

# Public Health Accountability Metrics

Annual Report  
March 2019



## About this Report

Welcome to Oregon Health Authority's Public Health Accountability Metrics Annual Report.

Public health accountability metrics bring attention to Oregon's health priorities and the tireless work of the public health system to achieve better outcomes. In June 2017, Oregon's Public Health Advisory Board established a set of accountability metrics to track progress toward population health goals in a modern public health system. Accountability metrics are one way Oregon's public health system demonstrates it is improving health and effectively using public dollars. These metrics show where Oregon is making progress, as well as help identify where new approaches and focus are needed.

This report fulfills statutory requirements under ORS 431.139 for reporting on public health accountability metrics.

For questions or comments about this report, or to request this publication in another format or language, please contact the Oregon Health Authority, Office of the State Public Health Director at:

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## Table of Contents

Executive Summary	3
Introduction	5
Communicable Disease Control	10
Prevention and Health Promotion	16
Environmental Health	23
Access to Clinical Preventive Services	29
Technical Appendix	32

The Oregon Health Authority, Public Health Division acknowledges the tremendous work of the Public Health Advisory Board, and specifically members of the Accountability Metrics subcommittee, for establishing and updating accountability metrics for Oregon's public health system. Subcommittee members reviewed hundreds of potential measures over the course of nearly two years to arrive at a set of measures that reflect Oregon's population health priorities and the important work of the governmental public health system. Thank you!

# Executive Summary

Oregon's public health system is changing how it prevents disease and protects and promotes health. A modern public health system ensures critical public health protections are in place for every person in Oregon, that the public health system is prepared and has the right resources to address emerging health threats, and that the public health system is engaged daily to eliminate health disparities.

Public health accountability metrics are one way Oregon's public health system demonstrates it is improving health and effectively using public dollars through a modern public health system. Established by the Public Health Advisory Board in 2017, public health accountability metrics reflect population health priorities for public health programs and highlight the daily work of local public health authorities (LPHAs) to achieve population health goals.

The 2019 Public Health Accountability Metrics Annual Report provides an in-depth look at how Oregon's public health system is doing today compared to a year ago on key health issues like childhood immunization, tobacco use and prescription opioid mortality, and access to clean drinking water. Key findings from the report include:

- **The 2017 legislative investment in public health modernization is strengthening capacity for improving childhood immunization rates.** Immunization quality improvement programs are a proven strategy for improving childhood immunization rates. Many LPHAs are using public health modernization funding to strengthen partnerships with health care providers for immunization quality improvement. As a result of increased local capacity and strong state-local partnerships, in 2018 LPHAs exceeded the 25% benchmark for the percent of Vaccines for Children clinics participating in the Assessment, Feedback, Incentives, and eXchange (AFIX) quality improvement program, increasing from 14% to 28% in a single year.
- **Rates of gonorrhea continue to increase at an alarming rate, from 107 per 100,000 in 2016 to 121 per 100,000 in 2017.** Oregon, like much of the nation, continues to experience an alarming increase in gonorrhea cases; however, it's rate is still below the 2017 national rate of 172 per 100,000. A sufficiently-resourced public health system, working with the health care system, has the tools to control and prevent the spread of gonorrhea. State and local public health authorities identify where cases are occurring and make sure both the infected individuals and their partners are properly treated. Some LPHAs are using public health modernization funding for interventions to increase capacity for gonorrhea case tracking and case management, and there were modest improvements in these processes from 2016 to 2017. Any additional improvements resulting from the investment will be reflected in next year's report.
- **Prescription opioid mortality rates are on the decline.** This report shows an overall improvement in the rate of prescription opioid deaths, with Oregon meeting the statewide benchmark of three deaths per 100,000 population in 2017. While we recognize this success, Oregon has a long way to go in solving the opioid crisis. This improvement must be considered within the broader context of illicit opioid deaths and overdoses not resulting in death.

# Executive Summary

- **Public health brings health considerations to the forefront in land use and transportation planning.** Communicating about health effects of land use and transportation planning and supporting strategies that promote health is an emerging area for a modern public health system. For the first time, this report shows LPHA involvement in local planning initiatives for active transportation, parks and recreation and land use. In 2018 more than half of LPHAs were involved in local initiatives, ensuring that health is a consideration in local land use and transportation planning.
- **Health outcomes vary across racial and ethnic groups.** Wherever possible, this report displays rates by race and ethnicity, and for many health outcomes disparities exist across racial and ethnic groups. Between 2016 and 2017, gonorrhea rates increased for almost every racial and ethnic group, but the rate of increase was highest among Native Hawaiians/Pacific Islanders and American Indians/Alaskan Natives. And while this year's report shows that adult smoking prevalence decreased for all racial and ethnic groups, rates of tobacco use remain higher for African Americans and American Indians/Alaskan Natives.

Differences in rates across racial and ethnic groups occur because of generations-long social, economic and environmental injustices that result in poor health. These injustices have a greater influence on health outcomes than biological or genetic factors or individual choices. Public health authorities have a responsibility to address the social conditions and correct historical and contemporary injustices that undermine health. One way the public health system begins to do this is by collecting and reporting data that show where health disparities exist and the underlying causes for why certain racial and ethnic groups experience poorer health.

Oregon is committed to being a state where health is within reach for everyone. A modern public health system that works daily to prevent disease, protect and promote health, and eliminate the root causes of health disparities is essential for achieving Oregon's vision.

Moving forward, annual reports will provide the public health system and its partners and stakeholders the information that is needed to understand where Oregon is making progress toward lifelong health for all, and where new approaches and additional focus are needed.

# Introduction

## Background

Since 2013 Oregon has been working to modernize how it improves the public's health. A modern public health system operates efficiently to achieve goals and is set up to provide critical protections for every person in the state. Through focusing on prevention, public health lessens the impact of health threats on people's lives and saves money by lowering demand for costly health care interventions. A strong and effective public health system is essential for achieving Oregon's triple aim of better health, better care and lower health care costs.

Efforts to modernize the public health system have been driven by Oregon's legislature, which has passed related laws in the last three sessions. In the 2015 and 2017 sessions, the legislature enacted laws to use public health accountability metrics to track the progress of state and local public health authorities to meet population health goals, and to use these metrics to incentivize the effective and equitable provision of public health services (Oregon Revised Statute 431.115).

## Public health funding for accountability metrics

The Oregon Health Authority (OHA) and local public health authorities (LPHAs) are funded to implement programs for some, but not all, public health accountability metrics. State and federal funding often provides partial funding for local programs, with the remainder provided through county general funds or other sources.

LPHAs receive funding from the Oregon Health Authority through contracts for categorical public health programs. This report includes information about whether LPHAs currently receive funding to support achievement of each local public health process measure.

In 2017 the Legislature made a \$5 million investment to modernize the governmental public health system. OHA distributed the majority of these funds to LPHAs to develop and implement regional strategies for communicable disease control.

Moving forward state and local public health authorities will continue to look for opportunities to align existing funding with public health accountability metrics, while also seeking opportunities for new funding.

# Introduction

## Purpose of this report

This report increases understanding of Oregon's current status on population health priorities. This report is not a report card for Oregon's public health system or any individual public health authority.

### Reporting by race and ethnicity

Where possible, data are reported by race/ethnicity. Differences in rates across racial and ethnic groups occur because of generations-long social, economic and environmental injustices that result in poor health. These injustices have a greater influence on health outcomes than biological or genetic factors or individual choices.

Public health authorities have a responsibility to address the social conditions and correct historical and contemporary injustices that undermine health. One way the public health system begins to do this is by collecting and reporting data that show where health disparities exist and the underlying causes for why certain racial and ethnic groups experience poor health.

Annual public health accountability metrics reports help to achieve the following core roles of the public health system<sup>1</sup>:

1. Collect and maintain data that reveal inequities in the distribution of disease and the social conditions that influence health;
2. Identify population subgroups characterized by an excess burden of adverse health or socioeconomic outcomes; and
3. Make data and reports available to partners and stakeholders and other groups.

Data showing health disparities supports affected communities and public health authorities to co-create the solutions that will begin to correct historical and social injustices so that all people in Oregon can reach their full health potential.

<sup>1</sup> Oregon Health Authority 2017). Public Health Modernization Manual. Available at: [https://www.oregon.gov/oha/PH/ABOUT/TASKFORCE/Documents/public\\_health\\_modernization\\_manual.pdf](https://www.oregon.gov/oha/PH/ABOUT/TASKFORCE/Documents/public_health_modernization_manual.pdf).



# Introduction

## Framework for public health accountability metrics

The Public Health Advisory Board (PHAB) adopted measures to track progress toward achieving population health goals through a modern public health system. The collection of health outcome and local public health process measures, defined below, are collectively referred to as public health accountability metrics. Measures are shown in Table 1.

Health outcome measures reflect population health priorities for the public health system. Making improvements on the health outcome measures will require long-term focus and must include other sectors.

Local public health process measures reflect the core functions of a local public health authority to make improvements in each health outcome measure. Local public health process measures capture the work that each local public health authority must do in order to move the needle on the health outcome measures.

Developmental metrics reflect population health priorities but for which comprehensive public health strategies are yet to be determined. These health outcome measures will be tracked and reported but will not be incentivized.

Measures in this report are reported under foundational program areas of a modern public health system:



**Communicable Disease Control**



**Prevention and Health Promotion**








**Environmental Health**



**Access to Clinical Preventive Services**

Table 1. Public Health Accountability and Developmental Metrics

PART 1: ACCOUNTABILITY METRICS			
Health Outcome Measure	Local Public Health Process Measures		
 <b>Communicable Disease Control</b>			
Percent of two-year olds who received recommended vaccines	Percent of Vaccines for Children clinics that participate in the Assessment, Feedback, Incentives and eXchange (AFIX) program		
Gonorrhea incidence rate per 100,000 population	Percent of gonorrhea cases that had at least one contact that received treatment	Percent of gonorrhea case reports with complete priority fields	
 <b>Prevention and Health Promotion</b>			
Percent of adults who smoke cigarettes	Percent of population reached by tobacco-free county properties policies	Percent of population reached by tobacco retail licensure policies	
Prescription opioid mortality rate per 100,000 population	Percent of top opioid prescribers enrolled in the Prescription Drug Monitoring Program (PDMP) Database		
 <b>Environmental Health</b>			
Percent of commuters who walk, bike, or use public transportation to get to work	Local public health authority participation in leadership or planning initiatives related to active transportation, parks and recreation, or land use		
Percent of community water systems meeting health-based standards	Percent of water systems surveys completed	Percent of water quality alert responses	Percent of priority non-compliers resolved
 <b>Access to Clinical Preventive Services</b>			
Percent of women at risk of unintended pregnancy who use effective methods of contraception	Annual strategic plan that identifies gaps, barriers and opportunities for improving access to effective contraceptive use		
PART 2: DEVELOPMENTAL METRICS			
Health Outcome Measure	Local Public Health Process Measure		
 <b>Access to Clinical Preventive Services</b>			
Percent of children age 0-5 with any dental visit	Not applicable		



# Introduction

## Sources for population health data

The public health system uses data from different sources to track health outcomes, including vital statistics, reportable disease monitoring, and surveys, among others. The variety of data sources, methods used to report data, and time periods for reporting present challenges to making comparisons across accountability metrics.

Each accountability metric should be looked at individually, and comparisons between metrics should not be made to understand differences in population health outcomes of interest.

## Technical details about health outcome and process measures

This report provides the first annual update to the Baseline Report, March 2018. The baseline year for data is 2016 unless otherwise specified. Benchmarks are presented for each measure. For most measures, the higher or larger the data, the more desirable relative to meeting or exceeding the benchmark. Measures where lower or smaller data points relative to the benchmark are desirable, are indicated with “lower is better” on the chart. Arrows on local public health process measures pages indicate where there was a lack of improvement from baseline year to the following year. Race categories of African American, American Indian & Alaska Native, Asian, Pacific Islander, and White do not include individuals of Hispanic ethnicity. Data for individuals of Hispanic ethnicity are presented separately. Data sources, data collection methods, measure specification, and additional technical information are described in detail in the Technical Appendix.



# Childhood Immunization

## Health Outcome Measure

### Percent of two-year olds who received recommended vaccines

Foundational program area: Communicable Disease Control

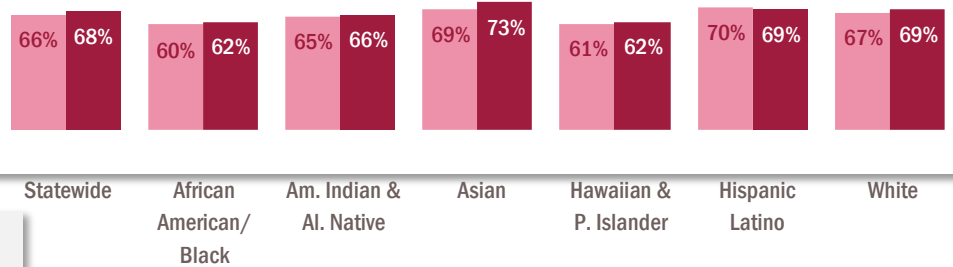
Data source: ALERT Immunization Information System

Benchmark source: 80%, Oregon State Health Improvement Plan (SHIP) 2020 target

#### By race and ethnicity

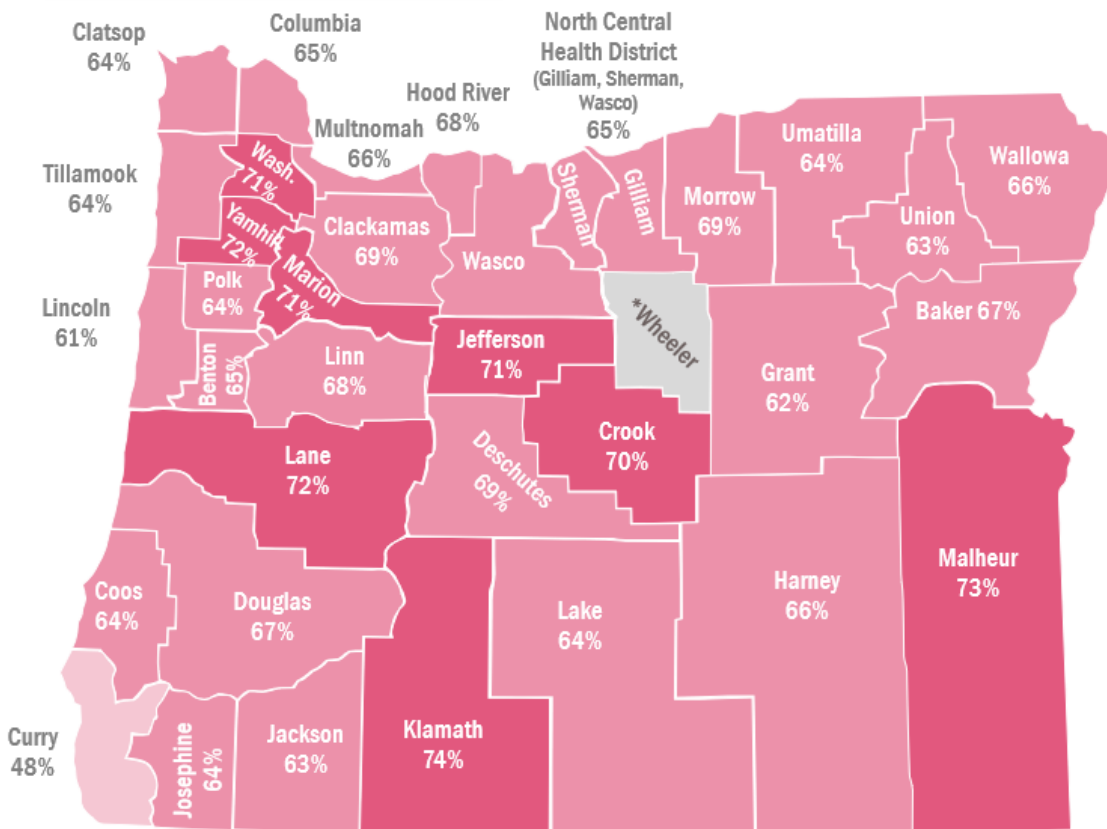
● 2016 ● 2017

Benchmark: 80%



#### By county

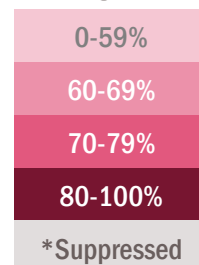
Oregon 2017



Benchmark:

80%

#### Legend



#### Notes:

- Two-year olds are children 24 to 35 months of age residing in the county.
- The vaccine series used is 4 doses of DTaP, 3 doses IPV, 1 dose MMR, 3 doses Hib, 3 doses Hep B, 1 dose Varicella, and 4 doses PCV (4:3:1:3:3:1:4 series).
- Percentage is calculated by dividing the number of children 24-35 months of age in each county who received the vaccination series (numerator) divided by number of children 24-35 months of age in each county (denominator). Numerators and denominators are not publicly available.
- Race and ethnicity categories are not mutually exclusive. One individual may contribute to one or more categories.
- \* indicates where rates are not displayed for populations of fewer than 50 people in accordance with Oregon Health Authority, Public Health Division confidentiality policy.



# Childhood Immunization

## Local Public Health Process Measure

### Percent of Vaccines for Children clinics participating in AFIX

**Foundational program area:** Communicable Disease Control

**Data source:** Assessment, Feedback, Incentives, and eXchange (AFIX) online tool

**Benchmark source:** 25% provided by Oregon Health Authority, Public Health Division, Immunization Program

#### Local public health funding

OHA funds all local public health authorities (LPHAs) to provide immunization services.

Beginning in July 2018, LPHAs are required to conduct outreach to engage health care providers in AFIX.

Some LPHAs are using 2017-19 public health modernization funding to increase the percent of Vaccines for Children providers participating in AFIX.

#### Benchmark:

# 25%

#### Notes:

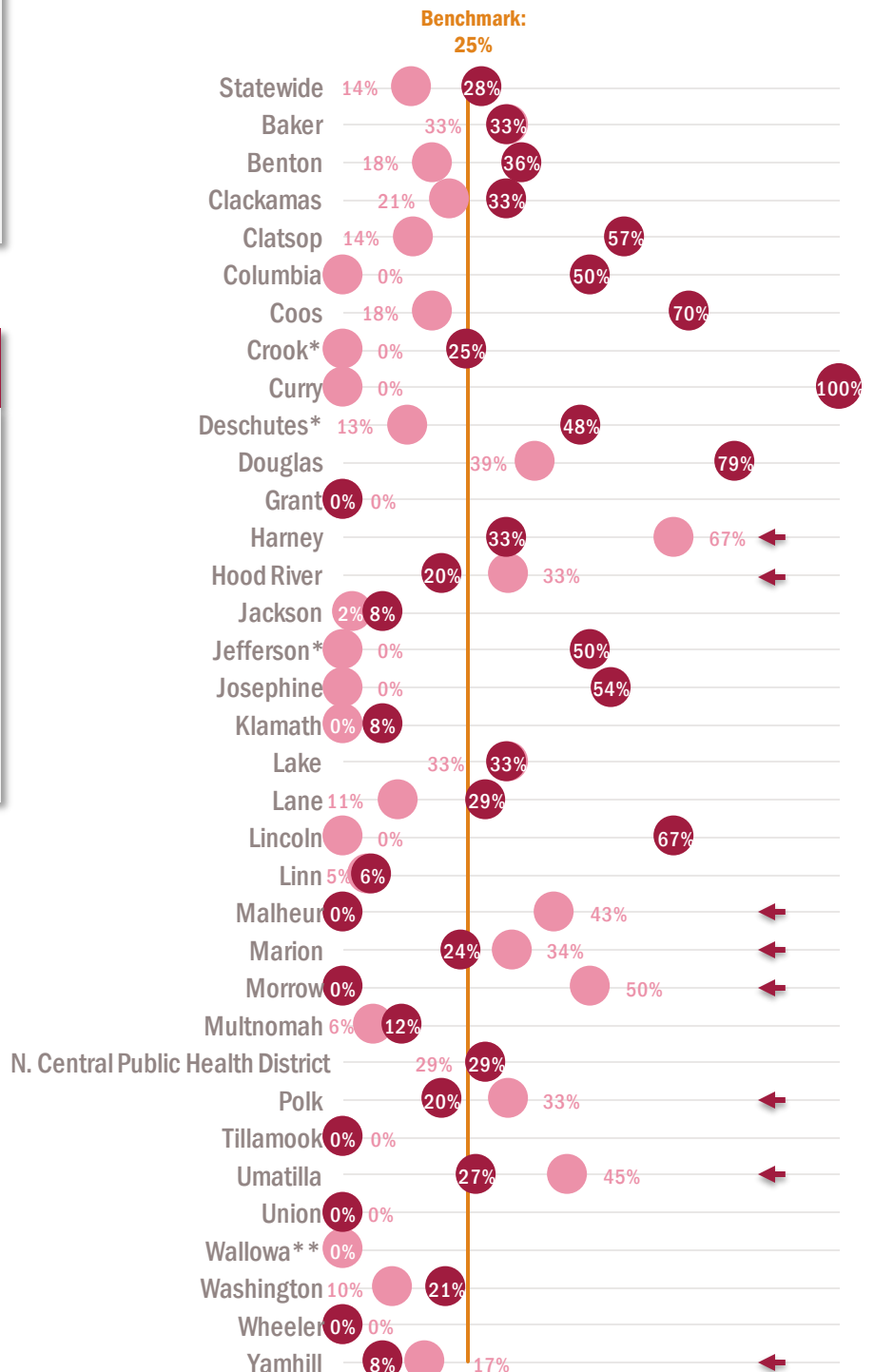
- Percentage calculated by dividing the number of clinics with any AFIX visits initiated (numerator) by the number of clinics active in Vaccines for Children (VFC) (denominator). Numerator and denominator data are provided in the Technical Appendix.

- \* indicates counties that completed their own AFIX visits in 2017, but these visits did not meet the CDC data reporting requirements and are not counted toward the process measure.

- \*\*Wallowa County legally transferred its public health authority to the Oregon Health Authority in 2018.

#### By county

● 2017 ● 2018





# Gonorrhea Rate

Health Outcome Measure

Gonorrhea incidence rate per 100,000 population

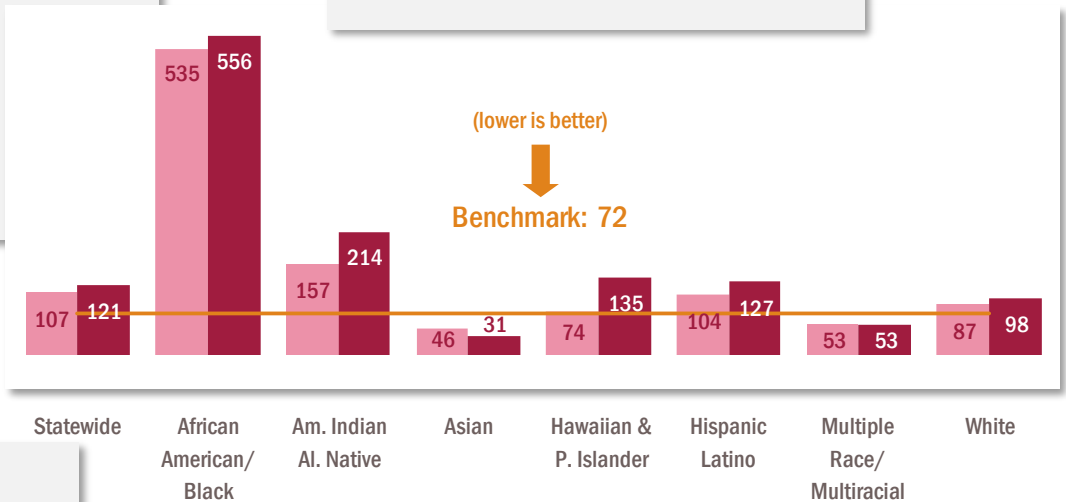
Foundational program area: Communicable Disease Control

Data source: Oregon Public Health Epi User System (Orpheus)

Benchmark source: 72/100,000, Oregon State Health Improvement Plan (SHIP) 2020 target

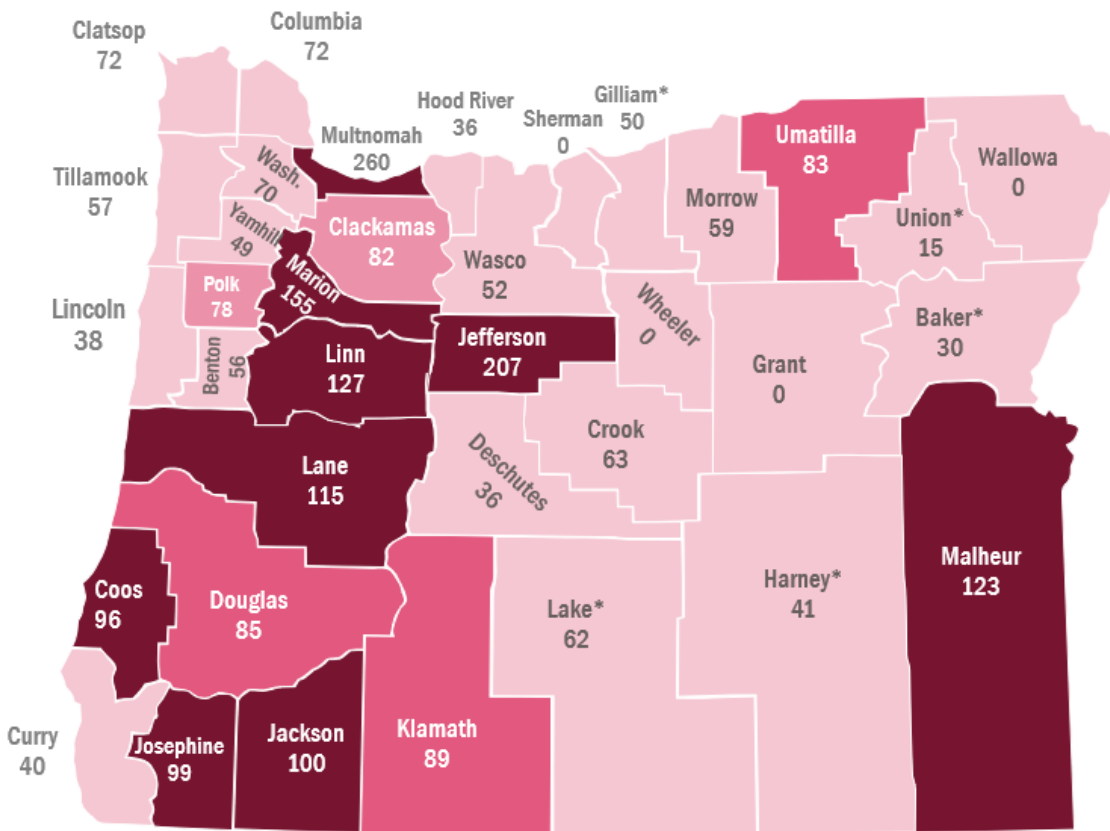
By race and ethnicity

● 2016 ● 2017

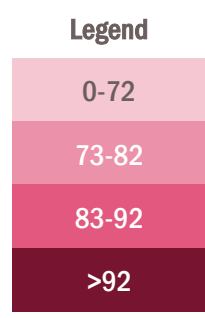


By county

Oregon 2017



(lower is better)  
Benchmark: 72



Notes:

- Population for rates by county use PSU Certified Population Estimates 2017. Population for rates by race and ethnicity use US Census Bureau Population Estimates, vintage 2016 and vintage 2017.
- All rates shown are crude rates (not age adjusted rates) and are calculated by identifying the total number of incident cases in a specified geographic area (numerator, Orpheus case counts) and dividing by the total population for the same geographic area during calendar year (denominator) and multiplied by



# Gonorrhea Rate

## Health Outcome Measure

### **Gonorrhea incidence rate per 100,000 population**

*(Continued from previous page)*

100,000. Numerator and denominator data are provided in the Technical Appendix.

- Race/ethnicity data excluded cases with the following categories: missing, other, refused, “refused unknown”, unknown, and “unknown other”.
- \* indicates rates for counties based on 1–5 events and are considered unreliable.



# Gonorrhea Rate

## Local Public Health Process Measure

**Percent of gonorrhea cases that had at least one contact that received treatment**

**Foundational program area:** Communicable Disease Control

**Data source:** Oregon Public Health Epi User System (Orpheus)

**Benchmark source:** 35%, provided by Oregon Health Authority, Public Health Division, HIV, STD and TB Section

### Local public health funding

OHA funds all local public health authorities (LPHAs) for communicable disease investigations, including those for sexually transmitted diseases (STD).

Beginning in January 2018, OHA provides funding to some LPHAs to conduct partner services for HIV and STD cases.

Some LPHAs are using 2017-19 public health modernization funding to improve gonorrhea investigations and case management.

Benchmark:

# 35%

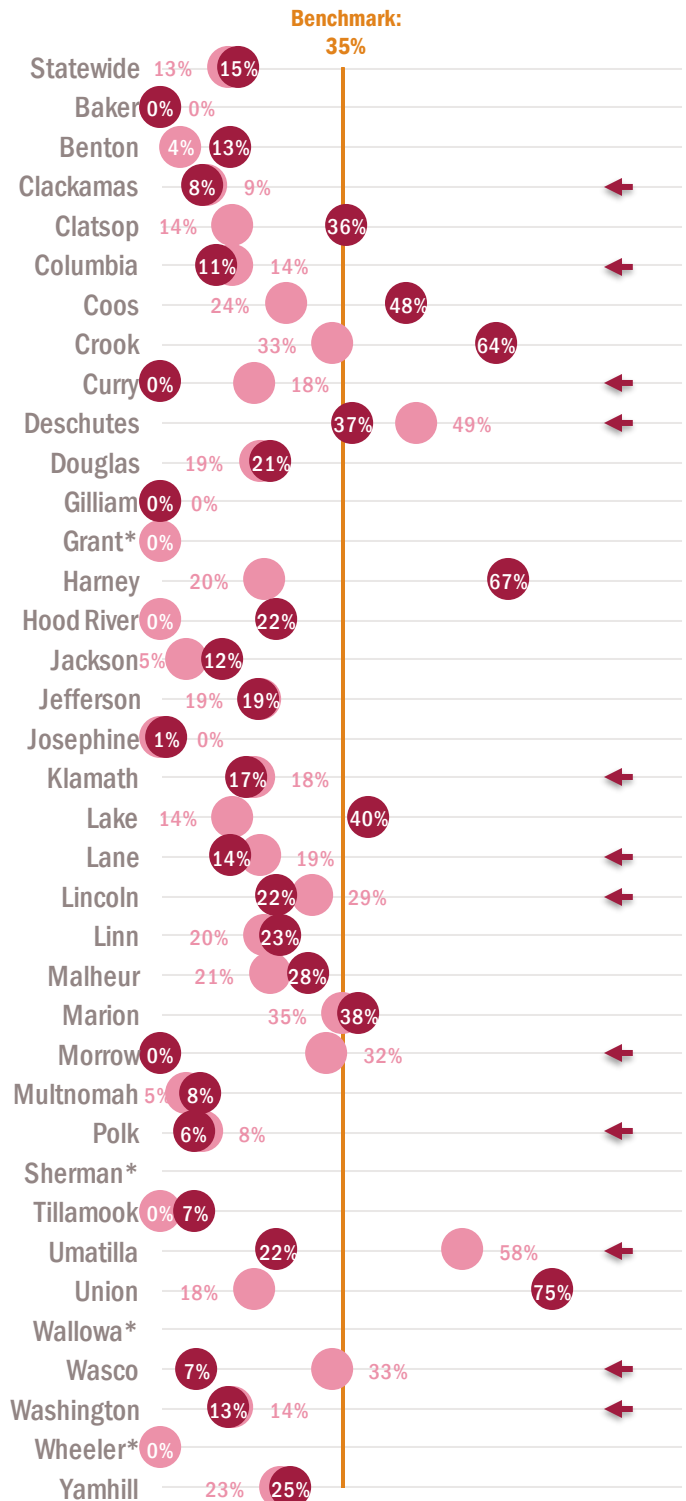
**Notes:**

- Percentages are calculated by identifying gonorrhea cases with at least one contact with treatment or Expedited Partner Therapy (EPT) documented on the contact record (numerator) and dividing by all confirmed or presumptive gonorrhea cases reported during the calendar year (denominator). Numerator and denominator data are provided in the Technical Appendix.

- \* indicates counties that had 0 gonorrhea cases in 2016 and/or 2017.

### By county

● 2016 ● 2017







# Gonorrhea Rate

## Local Public Health Process Measure

### Percent of gonorrhea case reports with complete priority fields

**Foundational program area:** Communicable Disease Control

**Data source:** Oregon Public Health Epi User System (Orpheus)

**Benchmark source:** 70%, provided by Oregon Health Authority, Public Health Division, HIV, STD and TB Section

### Local public health funding

OHA funds all local public health authorities (LPHAs) for communicable disease investigations, including those for sexually transmitted diseases (STD).

Beginning in January 2018, OHA provides funding to some LPHAs to conduct partner services for HIV and STD cases.

Some LPHAs are using 2017-19 public health modernization funding to improve gonorrhea investigations and case management.

Benchmark:

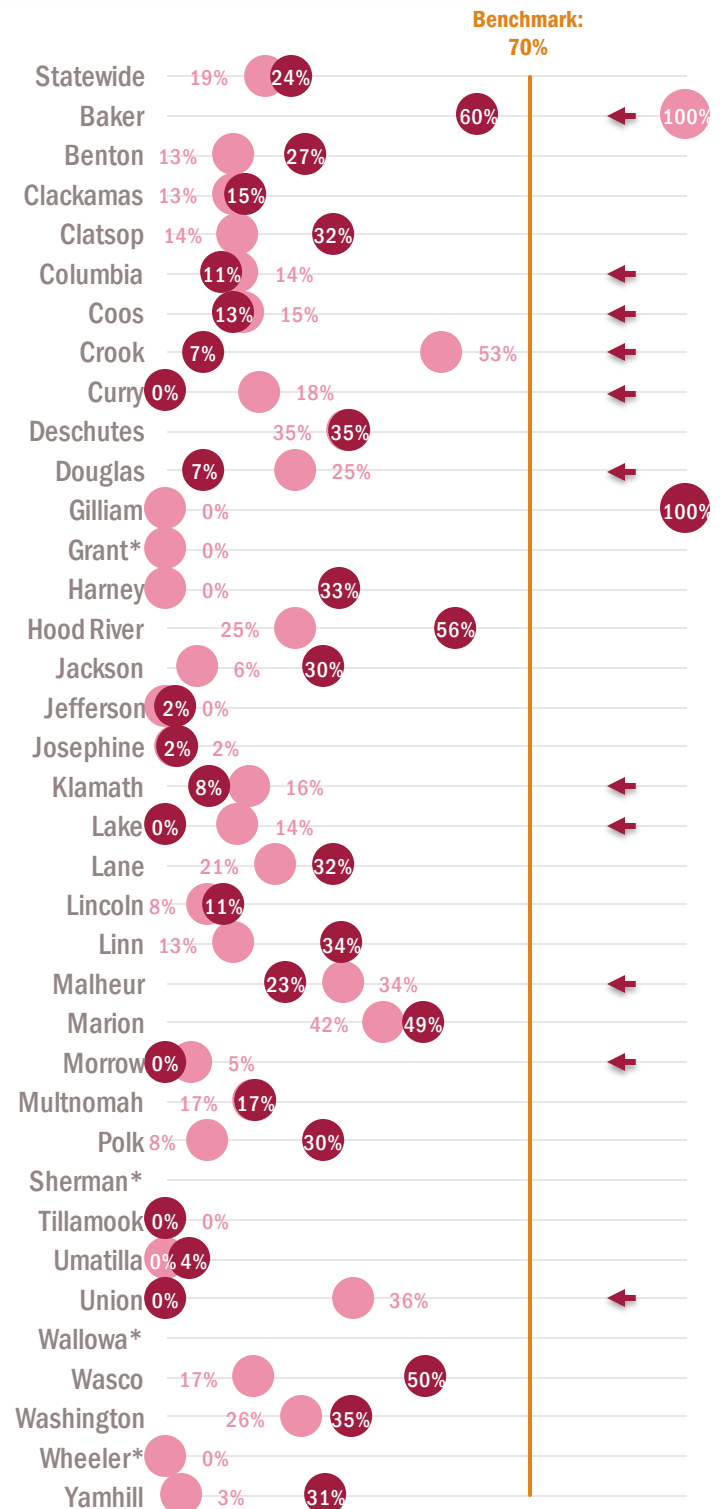
# 70%

**Notes:**

- Priority fields include race, ethnicity, gender of sex partner, pregnancy status, and HIV status/date of last HIV test. Priority fields (race, ethnicity, and pregnancy status) are considered complete if they are not unknown or refused.
- Percentages are calculated by identifying gonorrhea cases with a response for each priority field (numerator) and dividing by all confirmed or presumptive gonorrhea cases reported during the calendar year (denominator). Numerator and denominator data are provided in the Technical Appendix.
- \* indicates counties that had 0 gonorrhea cases in 2016 and/or 2017.

### By county

● 2016 ● 2017





# Adult Smoking Prevalence

Health Outcome Measure

Percent of adults who smoke cigarettes

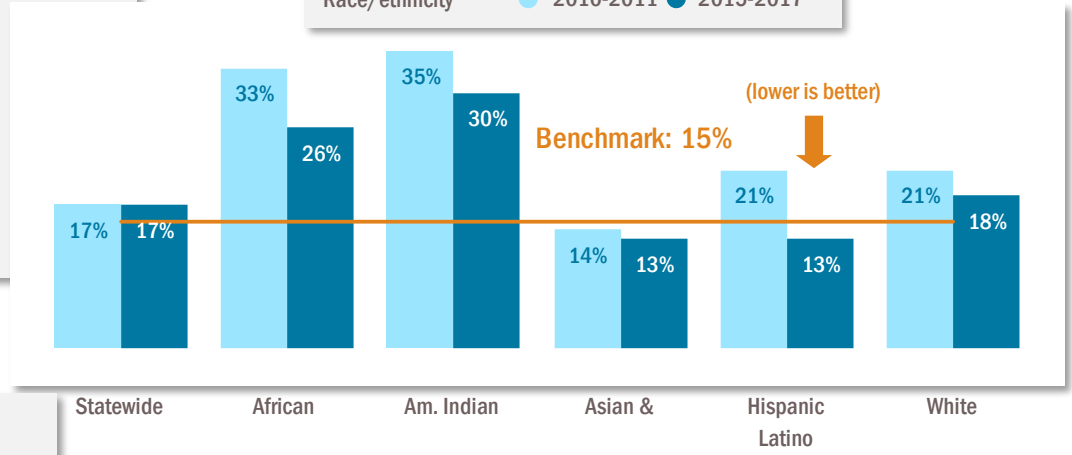
Foundational program area: Prevention and Health Promotion

Data source: Oregon Behavioral Risk Factor Surveillance System (BRFSS)

Benchmark source: 15%, Oregon State Health Improvement Plan (SHIP) 2020 target

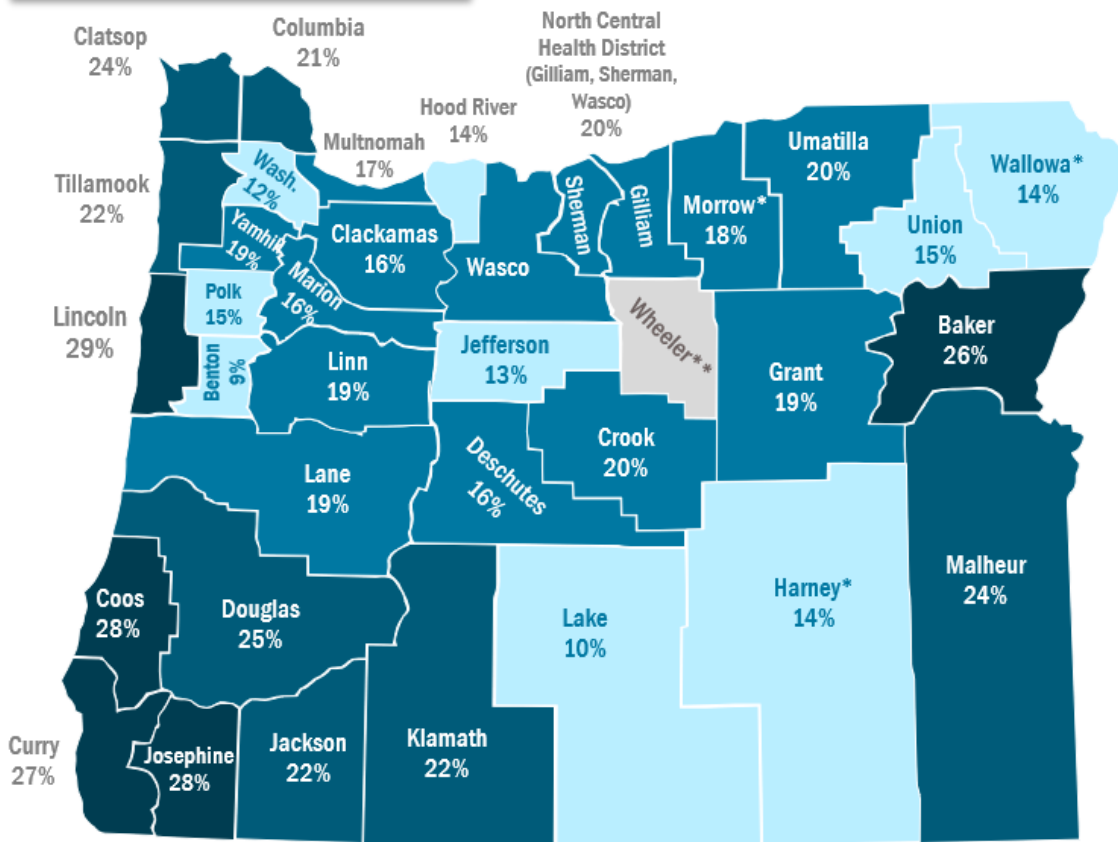
## By race and ethnicity

Statewide ● 2016 ● 2017  
Race/ethnicity ● 2010-2011 ● 2015-2017

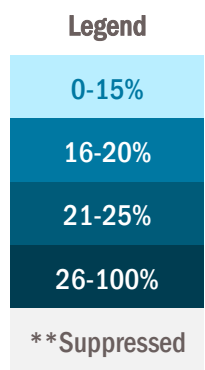


## By county

Oregon 2014-2017



Benchmark: 15%



Notes:

- Race/ethnicity data are combined for years 2015-2017, the most recent year for which reporting from a race/ethnic oversample is available.
- County data are combined for years 2014-2017; statewide rate is for 2017.
- Statewide, county, and race/ethnicity rates are age adjusted.
- Survey includes only people age 18 and older. The 2017 BRFSS sample was 9,382.
- Survey responses are weighted. Numerator and denominator data are not provided for weighted survey estimates. Refer to the Technical Appendix for details about weighting procedure.



# Adult Smoking Prevalence

Health Outcome Measure

**Percent of adults who smoke cigarettes**

*(Continued from previous page)*

- Confidence intervals are not shown. Refer to the Technical Appendix for additional information regarding reporting of confidence intervals.
- \* indicates county estimates with a relative standard error (RSE, a measure of reliability of an estimate)  $\geq 30$  and  $< 50$  and are considered unreliable. Refer to the Technical Appendix for details about relative standard error.
- \*\* indicates counties with suppressed data due to the number of respondents  $< 30$ .



# Adult Smoking Prevalence

## Local Public Health Process Measure

### Percent of population reached by tobacco-free county properties policies

Foundational program area: Prevention and Health Promotion

Data source: Tobacco-free Properties Evaluation in Counties Data Tables

Benchmark source: 100%, provided by Oregon Health Authority, Public Health Division, Health Promotion and Chronic Disease Prevention (HPCDP) Section

#### Local public health funding

OHA funds all local public health authorities (LPHAs) for tobacco education and prevention, which includes creating tobacco-free environments.

Benchmark:

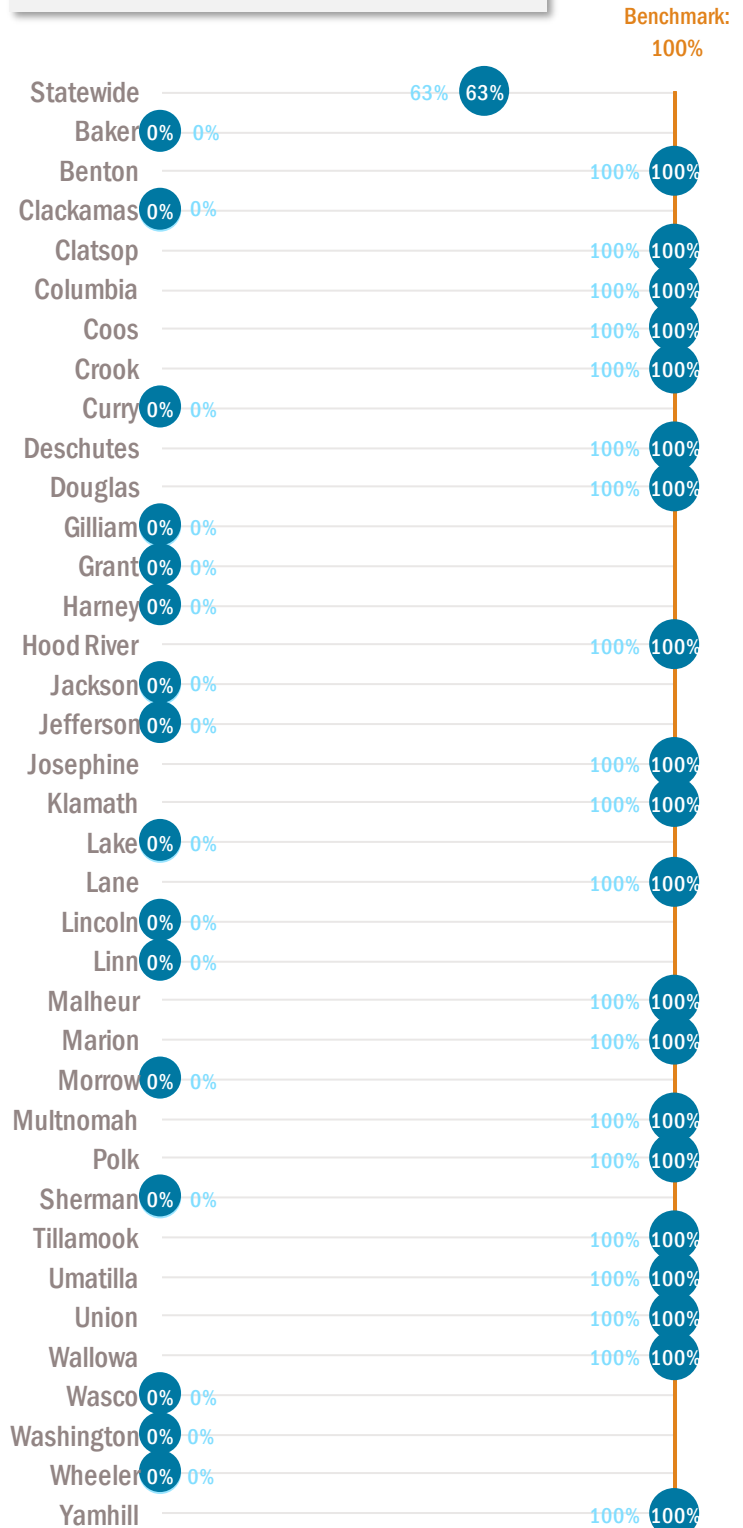
# 100%

#### Notes:

- Tobacco policies include comprehensive (all properties) and partial (some properties) tobacco-free county properties. HPCDP considers everyone (100%) in the county to be covered where a tobacco-free county property policy (comprehensive or partial) is in place.
- Data include tobacco-free policies but not smoke-free policies. Data include policies for county properties but not city properties.
- Statewide percentage calculated as: population covered by comprehensive policies + population covered by partial policies) divided by total population. Numerator and denominator data are provided in the Technical Appendix.
- Source for state and county population estimates: Portland State University Population Research Center.

#### By county

● 2015 ● 2016





# Adult Smoking Prevalence

Local Public Health Process Measure

Percent of population reached by tobacco retail licensure policies

Foundational program area: Prevention and Health Promotion

Data source: Tobacco Policy Database

Benchmark source: 100%, provided by the Oregon Health Authority, Public Health Division, Health Promotion and Chronic Disease Prevention (HPCDP) section

## Local public health funding

OHA funds all local public health authorities (LPHAs) for tobacco education and prevention, which includes creating tobacco-free environments.

Benchmark:

# 100%

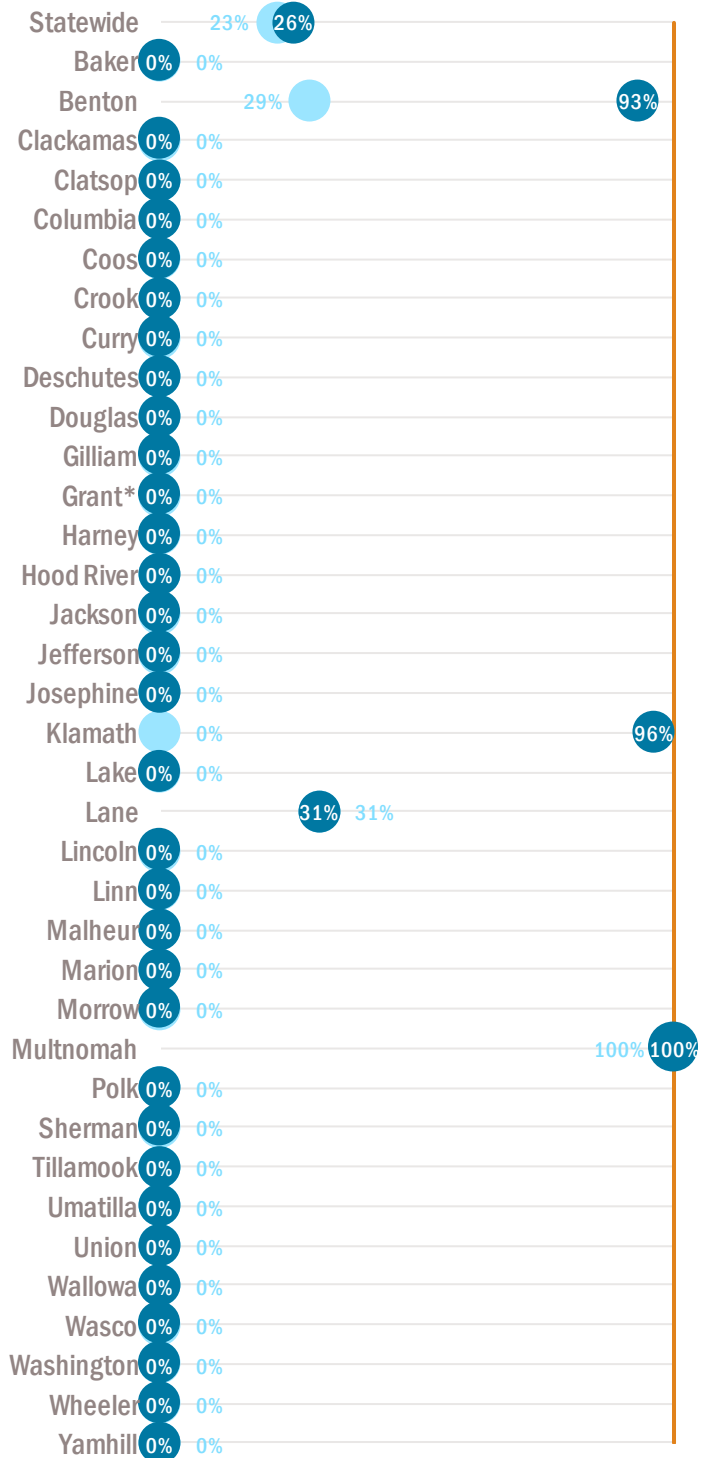
### Notes:

- Tobacco policies include tobacco retail licensure at a point in-time assessment, October 2016 and June 2017.
- County percentages are calculated as the population within the jurisdiction (i.e., city, unincorporated portions of a county) within each county with a tobacco retail licensure policy (numerator) divided by total county population; statewide percentage is calculated as the sum of county numerators divided by total state population. Numerator and denominator data provided in the Technical Appendix.
- Source for population estimates: U.S. Census Bureau, 2016 estimate.

## By county

● 2016 ● 2017

Benchmark:  
100%





# Prescription Opioid Mortality

Health Outcome Measure

Prescription opioid mortality rate per 100,000 population

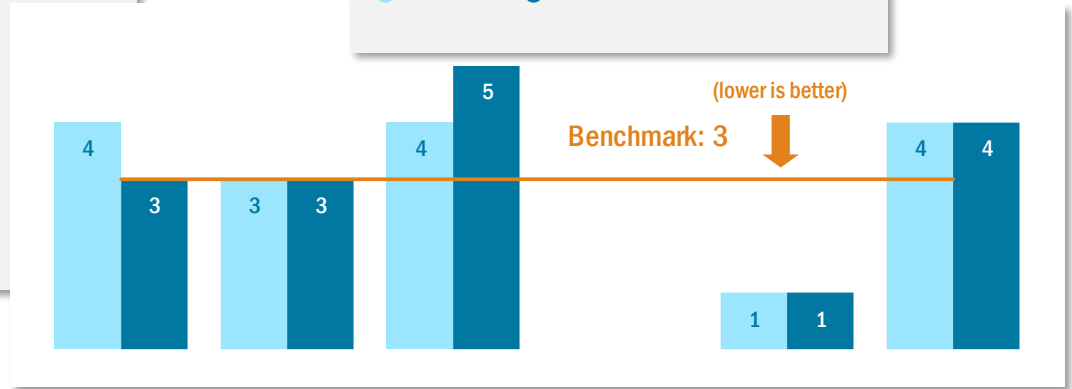
Foundational program area: Prevention and Health Promotion

Data source: Oregon Vital Events Registration System (OVERS)

Benchmark source: Less than 3/100,000, Oregon State Health Improvement Plan (SHIP) 2020 target

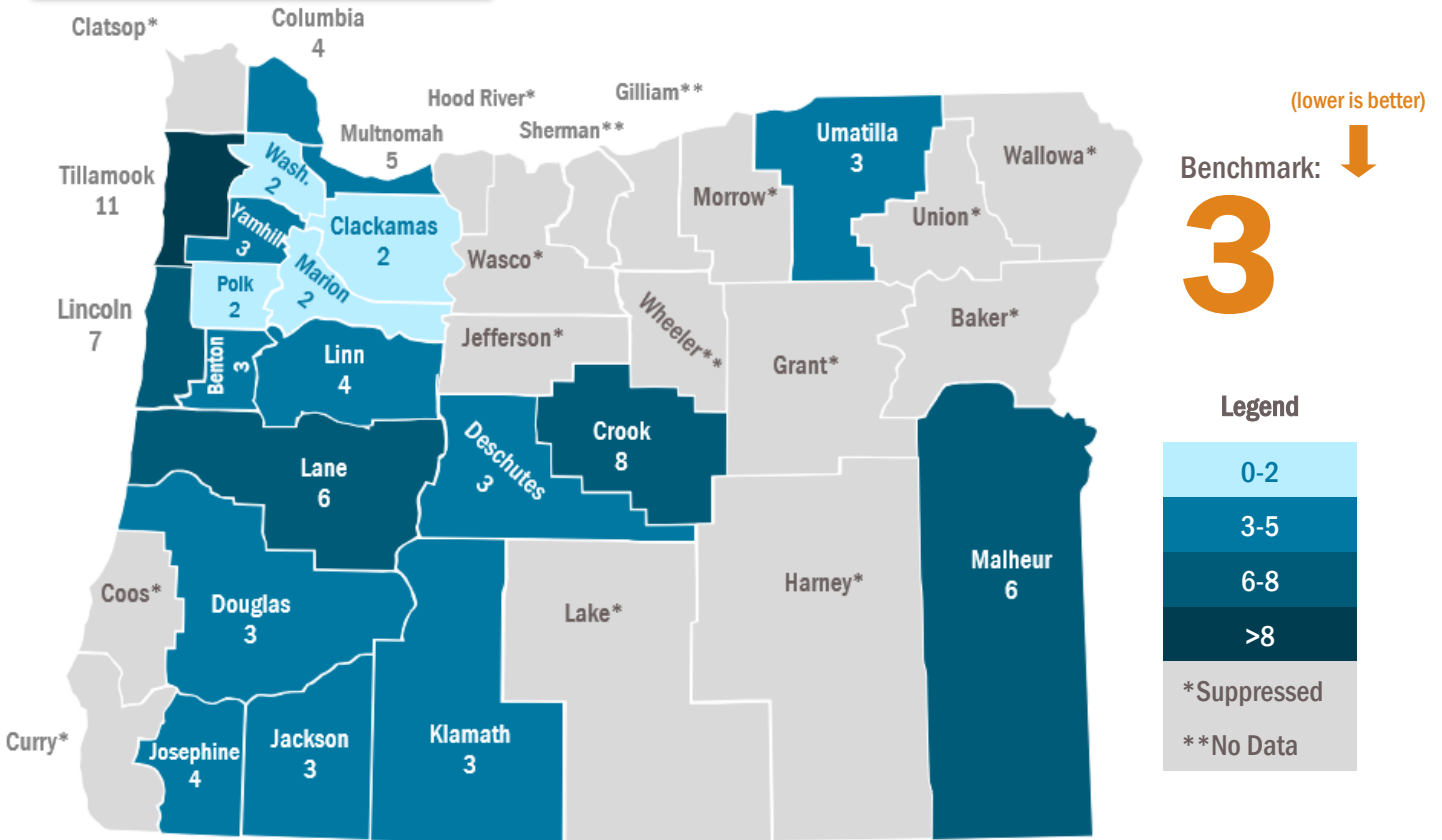
## By race and ethnicity

● 2012-2016 ● 2013-2017



## By county

Oregon 2013-2017



Notes:

- All rates are 5-year average crude rates per 100,000.
- Population estimates are from the National Center for Health Statistics (NCHS) bridged-race annual population estimates.
- Starting in 2014, data do not include deaths from Oregon residents that occurred out of state.
- "Pharmaceutical opioids" as a category exclude novel synthetic opioids and illicit fentanyl analogs because there is not currently a mechanism for distinguishing between prescribed synthetic opioids, including prescription fentanyl, and illicit fentanyl analogs. However, this means that deaths associated





# Prescription Opioid Mortality

Health Outcome Measure

**Prescription opioid mortality rate per 100,000 population**

*(Continued from previous page)*

with prescription synthetic opioids, such as prescription fentanyl, are also excluded (but not methadone).

- \* indicates rates not displayed for groups with 5 or fewer deaths or relative standard error (RSE) > 30.
- \*\* indicates counties for which no deaths were reported.



# Prescription Opioid Mortality

Local Public Health Process Measure

Percent of top opioid prescribers enrolled in PDMP

Foundational program area: Prevention and Health Promotion

Data source: Oregon Prescription Drug Monitoring Program (PDMP) database

Benchmark source: 95%, provided by Oregon Health Authority, Public Health Division, Injury and Violence Prevention Section

## Local public health funding

OHA funds some local public health authorities (LPHAs) for prescription drug overdose prevention.

These LPHAs are required to promote prescriber enrollment in the PDMP.

Benchmark:

**95%**

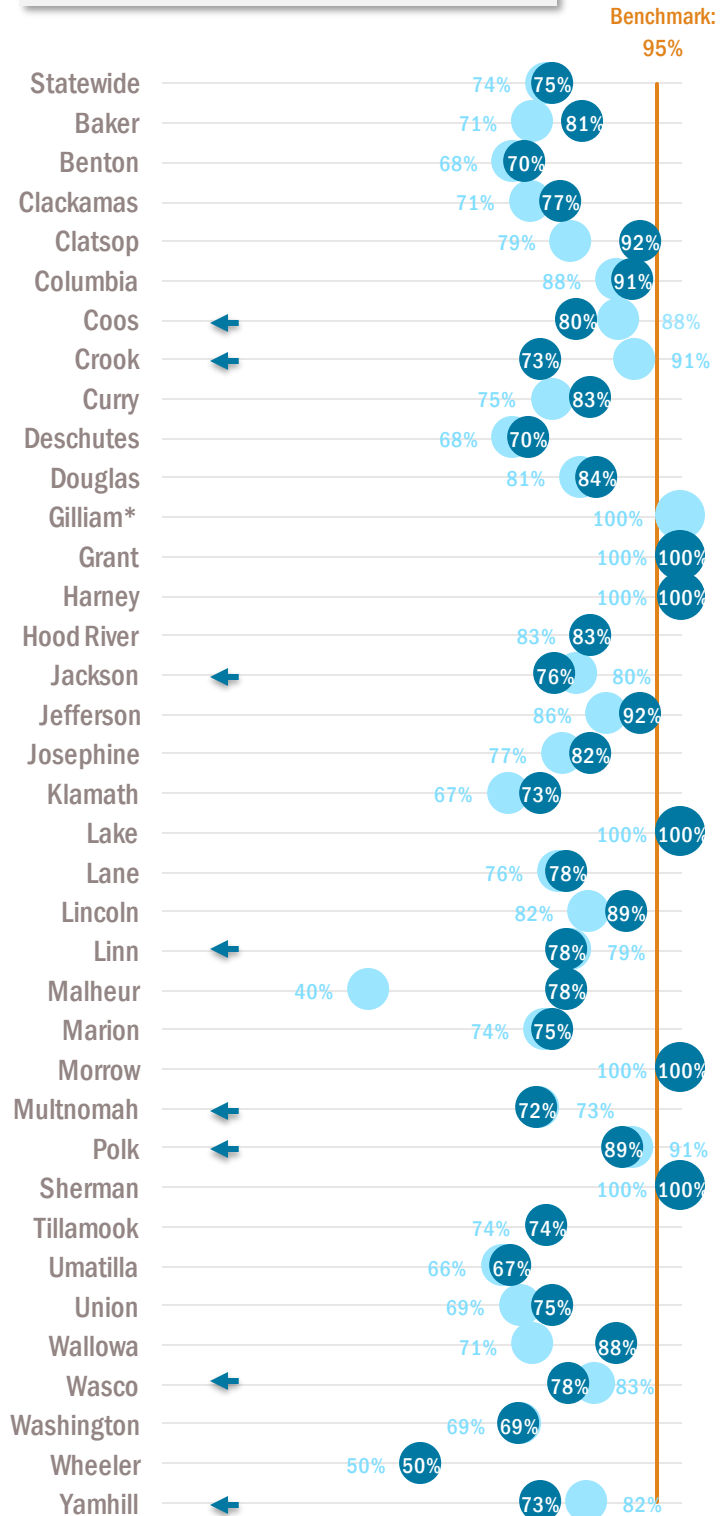
Notes:

- Top prescribers are defined as the top 4000 prescribers by volume; this represents approximately 20% of all prescribers in Oregon.

- \* There were no top prescribers in Gilliam County as of 9/30/2017.

## By county

● As of 9/30/2016 ● As of 9/30/2017





# Active Transportation

## Health Outcome Measure

Percent of commuters who walk, bike, or use public transportation to get to work

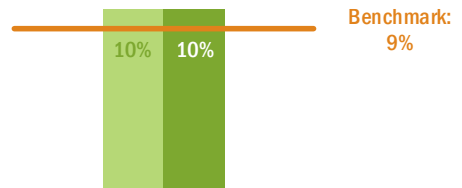
Foundational program area: Environmental Health

Data source: U.S. Census Bureau American Community Survey (ACS) 1-year and 5-year estimates online query system

Benchmark source: 9.2%, Healthy People 2020; sum of bike .6%, walk 3.1%, and mass transit 5.5%

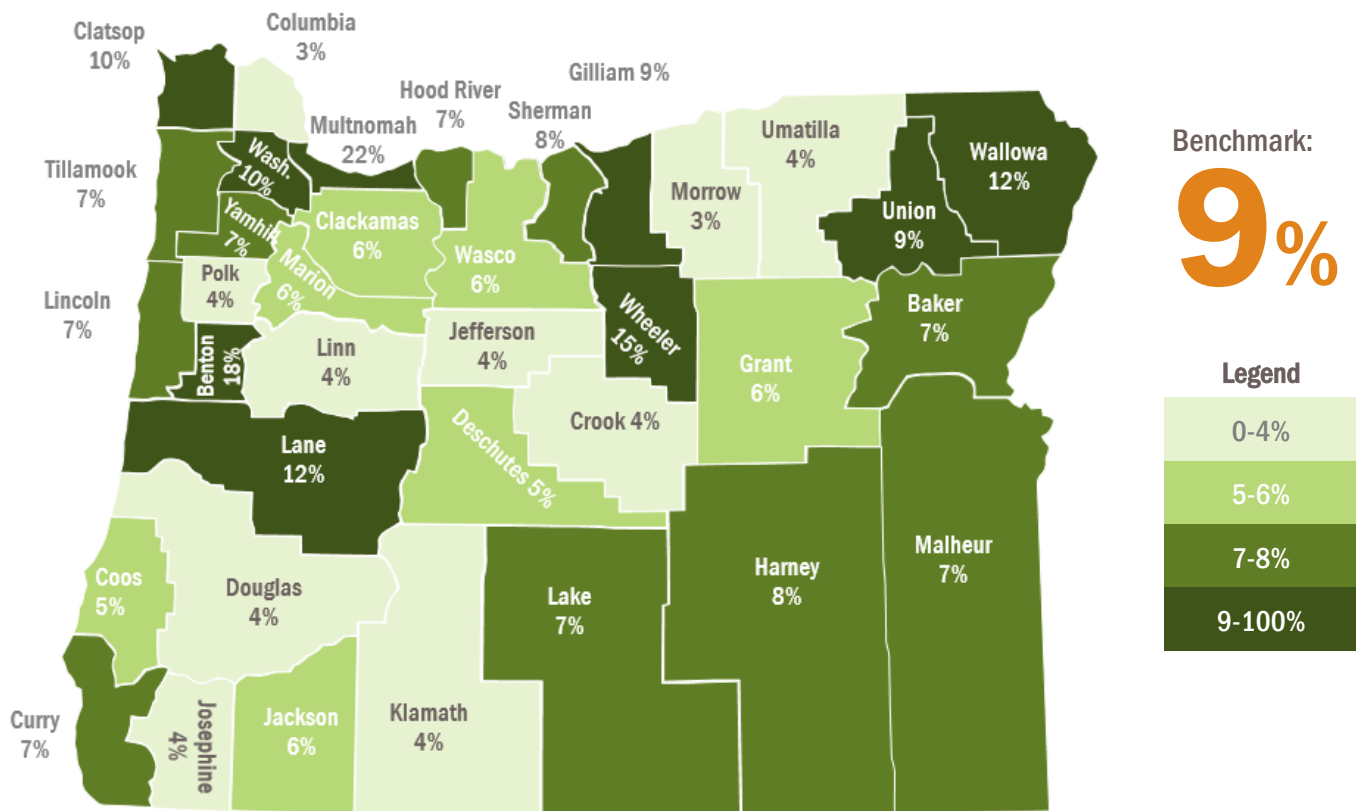
### Statewide

● 2016 ● 2017



### By county

Oregon 2013-2017



#### Notes:

- Data are not available by race/ethnicity for this metric from the ACS online query system.
- Statewide rate is annual; county rates are 5-year average.
- Commuters are defined as workers age 16 and older.
- Numerator and denominator data are not provided for weighted survey estimates.



# Active Transportation

## Local Public Health Process Measure

Local public health authority participation in leadership or planning initiatives related to active transportation, parks and recreation, or land use

Foundational program area: Environmental Health

Data source: Survey of local public health authorities (LPHAs)

Benchmark source: 100% of LPHAs that have eligible initiatives or activities

### Local public health funding

OHA does not fund local public health authorities (LPHAs) for active transportation.

Benchmark:

# 100%

Notes:

- Statewide percentage calculated as the number of counties that participate in planning initiatives, standing committees, or boards (numerator) divided by the number of counties with eligible processes or committees (denominator).

- Excluded from the denominator: Josephine, Linn, Malheur, Polk and Wallowa counties:

\* did not respond to survey;

\*\* LPHA reported there were no planning initiatives or standing advisory committees or boards in 2018 or the LPHA was unsure of whether there were planning initiatives or standing advisory committees or boards in 2018;

\*\*\*Wallowa County legally transferred its public health authority to the Oregon Health Authority in 2018.

- Numerator and denominator data are provided in the Technical Appendix.

### By county

● 2018

	Did not participate in planning initiatives, committees or boards	Participated in planning initiatives, committees or boards
<b>Statewide 59%</b>		
Baker	✓	
Benton		✓
Clackamas		✓
Clatsop	✓	
Columbia	✓	
Coos	✓	
Crook		✓
Curry	✓	
Deschutes		✓
Douglas		✓
Grant		✓
Harney		✓
Hood River	✓	
Jackson	✓	
Jefferson		✓
Josephine*		
Klamath		✓
Lake	✓	
Lane		✓
Lincoln		✓
Linn**		
Malheur**		
Marion		✓
Morrow	✓	
Multnomah		✓
N. Central Public Health District		✓
Polk**		
Tillamook		✓
Umatilla	✓	
Union	✓	
Wallowa***		
Washington		✓
Wheeler	✓	
Yamhill		✓



# Drinking Water

## Health Outcome Measure

### Percent of community water systems meeting health-based standards

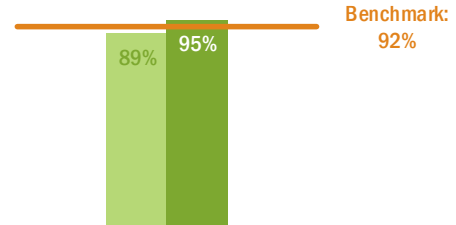
Foundational program area: Environmental Health

Data source: Safe Drinking Water Information System (SDWIS) Federal Reporting Services, the Environmental Protection Agency's (EPA) national regulatory compliance database

Benchmark source: 92%, EPA

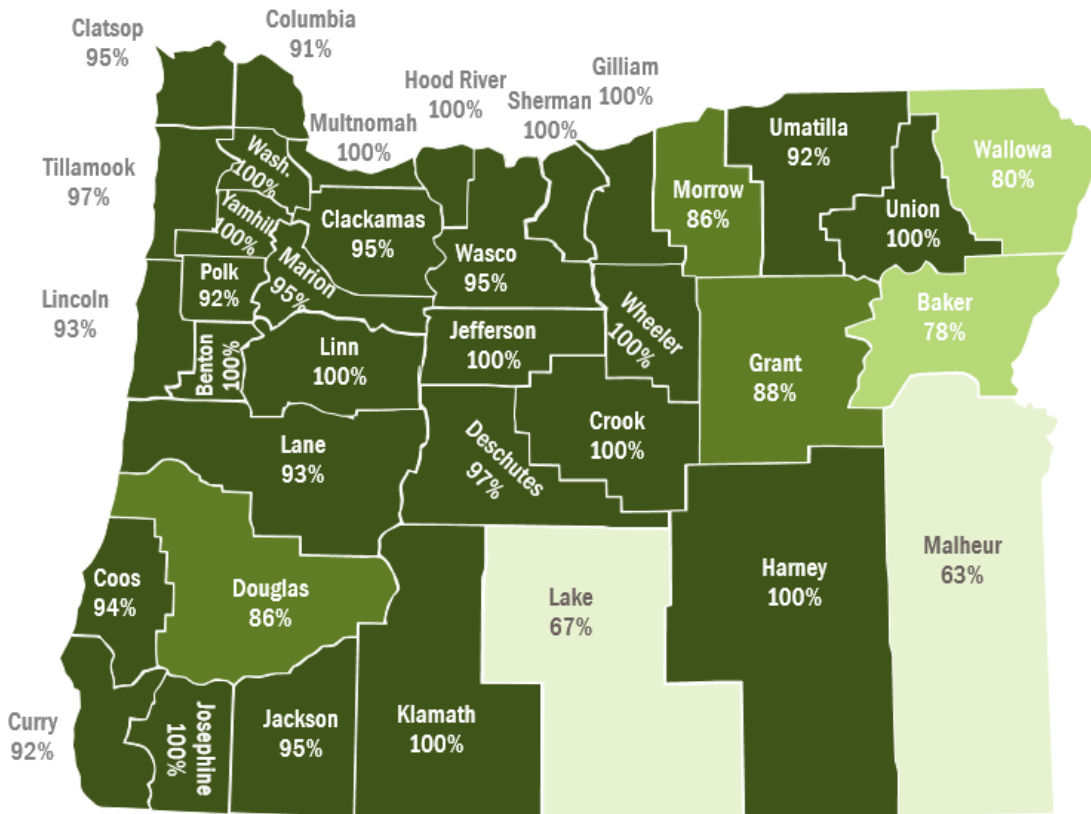
#### Statewide

● 2016 ● 2017



#### By county

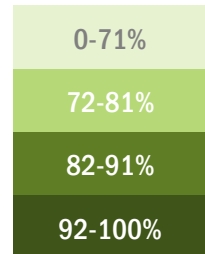
Oregon 2017



Benchmark:

# 92%

#### Legend



#### Notes:

- Unit of analysis is water systems; race/ethnicity data do not apply.
- Percentages are calculated by dividing the number of community water systems that met standards (numerator) by the number of community water systems (denominator). Numerator and denominator data are provided in the Technical Appendix.



# Drinking Water

## Local Public Health Process Measure

### Percent of water systems surveys completed

Foundational program area: Environmental Health

Data source: Oregon Drinking Water Database

Benchmark source: 100%, provided by Oregon Health Authority, Public Health Division, Drinking Water Services Section

#### Local public health funding

OHA funds some local public health authorities (LPHAs) for safe drinking water programs.

In other counties OHA provides those services.

Benchmark:

# 100%

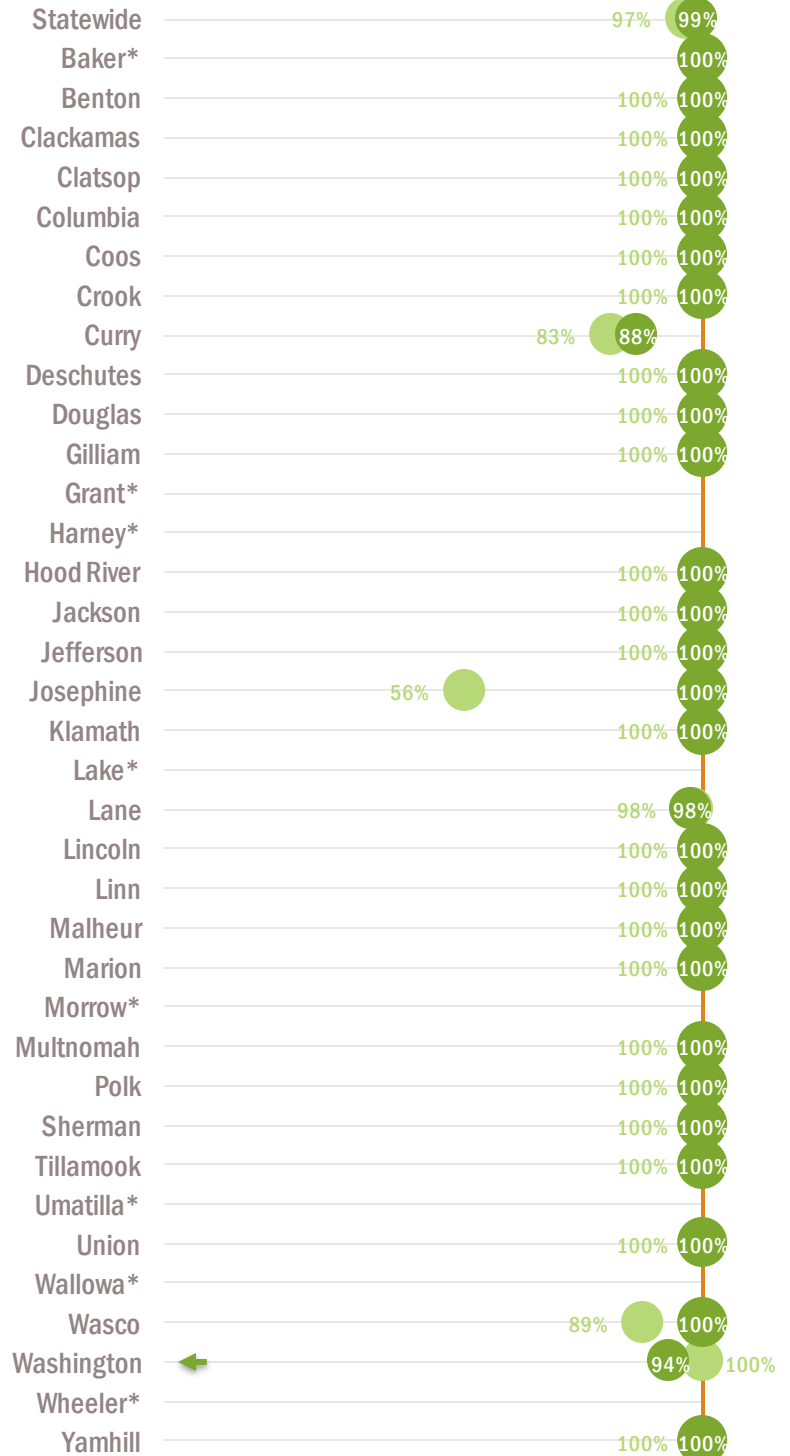
Notes:

- Percentages are calculated by dividing the number of water systems surveys completed (numerator) by the number of surveys (denominator). Numerator and denominator data are provided in the Technical Appendix.
- \* indicates counties for which no water system surveys were conducted in 2016 and/or 2017.

#### By county

● 2016 ● 2017

Benchmark: 100%







# Drinking Water

## Local Public Health Process Measure

### Percent of water quality alert responses

Foundational program area: Environmental Health

Data source: Oregon Drinking Water Database, Water Quality Alerts

Benchmark source: 100%, provided by Oregon Health Authority, Public Health Division, Drinking Water Services Section

### Local public health funding

OHA funds some local public health authorities (LPHAs) for safe drinking water programs.

In other counties OHA provides those services.

### Benchmark:

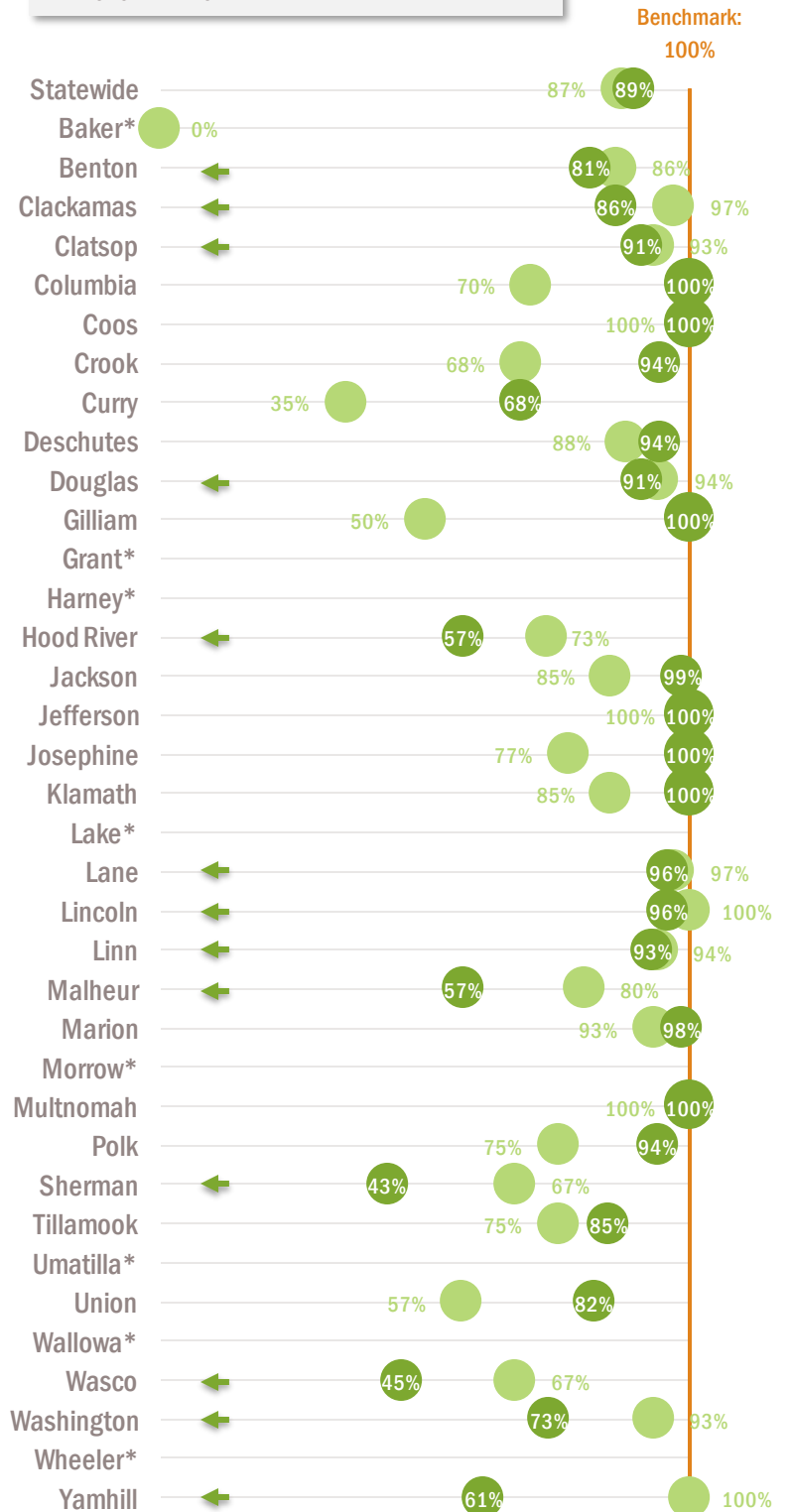
# 100%

#### Notes:

- Water quality alerts are generated when drinking water monitoring results indicate detection of a contaminant at a level of concern. Prompt investigation and resolution of these alerts is vital to ensuring safe drinking water.
- Percentages are calculated by dividing the number of alert responses (numerator) by the number of alerts (denominator). Numerator and denominator data are provided in the Technical Appendix.
- \* indicates counties for which water quality alerts were not applicable in 2016 and/or 2017.

### By county

● 2016 ● 2017





# Drinking Water

## Local Public Health Process Measure

### Percent of priority non-compliers resolved

Foundational program area: Environmental Health

Data source: Oregon Drinking Water Database

Benchmark source: 100%, provided by Oregon Health Authority, Public Health Division, Drinking Water Services Section

### Local public health funding

OHA funds some local public health authorities (LPHAs) for safe drinking water programs.

In other counties OHA provides those services.

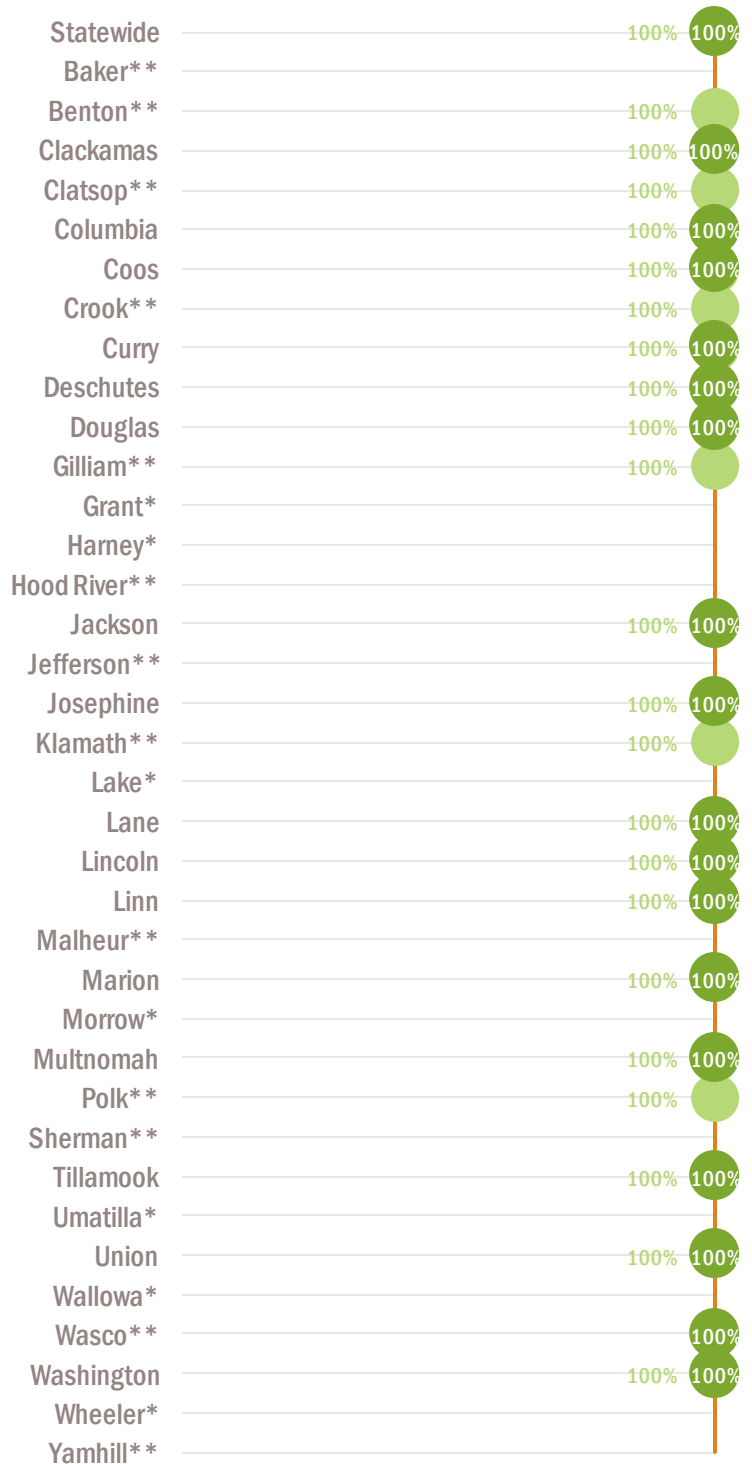
### Benchmark:

# 100%

### By county

● 2016 ● 2017

Benchmark: 100%



### Notes:

- A priority non-complier is a water system that accumulates 11 or more points from violations. Violation points are issued for failure to meet drinking water standards.
- Percentages are calculated by dividing the number of PNCs resolved (numerator) by the number of PNCs (denominator). Numerator and denominator data are provided in the Technical Appendix.
- \* indicates counties for which priority non-compliers (PNCs) were not applicable in 2016 and 2017.
- \*\* indicates 0 PNCs in 2016 and/or 2017.



# Effective Contraceptive Use

Health Outcome Measure

Percent of women at risk of unintended pregnancy who use effective methods of contraception

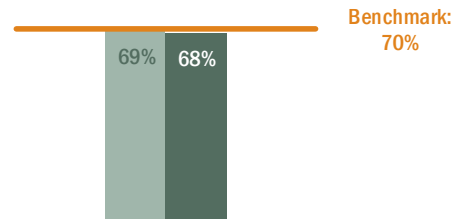
Foundational program area: Access to Clinical Preventive Services

Data source: Oregon Behavioral Risk Factor Surveillance System (BRFSS)

Benchmark source: 70%, provided by Oregon Health Authority, Public Health Division, Reproductive Health Program

## Statewide

● 2016 ● 2017



Benchmark:

**70%**

### Notes:

- Effectiveness is only one factor that influences contraceptive method choice. Client-centered approaches should always be used in contraception counseling to ensure that an individual's choices are respected.
- Effective methods of contraception are asked in BRFSS only of women, age 18-49, who are of reproductive age and at risk of unintended pregnancy.
- There are no estimates by race/ethnicity or county. Refer to the Technical Appendix for additional information.
- Confidence intervals are not shown. Refer to the Technical Appendix regarding the reporting of confidence intervals.
- Numerator and denominator data are not provided for weighted survey estimates.



# Effective Contraceptive Use

## Local Public Health Process Measure

**Annual strategic plan that identifies gaps, barriers and opportunities for improving access to effective contraceptive use**

Foundational program area: Access to Clinical Preventive Services

Data source: LPHA annual reporting to Oregon Health Authority, Public Health Division, Reproductive Health Program

Benchmark source: 70% by 2023, provided by Oregon Health Authority, Public Health Division, Reproductive Health Program

### By county

Note: County data will be available in 2020.

### Local public health funding

OHA funds local public health authorities (LPHAs) for assuring access to reproductive health services.

LPHAs work collaboratively within their community to identify gaps and barriers in access to reproductive health services. Funding supports LPHAs to take key steps toward developing a strategic plan, which may include identifying partners, developing collaborative relations, conducting a needs assessment or developing a strategic plan.

### Benchmark:

**70%**



# Dental Visits Children Aged 0-5

Developmental Metric

Percent of children age 0-5 with any dental visit

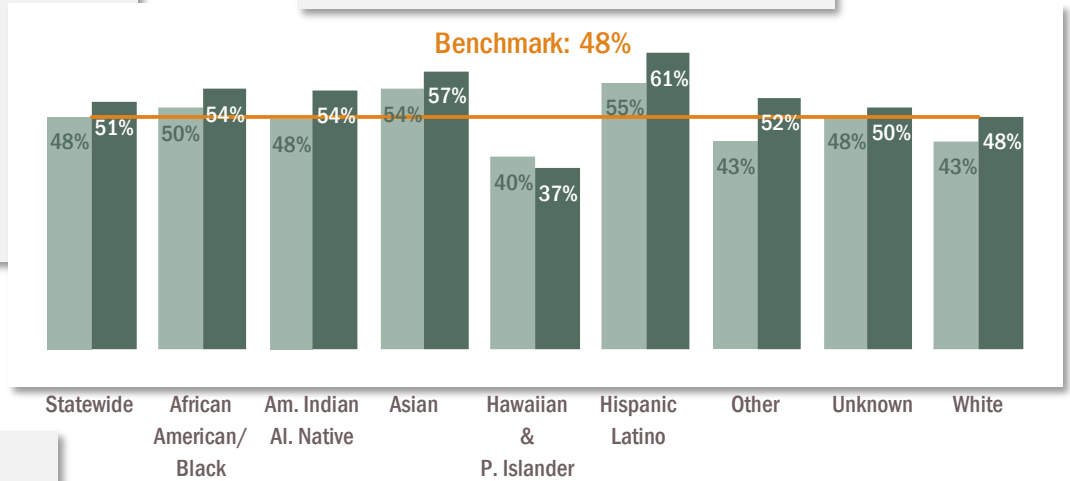
Foundational program area: Access to Clinical Preventive Services

Data source: MMIS Medicaid administrative claims data

Benchmark source: 48%, Oregon State Health Improvement Plan (SHIP) 2020 target

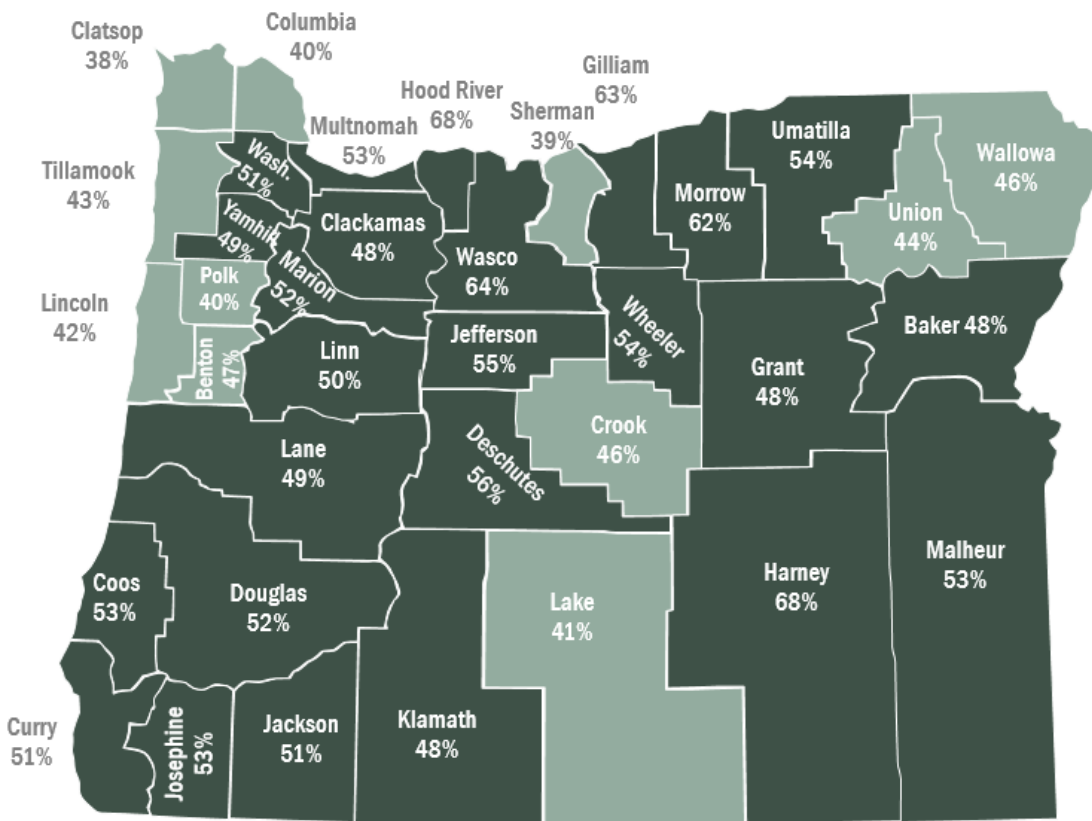
## By Race/Ethnicity

Oregon Medicaid ● 2016 ● 2017



## By county

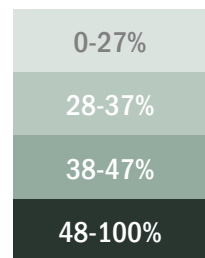
Oregon Medicaid 2017



Benchmark:

**48%**

### Legend



### Notes:

- This measure includes any dental service by a dentist or dental hygienist. It does not include dental services provided in a medical setting.
- This metric is considered developmental.
- Percentages are calculated by dividing the number of Medicaid enrolled children age 0-5 with any dental visit by the number of Medicaid enrolled children age 0-5. Numerator and denominator data are provided in the Technical Appendix.

# Technical Appendix

Data for this report were obtained from numerous public health programs and data systems, each having its own set of technical requirements and reporting conventions. Health outcome measures and local public health process measures presented in this report are generally consistent with how these data are reported elsewhere.

## **Survey estimates and 95% confidence intervals**

Data for adult smoking prevalence and effective contraceptive use were obtained from the Behavioral Risk Factor Surveillance System. Data for active transportation were obtained from the American Community Survey. Weighted survey estimates for population surveys that use complex sampling designs are calculated with a margin of error or confidence interval. Confidence intervals provide a measure of how much an estimate varies due to chance. 95% confidence intervals are not shown in this report.

## **Race and ethnicity categories**

Race/ethnicity categories for each measure are determined by the data collection system and associated public health program and may vary among accountability metrics. The race categories of African American, American Indian & Alaska Native, Asian, Pacific Islander, and White do not include individuals of Hispanic ethnicity. Data for individuals of Hispanic ethnicity are presented separately.

## **Age-adjusted versus crude rates**

Unadjusted or crude rates provide an estimate of the overall burden of disease; age-adjusted rates can be used to compare among counties for measures that are sensitive to age, such as tobacco use. Data in this report are shown as Oregon Health Authority programs typically report their data. Age-adjustment, if shown, is based on three age groups: 18-34, 35-54, and 55+ per the U.S. 2000 Census Standard Population.

# Communicable Disease Control

## Health Outcome Measure: Percent of two-year olds who received recommended vaccines

### Data source

ALERT Immunization Information System (ALERT IIS), 2016 - 2017

### Benchmark

80%, Oregon State Health Improvement Plan (SHIP) 2020 target

### Data collection procedure

Data accessed online at <http://www.oregon.gov/oha/PH/PREVENTIONWELLNESS/VACCINESIMMUNIZATION/Pages/researchchild.aspx>.

### Measure specification

Percentage is calculated by dividing the number of children 24-35 months of age who received the vaccination series (numerator) by number of children 24-35 months of age (denominator). Numerator and denominator data are not publicly available (Table 2).

Race/ethnicity categories provided by ALERT IIS are: African American, American Indian & Alaska Native, Asian, Hawaiian/Pacific Islander, Hispanic, and White. Race/ethnicity categories are not mutually exclusive, one individual may contribute to one or more categories.

### Additional notes

- Baseline year is 2016.
- Two year olds are children 24 to 35 months of age.
- The vaccine series used is 4 doses of DTaP, 3 doses IPV, 1 dose MMR, 3 doses Hib, 3 doses Hep B, 1 dose Varicella, and 4 doses PCV (4:3:1:3:3:1:4 series).
- Rates not displayed for populations of fewer than 50 people in accordance with OHA Public Health Division, Immunization Program confidentiality policy.
- Data for Gilliam, Sherman, and Wasco counties are combined. This is the North Central Public Health District.
- Oregon immunization rates measure vaccination levels among two-year-olds in a given year. Rates are based on ALERT IIS data for all two-year-olds with an Oregon address and a post-birth immunization record. Over 95% of all childhood immunizations given in Oregon since 1999 are in ALERT IIS and reporting levels have been higher in recent years.

**Table 2. Communicable Disease**

	Health outcome measure: % of 2-year olds who received recommended vaccines					
	2016	Numerator*	Denominator*	2017	Numerator*	Denominator*
Statewide	66%			68%		
African American/Black	60%			62%		
Am. Indian Alaska Native	65%			66%		
Asian	69%			73%		
Hawaiian/Pacific Islander	61%			62%		
Asian/Pacific Islander						
Hispanic/Latino	70%			69%		
Multiple races/multi						
Other/unknown						
White	67%			69%		
Baker	63%			67%		
Benton	67%			65%		
Clackamas	67%			69%		
Clatsop	62%			64%		
Columbia	58%			65%		
Coos	64%			64%		
Crook	69%			70%		
Curry	46%			48%		
Deschutes	65%			69%		
Douglas	66%			67%		
Gilliam						
North Central PH District	62%			65%		
Grant	53%			62%		
Harney	63%			66%		
Hood River	69%			68%		
Jackson	62%			63%		
Jefferson	65%			71%		
Josephine	60%			64%		
Klamath	68%			74%		
Lake	68%			64%		
Lane	66%			72%		
Lincoln	63%			61%		
Linn	64%			68%		
Malheur	70%			73%		
Marion	69%			71%		
Morrow	71%			69%		
Multnomah	64%			66%		
Polk	65%			64%		
Sherman						
Tillamook	61%			64%		
Umatilla	63%			64%		
Union	62%			63%		
Wallowa	56%			66%		
Wasco						
Washington	69%			71%		
Wheeler	**			**		
Yamhill	72%			72%		

\*Numerators and denominators not publicly available.

\*\*Rates not displayed for populations of fewer than 50 people.

North Central Public Health District is comprised of Gilliam, Sherman, and Wasco counties.



## **Local Public Health Process Measure: Percent of Vaccines for Children (VFC) clinics participating in AFIX**

### **Data source**

Assessment, Feedback, Incentives, and eXchange (AFIX) online tool, 2017 - 2018

### **Benchmark**

25%, provided by Oregon Health Authority, Public Health Division, Immunization Program

### **Data collection procedure**

Data accessed from AFIX online tool via secure login and provided by staff of the Oregon Health Authority, Public Health Division, Immunization Program.

### **Measure specification**

Percentage is calculated by dividing the number of clinics with any AFIX visits initiated (numerator) by the number of clinics active in the Vaccines for Children Program (VFC) as of the end of the calendar year (denominator). Numerator and denominator data are shown in Table 3.

### **Additional notes**

- Baseline year is 2017.
- Crook, Deschutes, and Jefferson counties completed their own AFIX visits in 2017, but these visits did not meet the CDC data reporting requirements and were not counted toward the process measure in 2017.
- Wallowa County legally transferred its public health authority to the Oregon Health Authority in 2018, therefore no data are shown for Wallowa County in 2018.

<b>Table 3. Communicable Disease</b>						
	<b>Local public health process measure: % of VFC clinics participating in AFIX</b>					
	2017	Numerator	Denominator	2018	Numerator	Denominator
Statewide	14%	79	569	28%	163	588
African American/Black						
Am. Indian Alaska Native						
Asian						
Hawaiian/Pacific Islander						
Asian/Pacific Islander						
Hispanic/Latino						
Multiple races/multi						
Other/unknown						
White						
Baker	33%	1	3	33%	1	3
Benton	18%	2	11	36%	5	14
Clackamas	21%	9	42	33%	14	43
Clatsop	14%	1	7	57%	4	7
Columbia	0%	0	9	50%	5	10
Coos	18%	2	11	70%	7	10
Crook	0%	0	4	25%	1	4
Curry	0%	0	7	100%	7	7
Deschutes	13%	3	23	48%	12	25
Douglas	39%	7	18	79%	15	19
Gilliam						
North Central PH District	29%	2	7	29%	2	7
Grant	0%	0	3	0%	0	3
Harney	67%	2	3	33%	1	3
Hood River	33%	2	6	20%	1	5
Jackson	2%	1	47	8%	4	48
Jefferson	0%	0	6	50%	3	6
Josephine	0%	0	14	54%	7	13
Klamath	0%	0	11	8%	1	12
Lake	33%	1	3	33%	1	3
Lane	11%	4	36	29%	11	38
Lincoln	0%	0	15	67%	10	15
Linn	5%	1	19	6%	1	18
Malheur	43%	3	7	0%	0	8
Marion	34%	14	41	24%	11	45
Morrow	50%	2	4	0%	0	4
Multnomah	6%	6	96	12%	11	94
Polk	33%	3	9	20%	2	10
Sherman						
Tillamook	0%	0	10	0%	0	9
Umatilla	45%	5	11	27%	3	11
Union	0%	0	9	0%	0	9
Wallowa	0%	0	4	*		
Wasco						
Washington	10%	6	60	21%	14	66
Wheeler	0%	0	1	0%	0	1
Yamhill	17%	2	12	8%	1	13

North Central Public Health District is comprised of Gilliam, Sherman, and Wasco counties.

\*Wallowa County legally transferred its public health authority to the Oregon Health Authority in 2018.

## Health Outcome Measure: Gonorrhea incident rate per 100,000

### Data source

Oregon Public Health Epi User System (Orpheus), 2016 - 2017

### Benchmark

72/100,000, Oregon State Health Improvement Plan (SHIP) 2020 target

### Data collection procedure

Data obtained from Orpheus and provided by staff of the Oregon Health Authority, Public Health Division, HIV, STD, TB Section.

### Measure specification

All rates shown are crude rates (not age adjusted rates) and are calculated by counting the total number of incident cases in a specified geographic area (country, state, county, etc.) and dividing by the total population for the same geographic area (for a specified time period, usually a calendar year) and multiplied by 100,000 (i.e., crude rate =  $100,000 \times \text{number of disease reports} / \text{total population}$ ). Numerator and denominator data are shown in Table 4.

Population data for race/ethnicity were obtained from U.S. Census Bureau Population Estimates, vintage 2016 and vintage 2017. Population data for Oregon counties were obtained from Portland State University Certified Population Estimates July 1, 2016 and July 1, 2017.

### Additional notes

- Baseline year is 2016.
- Rates and percentages based on 1 - 5 events are considered unreliable because of the greater influence of random variability.

**Table 4. Communicable Disease**

	Health outcome measure: Gonorrhea incidence rate per 100,000 population					
	2016	Numerator	Denominator	2017	Numerator	Denominator
Statewide	107	4353	4,076,350	121	5022	4,140,100
African American/Black	535	407	76,067	556	442	79,485
Am. Indian Alaska Native	157	72	45,814	214	99	46,220
Asian	46	82	177,671	31	58	187,218
Hawaiian/Pacific Islander	74	12	16,233	135	22	16,280
Asian/Pacific Islander						
Hispanic/Latino	104	543	522,571	127	689	540,923
Multiple races/multi	53	68	128,892	53	71	132,965
Other/unknown						
White	87	2730	3,126,217	98	3074	3,139,685
Baker	6*	1	16,510	30*	5	16,750
Benton	53	48	91,320	56	52	92,575
Clackamas	69	280	404,980	82	338	413,000
Clatsop	58	22	38,225	72	28	38,820
Columbia	73	37	50,795	72	37	51,345
Coos	65	41	63,190	96	61	63,310
Crook	70	15	21,580	63	14	22,105
Curry	49	11	22,600	40	9	22,805
Deschutes	37	65	176,635	36	65	182,930
Douglas	33	36	110,395	85	94	111,180
Gilliam	51*	1	1,980	50*	1	1,995
North Central PH District						
Grant	13*	1	7,410	0	0	7,415
Harney	68*	5	7,320	41*	3	7,360
Hood River	16*	4	24,735	36	9	25,145
Jackson	83	177	213,765	100	217	216,900
Jefferson	70	16	22,790	207	48	23,190
Josephine	99	84	84,675	99	85	85,650
Klamath	90	61	67,410	89	60	67,690
Lake	87	7	8,015	62*	5	8,120
Lane	77	281	365,940	115	427	370,600
Lincoln	50	24	47,735	38	18	47,960
Linn	92	112	122,315	127	157	124,010
Malheur	91	29	31,705	123	39	31,845
Marion	104	347	333,950	155	525	339,200
Morrow	162	19	11,745	59	7	11,890
Multnomah	249	1972	790,670	260	2086	803,000
Polk	60	48	79,730	78	63	81,000
Sherman	0	0	1,795	0	0	1,800
Tillamook	12*	3	25,920	57	15	26,175
Umatilla	110	88	79,880	83	67	80,500
Union	41	11	26,745	15*	4	26,900
Wallowa	0	0	7,140	0	0	7,195
Wasco	45	12	26,700	52	14	27,100
Washington	79	459	583,595	70	417	595,860
Wheeler	68*	1	1,465	0	0	1,480
Yamhill	33	35	104,990	49	52	106,300

\*Rates for counties based on 5 or fewer events are considered unreliable.

Source for race/ethnicity population estimates: US Census Bureau, vintage 2016, 2017. Source for state and county estimates: Portland State University. Population Research Center certified population estimates, July 1, 2016 and July 1, 2017.

## **Local Public Health Process Measure: Percent of gonorrhea cases that had at least one contact that received treatment**

### **Data source**

Oregon Public Health Epi User System (Orpheus), 2016 - 2017

### **Benchmark**

35%, provided by Oregon Health Authority, Public Health Division, HIV, STD and TB Section

### **Data collection procedure**

Data provided by Oregon Health Authority, Public Health Division, HIV, STD and TB Section.

### **Measure specification**

Numerator: Gonorrhea cases with at least one contact with treatment or Expedited Partner Therapy (EPT) documented on the contact record (this will not count if a contact becomes a case and treatment is not added to the contact record) or contact EPT is reported as “yes” on the gonorrhea case.

Denominator: All Confirmed or Presumptive gonorrhea cases reported in the designated time period with State = OR.

Numerator and denominator data are shown in Table 5.

Note: credit goes to the county where the case lives. For example, if a case is in Jackson County and they have a contact in Deschutes County, metrics will be counted in Jackson County if they are treated.

### **Additional notes**

- Baseline year is 2016.

**Table 5. Communicable Disease**

	Local public health process measure: % of gonorrhea cases that had at least one contact that received treatment					
	2016	Numerator	Denominator	2017	Numerator	Denominator
Statewide	13%	552	4353	15%	742	5022
African American/Black						
Am. Indian Alaska Native						
Asian						
Hawaiian/Pacific Islander						
Asian/Pacific Islander						
Hispanic/Latino						
Multiple races/multi						
Other/unknown						
White						
Baker	0%	0	1	0%	0	5
Benton	4%	2	48	13%	7	52
Clackamas	9%	26	280	8%	27	338
Clatsop	14%	3	22	36%	10	28
Columbia	14%	5	37	11%	4	37
Coos	24%	10	41	48%	29	61
Crook	33%	5	15	64%	9	14
Curry	18%	2	11	0%	0	9
Deschutes	49%	32	65	37%	24	65
Douglas	19%	7	36	21%	20	94
Gilliam	0%	0	1	0%	0	1
North Central PH District						
Grant	0%	0	1	*	*	0
Harney	20%	1	5	67%	2	3
Hood River	0%	0	4	22%	2	9
Jackson	5%	9	177	12%	26	217
Jefferson	19%	3	16	19%	9	48
Josephine	0%	0	84	1%	1	85
Klamath	18%	11	61	17%	10	60
Lake	14%	1	7	40%	2	5
Lane	19%	52	281	14%	58	427
Lincoln	29%	7	24	22%	4	18
Linn	20%	22	112	23%	36	157
Malheur	21%	6	29	28%	11	39
Marion	35%	121	347	38%	200	525
Morrow	32%	6	19	0%	0	7
Multnomah	5%	89	1972	8%	161	2086
Polk	8%	4	48	6%	4	63
Sherman	*	*	0	*	*	0
Tillamook	0%	0	3	7%	1	15
Umatilla	58%	51	88	22%	15	67
Union	18%	2	11	75%	3	4
Wallowa	*	*	0	*	*	0
Wasco	33%	4	12	7%	1	14
Washington	14%	63	459	13%	53	417
Wheeler	0%	0	1	*	*	0
Yamhill	23%	8	35	25%	13	52

\*indicates counties that had 0 gonorrhea cases.

## Local Public Health Process Measure: Percent of gonorrhea case reports with complete priority fields

### Data source

Oregon Public Health Epi User System (Orpheus), 2016 - 2017

### Benchmark

70%, provided by Oregon Health Authority, Public Health Division, HIV, STD and TB Section

### Data collection procedure

Data provided by Oregon Health Authority, Public Health Division, HIV, STD and TB Section.

### Measure specification

Numerator: Gonorrhea cases with a response for each priority field

- Pregnancy Status
  - female cases 15-44 years old at time of diagnosis
  - cannot be Unknown
- HIV Status / Date of Most Recent HIV test
  - HIV case in Orpheus with HIVDxDate  $\leq$  ReportDateLHD of Gonorrhea Case or date of most recent HIV test completed in Risk Section of Gonorrhea Case
- Gender of Sex Partner
  - Case must have documentation of sex partner risk question with an answer of "yes" for either male or female partners
- Race (cannot be Unknown or Refused)
- Ethnicity (cannot be Unknown or Declined)

Denominator: All Confirmed or Presumptive Gonorrhea cases reported in the designated time period with State = OR

Numerator and denominator data are shown in Table 6.

### Additional notes

- Baseline year is 2016.

**Table 6. Communicable Disease**

	Local public health process measure: % of gonorrhea case reports with complete priority fields					
	2016	Numerator	Denominator	2017	Numerator	Denominator
Statewide	19%	833	4353	24%	1217	5022
African American/Black						
Am. Indian Alaska Native						
Asian						
Hawaiian/Pacific Islander						
Asian/Pacific Islander						
Hispanic/Latino						
Multiple races/multi						
Other/unknown						
White						
Baker	100%	1	1	60%	3	5
Benton	13%	6	48	27%	14	52
Clackamas	13%	36	280	15%	52	338
Clatsop	14%	3	22	32%	9	28
Columbia	14%	5	37	11%	4	37
Coos	15%	6	41	13%	8	61
Crook	53%	8	15	7%	1	14
Curry	18%	2	11	0%	0	9
Deschutes	35%	23	65	35%	23	65
Douglas	25%	9	36	7%	7	94
Gilliam	0%	0	1	100%	1	1
North Central PH District						
Grant	0%	0	1	*	*	0
Harney	0%	0	5	33%	1	3
Hood River	25%	1	4	56%	5	9
Jackson	6%	10	177	30%	66	217
Jefferson	0%	0	16	2%	1	48
Josephine	2%	2	84	2%	2	85
Klamath	16%	10	61	8%	5	60
Lake	14%	1	7	0%	0	5
Lane	21%	60	281	32%	137	427
Lincoln	8%	2	24	11%	2	18
Linn	13%	15	112	34%	53	157
Malheur	34%	10	29	23%	9	39
Marion	42%	146	347	49%	259	525
Morrow	5%	1	19	0%	0	7
Multnomah	17%	345	1972	17%	362	2086
Polk	8%	4	48	30%	19	63
Sherman	*	*	0	*	*	0
Tillamook	0%	0	3	0%	0	15
Umatilla	0%	0	88	4%	3	67
Union	36%	4	11	0%	0	4
Wallowa	*	*	0	*	*	0
Wasco	17%	2	12	50%	7	14
Washington	26%	120	459	35%	148	417
Wheeler	0%	0	1	*	*	0
Yamhill	3%	1	35	31%	16	52

\*indicates counties that had 0 gonorrhea cases.



# Prevention and Health Promotion

## Health Outcome Measure: Percent of adults who smoke cigarettes (i.e., adult smoking prevalence)

### Data source

Behavioral Risk Factor Surveillance System (BRFSS), statewide 2016 - 2017; race/ethnicity 2010-2011 and 2015 -2017; county 2012 - 2015 and 2014 - 2017.

### Benchmark

15%, Oregon State Health Improvement Plan (SHIP) 2020 target

### Data collection procedure

Statewide and county estimates, overall and by race/ethnicity categories, were obtained from OHA Public Health Division, Health Promotion and Chronic Disease Prevention (HPCDP) staff.

### Measure specification

The weighted proportion of survey respondents who report that they have ever smoked 100 cigarettes and now smoke all days or some days (numerator) to all respondents who responded to cigarette smoking questions other than “don’t know” or refused (denominator). Numerator and denominator data are not provided for weighted survey estimates (Table 7). Race/ethnicity data are combined for multiple years and obtained from a race/ethnic oversample.

### Additional notes

- Baseline year is 2016 for statewide estimates, 2010 - 2011 for race/ethnicity estimates, and 2012 - 2015 for county estimates.
- The statewide BRFSS sample for 2016 was 8,620. The statewide BRFSS sample for 2017 was 9,382.
- Statewide and county rates and rates by race/ethnicity are age adjusted.
- Survey includes only people age 18 and older.
- Survey responses are weighted to correct for differences in the probability of selection due to non-response and non-coverage errors. Weights are assigned to each response to:
  - Adjust variables of age, race, and gender between the sample and the entire population.
  - Allow the generalization of findings to the whole population, not just those who respond to the survey.
  - Allow comparability of data (to other states, to national data, etc.) according to the size of the total demographic group (age, race, and gender) in Oregon that they represent.
- Survey results are estimates of population values and always contain some error because they are based on samples. Confidence intervals are one tool for assessing the reliability, or precision, of survey estimates. This is a statistical estimate of the reliability of the rate. Rates based on small numbers have wide confidence intervals and are considered less reliable because of the greater influence of random variability. Confidence intervals are not shown in accordance with reporting conventions of the Oregon Health Authority, Public Health Division, Health Promotion Chronic Disease Prevention Section.

*(Continued from previous page)*

- A tool for assessing reliability is the relative standard error (RSE) of an estimate. Estimates with large RSEs are considered less reliable than estimates with small RSEs. Percentages with a relative standard error (RSE) greater than or equal to 30 and less than 50 are unreliable, as recommended by the National Center for Health Statistics.
- Data are suppressed where the number of respondents is less than 30.

Table 7. Prevention and Health Promotion						
	Health outcome measure: % of adults who smoke cigarettes					
	2016	Numerator*	Denominator*	2017	Numerator*	Denominator*
Statewide	17%			17%		
	2010-11			2015-17		
African American/Black	33%			26%		
Am. Indian Alaska Native	35%			30%		
Asian						
Hawaiian/Pacific Islander						
Asian/Pacific Islander	14%			13%		
Hispanic/Latino	21%			13%		
Multiple races/multi						
Other/unknown						
White	21%			18%		
	2012-15			2014-17		
Baker	24%			26%		
Benton	11%			9%		
Clackamas	17%			16%		
Clatsop	21%			24%		
Columbia	20%			21%		
Coos	30%			28%		
Crook	26%			20%		
Curry	26%			27%		
Deschutes	17%			16%		
Douglas	24%			25%		
Gilliam						
North Central PH District	20%			20%		
Grant	15%**			19%		
Harney	11%**			14%**		
Hood River	9%**			14%		
Jackson	20%			22%		
Jefferson	13%**			13%		
Josephine	25%			28%		
Klamath	23%			22%		
Lake	19%**			10%		
Lane	19%			19%		
Lincoln	32%			29%		
Linn	20%			19%		
Malheur	22%			24%		
Marion	17%			16%		
Morrow	16%			18%**		
Multnomah	18%			17%		
Polk	14%			15%		
Sherman						
Tillamook	31%			22%		
Umatilla	18%			20%		
Union	14%			15%		
Wallowa	11%**			14%**		
Wasco						
Washington	12%			12%		
Wheeler	12%**			***		
Yamhill	18%			19%		

\*Numerators and denominators not provided for weighted survey estimates. BRFSS sample for 2016 was 8,620. BRFSS sample for 2017 was 9,382.

\*\*Indicates estimates that have relative standard error  $\geq 30$  and  $<50$  and are considered unreliable.

\*\*\* indicates estimates that are suppressed due to number of respondents  $<30$ .

North Central Public Health District is comprised of Gilliam, Sherman, and Wasco counties.

## Local Public Health Process Measures: Percent of population reached by tobacco-free county properties policies

### Data sources

Tobacco-free Properties Evaluation in Counties Data Tables, Oregon Health Authority, Public Health Division, Health Promotion Chronic Disease Prevention (HPCDP) Section, 2015 - 2016.

### Benchmarks

100%, provided by Oregon Health Authority, Public Health Division, HPCDP Section

### Data collection procedure

Provided by Oregon Health Authority, Public Health Division, HPCDP Section.

### Measure specification

Identification of tobacco-free policies for each county, including comprehensive (all properties) and partial (some properties) tobacco-free county properties. HPCDP considers everyone (100%) in the county to be covered where tobacco-free county property policy (comprehensive or partial) is in place. Data for this process measure include policies for tobacco-free county properties, but not smoke-free county properties. Data do not include policies for tobacco-free city properties. Population estimates were obtained from the Portland State University Population Research Center.

Numerator and denominator data are shown in Table 8.

### Additional notes

- Baseline year for tobacco-free county properties policies is 2015.
- For 2015, the statewide percentage 63.3% calculated as: (1,572,145 population covered by comprehensive policies + 967,460 population covered by partial policies) divided by 4,013,846 total 2015 population. For 2016, the statewide percentage 63.2% calculated as: (1,598,605 population covered by comprehensive policies + 977,025 population covered by partial policies) divided by 4,076,350 total 2016 population.

**Table 8. Prevention and Health Promotion**

	Local public health process measure: % of population reached by tobacco-free county properties policies					
	2015	Numerator	Denominator	2016	Numerator	Denominator
Statewide	63%	2,539,605	4,013,845	63%	2,575,630	4,076,350
African American/Black						
Am. Indian Alaska Native						
Asian						
Hawaiian/Pacific Islander						
Asian/Pacific Islander						
Hispanic/Latino						
Multiple races/multi						
Other/unknown						
White						
Baker	0%	0	16,425	0%	0	16,510
Benton	100%	90,005	90,005	100%	91,320	91,320
Clackamas	0%	0	397,385	0%	0	404,980
Clatsop	100%	37,750	37,750	100%	38,225	38,225
Columbia	100%	50,390	50,390	100%	50,795	50,795
Coos	100%	62,990	62,990	100%	63,190	63,190
Crook	100%	21,085	21,085	100%	21,580	21,580
Curry	0%	0	22,470	0%	0	22,600
Deschutes	100%	170,740	170,740	100%	176,635	176,635
Douglas	100%	109,910	109,910	100%	110,395	110,395
Gilliam	0%	0	1,975	0%	0	1,980
North Central PH District						
Grant	0%	0	7,430	0%	0	7,410
Harney	0%	0	7,295	0%	0	7,320
Hood River	100%	24,245	24,245	100%	24,735	24,735
Jackson	0%	0	210,975	0%	0	213,765
Jefferson	0%	0	22,445	0%	0	22,790
Josephine	100%	83,720	83,720	100%	84,675	84,675
Klamath	100%	67,110	67,110	100%	67,410	67,410
Lake	0%	0	8,010	0%	0	8,015
Lane	100%	362,150	362,150	100%	365,940	365,940
Lincoln	0%	0	47,225	0%	0	47,735
Linn	0%	0	120,860	0%	0	122,315
Malheur	100%	31,480	31,480	100%	31,705	31,705
Marion	100%	329,770	329,770	100%	333,950	333,950
Morrow	0%	0	11,630	0%	0	11,745
Multnomah	100%	777,490	777,490	100%	790,670	790,670
Polk	100%	78,570	78,570	100%	79,730	79,730
Sherman	0%	0	1,790	0%	0	1,795
Tillamook	100%	25,690	25,690	100%	25,920	25,920
Umatilla	100%	79,155	79,155	100%	79,880	79,880
Union	100%	26,625	26,625	100%	26,745	26,745
Wallowa	100%	7,100	7,100	100%	7,140	7,140
Wasco	0%	0	26,370	0%	0	26,700
Washington	0%	0	570,510	0%	0	583,595
Wheeler	0%	0	1,445	0%	0	1,465
Yamhill	100%	103,630	103,630	100%	104,990	104,990

Source of population estimates: Portland State University Population Research Center certified population estimates, July 1, 2015 and 2016.

## Local Public Health Process Measures: Percent of population reached by tobacco retail licensure policies

### Data sources

Tobacco retail licensure policy coverage point-in-time assessments, October 2016 and June 2017, Oregon Health Authority, Public Health Division, Health Promotion and Chronic Disease Prevention (HPCDP) Section.

### Benchmarks

100%, provided by Oregon Health Authority, Public Health Division, HPCDP Section

### Data collection procedure

Provided by Oregon Health Authority, Public Health Division, HPCDP Section.

### Measure specification

County percentages are the identification of the population of jurisdictions that have passed a tobacco retail licensure policy (city, unincorporated portions of a county, or entire county). (numerator) divided by the population of the entire county (denominator). Statewide percentage is a sum of all jurisdiction numerators divided by total state population. Population estimates were obtained from the U.S. Census Bureau, 2016.

Numerator and denominator data are shown in Table 9.

### Additional notes

- Baseline year for tobacco retail licensure policies is 2016.
- (2) Benton County ( $26,125/89,385=29\%$  in 2016 and  $83,235/89,305=93\%$  in 2017); Klamath County ( $63,644/66,443=96\%$  in 2017); Lane County ( $113,880/369,519=31\%$  in 2016 and 2017); Multnomah County ( $799,766/799,766=100\%$  in 2016 and 2017); State ( $939,771/4,093,465=23\%$  in 2016 and  $1,060,545/4,093,465=26\%$  in 2017).

**Table 9. Prevention and Health Promotion**

	Local public health process measure: % of population reached by tobacco retail licensure policies					
	2016	Numerator	Denominator	2017	Numerator	Denominator
Statewide	23%	939,771	4,093,465	26%	1,060,545	4,093,465
African American/Black						
Am. Indian Alaska Native						
Asian						
Hawaiian/Pacific Islander						
Asian/Pacific Islander						
Hispanic/Latino						
Multiple races/multi						
Other/unknown						
White						
Baker						
Benton	29%	26,125	89,385	93%	83,235	89,385
Clackamas						
Clatsop						
Columbia						
Coos						
Crook						
Curry						
Deschutes						
Douglas						
Gilliam						
North Central PH District						
Grant						
Harney						
Hood River						
Jackson						
Jefferson						
Josephine						
Klamath				96%	63,664	66,443
Lake						
Lane	31%	113,880	369,519	31%	113,880	369,519
Lincoln						
Linn						
Malheur						
Marion						
Morrow						
Multnomah	100%	799,766	799,766	100%	799,766	799,766
Polk						
Sherman						
Tillamook						
Umatilla						
Union						
Wallowa						
Wasco						
Washington						
Wheeler						
Yamhill						

Source of population estimates: U.S. Census Bureau, 2016.

## Health Outcome Metric: Prescription opioid mortality rate per 100,000

### Data source

Oregon Vital Events Registration System (OVERS) accessed from online Opioid Data Dashboard <http://www.oregon.gov/oha/PH/PREVENTIONWELLNESS/SUBSTANCEUSE/OPIOIDS/Pages/data.aspx>

### Benchmark

Less than 3/100,000, Oregon State Health Improvement Plan (SHIP) 2020 target

### Data collection procedure

Statewide and county data obtained directly from the Opioid Data Dashboard. Race/ethnicity data provided by Oregon Health Authority, Public Health Division, Injury and Violence Prevention Section.

### Measure specification

All rates shown are crude rates and are calculated by counting the total number of events (i.e., deaths) in a specified geographic area (state, county) and dividing by the total population for the same geographic area (for a specified time period, usually a calendar year) and multiplied by 100,000 (i.e., crude rate = 100,000 X number of events/total population). Numerator and denominator data are shown in Table 10.

### Additional notes

- Baseline year is 2012-2016 5-year average.
- All rates are 5-year average crude rates per 100,000 for 2012-2016.
- Population estimates are from the National Center for Health Statistics (NCHS) bridged-race annual population estimates.
- Starting in 2014, data do not include deaths from Oregon residents that occurred out of state.
- Rates not displayed for groups with 5 or fewer deaths or relative standard error > 30.
- The Public Health Advisory Board approved the Accountability Metric, "Prescription opioid mortality rate." Data obtained from the Opioid Data Dashboard are categorized as "Pharmaceutical Opioids."
- "Pharmaceutical opioids" as a category exclude novel synthetic opioids and illicit fentanyl analogs because there is not currently a mechanism for distinguishing between prescribed synthetic opioids, including prescription fentanyl, and illicit fentanyl analogs. However, this means that deaths associated with prescription synthetic opioids, such as prescription fentanyl are also excluded (but not methadone).



Table 10. Prevention and Health Promotion						
	Health outcome measure: Prescription opioid mortality rate per 100,000 population					
	2012-2016	Numerator	Denominator	2013-2017	Numerator	Denominator
Statewide	4	730	3,960,673	3	686	4,016,537
African American/Black	3	15	91,713	3	15	95,163
Am. Indian Alaska Native	4	11	54,813	5	13	55,467
Asian						
Hawaiian/Pacific Islander						
Asian/Pacific Islander	*	*	197,248	*	*	206,147
Hispanic/Latino	1	27	493,179	1	26	507,666
Multiple races/multi						
Other/unknown						
White	4	669	3,123,720	4	622	3,152,094
Baker	*	*	16,011	*	*	15,867
Benton	3	15	86,956	3	14	88,106
Clackamas	2	48	393,355	2	44	399,825
Clatsop	4	7	37,421	*	*	37,783
Columbia	5	12	49,479	4	10	49,648
Coos	*	*	62,333	*	*	62,662
Crook	9	9	20,958	8	9	21,469
Curry	*	2*	22,130	*	*	22,283
Deschutes	3	27	169,497	3	23	174,288
Douglas	4	22	106,657	3	18	107,152
Gilliam	**	**	**	**	**	**
North Central PH District						
Grant	*	*	7,191	*	*	7,209
Harney	*	*	7,119	*	*	7,147
Hood River	0	0	22,685	*	*	22,955
Jackson	5	51	209,140	3	34	211,868
Jefferson	*	*	22,219	*	*	22,582
Josephine	4	18	83,350	4	18	84,422
Klamath	3	11	65,364	3	9	65,777
Lake	*	*	7,810	*	*	7,759
Lane	6	111	357,564	6	106	361,721
Lincoln	9	20	46,349	7	17	47,051
Linn	5	29	119,025	4	22	120,210
Malheur	8	12	30,367	6	9	30,204
Marion	2	37	324,461	2	40	329,335
Morrow	*	*	11,075	*	*	11,117
Multnomah	4	166	777,418	5	181	790,305
Polk	2	8	77,656	2	8	78,991
Sherman	**	**	**	**	**	**
Tillamook	10	13	25,345	11	14	25,616
Umatilla	2	9	76,670	3	10	76,481
Union	*	*	25,610	*	*	25,676
Wallowa	*	*	6,777	*	*	6,810
Wasco	*	*	25,293	*	*	25,500
Washington	2	61	561,650	2	56	572,414
Wheeler	**	**	**	**	**	**
Yamhill	4	18	100,744	3	15	101,417

\*Suppressed for 5 or fewer events or relative standard error >=30.

\*\*No deaths reported.

Population estimates are 5-year averages.

## Local Public Health Process Measure: Percent of top opioid prescribers enrolled in the Prescription Drug Monitoring Program (PDMP)

### Data source

Oregon Prescription Drug Monitoring Program database, 2016. Accessed online at: <http://www.oregon.gov/oha/PH/PREVENTIONWELLNESS/SUBSTANCEUSE/OPIOIDS/Pages/data.aspx>

### Benchmark

95%, provided by Oregon Health Authority, Public Health Division, Injury and Violence Prevention Section

### Data collection procedure

County data were obtained directly from online Opioid Data Dashboard. Statewide percentage was obtained from Oregon Health Authority, Public Health Division, Injury and Violence Prevention Section.

### Measure specification

Top prescribers enrolled (numerator) divided by top prescribers (denominator), by county and statewide. Numerator and denominator data are shown in Table 11.

### Additional notes

- Baseline period is 12/31/2016.
- Top prescribers are defined as the top 4000 prescribers by volume; this represents approximately 20% of all prescribers in Oregon.
- There were no top prescribers in Gilliam County as of 12/31/2016.
- There were no top prescribers in Wheeler County as of 12/31/2017.
- Data provided in the PDMP online dashboard are quarterly, not annual. The measure combines being a top prescriber in a time period and whether or not that person is enrolled in the PDMP at the end of that time period. Calculating the number of top prescribers for the whole year is difficult because of churn in both the top prescriber list and in PDMP enrollment; accounts are deactivated and reactivated frequently. Quarterly data reflect enrollment as of the last day of the quarter.
- As of July 1, 2018, all prescribers in the state of Oregon were required to enroll in PDMP as mandated by Oregon statute.

**Table 11. Prevention and Health Promotion**

	Local public health process measure: % of top opioid prescribers enrolled in PDMP					
	9/30/2016	Numerator	Denominator	9/30/2017	Numerator	Denominator
Statewide	74%	2,960	4,000	75%	3002	4000
African American/Black						
Am. Indian Alaska Native						
Asian						
Hawaiian/Pacific Islander						
Asian/Pacific Islander						
Hispanic/Latino						
Multiple races/multi						
Other/unknown						
White						
Baker	71%	14	20	81%	13	16
Benton	68%	67	99	70%	70	100
Clackamas	71%	212	299	77%	236	308
Clatsop	79%	26	33	92%	34	37
Columbia	88%	21	24	91%	19	21
Coos	88%	66	75	80%	60	75
Crook	91%	10	11	73%	8	11
Curry	75%	21	28	83%	19	23
Deschutes	68%	149	220	70%	169	240
Douglas	81%	108	134	84%	108	129
Gilliam	100%	1	1	*	0	0
North Central PH District						
Grant	100%	5	5	100%	6	6
Harney	100%	7	7	100%	6	6
Hood River	83%	19	23	83%	19	23
Jackson	80%	203	255	76%	195	258
Jefferson	86%	12	14	92%	12	13
Josephine	77%	67	87	82%	70	85
Klamath	67%	40	60	73%	40	55
Lake	100%	7	7	100%	10	10
Lane	76%	333	436	78%	348	446
Lincoln	82%	37	45	89%	33	37
Linn	79%	73	93	78%	70	90
Malheur	40%	8	20	78%	14	18
Marion	74%	278	377	75%	258	344
Morrow	100%	5	5	100%	5	5
Multnomah	73%	637	877	72%	599	831
Polk	91%	19	21	89%	55	62
Sherman	100%	1	1	100%	1	1
Tillamook	74%	17	23	74%	20	27
Umatilla	66%	38	58	67%	33	49
Union	69%	20	29	75%	21	28
Wallowa	71%	5	7	88%	7	8
Wasco	83%	20	24	78%	18	23
Washington	69%	351	508	69%	369	537
Wheeler	50%	1	2	50%	1	2
Yamhill	82%	62	76	73%	56	77

\*There were 0 top prescribers in Gilliam County as of 9/30/2017.

# Environmental Health

## Health Outcome Measure: Percent of commuters who walk, ride bicycles, or use public transportation to get to work

### Data source

U.S. Census Bureau, American Community Survey (ACS) 1-year and 5-year estimates online query system, accessed at <https://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t#acsST>

### Benchmark

9.2%, Healthy People 2020. This represents the sum of mutually exclusive categories: bike .6%, walk 3.1%, and mass transit 5.5%

### Data collection procedure

Data were obtained directly from the ACS online query and downloaded as Excel file.

### Measure specification

Selection of “Means of Transportation to Work” from online query, specifying geographic location (state or counties). Add together categories “Walked,” “Bicycle,” and “Public transportation (exclude taxicab).” The percentages are mutually exclusive and were added together. Numerator and denominator data are not provided for weighted survey estimates. Numerator and denominator data are shown in Table 12.

### Additional notes

- Baseline year is 2016 (statewide) and 2012-2016 (county).
- Data are available by total and by gender and not by race/ethnicity for commuters who walk, bike, or use public transit from the ACS online query system.
- Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. Margins of error are not shown in the charts.
- County data are 5-year average estimates.

**Table 12. Environmental Health**

	Health outcome measure: % of commuters who walk, bike, or use public transportation to get to work					
	2012-2016	Numerator*	Denominator*	2013-2017	Numerator*	Denominator*
Statewide	10%			10%		
Race/Ethnicity**						
African American/Black						
Am. Indian Alaska Native						
Asian						
Hawaiian/Pacific Islander						
Asian/Pacific Islander						
Hispanic/Latino						
Multiple races/multi						
Other/unknown						
White						
Baker	8%			7%		
Benton	18%			18%		
Clackamas	6%			6%		
Clatsop	9%			10%		
Columbia	4%			3%		
Coos	6%			5%		
Crook	3%			4%		
Curry	6%			7%		
Deschutes	5%			5%		
Douglas	4%			4%		
Gilliam	11%			9%		
North Central PH District						
Grant	5%			6%		
Harney	7%			8%		
Hood River	7%			7%		
Jackson	6%			6%		
Jefferson	4%			4%		
Josephine	4%			4%		
Klamath	5%			4%		
Lake	9%			7%		
Lane	12%			12%		
Lincoln	7%			7%		
Linn	4%			4%		
Malheur	7%			7%		
Marion	6%			6%		
Morrow	4%			3%		
Multnomah	22%			22%		
Polk	5%			4%		
Sherman	7%			8%		
Tillamook	7%			7%		
Umatilla	5%			4%		
Union	10%			9%		
Wallowa	12%			12%		
Wasco	5%			6%		
Washington	10%			10%		
Wheeler	14%			15%		
Yamhill	7%			7%		

\*Numerators and denominators are not provided for weighted survey estimates.

\*\*Estimates not provided by race/ethnicity.

## Local Public Health Process Measure: Number of active transportation partner governing or leadership boards with LPHA representation

### Data source

Survey of Local Public Health Authorities

### Benchmark

100% of LPHAs that have eligible initiatives or activities

### Data collection procedure

Online survey

### Measure specification

Statewide percentage calculated as the number of counties that participate in planning processes or standing committees (numerator) divided by the number of counties with eligible processes or committees (denominator).

Excluded from the denominator: Josephine, Linn, Malheur, Polk, and Wallowa counties:

- did not respond to survey (Josephine);
- LPHA reported there were no planning initiatives or standing advisory committees or boards in 2018 or the LPHA was unsure of whether there were planning initiatives or standing advisory committees or boards in 2018 (Linn, Malheur, and Polk );
- Wallowa County legally transferred its public health authority to the Oregon Health Authority in 2018.

Numerator and denominator data are shown in Table 13.

### Additional notes

- Baseline year is 2018.

**Table 13. Environmental Health**

Local public health process measure: Local public health authority participation in leadership or planning initiatives related to active transportation, parks and recreation, or land use						
	2018	Numerator	Denominator			
Statewide	59%	17	29			
African American/Black						
Am. Indian Alaska Native						
Asian						
Hawaiian/Pacific Islander						
Asian/Pacific Islander						
Hispanic/Latino						
Multiple races/multi						
Other/unknown						
White						
Baker			√			
Benton	√	√	√			
Clackamas	√	√	√			
Clatsop			√			
Columbia			√			
Coos			√			
Crook	√	√	√			
Curry			√			
Deschutes	√	√	√			
Douglas	√	√	√			
Gilliam						
North Central PH District	√	√	√			
Grant	√	√	√			
Harney	√	√	√			
Hood River			√			
Jackson			√			
Jefferson	√	√	√			
Josephine	*					
Klamath	√	√	√			
Lake			√			
Lane	√	√	√			
Lincoln	√	√	√			
Linn	**					
Malheur	**					
Marion	√	√	√			
Morrow			√			
Multnomah	√	√	√			
Polk	**					
Sherman						
Tillamook	√	√	√			
Umatilla			√			
Union			√			
Wallowa	***					
Wasco						
Washington	√	√	√			
Wheeler			√			
Yamhill	√	√	√			

\*LPHA did not respond to the survey.

\*\*LPHA responded no or unsure to all.

\*\*\*Wallowa County transferred its public health authority to the Oregon Health Authority in 2018.

## Health Outcome Measure: Percent of community water systems meeting health-based standards

### Data source

Safe Drinking Water Information System (SDWIS) Federal Reporting Services, the Environmental Protection Agency's (EPA) national regulatory compliance database

### Benchmark

EPA standard is 92%

### Data collection procedure

Data provided by Oregon Health Authority, Public Health Division, Drinking Water Services Section.

### Measure specification

Numerator: number of (county, state) water systems on Government Performance and Results Act (GPRA) list, indicating non-compliance. Denominator: number of water systems (county, state). Numerator and denominator data are shown in Table 14.

### Additional notes

- Baseline year is 2016.
- The EPA database includes information on the nation's 160,000 public water systems and violations of drinking water regulations. The database contains aggregated information on water systems; violations reported by violation type and by contaminant/rule, and GPRA data.
- Unit of analysis is water systems; race/ethnicity data do not apply.



Table 14. Environmental Health						
	Health outcome measure: % of community water systems meeting health-based standards					
	2016	Numerator	Denominator	2017	Numerator	Denominator
Statewide	89%	794	891	95%	846	891
African American/Black						
Am. Indian Alaska Native						
Asian						
Hawaiian/Pacific Islander						
Asian/Pacific Islander						
Hispanic/Latino						
Multiple races/multi						
Other/unknown						
White						
Baker	78%	7	9	78%	7	9
Benton	93%	14	15	100%	15	15
Clackamas	84%	68	81	95%	77	81
Clatsop	100%	21	21	95%	20	21
Columbia	91%	32	35	91%	32	35
Coos	94%	17	18	94%	17	18
Crook	89%	17	19	100%	19	19
Curry	92%	11	12	92%	11	12
Deschutes	88%	58	66	97%	64	66
Douglas	86%	25	29	86%	25	29
Gilliam	67%	2	3	100%	3	3
North Central PH District						
Grant	75%	6	8	88%	7	8
Harney	100%	3	3	100%	3	3
Hood River	100%	7	7	100%	7	7
Jackson	90%	54	60	95%	57	60
Jefferson	75%	3	4	100%	4	4
Josephine	100%	32	32	100%	32	32
Klamath	93%	25	27	100%	27	27
Lake	33%	1	3	67%	2	3
Lane	94%	64	68	93%	63	68
Lincoln	80%	24	30	93%	28	30
Linn	95%	39	41	100%	41	41
Malheur	25%	2	8	63%	5	8
Marion	85%	63	74	95%	70	74
Morrow	71%	5	7	86%	6	7
Multnomah	96%	22	23	100%	23	23
Polk	75%	9	12	92%	11	12
Sherman	100%	4	4	100%	4	4
Tillamook	97%	34	35	97%	34	35
Umatilla	89%	32	36	92%	33	36
Union	90%	9	10	100%	10	10
Wallowa	80%	4	5	80%	4	5
Wasco	85%	17	20	95%	19	20
Washington	97%	28	29	100%	29	29
Wheeler	100%	3	3	100%	3	3
Yamhill	94%	32	34	100%	34	34

## Local Public Health Process Measure: Percent of water systems surveys completed

### Data source

Oregon Drinking Water Database, Water Quality Alerts, 2016 and 2017. Accessed online at: <https://yourwater.oregon.gov/alertscounty.php>

### Benchmark

100%, provided by Oregon Health Authority, Public Health Division, Drinking Water Services Section

### Data collection procedure

Selection criteria for online data query:

Regulating Agency: County

County: All Counties and each County

Year Due: 2016

Survey List Options: "All Systems on Due List"

### Measure specification

Numerator: water systems surveys completed in the calendar year. Denominator: water system surveys due in calendar year. Numerator and denominator data are shown in Table 15.

### Additional notes

- Baseline year is 2016.
- Inactive and non-EPA (state regulated) systems excluded.
- 9 counties had no water systems surveys in 2016 and/or 2017.

**Table 15. Environmental Health**

	Local public health process measure: % of water systems surveys completed					
	2016	Numerator	Denominator	2017	Numerator	Denominator
Statewide	97%	414	428	99%	429	432
African American/ Black						
Am. Indian Alaska Native						
Asian						
Hawaiian/Pacific Islander						
Asian/Pacific Islander						
Hispanic/Latino						
Multiple races/multi						
Other/unknown						
White						
Baker	*	*	*	100%	1	1
Benton	100%	6	6	100%	7	7
Clackamas	100%	45	45	100%	44	44
Clatsop	100%	7	7	100%	6	6
Columbia	100%	13	13	100%	12	12
Coos	100%	9	9	100%	9	9
Crook	100%	9	9	100%	9	9
Curry	83%	5	6	88%	7	8
Deschutes	100%	29	29	100%	30	30
Douglas	100%	14	14	100%	15	15
Gilliam	100%	2	2	100%	2	2
North Central PH District						
Grant	*	*	*	*	*	*
Harney	*	*	*	*	*	*
Hood River	100%	3	3	100%	4	4
Jackson	100%	36	36	100%	37	37
Jefferson	100%	5	5	100%	5	5
Josephine	56%	14	25	100%	31	31
Klamath	100%	24	24	100%	24	24
Lake	*	*	*	*	*	*
Lane	98%	46	47	98%	42	43
Lincoln	100%	7	7	100%	8	8
Linn	100%	31	31	100%	31	31
Malheur	100%	2	2	100%	1	1
Marion	100%	37	37	100%	36	36
Morrow	*	*	*	*	*	*
Multnomah	100%	10	10	100%	9	9
Polk	100%	4	4	100%	4	4
Sherman	100%	4	4	100%	2	2
Tillamook	100%	13	13	100%	11	11
Umatilla	*	*	*	*	*	*
Union	100%	4	4	100%	4	4
Wallowa	*	*	*	*	*	*
Wasco	89%	8	9	100%	10	10
Washington	100%	15	15	94%	15	16
Wheeler	*	*	*	*	*	*
Yamhill	100%	12	12	100%	13	13

\*No water systems surveys.

## Local Public Health Process Measure: Percent of water quality alert responses

### Data source

Oregon Drinking Water Database, Water Quality Alerts, 2016 and 2017. Accessed online at: <https://yourwater.oregon.gov/alertscounty.php>

### Benchmark

100%, provided by Oregon Health Authority, Public Health Division, Drinking Water Services Section

### Data collection procedure

Online query on “Water Quality Alerts” page.

Regulating Agency: County

County: All Counties

Alert Type: “All alert types”

Date Range: 1/1/2016 to 12/31/2016 and 1/1/2017 to 12/31/2017

Other options: [show non-alerts (sodium, coliform source and special samples), show non-EPA (state regulated) systems, show inactive systems] not selected

Steps:

1. Download query results to Excel spreadsheet.
2. Sort by Alert ID, then by County. Purpose: to identify unique alert IDs for which a contact report date is available.
3. Non-responded alerts (i.e., no alert report date for a unique alert ID) were summed for each county.
4. All unique alert IDs were summed for each county. This is the denominator.
5. Calculation of numerator, the unique alert IDs responded to – was performed by subtracting the total in step 3 from the total in step 4 (for each county).
6. The process measure, % of water quality alert responses, was calculated by dividing the numerator in step 5 by the denominator in step 4.

### Measure specification

Numerator: count of water quality alerts responded to. Denominator: unique alert IDs. Numerator and denominator data are shown in Table 16.

### Additional notes

- Baseline year is 2016.
- Water quality alerts are generated when drinking water monitoring results indicate detection of a contaminant at a level of concern. Prompt investigation and resolution of these alerts is vital to ensuring safe drinking water.
- There were 7 counties for which quality alerts were not applicable in 2016: Grant, Harney, Lake, Morrow, Umatilla, Wallowa, and Wheeler. In addition to these 7, Baker County was not applicable in 2017.

**Table 16. Environmental Health**

	Local public health process measure: % of water quality alert responses					
	2016	Numerator	Denominator	2017	Numerator	Denominator
Statewide	87%	653	749	89%	642	718
African American/ Black						
Am. Indian Alaska Native						
Asian						
Hawaiian/Pacific Islander						
Asian/Pacific Islander						
Hispanic/Latino						
Multiple races/multi						
Other/unknown						
White						
Baker	0%	0	1	*	*	*
Benton	86%	18	21	81%	13	16
Clackamas	97%	71	73	86%	56	65
Clatsop	93%	13	14	91%	10	11
Columbia	70%	7	10	100%	18	18
Coos	100%	15	15	100%	21	21
Crook	68%	13	19	94%	16	17
Curry	35%	6	17	68%	13	19
Deschutes	88%	37	42	94%	67	71
Douglas	94%	33	35	91%	20	22
Gilliam	50%	2	4	100%	1	1
North Central PH District						
Grant	*	*	*	*	*	*
Harney	*	*	*	*	*	*
Hood River	73%	8	11	57%	4	7
Jackson	85%	70	82	99%	67	68
Jefferson	100%	1	1	100%	3	3
Josephine	77%	26	34	100%	17	17
Klamath	85%	17	20	100%	20	20
Lake	*	*	*	*	*	*
Lane	97%	63	65	96%	70	73
Lincoln	100%	34	34	96%	23	24
Linn	94%	60	64	93%	42	45
Malheur	80%	4	5	57%	8	14
Marion	93%	55	59	98%	65	66
Morrow	*	*	*	*	*	*
Multnomah	100%	21	21	100%	16	16
Polk	75%	18	24	94%	17	18
Sherman	67%	6	9	43%	3	7
Tillamook	75%	12	16	85%	11	13
Umatilla	*	*	*	*	*	*
Union	57%	4	7	82%	9	11
Wallowa	*	*	*	*	*	*
Wasco	67%	12	18	45%	10	22
Washington	93%	14	15	73%	11	15
Wheeler	*	*	*	*	*	*
Yamhill	100%	13	13	61%	11	18

\*Water quality alerts not applicable.

## Local Public Health Process Measure: Percent of priority non-compliers (PNCs) resolved

### Data source

Oregon Drinking Water Database, Priority Non-Compliers, 2016 and 2017. Accessed at <https://yourwater.oregon.gov/reports/county-pncs.php>

### Benchmark

100%, provided by Oregon Health Authority, Public Health Division, Drinking Water Services Section

### Data collection procedure

Online query on “County Review - PNCs” page

Select the county to review: each available county selected from the drop down list

Date range: from 1/1/2016 to 12/31/2016 and 1/1/2017 to 12/31/2017

### Measure specification

Numerator: count of resolved PNCs. Denominator: all PNCs. Numerator and denominator data are shown in Table 17.

### Additional notes

- A priority non-complier is a water system that accumulates 11 or more points from violations. Violation points are issued for failure to meet drinking water standards.
- There were 7 counties for which PNCs were not applicable in 2016 and/or 2017: Grant, Harney, Lake, Morrow, Umatilla, Wallowa, and Wheeler.
- The following counties had no PNCs during 2016 and/or 2017 (online query revealed a blank listing): Baker, Benton, Clatsop, Crook, Gilliam, Hood River, Jefferson, Klamath, Malheur, Polk, Sherman, Wasco, and Yamhill.
- All PNCs were resolved in both 2016 and 2017.

**Table 17. Environmental Health**

	Local public health process measure: % of priority non-compliers resolved					
	2016	Numerator	Denominator	2017	Numerator	Denominator
Statewide	100%	76	76	100%	57	57
African American/Black						
Am. Indian Alaska Native						
Asian						
Hawaiian/Pacific Islander						
Asian/Pacific Islander						
Hispanic/Latino						
Multiple races/multi						
Other/unknown						
White						
Baker	**	0	**	**	0	**
Benton	100%	2	2	**	0	**
Clackamas	100%	4	4	100%	5	5
Clatsop	100%	1	1	**	0	**
Columbia	100%	4	4	100%	3	3
Coos	100%	2	2	100%	2	2
Crook	100%	1	1	**	0	**
Curry	100%	7	7	100%	5	5
Deschutes	100%	3	3	100%	3	3
Douglas	100%	5	5	100%	5	5
Gilliam	100%	1	1	**	0	**
North Central PH District						
Grant	*	*	*	*	*	*
Harney	*	*	*	*	*	*
Hood River	**	0	**	**	0	**
Jackson	100%	6	6	100%	2	2
Jefferson	**	0	**	**	0	**
Josephine	100%	4	4	100%	5	5
Klamath	100%	3	3	**	0	**
Lake	*	*	*	*	*	*
Lane	100%	8	8	100%	7	7
Lincoln	100%	1	1	100%	1	1
Linn	100%	7	7	100%	2	2
Malheur	**	0	**	**	0	**
Marion	100%	7	7	100%	5	5
Morrow	*	*	*	*	*	*
Multnomah	100%	2	2	100%	1	1
Polk	100%	1	1	**	0	**
Sherman	**	0	**	**	0	**
Tillamook	100%	1	1	100%	3	3
Umatilla	*	*	*	*	*	*
Union	100%	1	1	100%	1	1
Wallowa	*	*	*	*	*	*
Wasco	**	0	**	100%	4	4
Washington	100%	5	5	100%	3	3
Wheeler	*	*	*	*	*	*
Yamhill	**	0	**	**	0	**

\*Priority non-compliers (PNC) not applicable.

\*\*0 PNCs.

# Access to Clinical Preventive Services

## Health Outcome Measure: Percent of women at risk for unintended pregnancy who use effective methods of contraception

### Data source

Behavioral Risk Factor Surveillance System, 2016 - 2017

### Benchmark

70%, provided by Oregon Health Authority, Public Health Division, Reproductive Health Program

### Data collection procedure

Data provided by Oregon Health Authority, Public Health Division, Reproductive Health Program.

### Measure specification

"Effective methods of contraception" includes most effective and moderately effective methods.

Definition of most effective methods: IUD, implant, female sterilization or vasectomy

Definition of moderately effective methods: pill, patch, ring, or shot

Definition of reproductive-age women at risk of unintended pregnancy:

Age: 18-49

Not currently pregnant

Have not had a hysterectomy

Not currently abstinent

Have an opposite-sex partner

Not "too old" or told by a healthcare worker they cannot get pregnant

Not trying to get pregnant or "don't mind if get pregnant" (2014)

Excludes any without known contraceptive use status (such as those who ended the survey early)

Numerator and denominator data are not provided for weighted survey estimates (Table 18).

### Additional notes

- Baseline year is 2016.
- Effectiveness is only one factor that influences contraceptive method choice. Client-centered approaches should always be used in contraception counseling to ensure that an individual's choices are respected.
- There are no estimates by race/ethnicity or by county. Because of small numbers, five years of combined data are required for reporting. Five years of combined data, 2014 – 2018 for race/ethnicity and county estimates will be examined according to data suppression rules after the 2018 BRFSS data become available. Data prior to 2014 cannot be combined with later years because of the substantial changes to the wording of the BRFSS questions.
- Survey results are estimates of population values and always contain some error because they are based on samples. Confidence intervals are one tool for assessing the reliability, or precision, of survey estimates. Confidence intervals are not shown.



**Table 18. Access to Clinical Preventive Services**

	Health outcome measure: % of women at risk of unintended pregnancy who use effective methods of contraception					
	2016	Numerator*	Denominator*	2017	Numerator*	Denominator*
Statewide	69%			68%		
Race/ethnicity**						
African American/Black						
Am. Indian Alaska Native						
Asian						
Hawaiian/Pacific Islander						
Asian/Pacific Islander						
Hispanic/Latino						
Multiple races/multi						
Other/unknown						
White						
County**						
Baker						
Benton						
Clackamas						
Clatsop						
Columbia						
Coos						
Crook						
Curry						
Deschutes						
Douglas						
Gilliam						
North Central PH District						
Grant						
Harney						
Hood River						
Jackson						
Jefferson						
Josephine						
Klamath						
Lake						
Lane						
Lincoln						
Linn						
Malheur						
Marion						
Morrow						
Multnomah						
Polk						
Sherman						
Tillamook						
Umatilla						
Union						
Wallowa						
Wasco						
Washington						
Wheeler						
Yamhill						

\*Numerators and denominators are not provided for weighted survey estimates.

\*\*Data for race/ethnicity and county require combined years of data and are not yet available due to change in the wording of the survey question in 2014.

## **Local Public Health Process Measure: Annual strategic plan that identifies gaps, barriers and opportunities for improving access to effective contraceptive use**

### **Data source**

LPHA annual reporting, Oregon Health Authority, Public Health Division, Reproductive Health Program

### **Benchmark**

70% by 2023, provided by Oregon Health Authority, Public Health Division, Reproductive Health Program

### **Data collection procedure**

TBD

### **Measure specification**

TBD

### **Additional notes**

- LPHA data will be available in 2020.

**Table 19. Access to Clinical Preventive Services**

	Local public health process measure: Annual strategic plan that identifies gaps, barriers and opportunities for improving access to effective contraceptive use				
	TBD	Numerator	Denominator		
Statewide					
African American/Black					
Am. Indian Alaska Native					
Asian					
Hawaiian/Pacific Islander					
Asian/Pacific Islander					
Hispanic/Latino					
Multiple races/multi					
Other/unknown					
White					
Baker					
Benton					
Clackamas					
Clatsop					
Columbia					
Coos					
Crook					
Curry					
Deschutes					
Douglas					
Gilliam					
North Central PH District					
Grant					
Harney					
Hood River					
Jackson					
Jefferson					
Josephine					
Klamath					
Lake					
Lane					
Lincoln					
Linn					
Malheur					
Marion					
Morrow					
Multnomah					
Polk					
Sherman					
Tillamook					
Umatilla					
Union					
Wallowa					
Wasco					
Washington					
Wheeler					
Yamhill					

## Developmental Metric: Percent of children age 0-5 with any dental visits

### Data source

Medicaid administrative claims data

### Benchmark

47.8%, State Health Improvement Plan (SHIP) 2020 target

### Data collection procedure

Data provided by Oregon Health Authority, Public Health Division, Oral Health Program.

### Measure specification

Numerator: number of clients who received any dental service under the supervision of a dentist or dental hygienist in the measurement year. Denominator: number of clients who have continuous enrollment for 12 months in a coordinated care organization. Numerator and denominator data are shown in Table 20.

### Additional notes

- Baseline year is 2016.
- This metric is considered developmental and will be tracked and reported.
- This measure includes any dental service by a dentist or dental hygienist. It does not include dental services provided in a medical setting.
- There is no local public health process measure associated with this developmental metric.
- Data are for Medicaid clients only.

**Table 20. Access to Clinical Preventive Services**

	Developmental measure: % of children age 0-5 with any dental visit*					
	2016	Numerator	Denominator	2017	Numerator	Denominator
Statewide	48%	33,772	71,022	51%	38,657	75,875
African American/Black	50%	649	1,305	54%	770	1,434
Am. Indian Alaska Native	48%	402	846	54%	512	957
Asian	54%	616	1,150	57%	721	1,256
Hawaiian/Pacific Islander	40%	140	353	37%	124	332
Asian/Pacific Islander						
Hispanic/Latino	55%	4,359	7,872	61%	4,934	8,061
Multiple races/multi						
Other	43%	326	765	52%	449	867
Unknown	48%	17,190	35,446	50%	19,801	39,521
White	43%	10,090	23,285	48%	11,346	23,447
Baker	44%	137	312	48%	170	354
Benton	41%	363	891	47%	458	984
Clackamas	46%	2,293	4,969	48%	2,484	5,209
Clatsop	28%	189	665	38%	255	677
Columbia	32%	238	738	40%	310	776
Coos	49%	618	1,270	53%	733	1,371
Crook	35%	180	508	46%	241	520
Curry	43%	142	331	51%	190	372
Deschutes	51%	1,536	2,989	56%	1,801	3,225
Douglas	51%	1,084	2,114	52%	1,183	2,264
Gilliam	50%	10	20	63%	15	24
North Central PH District						
Grant	41%	37	91	48%	47	98
Harney	51%	77	152	68%	127	187
Hood River	58%	332	573	68%	404	594
Jackson	48%	2,225	4,645	51%	2,579	5,044
Jefferson	53%	303	569	55%	314	572
Josephine	46%	920	1,985	53%	1,133	2,142
Klamath	51%	697	1,379	48%	697	1,463
Lake	33%	37	111	41%	57	138
Lane	50%	3,192	6,430	49%	3,379	6,839
Lincoln	38%	321	834	42%	389	927
Linn	44%	1,138	2,577	50%	1,347	2,700
Malheur	46%	409	881	53%	533	1,012
Marion	48%	4,005	8,347	52%	4,699	9,050
Morrow	51%	150	293	62%	179	290
Multnomah	50%	5,996	12,038	53%	6,984	13,218
Polk	40%	549	1,364	40%	598	1,477
Sherman	41%	7	17	39%	7	18
Tillamook	35%	159	451	43%	191	447
Umatilla	49%	887	1,824	54%	1,019	1,886
Union	40%	210	528	44%	261	592
Wallowa	42%	56	134	46%	66	144
Wasco	52%	321	614	64%	431	677
Washington	48%	3,819	7,958	51%	4,207	8,240
Wheeler	24%	4	17	54%	13	24
Yamhill	47%	882	1,873	49%	965	1,961

\*Medicaid claims data.



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