

2017 COMMUNITY **HEALTH** ASSESSMENT

CLACKAMAS COUNTY
PUBLIC HEALTH DIVISION



Welcome and thank you

Dear Clackamas County residents & partners,

On behalf of Clackamas County's Department of Health, Housing and Human Services (H3S) and its Public Health Division we thank you for taking the time to learn more about the overall picture of what health looks like in Clackamas County.

The role of Public Health is to promote and protect the health of people and the communities where they live, learn, work and play. H3S works to promote and assist people, families and communities to be safe, to be healthy and to prosper. Improving the health, well-being and equity across our county is an important job – one we take incredibly seriously. One way we reach this goal is to work within our divisions, such as Public Health, to not only provide snapshots of information, but to perform the real work that is needed across the county. Some of that work is geared toward assessing the overall health of residents and our communities. Toward that end we gather a variety of health data to inform us about the health of our public and how we can take steps to create healthier communities across Clackamas County.

In this Community Health Assessment, we are not only building our understanding of what makes up the health of a community, we are going deeper. We are analyzing how and why people access health and how those decisions and actions make up the health of our community. We are examining how healthcare is consumed in the county, how participation in healthcare occurs and the direct impact on the local economy. We are also looking at a variety of other health-related actions among all county residents such as access to healthy food, exercise and environmental factors.

We look forward to working with you to improve our residents' health and quality of life so they can live longer, healthier lives.

Yours in health,



Richard Swift
Director of Health, Housing & Human Services



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Director of Public Health

Updated June 2018

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The Public Health Division would like to take this opportunity to acknowledge the partnerships and collaborations with our sister divisions. This assessment would not have been possible without your continued support and dedication to the citizens of Clackamas County.

Healthy Columbia Willamette Partner Organizations

- Adventist Medical Center
- Clackamas County Public Health Division
- Clark County Public Health
- FamilyCare
- Health Share of Oregon
- Kaiser Sunnyside Hospital
- Kaiser Westside Hospital
- Legacy Emanuel Medical Center

- Legacy Good Samaritan Medical Center
- Legacy Meridian Park Medical Center
- Legacy Mount Hood Medical Center
- Legacy Salmon Creek Medical Center
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- Providence St. Vincent Medical Center
- Providence Willamette Falls Medical Center
- Tuality Healthcare
- Washington County Public Health

211INFO

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Executive Summary

Clackamas County's Public Health Division has been recognized as an accredited public health agency since 2014. Public health accreditation is a distinction earned among health departments by a nationally recognized entity. As an accredited health department, Clackamas County's Public Health Division is accountable for upholding evidence-based standards. One of the expectations for maintaining public health accreditation is to complete a health assessment every 3 to 5 years, with this current assessment serving as the 2017 Clackamas County Community Health Assessment.

A community health assessment is a process for collecting, analyzing, and presenting descriptive data to help us better understand the health of our community. The data in this assessment will serve as the foundation for Clackamas County Public Health Division's health improvement projects over the next three years. Based on the data presented, and following the release of this assessment, citizens can expect the following: 1) community health improvement projects, 2) reports providing an in depth analysis of the data presented here, and 3) policy analyses to assist policymakers in making changes in the community. This information is intended to serve as a resource and educational tool for the community and stakeholders throughout their planning, decision making, and implementation processes. The public can look to Clackamas County Public Health to assist with and/or direct the changes needed in our community to address the top health findings from this assessment.

The Clackamas County Community Health Assessment examines the health of residents and presents how issues such as affordable housing, transportation, alcohol/drug use, and educational attainment for youth impact the health of our communities. The Assessment was partially developed through the Healthy Columbia Willamette Collaborative – a consortium of local public health agencies, hospitals and coordinated care organizations in the metro region. It includes analyses of regional and local public health data, in addition to environmental, income, housing, and education data.

Each community in Clackamas County faces its own unique public health issues. To help address this, the Community Health Assessment introduces the concept of Health Equity Zones, which are maps and

datasets that are broken down into smaller geographic areas located within the county. The Health Equity Zones will allow public health officials to appropriately focus on the education and prevention of specific public health issues in these varying communities.

The 2017 Clackamas County Community Health Assessment is divided into the following seven categories: Population & Demographics, Culture of Health, Environmental Health, Health Behaviors, Maternal & Child Health, Illnesses and Chronic Conditions, and Deaths. Key findings from some of these sections are summarized below.

Key Findings: Culture of Health

Youth and adults in the Canby, Colton, Estacada, Gladstone, Molalla River, North Clackamas, Oregon City, and Oregon Trail Health Equity Zones face greater economic disparities than youth and adults in the Lake Oswego and West Linn/Wilsonville Health Equity Zones. Youth in one or all of these zones were less likely to graduate high school with their 4-year cohort and were more likely to receive free or reduced price lunch (i.e., economically disadvantaged). For example, students who were economically disadvantaged were on average 14 percent less likely to graduate high school in four years when compared to students who were not economically disadvantaged.

Homelessness and economic stability were additional priorities identified throughout this assessment. A Point- In-Time Homeless Count was conducted by Clackamas County in 2017 identified 2,293 individuals who qualified as homeless, an estimated four percent increase from the Point-In-Time Count conducted in 2015. Of those who

qualified as homeless in 2017, 67 percent were under the age of 18. Between 2013 and 2015, 211info®, a nonprofit assisting Oregon and Washington residents connect with resources, saw an increase of 20 percent in the number of callers seeking housing resources. Additionally, while the median income in Clackamas County is estimated at \$64,700, there is a 39 percent difference between the median household income among residents in the Lake Oswego Health Equity Zone and the Molalla River Health Equity Zone.

Residents of Clackamas County also face a distinct health care shortage. For example, while there is 1 mental health provider for every 476 people in Clackamas County, there is only 1 primary care provider for every 1,159 people. Additionally, the mean travel time to the nearest hospital for residents of Estacada or in areas of the east side of the County is estimated to be 30 minutes.

Health Behaviors

The 2013 and 2015 Oregon Healthy Teens Surveys have allowed us to capture some of the top health behavior concerns of 8th and 11th grade students. Of note are the percentage who reported using alcohol in the past month, the percentage who attempted suicide in the past 12 months, and the percentage not meeting recommended physical activity guidelines. For example, 12.3 percent of 8th grade students and 30.3 percent of 11th grade students reported alcohol use in the past 30 days. Similarly, 17.7 percent of 11th grade students reported binge drinking in the past 30 days.

Similar health behavior priorities were identified among adults. Additionally, quality of life indicators offered a new perspective on the considerable disparities in health behaviors that exist between those with an income in the lowest index compared to those with an income in the highest index. For example, comparing those with an income in the lowest 25 percent to those with an income in the top 25 percent: approximately 25 percent are current smokers versus less than 10 percent; approximately 24 percent are obese versus 18 percent; and less than three-quarters (72.4 percent) exercised in the past 30 days compared to 90 percent.

Illnesses and Chronic Conditions

Nearly 40 percent of youth are classified as overweight or obese and approximately 20 percent have an asthma diagnosis. To that end, asthma was one of the leading causes of emergency department visits among children without insurance. Furthermore, the rate of youth, 6-11 years old, who are classified as overweight or obese in Clackamas County is an estimated 13 percent higher than the national average.

Among adults, men in Clackamas County are more likely to receive a diagnosis for high blood pressure, high cholesterol, and/or diabetes, while women are more likely to be diagnosed with depression. Hypertension and diabetes were among the top two leading causes of emergency department visits among adults who were self-pay or uninsured.

Between 2011 and 2015, there were dramatic increases in the number of people diagnosed with a sexually transmitted infection:

- For every 100,000 residents, Chlamydia incidence has increased from a rate of approximately 243 cases to 291 cases,
- For every 100,000 residents, Gonorrhea incidence has increased from a rate of approximately 23 cases to 52 cases, and
- For every 100,000 residents, Syphilis incidence has increased from a rate of approximately 2 cases to 11 cases.

Leading Causes of Potentially Preventable Deaths

The top two causes of death in Clackamas County are major cardiovascular diseases (including diseases of the heart, cerebrovascular diseases, and essential hypertension and hypertensive renal disease) and malignant neoplasms (cancer), with neoplasms of the trachea, bronchus, lung and breast as the leading causes. The remaining of the top ten leading causes of death include chronic lower respiratory diseases, accidents (unintentional injury), Alzheimer's disease, diabetes mellitus, intentional self-harm (suicide), drug-induced deaths, chronic liver disease and cirrhosis, and alcohol-induced deaths.

Methodology

Data Sources and Structure of Report

The data and findings for the health assessment of Clackamas County residents has been divided into the following seven sections:

1. Population & Demographics
2. Culture of Health
3. Environmental Health
4. Maternal & Child Health
5. Health Behaviors
6. Illnesses & Chronic Conditions
7. Deaths

The Population & Demographics section consists of population counts and percentages by city, age group, race and ethnicity. Data sources for this section included Portland State University's Annual Oregon Population Report Tables and the U.S. Census Bureau's American Community Survey 1-Year and 5-year Estimates.

Five sub-sections were created to capture the Culture of Health in Clackamas County. These sub-sections included: Education, Economic Stability, Neighborhood and Built Environment, Social Context, and Health Care Access. The Culture of Health section is varied and diverse, and as such includes a multitude of data sources: 211info, Clackamas County Crime Report, Clackamas County Community Food Assessment, Clackamas County Natural Hazards Mitigation Plan, Clackamas County Point-in-Time Homeless Count, Community Commons, Healthy Columbia Willamette Collaborative, National Highway Traffic Safety Administration, Oregon Department of Education, Oregon Department of Transportation, The Health Inequality Project, U.S. Census Bureau, and the U.S. Department of Agriculture.

The Environmental Health section utilizes data captured by the National Environmental Public Health Tracking Network and the Environmental Protection Agency's Air Quality Index.

The remaining sections of the report, Maternal & Child Health, Health Behaviors, Illnesses & Chronic Conditions, and Deaths, rely heavily on the work conducted through the region's community health needs assessment. The regional assessment, completed through the Healthy Columbia Willamette Collaborative, was completed in August 2016, and included the top health behaviors affecting the quad-county region (Clark County in Washington State, Clackamas County, Multnomah County, and Washington County). Participants in the regional assessment include the quad county local health departments, 14 area hospitals, and two Coordinated Care Organizations. The methodology and data sources for these sections have been described in the [regional report](#). Additional data sources utilized outside of the assessment included ALERT (Oregon's Immunization database), Oregon's Prescription Drug Monitoring Program, TWIST (Oregon's Women, Infant and Children database), and Oregon's Death Data.

Some of the data in this report are given in the form of an incidence rate, or are age-adjusted. Incidence rate refers to new cases of a disease over a certain time period. Age-adjusted allows for data to be compared across different populations where the age differences may be quite different. All statistical significance analyses were conducted in SAS 9.4 using a significance level of 0.05. All maps were created using ArcGIS Online.

Health Equity Zones

This assessment introduces the concept of Health Equity Zones. Given that the level of diversity within Clackamas County is not always apparent through County level data, Health Equity Zones were created to more accurately reflect the areas of opportunity across our County. Although data at this level is not yet readily available, an introduction to how data will look and be provided by these zones in the future has been included wherever possible.

Healthy People 2020

Every 10 years Healthy People releases science-based recommendations and goals for improving health. These recommendations are intended to help raise awareness around health disparities and provide priorities for improving one's health. These goals have been inserted throughout this report, where applicable. Look for the Healthy People 2020 Goals in this report by the label "HP 2020 Goal."

Community Engagement

The 2016 Healthy Columbia Willamette Collaborative Community Health Needs Assessment includes a Community Themes and Strengths Assessment, designed to expand the community voice. This assessment included an online survey, listening sessions, and an inventory of community engagement projects. A Community Themes section has been included at the beginning of this report to showcase the voices of Clackamas County residents. Citizen quotes captured during the listening session are woven throughout the assessment where appropriate. The methodology for the online survey and listening session can be found in the [regional report](#).

Knowledge Gaps

Every effort has been made to make this report as comprehensive as possible. Nevertheless, a limitation of this report includes data availability/ accessibility, data lag time and data granularity. These limitations are particularly evident in relation to the environment in which people live, healthcare utilization, and health disparities. Many, if not all of the data sources providing environmental health and health data are secondary, meaning the data are collected and analyzed by an organization prior to being available to the public. As a secondary data source, there is often a lag in time before the data is released to allow for data cleaning, quality checks, and analyses. This results in data that is often a year or two or more behind the current year, thus making it difficult to assess the current situation in our County. Additionally, the information provided in secondary data sources are often only available at the County level. Data available at the city or Health Equity Zone level has been included wherever possible.

Some data sources were either unavailable to us at the time of this report or the databases used for collecting the data had recently undergone changes, making the data and trends less reliable for analyses. As a result, data from these sources were either not included, or were included in a limited capacity. If multiple years of data were available, the trends have been presented in this assessment, otherwise, only one year of data is shown. These limited data sources include health care claims data, crime data, and environmental health data.

Clackamas County Public Health Division is currently forging partnerships that will allow us to expand the scope of our data sources and conduct more meaningful health assessments at the level of the Health Equity Zone in the near future.

Next Steps

The work now begins to put this assessment into action through development of the 2017 Clackamas County Community Health Improvement Plan (CHIP). This plan is created every 3 years, and once approved by the Clackamas County Board of Commissioners, will serve as the external roadmap for improving the health of communities within Clackamas County.

Clackamas County Public Health Division staff will provide planning participants with the opportunity to do the following:

- Learn about the role and responsibilities of the Clackamas County Public Health Division;
- review current community-level data;
- participate in an activity to prioritize the issues to be reflected in the new CHIP;
- share their experiences and suggest strategies for action; and provide feedback on the Health Equity Zones concept.

Clackamas County Public Health Division believes that in order to create lasting improvements for the health of our residents, robust and strategic collaborations across all sectors are required. Together we can build a complete infrastructure of healthy communities, close the gaps in health due to race, ethnicity, or national origin, gender identity or sexual orientation, zip code, and/or income.

Moving forward, the Clackamas County Public Health Division will:

- Serve as the chief health strategist for Clackamas County;
- Enhance our partnerships to include more representation from the local business community, communities of color, and communities of low-income;
- Maintain and build upon our recognition as a nationally accredited local public health agency through the Public Health Accreditation Board;
- Improve our ability to collect, analyze and interpret data that communities can use to improve their health;
- Continue to strengthen the policies, systems, and environments that support the health of our residents; and
- Seek additional funding to be more responsive in meeting local needs.ⁱ

ⁱ Public Health 3.0: A Call to Action to Create a 21st Century Public Health Infrastructure. Office of the Assistant Secretary for health. U.S. Department of health and Human Services. October 2016.

Clackamas County Community Themes & Strengths

Identified through community engagement projects



Top 5 important characteristics of a healthy community

1. Safe, affordable housing
2. Low crime/safe neighborhoods
3. Access to healthy, affordable food
4. Access to physical, mental, and/or oral health care
5. Good schools



Top 5 important issues that need to be addressed to make the community healthy

1. Homeless/lack of safe, affordable housing
2. Unemployment/lack of living wage jobs
3. Mental health challenges
4. Hunger/lack of healthy, affordable food
5. Lack of access to physical, mental, and/or oral health care



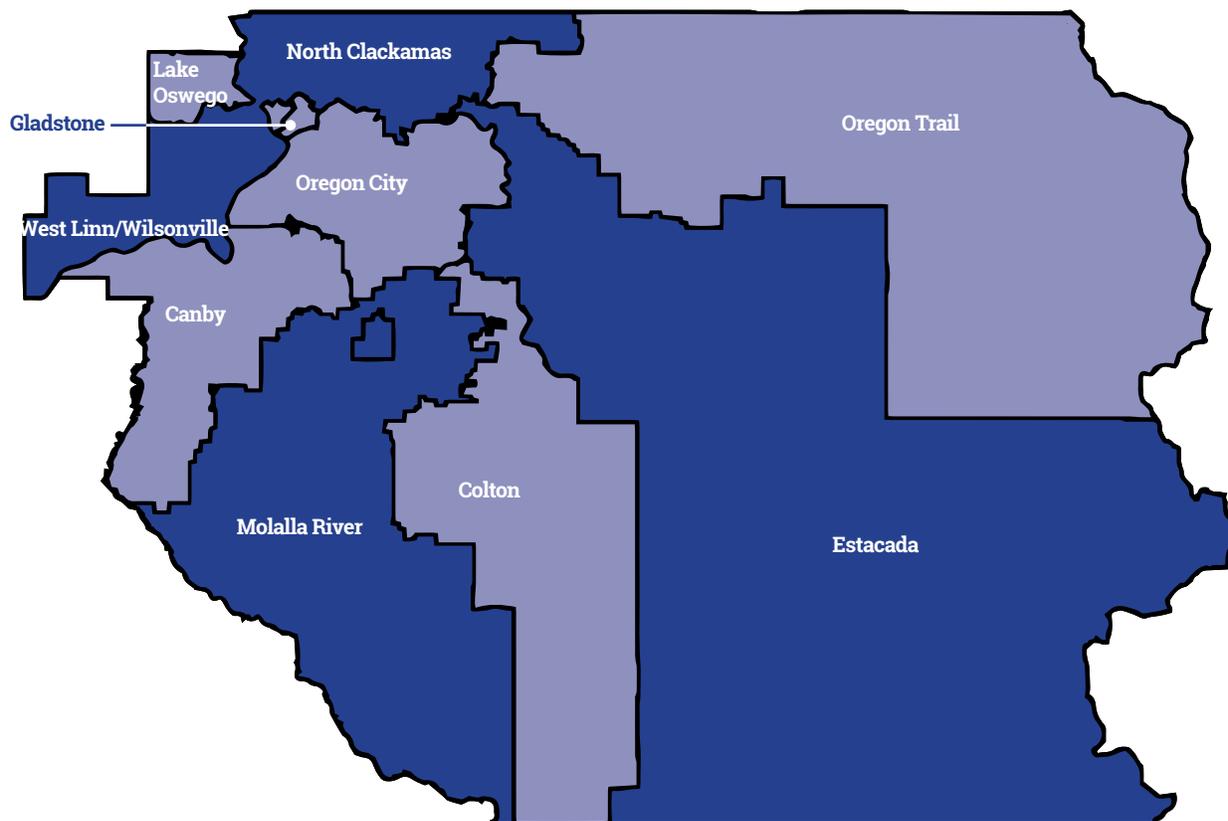
Top 3 important risky behaviors in your community

1. Drug use/abuse
2. Alcohol abuse/addiction
3. Poor eating habits

Data source: 2016 Healthy Columbia Willamette Collaborative

Health Equity Zones

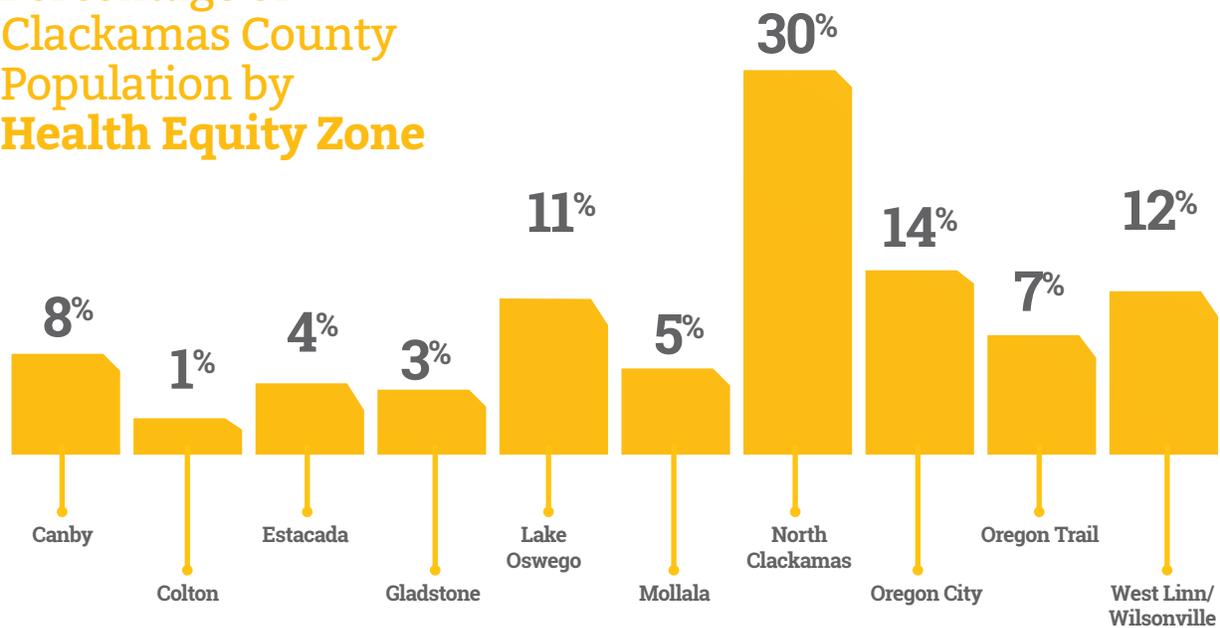
Third most populous in the State of Oregon, Clackamas County is both economically and geographically diverse. Population data is often only available at the county level, meaning the health of the individual communities is typically lost in the big picture. Health Equity Zones are a new concept developed by Clackamas County's Public Health Division to help address the gaps in our knowledge of our communities. Health Equity Zones are divisions of the county that are separated into smaller geographic areas that will allow us to visibly display and share data in meaningful ways. These zones will better communicate the health, equity, and quality of life needs of local communities for residents, partners, funders and elected officials.



Population & Demographics



Percentage of Clackamas County Population by Health Equity Zone



As of the 2010 Census, the population in Clackamas County was 375,992. According to American FactFinder, a U.S. Census source for population information, the 2015 population in Clackamas County is estimated to be 401,515, a seven percent increase from what was calculated in 2010. Approximately two-thirds, or 67 percent, of Clackamas County's population resides in the Health Equity Zones of North Clackamas, Lake Oswego, Oregon City, and West Linn/Wilsonville. The city of Happy Valley, located in the North Clackamas Health Equity Zone, has seen the largest increase in population since 2010, with a 26 percent increase as of the 2015 population estimate.

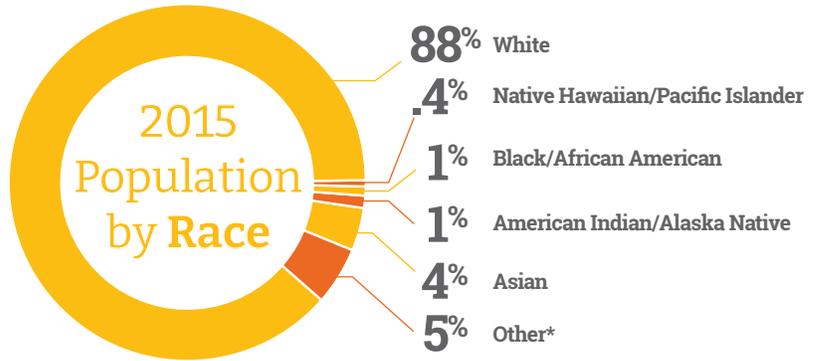
Based on 2015 estimates, the majority of the population in Clackamas County is White (89 percent), with those identifying as Asian or with more than one race, primarily making up the remainder of the population at 4 percent and 5 percent, respectively. The racial makeup of Clackamas County has changed very little since the 2010 Census, when Whites represented 90 percent of the population, Asians 3 percent, and Multi-Race 5 percent. Approximately 8 percent of the population identified as ethnically Hispanic in 2010, with only a slight increase to 9 percent as of the 2015 population estimate.



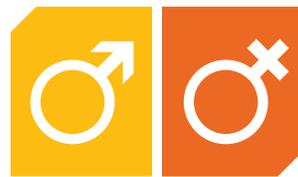


Between 2010 and 2015, the percentage of residents identifying themselves as White decreased approximately 2 percent. Slight increases (approximately 1 percent) have been observed in the Asian population and in individuals identifying with more than one race.

In 2015, the estimated median age was 41.5 years. The female population was slightly older than the male population, with a median age of 43.0 (versus 39.9 in males). Approximately 40 percent of the population was over the age of 40 years. The mean race adjusted life-expectancy for women is estimated to be 85.5 years and 82.2 years for men.



*Identifies with two or more races

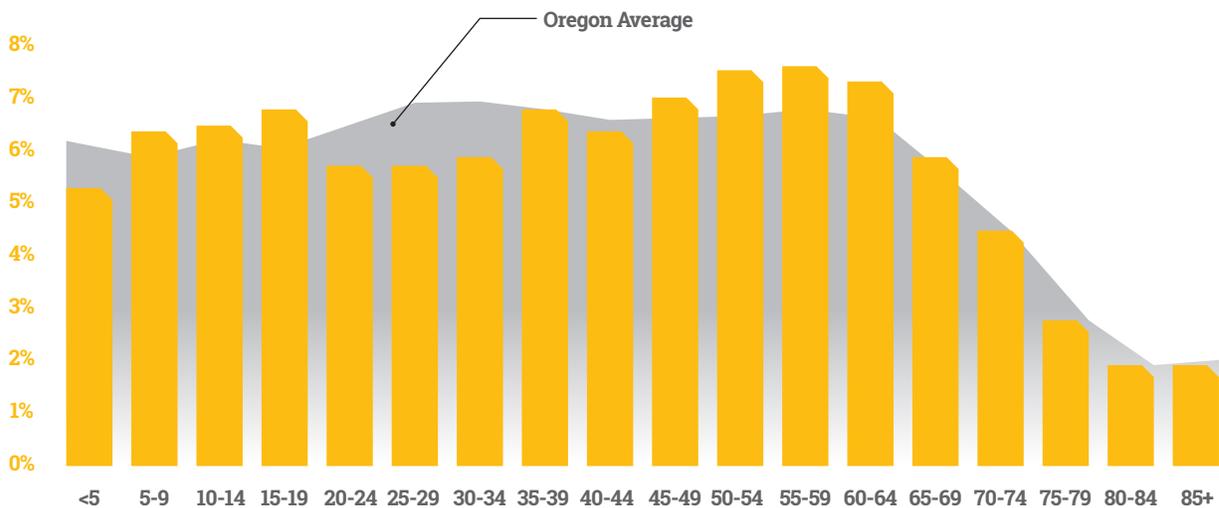


50/50
Male to Female Ratio

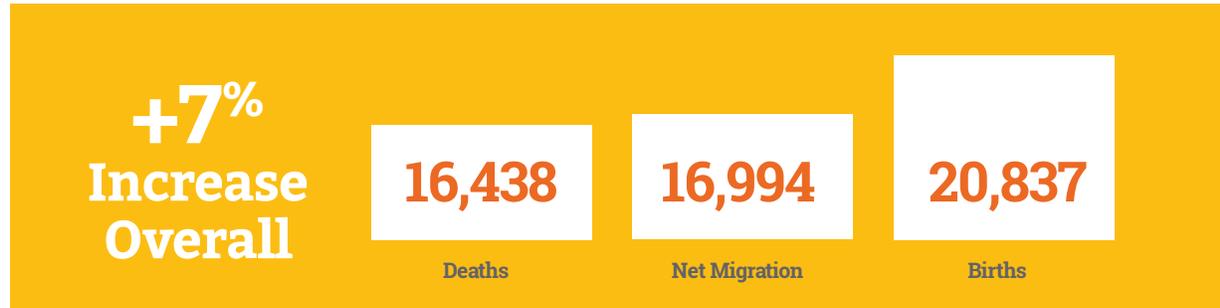


1 in 10
are Hispanic

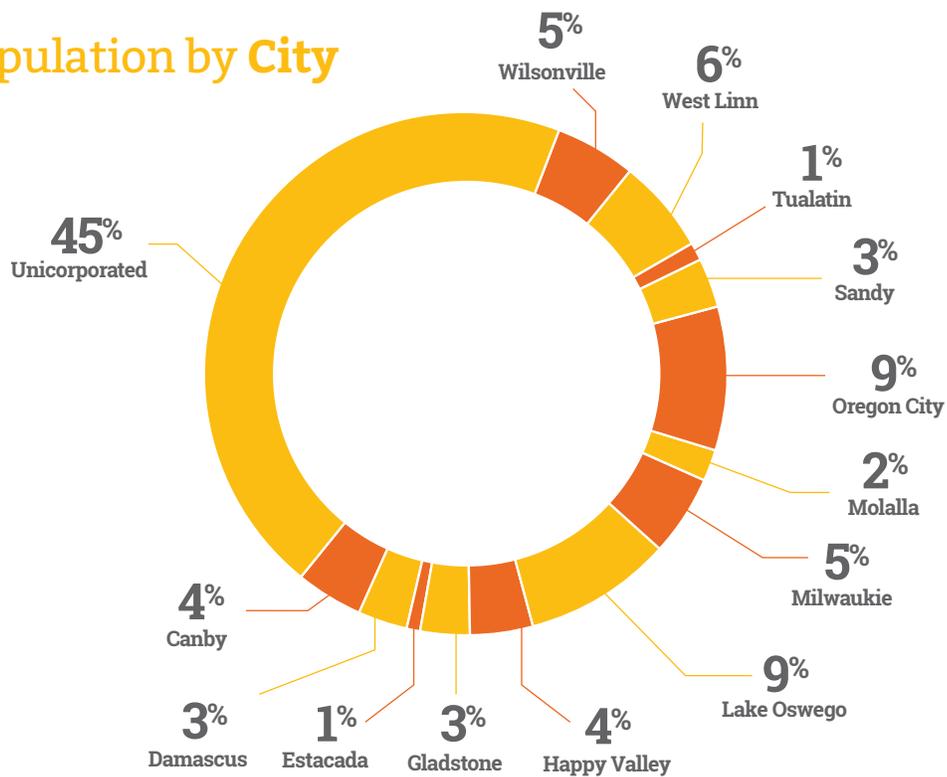
Population by Age



Population Change Between 2010 and 2015



2015 Population by City



Sources:

The Association Between Income and Life Expectancy, 2001-2014
 Portland State University, Population Research Center, 2015 Annual Oregon Population Report Tables
 U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates
 U.S. Census Bureau, 2015 American Community Survey 1-Year Estimates

Culture of Health



Culture of Health is a collective term used to describe the conditions and environment in which we live and the manner in which those conditions influence our health. The conditions and environment in which we live play an indirect role on our quality of life and health. Examples of Culture of Health include, but are not limited to, access to healthy food and local markets, educational opportunities, access to health care services, public safety, and economic and job opportunities. The social and physical environment in which we live has been shown to impact our quality of life, and ultimately our health, explaining the disparity in health among people living in certain communities over others.

Nationally, 28.2 percent of individuals over the age of 25 with less than a high school diploma were estimated to be living in poverty in 2015. This represents an increase from 27.1 percent in 2010. Among all individuals over the age of 25, regardless of educational attainment, the percentage estimated to be living in poverty has increased from 14.3 percent in 2010 to 14.5 percent in 2015. Data from 2011 suggests 29.5 percent of households with less than high school attainment spent more than 50 percent of their income on housing compared to 12.7 percent of households with a four-year college degree. The ratio between households with an income in the 80th percentile compared to households with an income in the 20th percentile in the United States is 4.4. The disparity in Oregon is slightly greater, with a ratio of 4.6.^{i,ii}

In Oregon, the high school graduation rate for ninth-grade students who graduate with their cohort in four years is 70 percent, compared to the national median of 86 percent. Additionally, 21 percent (23 percent nationally) of children under the age of 18 in Oregon are estimated to be living in poverty. Approximately 20 percent, or 1 in 5 households in Oregon qualify as living in severe housing – households with overcrowding, high housing costs, or lack of kitchen or plumbing facilities. The national median for this same measure is estimated to be 14 percent.ⁱⁱⁱ

Healthy People 2020 goals for Culture of Health include increasing the proportion of persons with medical insurance and a usual primary care provider, reducing the proportion of occupied housing units that have moderate or severe physical problems, and increasing the proportion of students who graduate with a regular diploma 4 years after starting 9th grade.

We've assessed the following aspects of Cultures of Health in this assessment: education, economic stability, income, neighborhood and built environment, transportation, social context, and health care access. Examples of areas that were explored include high school graduation rates, homelessness, median household incomes, poverty, proximity to resources and services, traffic fatalities, and health care shortages. These topics were chosen to direct both Clackamas County and external community organizations in their identification of opportunities to advance the social environment work that will promote the health of all residents.

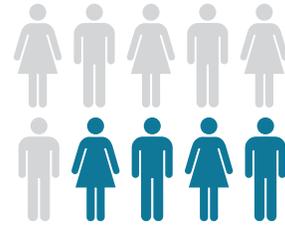
i Healthy People 2020, National Snapshot

ii Robert Wood Johnson Foundation, County Health Rankings, 2016 Oregon Summary Report

Education

For the 2014-2015 school year, a mean of 72 percent of K-12 students in Clackamas County were reported as White, with a minimum of 62 percent reported in the Canby School District and a maximum of 89 percent reported in the Colton School District. The mean Hispanic population reported was 16 percent, with the highest percentage (32 percent) reported in Canby School District.

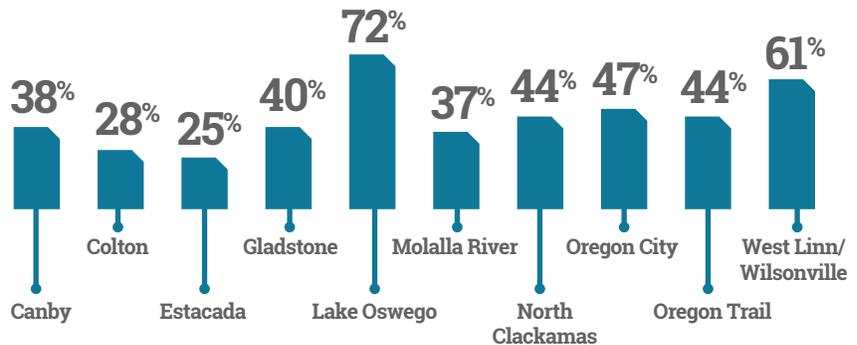
The mean number of different languages spoken at home across all 10 school districts in Clackamas County was 11 (range: 4-16) with Lake Oswego and North Clackamas School Districts reporting the greatest number of languages spoken (16 and 14, respectively). Similarly, Lake Oswego and North Clackamas School Districts had higher percentages of Asian (9 percent and 6 percent, respectively) and Multi-Racial (6 percent, both) populations, suggesting increased diversity in these school districts.



Approximately **40% of students** are economically disadvantaged.

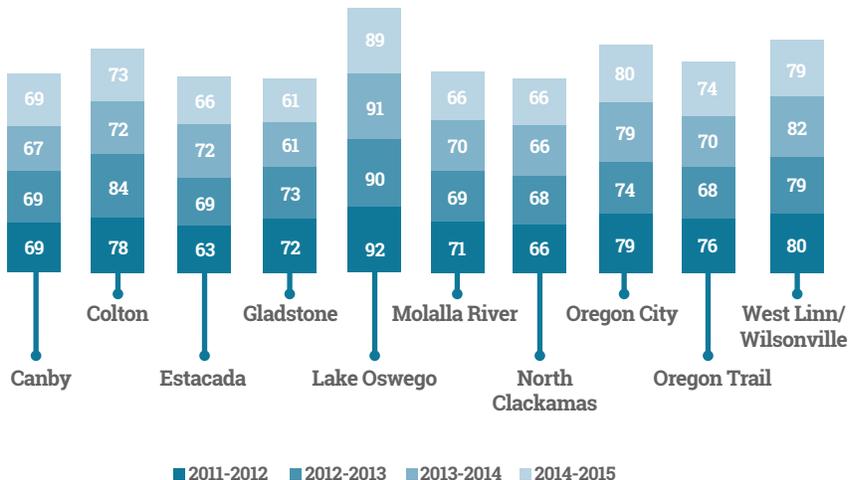
Mean Percentage of Students Meeting or Exceeding in Math

by Health Equity Zone, 2014-2015, K-12

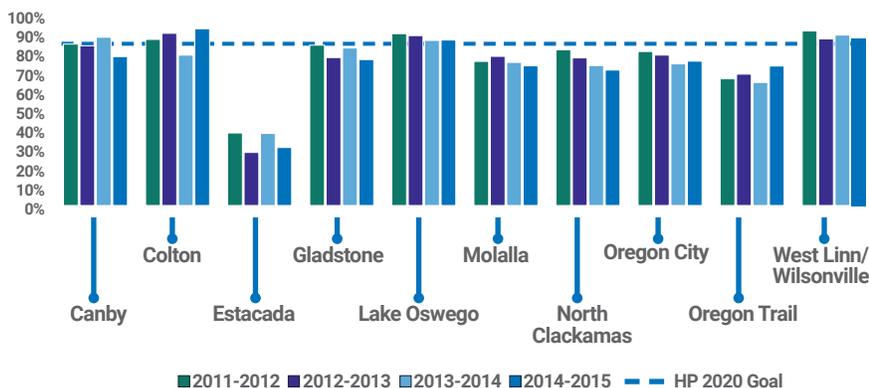


Mean Percentage of Students Meeting or Exceeding in Science

by Health Equity Zone, 2011-2015, K-12



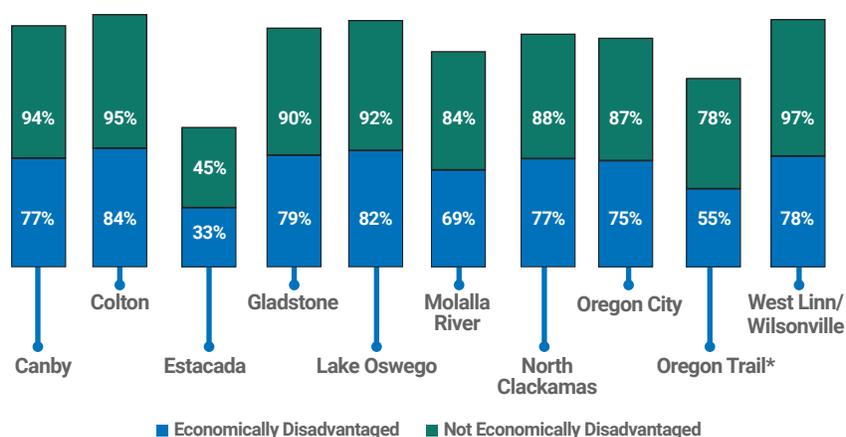
Clackamas County High School Graduation Rate by Health Equity Zone, 2011-2015



Between 2011 and 2015, six of Clackamas County's 10 school districts met or exceeded the Healthy People 2020 graduation goal of 87 percent at least once. Graduation rates in the Gladstone, Lake Oswego, North Clackamas and Oregon City School Districts all show increasing trends during this four-year period. For example, the graduation rate in North Clackamas School District has increased 13 percent. Mean graduation rates between 2011 and 2015 in the school districts of Estacada (74.8 percent) and Oregon Trail (70.5 percent) have remained relatively stable and are disproportionately lower than the County mean (81.8 percent). The mean graduation rate in Clackamas County has increased from 80.6 percent for the 2011-2012 school year to 83.1 percent for the 2014-2015 school year.

These data represent the percent of students in each district who graduated high school within 4 years. This includes all traditional and distance learning schools within the districts. NOTE: Estacada has one traditional school, and two hybrid or distance learning schools. As such, their graduation rates affect the District's rate even though the student body may live across the Portland metro region.

Graduation Rates by Economic Status¹ and Health Equity Zone, 2014-2015



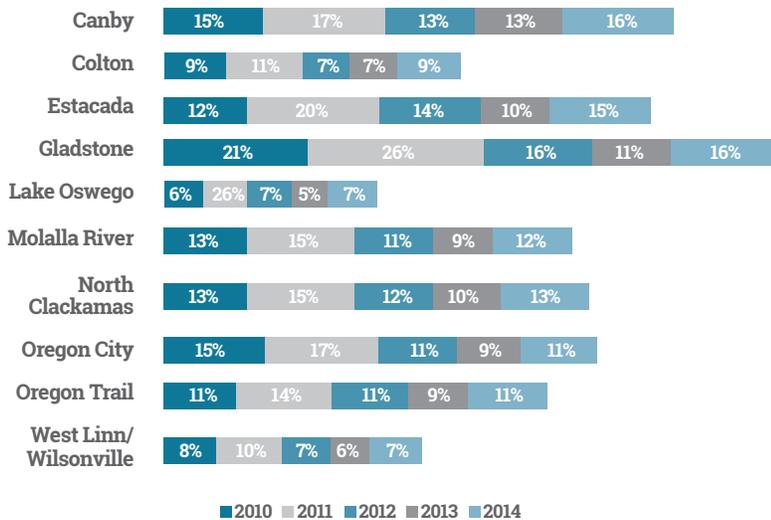
¹ Qualifies for free or reduced lunch
* p-value <0.05

Students who qualified as economically disadvantaged during the 2014-2015 school year were less likely to graduate than students who were not economically disadvantaged. The mean graduation rate of economically disadvantaged students compared to non economically disadvantaged students differed by 13 percent. Oregon Trail School District saw the greatest disparity, with the graduation rate in the economically disadvantaged population (56 percent) significantly less than the graduation rate in the non-economically disadvantaged population (80 percent).

Economic Stability

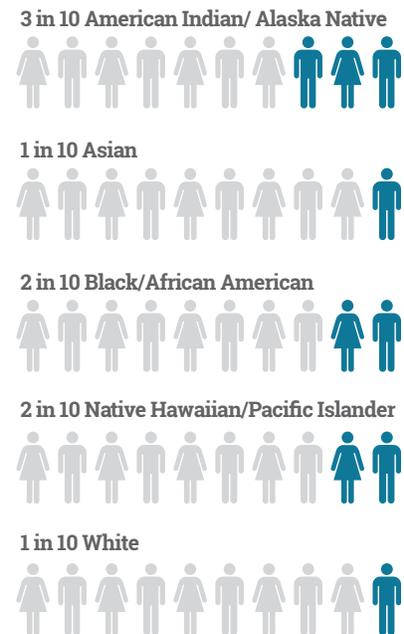
Estimates of Children 5-17 Living in Poverty,

by Health Equity Zone, 2010-2014



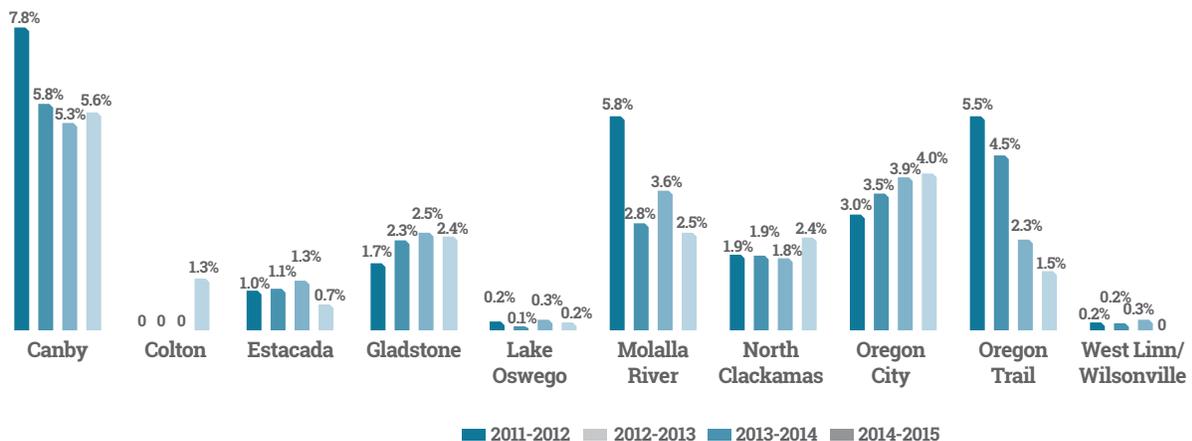
For every 1,000 persons in Clackamas County in 2015 approximately five were living in unstable housing, unsheltered or living in shelter programs. 47 percent of the homeless population counted in 2015 were under the age of 18.

Racial Characteristics of the Population Earning <125 percent Federal Poverty Level (\$25,975)



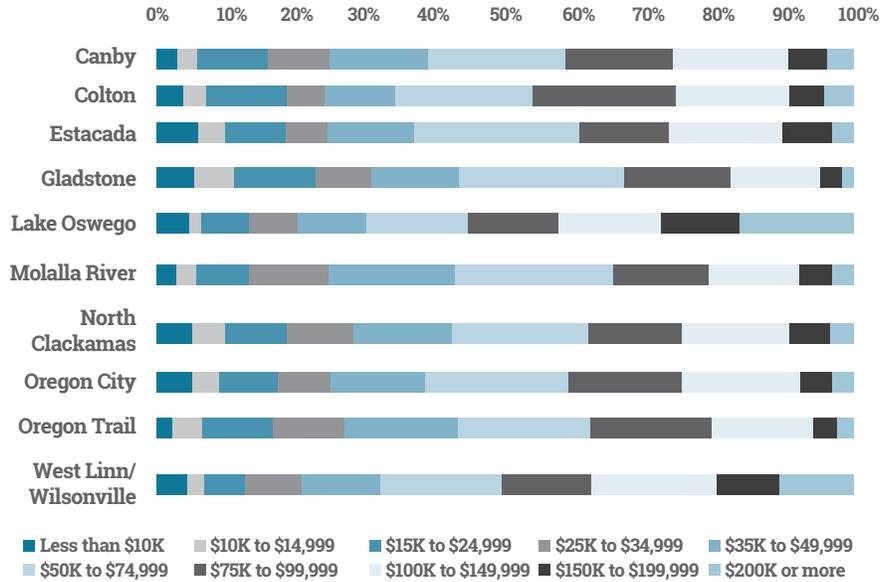
Percentage of Students Experiencing Homelessness

by Health Equity Zone, 2011-2015



Based on the national income distribution, women earning an income in the lowest quartile had a race-adjusted life expectancy of 82.5 years, a 6 percent decrease from the life expectancy of women earning an income in the top quartile. Males exhibit a larger disparity, with those earning an income in the lowest quartile experiencing an almost 9 percent decrease in life expectancy from their counterparts earning an income in the highest quartile.

Clackamas County 2014 Household Income Estimates by Health Equity Zone



Based on 2014 estimates, the median household income in Clackamas County was \$64,700. Lake Oswego Health Equity Zone had the highest median income (\$83,391), while Molalla River Health Equity Zone had the least (\$56,096). In other words, half of the households in the Molalla River Health Equity Zone have an income less than \$56,096. Additionally, more than 20 percent of household incomes in the Gladstone Health Equity Zone are less than \$34,999, the largest percentage in this range among the Health Equity Zones.

“Holistic health includes homes and schools.”

– Clackamas County Resident

“People are scared of homeless and there is no need to be.”

– Clackamas County Resident

“I would love to have a house even if it’s a little garage. But I make the best of it.”

– Clackamas County Resident

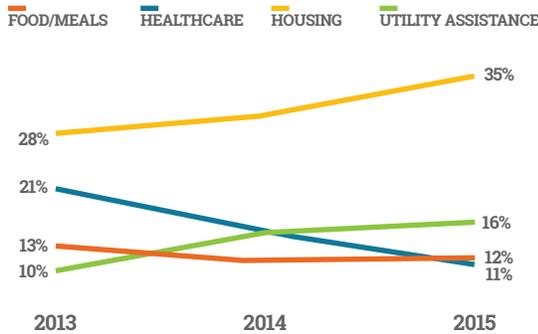
Sources:

- Clackamas County Point-In-Time Homeless Count 2015
- Oregon Department of Education, 2011-2015
- The Association Between Income and Life Expectancy, 2001-2014
- U.S. Census Bureau, Small Area Income and Poverty Program, 2015
- U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates

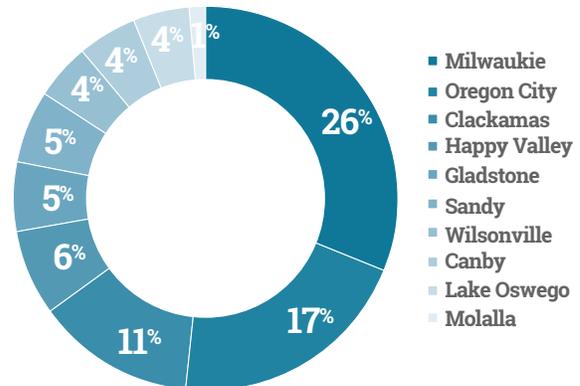
211info



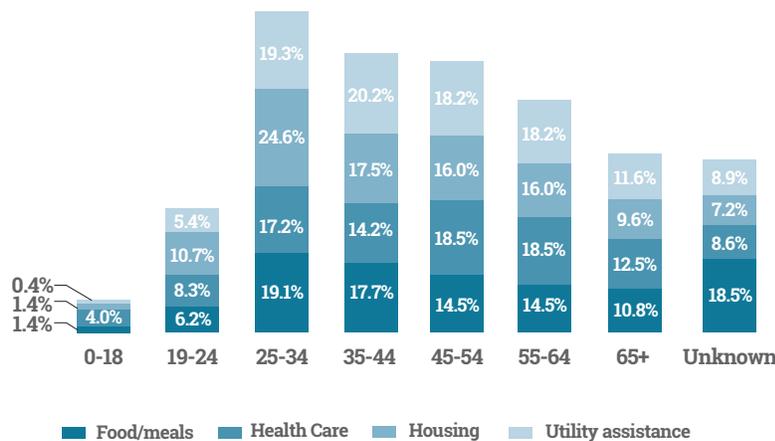
Top Needs of 211info Callers, 2013-2015



Percentage of Calls to 211info by City (Top 10), 2013-2015



Top Needs of 211info Callers by Age Group, 2013-2015

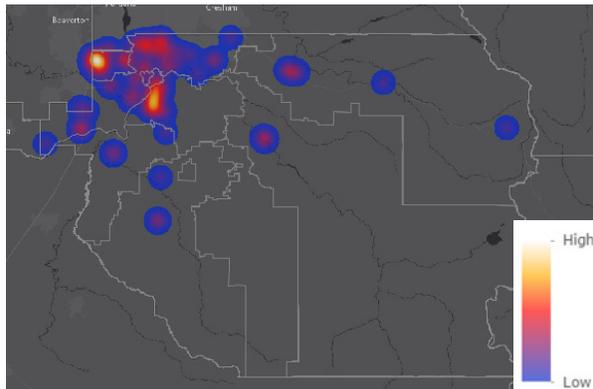


Source:
211info

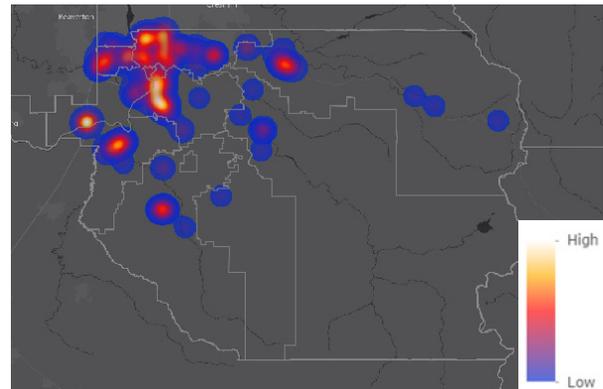
211 info® is a nonprofit helping connect residents across Oregon and Southwest Washington to services and resources in their community. In Clackamas County, between 2013 and 2015, 211info received 67,723 calls for services and resources, of which approximately 54 percent were among new callers. The mean rate of new callers during this time period was 30.3 callers per 1,000 residents. The top needs and services requested were for food/meals, health care, housing, and utility assistance. The proportion of total calls pertaining to housing needs increased 27 percent between 2013-2015 with the number of calls for health care services decreasing by 47 percent. Nearly half (47 percent) of all callers reported living in either Milwaukie or Oregon City. Needs for services and/or resources were greatest among those 25-34 years old and then decreased with increasing age.

Neighborhood and Built Environment

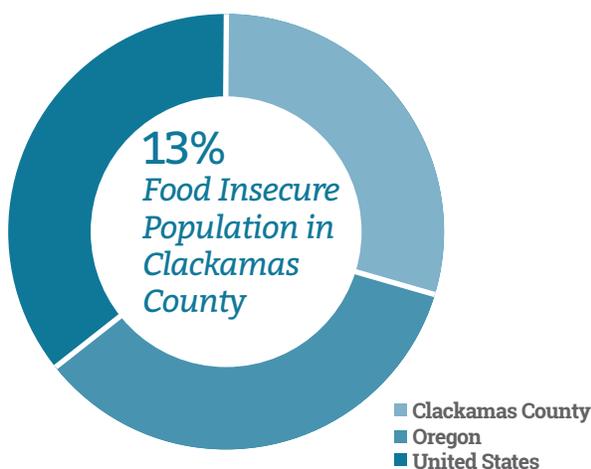
Density of Liquor Stores, Convenience Stores and Fast Food Restaurants



Density of Stores Accepting SNAP and WIC Benefits



The greatest density of liquor stores and fast food restaurants are concentrated in the Health Equity Zones of Lake Oswego, North Clackamas, West Linn/Wilsonville, Gladstone and Oregon City. Specifically, the concentrations in the cities of Lake Oswego and Oregon City represent the greatest proportion at 22 percent and 17 percent, respectively. The Health Equity Zones of Canby, Estacada, Gladstone, Molalla River and Oregon Trail reported some of the highest percentages of students qualifying for free or reduced price lunch (range: 45 percent-51 percent). In contrast, the greatest density of stores accepting SNAP and WIC benefits are located in the Health Equity Zones of Lake Oswego, North Clackamas and Oregon City.



Sources:
Community Food Assessment, Clackamas County, 2015
Community Commons, U.S. Department of Agriculture Nutrition Program
U.S. Department of Agriculture Census 2012

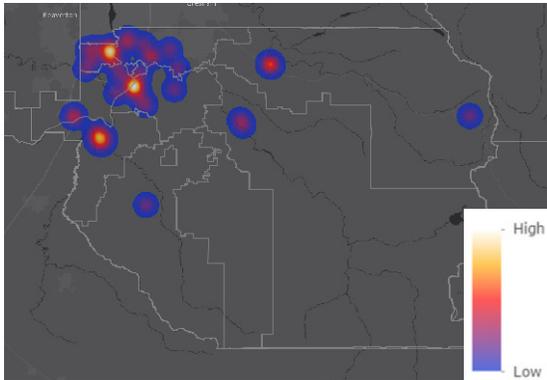
A community food assessment conducted in Clackamas County in 2015 found 157 farms reported producing vegetable crops for sale, while 1,015 produced cut Christmas trees, woody crops, or nursery and greenhouse crops. Nursery and greenhouse crops represented 43 percent of all agricultural commodity sales in Clackamas County in 2012.

“A clean community is a healthy community.”
- Clackamas County Resident

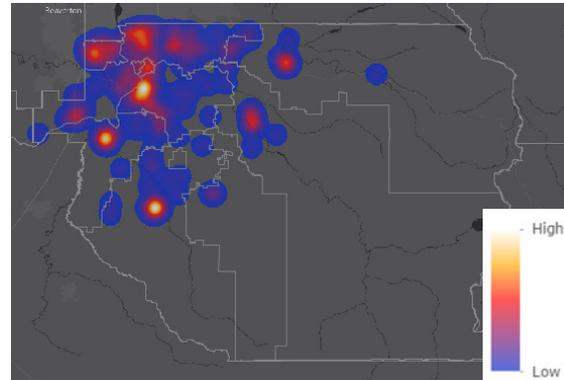
“I grew up in a community where I want my kids to grow up the same way.”
- Clackamas County Resident

Social & Community Context

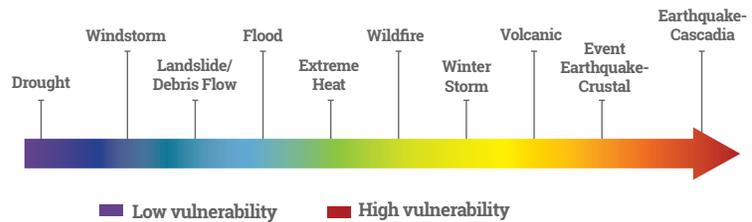
Density of Arts and Culture Institutions



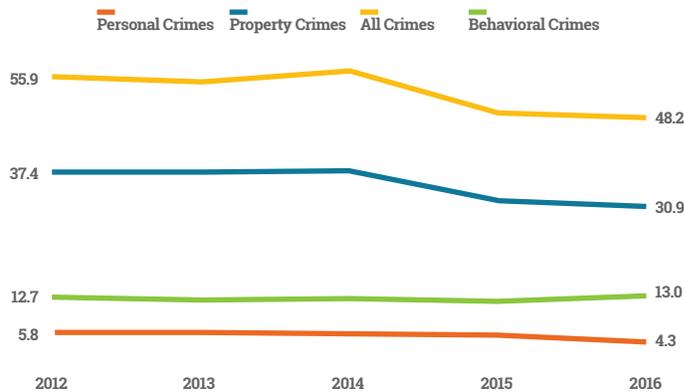
Density of Faith Based Institutions



Assessment of Clackamas County Vulnerability in a Natural Disaster



Crime Rates Per 1,000 Population 2012-2016

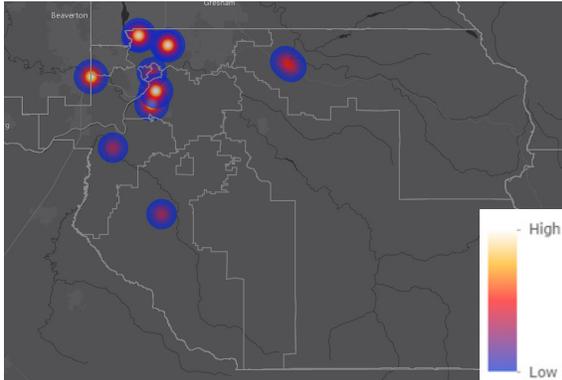


There were 11,826 crimes reported to the Clackamas County Sheriff's Office in 2016. Property crimes, such as theft, accounted for 63 percent of the total crimes reported. More than a quarter (27 percent) of the crimes reported were behavioral (e.g., drug charges, DUII), with remainder of the crimes being person crimes (10 percent). The top six crimes reported were theft (34 percent), criminal mischief (7.9 percent), burglary (6.5 percent), identity theft (4.7 percent), stolen vehicle (4.2 percent), and assault (4.1 percent).

Sources:
 Clackamas County Natural Hazards Mitigation Plan, 2012
 Clackamas County Sheriff's Office, Population Crime Rates, 2012-2016
 Community Commons, ESRI Business Analyst, 2010

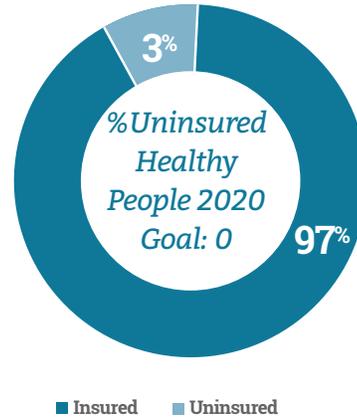
Health Care Access

Density of Federally Qualified Health Centers* and Hospitals

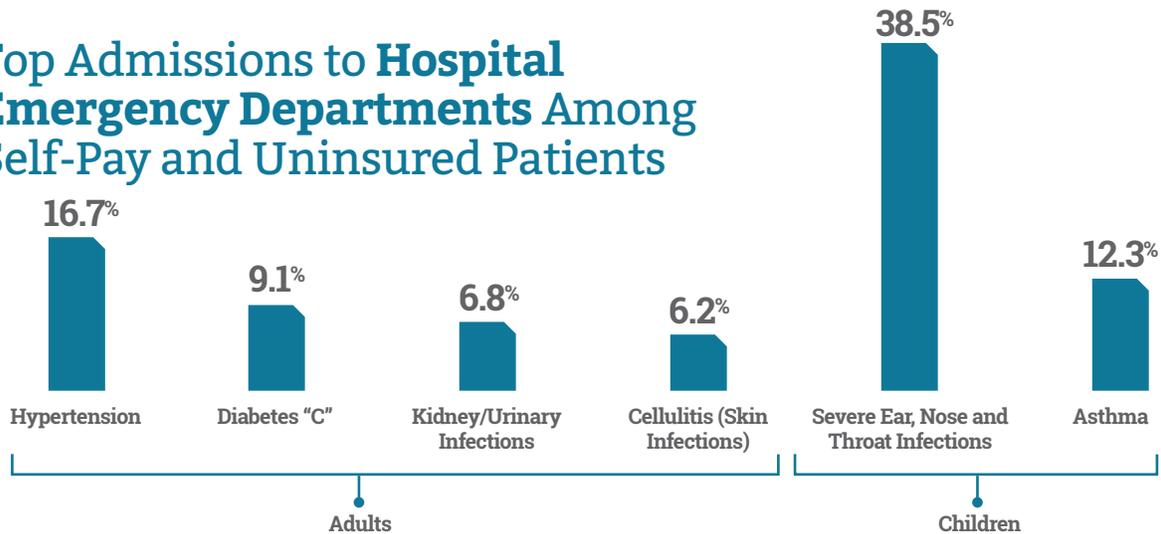


Health centers qualifying for federal funding, enhanced reimbursement from Medicare and Medicaid, serve an underserved area of population, and offer a sliding fee scale.

Health Insurance Coverage, By Type, 2015.



Top Admissions to Hospital Emergency Departments Among Self-Pay and Uninsured Patients



In 2013, 1 Primary Care provider for **1,159 people**



In 2014, 1 Dentist for **1,321 people**



In 2015, 1 Mental Health provider for **476 people**

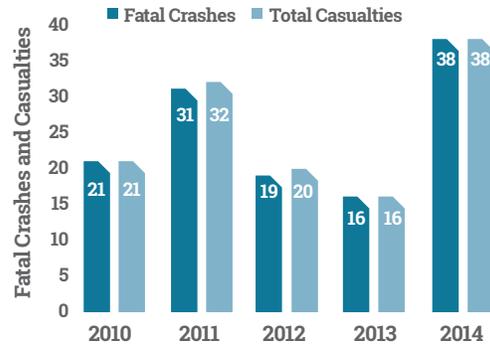


30 Minutes average travel time to nearest hospital from Estacada or East County

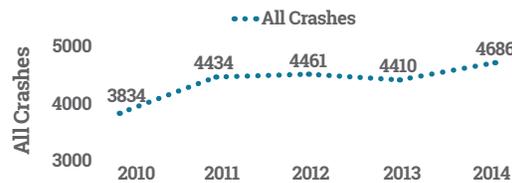
Sources:
 Healthy Columbia Willamette Collaborative, Community Health Needs Assessment, 2016
 Oregon Health Insurance Survey: Demographic Information Fact Sheet, 2015. Oregon Health Authority.

Transportation

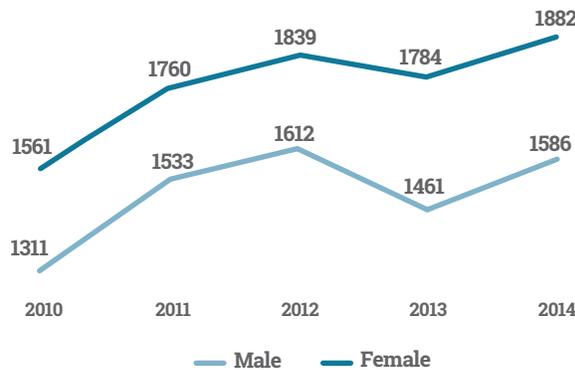
Crashes and Casualties, 2010-2014



Between 2010 and 2014, the number of fatal crashes reached an all-time high in 2014, with 38 fatal crashes. While there were 31 fatal crashes reported in 2011, the number of fatal crashes in 2014 increased from 21 fatal crashes reported in 2010. Nearly a quarter of the individuals killed in fatal crashes in 2014 were pedestrians. On average, approximately 265 more women are injured in crashes every year in Clackamas County than men.

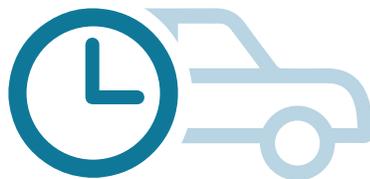


Injuries, 2010-2014



Among workers who commute in their car...

42% commute more than 30 minutes



77% of the workforce usually drives alone to work



Sources:

National Highway Transportation and Safety Administration, Fatality Analysis Reporting System, 2010-2014
 Oregon Department of Transportation, Crash Summary Book, 2010-2014
 U.S. Census Bureau, American Community Survey 5-year Estimates, 2010-2014

Environmental Health

The environment refers to a number of elements, including the air we breathe, the water we drink, and the food we eat. Environmental health also encompasses chemical and radiological hazards we may come in contact with, such as lead based paint. The World Health Organization estimates 24 percent of the global disease burden and 23 percent of all deaths are due to environmental factors.

Fine particulate matter (PM_{2.5}), an air pollutant that can affect a person's health, is produced from all types of combustion, such as motor vehicles, power plants, residential wood burning, forest fires, and agricultural burning. Health issues linked to exposure to particle pollution include chest tightness, shortness of breath, asthma attacks, heart attacks, and premature death in people with heart or lung disease. The Environmental Protection Agency advises particulate matter levels should not exceed 12.0µg/m³. The 2011 average daily density of fine particulate matter in the United States was estimated to be 11.9µg/m³, while the average daily density of PM_{2.5} in Oregon was 8.9µg/m³.

Examples of Healthy People 2020 goals for environmental health include increasing use of alternative modes of transportation for work, reducing the number of days the Air Quality Index exceeds 100, and reducing blood lead levels in children.

The following environmental health information is a compilation from the National Environmental Public Health Tracking Network and the Environmental Protection Agency. The National Environmental Public Health Tracking Network is a database of health, exposure, and hazard information collected from a number of national, state, and city sources. The most recent year of data available from these sources was 2012 and includes the data pertaining to the air quality of Clackamas County.

i Pruss-Ustun, A. and Corvalan, C. Preventing Disease Through Healthy Environments: Towards an estimate of the environmental burden of disease. World Health Organization. Paris. 2006



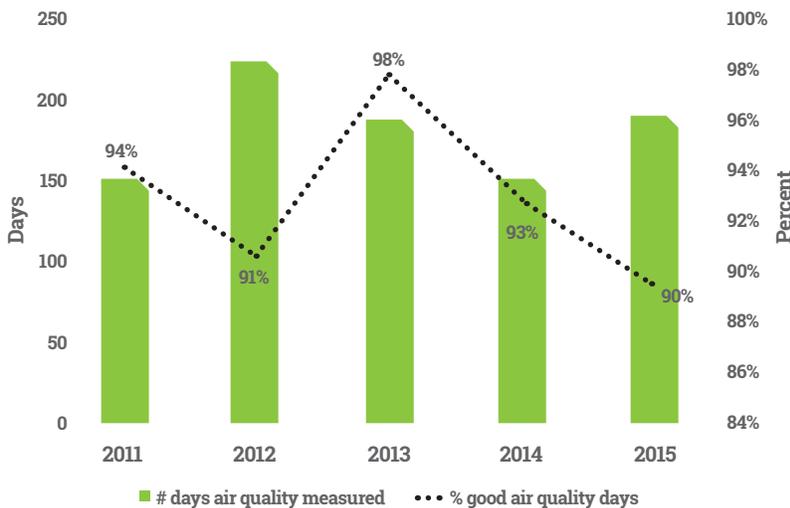
Annual Ambient Concentration of PM_{2.5}

The national standard for annual fine particulate matter, PM_{2.5}, levels is 12.0 micrograms per meter cubed. When PM_{2.5} levels are above 12, this means that air quality is more likely to affect your health.

0 days
of exposure
to unhealthy
levels of ozone
in 2012



Good Air Quality Days, EPA Air Quality Index, 2011-2015



The air quality index (AQI) is an index of how clean or polluted the air is. The index is based on a calculation of five major air pollutants: ground-level ozone, particulate matter, carbon monoxide, sulfur dioxide, and nitrogen dioxide. A “good” air quality index suggests air quality is satisfactory, and air pollution poses little or no risk to the public’s health. Healthy People 2020 is targeting a 10 percent reduction in the number of days AQI is unhealthy, very unhealthy or hazardous.

Sources:
2012 National Environmental Public Health Tracking Network
Environmental Protection Agency Air Quality Index

Maternal & Child Health

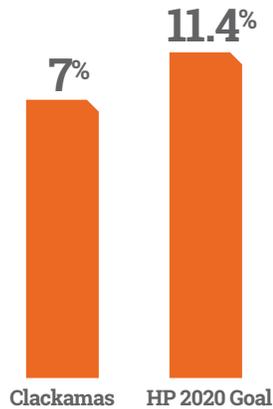
The health and well-being of mothers, infants, and children help predict future public health challenges. The health of women and their families are influenced by the mother's health before conception, during pregnancy, childbirth, and between pregnancies. Factors such as race, ethnicity, age, and income play a large role in the physical, mental, and socioeconomic health of a woman and her family. An environment which supports the needs of the mother increases the chances of healthy birth outcomes, early identification of any health conditions, and ultimately increases the chances for opportunities that will enable children to reach their full potential.

Some of the Maternal, Infant, and Child Health Healthy People 2020 goals include reducing the rate of fetal and infant deaths, increasing the proportion of pregnant women who receive early and adequate prenatal care, and increasing the proportion of infants who are breastfed.

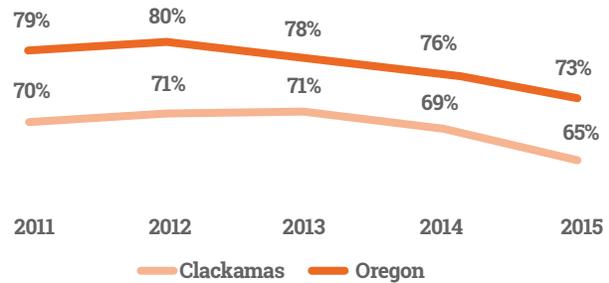
Data sources used to capture Maternal and Child Health in Clackamas County included the Pregnancy Risk Assessment Monitoring System (PRAMS) and the database used for Women, Infants, and Children (WIC). PRAMS, a surveillance project implemented by the Centers for Disease Control and Prevention (CDC), utilizes information collected in surveys to identify groups of women and children at risk for certain health outcomes and to monitor changes in maternal and child health. WIC is a supplemental nutrition program providing supplemental foods, health care referrals, and nutrition education to low-income pregnant, breastfeeding, and non-breastfeeding postpartum women and their children found to be at nutritional risk.

/ Maternal and Child Health

Percentage of Preterm Births <36 Weeks, 2009-2011

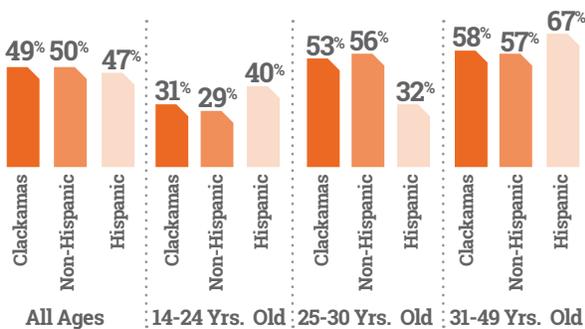


Percentage of Medicaid Births on WIC, 2011-2015



Despite an eight percent increase in the proportion of Clackamas County residents utilizing public insurance between 2012 and 2014, the percentage of Medicaid births on WIC has declined nine percent since 2012.

Exclusive Breastfeeding at 2 Months Old, 2009-2011



6.3% of mothers smoke during pregnancy



72.3% of women receiving early prenatal care

Breastfeeding has been shown to reduce an infant's risk of infections, asthma, obesity, and sudden infant death syndrome (SIDS). Moms who breastfeed decrease their risk of breast and ovarian cancer as well as postpartum depression. In Clackamas County, approximately 50 percent of postpartum women were exclusively breastfeeding at two months. Women under the age of 24 were less likely to breastfeed compared to women over the age of 30.

Sources:
 Healthy Columbia Willamette Collaborative,
 Community Health Needs Assessment. 2016
 Pregnancy Risk Assessment Monitoring System,
 2009-2011
 Women, Infants & Children, 2011-2015

Health Behaviors

Health Behaviors is a broad term used to describe a person's lifestyle and personal behaviors that may influence or impact the state of that person's health presently or in the future. For example, some behaviors have been shown to increase one's chances of certain types of cancer, such as tobacco use and lung cancer.

Other lifestyle choices and health behaviors often studied include: behaviors which may predict one's mental health, such as suicide attempts; the amount of physical activity one typically engages in; dental visits; and, access to a usual source of primary care. Just as Maternal and Child Health outcomes serve as predictors to future public health challenges, Health Behaviors can serve as predictors to both future personal health challenges (i.e., chronic disease) and public health challenges (i.e., healthcare utilization).

In the United States, 18 percent of adults are estimated to be current smokers, with 17 percent estimated to be current smokers in Oregon. Nineteen percent of Oregon residents report binge and/or heavy drinking compared to 17 percent of the U.S. Subsequently, 31 percent of driving deaths are attributed to alcohol impairment in the U.S., with a similar percentage (30 percent) reported in Oregon.

Examples of Healthy People 2020 goals related to health behaviors include increasing the proportion of persons with health insurance, increasing the contribution of fruits and vegetables to the diet, and reducing the proportion of persons engaging in binge drinking (4 or more drinks on one occasion (females) or 5 or more drinks on one occasion (males); binge drinking for teens: 5 or more drinks of alcohol in a row during the past 30 days.

Due to the difference in behaviors and lifestyles between children and adults, two distinct data sources were used. Oregon Healthy Teens (OHT) is a survey used statewide to assess the health and progress of Oregon's adolescents. The survey is administered to 8th and 11th grade students; data from the 2012/2013 and 2014/2015 surveys are included in this report. Physical activity behaviors are based on the adolescents' activity in the past 7 days, alcohol and drug use is based on the activity in the past month, and suicidal tendencies are based on thoughts and behaviors over the past year. The full results of the surveys are accessible from the Oregon Health Division [here](#).

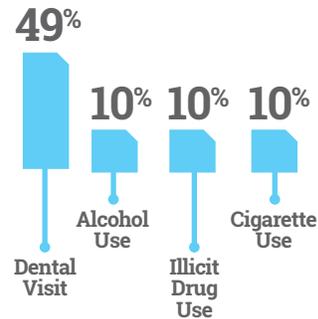
The Behavioral Risk Factor Surveillance System, or BRFSS, is similar to OHT, except that it captures the behavior of adults. Data from 2010-2013 were included in this report. The full results, by county, are available [here](#).

Youth

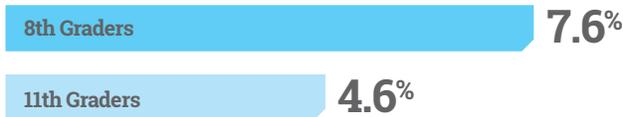
Approximately 1 in 3 eleventh grade students report using alcohol and 1 in 5 report using marijuana in the past month. Among eighth grade students, males were significantly more likely to report alcohol use; however, there was no significant difference in alcohol use between eleventh grade males and females. Marijuana use, on the other hand, was approximately equal in eighth grade males and females, while a significant difference in male and female marijuana use was reported in eleventh grade students (with more females reporting use than males).

Eighth and eleventh grade females were significantly more likely than males to engage in the recommended physical activity level; similarly eighth grade females were significantly more likely to consume 5 or more fruits and vegetables per day. There was so no significant difference in fruit/vegetable consumption between eleventh grade males and females.

Healthy People 2020 Goals



Reported Suicide Attempts in Past 12 Months



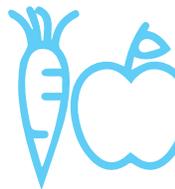
12.3% of 8th graders and **30.3%** of 11th graders reported alcohol use in the past 30 days



6.4% of 8th graders and **13.2%** of 11th graders reported cigarette/vaping use in the past month



7% of 8th graders and **21.5%** of 11th graders reported marijuana use in the past month



21.6% of 8th graders and **19.5%** of 11th graders reported consuming 5 or more fruits and vegetables per day



28.4% of 8th graders and **23.7%** of 11th graders reported being physically active for 60 minutes everyday in the past 7 days



84.7% of 8th graders and **82.3%** of 11th graders reported a dental visit in the past 12 months

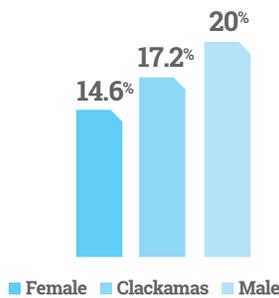
Sources:
Healthy Columbia Willamette Collaborative, Community Health Needs Assessment, 2016
Oregon Healthy Teens, 2013, 2015

Adults

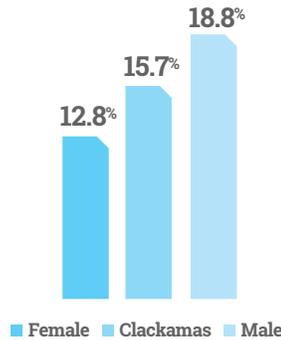
Data collected from the Behavioral Risk Factor Surveillance System suggests 18.8 percent of males binge drink, or consume 5 or more alcoholic beverages in one session. There were nearly 40 percent more female respondents to the survey question pertaining to binge drinking, suggesting the percentage of males who binge drink in Clackamas County may be underestimated. Similarly, 20 percent, or 1 in 5 males in Clackamas County are estimated to be current smokers.

Clackamas County adults exceed the Healthy People 2020 goal for the recommended percentage with a dental visit in the past year. However, while females in Clackamas County exceed the goal for the percentage with a usual health care provider, males do not.

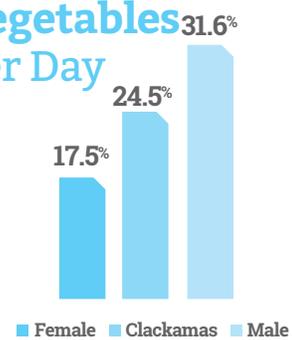
Reported Current Smoker



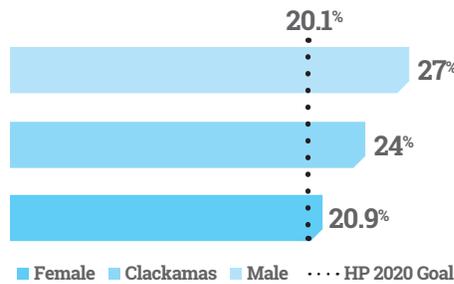
Reported Binge Drinking



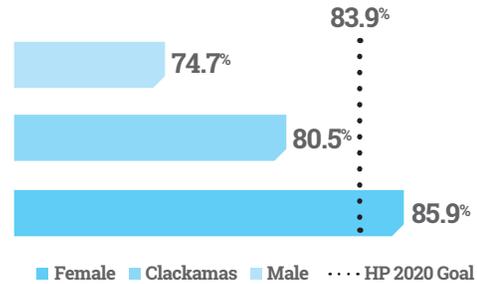
Consumption of 5 or More Fruits/Vegetables per Day



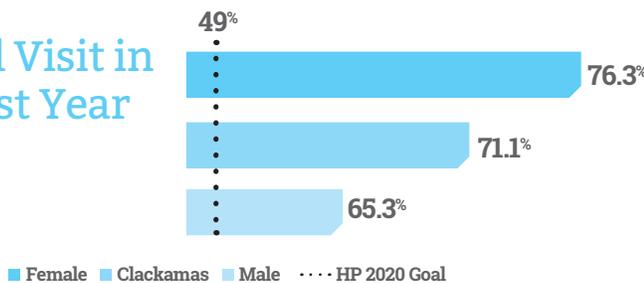
Participating in Enough Physical Activity to Meet Recommended Guidelines



Has Personal Doctor or health Care Provider



Dental Visit in the Past Year



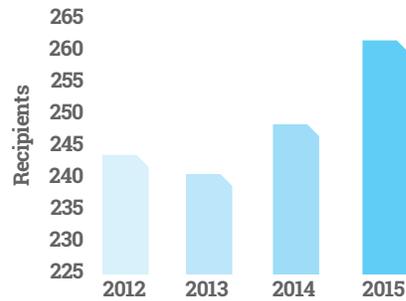
Sources:
Behavioral Risk Factor Surveillance System
2010-2013

Healthy Columbia Willamette Collaborative,
Community Health Needs Assessment, 2016

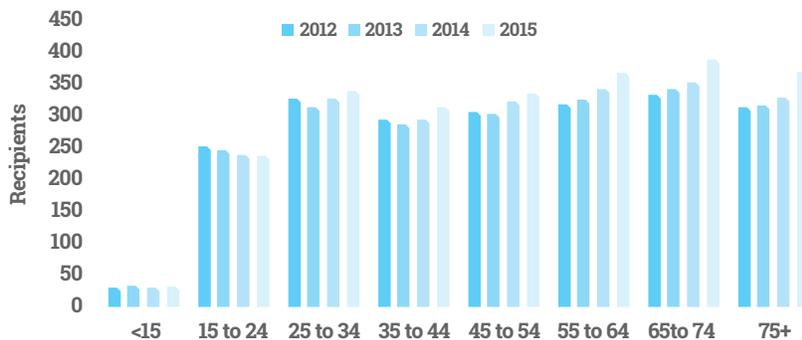
Prescription Opioids

The Oregon Prescription Drug Monitoring Program is a database containing all scheduled II-IV controlled substances dispensed by participating Oregon-licensed retail pharmacies. In 2015, 417,480 opioid prescriptions were dispensed; this represents more prescriptions than there are people in Clackamas County. The number of people receiving an opioid prescription per 1,000 residents in Clackamas County in 2015 represented a 7.1 percent increase from the number of people receiving prescriptions per 1,000 residents in 2012. By age group, recipient rates are relatively equally distributed among those 25 years and older.

Opioid Recipients per 1,000 Residents, 2012-2015



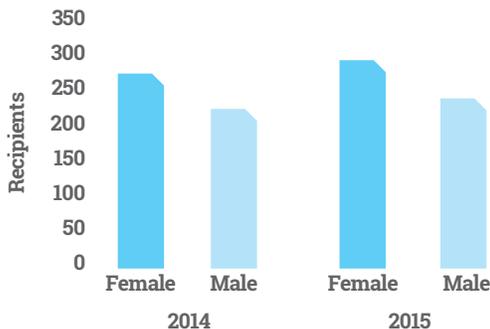
Opioid Recipient Rates by Age, per 1,000 Residents, 2012-2015



"I'm concerned about the heroin use in the community with youngsters."

-Clackamas County Resident

Age-Adjusted Opioid Recipient Rate by Sex per 1,000 Residents 2014-2015

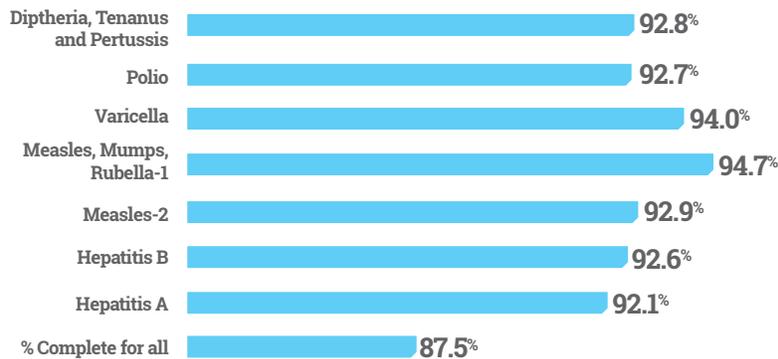


Females were significantly more likely to receive opioid prescriptions compared to males in both years where that demographic information was captured.

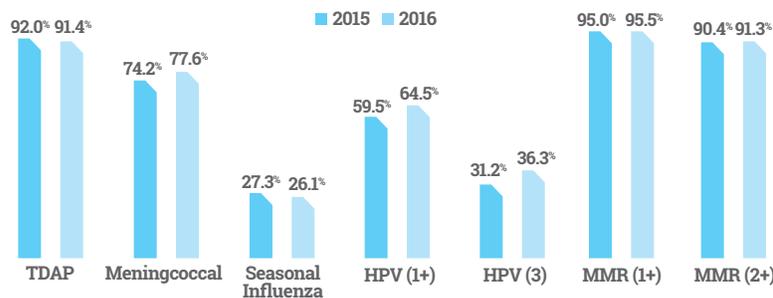
Source:
Oregon Prescription Drug Monitoring Program, 2012-2015

Immunization

Kindergarten Immunization Rates, 2015-2016



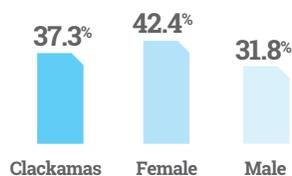
Adolescent (13-17 Years Old) Immunization Rates, 2015-2016



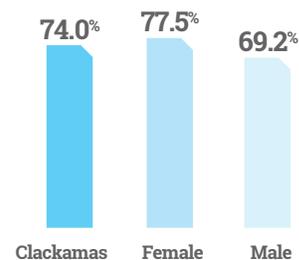
For the 2015-2016 school year, 87.5 percent of kindergartners had received all recommended immunizations. The percentage of non-medical exemption rates for this same school year was 7.4 percent. Less than 30 percent of adolescents (13-17 years old) had received their seasonal influenza vaccine, and less than 65 percent received their first HPV vaccine.

Adults 65 years and older are at high risk for complications such as Pnuemococcal pneumonia if infected with seasonal influenza. The Centers for Disease Control and Prevention estimate between 71 percent and 85 percent of seasonal influenza-related deaths are in this same population. Similarly, approximately 18,000 older adults die each year from pneumococcal disease. Over the 2010-2013 flu seasons, 38 percent of Clackamas County adults received their seasonal influenza vaccine.

Seasonal Influenza Vaccination Adults, 2010-2013



Pneumonia Vaccination Adults 65+ 2010-2013



Sources:

Behavioral Risk Factor Surveillance System 2010-2013
 Centers for Disease Control and Prevention, National Center for Immunization and Respiratory Disease
 Healthy Columbia Willamette Collaborative, Community Health Needs Assessment, 2016
 Oregon Immunization Records. 2015-2016

Illnesses and Chronic Conditions

Illnesses and chronic conditions, or morbidity, is a term used to describe the unhealthy state of an individual as a result of illness, disease, injury or disability. An individual may have more than one illness, defined as co-morbidities. Examples of morbidities include cancer incidence, high blood pressure, high cholesterol, obesity, and incidence of sexually transmitted infections. Chronic diseases and conditions are often associated with increased healthcare utilization and cost and a decreased quality of life. For example, cardiovascular diseases in the United States are estimated to account for \$320 billion in health care expenditures and related expenses annually.ⁱ Understanding the burden of morbidity in our community helps us to identify disparities in disease incidence among the population, identify risk factors, increase access to treatment, monitor treatment outcomes, prevent death, and increase quality of life.

Examples of Healthy People 2020 goals related to morbidity include reducing the proportion of persons in the population with hypertension, reducing the proportion of children and adults who are obese, reducing gonorrhea rates, and reducing sustained domestic transmission of primary and secondary syphilis. The status of select National and State illness and chronic condition indicators are included below.

- The National Health and Nutrition Examination Survey estimated the proportion of adults (20+ years) classified as obese in the United States between 2013 and 2014 was 37.7 percent. Between 1988 and 1994, 22.8 percent of adults were estimated to be obese; nearly half of the current value. Healthy People 2020 has set a desired decrease in this measure to a target of 30.5 percent.ⁱⁱ

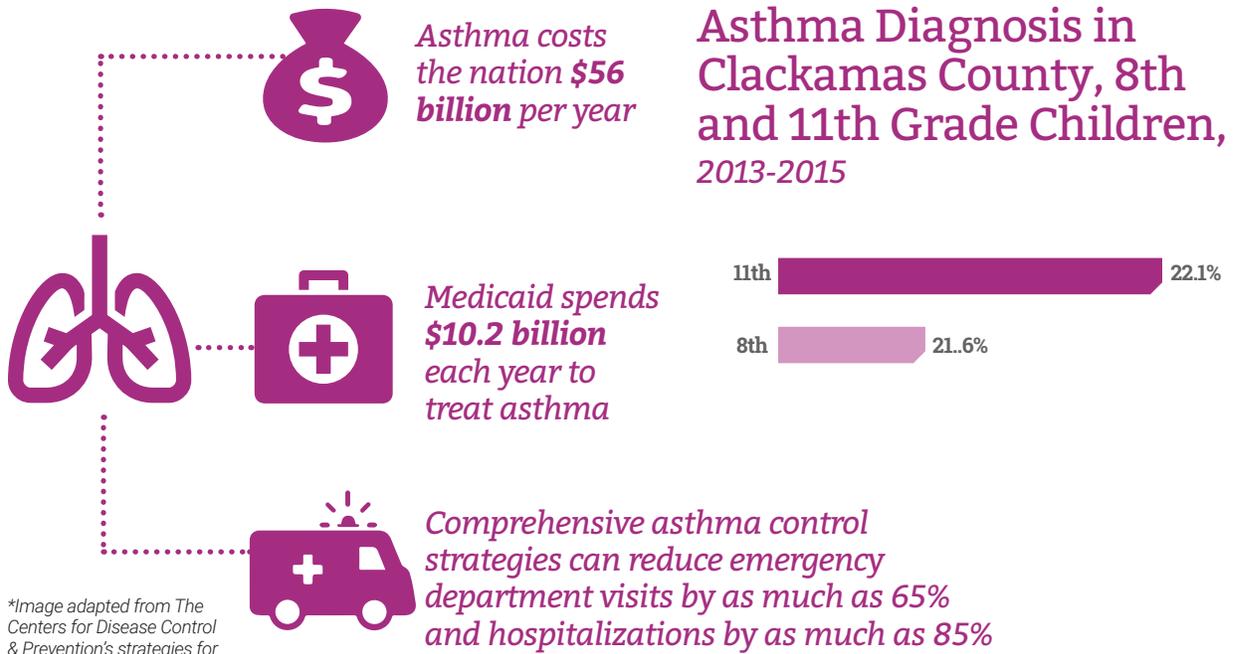
- The Centers for Disease Control and Prevention (CDC) reported an unprecedented high in the rate of reported Sexually Transmitted Diseases in the United States in 2015. An estimated 1.5 million cases of Chlamydia were reported, the highest number of annual cases of any condition ever reported to the CDC. Between 2014 and 2015, the rate of newly diagnosed Chlamydia infections per 100,000 increased 6 percent, Gonorrhea increased 13 percent, Syphilis (primary and secondary) increased 19 percent, and Congenital Syphilis cases increased 6 percent. Oregon is reporting a similar trend in regard to Chlamydia with the rate of newly diagnosed infections per 100,000 increasing five percent between 2014 and 2015. However, in Oregon, Gonorrhea incidences increased 40 percent between 2014 and 2015, and Syphilis (primary and secondary) incidences increased 26 percent. Lastly, in 2015 Oregon reported 6 cases of congenital syphilis, whereas 2 cases were reported in 2014, 0 in 2013, 1 in 2012, and 0 in 2011.ⁱⁱⁱ

i Mozaffarian D, Benjamin EJ, Go AS, et al. Heart Disease and Stroke Statistics-2016 Update: A Report From the American Heart Association. *Circulation*. 2016;133:e38-e360

ii Healthy People 2020, National Snapshot

iii Centers for Disease Control and Prevention. Sexually Transmitted Disease Surveillance 2015. Atlanta: U.S. Department of Health and Human Services; 2016.

Youth



Obesity Among Children 6-11 Years Old, 2015



Sources:

Calculations from the Centers for Disease Control and Prevention (CDC) based on 2003–2008 Medical Expenditure Panel Surveys and the CDC Chronic Disease Cost Calculator

Clackamas County GROW Healthy Kids & Communities, Impact Report, 2015

Costs of Asthma in the United States: 2002–2007, *Journal of Allergy and Clinical Immunology* 127, no. 1 (January 2011): 145–152

Elizabeth R. Woods et al. Community Asthma Initiative: Evaluation of a Quality Improvement Program for Comprehensive Asthma Care, *Pediatrics* 129, no. 3 (March 2012): 465–472

Sibylle H Lob et al. "Promoting Best-Care Practices in Childhood Asthma: Quality Improvement in Community Health Centers," *Pediatrics* 128, no. 20 (2011): 20-28

Healthy Columbia Willamette Collaborative, Community Health Needs Assessment, 2016

Oregon Healthy Teens, 2013, 2015

T. Nurmagambetov et al. Economic Value of Home-based, Multi-Trigger, Multicomponent Interventions with an Environmental Focus for Reducing Asthma Morbidity: A Community Guide Systematic Review, *American Journal of Preventative Medicine* 41, 2S1 (2011): S33–S47

A recent study of child weight status in Clackamas County revealed approximately 2 in 3 children would be classified as in a "healthy weight" category. By sex, 39.2 percent of boys and 37.3 percent of girls were classified as overweight or obese; both proportions are above the national averages of 34 percent and 32.4 percent, respectively. This same study reported that children in Clackamas County spend an average of 51 minutes per day of total activity, which is 9 minutes less than the federal recommended guidelines for moderate to vigorous intensity physical activity per day. Additionally, the data suggests a decreasing trend in physical activity as children progress between kindergarten and the sixth grade.

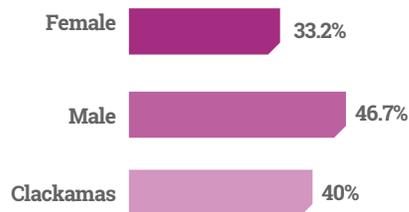
Adults

High Blood Pressure Diagnosis

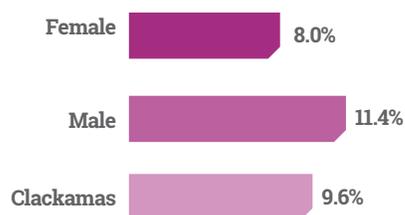


Estimates of adult chronic conditions are based on reported conditions in the Behavioral Risk Factor Surveillance Study. Data collected over 3 different study periods - 2010, 2011, and 2013 - reveal a higher number of female respondents to all questions. Men report a higher rate of high blood pressure, high cholesterol, and diabetes diagnoses; based on number of respondents, the diagnoses in men may therefore be underestimated. More women report having received a diagnosis of depression compared to men.

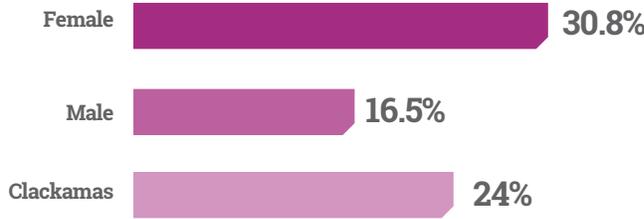
High Cholesterol Diagnosis



Diabetes Diagnosis (Ever)



Depression Diagnosis



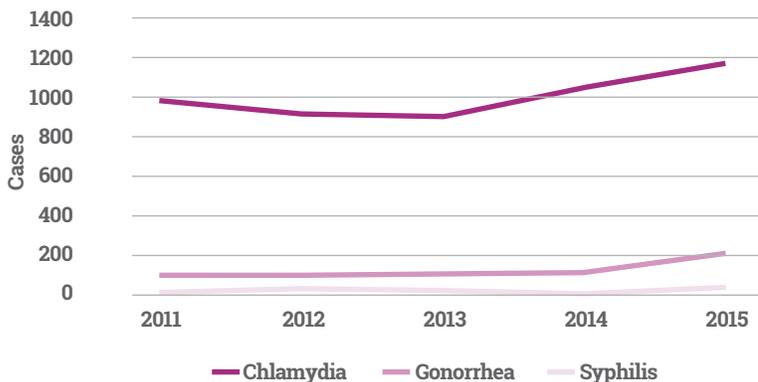
Cancer Incidence Per 100,000 Population

Breast.....	141.3
Prostate.....	120.4
Lung & bronchus.....	55.5
Colon & Rectum.....	36.2



The age-adjusted incidence rate (452.3 cases per 100,000 people) for all cancer sites has remained stable over a five year period (2009-2013) in Clackamas County. Clackamas County is ranked 10th in Oregon for the rate of cancer incidence per 100,000 people.

Rate of Sexually Transmitted Infections per 100,000 People, 2011-2015



Incidence of the top cancer sites in Clackamas County - breast, prostate, lung & bronchus, colon & rectum - has also remained stable over the same five year time period.

Between 2011 and 2015, Clackamas County saw significant increases in sexually transmitted infections. For every 100,000 residents, Chlamydia incidences increased from a rate of approximately 243 cases to 291 cases (a 20 percent increase). Gonorrhea incidences increased from a rate of approximately 23 cases to 52 cases for every 100,000 residents (a 126 percent increase). Meanwhile, incidences of Syphilis increased from a rate of approximately two cases to 11 cases (a 450 percent increase).

Sources:
Behavioral Risk Factor Surveillance System 2010-2013
Healthy Columbia Willamette Collaborative, Community Health Needs Assessment, 2016
National Cancer Institute State Cancer Profiles, 2009-2013
Oregon Public Health Epidemiologists User System

Deaths



Potentially preventable causes of death such as cancer, stroke, heart disease, and chronic lower respiratory disease, provide information that help health officials to prioritize prevention goals and strategies. These deaths are termed potentially preventable based on their association with preventable health behaviors that have been shown to contribute to the leading causes of death. Examples of such health behaviors and chronic conditions include tobacco use and maintaining a healthy weight.

The top five leading causes of death in the United States, based on 2014 data, were heart disease, cancer, chronic lower respiratory disease, cerebrovascular disease (stroke), and unintentional injuries. The leading causes of death in Clackamas County are similar to that of the United States, with differences due to variation in cultures of health, access to health services, and public health efforts.

A recent report from the Centers for Disease Control and Prevention revealed significant decreases in three of the top five potentially preventable deaths (diseases of the heart, cancer, and stroke) between 2010 and 2014. However, a significant increase was observed in unintentional injuries

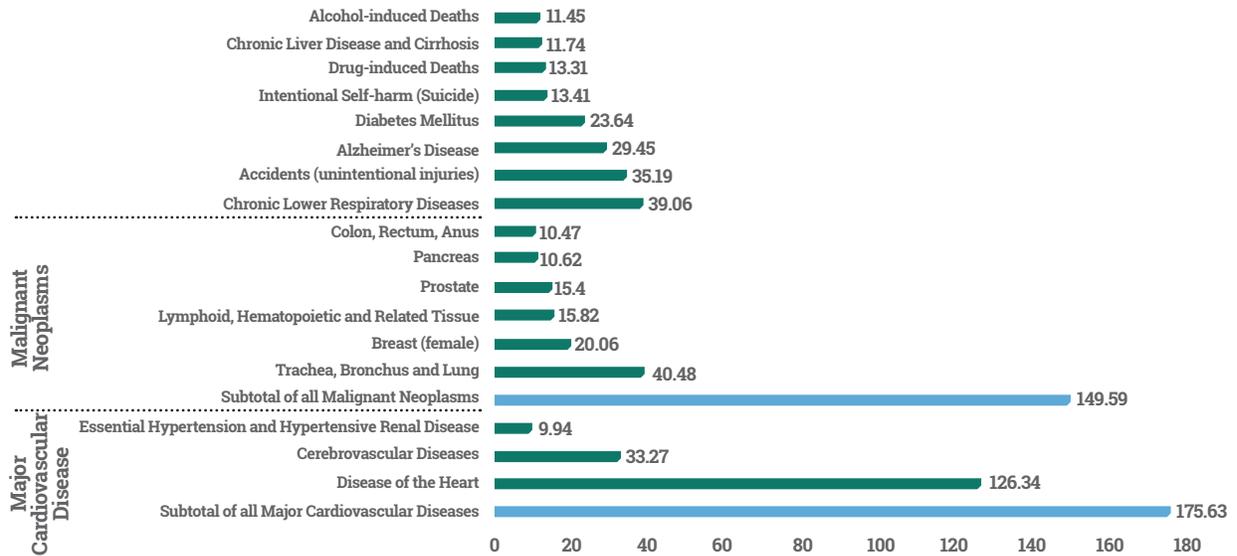
(falls, drug poisoning, and motor vehicle crashes) over this same time period. Increases in falls and drug poisonings (overdose from prescription and illicit drugs) contributed to the rise in deaths from unintentional injuries.¹

The following data for Clackamas County has been included to not only serve as a benchmark, but to support further analyses and research into the selection and implementation of evidence-based interventions to prevent these deaths.

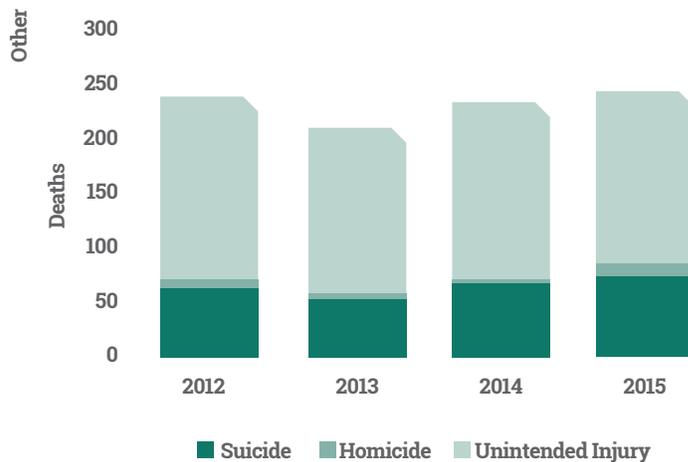
¹ Garcia MC, Bastian B, Rossen LM, et al. Potentially Preventable Deaths Among the Five Leading Causes of Death - United States, 2010 and 2014. *MMWR Morb Mortal Wkly Rep* 2016;65:1245-1255.

/ Deaths

Top Leading Causes of Preventable Death *per 100,000 People, 2013*



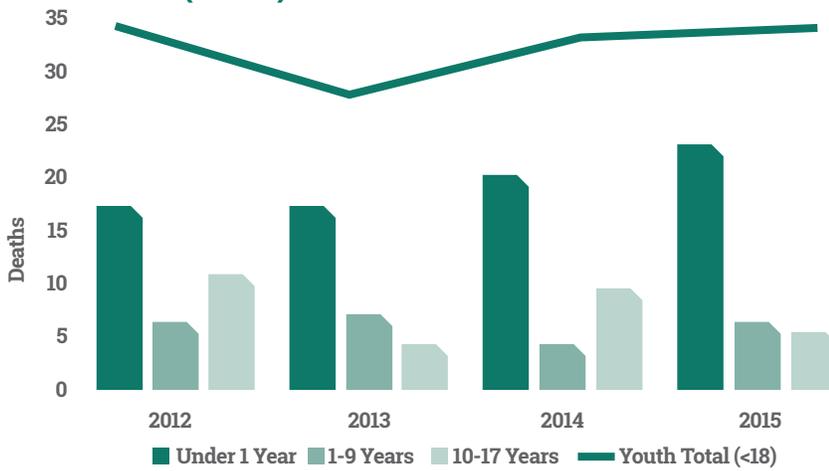
Manner of Death, 2012-2015



The mean number of deaths by suicide, homicide, and unintentional injury between 2012 and 2015 was 234 (ranging from 213 to 246), with an overall increase of less than three percent. The rate of deaths by suicide has increased from 16 suicides per 100,000 residents in 2012 to 19 suicides per 100,000 residents in 2015. The rate of homicides has remained relatively stable, with 2 deaths per 100,000 residents in 2012 and 3 deaths per 100,000 residents in 2015.

/ Deaths

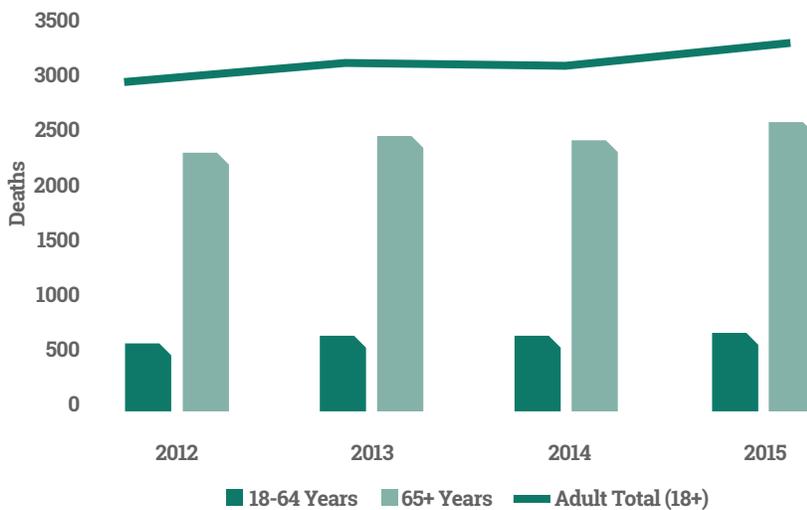
Death by Age Group, Youth (<18), 2012-2015



The number of deaths among youth has remained relatively stable in the past 4 years, with the total count remaining below 35. Deaths in infants under 1 year old remain disproportionately higher, and are greater than the number of deaths in 1-17 year olds combined.

While the number of deaths among older adults (65+) has increased approximately 10 percent since 2012, the rate of deaths has decreased due to the aging population of Clackamas County. For example, the population of older adults (65+) increased 16 percent between 2011 and 2015, with the rate of deaths per 10,000 people decreasing from 451 to 437 during this same time period.

Death by Age Group, Adults (18+), 2012-2015



Sources:
 Healthy Columbia Willamette Collaborative, Community Health Needs Assessment, 2016
 Oregon Death Data, 2012-2015