About this Report

Welcome to Oregon Health Authority’s Public Health Accountability Metrics Baseline Report.

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. Public health accountability metrics will help track progress towards the modernization of Oregon’s public health system, as well as help identify where change may be needed if goals aren’t being met. More importantly, these metrics emphasize Oregon’s population health priorities including areas where public health can work with other sectors to achieve shared goals.

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:

(971) 673-1222 or PublicHealth.Policy@state.or.us

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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, to establish the first-ever set of 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 leads the nation in tracking the efforts of the public health system to improve health outcomes. Oregon Revised Statute 431.115 requires the use of accountability metrics to incentivize the effective and equitable provision of public health services across Oregon.

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 improving childhood immunization rates, reducing tobacco use and opioid overdose, and ensuring access to clean drinking water. It is important to note that no single set of measures can capture all of the work of governmental public health, and this report provides a snapshot of how the state is performing on leading health issues. Key findings from the report include:

- **Say something about vaccines.** Oregon’s public health system improve improve improve improve improve improvement.

- **In 2017, the rate of gonorrhea infections was considerably higher than the statewide benchmark of 72 cases per 100,000 people and was higher than 2016.** In recent years, Oregon, like much of the rest of the nation, has experienced a large increase in gonorrhea cases, with significant disparities among certain populations. State and local public health authorities identify where outbreaks are occurring and make sure both the individual affected and their partners are properly treated. Oregon’s public health system has already begun to improve its work on sexually transmitted and other communicable diseases through a new $5M state investment in public health.

- **Add something new here.** The report highlights highlights highlights highlights etc etc etc etc et cetera et cetera et cetera et cetera.

Change this..., 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 population health goals, and where new approaches and additional focus are needed.

Framework for Public Health Accountability Metrics

The Public Health Advisory Board 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.

**Health outcome measures** reflect population health priorities for the public health system. Making improvements on health outcome measures will require long-term focus and must include work in other sectors. More than half of the health outcome measures align with current coordinated care organization incentive measures.

**Local public health process measures** reflect the daily work of a local public health authority to make improvements in each health outcome measure.
Introduction

Background

Since 2013 Oregon has been working to modernize how public health is provided across the state. Public health modernization is intended to ensure the public health system operates efficiently, is aligned with health system transformation, and is set up to provide critical protections for every person in the state.

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).

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.
## Table 1. Public Health Accountability and Developmental Metrics

### PART 1: ACCOUNTABILITY METRICS

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<th>Health Outcome Measure</th>
<th>Local Public Health Process Measures</th>
</tr>
</thead>
<tbody>
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<td></td>
</tr>
<tr>
<td>Percent of two-year olds who received recommended vaccines</td>
<td>Percent of Vaccines for Children clinics that participate in the Assessment, Feedback, Incentives and eXchange (AFIX) program</td>
</tr>
<tr>
<td>Gonorrhea incidence rate per 100,000 population</td>
<td>Percent of gonorrhea cases that had at least one contact that received treatment</td>
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<tr>
<td>Prescription opioid mortality rate per 100,000 population</td>
<td>Percent of top opioid prescribers enrolled in the Prescription Drug Monitoring Program (PDMP) Database</td>
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<tr>
<td>Percent of adults who smoke cigarettes</td>
<td>Percent of population reached by tobacco-free county properties policies</td>
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<td>Prescription opioid mortality rate per 100,000 population</td>
<td>Percent of population reached by tobacco retail licensure policies</td>
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<tr>
<td>Percent of commuters who walk, bike, or use public transportation to get to work</td>
<td>Local public health authority participation in leadership or planning initiatives related to active transportation, parks and recreation, or land use</td>
</tr>
<tr>
<td>Percent of community water systems meeting health-based standards</td>
<td>Percent of water systems surveys completed</td>
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<tr>
<td>Percent of women at risk of unintended pregnancy who use effective methods of contraception</td>
<td>Annual strategic plan that identifies gaps, barriers and opportunities for improving access to effective contraceptive use</td>
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</table>

### PART 2: DEVELOPMENTAL METRICS

<table>
<thead>
<tr>
<th>Health Outcome Measure</th>
<th>Local Public Health Process Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Access to Clinical Preventive Services</strong></td>
<td></td>
</tr>
<tr>
<td>Percent of children age 0-5 with any dental visit</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
Introduction

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.

LPHAs receive funding through Oregon Health Authority through contracts for individual programs. Each page in this report for local public health process measures includes information about whether LPHAs currently receive funding to support achievement of the process measure. 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 to increase public health funding.

Sources for population health data

The public health system uses data from different sources to track health outcomes, including vital statistics, reportable disease surveillance, 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.
Introduction

How to use this report

This report should be used to understand our current status on population health priorities and public health interventions to make improvements. Where possible, data are reported by race/ethnicity, which help to understand the health disparities that exist in Oregon. This report should not be interpreted as a report card for Oregon’s public health system or any individual public health authority.

No single metric or set of metrics fully captures the important work of the governmental public health system. The PHAB selected from hundreds of potential metrics to identify those that are relevant, readily available, and capture the important work of public health modernization.

The information in this report will be used to inform public health interventions. Many public health accountability metrics align with quality metrics used by other sectors, including coordinated care organizations. Shared metrics should be used to support collaborative cross-sector approaches for improving health.

Measures in this report are reported under the public health modernization foundational program areas:

- Communicable Disease Control
- Prevention and Health Promotion
- Environmental Health
- Access to Clinical Preventive Services

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. 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. 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, 2016 - 2017

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

By race and ethnicity
Statewide 2016 2017
Race/ethnicity 2016 2017

Benchmark: 80%

By county
Oregon 2017

Notes:
- Two-year olds are children 24 to 35 months of age residing in the county.
- The official childhood vaccination series 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.
Foundational program area: Communicable Disease Control

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

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

Local public health funding

All local public health authorities (LPHAs) receive funding to provide immunization services. Beginning in July 2018, conducting outreach to engage health care providers in AFIX was a required activity.

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.
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), 2016 - 2017

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

By county
Oregon 2017

Notes:
- 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 100,000. Numerator and denominator data are provided in the Technical Appendix.
Gonorrhea Rate
Health Outcome Measure

Gonorrhea incidence rate per 100,000 population

- 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), 2016 - 2017

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

Local public health funding

All local public health authorities (LPHAs) receive funding for communicable disease investigations, including those for STDs. Beginning in January 2018 some LPHAs received additional funding to conduct partner services for HIV and STD cases.

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 or 2017.

By county

Benchmark: 35%

Local Public Health Process Measure

Gonorrhea Rate

By county

2016 2017

Benchmark: 35%

Statewide 13% 15%
Baker 0% 9%
Benton 4% 13%
Clackamas 8% 9%
Clatsop 14% 36%
Columbia 11% 14%
Coos 24% 48%
Crook 33% 64%
Curry 0% 18%
Deschutes 19% 37%
Douglas 21% 49%
Gilliam 0% 0%
Grant* 0% 0%
Harney 20% 67%
Hood River 0% 22%
Jackson 5% 12%
Jefferson 19% 19%
Josephine 1% 0%
Klamath 17% 18%
Lake 14% 19%
Lane 14% 22%
Lincoln 20% 29%
Linn 23% 28%
Malheur 21% 28%
Marion 35% 38%
Morrow 0% 32%
Multnomah 5% 8%
Polk 6% 8%
Sherman* 0% 0%
Tillamook 0% 7%
Umatilla 22% 58%
Union 18% 75%
Wallowa* 0% 0%
Wasco 7% 33%
Washington 13% 14%
Wheeler* 0% 0%
Yamhill 23% 25%

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 or 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), 2016 - 2017

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

Local public health funding

All local public health authorities (LPHAs) receive funding for communicable disease investigations, including those for STDs. Beginning in January 2018 some LPHAs received additional funding to conduct partner services for HIV and STD cases.

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 or 2017.
**Foundational program area:** Prevention and Health Promotion


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

**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. Refer to the Technical Appendix for details about weighting procedure.
- Confidence intervals are not shown. Refer to the Technical Appendix for additional information regarding reporting of confidence intervals.
Adult Smoking Prevalence

Health Outcome Measure

Percent of adults who smoke cigarettes

* indicates county estimates with a relative standard error (RSE, a measure of reliability of an estimate) ≥ 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, 2015 - 2016

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

Local public health funding

All local public health authorities (LPHAs) receive funding 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 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.
**Foundational program area:** Prevention and Health Promotion

**Data source:** Tobacco Policy Database, 2016 - 2017

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

**Local public health funding**

All local public health authorities (LPHAs) receive funding for tobacco education and prevention, which includes creating tobacco-free environments.

**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. Numerators and denominator data provided in the Technical Appendix.
- Source for population estimates: U.S. Census Bureau, 2016 estimate.
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), 2012 - 2016 and 2013 - 2017

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

By race and ethnicity

Statewide 2012-2016 2013-2017
Race/ethnicity 2012-2016 2013-2017

Benchmark: 3

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...
Prescription Opioid Mortality

Health Outcome Measure

Prescription opioid mortality rate per 100,000 population

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).
- * indicates rates not displayed for groups with 5 or fewer deaths or relative standard error (RSE) > 30.
- ** indicates counties for which no data were available.
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, 2016 - 2017

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

Local public health funding
Some local public health authorities (LPHAs) receive funding for prescription drug overdose prevention. These counties 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.
- * Data not available for Gilliam County in 2016.
- ** There were no top prescribers in Wheeler County in 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, 2016 - 2017 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%

**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.
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

No current state or federal funding.

Benchmark:

100%

Statewide 57%

<table>
<thead>
<tr>
<th>County</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baker</td>
<td>0</td>
</tr>
<tr>
<td>Benton</td>
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<tr>
<td>Clackamas</td>
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<tr>
<td>Clatsop</td>
<td>0</td>
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<tr>
<td>Columbia</td>
<td>0</td>
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<tr>
<td>Coos</td>
<td>0</td>
</tr>
<tr>
<td>Crook</td>
<td>0</td>
</tr>
<tr>
<td>Curry</td>
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</tr>
<tr>
<td>Deschutes</td>
<td>1</td>
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<tr>
<td>Douglas</td>
<td>1</td>
</tr>
<tr>
<td>Grant</td>
<td>1</td>
</tr>
<tr>
<td>Harney</td>
<td>1</td>
</tr>
<tr>
<td>Hood River</td>
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<tr>
<td>Jackson</td>
<td>0</td>
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<tr>
<td>Jefferson</td>
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<tr>
<td>Josephine*</td>
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<tr>
<td>Klamath</td>
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<td>Lake</td>
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<td>Lincoln</td>
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<td>Multnomah*</td>
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<td>N. Central Public Health District</td>
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<td>Polk**</td>
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<td>Wallowa***</td>
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</tr>
<tr>
<td>Wheeler</td>
<td>0</td>
</tr>
<tr>
<td>Yamhill</td>
<td>0</td>
</tr>
</tbody>
</table>

Notes:
- Statewide percentage calculated as the number of counties that participate in initiatives or activities (numerator) divided by the number of counties with eligible initiatives or activities (denominator). Numerator and denominator data are provided in the Technical Appendix.
- * indicates LPHAs that did not respond to survey (not included in the denominator).
- ** indicates counties excluded from the denominator because the 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 (not included in the denominator).
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, 2016 - 2017

Benchmark source: 92%, EPA

Statewide

- 2016
- 2017

Benchmark: 92%

By county
Oregon 2017

[Map showing percentage of water systems meeting health-based standards by county in Oregon, with the statewide benchmark of 92% highlighted.]

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, 2016 - 2017

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

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.
**Foundational program area:** Environmental Health

**Data source:** Oregon Drinking Water Database, Water Quality Alerts, 2016 - 2017

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

**Local public health funding**

All local public health authorities (LPHAs) receive funding for safe drinking water programs.

**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.
**Drinking Water**

*Local Public Health Process Measure*

Percent of priority non-compliers resolved

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**Foundational program area:** Environmental Health

**Data source:** Oregon Drinking Water Database, 2016 – 2017

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

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**Local public health funding**

All local public health authorities (LPHAs) receive funding for safe drinking water programs.

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### By county

<table>
<thead>
<tr>
<th>County</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statewide</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Baker**</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Benton**</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Clackamas</td>
<td>100%</td>
<td>100%</td>
</tr>
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**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/or 2017.
- ** Indicates 0 PNCs in 2016 and/or 2017.

**Benchmark:** 100%
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), 2016 - 2017

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

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.
- “Effective” as single-category includes most effective and moderately effective. Starting in 2014, respondents were asked about their use of contraception “the last time you had sex.”
- 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.

Benchmark:

70%
## 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:** 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

### Local public health funding

All local public health authorities (LPHAs) receive funding for assuring access to reproductive health services. Using funds to develop a strategic plan is one strategy LPHAs may use to assure access.

### Benchmark:

**100%**

**Notes:**

- The statewide percentage is calculated by dividing the number of LPHAs that have completed a strategic plan (numerator) by the number of LPHAs (denominator). Numerator and denominator data are provided in the Technical Appendix.

### By county

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Dental Visits Children Aged 0-5
Public Health 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, 2016 – 2017

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

By Race/Ethnicity
Oregon Medicaid 2016  2017

Benchmark: 48%

By county
Oregon Medicaid 2017

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.
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 consistent with how these data are reported elsewhere (e.g., Oregon Health Authority, Public Health Division reports and webpages, State Population Health Indicators).

Survey estimates and 95% confidence intervals

Data for adult smoking prevalence and effective contraceptive use were obtained from the Behavioral Risk Factor Surveillance System (BRFSS). Data for active transportation were obtained from the American Community Survey. Survey estimates 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 metric 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, 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) divided by number of children 24-35 months of age (denominator). Numerator and denominator data are not publicly available.

Additional notes

- Baseline year is 2016.
- Two year olds are children 24 to 35 months of age.
- The official childhood vaccination series 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 (4:3:1:3:1:4 series).
- Rates not displayed for populations of fewer than 50 people in accordance with OHA Public Health Division confidentiality policy.
- 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.
- 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 Immunization Information System (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 and reporting levels are even higher in recent years.

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 2 at
the end of the Technical Appendix.

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.

Health Outcome Measure: Gonorrhea incident rate per 100,000

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

Benchmark
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 X number of disease reports/total population). Numerator and denominator data are shown in Table 2 at the end of the Technical Appendix.

• Population data for race/ethnicity were obtained from U.S. Census Bureau Population Estimates, Vintage 2016 and Vintage 2017. Population data for Oregon 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.

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 Tuberculosis Section
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 Tuberculosis Section

Data collection procedure
Data provided by Oregon Health Authority, Public Health Division, HIV, STD and Tuberculosis 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 ≤ ReportDateLHD of Gonorrhea Case OR date of most recent HIV test completed in Risk Section of Gonorrhea Case
- Gender of Sex Partner
  - SexPtnrMal (Has this person ever had sex with a male) OR SexPtnrFem (Has this person ever had sex with a female) must have an answer of Yes

Additional notes
- Baseline year is 2016.
• 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 2 at the end of the Technical Appendix.

Additional notes
• Baseline year is 2016.

Prevention and Health Promotion

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

Data source

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 staff who maintain and report the State Population Health Indicators (http://www.oregon.gov/oha/ph/About/Pages/HealthStatusIndicators.aspx).

Measure specification
The weighted proportion of survey respondents who report that they have 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). The statewide BRFSS sample for 2016 was x,xxx. The statewide BRFSS sample for 2017 was x,xxx.

Additional notes
• Baseline year is 2016 for statewide estimates, 2010 - 2011 for race/ethnicity estimates, and 2012 - 2015 for county estimates.
• Race/ethnicity data are combined for multiple years and obtained from a race/ethnic oversample.
• 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.

- Another 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.

Local Public Health Process Measures: Percent of population reached by (1) tobacco-free county properties policies and (2) tobacco retail licensure policies

Data sources

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

(2) 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% for both, provided by Oregon Health Authority, Public Health Division, HPCDP Section

Data collection procedure

(1) and (2) provided by Oregon Health Authority, Public Health Division, HPCDP Section.

Measure specification

(1) 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.

(2) 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 2 at the end of the Technical Appendix.

Additional notes

- Baseline year for tobacco-free county properties policies is 2015. Baseline year for tobacco retail licensure policies is 2016.
- (1) 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.
- (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).

**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**

Data obtained directly from the Opioid Data Dashboard.

**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).

**Additional notes**

- 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.
- 2014-2016 data do not include deaths from Oregon residents that occurred out of state.
- Rates not displayed for groups with fewer than 5 deaths.
- 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
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, 2016 American Community Survey (ACS) 1-Year and 5-years estimates online

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

Data source

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, by county and statewide.

Additional notes
• Top prescribers are defined as the top 4000 prescribers by volume; this represents approximately 20% of all prescribers in Oregon.
• Data not available for Gilliam County.
• 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. It is problematic to retrospectively calculate for the whole year because of churn in both the top prescriber list and in PDMP enrollment; accounts are deactivated and reactivated frequently. While recalculating the top prescribers for the whole year is possible, determining retrospectively whether they were enrolled for the whole year (or were enrolled on a certain date) is difficult. The Oregon Health Authority, Public Health Division, Injury and Violence Prevention Section recommends using Q4 2016 as a baseline which shows PDMP enrollment as of 12/31/16.

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).
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.

**Additional notes**

- Data are available only 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 2012-2016.

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

**Data source**

TBD

**Benchmark**

TBD

**Data collection procedure**

TBD

**Measure specification**

TBD

**Additional notes**

TBD

**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).

**Additional notes**
- 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.
- For 2016, there were 98 out of 891 water systems out of compliance (11%).
- The number of county water systems ranges from 3 to 81.

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

**Data source**

**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.

**Additional notes**
- Inactive and non-EPA (state regulated) systems excluded.
- 8 counties had no water systems surveys in 2016.
- Statewide, there were 414 completed surveys in 2016 for 428 due (97%).
Local Public Health Process Measure: Percent of water quality alert responses

Data source

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

Data collection procedure
Regulating Agency: County
County: All Counties
Alert Type: “All alert types”
Date Range: 1/1/2016 to 12/31/2016
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. 
   Example 1, there are 2 unique alert IDs for Bethany Elementary School water system in Marion County, one of which does not have a contact report date. This would be counted as 1 non-responded alert.
   Example 2, there are 2 unique alert IDs for Sherman County School water system, both of which do not have contact report dates. These are counted as 2 non-responded alerts.
   Example 3, there is one unique alert ID and no contact report dates for all 4 lines shown. This would be counted as 1 non-responded alert.
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.

Additional 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.
• There were 7 counties for which quality alerts were not applicable: Grant, Harney, Lake, Morrow, Umatilla, Wallowa, and Wheeler.
Local Public Health Process Measure: Percent of priority non-compliers (PNCs) resolved

Data source

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

Measure specification
Numerator: count of resolved PNCs. Denominator: all PNCs.

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: Grant, Harney, Lake, Morrow, Umatilla, Wallowa, and Wheeler.
- 7 counties had no PNCs during the period (online query revealed a blank listing): Baker, Hood River, Jefferson, Malheur, Sherman, Wasco, and Yamhill.
- Statewide, 76 PNCs were identified in 2016 (range: 1 – 8). All were resolved.

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

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" as single-category includes most effective and moderately effective (IF used every time, 2010-2013). Effectiveness is asked on the survey with 5 response categories: Most effective (implant, IUD, female and male sterilization); Moderately effective (pill, patch, ring, or shot) (IF used "every time you have sex", 2010-2013); Moderately effective but inconsistent use (2010-2013 only; includes pill, patch, ring, or shot IF used "sometimes" or "most of the time"); Less effective (cap/sponge/diaphragm (BRFSS groups these together), condoms, spermicide, withdrawal); No method.

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

- 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 care if get pregnant" (2010-2013) or "don't mind if get pregnant" (2014)
- **Exclude any without known contraceptive use status (such as those who ended the survey early)**

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

Definition of moderately effective methods: Pill, patch, ring, or shot, IF used “every time you have sex” (2010-13); pill, patch, ring, or shot (2014-16)

Additional 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.
- The Oregon coordinated care organization benchmark of 50% is not applicable because it counts only permanent and long-acting contraceptives when a medical claim is submitted with a diagnosis code indicating use of those methods.
- The 2014 BRFSS module was modified from 2010-2013. Starting in 2014, respondents were asked about their use of contraception "the last time you had sex," rather than currently. Also, the upper age limit of reproductive-age women increased from 44 to 49 in 2014.
- There are no estimates by race/ethnicity or by county. Because of small numbers, four or five years of combined data are required for reporting. Four (or five) years of combined data, 2014 – 2017 (2018) for race/ethnicity and county estimates will be examined according to data suppression rules after the 2017 (2018) BRFSS data become available. Data prior to 2014 cannot be combined with later years because of the change to the wording of the BRFSS question (described above).
- 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.
Local Public Health Process Measure: Annual strategic plan that identifies gaps, barriers and opportunities for improving access to effective contraceptive use

Data source
Oregon Health Authority, Public Health Division, Reproductive Health Program

Benchmark
100%, provided by Oregon Health Authority, Public Health Division, Reproductive Health Program

Data collection procedure
TBD

Measure specification
TBD

Additional notes
TBD

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.

Additional notes
• 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.