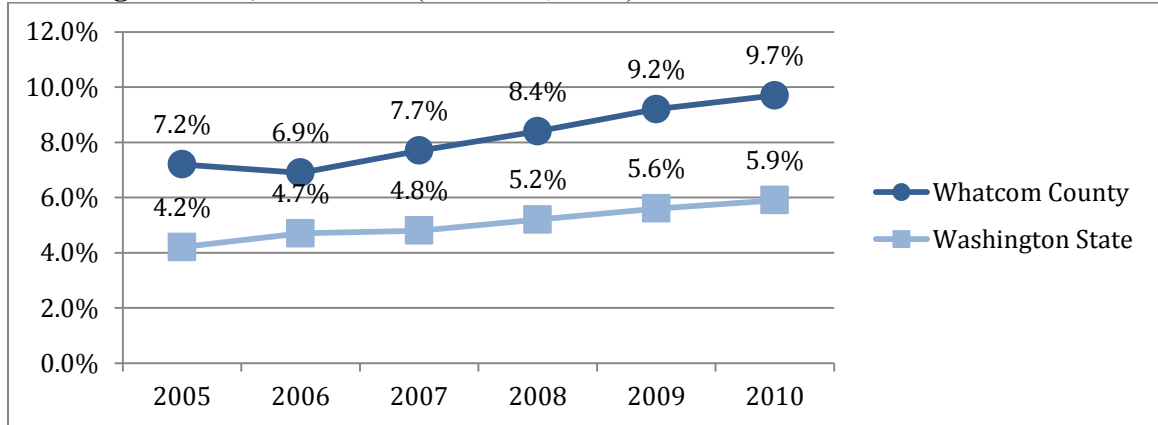
**Figure 3. Percentage of Children (19-35 months) with up-to-date immunization status, Whatcom County, 2007-2010. (WADOH, 2010)**



**School immunization exemption rates higher than state.**

Over the past several years, Whatcom County has consistently had one of the highest school immunization exemption rates in Washington State with continued upward trends. In 2009-2010 school year, 9.7% of children in Whatcom schools were exempt for one or more vaccine compared to 5.9% for the state (WADOH, 2010).

**Figure 4. Percent of K-12 Immunization Exemption, Whatcom County and Washington State, 2004-2010 (WADOH, 2009)**



**Childhood dental disease common.**

By 3<sup>rd</sup> grade, the majority of children (61%) in Whatcom County public schools have dental decay experience (WCOHC, 2010). Children in low-income families were more likely to experience tooth decay and to have untreated decay. Hispanic or Asian children were more likely than white, non-Hispanic children to experience decay and to have untreated decay. Over 56% of third graders have preventive dental sealants. This exceeds Healthy People 2010 objectives (28%), and is likely the result of targeted school based sealant programs.

**Table 7. Percent of Children with Dental Decay and Untreated Decay, Whatcom County and Washington State, 2010 (WCOHC, 2010).**

	Head Start Preschoolers		Public School Kindergartener		Public School Third Grade	
	Whatcom	Washington	Whatcom	Washington	Whatcom	Washington
Decay Experience	43%	40%	42%	39%	61%	58%
Untreated Decay	28%	13%	16%	14%	13%	15%

## VII. ADOLESCENT AND ADULT HEALTH BEHAVIORS

### SYNOPSIS

The majority of youth and adults are healthy, but poor nutrition, physical inactivity and substance use are areas for further exploration and improvement. Inappropriate social behaviors such as bullying are not uncommon.

### WHY IS THIS IMPORTANT?

Health and social behaviors are dependent on numerous factors including personal attributes, learned habits, and social and physical environments. Adoption of healthy behaviors across the lifespan is a key strategy to reduce serious health consequences, such as chronic diseases and injuries.

### YOUTH AND YOUNG ADULT HEALTH BEHAVIORS

#### **More than half of teens not getting enough physical activity or eating a healthy diet.**

Greater than 50% of teens report inadequate physical activity, spend 3 or more hours in front a screen each day, and partake of poorly balanced diets (HYS, 2008-2010).

#### **Nearly one quarter of all middle and high school students overweight or obese; Hispanic youth disproportionately impacted.**

In 2010, the prevalence of obesity or overweight was 22.6% among 8<sup>th</sup> graders and 24.8% among 10<sup>th</sup> graders (HYS, 2008-2010). In 2010, 37.3% of Hispanic youth in 8<sup>th</sup> grade were overweight or obese (in top 5% for body mass index by age and gender) compared with 20.3% of non-Hispanic youth in 8<sup>th</sup> grade.

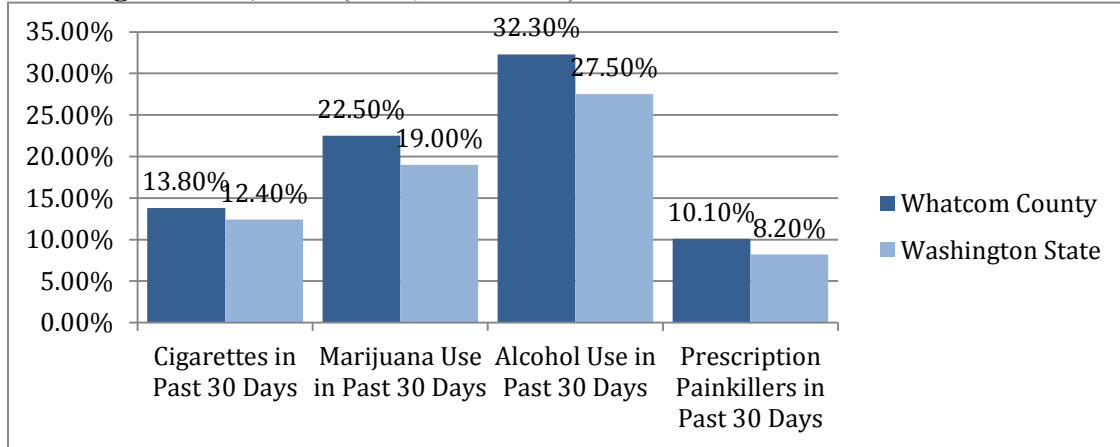
#### **Majority of youth do not use illicit substances, but substantial minority do.**

Most youth are choosing not to use tobacco, alcohol, marijuana or other illicit substances. However, by the end of high school, a substantial proportion of students are using substances, particularly alcohol and marijuana (HYS, 2008-2010).

**Table 1. Substance Use Among Students Grades 6<sup>th</sup>, 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup>, Whatcom County, 2010 (HYS, 2008-2010)**

		6 <sup>th</sup>	8 <sup>th</sup>	10 <sup>th</sup>	12 <sup>th</sup>
Cigarettes in past 30 days	Whatcom County	0.9%	6.4%	13.8%	18.3%
	Washington State	1.7%	6.4%	12.4%	19.1%
Marijuana use in past 30 days	Whatcom County	0.9%	8.8%	22.5%	24.1%
	Washington State	1.6%	9.2%	19.0%	26.2%
Alcohol use in past 30 days	Whatcom County	2.3%	13.7%	32.3%	40.5%
	Washington State	3.8%	14.0%	27.5%	39.9%
Prescription Painkillers in past 30 days	Whatcom County	N/A	3.9%	10.1%	8.1%
	Washington State	N/A	4.2%	8.2%	7.8%

**Figure 1. Percentage Substance Use Among 10<sup>th</sup> Graders, Whatcom County and Washington State, 2010 (HYS, 2008-2010)**



**High rates of substance use by college students.**

In a Student Health Survey conducted with WWU students, 46% reported marijuana use, 36% binge drinking in past 2 weeks, and 17% hallucinogens or recreational drug use (WWU, 2010).

**One out of four youth exposed to bullying.**

Bullying behavior is present in Whatcom County schools. Approximately 25% of student in the 8<sup>th</sup> and 10<sup>th</sup> grades report being bullied at school (HYS, 2008-2010).

**ADULT HEALTH BEHAVIORS**

**Fruit and vegetable consumption low among adults.**

In 2007, only 31% of adults in Whatcom County ate the recommended 5 or more servings of fruits and vegetables per day (BRFSS, 2007).

**Physical activity varies.**

In 2007, 85% of Whatcom County adults indicated they engaged in some sort of physical activity in the past month, with a range of intensity levels and time spent exerting reported. Those less likely to have participated in physical activity include those with lower incomes, health status of fair or poor, and those with less than a college degree (BRFSS, 2007).

**Obesity increasing; overall percentages better than other communities.**

As in other areas of the state and nation, obesity rates continue to increase in Whatcom County, even though the county is better off than other communities. Some areas of Whatcom County, particularly outlying and unincorporated areas of the county have higher risks of obesity and tobacco use, meaning obesity is more prevalent in North county areas, smoking is more prevalent in East county areas (WADOH, 2011). In 2007, 26% of County residents had a Body Mass Index (BMI) calculation of obese which is a significant increase from 17% in 2002 (BRFSS, 2007). Forty percent of Whatcom County adults are calculated to have a healthy weight. Thirty-four percent are overweight and 26% considered obese (BRFSS, 2007). Obesity was associated with

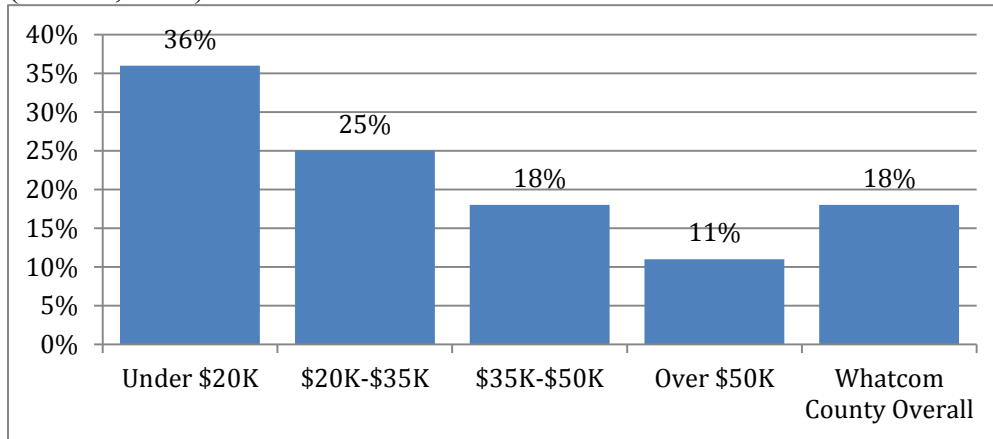


having low income (under \$20,000/year), a high school education or less, residing in rural areas, and a fair/poor health status (BRFSS, 2007).

**Tobacco use common in lower income groups.**

In 2007, 18% of all adults in Whatcom County were current smokers compared with 36% of adults with household income less than \$20K (BRFSS, 2007).

**Figure 2. Percentage of Adult Smokers by Income Level, Whatcom County, 2007 (BRFSS, 2007)**



**Adult alcohol use common at all income levels.**

In 2007, 60% of Whatcom County adults indicated that they had a least one drink of alcohol in the past month. An estimated 7% of adults are chronic drinkers (more than 60 drinks per month), and 5% of adults are binge drinkers (BRFSS, 2007).

## VIII. SELECTED HEALTH CONDITIONS

### SYNOPSIS

Selected health conditions within this section have significant impacts on the health of Whatcom County residents. The leading causes of morbidity and mortality are chronic diseases, such as cardiovascular disease, cancer, and Alzheimer’s dementia. Behavioral health conditions, such as depression and substance abuse, communicable diseases such as influenza and food borne illnesses, and trauma and injuries also have major influences on the community.

### WHY IS THIS IMPORTANT?

In addition to addressing broad social and economic issues to improve health outcomes, targeted and focused interventions and prevention strategies may be needed to reduce specific health conditions.

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### LEADING CAUSES OF DEATH

#### Chronic diseases most common causes of death.

Major causes of death and disability are associated with risk behaviors. Three of the top four leading causes of death (cardiovascular disease, cancer and chronic lower respiratory disease) are conditions that develop over time and are associated with health behaviors such as obesity, poor nutrition, physical inactivity and tobacco use.

**Table 1. Top Ten Leading Causes of Death, Whatcom County and Washington State, 2008 (WADOH, 2009).**

Cause of Death	Whatcom Count	Whatcom Rate per 100,000	Washington Rate per 100,000
Cardiovascular disease	420	219.9	224.0
Malignant neoplasms (cancer)	326	170.7	176.0
Alzheimer’s disease	103	53.9	47.1
Chronic lower respiratory diseases	82	42.9	44.5
Accidents	63	33.0	41.2
Diabetes mellitus	44	23.0	24.1
Suicide	33	17.3	13.4
Influenza & pneumonia	24	12.6	11.9
Parkinson’s disease	15	7.9	7.8
Chronic liver disease & cirrhosis	14	7.3	10.3

## MENTAL ILLNESS

### **At least one out of ten people experience poor mental health.**

In 2007, 10% of Whatcom County adults reported poor mental health of two weeks or more in the past month (BRFSS, 2007).

### **Depression common among high school and university students.**

- Approximately 28% of high school students report depression symptoms (HYS, 2008-2010). High school rates are similar to the state.
- 18.8% of WWU students report depression symptoms or history of depression diagnosis (WWU, 2010). The depression prevalence at WWU is higher than rates reported nationally (14.9 %) (NCHA, 2008).

### **Suicide rate higher than the state and nation.**

According to 2009 data, the suicide rate for Whatcom County is 19.3 /100,000. The rate exceeds the state rate of 13.3/100,000 and is significantly higher than peer counties across the nation (CHAT, 2009).

### **Suicide ideation and attempts prevalent among youth and young adults attending college.**

Approximately 7% of high school students report suicide attempts (HYS, 2008-2010) and 9.9% of WWU students report serious consideration or attempt at suicide (NCHA, 2008).

**Table 2. Mental Health among Students in 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> Grade, Whatcom County, 2010 (HYS, 2008-2010)**

	8 <sup>th</sup> Grade	10 <sup>th</sup> Grade	12 <sup>th</sup> Grade
Depression			
Whatcom County	22.6%	28.6%	27.3%
Washington State	24.9%	29.7%	28.4%
Seriously Considered Attempting Suicide			
Whatcom County	13.8%	17.4%	12.4%
Washington State	14.4%	17.7%	13.8%
Attempted Suicide			
Whatcom County	5.8%	7.4%	6.9%
Washington State	7.1%	7.2%	5.8%

## SUBSTANCE ABUSE AND CHEMICAL DEPENDENCY

### Substance misuse significant cause of morbidity and mortality.

Drugs or alcohol were related to cause of death in over 12 of every 100 deaths in Whatcom County in 2009; over forty percent of traffic fatalities were alcohol-related (CHAT, 2009).

### Illicit drug use rates higher in Whatcom County than the nation.

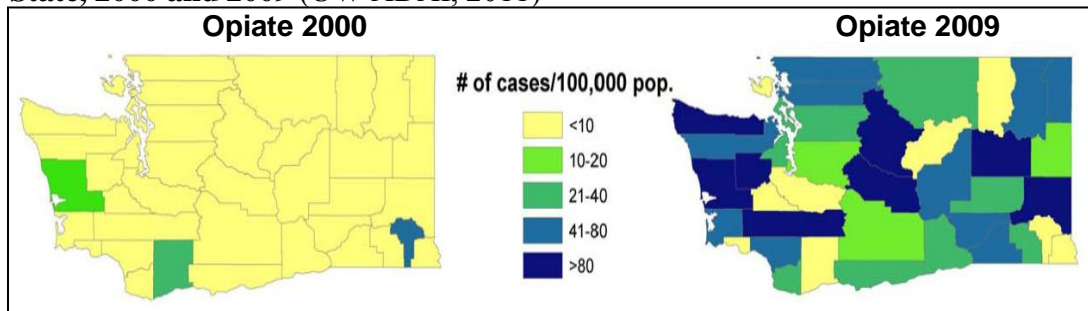
Illicit drug use is significantly higher in Washington State and the region that includes Whatcom County (9.9%) than the national average (8.1%) (SAMHSA, 2006, 2007, 2008). This is true for all classifications, including marijuana, cocaine, and the non-medical use of pain relievers and other substances.

### Growing opiate addiction problem.

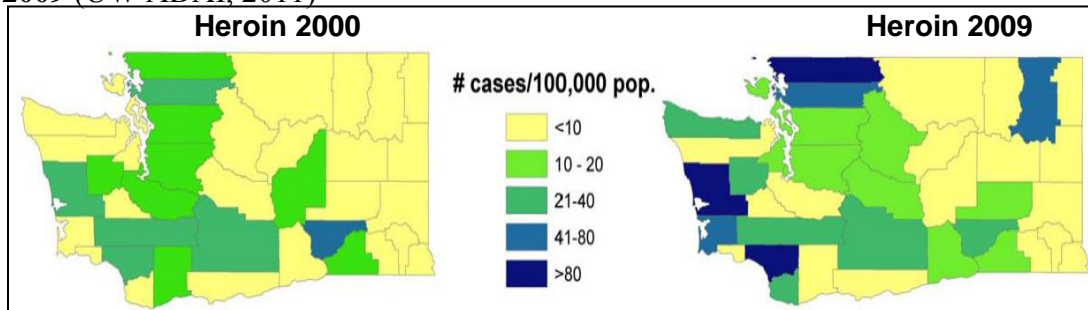
Over the past 5 years, the Whatcom County Needle Exchange Program reports significant increases in number of IV drug use clients and notably younger clients (WCHD, 2010). This is confirmed by PHSJMC Emergency Room data (PeaceHealth SJMC, 2011).

The following graphics prepared by the Alcohol and Drug Abuse Institute at University of Washington demonstrate the significant increases in prescription opiate and heroin use (as measured by police evidence data) over the past decade. Heroin use is particularly high in Whatcom County.

**Figure 1. Rates of Opiate Prescription Drug Use Cases per 100,000, Washington State, 2000 and 2009 (UW ADAI, 2011)**



**Figure 2. Rates of Heroin Drug Use Cases per 100,000, Washington State, 2000 and 2009 (UW ADAI, 2011)**

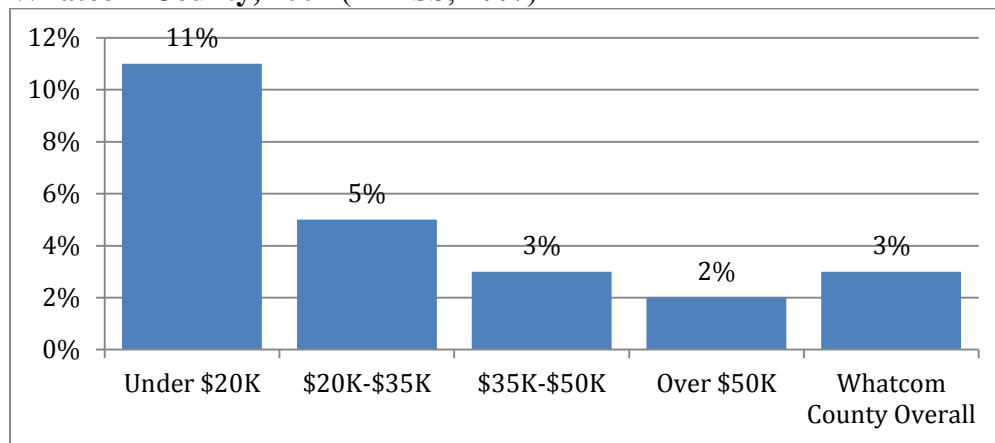


## CHRONIC DISEASES-CARDIOVASCULAR DISEASE

### Cardiovascular disease most common cause of death.

In 2007, 3% of adults reported having had a heart attack, 3% having angina or coronary heart disease, and 2% have had a stroke (BRFSS, 2007).

**Figure 3. Percentage of Adults with Cardiovascular Disease by Income Level, Whatcom County, 2007 (BRFSS, 2007)**

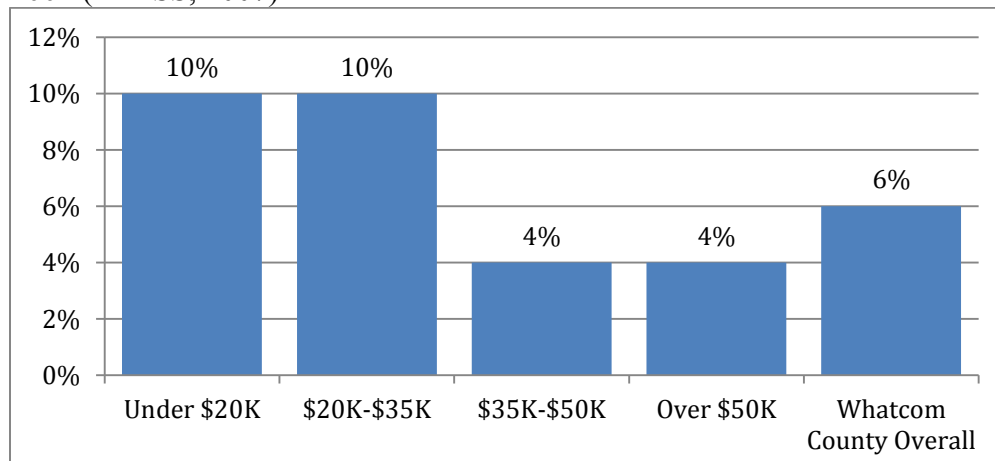


## CHRONIC DISEASES-DIABETES

### Diabetes less prevalent than nation, but higher in low income and racial/ethnic minority populations.

While the overall 6% prevalence of diabetes mellitus in Whatcom County ranks in the lowest quartile across the nation, morbidity imposes a significant demand on health care resources (BRFSS, 2007). The prevalence of diabetes among American Indians is higher than any other ethnic group. Rates are also higher in Hispanics than non-Hispanic Whites. (*See III. Social Factors*) Diabetes is also more common in lower income populations.

**Figure 4. Percentage of Adults with Diabetes by Income Level, Whatcom County, 2007 (BRFSS, 2007)**



## CHRONIC DISEASES-DEMENTIA

### **Dementia takes toll on many Whatcom seniors and their families.**

In 2008, Alzheimer's Disease was the third most frequent cause of death in Whatcom County accounting for 53.9 deaths per 100,000 (WA state mortality rate 47.1 per 100,000) (CHAT, 2009). The prevalence of Alzheimer's disease doubles every 5 years after age 65 (MMWR, 2003).

## COMMUNICABLE DISEASES

### **Selected communicable diseases of community interest.**

Communicable diseases are diseases caused by bacteria, viruses or other biological agents. They are usually transmitted through person-to-person contact or exposure to contaminated surfaces or ingestions of tainted food. Many of these diseases can be prevented with proper precautions that include immunizations, hand-washing, safe sexual practices, food safety activities or other preventive measures.

**Table 3. Communicable Disease Cases, Whatcom County, 2004-2008 (CHAT, 2009)**

	2004	2005	2006	2007	2008
Hepatitis A-acute	5	2	6	6	1
Hepatitis B-acute	1	4	0	0	0
Hepatitis C-acute	0	0	1	0	3
Measles	0	0	0	0	0
Meningococcal Disease	0	3	1	2	0
Mumps	0	0	4	2	0
Pertussis	302	120	58	66	55
Rubella	0	0	0	0	0
Tetanus	0	0	0	0	0
Tuberculosis	6	5	4	7	5

### **Influenza immunization rates below national goals.**

Influenza is a seasonal respiratory illness that may be prevented with immunizations and good respiratory hygiene. Because of the morbidity and mortality associated with the disease, the CDC conducts continuous surveillance for influenza and influenza-like (ILI) illnesses (WADOH, 2009). The influenza immunization rate for Whatcom County for people 65 years and older is 70%. (BRFSS, 2007). This rate is well below the Healthy Person 2010 goal of 90% for people in that age range.

**Pertussis (whooping cough) rates higher than state.**

Pertussis (or whooping cough) is a vaccine preventable, but potentially lethal disease for young children. The pertussis infection rate among children in Whatcom County is 4-5 times greater than the state infection rate (CHAT, 2009). In 2009, 17 of 34 cases in Whatcom County occurred in children.

**Table 4. 3-Year Rates of Pertussis Among Infants (less than 1 year) per 100,000 people, Whatcom County, 1996-2009 (CHAT, 2009)**

	1999-2003	2000-2004	2001-2005	2002-2006	2003-2007	2004-2008	2005-2009
Whatcom County	126	230	249	226	284	298	244
Washington State	120	120	136	140	138	114	102

**Sexually transmitted disease rates lower than state.**

Sexually transmitted diseases include gonorrhea, syphilis, chancroid, and HIV. Chlamydia infections are among the most frequently sexually acquired infections. The age-adjusted incidence of Chlamydia infections in Whatcom County is consistently below rates for the state. Rates of other sexually transmitted diseases in Whatcom County are similarly below state rates.

**Table 5. Number of STD Cases, Whatcom County, 2004-2009 (CHAT, 2009)**

	2004	2005	2006	2007	2008	2009
Chlamydia	466	474	517	457	445	NA
Gonorrhea	56	126	101	54	27	NA
HIV	7	7	8	10	10	7
Syphilis	0	3	7	2	1	6

**Table 6. Age-Adjusted Rates of Chlamydia and Gonorrhea, Whatcom County, 2004-2008 Averages (CHAT, 2009)**

	Whatcom Cases	Whatcom Rate Per 100,000	Washington Cases	Washington Rate Per 100,000
Chlamydia	2,359	211.6	94,686	291.8
Gonorrhea	364	35.6	17,981	56.11

**Food borne illness rates higher than state.**

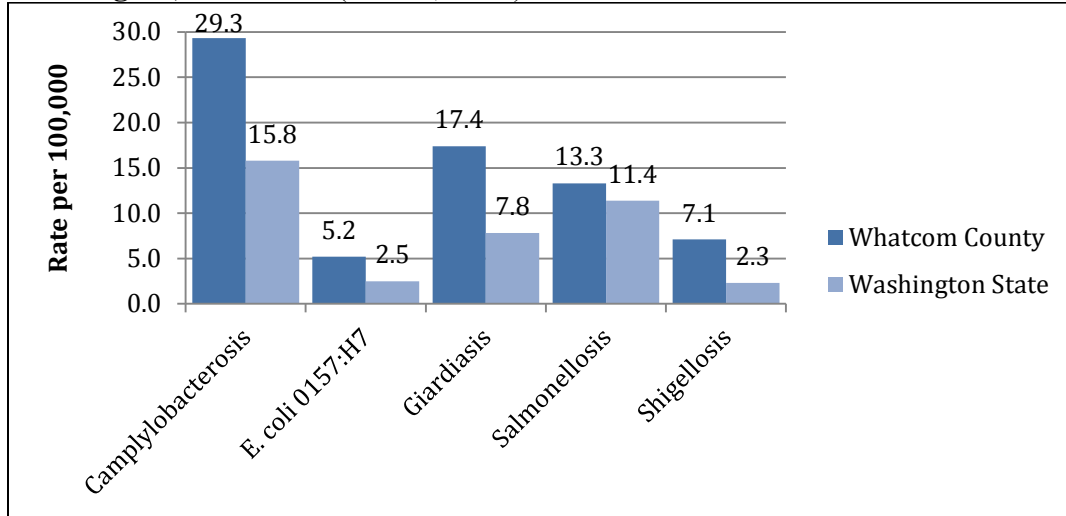
Foodborne diseases have a major public health impact. In addition to acute gastroenteritis, many emerging foodborne diseases may cause chronic conditions, severe illnesses, disability, and death.

**Table 7. 3-Year Rates of Food Borne Illnesses (per 100,000), Whatcom County and Washington State, 2003-2010 (CHAT, 2009)**

	2003-2005	2004-2006	2005-2007	2006-2008
Camphylobacterosis				
Whatcom County	30.4	31.5	33.6	29.3
Washington State	15.2	15.2	15.9	15.8
E. coli 0157:H7				
Whatcom County	3.4	4.4	5.4	5.2
Washington State	2.3	2.5	2.4	2.5
Giardiasis				
Whatcom County	12.8	11.3	14.5	17.4
Washington State	7.1	7.1	7.7	7.8
Salmonellosis				
Whatcom County	10.9	10.5	11.0	13.3
Washington State	10.6	10.1	10.5	11.4
Shigellosis				
Whatcom County	2.6	6.3	6.5	7.1
Washington State	2.7	2.6	2.7	2.3



**Figure 5. 3-Year Rates of Food Borne Illnesses (per 100,000), Whatcom County and Washington, 2006-2008 (CHAT, 2009)**

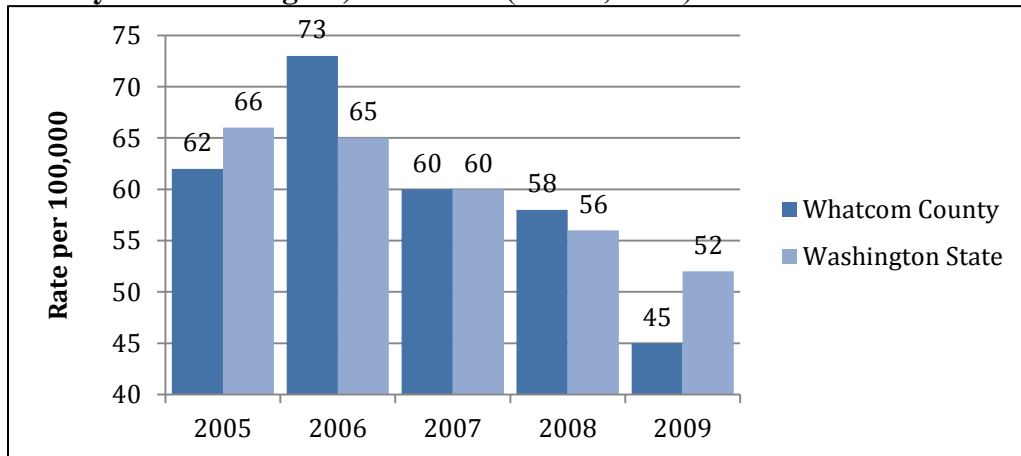


## TRAUMA AND INJURIES

### Injuries associated with motor vehicle accidents declining.

Motor vehicle accidents (MVA) are a frequent cause of serious personal injury and accidental death. The graph below reports rates of injuries from MVA per 100,000 population. The rates of injuries associated with MVA in Whatcom County are comparable to injury rates for the state. Over the past five years, rates of injuries from MVA in the county and state have been declining.

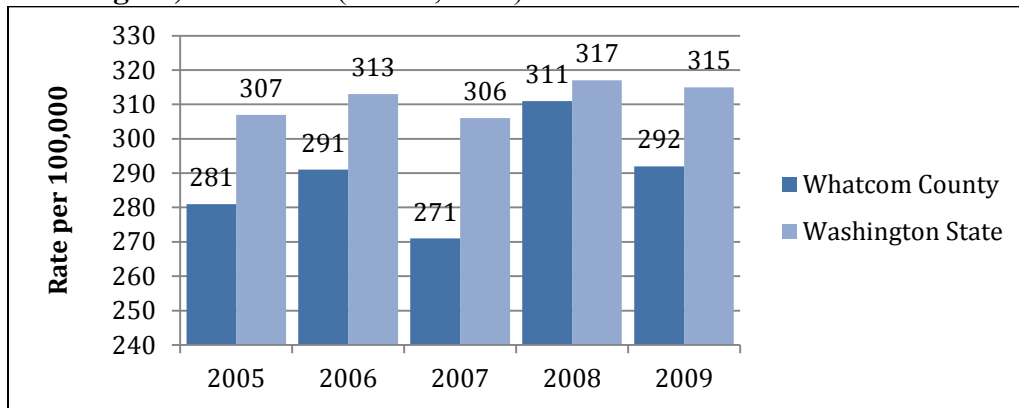
**Figure 6. Rate of Injuries from Motor Vehicle Accidents (per 100,000), Whatcom County and Washington, 2005-2009 (CHAT, 2009)**



**Injuries from falls lower than state.**

Falls are one of the most frequent causes of personal injury. The rates of injuries due to falls per 100,000 population for the past five years are illustrated in the following graph. The frequency of fall related injuries in Whatcom County are lower than rates for the state.

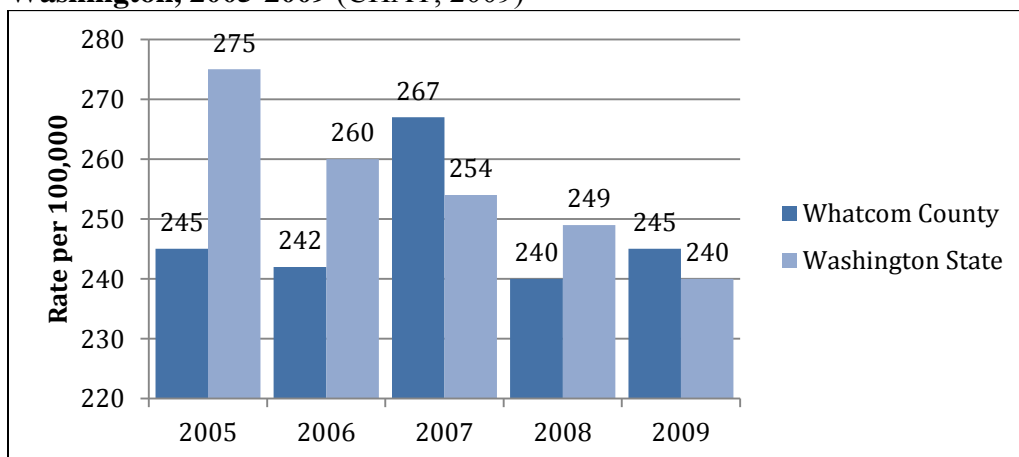
**Figure 7. Rate of Injuries from Falls (per 100,000), Whatcom County and Washington, 2005-2009 (CHAT, 2009)**



**Childhood injuries similar to state.**

The rates of childhood injuries (in children ages 0-19 years) in Whatcom County have not changed significantly over the past five years and are not significantly different from rates for the state. By comparison, overall rates of childhood injury have declined in the state during this time period (CHAT, 2009).

**Figure 8. Rate of Injuries Among Children (per 100,000), Whatcom County and Washington, 2005-2009 (CHAT, 2009)**



## SENTINEL EVENTS

### **Specific conditions alert community to potential health system issues.**

Sentinel events are those cases of unnecessary disease, disability, or untimely death that could be avoided if appropriate and timely medical care or preventive services were provided (NACCHO, 2006). These include vaccine-preventable illness, late stage cancer diagnosis, and unexpected syndromes or infections. Sentinel events may alert the community to health system problems, such as inadequate vaccine coverage, lack of primary care and/or screening, a bioterrorist event, or the introduction of globally transmitted infections.

**Table 8. Sentinel Events of Communicable Diseases, Whatcom County and Washington State, 2009. (CHAT, 2009)**

	Whatcom County	Washington State
Measles	0	NA
Mumps	1	6
Rubella	0	NA
Pertussis	34	291
Tetanus	0	NA

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**Section Four:**

# **Community Themes and Strengths Assessment**

Whatcom County  
Community Health  
Assessment - 2011

## Overview:

The purpose of this section is to understand what is important to our community, how is quality of life perceived by our community, and what assets are available to improve community health. This assessment includes community strengths, challenges and themes identified from multiple sources through Whatcom County. This process and the section below illuminate the diversity of issues that are important to Whatcom County residents and the variety of assets and strengths we possess to address community health challenges.

## Methods:

This assessment reports general perceptions of our community, particularly as related to community health. These perceptions were derived from a wide variety of sources and venues and reflect subjective generalizations. This assessment is informed by multiple events convened as part of the Community Health Assessment process, as well as other events and projects occurring within the community.

- A large group session to formulate a community health vision. In December 2010, 44 community leaders came together at the St Luke's Education Center at the invitation of the Whatcom County Health Department and PeaceHealth St. Joseph Medical Center to formulate a vision of community health. A number of themes emerged from this exercise.
- Four discussions with distinct community populations. Four focus groups were conducted during April and May 2011. The structured discussion groups were held with the following Whatcom County community members:
  - members of the Hispanic/Latino community from across the county
  - pregnant or parenting adolescent mothers
  - pregnant or parenting mothers with chemical dependency concerns
  - substance use treatment providers (Health Department contractors)
- A community forum to highlight findings of projects and studies conducted locally in recent years. This forum occurred in March 2011. Twelve organizations or community coalitions that had conducted ad hoc assessments on relevant issues to community health were invited to present a summary of their findings and observations. Participants in the forum included the Community Leadership Group, other interested residents from the community, faculty (members of the Technical Advisory Group) and students from WWU. The following projects or studies were included:
  - Whatcom County Stakeholders' Forum (1/10<sup>th</sup> of 1 percent) (2009)
  - Whatcom Prosperity Project (2007/2011)
  - Community Engagement Research/Whatcom Prosperity Action Team (2008)
  - Whatcom Community Food Assessment (2008)
  - Non-profit Assessment Survey (2010)
  - Whatcom County Point in Time Homeless Count (2010/2011)
  - Whatcom County Land Use (Values and Beliefs) Survey (Whatcom Legacy Project; 2009)
  - City of Bellingham Legacies and Strategic Commitments (2009)

- Interviews with Elected Officials gathered by WWU/Health Department (2010)
- Comprehensive Health Plan Public Input gathered by Health Department (2007)
- Whatcom Taking Action Children with Special Health Care Needs Plan (2009)
- Whatcom County ACHIEVE Project /Community Action Plan for Healthy and Active Living (2010)

Forum findings reflect observations that emerged from multiple observers and participants. Observations are the result of examination and analysis of written reports, presentations, and notes from forum discussion.

- Multiple key informant interviews/community events. Over fifteen key informant interviews with community leaders and individuals with expertise about factors influencing community health were conducted. Many individuals guided project staff to data and resources for further information, which are included in the assessments. A list of individuals (and their organizations) who participated in key informant interviews and selected community events that informed the assessment is included at the end of this section.
- Inventory of community assets and initiatives related to areas of community interest and to the community health vision. Project staff constructed comprehensive (though not exhaustive) lists of existing organizations and entities working on specific topics or populations of interest. Organizations and entities listed in inventories were derived from the Themes and Strengths forum, focus groups, key informant interviews, review of online resource directories, and personal knowledge. Undoubtedly there are additional important organizations or entities that were not included in these inventories. This is entirely due to oversight and does not represent any judgment as to the value or merits of these entities. Inventories were organized into the following categories that mirror the community health vision.
  - **Children and families**
    - Young children/emerging families
    - Youth and young adult health
  - **Health care and support services**
    - Health care access and organization of the health care delivery system
    - Mental health and substance use services
  - **Opportunities for good health**
    - Food and nutrition
    - Housing and the built environment
    - Jobs and education
  - **Connections and commitments to people and place**
    - Community voice and inclusion
    - Environmental preservation and protection



## Results:

### Community Strengths

Whatcom County has many strengths that provide a strong foundation for good health. The following table outlines a sample of commonly identified community strengths.

<b>People and Organizations</b>	
<b>Caring and collaborative people</b>	<ul style="list-style-type: none"> <li>• Genuine interest and willingness to come together to address issues as a community</li> <li>• Strong cooperation and collaboration</li> <li>• Spirit of volunteerism and charitable giving</li> </ul>
<b>Growing cultural diversity</b>	<ul style="list-style-type: none"> <li>• Hispanic population, Slavic population, two tribes</li> </ul>
<b>Strong non-profit sector and foundations</b>	<ul style="list-style-type: none"> <li>• Commitment to helping people despite diminishing resources</li> <li>• Funders Alliance</li> </ul>
<b>Strong small business community and several larger employers with interest and involvement in community health efforts</b>	<ul style="list-style-type: none"> <li>• Northwest Economic Council and Small Business Development Center</li> <li>• Chambers of Commerce</li> <li>• Multiple employers</li> </ul>
<b>Quality health care services</b>	<ul style="list-style-type: none"> <li>• Including a local community hospital</li> </ul>
<b>Variety of social support and human services</b>	<ul style="list-style-type: none"> <li>• Housing and food assistance</li> <li>• Veterans support</li> <li>• Senior centers</li> </ul>
<b>Good schools and educational resources</b>	<ul style="list-style-type: none"> <li>• Early childhood programs (including Head Start and Early Head Start)</li> <li>• Seven local school districts</li> <li>• Several private K-12 schools (primarily faith-based)</li> <li>• Four colleges/universities (Bellingham Technical College, Whatcom Community College, Northwest Indian College, Western Washington University)</li> </ul>
<b>Community events/traditions</b>	<ul style="list-style-type: none"> <li>• Active community involvement in local events and preservation of community traditions (e.g., Ski-to-Sea, Northwest Fair, Scottish Highland games, other)</li> </ul>
<b>Place</b>	
<b>Natural beauty</b>	<ul style="list-style-type: none"> <li>• Puget Sound, San Juan Islands, Bellingham Bay, lakes (Whatcom, Samish, Padden), rivers, mountains (Mt. Baker), forests, parks and trails</li> </ul>
<b>Agricultural base</b>	<ul style="list-style-type: none"> <li>• Fishing and farming; local healthy foods; contribution to local economy</li> </ul>
<b>Recreational opportunities</b>	<ul style="list-style-type: none"> <li>• Water sports, mountain sports, cycling, running/walking, hiking, camping</li> </ul>
<b>Environmental consciousness</b>	<ul style="list-style-type: none"> <li>• Interest in water quality and air quality; commitment to recycling, reusing, reducing energy use; sustainability movement</li> </ul>
<b>Proximity to amenities</b>	<ul style="list-style-type: none"> <li>• Easy driving distance/ferry to amenities in British Columbia, San Juan Islands, Seattle metro area, North Cascades</li> </ul>

<b>Community Health Partnerships and Initiatives</b>	
<b>Partnerships, networks, coalitions, alliances, and other groups</b>	<ul style="list-style-type: none"> <li>• Examples: <i>Community Health Assessment Leadership Team, Whatcom Family and Community Network, Funders Alliance, Whatcom Council of Nonprofits, Whatcom Alliance for Healthcare Access, Whatcom Oral Health Coalition, Community Resource Networks, Whatcom Taking Action, Coalition to End Homelessness, Whatcom Coalition for Healthy Communities, (others).</i></li> </ul>
<b>Model programs, community initiatives, and entities</b>	<ul style="list-style-type: none"> <li>• Poverty: <i>Whatcom Prosperity Project</i></li> <li>• Housing/Homelessness: <i>Homeless Service Center, Offender Re-Entry Housing Case Management</i></li> <li>• Hunger/Food Insecurity: <i>Anti-Hunger Coalition, Food Banks</i></li> <li>• Health Care: <i>Project Access (specialty care), Behavioral Health Access Program, Donated Adult Dental (DAD), Access to Baby and Child Dentistry (ABCD)</i></li> <li>• Chronic Disease: <i>Whatcom ACHIEVE Initiative</i></li> <li>• Mental Health and Substance Use: <i>Behavioral Health Tax (1/10<sup>th</sup> of 1 percent tax)</i></li> <li>• Children with Special Health Care Needs: <i>Whatcom Taking Action for Children and Youth with Special Health Care Needs</i></li> <li>• Nutrition: <i>Community Food Assessment, Northwest Indian College Traditional Foods Program, Cocinos Santos</i></li> <li>• Physical Activity/Safety: <i>Safe Routes to School, Safe Streets (Lummi)</i></li> <li>• Youth Development: <i>Lummi Cedar Project, Lummi Youth Build</i></li> </ul>

## Community Challenges

While community members recognize considerable strengths, a number of areas are also noted as challenges that impact community health and may benefit from additional community attention. The following table outlines key “challenges”.

<b>Socio-economics and Basic Needs</b>	
<b>Poverty and economic instability</b>	<ul style="list-style-type: none"> <li>• Concerns about women, children, and families living in poverty and social isolation</li> <li>• Recognition of racial/ethnic groups living in poverty (tribes, migrant workers)</li> </ul>
<b>Educational achievement gaps and limited resources</b>	<ul style="list-style-type: none"> <li>• Concerns about school readiness and student academic success, high school graduation.</li> <li>• Limited availability of educational supports for lower income children and those with diverse cultural backgrounds (access to computers, bilingual teachers, etc)</li> <li>• Budget woes of K-12 and higher educational systems impacting available services and supports</li> </ul>
<b>Limited work opportunities</b>	<ul style="list-style-type: none"> <li>• Job instability and concern about unemployment/layoffs related to the economic recession</li> <li>• Perceived lack of vocational training opportunities/entry level work-especially for young people</li> <li>• Limited availability of living wage jobs with benefits</li> </ul>

<b>Housing stability</b>	<ul style="list-style-type: none"> <li>• Lack of affordable housing options</li> <li>• Poor housing quality and stability for some young families</li> <li>• Limited housing supports for special needs--individuals with substance use and mental illness, offenders re-entering community after incarceration, low income seniors</li> </ul>
<b>Food access</b>	<ul style="list-style-type: none"> <li>• Lack of access to affordable healthy foods (fruits, vegetables, whole grains) for some groups (low income) and geographic areas (rural)</li> <li>• High availability of unhealthy foods (high calorie, high fat, processed foods) throughout the community (stores, restaurants, worksites, etc.)</li> </ul>
<b>Transportation access</b>	<ul style="list-style-type: none"> <li>• Difficulty getting from outlying areas to services and work opportunities in Bellingham (limited public transportation options)</li> <li>• Concerns about traffic/pedestrian safety in some community areas, limited ability of children to walk to school safely (e.g., Kendall/Maple Falls, others)</li> </ul>
<b>Health care access</b>	<ul style="list-style-type: none"> <li>• Financial barriers -- lack of health care insurance coverage or underinsurance (e.g., high co-payment requirements or catastrophic only), lack of providers accepting various insurance plans particularly public plans (Medicaid, Medicare)</li> <li>• Cultural barriers -- fear, distrust of health care system; feelings of stigmatization and lack of respect; limited literacy/health literacy</li> <li>• Geographic barriers -- Lummi Island (ferry), East County (distance), Point Roberts (Canadian border)</li> <li>• Lack of availability of some health care services in Whatcom County--specialty medical services and supports for children and seniors, dental care for low income adults</li> <li>• Lack of care coordination/integration of health care service delivery especially for those with complex health needs—behavioral health, chronic disease, social needs</li> <li>• Challenges with navigating complex systems--non-English speaking, low literacy, complex needs</li> </ul>
<b>Special needs supports</b>	<ul style="list-style-type: none"> <li>• Lack of respite care for children and adults with special needs</li> <li>• Social isolation of seniors</li> <li>• Need for additional social supports for veterans (<i>Note: new programs have been recently implemented in this area</i>)</li> </ul>
<b>Environmental issues</b>	
<b>Water quality</b>	<ul style="list-style-type: none"> <li>• Deteriorating water quality (Examples: Lake Whatcom, Drayton Harbor/Puget Sound)</li> </ul>
<b>Community development concerns</b>	<ul style="list-style-type: none"> <li>• Proposed projects with possible environmental and health impacts (Examples: coal shipping terminal in North County, Galbraith Mountain, Chuckanut Ridge, Bellingham waterfront redevelopment, building site for a new jail)</li> </ul>
<b>Agricultural practices</b>	<ul style="list-style-type: none"> <li>• Exposure of farmworkers and their families to pesticides and other harmful working/living conditions</li> </ul>
<b>Natural hazards</b>	<ul style="list-style-type: none"> <li>• Earthquakes and floods</li> <li>• Asbestos (Swift Creek)</li> </ul>

<b>Social Issues</b>	
<b>Politics</b>	<ul style="list-style-type: none"> <li>• Political discord and negative politics</li> </ul>
<b>Social cohesion</b>	<ul style="list-style-type: none"> <li>• Community inclusion, for individuals with disabilities and special needs</li> <li>• Cultural divides leading to fear, mistrust, misunderstanding</li> <li>• Stigmatization of groups based on race/ethnicity, sexual orientation, substance use/mental illness, disability status</li> </ul>
<b>Crime</b>	<ul style="list-style-type: none"> <li>• Increasing presence of gangs within the community and gang violence/drug-related issues</li> <li>• Perceived increases in severity of domestic violence offenses</li> </ul>
<b>Immigration</b>	<ul style="list-style-type: none"> <li>• Strained relationships with border patrol/immigration officials— infringement on rights of residents/property owners living near border</li> <li>• Immigration fears in migrant community</li> </ul>
<b>Specific Health Issues</b>	
<b>Mental health and substance abuse</b>	<ul style="list-style-type: none"> <li>• Growing concern about dangerous substance use behaviors and substance abuse disorders among young people, college students, Native Americans, adults of all ages, and women of child-bearing age</li> <li>• Increasing prescription pain medicine misuse/heroin use</li> <li>• Adverse impacts of parental substance use and mental illness on children including drug-affected infants and child abuse and neglect</li> <li>• Lack of access to mental health and substance use services including supportive recovery programs and care management, especially for those with co-occurring disorders</li> </ul>
<b>Developmental and behavioral issues in children</b>	<ul style="list-style-type: none"> <li>• Family, school, and health care provider challenges with managing difficult behaviors and developmental challenges</li> <li>• Lack of supportive services such as respite care and therapeutic interventions locally</li> </ul>
<b>Obesity and related chronic diseases</b>	<ul style="list-style-type: none"> <li>• Concern focused on children and perceived increases in childhood obesity</li> <li>• Particular concern in communities (i.e., tribal and Hispanic communities) that experience high rates of diabetes and other diseases associated with obesity.</li> </ul>
<b>Dental/oral health</b>	<ul style="list-style-type: none"> <li>• High rates of childhood dental disease</li> <li>• Lack of access to dental services for adults</li> <li>• Vocal opposition to fluoridation of community water systems</li> </ul>
<b>Immunization/communicable disease prevention</b>	<ul style="list-style-type: none"> <li>• High levels of parental vaccine hesitancy, including ongoing concerns about childhood autism</li> <li>• Elevated sexually transmitted disease rates and blood-borne illnesses (such as Hepatitis C)</li> </ul>

## Community Themes

Throughout the assessment, the community health vision created an organizing framework for considering community themes. Themes revolved around: a) the health and well-being of children and families, b) access, availability and organization of health care and social service systems, c) availability of health opportunities for all populations and groups (i.e., housing, healthy food, education, jobs, and d) issues of social connection, cohesion and environmental stewardship.

**Children and Families:** The importance of protecting the health, well-being and future of children emerged as a consistent theme in our communities. There is a growing recognition of the central role of early childhood experience in shaping a child's future and how formative events from birth through adolescence have a lasting effect on health. Current economic times and social changes make this a challenging period to raise children. In Whatcom County, mental health and substance use issues are having a profound and concerning impact on our families. A safe and nurturing environment includes access to high quality educational opportunities including early learning supports, health care resources such as disease prevention and treatment, secure housing, adequate food and clothing, and protection from the effects of adverse childhood events. There are a number of community groups and existing initiatives around these issues to build upon for improved community health and well-being.

- **Growing recognition of the central role of adverse childhood experiences and impact on health.**
  - In the past several years, community awareness of the long term physical and mental health impacts of adverse childhood experiences has grown in response to national level speakers, scientific information, and cross-sector community discussions. Persistent childhood psychological or physical trauma and stressors related to family dysfunction decreases readiness for school and educational attainment, increases behavioral/mental health disorders, heightens youth health risk behaviors (tobacco, alcohol, drugs, risky sex), and has lasting health effects observed across the life span (depression, obesity, heart disease). Infants and children under the age of three are at the greatest risk due to increased vulnerability of their developing brains.
- **Difficult and challenging time for young families.**
  - The lingering recession permeates discussions and observations across Whatcom County. The economic crisis has aggravated the levels of poverty, unemployment, food insecurity, and foreclosures. The instability threatens the health and well-being of children as many parents may be forced to change living situations, jobs, and roles creating significant family stress.
  - Social structures and service delivery systems are in flux with national and local reorganization and system transformation. The economic crisis has also contracted both public and donor funding for service organizations whose mission is to serve the marginalized in the community including women, children and young families.

- **Substance abuse and mental health problems undermine family stability.**
  - People across the county raised concerns of growing dangerous substance use behaviors and substance abuse disorders among young people, women of child-bearing age, and parents of young children.
  - Mental illness (often co-occurring with substance use) is a serious concern among children and youth, pregnant and post-partum women.
  - Unmet treatment need and few prevention resources contribute to these problems. Growing up in a home with substance abuse or mental illness is an adverse childhood event.
- **Other maternal health issues (breastfeeding support, dental health) also identified as priority issues.** (Emerging Families community meeting, 2010; Whatcom Oral Health Coalition, 2011-2012)
- **Further work to improve the health and well-being of young children, youth, and families can build on the efforts of existing community partners.** The following tables list a number of community organizations and groups that have an interest or stake in issues related to young children, youth, and families. These lists are likely to miss key individuals or groups and will be updated as needed.

**Health Care and Social Support Services:** Whatcom County possesses high quality health care services. The theme of unequal access to health services was reported by multiple observers in a variety of venues. The issue was reported by consumers, providers, and administrators of health services. Areas of concern for health care access include primary health care, insurance, preventive services (medical/dental/behavioral), availability of specialty services and therapies, coordination and connection of services, and geographic access barriers. Access to dental care and behavioral health care services, including substance abuse treatment, were particularly highlighted as a critical need for low-income individuals, including those underinsured or lacking insurance. Those with complex needs and mental health and substance abuse issues would benefit from coordinated care and integrated services.

- **Excellent health services are an advantage enjoyed by many, but a significant proportion does not receive basic services.**
  - Whatcom County has a “haves and have-nots” situation with many health and social services. The community is the beneficiary of public health and health care systems that provide quality services for most conditions that are prevalent in Whatcom County, but a small but significant portion do not receive basic adequate services, including primary care, dental and behavioral health services.
- **Some populations report unequal ability to access adequate services.**
  - Patients with Medicare or Medicaid insurance find it increasingly difficult to locate providers who provide care for new patients.

- Teenage mothers indicated barriers to receiving prenatal care included physicians not accepting new patients on Medicaid (and “coupons”), lack of external support in obtaining referral to physician, transportation (especially rural residents), and fear of informing their family about the pregnancy.
- Members of the Hispanic/Latino community indicated access barriers to accessing care included language barriers, disrespectful providers and staff, inadequate or poor quality treatment, impossibly long waiting lists for dental care, and significant bureaucratic or paperwork barriers to accessing care made more complicated by immigration status or lack of documentation.
- Low-income adults reported that access to dental services is the health access issue of greatest concern.
- While providers in federally funded community health centers are typically able to provide primary care services to almost all consumers regardless of insurance, challenge exist in referring patients for specialty consultation and for expensive technological diagnostic procedures such as CT or MRI scans.
- **Care coordination and integrated services are needed.**
  - Complex patients, including children with special health care needs, the elderly, and others need coordinated care and less fragmentation of their many service needs and providers.
  - Integration of services would be advantageous for many patients, particularly those with mental health and substance abuse issues, as well as those with other co-occurring illnesses.
- **Dental care is top service need for low income adults in Whatcom County.** (Whatcom Prosperity Project, 2011)
- **A number of initiatives and groups are interested in improving access to health care, health care delivery and behavioral services in Whatcom County.** The following lists of assets break out health care access and behavioral health.

**Opportunities for Good Health:** Many opportunities for healthy living exist in Whatcom County, including a wide variety of recreational opportunities and local nutritious foods. Residents and organizations are motivated to enhance these opportunities as well as create communities with strong education, sustainable employment opportunities and positive community connections. The desire to ensure that everyone is able to meet their basic needs appeared consistently across the assessment. Unmet basic needs play a key role in quality of life and health risks and challenges. The County has numerous initiatives to improve housing, safe neighborhoods and streets, and local food access.

- **A safe place to live and adequate food on the table is a constant concern and stress for many.**
  - Security of many Whatcom County residents is threatened by lack of access to affordable and safe housing, housing insecurity, unsafe or unhealthy home environments, expensive housing, and homelessness.

- People sometimes have to choose between paying for housing and paying for food, health care and other basic needs.
- People end up having to live in unsafe neighborhoods or in isolated areas because the housing is more affordable. This limits access to healthy, affordable food, jobs, health care, and social services and supports.
- Having a safe environment to walk, exercise or recreate is important but not equally available to all. Safe neighborhoods, roads, sidewalks, and trails for pedestrians and cyclists vary substantially across the county. Many lower income residents in particular have less access to safe environments, contributing to disparities in health related to exercise and toxic exposures.
- Whatcom County is doing a good job in developing food assistance programs to meet food needs as well as addressing housing needs. (*Whatcom Prosperity Project, 2011*) County-wide, organizations and coalitions are also making notable progress toward the goals of affordable housing, ending homelessness, and safe streets. These include the Whatcom County Coalition for the Homeless, Project Homeless Connect, and the Lummi Cedar Project/Safe Streets.
- **Growing interest county-wide for increased access to local sources of healthy, affordable foods.**
  - Growing demand and interest in supporting local agriculture and accessing local and sustainable food sources is a theme in institutions (schools, hospital) and individuals in Whatcom County.
  - Affordable access to adequate and nutritious food on a daily basis is a significant challenge for many, particularly populations that are low-income, rural or do not have reliable and affordable transportation.
- **Opportunities for a good education and good jobs impact quality of life across generations.**
  - School success and achieving educational milestones such as graduating from high school is harder for Native Americans, Hispanic/Latinos, non-English speaking individuals, and lower income individuals and families. Racial or ethnic discrimination, lower income, language barriers, and disabilities restrict quality educational experiences for many Whatcom County children and youth.
  - Poorer educational attainment means worse employment opportunities and poorer health and well-being for life. This maintains a cycle of poverty for many families. As parents struggle with stable employment and making ends meet, it affects their ability to keep children in school and support their education.

**Connections to People and Place:** Themes of social cohesion, connection and commitment to the community emerged frequently. The opportunity to build connections and social support within groups is valued. Accessing, protecting, and sustaining a healthy environment emerged as a theme important to quality of life and a strong asset of living in Whatcom County. Those



communities who live with disparities have many assets and ideas about addressing problems. These groups are eminently qualified to identify major issues that result in marginalization and disparities, and to be central to building long-term solutions.

- **Many distinct communities live within Whatcom County, each valuing their community and social connectedness.**
  - People are perceived as engaged and active, that Whatcom County is a place “where people contribute to the community.” Neighborhood, community (such as a church or college), or cultural identity can be defining and a source of social support.
  - Citizens are very engaged in community efforts as well, whether donating money, time, or other tangible resources.
  - Minority communities including Native American tribes and Hispanic/Latinos are among those most likely to experience poverty, unemployment, and health disparities. These populations are also the most likely to be disenfranchised from power structures in the community that determine public policy.
  - Developing community consensus around strategies to address disparities will be a challenge in this context. For the tribes there is a long history of suspicion and mistrust that emerges from failure to uphold past commitments and promises. For Hispanic/Latinos, increasing fear and suspicion emerges from failed national immigration policies and local punitive policies for those who lack proper immigration status or citizenship.
- **A healthy environment is valued as crucial to quality of life.**
  - Numerous environmental assets contribute to good health in Whatcom County. The ocean and lakes, mountains, forests, farmland, and islands combine to form a beautiful and unique natural environment. A wide range of outdoor recreational opportunities exist in access to parks, trails, bodies of water, mountains, and other opportunities.
  - Protecting and preserving the natural environment is highly valued. Concerns exist about clean water and clean air. Planning for land use and growth is seen as very important to assure a high quality of life for residents. The City of Bellingham’s *Legacies and Strategic Commitments* has made health and safety a priority including attention to water quality, healthy environment, and public safety.
  - The leaders in local governments have made access to healthy, safe environments a priority including abundant hiking trails and bicycle lanes. Generally missing from the public leadership dialogue, however, are issues of inequitable access to the many recreation opportunities available in Whatcom County and the underlying social and structural factors that influence people’s opportunities to lead healthy lives, such as issues that contribute to why some population groups may be less likely or able to use trails.

- **Communities living with social disparities bring insights and inform potential solutions.**
  - The discussion groups with Hispanic/Latino community members, and mothers facing social and health barriers represent direct voices of those who live with disparities. These groups, results of the Prosperity Project, community work with homeless individuals to share their stories, the Prosperity Action teams, digital stories by Lummi youth all show the considerable strengths and incredible resourcefulness within marginalized groups.
  - While local public officials (mayors, council members) give serious consideration to selected community health concerns such as environmental health, walking trails, or bicycle lanes, almost none of those interviewed included issues of health disparities among priorities for public policy intervention.

## **Appendix 4.1: Community Assets and Initiatives Tables**

1. Young Children and Emerging Families
2. Youth and Young Adult Health
3. Health Care Access and Organization of Delivery System
4. Mental Health and Substance Use Services
5. Food and Nutrition
6. Housing and Built Environment
7. Education and Jobs
8. Community Participation and Voice
9. Environmental Preservation and Protection

## Assets and Initiatives: Young Children and Emerging Families

Organizations/Entity	Focus
<b>Health Care Services</b>	
Mt. Baker Planned Parenthood	Family planning/pregnancy testing/options counseling
Whatcom Pregnancy Center	Pregnancy testing
OB/Pediatric/Family Practice Providers (BOGA, PeaceHealth, Family Care Network, other smaller practices)	Family planning Prenatal care Labor and delivery Postpartum care Pediatric care
Community Health Centers (SeaMar, Interfaith)	Primary Care Behavioral Health Dental Care (pregnancy/early childhood)
Tribal Health Centers (Lummi, Nooksack)	Primary Care
PHSJMC Child Birth Center	Labor and delivery Lactation consultation Special care nursery
Birthing Center	Labor and delivery (midwives)
WCHD Specialty Outreach Clinics ( <i>to be discontinued at WCHD in 2012</i> )	Developmental Pediatrics Child Psychiatry Genetics Rehabilitation Medicine
<b>Maternity Support/Nutrition</b>	
Nooksack Tribe	WIC
Lummi Nation	WIC and Maternity Support Services (First Steps) Teen Parent Program
SeaMar	WIC Maternity Support Services (First Steps)
Whatcom County Health Department	WIC/MSS (First Steps) GRADS Teen Parent Program consultation Breastfeeding promotion Child care health consultation Early Intervention Program-CPS/WorkFirst (DSHS)
Answers Counseling	Maternity Support Services (First Steps) Behavioral Health Services (pregnant women)
Walgreen's (Option Care)	Home nursing care (including medical home visits for new mothers/babies)
LaLeche League	Breastfeeding support
<b>Teen Parent Support</b>	
Bellingham School District: -GRADS Program	Teen parent support/high school completion program
Lummi -Teen Parent Program	
Nooksack SD -Teen Parent Program	
<b>Social Services/Family Support</b>	
DSHS	Medicaid/Pregnancy Medical TANF/Work First Child Protective Services (CPS)
Brigid Collins	Child abuse/neglect prevention and response Foster family support Growing Together/ Safe Mothers-Safe Babies- parenting support/ substance use group Child Advocacy Center-child sexual assault
Catholic Community Services	Behavioral health services (children, families)
Opportunity Council	Housing assistance

<b>Organizations/Entity</b>	<b>Focus</b>
Domestic Violence and Sexual Assault	DV support
Lydia Place	Housing
<b>Early Learning/Child Development</b>	
Opportunity Council (Early Learning and Family Support Services)	Lead Agency for Infant/Toddler Early Intervention (Birth-3) Child care resource and referral Head Start/Early Head Start
Whatcom Center for Early Learning (Birth-3)	Early intervention services for young children
Migrant Head Start	
Lummi Early Head Start	
Child Care Centers/Providers	
School Districts -Bellingham School District -Nooksack Valley School District -Others	Child Find (for identifying developmental delay)
Bellingham Technical College	Parenting/child development Child birth classes
Whatcom Community College	
Western Washington University	
Bellingham Library	Storytelling/early literacy promotion
<b>Non-Profits/Foundations/Funders</b>	
United Way of Whatcom County	Early learning/literacy (2011)
ARC of Whatcom County	Special needs/developmental and physical disabilities
Blue Skies for Children	Enrichment programs
<b>Coalitions/Networks/Advisory Groups</b>	
Whatcom Family and Community Network	Community engagement/Adverse childhood experiences
Whatcom Early Learning Systems Network (Whatcom Early Learning Alliance—new name)	Early childhood/early learning
First Steps Coalition	Maternity support services providers and partners
Oral Health Coalition	Oral health promotion- priority focus on young children and pregnant women (2010-2012)
Whatcom Taking Action for Children with Special Health Needs	Coordination/integration of health and social supports for children and families impacted by special needs
Women and Children's Advisory Group (PHSJMC Hospital)	Hospital maternity/pediatric care practices
Breastfeeding Promotion Task Force (TBD)	<i>In process (2011)</i> - community breastfeeding supports
<b>Numerous others...</b>	

Assets and Initiatives: Youth and Young Adult Health	
Organizations/Entity	Focus
<b>Youth services</b>	
Northwest Youth Services	Youth support/housing
Big Brothers, Big Sisters	Mentoring
Boys and Girls Clubs (Whatcom County)	After school activities/youth development
Amy's Place	Homeless youth
Rebound of Whatcom County	Youth support, parenting, summer camp
Blue Skies for Children	Sponsors enrichment programs/essential needs for homeless, foster and low income children ages 6-15
Lummi Nation	Youth Academy Youth Build Lummi Cedar Project-traditional canoe paddling
Nooksack Tribe	SAMSHA substance use prevention grant (new)
Community to Community Development	Raices Culturales Youth Mentoring/ Empowerment
Youth Sports Leagues (soccer, swimming, other)	
<b>Educational Initiatives</b>	
K-12 Schools/School Districts (multiple)	
Compass-to-Campus (WWU)	College and career promotion for underprivileged children
Communities in Schools	Mentoring
<b>Coalitions/Networks/Advisory Groups</b>	
Whatcom Family and Community Network/ Whatcom Prevention Coalition	-Community Mobilization Against Substance Abuse/substance use prevention (targeted work at high risk schools in Bellingham, Ferndale)
<b>Numerous others...</b>	

## Assets and Initiatives: Health Care Access and Organization of Delivery System

Organizations/Entity	Focus
<b>Health Care Provision</b>	
Community Health Centers -SeaMar -Interfaith	Primary care Dental Behavioral health
Tribal Health Centers -Lummi -Nooksack	Primary care
PeaceHealth St. Joseph Medical Center	Hospital→ Inpatient/outpatient care Charity care/"Bridge Assistance"
Private health care providers (medical/dental) -PeaceHealth Medical Group -Family Care Network -Mount Baker Planned Parenthood -Other primary/specialty providers	Medical care
Bellingham Birth Center	Birthing center/midwives
Naturopathic/chiropractic services (multiple)	
Pharmacies (multiple)	
Physical/occupational/speech/nutrition therapies (multiple)	
Other ancillary services (radiology, etc.)	
<b>Health Support Services</b>	
NW Regional Council/Area Agency on Aging	Services supports for seniors/disabled, including health supports
Walgreen's Option Care	Home health services
Whatcom Hospice	End of life/palliative care
Skilled nursing facilities (multiple)	Extended care
<b>Non-Profits/Foundations/Funders</b>	
St. Luke's Foundation Whatcom Community Foundation St. Joseph Hospital Foundation United Way of Whatcom County	Funding health related initiatives
<b>Coalitions/Networks/Advisory Groups</b>	
Whatcom Alliance for Health Care Access (WAHA)	Health Insurance Connection -SHIBA -Medicaid Enrollment Health Care Reform -Accountable Care Organization development Access Projects: -Project Access (specialty care) -Behavioral Health Access Program -Access to Baby and Child Dentistry (ABCD) -Project Dental Access (new)
Oral Health Coalition	Dental access/oral health initiatives
Whatcom Taking Action for CYSCHN	Access/availability/coordination of services for children with special needs and their families
Lummi Island Health Committee	Access to primary care services/urgent care on the island
<b>Numerous others...</b>	

Assets and Initiatives: Mental Health and Substance Use Services	
Organizations/Entity	Focus
<b>Behavioral Health Providers</b>	
Whatcom County Detox Catholic Community Services Pioneer Advanced Choices Westcoast Counseling Whatcom Counseling and Psychiatric SeaMar Visions Lummi, SeaMar, Interfaith Health Centers Sendan Center (child psychiatry/autism) Private mental health therapists and psychiatrists	Mental and substance use treatment
Suboxone providers	Opiate treatment
Methadone clinic (Arlington, WA)	
Oxford houses	Substance use recovery support
PeaceHealth St. Joseph Medical Center	Inpatient mental health
Employee Assistance Programs -PeaceHealth (Vince Foster) -Others	Employee support (mental health counseling)
<b>Schools/College</b>	
K-12 Schools	Prevention/ Intervention Specialists, Mental Health
WWU	Student Health and Counseling Services Prevention and Wellness Services
<b>Government Services</b>	
WCHD -Human Services (Mental Health and Substance Use, Veterans, DD) -Needle Exchange Program	County behavioral health system leadership/ contracts for service provision Harm reduction for IV drug users
Whatcom County Drug Court	
<b>Initiatives</b>	
Behavioral Health Access Program (WAHA)	Funding and connection services for individuals needing behavioral health treatment/counseling
Taking Action for Children and Youth with Special Health Care Needs	Improving system for children with developmental and behavioral health needs
<b>Coalitions/Networks/Advisory Groups</b>	
Behavioral Health Revenue Advisory Committee (1/10 <sup>th</sup> of 1% tax)	Community oversight on use of tax revenue
Mental Health Advisory Board	
Substance Use Advisory Board	
Substance Use Providers Group	
Lummi Drug Task Force	
National Alliance on Mental Illness (Whatcom Chapter)	Support for individuals and families impacted by mental illness
Whatcom Prevention Coalition (WFCN)	Drug/substance use prevention Gang prevention
Pain Management/ Opiate Task Force (WCMS)	Address pain medication prescription practices
<b>Numerous others...</b>	



Assets and Initiatives: Food and Nutrition	
Organizations/Entity	Focus
<b>Food and Nutrition Assistance</b>	
Basic Food Program (SNAP-Ed)-DSHS	Food stamps
WIC Programs (SeaMar, Lummi, Nooksack, WCHD)	Low income pregnant/postpartum breastfeeding and children 0-5 years -Nutrition education -Supplemental food vouchers -Farmers market vouchers
NW Regional Council	Senior meals
Food Banks (Bellingham, Ferndale, Lynden, other)	Food assistance (low income)
Free and Reduced Lunch (School districts-all)	Free or reduced priced meals (low income)
FoodSense (WSU Extension)	Nutrition education in schools
<b>Cultural Foods</b>	
Community to Community Development/Comunidad a Comunidad (C2C)	Hispanic/Farmworker Community Outreach Food Sovereignty Cocinos Santos (healthy kitchens)
Northwest Indian College (NWIC)	Traditional foods
<b>Food Production/Distribution/Service</b>	
Farms and fisheries	Berries, dairy, seafood, shellfish, other
Local food production (Erin's Baked Goods, Chuckanut Cheesecakes, Mallard Ice Cream, etc.)	
Farmer's markets	
Grocery stores/food coops (Community Food Co-ops, Hagen, Markets LLC, Safeway, IGA, others)	
Restaurants/food service establishments	
Sustainable Connections	Local foods, sustainable economy
<b>Healthy Foods Promotion</b>	
Community Gardens (multiple)	Community gardening/fresh foods
School Gardens (multiple)	School gardening/education
Farm-to-School Initiatives (F2S)	Fresh local foods in school meals
Community Supported Agriculture (CSA)	
<b>Food Safety</b>	
WCHD Food Program	Food service inspections Beach/shellfish monitoring
<b>Initiatives</b>	
WSU Cooperative Extension	Community Food Assessment
<b>Coalitions/Networks/Groups</b>	
Whatcom Food System Network (new)	Access to safe and healthy foods Food justice (food and farmworkers) Economic development (local agriculture/food business) Sustainability/environmental protection
ACHIEVE Advisory Group/Community Health Action and Response Team (CHART)	Nutrition and physical activity
Sustainable Whatcom/Convergence Partnership (WCF)	Funding for nutrition and other projects

## Assets and Initiatives: Housing and Built-Environment

Organizations/Entity	Focus
<b>Housing/Homelessness Support</b>	
WCHD (Human Services)	Housing Program Point-in-Time Homeless Count Veterans Housing Support
Opportunity Council	Homeless Service Center
Bellingham Housing Authority	Low income housing
Sterling Meadows	Migrant worker housing
<b>Healthy Homes</b>	
NW Clean Air Agency	Indoor air
Opportunity Council	Healthy Homes/ weatherization
<b>Home Construction</b>	
Habitat for Humanity	Volunteer/building affordable homes
Lummi Youth Build	Youth development/vocational skill building
<b>Community Planning/Transportation</b>	
Whatcom County	Planning & Development Services Public Works department Parks and Recreation Planning Commission
City of Bellingham	Community Development/HUD Planning Transportation Options Parks and Recreation
Smaller Cities	Planning departments Parks and recreation
Whatcom Council of Governments (COG)	Regional transportation planning
Whatcom Transit Authority	Bus/mass transit
FutureWise Whatcom	Local chapter of statewide land-use advocacy organization
<b>Special Community Initiatives (Housing and Community Planning)</b>	
City Gate Apartments-York neighborhood, Bellingham	Offender Re-entry housing and case management
Project Homeless Connect	Health care and social services for homeless (annual event in March)
Lummi Safe Streets	Safe lighted trails/paths for walking/biking (Haxton Way, Lummi Reservation)
Safe Routes to School	Walking/biking routes for schools, engineering improvements
Complete Streets Planning	"Pedestrian-first" planning
Smart Trips/Commute Trip Reduction	Bus/bike/ride-share promotion
Whatcom Legacy Project	Long-range county planning
<b>Coalitions/Networks/Advisory Groups</b>	
Coalition to End Homelessness	Homeless housing
ACHIEVE Community Health Action and Response Team (CHART)	Community planning (safe/active community environments) Tobacco free environments (homes, parks, public venues)
Community Transportation Advisory Group	Transportation planning (County citizens and technical advisors)
Whatcom County Bike/Ped Citizens Advisory Group	Walking/biking (county)
Bellingham Bike/Ped Steering Committee	Walking/biking (city)

## Assets and Initiatives: Education and Jobs

Organizations/Entity	Focus
<b>Early Learning</b>	
Opportunity Council ELAFS	Early learning/early intervention for special needs
Child Care/Preschools	School readiness
Whatcom Early Learning Systems Network (Whatcom Early Learning Alliance—new name)	Early learning/early childhood
<b>School/Educational Supports</b>	
School Districts	Pre-K-12
Northwest Educational Service District 189	
Parent Teacher Student Associations (PTSA)	
School Boards and Parent Advisory Groups	
<b>College and Career</b>	
Northwest Indian College	Higher ed.-native culture
Bellingham Technical College	Higher ed.-technical/vocational training
Whatcom Community College	Higher ed.
Western Washington University	Higher ed.
<b>Employment and Economic Development</b>	
Worksource	Job training/connection services
NW Economic Council	Economic development
Chambers of Commerce	
<b>Nonprofits/Foundations</b>	
Bellingham School District Foundation	Support for schools/special initiatives
Communities in Schools	Mentoring
<b>Initiatives</b>	
WWU Compass-to-Campus Program	Pipeline to college/career for disadvantaged children
AVID Program (Shuksan MS)	Academic success for high risk populations
GRADS Teen Parent Program (Squalicum HS)	HS graduation for teen parents
Citizens for a Working Whatcom	Citizen group/jobs
<b>Numerous others...</b>	

## Assets and Initiatives: Community Voice and Inclusion

Organizations/Entity	Focus
<b>Organizations</b>	
ARC of Whatcom County	Developmental disabilities/special needs
Community to Community Development/Comunidad a Comunidad (C2C)	Advocacy for women/under-represented people/Hispanic-Latino/farmworkers
Northwest Indian Health Board	Native health-related initiatives
Northwest Indian College (NWIC)	American Indian-culture/education
Lummi Nation/Nooksack Tribe	Native culture
SeaMar Community Health Center	Hispanic/multi-cultural health care
WWU Center for Cross-Cultural Research	Culture related research and inclusion of cultural content in higher education
<b>Initiatives (examples)</b>	
Health Equity Team (WCHD)	Cultural competency/health equity
Communities of Opportunity (CO) Communication Project (WCHD)	Public health communication with Hispanic and Russian/Slavic communities
Hispanic Family Outreach (Bellingham Public Schools)	Hispanic family engagement/academic success
<b>Coalitions/Networks/Groups</b>	
Whatcom Family and Community Network	Community engagement/community asset-building
Whatcom Taking Action for Children and Youth with Special Health Care Needs	Inclusion-children/youth with special needs and their families
<b>Numerous others...</b>	

Assets and Initiatives: Environmental Preservation and Protection	
Organizations/Entity	Focus
Governmental entities	
Whatcom County	Environmental health, planning, public works
City of Bellingham/Small Cities	Planning/public works
WA State Dept. of Ecology	Ecology (Puget Sound/Bellingham Bay, rivers)
WA State Dept. of Health	Environmental health
US Environmental Protection Agency	Swift Creek/Sumas asbestos
Water Quality	
Whatcom Marine Resources Committee/NW Straits Marine Conservation Initiative (Whatcom County)	Marine conservation, economics, recreation, science, tribes, citizens
Lake Whatcom Management Program (Bellingham/County)	Local government/Lake Whatcom water quality improvement/protection
Lake Samish Association	Homeowners association/Lake Samish water quality
Air Quality	
Northwest Clean Air Agency	Compliance with federal, state and local air quality regulations in Island, Skagit and Whatcom Counties
Land Use/Sustainability	
Re Sources for Sustainable Communities	Recycling, education, advocacy, and conservation of natural resources
Sustainable Connections	Sustainable business/local business, green building/smart growth, food/farming, energy efficiency
FutureWise (Whatcom)	Statewide land use advocacy
Conservation/Education	
North Cascades Institute	Non-profit/environmental education
Nooksack Salmon Enhancement Association	Restoring sustainable wild salmon runs/habitat
Coalitions/Networks/Groups	
Birch Bay Waterfront Group	Citizen's group/Birch Bay shoreline restoration/enhancement
People for Lake Whatcom	Citizen's group/Lake Whatcom water quality
People for Lake Padden	Citizen's group/Lake Padden water quality
<b>Numerous others...</b>	

## **Appendix 4.2: Key Informant Interviews, Discussions, Events**

- NW Indian Health Board – Don Vesper, Gloria Point
- Prosperity Project – Greg Winters
- WWU Student Health – Emily Gibson, MD, Medical Director
- SeaMar – Ione Adams, MD, Medical Director
- Interfaith – Gib Clarke, Director
- Nooksack Tribe – Frank James, MD
- WAHA – Larry Thompson, Executive Director
- Whatcom County Health Department, Astrid Newell, MD
- Mental Health Advisory Board – (Michael Massanari, MD is member)
- Pain Management and Opiate Dependence Task Force – Vince Foster, PhD
- Community to Community Development– Erin Thompson, Director of Food Sovereignty Programs
- City of Bellingham, David Webster
- United Way, Peter Theisen
- Whatcom County Human Services, Anne Deacon
- Whatcom County Housing Programs, Gail de Hoog
- Discussion with Substance Abuse Treatment Providers
- Discussion with Hispanic/Latino community members
- Discussions with Pregnant/Parenting mothers
- Adverse Childhood Experiences training event (Whatcom Family and Community Network)
- Camden Report presentation (PHSJMC)

**Section Five:**

# **Forces of Change Assessment**

Whatcom County  
Community Health  
Assessment - 2011

## Overview:

In this component of the assessment, forces of change that influence the health and quality of life of the community and the local health system are identified. Potential opportunities and threats arising out of these forces are also considered.

## Methods:

In April 2011, the Community Leadership Group held a brainstorming session during which participants developed a list of forces of change, such as events, trends and factors in various categories. These categories included social, political, economic, ethical, medical, scientific, geographic, environmental, legal, and technological. Participants then grouped the forces and attempted to identify potential threats and opportunities for each force. The Core Group then reviewed these findings, added further information, interpretation, and synthesis. A synthesis of the forces of change is provided below. Tables providing a complete listing of identified forces and possible impacts follow.

## Synthesis of Findings:

**Synopsis:** In Whatcom County, a number of forces and dynamics are at work influencing community health and well-being. Particularly relevant forces include the existence of distinct communities within the larger community, changing demographics, transformation of health and social service systems, dynamics related to economic development/growth and environmental preservation, impacts of the economic recession and persistent poverty, and a tension between individualism and a communal spirit in Whatcom County.

### 1. Communities within Community

Whatcom County is comprised of a number of distinct communities, each with unique history, identity, culture and values.

- These communities include the City of Bellingham, six incorporated cities (Blaine, Everson, Ferndale, Lynden, Nooksack, and Sumas), and “the County” (unincorporated Whatcom County), as well as the Lummi Nation and Nooksack Indian Tribe, the Hispanic community, the Russian-speaking community, and Western Washington University, among others.
- When identifying forces of change we must consider who are “we” and “where is home”? The answer to these questions shape how we see, experience and interpret the forces of change.
- This rich social, economic and cultural mix carries both opportunities (for economic strength and cultural diversity) and threats of inequitable distribution of resources, uneven access to services, unequal power and political representation in policy and decision-making.



## **2. Changing Demographics**

There is an increase in the population of older adults, increasing ethnic and racial diversity, and an overall continuing trend of population growth in Whatcom County.

- This provides new opportunities for increased financial and intellectual resources and more perspectives for problem-solving.
- This trend also places increasing demands on health, social service and educational resources to adapt to the changing needs of the populations that they serve.

## **3. Transformation of Health and Social Services Systems**

There are significant changes in the way in which health care entities, social service providers, and schools are organizing, funding, and delivering services.

- Funding streams are shifting, with a growing role of non-profit and philanthropic organizations shoring up the diminished public funding support for health and social services.
- Information exchange and the proliferation of personal communication devices are changing the way that services are provided, and will be provided.
- There is an awakening to consumer oriented services or “patient centered” care.
- Health care reform is happening, and will happen over a five to ten year period. The systems we have now are changing, and are likely going to become more consolidated (i.e. more employed physicians) and clinically integrated across organizational boundaries.
- Threats of system delivery transformation are that changes can leave some organizations and individuals disconnected or “fallen through the cracks” as systems go through adjustments and evaluation/improvement cycles. Learning to coordinate and negotiate new systems takes time and energy for all stakeholders. Decreasing resources can simply mean less services provided, particularly for most in need. Patient/consumer and provider satisfaction can possibly diminish if changes are unwelcome or unfamiliar, regardless of outcomes. Potentially more volatile funding streams and organizational instability exist.

## **4. Dynamic related to economic development and growth and environmental preservation and protection**

Hot button issues in Whatcom County often relate to the interface of economic development and growth and the perceived or real impacts of development on the environment.

- The Gateway Pacific Terminal proposal to build a large shipping facility in north Whatcom County is an example of a project that could potentially bring high-wage jobs to Whatcom County as well as more trains and coal. The proposal has engendered vocal support as well as vehement opposition often couched as “jobs vs. environment”. Real estate development around Lake Whatcom, the County’s primary source of drinking water, creates tension between those whose livelihood depends on development and those who are concerned about protecting and improving water quality. Food

production and agricultural practices around pesticides, irrigation, equipment and workers is another important example in Whatcom County. A robust sustainable economy brings job security and financial stability, with opportunities for large and small businesses, entrepreneurs, and workers. The local natural environment provides essential human needs, including air, water, and food. The Whatcom County environment is also greatly valued for its beauty, outdoor recreation opportunities, and attraction to new residents and tourists.

- This dynamic compels active and broad civic involvement in public policy, and provides the opportunity for long-range planning and setting priorities about land use and economic development.
- The threat of this dynamic is that stakeholders may begin to believe the extremes of their own perspectives, forgetting how the choice is not between the two ends of the spectrum as much as the choice is about what kind of balance we are going to strike.

## **5. Persistent poverty threatens community stability**

There are portions of the Whatcom County population, including many children, living in persistent poverty.

- Poverty imposes many threats on the health and well-being of both the individual and the community. Poverty makes the negative impacts of larger economic forces such as recession or shifts to service sector jobs even more devastating. Cycles of poverty and unemployment can affect educational attainment, family stability and functioning, access to health care and health insurance, and mental health. The effects of growing up poor include being more likely to have low earnings as an adult and having poor health later in life. The impact of lower workforce productivity and higher healthcare expenditures due to illness and early mortality all threaten the collective quality of life for our community.
- There are opportunities to make a difference in many people's lives, particularly children's, by working to reduce the effects of poverty and create a more stable financial foundation for all members of the Whatcom County population.

## **6. Tension between individualism and a communal spirit in Whatcom County**

There seems to be two counter forces that one can see as being each side of the public face coin: the pioneer spirit of individualism and a community spirit of belonging.

- This community embraces individualism in many political and social behaviors, with notable portions of the population making choices such as preventing vaccination of their children or voting against fluoride in the public water supply. This value crosses traditional political boundaries. For example, the sizeable home schooling community in Whatcom County includes politically conservative families with strong religious beliefs as well as politically liberal families with strong anti-government beliefs. Whatcom County also supports a communal spirit in many events and coalitions. Diverse organizations build collaborations and task forces across sectors. One example is the Whatcom County Coalition to End Homelessness, a group with a 10-year plan to end homelessness in Whatcom County and reports significant decreases in homelessness since they implemented their plan (despite the current economic lows).

- The opportunities of channeling these collective strengths of the community can make for strong and effective action and pooling of resources. The time and effort it can take to work collectively with divergent views and organizational goals can potentially hinder efficiency and ability to act decisively and respond quickly.

**Summary of Community Leadership Group  
Forces of Change Brainstorming Session  
(April 2011)**

**Social**

<b>Forces</b>	<b>Threats Posed</b>	<b>Opportunities Created</b>
<ul style="list-style-type: none"> <li>• Increased poverty</li> <li>• Joblessness</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of employment opportunities</li> <li>• Increased demands on health and social resources</li> </ul>	
<ul style="list-style-type: none"> <li>• Increased older population               <ul style="list-style-type: none"> <li>○ Death and dying as cultural issue</li> <li>○ Retirement destination</li> </ul> </li> <li>• Population growth               <ul style="list-style-type: none"> <li>○ County as a whole</li> <li>○ Certain places</li> <li>○ Changing demographics</li> <li>○ Increasing diversity (still majority Caucasian)</li> </ul> </li> <li>• Growing number immigrant families               <ul style="list-style-type: none"> <li>○ Increased Hispanic population</li> </ul> </li> <li>• College/University large proportion of population</li> </ul>	<ul style="list-style-type: none"> <li>• Increased demands on health and social resources</li> <li>• Lack of alignment of resources and services with demographic shifts</li> <li>• Denial of forces/shift</li> <li>• Isolation of populations</li> </ul>	<ul style="list-style-type: none"> <li>• Influx of intellectual and financial resources</li> <li>• Embracing the change and new opportunities</li> <li>• Special population based/targeted resources</li> <li>• More voices/perspectives for solutions</li> </ul>
<ul style="list-style-type: none"> <li>• Increased pressure on schools to serve more functions</li> <li>• Shift/increase in social role of schools at the time of decreased resources</li> <li>• Lack of family support</li> <li>• Increased stress/decreased resources for education system</li> </ul>	<ul style="list-style-type: none"> <li>• Increased behavior/substance abuse problems</li> <li>• Adverse effect on educational process</li> <li>• Turns schools into political battleground</li> <li>• Educational system becomes outmoded</li> </ul>	<ul style="list-style-type: none"> <li>• School = safe place</li> <li>• Nondiscriminatory place for all kids</li> <li>• Where kids in need are and can be reached</li> <li>• Have the place to partner with service providers</li> </ul>
Increased drug use (IV/Rx) and increased drug trade		
County / tribe relationship (Lummi Nation is sovereign nation)		
Large number of Vista/AmeriCorps volunteers		

**Legal/Law Enforcement**

<b>Forces</b>	<b>Threats Posed</b>	<b>Opportunities Created</b>
<ul style="list-style-type: none"> <li>• Old jail</li> <li>• New jail proposal</li> <li>• Closing prisons and early releases</li> <li>• Increased cost of criminal justice system</li> </ul>		
Impact of mental illness substance abuse		
Increased immigration		

## Summary of Community Leadership Group Forces of Change Brainstorming Session (continued)

### Geographic

Forces	Threats Posed	Opportunities Created
<ul style="list-style-type: none"> <li>• Canadian border                             <ul style="list-style-type: none"> <li>○ Growth of militarization at border</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Increased drug trade</li> <li>• Use of profiling at border/Hispanic population</li> <li>• Increased deportation impact on families</li> <li>• Increase of criminals arrested in Whatcom County</li> <li>• Increased cost of law enforcement</li> </ul>	<ul style="list-style-type: none"> <li>• Increased tax revenue</li> <li>• Increased opportunities for collaboration with Canada</li> <li>• Cultural/quality of life opportunities related to proximity to Vancouver</li> </ul>
<ul style="list-style-type: none"> <li>• Rural/urban split of the county</li> </ul>	<ul style="list-style-type: none"> <li>• Inequitable distribution of resources</li> </ul>	<ul style="list-style-type: none"> <li>• Diverse culture</li> <li>• Markets for agriculture in nearby population centers</li> </ul>
County covers large land mass; geographically distinct		

### Economic

Forces	Threats Posed	Opportunities Created
<ul style="list-style-type: none"> <li>• Ongoing budget challenges (crisis) in all sectors                             <ul style="list-style-type: none"> <li>○ State, federal, city</li> </ul> </li> <li>• Shrinking and threatened public and private funding</li> </ul>	<ul style="list-style-type: none"> <li>• Dwindling safety net resources (everywhere)</li> <li>• Government budget issues impacting public services</li> <li>• Decreased funding for behavioral health programs</li> </ul>	<ul style="list-style-type: none"> <li>• Think about new ways to collaborate/share resources</li> </ul>
<ul style="list-style-type: none"> <li>• Capitalism</li> <li>• Recession 2009--?</li> <li>• Recovery</li> </ul>	<ul style="list-style-type: none"> <li>• Increased unemployment</li> <li>• Increase in employed but without health insurance</li> <li>• Stagnant multi-family residential development</li> </ul>	<ul style="list-style-type: none"> <li>• Rethink safety net</li> </ul>
<ul style="list-style-type: none"> <li>• New EDC direction</li> <li>• Gateway terminal (coal trains)</li> </ul>	<ul style="list-style-type: none"> <li>• Income inequality</li> <li>• Coal dust</li> <li>• Noise</li> <li>• Accidents</li> <li>• Contributing to environmental problems</li> </ul>	<ul style="list-style-type: none"> <li>• Jobs/employment</li> <li>• Define values/stand up for what is right</li> <li>• Opportunity to conduct Health Impact Assessment</li> </ul>
<ul style="list-style-type: none"> <li>• Waterfront development                             <ul style="list-style-type: none"> <li>○ Emphasis on local economy</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Continual bickering</li> <li>• Exclusive, high-end                             <ul style="list-style-type: none"> <li>○ Lack of access for everyone</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Jobs</li> <li>• Recreation/physical activity</li> <li>• Environmental clean-up</li> <li>• Social gathering</li> </ul>
Shift from an economy based around natural resources to an economy based on services		
Absence of long-term land use plan (also Environmental)		

## Summary of Community Leadership Group Forces of Change Brainstorming Session (continued)

### Medical

Forces	Threats Posed	Opportunities Created
<ul style="list-style-type: none"> <li>• Shrinking services/Closures                             <ul style="list-style-type: none"> <li>○ Mother Baby Center</li> <li>○ Chemical Dependency Inpatient Unit (St. Joseph's)</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Unmet need</li> </ul>	<ul style="list-style-type: none"> <li>• Reconfigure health care system to meet needs in a new way</li> </ul>
<ul style="list-style-type: none"> <li>• Emerging models of care                             <ul style="list-style-type: none"> <li>○ Focus on population based medicine and prevention</li> <li>○ Home-scale technology can empower patients</li> <li>○ Clinical integration/medical home coordinator &amp; HIE</li> <li>○ Increased hospice and palliative care</li> <li>○ Patient/consumer centered care</li> <li>○ Accountable Care Organization (ACO) development</li> <li>○ National trends of consolidation</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Timing for success</li> <li>• Focus on profit over quality</li> <li>• Increase number of competing players</li> <li>• Disintermediation of health care industry; e.g., home as new doctor's office (threat and opportunity)</li> <li>• Model flaw of ACO: should be focused on wellness &amp; prevention</li> </ul>	<ul style="list-style-type: none"> <li>• Redesign end of life care</li> <li>• Decrease costs</li> <li>• Increase access</li> <li>• Increase quality</li> <li>• Assure care for underserved population</li> <li>• Disintermediation of health care industry; e.g., home as new doctor's office (threat and opportunity)</li> </ul>
<ul style="list-style-type: none"> <li>• Increased costs                             <ul style="list-style-type: none"> <li>○ Need to align costs with reduced reimbursements</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Access to medical care                             <ul style="list-style-type: none"> <li>○ East county</li> </ul> </li> </ul>	
<ul style="list-style-type: none"> <li>• Consolidation of services/strengthening of PeaceHealth System (purchase of Madrona, North Cascade Cardiology)</li> </ul>	<ul style="list-style-type: none"> <li>• Current equilibrium disrupted</li> <li>• Physician/provider satisfaction (threat and opportunity)</li> <li>• Patient satisfaction (threat and opportunity)</li> <li>• Changed practice environment (threat and opportunity)</li> <li>• Lack of competition</li> </ul>	<ul style="list-style-type: none"> <li>• Physician/provider satisfaction (threat and opportunity)</li> <li>• Patient satisfaction (threat and opportunity)</li> <li>• Changed practice environment (threat and opportunity)</li> </ul>
High collaboration between Public Health and Medical/Hospital		
Health Care Reform		
Top-notch medical care and professionals		

## Summary of Community Leadership Group Forces of Change Brainstorming Session (continued)

### Technological

Forces
Increased use of social media
Reliance on sound-bite level communication for information
Digital divide limiting access to information

### Political

Forces	Threats Posed	Opportunities Created
<ul style="list-style-type: none"> <li>• Health care reform (legislation) or not?</li> </ul>	<ul style="list-style-type: none"> <li>• If dismantled                             <ul style="list-style-type: none"> <li>○ Death spiral</li> <li>○ No reform for a generation</li> </ul> </li> </ul>	
<p style="text-align: center;">Reduced funding</p> <p style="text-align: center;">Centralization at state and federal</p> <p style="text-align: center;">Reduced capacity/ civic engagement</p>	<ul style="list-style-type: none"> <li>• Lack of higher calling of a vision</li> </ul>	
<ul style="list-style-type: none"> <li>• Polarizing forces</li> <li>• City of Bellingham/County governments</li> </ul>	<ul style="list-style-type: none"> <li>• Pending elections</li> <li>• City and county governments not always working together</li> </ul>	
<ul style="list-style-type: none"> <li>• Sales and property taxes fund services</li> <li>• No income tax (regressive tax-greater burden on poor than rich; impacted by economy)</li> </ul>		
Public Health Board is County Council		
State legislation affecting immigrants		

### Environmental

Forces
<ul style="list-style-type: none"> <li>• Impacts of development                             <ul style="list-style-type: none"> <li>○ Water quality (Lake Whatcom) – deteriorating water quality of primary source of drinking water</li> <li>○ Agricultural impact on air, water, and environment</li> <li>○ Gateway terminal</li> <li>○ Water resource allocations</li> <li>○ Absence of long-term land use plan (also Economic)</li> </ul> </li> </ul>
Swift Creek (asbestos)
Live in beautiful and rich landscape; attracts people
Previous sites of industry leave environmental legacy
Climate change
Non-fluoridated water
Energy costs

## Summary of Community Leadership Group Forces of Change Brainstorming Session (continued)

### Scientific

Forces	Threats Posed	Opportunities Created
<ul style="list-style-type: none"> <li>• Scientific evidence of early brain development</li> </ul>	<ul style="list-style-type: none"> <li>• Adverse childhood experiences</li> </ul>	<ul style="list-style-type: none"> <li>• Use evidence to promote effective interventions/allocate resources</li> </ul>
<ul style="list-style-type: none"> <li>• Vaccine hesitancy (worry about autism)</li> </ul>	<ul style="list-style-type: none"> <li>• Disease outbreaks</li> </ul>	<ul style="list-style-type: none"> <li>• Health education</li> </ul>
Increased diagnoses of autism		
Research funding prioritizes profitable enterprises		
Using reliable data to identify health issues		
Researchers forced into studying what people will fund (in a box...)		
Lots of new, good research on interventions		

### Ethical

Forces	Threats Posed	Opportunities Created
<ul style="list-style-type: none"> <li>• Increased gap between “haves” and “have nots”                             <ul style="list-style-type: none"> <li>○ Greater attention on individual welfare than community welfare</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Unstable society</li> <li>• Reinforcing cycle</li> <li>• Loss of safety net</li> </ul>	
<ul style="list-style-type: none"> <li>• Shared value of care and compassion (everyone deserves basic needs met)</li> </ul>	<ul style="list-style-type: none"> <li>• Limits with volunteerism</li> <li>• Burn-out</li> </ul>	<ul style="list-style-type: none"> <li>• Harnessing volunteerism/philanthropy</li> </ul>
<ul style="list-style-type: none"> <li>• Scarcity of resources (e.g., health care)</li> </ul>		<ul style="list-style-type: none"> <li>• Opportunity to identify what is important/ how do we create system that meets basic needs</li> <li>• Social justice</li> </ul>
Reluctance to address highly charged, yet important, issues in a proactive, even-handed manner		

### Other

Forces
<ul style="list-style-type: none"> <li>• Community collaboration                             <ul style="list-style-type: none"> <li>○ Collaborations among organizations and sectors</li> </ul> </li> <li>• Community work to provide access to fresh, local food                             <ul style="list-style-type: none"> <li>○ Interest in food/farming</li> </ul> </li> </ul>
Committed, passionate individuals driving community initiatives (e.g., Vanessa Cooper with Northwest Indian College)
Fear-based popular media
Returning veterans with complex needs
Emerging diseases



**Section Six:**

# **Public Health System Capacity Assessment**

Whatcom County  
Community Health  
Assessment - 2011

## **Overview:**

This section reviews the local public health system which includes the local public health authority (health jurisdiction) and numerous community partners. The assessment attempts to address questions of organizational structure, activities, competencies, and capacities of the system.

The local public health system has the responsibility to protect, promote and improve the health of residents and visitors in a community. A strong public health system is critical to address current and emerging health issues, including public health emergencies—such as disease outbreaks, natural disasters, bioterrorism, and mass casualty events. The public health system also works proactively to improve health for all by supporting population-level prevention and health promotion efforts.

## **Methods:**

The Whatcom County Health Department staff conducted an internal review of the organization and programs, completed an inventory of community partners, and then used the Ten Essential Services of Public Health framework to review Health Department and community assets and challenges. Discussion with the Public Health Advisory Board on April 22, 2011 was used to solicit input for the assessment. Results from a WA State Public Health Standards review process (May 2011) were used to assess Health Department operations and recommendations for improvement. Staff then completed the following sections:

- **Local Public Health System Components:** *Health Department, Boards/Coalitions, and Community Partners*
- **Local Health Jurisdiction Capacity:** *Administration/Management, Professional and Support Staff, Funding/Financial Stability*
- **Core Functions and Essential Services of Health:** *Health Department and Community*
- **Public Health Performance Standards:** *Strengths and Opportunities for Improvement*

## **Synopsis of Findings:**

Overall, Whatcom County has a strong, well-connected public health system. Particular strengths of the system include a collaborative Unified Incident Command structure for emergencies. Opportunities exist to enhance the effectiveness of the system, though resource limitations make this challenging.

The Whatcom County Health Department (WCHD) has close working relationships (technical assistance and mutual support) with health, social service, and other government sectors. However, relationships of the health department with some sectors, such as businesses, largely revolve around regulatory functions (e.g., food service inspections). There may be additional opportunities to expand partnerships and connections with education, business, media, community advocacy, faith-based groups and other groups to address public health issues. There may also be opportunities to increase involvement and engagement of the Health Board and other boards and coalitions in proactive public health efforts.

As with other service systems, the public health system has experienced significant impacts due to the economic recession. The WCHD budget has decreased leading to program staff reductions. Additional reductions are anticipated in 2012. Progress on key operational improvement areas such as communications, use and support of information technology, data collection and epidemiology is limited by lack of staffing capacity, and will likely continue to be limited without additional resources

In addition to WCHD impacts, the overall public health system has experienced significant reductions in the availability of health services and social supports during the past several years. This trend is ongoing.

## **Local Public Health System Components:**

The local public health system includes the local health jurisdiction (Whatcom County Health Department), the Health Board, the Public Health Advisory Board, multiple additional advisory boards and community groups, as well as many community partners and service providers in health care, social services, education, nonprofit, business, advocacy, and other sectors.

### **Whatcom County Health Department (WCHD)**

WCHD is a department within local county government overseen by an elected County Executive and an elected County Council. The Health Department:

- Serves as the lead agency for public health and human services in Whatcom County.
- Has jurisdiction for public health matters over the entire county, including City of Bellingham and small cities. Does not have jurisdiction over activities occurring on tribal lands, Lummi and Nooksack reservations.
- Is responsible for protecting and promoting the health of county residents and visitors. Primarily focuses on population health rather than individual health.
- Specific mandated functions relate to controlling communicable disease (infections, food borne illness) and environmental health threats, as well as overseeing public resources for mental health, substance use, developmental disability, veterans, and housing services.
- Plays a leadership role in responding to community health emergencies (e.g., pandemic flu) and emerging diseases. Also serves in a pro-active role addressing broad community health issues, including maternal and child health, chronic disease, and health disparities.

### **Health Board**

The Whatcom County Health Board includes the seven elected County Council members, representing districts throughout the county. The Health Board:

- Is responsible for developing and adopting health related policy, responding to community health needs, and prioritizing resources.
- Meets on a quarterly basis. A smaller group (3 members) occasionally meets as a “Health Committee”. One County Council member is officially appointed to the Public Health Advisory Board.
- Currently (2011), no council members have significant health background. WCHD typically creates the Health Board agenda.

### **Public Health Advisory Board**

The Public Health Advisory Board (PHAB) is a group of community representatives from specific sectors (health care, education, environment, business, tribes, etc.) that are appointed by the County Executive to serve as advisors for the Health Board and the WCHD on health policy and program matters.

- Meets every one to two months.
- Currently, undergoing modification of meeting format to better utilize expertise and guidance of advisory board members.

### **Other Advisory Boards**

Several programs within the Health Department (primarily Human Services programs) have advisory boards made up of community representatives appointed by the County Executive to provide advice for specific topics or programmatic areas. These include:

- *Mental Health and Substance Use Advisory Boards*
- *Behavioral Health Revenue Advisory Committee (1/10<sup>th</sup> of 1% mental health sales tax)*
- *Developmental Disabilities Advisory Board*

### **Project Specific Community Groups**

Specific health department-sponsored projects and initiatives often rely on ad hoc community advisory groups or other teams of community representatives from diverse sectors. Examples include:

- *Community Health Assessment and Improvement Plan Project- Community Leadership Group*
- *ACHIEVE Chronic Disease Prevention Initiative- Community Health Action and Response Team (CHART)*
- *Whatcom Taking Action for Children with Special Health Care Needs- Leadership Team, Development Team, Coordinating Council, Action Groups*

### **Community Boards/Coalitions**

Staff from the WCHD sit on (and often serve in leadership roles for) a number of local community boards and coalitions that address public health issues including:

- *Whatcom Alliance for Health Care Access (WAHA)*
- *Whatcom Coalition to End Homelessness*
- *Whatcom Family and Community Network (WFCN)-Public health and safety network*
- *Domestic Violence and Sexual Assault Services Commission*
- *Whatcom County Medical Society*
- *Community Transportation Advisory Group-technical advisor role*
- *Whatcom County Early Learning Systems Network*
- *First Steps Coalition-Maternity support services*

### **State and Regional Partners/Groups**

WCHD staff also coordinate with regional and state public health partners on public health issues and participate in a variety of state and regional committees and groups.

- *Washington State Department of Health (DOH)*
- *Washington State Department of Ecology (DOE)*
- *Washington State Association of Local Public Health Officials (WSALPHO)*
- *Washington State Public Health Association (WSPHA)*
- *North Sound Mental Health Administration (NSMHA)*

### **Unified Incident Command (for emergency response)**

WCHD and other departments within county government actively participate in a unified incident command/emergency response system for the county. Key partners include:

- *Whatcom County (Sheriff-Division of Emergency Management, Public Works, IT, Finance, other)*
- *City of Bellingham (Fire, Police, IT)*
- *PeaceHealth St. Joseph Medical Center*
- *School districts*
- *Whatcom Transit Authority*
- *Port of Bellingham*
- *Western Washington University*
- *Whatcom Community College*
- *Lummi Nation*
- *Nooksack Tribe*
- *Others*

## Community Partners

The public health system relies on contributions from multiple community entities to ensure the health and wellbeing of the community. Sectors and partners include (but are not limited to):

Sectors	Local Partners
<b>Health Care</b>	<ul style="list-style-type: none"> <li>● <u>Hospital</u>: <i>PeaceHealth St Joseph Medical Center</i></li> <li>● <u>Community Health Centers</u>: <i>Interfaith, SeaMar</i></li> <li>● <u>Tribal Health Centers</u>: <i>Lummi, Nooksack</i></li> <li>● <u>Student Health Center</u>: <i>Western Washington University</i></li> <li>● <u>Private Health Care Providers</u>: <i>Family Care Network, Peace Health Medical Group, Mt. Baker Planned Parenthood, smaller providers</i></li> <li>● <u>Specialty Centers</u>: <i>Bellingham Surgery Center, Pacific Rim Surgery Center, smaller specialty specific centers (urology, ENT, ophthalmology), PeaceHealth St. Joseph Cancer Center, PeaceHealth Center for Senior Health, others</i></li> <li>● <u>Naturopathic/Chiropractic Practitioners</u></li> <li>● <u>Ancillary Services</u>: <i>Pharmacy, Home Health, Laboratory, Radiology, etc.</i></li> </ul>
<b>Government</b>	<ul style="list-style-type: none"> <li>● <u>State</u>: <i>Dept. of Health, Dept. of Social and Health Services, Dept. of Early Learning, Dept. of Ecology, Dept. of Behavioral Health and Recovery</i></li> <li>● <u>Regional</u>: <i>Snohomish, Skagit, San Juan, Island Counties</i></li> <li>● <u>County</u>: <i>County departments: Administration, Finance, Information Technology, Planning, Public Works, Parks, Courts, Sherriff--Emergency Management, County Jail; Whatcom Council of Governments-Community Transportation Advisory Group</i></li> <li>● <u>City level</u>: <i>City of Bellingham: Mayor/Deputy Mayor, Community Development, Planning, Parks and Recreation, IT, Fire, Police, other; smaller cities-Ferndale, Lynden, Blaine, Everson, Sumas, Nooksack</i></li> </ul>
<b>Education</b>	<ul style="list-style-type: none"> <li>● <u>Early childhood</u>: <i>Child care centers/providers, preschool/pre-K programs, after school programs</i></li> <li>● <u>K-12 schools</u>: <i>7 school districts and small number of private schools</i></li> <li>● <u>Higher education and vocational schools</u>: <i>Western Washington University, Whatcom Community College, Bellingham Technical College, Northwest Indian College</i></li> </ul>
<b>Social Services/ Non-profits</b>	<ul style="list-style-type: none"> <li>● <u>Community Action</u>: <i>Opportunity Council (child care resource and referral, early learning, Head Start/Early Head Start, Early Support for Infants and Toddlers/Birth-to-3 program, Homeless Housing Center, rental/housing assistance, energy assistance, other)</i></li> <li>● <u>Low Income Housing</u>: <i>Bellingham-Whatcom Housing Authority</i></li> <li>● <u>Disability</u>: <i>ARC of Whatcom County, Max Higbee Center</i></li> <li>● <u>HIV/AIDS</u>: <i>Evergreen AIDS Foundation</i></li> <li>● <u>Child Abuse/Child Advocacy</u>: <i>Brigid Collins</i></li> <li>● <u>Domestic Violence</u>: <i>Domestic Violence and Sexual Assault Services</i></li> <li>● <u>Teens</u>: <i>Northwest Youth Services</i></li> <li>● <u>Seniors</u>: <i>Northwest Regional Council, Meals on Wheels, Senior Centers</i></li> <li>● <u>Homeless</u>: <i>Lighthouse Mission, Amy's Place (youth)</i></li> </ul>

	<ul style="list-style-type: none"> <li>• <u>Legal</u>: <i>Law Advocates, Northwest Justice Project</i></li> <li>• <u>Other</u>: <i>Whatcom Dispute Resolution Center, Whatcom Peace and Justice Center</i></li> </ul>
<b>Community Advocacy Groups/ Faith-Based Organizations</b>	<ul style="list-style-type: none"> <li>• <i>Whatcom Family and Community Network (youth, drugs, gangs, neighborhoods, community)</i></li> <li>• <i>Community to Community Development /Comunidad a Comunidad (Hispanic families, farm workers)</i></li> <li>• <i>Community Resource Networks (Bellingham CRN and Ferndale CRN)</i></li> <li>• <i>Local churches</i></li> </ul>
<b>Business</b>	<ul style="list-style-type: none"> <li>• <i>Chambers of Commerce</i></li> <li>• <i>Sustainable Connections</i></li> <li>• <i>Food service establishments</i></li> </ul>
<b>Media</b>	<ul style="list-style-type: none"> <li>• <u>Print/online</u>: <i>Bellingham Herald, other newspapers/weeklies</i></li> <li>• <u>Radio</u>: <i>KAFE 104.1, KGMI</i></li> </ul>
<b>Funders/ Foundations</b>	<ul style="list-style-type: none"> <li>• <i>Whatcom Community Foundation</i></li> <li>• <i>United Way of Whatcom County</i></li> <li>• <i>St. Luke's Foundation</i></li> <li>• <i>St. Joseph Hospital Foundation</i></li> </ul>

## **Local Health Jurisdiction Capacity:**

Health jurisdiction capacity includes the staffing and resources available to carry out public health functions. In 2010-2011, the Health Department lost staff and programs in multiple areas: Oral Health, Tobacco Prevention and Control, Adult Immunizations, Nutrition, Environmental Health, Administration/Clerical Support.

### **Administration and Management**

The current structure of the WCHD includes 5 divisions (Administration, Environmental Health, Community Health, Communicable Disease and Epidemiology, and Human Services). Managers and administrators are all experienced each with more than 10 years in public health.

### **Professional and Support Staff**

WCHD staff capacity reached a peak in 2008, but has been decreasing over the past several years due to County budget challenges.

- **Total Authorized FTE: 80.5 (2005) → 90.7 (2008) → 75.2 (2011)**

Education and ongoing training are essential to maintain a well-prepared public health workforce. Currently WCHD staff has the following qualifications:

- Doctoral level training (MD): 2.6 FTE
- Master in Public Health (MPH): 3.0 FTE
- Additional Qualifications: Public Health/Community Health Nurse certifications, Masters in Nursing, IBCLC lactation certification, environmental health certification

### **Funding/Financial Sustainability**

Public health in Whatcom County receives funding from a number of different sources including federal, state, and local sources.

One measure of financial stability is the total County general fund contribution, as this represents the capacity of local government to support local public health services. The total general fund contribution decreased significantly from the 2007-2008 biennium to the 2009-2010 biennium. Current funding in the 2011-2012 cycle is in flux due to reduced revenues (state and local funds).

#### **Total County General Fund Contribution to Health Department Budget**

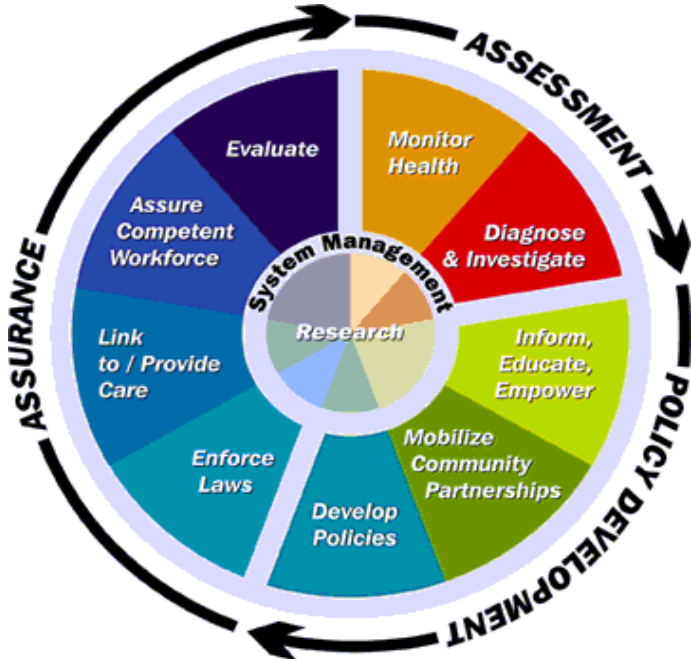
<b>Year</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>
<b>General Fund</b>	\$2,129,499	\$2,284,847	\$2,467,490	\$1,610,183	\$1,656,798



Health Dept. Funding Sources	Details
County General Fund	Local tax dollars
Federal funds	Typically passed through state DOH (i.e., <i>WIC, MCH Block Grant</i> )
State funds	Designated public health funds from state legislature ( <i>5930-Blue Ribbon Funds; Local Capacity Development funds</i> )
Medicaid Administrative Match	Federal and state funds for services that connect people to Medicaid or improve Medicaid services
Grants	Competitive applications ( <i>ACHIEVE Chronic Disease Prevention, GRADS Teen Parent, Community Transformation Grant</i> )
Contracts for service	<i>DSHS Work First, DSHS Early Intervention Program</i>
Fee-for-service/insurance billing	<i>Medicaid Maternity Support Services, clinical services</i>
Fees	<i>Permit fees, food inspection fee, child care consultation fees</i>
Pass Through Funds/Contracts	Health Department manages several large Human Services funds (tax revenue). Examples include: <i>Veteran Relief Fund, Behavioral Health Tax Revenue (1/10<sup>th</sup> of 1%), Developmental Disabilities Millage Funds</i>

**Core Functions and Essential Services of Public Health:**

The local public health system is responsible for assuring the health of the population through three core functions (assessment, assurance, and policy development) and ten essential services. The following review assesses both health department and community assets and strengths in relation to each of the ten essential services.



<b>Essential Service 1: Monitor Health Status to Identify Community Health Problems</b>	
<i>Health Department</i>	<i>Community</i>
<p>WCHD plays a leadership role in collecting, analyzing and distributing health data in the community. The HD coordinates with state DOH to obtain local data (including state comparisons)</p> <p>Key WCHD assets include:</p> <ul style="list-style-type: none"> <li>• Communicable disease surveillance (influenza, etc.)</li> <li>• Data collection for specific program areas: Immunization, Oral Health, Chronic Disease (ACHIEVE), Substance Use/Mental Health</li> <li>• Access to data sources: birth, death, BRFSS (county oversample every 5 years), DOH (HYS, CHAT, Child Profile), DSHS (DDD, DBHR), OSPI, Local Public Health Indicators, County Health Rankings</li> </ul> <p>Key challenges include:</p> <ul style="list-style-type: none"> <li>• Lack of trained assessment staff (position slated to open in 2012)</li> <li>• Lack of data sources to identify and monitor health disparities and health issues associated with socioeconomic status.</li> <li>• Lack of information technology support.</li> <li>• Limited development and dissemination of health data reports to the community and policy makers.</li> </ul>	<p>The community has an interest in using data and information to improve community health, however we lack a coordinated approach to metrics. Additional opportunities exist to tap into non-traditional health data sources, e.g., schools, businesses (grocery stores, etc.), health insurance, and others.</p> <p>Community assets include:</p> <ul style="list-style-type: none"> <li>• City of Bellingham: Results Accountability metrics</li> <li>• PeaceHealth: Hospital metrics, quality improvement (Hospital Compare)</li> <li>• United Way: National measures</li> <li>• WWU: Student health data. Resources (faculty and students) for assisting with data collection, GIS mapping, other</li> <li>• Whatcom Coalition for Healthy Communities/Whatcom Community Foundation: <a href="http://www.whatcomcounts.org">www.whatcomcounts.org</a> (Healthy Communities Institute)</li> <li>• Schools: student health and achievement data</li> </ul>

<b>Essential Service 2: Diagnose and Investigate Health Problems and Hazards</b>	
<i>Health Department</i>	<i>Community</i>
<p>WCHD plays a leadership role in diagnosing and investigating health problems. Environmental Health staff, in particular, has experience in environmental impact studies to investigate potential and actual impacts of health hazards. Examples: Swift Creek Asbestos, Gateway Pacific Terminal (and coal trains). Investigations are typically done in collaboration with other state and local agencies with additional expertise.</p> <p>Additional WCHD/community needs include training and capacity to conduct Health Impact Assessments (HIAs) that proactively explore broad health impacts of built-environment and development projects as well as policy changes.</p>	<p>Numerous agencies contribute expertise or lead efforts to diagnose and investigate health hazards in Whatcom County, including:</p> <ul style="list-style-type: none"> <li>• State Dept. of Ecology</li> <li>• City of Bellingham</li> <li>• Whatcom County Planning/Public Works</li> </ul>

<b>Essential Service 3: Inform, Educate and Empower People About Health Issues</b>	
<i>Health Department</i>	<i>Community</i>
<p>WCHD provides health education resources, maintains a website, develops media releases or other information in print media/radio, attends community fairs and events, and leads community events (largely focused on community leaders).</p> <p>Additional capacity needs include enhanced use of social media and other electronic information sharing platforms.</p>	<p>Community has a number of health education services/programs. Examples include:</p> <p>Community projects</p> <ul style="list-style-type: none"> <li>• Community to Community Development-Cocinos Santos</li> <li>• Lummi Cedar Project</li> <li>• Traditional Foods (NWIC)</li> </ul> <p>Health Related Courses/Information</p> <ul style="list-style-type: none"> <li>• PeaceHealth: LifeQuest classes, hospital discharge classes (OB, etc.)</li> <li>• Other health care providers: SeaMar, etc.</li> <li>• Schools: K-12 schools (health curriculum), Bellingham Technical College (childbirth classes, parenting, etc.), Northwest Indian College, Whatcom Community College, WWU</li> <li>• Mini-medical school (WCMS)</li> </ul> <p>Health Professional Training Programs</p> <ul style="list-style-type: none"> <li>• Health Careers Program (School Districts)</li> <li>• St. Luke’s Foundation (scholarships)</li> <li>• WWU, BTC, WCC, NWIC</li> </ul>

<b>Essential Service 4: Mobilize Partnerships to Identify and Solve Health Problems</b>	
<i>Health Department</i>	<i>Community</i>
<p>WCHD plays a leadership role in convening, facilitating, leading and maintaining community partnerships to address community health issues. Recent initiatives include ACHIEVE chronic disease prevention project, Community Health Assessment and Improvement Plan project, and Taking Action for Children with Special Health Care Needs. Aligning multiple groups and initiatives can be challenging.</p>	<p>The Whatcom County community has a history of forming successful and innovative collaborative partnerships, coalitions, and alliances to address health and social issues.</p> <p>Multiple existing examples include:</p> <ul style="list-style-type: none"> <li>• Community Leadership Group (CHA/CHIP)</li> <li>• Whatcom Alliance for Healthcare Access</li> <li>• Oral Health Coalition</li> <li>• Coalition to End Homelessness</li> <li>• Whatcom Funders Alliance</li> <li>• Whatcom Taking Action for Children and Youth with Special Health Care Needs</li> </ul>

<b>Essential Service 5: Develop Policies and Plans that Support Individual and Community Health</b>	
<i>Health Department</i>	<i>Community</i>
<p>WCHD has a key role in facilitating the development of plans (such as the Community Health Improvement Plan and ACHIEVE Community Action Plan), and developing and advocating for health policies that promote good health.</p> <p>Additional staff and leadership (Health Board, Public Health Advisory Board) training and practice in policy development are needed.</p>	<p>Local and state partners from multiple sectors participate in community health policy development and planning. Sectors include:</p> <ul style="list-style-type: none"> <li>• Government</li> <li>• Health care</li> <li>• Education</li> <li>• Social Service</li> <li>• Business</li> <li>• Advocacy</li> </ul>

<b>Essential Service 6: Enforce Laws and Regulations that Protect Health and Ensure Safety</b>	
<i>Health Department</i>	<i>Community</i>
<p>WCHD has significant strengths in regulation particularly in environmental health areas, such as food inspections/food safety, onsite septic systems, and living environment protections. Other areas of strength include: enforcing communicable disease mandates and managing requirements for community behavioral health resources.</p> <p>Health department challenges include providing technical assistance and support to community members on compliance with laws/regulations, especially individuals/businesses with staff who speak languages other than English and those with other cultural, financial or educational barriers. Some regulatory areas may also benefit from additional attention, e.g., tobacco and alcohol sales/marketing to children.</p>	<p>Community assets include strong law enforcement (City Police, County Sherriff, Lummi Tribal Police, WWU Security), safety and emergency preparedness functions (Fire, Emergency Medical Services (Whatcom Medic One), City and County Emergency Management.</p>

<b>Essential Service 7: Link People to Personal Health Care Services &amp; Provide Healthcare When Otherwise Unavailable</b>	
<i>Health Department</i>	<i>Community</i>
<p>WCHD has specific programs including Children with Special Health Care Needs, WIC/MSS, Immunizations (children), TB, HIV, and Needle Exchange that provide linkage and direct care services. (<i>State and local budget cuts may result in losing these resources</i>).</p> <p>Challenges include budget and staffing reductions as well as the overall direction of public health moving away from providing direct healthcare services.</p>	<p>The Whatcom Alliance for Health Care Access (WAHA), a community supported non-profit, serves as a hub for access and linkage issues. PeaceHealth, WCHD and other major community health and business leaders play important leadership roles. Other community assets include:</p> <ul style="list-style-type: none"> <li>• Community Health Centers (Interfaith and SeaMar)</li> <li>• Tribal Health Centers (Lummi and Nooksack)</li> <li>• Multiple health care providers who donate time and services</li> </ul>

<b>Essential Service 8: Assure Competent Public Health and Personal Health Care Workforce</b>	
<i>Health Department</i>	<i>Community</i>
<p>WCHD provides technical assistance and training for community health care providers on issues such as:</p> <ul style="list-style-type: none"> <li>• Immunizations (esp. vaccines for children)</li> <li>• Notifiable Conditions</li> <li>• Tuberculosis</li> </ul> <p>Opportunities exist to enhance health care workforce competency and practices in caring for children with special health care needs, addressing behavioral health needs, chronic disease management, primary preventive services, maternal and early childhood health care practices (breastfeeding, immunizations, developmental screening, oral health)</p> <p>Other opportunities include just-in-time training and coordination with providers during a public health emergency situation (i.e., pandemic influenza)</p>	<p>The community offers provider continuing education opportunities (PeaceHealth, Whatcom County Medical Society, others), hospital privileging requirements. Challenges include increasing health care provider competency in systems change and population-based health approaches.</p>

<b>Essential Service 9: Evaluate Effectiveness, Accessibility and Quality of Personal and Population-Based Health Services</b>	
<i>Health Department</i>	<i>Community</i>
<p>WCHD has some capacity to evaluate program effectiveness, but needs additional resources in this area, including evaluating public health policies and partnerships. The department participates in a tri-annual public health standard review to evaluate operations.</p> <p>Recent Program Evaluations include:</p> <ul style="list-style-type: none"> <li>• CSHCN (2007)</li> <li>• Immunization Program (2010-11)</li> </ul>	<p>The Whatcom Alliance for Healthcare Access (WAHA) and new Accountable Care Organization (ACO) working groups are key community assets for evaluating effectiveness and accessibility of health services. WWU Critical Junctures Institute is another current resource (though limited operation at the current time due to funding).</p>

<b>Essential Service 10: Research for new insights and innovative solutions to health problems</b>	
<i>Health Department</i>	<i>Community</i>
<p>WCHD periodically participates in community health research projects. Recent examples include the Environmental Risk Reduction through Nursing Intervention and Education (ERNNIE) Program.</p> <p>Staff desire additional training and participation in Community-based participatory research methods.</p>	<p>Community resources for research include the WWU Critical Junctures institute and faculty affiliates with an interest in health issues.</p>

## **Public Health Performance Standards (May 2011):**

WCHD participated in the tri-annual state public health standards review process in 2010-2011. This process includes an extensive review of health department operations by outside reviewers. The Health Department opted to assess organizational performance against the highest level of standards that are comparable to new national accreditation standards. The following outlines strengths and opportunities for improvement:

### **Strengths**

- WCHD demonstrated **91% of standards** in the 2010-2011 Standards for Public Health in Washington (which included all of the national Public Health Accreditation Board standards and several Washington only measures). Six percent of the standards were partially met and only 3% were not demonstrated.
- Key areas of strength included collaborative relationships with community partners and exemplary documentation in many areas.

### **Opportunities for Improvement** (from the Standards Review and previously recognized needs)

- **Data collection/interpretation/use**
  - Performance management and quality improvement
    - Internal data systems (tracking services and outcomes)
  - Community assessment and planning (in progress)
  - Epidemiology and surveillance systems (this was recognized as an internal need)
  - Use and dissemination of data to community and policy makers
- **Communication**
  - Risk communication, including a risk communication plan
  - Use and support of new technologies and platforms (social media, internet, website)
  - Communication with special populations (immigrant/migrant, non-English language)
- **Policy development/analysis/advocacy**
  - Policymaker outreach and awareness
  - Staff development
    - Policy development and analysis
    - Health impact assessment
- **Emergency response planning (and ongoing community preparedness)**
  - Ongoing planning and coordination with partners
  - Staff development
    - Incident Command Structure
- **Cultural competency and equity focus**
  - Staff development
    - Community engagement/participatory processes
  - Internal equity/workplace relationships
  - Outreach with special populations
  - Equity focus in community health assessment processes
- **Sustainable funding/maximizing fiscal health**
  - Grants and contracts

**Section Seven:**

# **Strategic Issues Summary**

Whatcom County  
Community Health  
Assessment - 2011



## Overview:

This section includes a discussion of strategic issues that were identified through analysis and discussion of the Community Health Vision and the four assessment components of the Community Health Assessment project. These strategic issues will serve as the basis for creating a Whatcom County Community Health Improvement Plan (CHIP).

## Methods:

In October 2011, Community Leadership Group and Core Team sponsored a community forum entitled “*From Assessment to Action*”. Visioning partners and other interested community members were invited. Staff presented a PowerPoint of Community Health Assessment data. The large group then broke into smaller groups to discuss the key findings. Input from this forum provided a framework for identification of six strategic issues.

In March and April 2012, the Community Leadership Group held two full-day retreats to discuss and prioritize the six strategic issues and identify potential initiatives to address the issues. Further discussion of the prioritization and resulting CHIP framework will be incorporated in the CHIP document.

## Strategic Issues Overview:

<b>Overarching Issue:</b>	
<i>How do we improve health, reduce disparities and advance equity in Whatcom County?</i>	
<b>1. Community Voice &amp; Engagement</b>	<i>Foster a more inclusive community where all people feel their voices are heard and they can actively participate in community life without fear and stigmatization</i>
<b>2. Healthy Child &amp; Family Development</b>	<i>Reduce and mitigate adverse childhood experiences and optimize healthy child, youth and family development</i>
<b>3. Healthy Living in Neighborhoods and Communities</b>	<i>Increase opportunities for people to live healthy active lifestyles and enhance social connections within neighborhoods and communities</i>
<b>4. Health Care Access and Service Delivery</b>	<i>Reduce barriers to health care and improve service delivery to better meet health the needs of vulnerable populations throughout the county</i>
<b>5. Substance Use and Mental Health</b>	<i>Reduce use and abuse of harmful substances and optimize mental health and well-being</i>
<b>6. Health Data and Metrics</b>	<i>Improve collection, use, and sharing of data and metrics to promote community health improvement</i>

## Overarching Issue: Health, Disparities, and Equity

### Overview of Issue:

In general people in Whatcom County are healthy, but disparities are hidden among the averages. The overall health and well-being of the community is dependent on everyone having opportunities to be healthy and thrive.

### Synopsis of Findings:

In 2011, Whatcom County ranked **6<sup>th</sup> out of 39** Washington counties in the annual County Health Rankings project, a national health research initiative. (*RWJF, 2011*) The County performs **better than 90% of other communities** across the nation on several measures. **Fewer people report fair or poor health status** (more report good or excellent health status), and **overall premature death is lower** (life expectancy is higher).

But taking a closer look, we see that not everyone experiences the same level of health and well-being and not all groups or populations have the same opportunities to live healthy lives.

Health assessment data show **that health and health opportunities correlate with income, education level, race/ethnicity, and geography.**

People living in **low-income households** are **more likely to report fair or poor health status** compared with those living in higher income households. The relationship is step-wise—the less money you have, the more likely you are to have poor health status and vice versa. The **same relationship is seen with education level.**

Health risks and conditions also correlate with income, education level, race/ethnicity, geography. For example, proportions of Whatcom County residents who have **diabetes, are obese or use tobacco** are relatively low compared to some other communities, but **significantly higher proportions of lower income populations** have these health risk factors. Health risks also **vary by geography**, with relatively higher rates of obesity in North County and higher rates of smoking in East County.

More than 80% of the Whatcom County population is White, however **racial/ethnic diversity is increasing.** Whatcom County residents who are American Indian/Native Alaskan or Black are **more likely to die a premature death.** Hispanic and American Indian/Native Alaskan populations are more likely to experience **obesity and diabetes.** American Indian/Native Alaskans are disproportionately burdened by **mental health and substance use issues.** Minority populations are more likely to live in **poverty** and to have **lower educational attainment.** Hispanic and American Indian households have the **lowest median income** of any groups within the County.

## Strategic Issue #1: Community Voice and Engagement

### Overview of Issue

Whatcom County is a growing community with **increasing diversity**. In general, people in Whatcom County feel a sense of **connection and belonging**, but this is not true for everyone. Common sentiments shared by members of **marginalized groups** (racial/ethnic minorities, immigrants, migrant workers, and others) include fear and mistrust of large institutional systems such as health care and government, and feelings of stigmatization and disrespect. Past experiences with the majority culture as well as current challenges (such as issues related to immigration or conflicts related to land use and water rights) contribute to **fear and isolation**. At the same time, individuals within these groups have **valuable insights** into community challenges and demonstrate a desire and willingness to identify and participate in solutions that build on their respective **communities' strengths**. Increasing opportunities for authentic community engagement, voice, and active participation for all groups was identified as a key need throughout the assessment process.

### Synopsis of Assessment Findings

- **Whatcom County is growing steadily**, both in its cities as well as rural areas. The total population increased 21% from 2000 to 2010 (from 166,814 to 201,140), compared to 14% for Washington State (*U.S. Census, 2010*). The County population is primarily White, but **diversity is expanding**. Racial and ethnic minorities, particularly **Hispanic population**, make up an increasingly larger proportion of the population. The Hispanic population grew from 5% of total population in 2000 to 8% in 2010. Eleven percent of the people in Whatcom County speak a primary language other than English (primarily Spanish and Russian), and nearly 5% do not speak English at all. Two **federally recognized tribal nations** (Lummi Nation and Nooksack Tribe) live within the County, making up about 3% of the population.
- The **unique geography** of the county **promotes isolation** of some population groups. **Pockets of poverty** are scattered throughout the county, and include areas within cities (e.g., Bellingham and Ferndale), tribal reservations, and in more rural areas (e.g., North County-Birch Bay/Blaine, East County-Kendall/Maple Falls). The Hispanic population is largely concentrated in agricultural areas of Lynden and Everson/Nooksack as well as in north Bellingham. **Travel distance and transportation barriers** in rural and outlying areas increase challenges with developing and maintaining positive social connections and community involvement.
- With an intentional focus on reducing health disparities and inequities, the Community Leadership Group for the CHA and CHIP identified the **need to have diverse voices and representation** at the leadership table, and to hear the perspectives of community members from diverse backgrounds through focus groups and community forums. Despite positive movement in this direction, the Leadership Group recognizes that more effort is needed in this area particularly in **building stronger connections** with Tribal partners and other groups, meeting people where they are in community, and facilitating **community-driven** (as opposed to agency-driven) health improvement processes.

## Strategic Issue #2: Healthy Child, Youth and Family Development

### Overview of Issue

The importance of **protecting the health, well-being and future** of children, youth and families emerged as a consistent theme throughout the Community Health Assessment process. Enhancing family economic stability, addressing basic needs, promoting healthy family relationships and family functioning, encouraging protective maternal and child health behaviors, and supporting school readiness and success are keys to improving child and family wellbeing and reducing health and social disparities in our communities.

### Synopsis of Assessment Findings

- Community leaders have a growing recognition of the **central role of early life experience and childhood adversity** (i.e., Adverse Childhood Experiences-ACEs) on long-term health.
- The **current economic downturn and changes in social service systems** and supports have been particularly challenging for **young families**. Thousands of children and families live in **poverty** (100% FPL), with young families headed by single mothers at highest risk (27.9% of all single mothers, more than 40% of Hispanic, American Indian and Asian single mothers, and 62.6% of **single mothers** with children younger than 5 years).
- Of the approximately **2200 infants** born each year to Whatcom County mothers, **nearly half (46.7%) are to lower income women** who qualify for Medicaid (185% of FPL) during pregnancy. These mothers are **less likely** to receive **early prenatal care** (63.0% vs. 87.1% for Non-Medicaid) and are more likely to have **health risks** such as tobacco use or drug use during pregnancy. (*DSHS, 2010*) In 2008, **17.4 % of pregnant women** in Whatcom County on **DSHS/Medicaid** required treatment for **substance abuse** compared with 12.6% for the state. (*DSHS, 2010*) Approximately **15% of low income pregnant and postpartum women** enrolled in the WCHD WIC program report **depression** symptoms. (*WCHD, 2011*)
- **Teen parents** are more likely to experience social and economic challenges. **Teen pregnancy and birth** rates are relatively low in Whatcom County and comparable to state rates, however pregnancy and teen birth rates for **Hispanic and American Indian teens** are **7 times** higher than for the general population. (*CHAT, 2011*)
- Economic stresses take a toll on family relationships and emotional well-being. Finding and maintaining **safe, stable and affordable housing, and meeting other basic needs** (childcare, transportation, food, etc.) are major issues for many lower income families. More than half (55%) of rental households spend more than 30% of their income on housing, a measure of housing affordability. (*ACS, 2010*) Nearly 40% of the 1,311 **homeless** individuals in Whatcom County are children and youth less than 18 years. (*PIT, 2011*). Thirty percent of households with income less than \$20,000 per year reported **hunger**. (*BRFSS, 2007*)

- **Substance abuse and mental health problems** undermine family stability, and contribute to **child maltreatment and neglect**. In 2008, 30% of children and youth receiving state assistance through DSHS (5208 children) had 3 or more adverse childhood experiences (i.e., physical, emotional or sexual abuse, neglect, parental substance use or mental illness, domestic violence in household, parental incarceration). **American Indian** children are **disproportionately impacted** (66% of American Indian children had high ACE scores compared with 28% of Non-Hispanic White children and 29% of Hispanic children). Rates of referrals for child **abuse and neglect are consistently higher** in Whatcom County than the state--37.72 per 1000 compared to a state rate of 29.80. (*DSHS, 2010*)
- Other maternal and child health issues (**breastfeeding** duration, **immunization** rates, **dental caries** in young children) are also identified as important issues. While **nearly 90%** of low-income mothers on the WIC program **initiate breastfeeding**, the percent of postpartum women breastfeeding **drops to approximately 75%** at 4 weeks (recommended duration is 1 year). (*WIC, 2010*) In 2010, **only 57%** of Whatcom County **2 year olds** (age 19-35 months) were **up-to-date on recommended immunizations** as recorded in state's Child Profile registry (WA State Child Profile, 2011). Vaccine-preventable **whooping cough** (pertussis) rates are **consistently higher** in Whatcom County than the state. In 2010, **42% of public school kindergarten** and **61% of third graders** in Whatcom County had **dental decay experience**. Low-income children are disproportionately impacted. (*Whatcom County Smile Survey, 2010*)
- Gaps in school readiness and success are evident in the community. In 2010, nearly **50% of children in WA state** were **below expected level for language, communication and literacy** on a state-wide kindergarten assessment which included one school in Whatcom. (*WAKids, 2010*) While Head Start programs serve approximately 281 low income children in Whatcom, another 147 children are on the waiting list to receive services. (*OC ELAFS, 2012*) In 2010, **only 77.9%** of Whatcom County youth **graduated from high school on time**. **Less than 60% of American Indian** (58.9%) and **Hispanic** (59.7%) youth graduated on time.
- **More than one out of four** (27-28%) high school students report **depression symptoms**, and greater than 30% of high school 10<sup>th</sup> graders have used **alcohol** in the past 30 days. Approximately **25% of youth** in grades 8 and 10 **report being bullied** at school. **Greater than 50% of teens** report **inadequate physical activity**, spend 3 or more hours in front a screen each day, and partake of poorly balanced diets. Health behaviors and conditions are correlated with academic success. Youth who are doing **poorly in school** (based on grades C-F) are **more likely to be depressed, to be overweight or obese, or to use tobacco, alcohol or other substances**. (*HYS, 2010*)
- Further work to improve the health and well-being of young children, youth, and families can build on the efforts of existing community partners. The **PHSJMC Child Birth Center** delivers over 95% of the 2,200 infants born in Whatcom County each year. Four entities (**WCHD, SeaMar Community Health Center, Nooksack Tribe, and Lummi Nation**) have WIC and/or maternity support services programs. **Opportunity Council** provides Early Head Start, Head Start, Early Support for Infants and Toddlers/Birth-to-Three, Child Care Resource and Referral and other services. The **Whatcom Homeless Service Center** (also at

Opportunity Council) provides housing assistance and case management supports for individuals and families that have critical housing needs. **Brigid Collins Family Support Center** provides resources for children and families impacted by abuse and neglect. The **GRADS** teen parent program through Bellingham School District supports teen parents in completing their high school education. Numerous other resources for families are available, but many would benefit from greater coordination and more capacity.

- The community hosts several **coalitions and groups** with special interest in maternal and childhood health issues. The **First Steps Coalition**, facilitated by WCHD represents providers of Maternity Support Services, WIC Nutrition, and other community services for low-income mothers on Medicaid. The **Whatcom Early Learning Alliance**, facilitated by the Opportunity Council represents agencies and individuals with an interest in promoting early childhood health and optimizing early childhood learning opportunities. The **Oral Health Coalition** and **Community Breastfeeding Roundtable** are additional groups with focus on maternal and infant health issues.

## Strategic Issue #3: Healthy Living in Neighborhoods and Communities

### Overview of Issue

This issue was originally entitled “Healthy Active Living” with an emphasis on addressing people’s health habits—healthy eating, physical activity, weight control, and tobacco use. After considerable discussion, that emphasis has been intentionally changed to reflect a primary focus on the importance of place in one’s ability to adopt a healthy active lifestyle—homes, neighborhoods and community environments that support individual and community health. “Living healthy” depends on numerous factors including an individual’s physical attributes, personal knowledge and motivation, social supports, and the environment in which he or she lives, learns, works and plays. Safe, stable, and affordable housing is a critical starting point for healthy living. In addition, research shows that people who live in neighborhoods or communities with greater access to healthy foods, safe places to be physically active, reduced exposure to tobacco smoke and tobacco products, and more positive social connections have lower rates of obesity, smoking and other health conditions than those who live in areas without these opportunities.

### Synopsis of Assessment Findings

- **Affordable housing** is a stressor for many households in Whatcom County. **Fifty-five percent** of Whatcom County renters spend **more than a third of their income** on housing. Forty-four percent of owners with mortgages in Whatcom County spent 30 percent or more of their household income on housing. (*US Census Bureau, ACS, 2010*) The 2011 Point-in-Time Homeless Count indicated at least **1,311 people** in Whatcom County are homeless (*PIT, 2011*). Nearly **40% of all homeless persons** in Whatcom County (more than 500 children and youth) are **under 18 years**.
- Overall, Whatcom County has **lower rates of health conditions** such as obesity and diabetes associated with lifestyle issues than comparable counties. Despite this positive finding, rates of overweight and obesity are growing. Specific sub-populations **including rural, low income, and racial/ethnic minority groups** are **disproportionately impacted**. Tobacco use also continues to be an issue, particularly for low-income adults--36% for adults with annual income <\$20,000 vs. 18% for all adults. (*BRFSS, 2007*)
- Community Health Assessment data revealed that some areas of Whatcom County, particularly outlying and **unincorporated areas** of the county have **higher risks of obesity and tobacco use**, meaning obesity is more prevalent in North county areas, smoking is more prevalent in East county areas (*WADOH, 2011*). Racial/ethnic minority and lower income populations are also more likely to be impacted by these health issues and live in areas with fewer opportunities for healthy active living.
- There is **great variation** in Whatcom County between geographic areas in terms of potential **“walkability” or “bikeability”**— the ability to live reasonably well without a car. Bellingham is rated as a “Walker’s Paradise,” Ferndale is considered “very walkable”, Lynden is “somewhat walkable,” and all other areas were “car-dependent” (*ACHIEVE, 2011*).

- In a survey of City of Bellingham residents, **57% reported feeling safe walking** alone at night in their neighborhoods (COB, 2011). In a **community prioritization process** conducted through the Whatcom ACHIEVE initiative, enhancing **community safety and perceived safety** (traffic and crime) was identified as the **top priority for improving physical activity** among children and families. (ACHIEVE, 2010)
- According to the RWJ County Health Rankings (2012), **15% of low-income people** in Whatcom County **do not live near a grocery store** (national goal is 0%). Maps developed during the Whatcom County Community Food Assessment (2011) project demonstrate significant “**food deserts**” in unincorporated areas of the county. Rural residents (living in unincorporated Whatcom County – approximately 44% of County residents) are most likely to have convenience stores, rather than grocery stores as the closest place to buy food.
- Whatcom County has a **higher number of retail alcohol and tobacco licenses** that are active during the year compared with other similar counties and the state. (RPP, 2010). In 2009, there were 2.21 active alcohol licenses per 1000 Whatcom County population compared to 1.70 in similar counties and 1.99 in the state. In 2009, there were 1.08 tobacco retail and vending licenses compared to 0.88 for similar counties and 1.00 in the state. In 2012, 25% of retail stores (6/24) that had random tobacco compliance visits sold cigarettes to minors. (DOH, 2012)
- Despite state laws limiting tobacco use in businesses and worksites, a significant number of people including children are **exposed to second-hand smoke in home and community environments**.
  - An estimated 29% of Whatcom households with children under age 18 have at least one smoker in the home (BRFSS, 2007).
  - The PeaceHealth St. Joseph Medical Center campus and all public school (K-12) campuses are smoke-free, however other large campuses (Western Washington University, Whatcom Community College, County government) are not. There are no designated smoke-free parks or play areas in the County.
- Whatcom County has **strong housing related services and programs** to build on for addressing issues of affordable housing and homelessness. Over the past several years, Whatcom County has also begun to focus efforts on **changing policies, environments and systems (PES)** to promote healthy active living, reduce risk of chronic disease, and reduce disparities. In 2009-2010, a *Community Action Plan for Healthy Active Living* was created through the ACHIEVE project, a federally funded **collaborative community planning** process. The plan emphasizes PES strategies related to nutrition, physical activity and tobacco. Since then, the county has received funds through the federal Community Transformation Grant to implement components of the *Community Action Plan* in targeted areas of the community with higher risk of health conditions such as obesity and smoking. A Healthy Corner Store initiative to **increase healthy food access and decrease tobacco marketing** to youth is now in progress. Grant funds also support changing **community design standards** to promote more walking, biking, and other forms of physical activity.



## Strategic Issue #4: Health Care Access and Service Delivery

### Overview of Issue

Whatcom County is generally well-served by health care providers and facilities including primary care providers, medical specialists, dental and behavioral health providers, alternative care providers, and a community hospital. The more critical issue for community health is access to those health services. Barriers to care include lack of or inadequate health insurance, mal-distribution of primary care providers, and the limited number of current providers accepting new patients. Barriers are particularly acute for residents who lack or have limited public funded insurance, who live in rural communities, who are poor and less educated, or who feel stigmatized due to cultural issues such as race/ethnicity, sexual orientation, or history of mental illness or addiction. Access to dental care is particularly acute for the underinsured and for those with limited resources. These barriers to care are expected to increase with continuing reductions in the state budget. Improvements in the quality and coordination of services, especially for those with chronic health conditions and patient experience/perceptions of care were also identified as community health priorities.

### Synopsis of Assessment Findings

- Whatcom County is designated a **Health Professional Shortage Area** as defined by the federal government, and selected census tracts are also designated Medical Under-Served Areas. These designations are based on a shortage of primary care providers, particularly in rural communities and in communities where poverty and homeless rates are highest. Structural needs in the delivery system also include selected subspecialty providers and dental providers.
- **Unmet health care needs** have been **growing** in recent years. In 2007, **16% of adults** indicated they needed health care in the past year but were **unable to see a doctor** due to cost, compared with 8% in 1996 and 9% in 2002. (*BRFSS 2007*) Populations that were most likely to have unmet needs included those who had no health care coverage (48%), those who earn less than \$20,000 per year (32%), respondents who report their health status as *fair/poor* (28%), 18-29 years olds (23%), those with a high school education or less (22%), and those that were unemployed (20%).
- In 2010, an estimated **11-16% of adults in Whatcom County did not have health insurance**. (*CHAT, 2009, WA-OFM, 2011*). In 2007, 37% of adults did not have dental insurance. The number of **uninsured visits** to Interfaith Community Health Center **grew significantly** from 4,790 in 2008 to 7453 in 2010. (*Interfaith CHC data, 2010*)
- Thirty-one percent of Whatcom County **residents rely on public insurance** (Medicare or Medicaid/Basic Health). Patients with Medicare or Medicaid insurance find it **increasingly difficult to locate providers** who provide care for new patients. Only 44% of providers accepting Medicare and 41% of providers accepting Medicaid will see new patients. (*DOH, 2010*)

- **Teenage mothers** indicated **barriers to receiving prenatal care** included physicians not accepting new patients on Medicaid (and “coupons”), lack of external support in obtaining referral to physician, transportation (especially rural residents), and fear of informing their family about the pregnancy. (*Focus group*)
- Members of the **Hispanic/Latino community** indicated barriers to accessing care included **language barriers**, disrespectful providers and staff, **inadequate or poor quality treatment**, impossibly long waiting lists for dental care, and significant bureaucratic or paperwork barriers to accessing care made more complicated by immigration status or lack of documentation. (*Focus group*) Low-income adults identified **dental care as the most needed but least available service**. (*Whatcom Prosperity Project, 2011*)
- Based on national performance reporting requirements, the quality of health services provided in Whatcom County is variable. There is a striking disparity between the **quality of the processes** of care that are **on par with best practices** in the nation (e.g., pre-operative antibiotic usage-98<sup>th</sup> percentile and implementation of congestive heart failure protocol-99<sup>th</sup> percentile) and **people’s perception of that care that ranks below average** for the nation and below that of other community hospitals in the region. Only 59% of PHSJMC patients assigned the hospital a score of 9-10 on a quality rating scale of 1-10. This ranks at the 19<sup>th</sup> percentile for the nation. **Clinical outcome measures are also variable** with wound infections after cardiac surgery ranking in the 51<sup>st</sup> to 90<sup>th</sup> percentile and adverse outcomes after cardiac catheterization ranking in the 51<sup>st</sup> to 75<sup>th</sup> percentile. (*CMS-Hospital Compare*)
- Data suggest **over-utilization of some medical procedures** such as C-sections for first time mothers and high tech/high cost MRIs for back pain. **Other services may be under-utilized** such as hospice care that can save money at the end of life and improve patient and family satisfaction with care. In 2008, 30.3% of Whatcom births were delivered by C-section compared to 26.6% in the state. (*WA DOH, 2009*) The national goal is 15%. Thirty-six percent of individuals presenting for acute back pain received a MRI prior to recommended 30-day trial of medication. Approximately 50% of patients with end stage cancer are admitted to hospice care, but spend only one week in care. The goal is 66% or more.
- Over **9,000 Emergency Department (ED) visits per year** are for **behavioral health issues** (mental illness or substance use related health need). Many of these are **potentially avoidable** if behavioral health issues are better managed in the community setting. ED visits in general are disproportionately greater for Medicaid/Basic Health patients (27-29% of all visits) than other payer sources, suggesting that increasing access to coordinated health services for Medicaid clients and clients with behavioral health issues could potentially reduce avoidable ED visits.
- Whatcom County has dedicated **significant resources to addressing issues of health care access and quality**, specifically through the work of the **Whatcom Alliance for Healthcare Access (WAHA)**, a collaborative non-profit agency that connects people to health care services, promotes system improvement and fosters public participation in developing sound health care policies. The current *Transforming Health Care in Whatcom County* initiative and efforts to develop a local Accountable Care Organization are examples of WAHA’s work.

## Strategic Issue #5: Substance Abuse and Mental Health

### Overview of Issue

Of all the information considered in the Community Health Assessment process, data related to substance use issues were some of the most striking and, to many people, surprising. Substance abuse, particularly opiate/heroin abuse has been trending upwards in an alarming way in our community over the past several years. The apparent increasing number of young people using drugs and the proportion of children impacted by parental use of substances is most concerning.

Substance use is both a root cause and a consequence of social and health issues and disparities in our community. Substance use is closely linked to rates of depression and mental illness, child abuse and neglect, domestic violence, crime, gang involvement, homelessness, unemployment, drug-affected infants and other poor birth outcomes, communicable disease rates (particularly hepatitis), overdose deaths, motor vehicle and other accidents, and lost productivity and human potential. Misuse of drugs and other substances is not limited to one socio-economic group, but affects a wide range of individuals and families. Those who experience adversity as children including growing up in households with substance abuse issues are more likely to have challenges with substance use in their own lives (ACEs are strongly correlated with substance use behaviors). Community challenges include getting a handle on current trends, stemming the tide of drug availability, preventing initial use, breaking intergenerational cycles, and having effective services and supports for treatment and recovery.

Mental health concerns are also identified as a community priority. A significant percentage of youth and adults experience depression symptoms and rates of suicide are higher than state rates.

### Synopsis of Assessment Findings

- In the state of Washington, **visits for substance abuse** in federally qualified community health centers have **increased 27.8%** from 2007 to 2009 (*HRSA 2009*). An estimated 70.5% of adults **eligible for treatment** for substance abuse **do not receive care** (2008). In 2008, only 36% of the 4,460 adult DSHS clients in Whatcom County with an alcohol or drug problem received alcohol or drug treatment. (*DSHS, 2011*) In the same year, 48% of the 982 youth DSHS clients with an alcohol or drug problem received treatment.
- PHSJMC hospital ED data show that not only are the numbers of ED visits related to opiates increasing in recent years, the proportion of visits by **youth and young adults are increasing** as well. (*PHSJMC, 2012*) The Whatcom County Needle Exchange Program at the Health Department reports increases in client need (exchanging used needles for clean needles to prevent spread of blood-borne infections), and notably younger clients. (*WCHD, 2011*) Maps from the Alcohol and Drug Abuse Institute in Seattle show that Whatcom County is one of the **counties most impacted by high levels of opiate availability** compared with other areas of the state, and that this situation has emerged over the past 10 years.
- Conditions associated with drug use are on the rise. **Hepatitis C has increased** in Whatcom County with the primary risk factor being IV drug use. (*CHAT, 2009*) In recent years, Whatcom County has had higher rates of **child abuse and neglect** referrals than other areas of

the state. These are frequently **linked to parental or household substance use**. (*DSHS, personal communication*)

- In 2008, **17.4 % of pregnant women** in Whatcom County on DSHS/Medicaid **required treatment for substance abuse** compared with 12.6% for the state. (*DSHS, 2010*) The number and rate of **drug-affected pregnancies** and births more than **tripled** from 2006 to 2010 from 0.37% of total births in Whatcom County to 1.37%. (*PHSJMC, 2011*)
- In 2010, Whatcom County high school students in 10<sup>th</sup> grade reported the following: Current tobacco use (13.8%), current alcohol use (32.3%), current marijuana use (22.5%), prescription drug use –**opiates/pain meds (10.1%)**, Ritalin/ADHD meds (4.8%). (*HYS, 2010*) College students from WWU reported that 46% used marijuana, 35.9% engaged in binge drinking (5 or more drinks at a time), and **17% used hallucinogens** or other recreational drugs. (*WWU Student Health Survey, 2010*)
- Drugs or alcohol were related to cause of death in over **12 of every 100 deaths** in Whatcom County in 2009; over **40% of traffic fatalities** were **alcohol-related** (CHAT 2009)
- At least **one out of ten adults** (10%) experience **poor mental health**, reporting poor mental health of two weeks or more in the past month. (*BRFSS, 2007*) Approximately **15% of new mothers** on WCHD WIC program identified **depression symptoms**. (*WCHD, 2011*) More than **one out of four** (28%) 10<sup>th</sup> grade high school students reported **depression symptoms**, 17% reported **suicide ideation**, and 7% reported **suicide attempts**. (*HYS, 2010*). According to 2009 data, the Whatcom County **suicide rate is significantly higher** than state (19.3/100,000 people vs. 13.3/100,000 people). (*CHAT, 2009*)
- Whatcom County partners have taken **steps to address substance use and mental health issues** including: passage of the Mental Health Sales Tax (1/10<sup>th</sup> of 1 percent) which funds prevention and treatment services, establishing the Behavioral Health Access Program which provides access to services for those who do not have other means of payment, expanded medication-supported (Suboxone) opiate withdrawal programs, on-site substance use counselor in Needle Exchange Program to link clients to treatment, and targeted prevention efforts in local schools that have higher substance use risks through the Whatcom Prevention Coalition. Despite progress, additional steps to prevent and reduce substance abuse, optimize mental health, and **address underlying issues of adversity and trauma** are warranted.

## Strategic Issue #6: Community Health Data and Metrics

### Overview of Issue

Throughout the assessment process, lack of readily available objective data about key health issues and, in particular, lack of local data for sub-population groups was evident. Other challenges include outdated information as some data collection processes occur infrequently or the data is not reported in a timely fashion. Staffing capacity to collect, analyze and report data is also limited. The desire to establish better systems to collect, manage, and share data is fueled by increasing emphasis on data-driven processes by health and social service agencies as well as funders. Numerous community partners are interested in having access to such systems and in creating more robust health information exchange capabilities within the community. The need to improve cultural sensitivity related to data and to develop more positive, asset-based community health indicators is recognized.

### Synopsis of Assessment Findings

- Both the Whatcom County Health Department and PeaceHealth St. Joseph Medical Center have **limited staff capacity** to dedicate to community health data collection, analysis and reporting. This was identified as a key **area for public health system improvement**.
- Data that are collected through state agencies (DOH or DSHS) are typically **several years old** by the time they are released. The local oversample for the Behavioral Risk Factor Surveillance System survey, which is a primary source for health behavior data, is on a five-year cycle so the most recent data available for assessment were from 2007. The next local BRFSS sample will be in 2012. Changes in survey questions or methodology create **issues for tracking trends** over time.
- **Small local sample sizes** limit ability to provide accurate analysis for **sub-populations**, such as by race/ethnicity or geographic location.
- Until this past year, the Whatcom Coalition for Healthy Communities (now defunct) supported a **community data website** called *Whatcom Counts*. This resource was a **repository of data** related to a broad range of **indicators**. While useful for the general public seeking information, the tool was less useful for public health monitoring purposes.
- Several local agencies including City of Bellingham and Whatcom County Health Department are developing or implementing **performance accountability systems** that use population measures and program performance data to guide action. United Way of Whatcom County is interested in tracking local progress related to new national United Way measures.
- **Health information exchange** capabilities are a key component of the Transforming Health Care/Accountable Care Organization development process spearheaded by the Whatcom Alliance for Healthcare Access.

