

DRAFT

Public Health Accountability Metrics

Annual Report 2020

Technical Supplement

June 2020

Overview

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.

Abbreviations

HIV = Human immunodeficiency virus

IQIP = Immunization Quality Improvement for Providers

LPHA = Local public health authority

NH = Non-Hispanic

OHA = Oregon Health Authority

PH = Public health

SHIP = State Health Improvement Plan

STD = Sexually transmitted disease

TB = Tuberculosis

Childhood Immunization

Health Outcome Measure

Percent of two-year olds who received recommended vaccines

Table 1

Data source

ALERT Immunization Information System (ALERT IIS), 2016, 2017, 2018, 2019

Benchmark

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

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 24-35 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 each 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.

Additional information about childhood immunizations can be obtained from the Oregon Immunization Program website at: healthoregon.org/imm

Childhood Immunization

Health Outcome Measure

Percent of two-year olds who received recommended vaccines

Table 2

	2016	Num.*	Den.*	2017	Num.*	Den.*	2018	Num.*	Den.*	2019	Num.*	Den.*
STATEWIDE	66%			68%			69%			71%		
NH† African American/Black	60%			62%			61%			61%		
NH Am. Indian Alaska Native	65%			66%			66%			69%		
NH Asian	69%			73%			73%			76%		
NH Hawaiian/Pacific Islander	61%			62%			61%			65%		
NH Asian/Pacific Islander												
Hispanic/Latino	70%			69%			72%			74%		
NH Multiple races/multiracial												
Other/unknown												
NH White	67%			69%			70%			72%		
COUNTY												
Baker	63%			67%			66%			67%		
Benton	67%			65%			67%			65%		
Clackamas	67%			69%			71%			69%		
Clatsop	62%			64%			64%			64%		
Columbia	58%			65%			61%			65%		
Coos	64%			64%			67%			64%		
Crook	69%			70%			68%			70%		
Curry	46%			48%			56%			48%		
Deschutes	65%			69%			68%			69%		
Douglas	66%			67%			65%			67%		
Gilliam												
Grant	53%			62%			66%			62%		
Harney	63%			66%			73%			66%		
Hood River	69%			68%			77%			68%		
Jackson	62%			63%			63%			63%		
Jefferson	65%			71%			65%			71%		
Josephine	60%			64%			65%			64%		
Klamath	68%			74%			75%			74%		
Lake	68%			64%			54%			64%		
Lane	66%			72%			74%			72%		
Lincoln	63%			61%			61%			61%		
Linn	64%			68%			64%			68%		
Malheur	70%			73%			70%			73%		
Marion	69%			71%			71%			71%		
Morrow	71%			69%			67%			69%		
Multnomah	64%			66%			66%			66%		
North Central PH District†	62%			65%			67%			65%		
Polk	65%			64%			67%			64%		
Sherman												
Tillamook	61%			64%			64%			64%		
Umatilla	63%			64%			61%			64%		
Union	62%			63%			64%			63%		
Wallowa	56%			66%			69%			66%		
Wasco												
Washington	69%			71%			73%			71%		
Wheeler§												
Yamhill	72%			72%			73%			72%		

*Numerators and denominators not publicly available

†NH refers to non-Hispanic

‡One immunization rate is shown for each county that comprises the North Central Public Health District (Gilliam, Sherman, Wasco)

§Rates are not displayed for populations of fewer than 50 people

Childhood Immunization

Local Public Health Process Measure

Percent of Vaccines for Children (VFC) clinics participating in IQIP

Table 3

Data source

Immunization Quality Improvement for Providers (IQIP) online tool, 2017, 2018, 2019

Benchmark

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

Measure specification

Percentage is calculated by dividing the number of clinics with any IQIP 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 4.

Additional notes

- Baseline year is 2017.
- Crook, Deschutes, and Jefferson counties completed their own IQIP 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 starting in 2018.

Childhood Immunization

Local Public Health Process Measure

Percent of Vaccines for Children (VFC) clinics participating in IQIP*

Table 4

	2017	Num.	Den.	2018	Num.	Den.	2019	Num.	Den.
STATEWIDE	14%	79	569	28%	163	588	26%	155	589
NH African American/Black									
NH Am. Indian Alaska Native									
NH Asian									
NH Hawaiian/Pacific Islander									
NH Asian/Pacific Islander									
Hispanic/Latino									
NH Multiple races/multiracial									
Other/unknown									
NH White									
COUNTY									
Baker	33%	1	3	33%	1	3	67%	2	3
Benton	18%	2	11	36%	5	14	38%	6	16
Clackamas	21%	9	42	33%	14	43	0%	0	44
Clatsop	14%	1	7	57%	4	7	57%	4	7
Columbia	0%	0	9	50%	5	10	22%	2	9
Coos	18%	2	11	70%	7	10	18%	2	11
Crook	0%	0	4	25%	1	4	100%	4	4
Curry	0%	0	7	100%	7	7	71%	5	7
Deschutes	13%	3	23	48%	12	25	24%	7	29
Douglas	39%	7	18	79%	15	19	20%	4	20
Gilliam									
Grant	0%	0	3	0%	0	3	67%	2	3
Harney	67%	2	3	33%	1	3	33%	1	3
Hood River	33%	2	6	20%	1	5	20%	1	5
Jackson	2%	1	47	8%	4	48	20%	10	49
Jefferson	0%	0	6	50%	3	6	50%	3	6
Josephine	0%	0	14	54%	7	13	29%	4	14
Klamath	0%	0	11	8%	1	12	77%	10	13
Lake	33%	1	3	33%	1	3	33%	1	3
Lane	11%	4	36	29%	11	38	42%	16	38
Lincoln	0%	0	15	67%	10	15	67%	10	15
Linn	5%	1	19	6%	1	18	20%	3	15
Malheur	43%	3	7	0%	0	8	17%	1	6
Marion	34%	14	41	24%	11	45	17%	7	42
Morrow	50%	2	4	0%	0	4	100%	4	4
Multnomah	6%	6	96	12%	11	94	19%	18	93
North Central PH District†	29%	2	7	29%	2	7	29%	2	7
Polk	33%	3	9	20%	2	10	50%	5	10
Sherman									
Tillamook	0%	0	10	0%	0	9	50%	4	8
Umatilla	45%	5	11	27%	3	11	33%	4	12
Union	0%	0	9	0%	0	9	44%	4	9
Wallowa‡	0%	0	4						
Wasco									
Washington	10%	6	60	21%	14	66	12%	8	66
Wheeler	0%	0	1	0%	0	1	100%	1	1
Yamhill	17%	2	12	8%	1	13	0%	0	12

*Immunization Quality Improvement for Providers program

†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.

Gonorrhea Rate

Health Outcome Measure

Gonorrhea incidence rate per 100,000 population

Table 5

Data source

Oregon Public Health Epi User System (Orpheus), 2016, 2017, 2018, 2019

Benchmark

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

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 6.

Population data for race/ethnicity were obtained from U.S. Census Bureau Population Estimates. Population data for Oregon counties were obtained from Portland State University Certified Population Estimates.

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.

Additional information about gonorrhea can be obtained from the Oregon HIV, STD and TB Section website at: healthoregon.org/std

Gonorrhea Rate

Health Outcome Measure

Gonorrhea incidence rate per 100,000 population

Table 6

	2016	Num.	Den.*	2017	Num.	Den.*	2018	Num.	Den.*	2019	Num.	Den.*
STATEWIDE	107	4353	4,076,350	121	5022	4,140,100	141	5,902	4,195,300	145	6,127	4,236,400
NH African American/Black	535	407	76,067	556	442	79,485	667	548	82,107	628	516	82,107
NH Am. Indian Alaska Nat.	157	72	45,814	214	99	46,220	188	88	46,704	225	105	46,074
NH Asian	46	82	177,671	31	58	187,218	49	96	196,426	57	112	196,426
NH Hawaiian/Pacific Isl.	74	12	16,233	135	22	16,280	202	34	16,854	196	33	16,854
NH Asian/Pacific Islander												
Hispanic/Latino	104	543	522,571	127	689	540,923	149	826	556,396	147	816	556,396
NH Multiple races/multi	53	68	128,892	53	71	132,965	65	89	136,950	90	123	136,950
Other/unknown												
NH White	87	2730	3,126,217	98	3074	3,139,685	112	3,524	3,155,276	109	3,440	3,155,276
COUNTY												
Baker	6†	1	16,510	30†	5	16,750	42	7	16,765	24†	4	16,820
Benton	53	48	91,320	56	52	92,575	63	59	93,590	74	70	94,360
Clackamas	69	280	404,980	82	338	413,000	104	435	419,425	86	366	423,420
Clatsop	58	22	38,225	72	28	38,820	41	16	39,200	15	6	39,330
Columbia	73	37	50,795	72	37	51,345	56	29	51,900	97	51	52,750
Coos	65	41	63,190	96	61	63,310	120	76	63,275	40	25	63,290
Crook	70	15	21,580	63	14	22,105	44	10	22,710	43	10	23,440
Curry	49	11	22,600	40	9	22,805	65	15	22,915	30	7	23,000
Deschutes	37	65	176,635	36	65	182,930	29	54	188,980	36	69	193,000
Douglas	33	36	110,395	85	94	111,180	125	140	111,735	76	85	112,250
Gilliam	51†	1	1,980	50†	1	1,995	0	0	1,985	0	0	1,990
Grant	13†	1	7,410	0	0	7,415	27†	2	7,400	14†	1	7,360
Harney	68†	5	7,320	41†	3	7,360	0	0	7,380	0	0	7,360
Hood River	16†	4	24,735	36	9	25,145	71	18	25,310	59	15	25,480
Jackson	83	177	213,765	100	217	216,900	115	253	219,200	123	272	221,290
Jefferson	70	16	22,790	207	48	23,190	132	31	23,560	176	42	23,840
Josephine	99	84	84,675	99	85	85,650	199	172	86,395	154	134	86,750
Klamath	90	61	67,410	89	60	67,690	88	60	67,960	177	121	68,190
Lake	87	7	8,015	62†	5	8,120	0	0	8,115	0	0	8,080
Lane	77	281	365,940	115	427	370,600	135	506	375,120	156	590	378,880
Lincoln	50	24	47,735	38	18	47,960	50	24	48,210	48	23	48,260
Linn	92	112	122,315	127	157	124,010	87	109	125,575	120	152	126,550
Malheur	91	29	31,705	123	39	31,845	119	38	31,925	72	23	32,030
Marion	104	347	333,950	155	525	339,200	147	506	344,035	157	547	347,760
Morrow	162	19	11,745	59	7	11,890	101	12	11,885	47	6	12,680
Multnomah	249	1972	790,670	260	2086	803,000	304	2,474	813,300	321	2635	821,730
North Central PH District												
Polk	60	48	79,730	78	63	81,000	96	79	82,100	72	60	82,940
Sherman	0	0	1,795	0	0	1,800	0	0	1,785	169†	3	1,770
Tillamook	12†	3	25,920	57	15	26,175	53	14	26,395	19†	5	26,500
Umatilla	110	88	79,880	83	67	80,500	115	93	80,765	101	82	81,160
Union	41	11	26,745	15†	4	26,900	22	6	26,885	19†	5	26,840
Wallowa	0	0	7,140	0	0	7,195	98	7	7,175	56†	4	7,150
Wasco	45	12	26,700	52	14	27,100	59	16	27,200	84	23	27,240
Washington	79	459	583,595	70	417	595,860	95	576	606,280	104	637	613,410
Wheeler	68†	1	1,465	0	0	1,480	0	0	1,450	0	0	1,440
Yamhill	33	35	104,990	49	52	106,300	61	65	107,415	50	54	108,060

*Source for race/ethnicity population estimates: US Census Bureau. Source for state and county estimates: Portland State University Population Research Center certified population estimates.

†Rates based on 1-5 events are considered unreliable.

Gonorrhea Rate

Local Public Health Process Measure

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

Table 7

Data source

Oregon Public Health Epi User System (Orpheus), 2016, 2017, 2018, 2019

Benchmark

35%, 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 8.

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.

Gonorrhea Rate

Local Public Health Process Measure

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

Table 8

	2016	Num.	Den.	2017	Num.	Den.	2018	Num.	Den.	2019	Num.	Den.
STATEWIDE	13%	552	4353	15%	742	5022	11%	641	5902	9%	565	6127
NH African American/Black												
NH Am. Indian Alaska Native												
NH Asian												
NH Hawaiian/Pacific Islander												
NH Asian/Pacific Islander												
Hispanic/Latino												
NH Multiple races/multiracial												
Other/unknown												
NH White												
COUNTY												
Baker	0%	0	1	0%	0	5	14%	1	7	0%	0	4
Benton	4%	2	48	13%	7	52	8%	5	59	17%	12	70
Clackamas	9%	26	280	8%	27	338	7%	29	435	5%	20	366
Clatsop	14%	3	22	36%	10	28	19%	3	16	33%	2	6
Columbia	14%	5	37	11%	4	37	7%	2	29	8%	4	51
Coos	24%	10	41	48%	29	61	29%	22	76	8%	2	25
Crook	33%	5	15	64%	9	14	50%	5	10	40%	4	10
Curry	18%	2	11	0%	0	9	13%	2	15	29%	2	7
Deschutes	49%	32	65	37%	24	65	52%	28	54	33%	23	69
Douglas	19%	7	36	21%	20	94	20%	28	140	41%	35	85
Gilliam*	0%	0	1	0%	0	1			0			0
Grant*	0%	0	1			0	0%	0	2	0%	0	1
Harney*	20%	1	5	67%	2	3			0			0
Hood River	0%	0	4	22%	2	9	17%	3	18	7%	1	15
Jackson	5%	9	177	12%	26	217	11%	27	253	8%	22	272
Jefferson	19%	3	16	19%	9	48	26%	8	31	17%	7	42
Josephine	0%	0	84	1%	1	85	2%	4	172	2%	3	134
Klamath	18%	11	61	17%	10	60	18%	11	60	34%	41	121
Lake*	14%	1	7	40%	2	5			0			0
Lane	19%	52	281	14%	58	427	12%	59	506	8%	50	590
Lincoln	29%	7	24	22%	4	18	21%	5	24	26%	6	23
Linn	20%	22	112	23%	36	157	21%	23	109	9%	13	152
Malheur	21%	6	29	28%	11	39	37%	14	38	26%	6	23
Marion	35%	121	347	38%	200	525	29%	146	506	22%	121	547
Morrow	32%	6	19	0%	0	7	67%	8	12	0%	0	6
Multnomah	5%	89	1972	8%	161	2086	4%	92	2,474	4%	102	2635
North Central PH District												
Polk	8%	4	48	6%	4	63	11%	9	79	12%	7	60
Sherman*			0			0			0	100%	3	3
Tillamook	0%	0	3	7%	1	15	7%	1	14	0%	0	5
Umatilla	58%	51	88	22%	15	67	26%	24	93	21%	17	82
Union	18%	2	11	75%	3	4	33%	2	6	20%	1	5
Wallowa*, †			0			0						
Wasco	33%	4	12	7%	1	14	19%	3	16	17%	4	23
Washington	14%	63	459	13%	53	417	11%	66	576	8%	52	637
Wheeler*	0%	0	1			0			0			0
Yamhill	23%	8	35	25%	13	52	15%	10	65	9%	5	54

*Indicates counties that had 0 gonorrhea cases in years where no data are shown.

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

Gonorrhea Rate

Local Public Health Process Measure

Percent of gonorrhea case reports with complete priority fields

Table 9

Data source

Oregon Public Health Epi User System (Orpheus), 2016, 2017, 2018, 2019

Benchmark

70%, 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 10.

Additional notes

- Baseline year is 2016.

Gonorrhea Rate

Local Public Health Process Measure

Percent of gonorrhea case reports with complete priority fields

Table 10

	2016	Num.	Den.	2017	Num.	Den.	2018	Num.	Den.	2019	Num.	Den.
STATEWIDE	19%	833	4353	24%	1217	5022	29%	1725	5902	26%	1595	6197
NH African American/Black												
NH Am. Indian Alaska Native												
NH Asian												
NH Hawaiian/Pacific Islander												
NH Asian/Pacific Islander												
Hispanic/Latino												
NH Multiple races/multiracial												
Other/unknown												
NH White												
COUNTY												
Baker	100%	1	1	60%	3	5	14%	1	7	25%	1	4
Benton	13%	6	48	27%	14	52	32%	19	59	46%	32	70
Clackamas	13%	36	280	15%	52	338	33%	142	435	45%	164	366
Clatsop	14%	3	22	32%	9	28	38%	6	16	50%	3	6
Columbia	14%	5	37	11%	4	37	7%	2	29	14%	7	51
Coos	15%	6	41	13%	8	61	18%	14	76	16%	4	25
Crook	53%	8	15	7%	1	14	40%	4	10	20%	2	10
Curry	18%	2	11	0%	0	9	13%	2	15	14%	1	7
Deschutes	35%	23	65	35%	23	65	65%	35	54	46%	32	69
Douglas	25%	9	36	7%	7	94	20%	28	140	24%	20	85
Gilliam*	0%	0	1	100%	1	1			0			0
Grant*	0%	0	1			0	0%	0	2	100%	1	1
Harney*	0%	0	5	33%	1	3			0			0
Hood River	25%	1	4	56%	5	9	56%	10	18	27%	4	15
Jackson	6%	10	177	30%	66	217	33%	84	253	36%	99	272
Jefferson	0%	0	16	2%	1	48	3%	1	31	29%	12	42
Josephine	2%	2	84	2%	2	85	1%	1	172	9%	12	134
Klamath	16%	10	61	8%	5	60	7%	4	60	14%	17	121
Lake*	14%	1	7	0%	0	5			0			0
Lane	21%	60	281	32%	137	427	41%	207	506	42%	246	590
Lincoln	8%	2	24	11%	2	18	21%	5	24	39%	9	23
Linn	13%	15	112	34%	53	157	31%	34	109	18%	28	152
Malheur	34%	10	29	23%	9	39	26%	10	38	22%	5	23
Marion	42%	146	347	49%	259	525	47%	240	506	41%	222	547
Morrow	5%	1	19	0%	0	7	42%	5	12	17%	1	6
Multnomah	17%	345	1972	17%	362	2086	23%	565	2,474	15%	403	2635
North Central PH District												
Polk	8%	4	48	30%	19	63	46%	36	79	25%	15	60
Sherman*			0			0			0	33%	1	3
Tillamook	0%	0	3	0%	0	15	21%	3	14	0%	0	5
Umatilla	0%	0	88	4%	3	67	12%	11	93	24%	20	82
Union	36%	4	11	0%	0	4	17%	1	6	0%	0	5
Wallowa*, †			0			0						
Wasco	17%	2	12	50%	7	14	63%	10	16	22%	5	23
Washington	26%	120	459	35%	148	417	40%	229	576	34%	215	637
Wheeler*	0%	0	1			0			0			0
Yamhill	3%	1	35	31%	16	52	25%	16	65	24%	13	54

*Indicates counties that had 0 gonorrhea cases in years where no data are shown.

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

Adult Smoking Prevalence

Health Outcome Measure

Percent of adults who smoke cigarettes

Table 11

Data source

Behavioral Risk Factor Surveillance System (BRFSS), statewide 2016, 2017, 2018; race/ethnicity 2010-2011 and 2015 -2017 combined years; county 2012 - 2015 and 2014 – 2017 combined years

Benchmark

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

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 12). 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.

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 sizes were 8,620 in 2016, 9,382 in 2017, and 9,430 in 2018.
- 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: (1) adjust variables of age, race, and gender between the sample and the entire population; (2) allow the generalization of findings to the whole population, not just those who respond to the survey; (3) 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.
- 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.

Additional information about smoking can be obtained from the Health Promotion Chronic Disease Prevention website at: healthoregon.org/tobacco

Adult Smoking Prevalence

Health Outcome Measure

Percent of adults who smoke cigarettes

Table 12

	2016	Num.*	Den.*	2017	Num.*	Den.*	2018	Num.*	Den.*
STATEWIDE	17%			17%			16%		
	2010-11			2015-17			2015-17		
NH African American/Black	33%			26%			26%		
NH Am. Indian Alaska Native	35%			30%			30%		
NH Asian									
NH Hawaiian/Pacific Islander									
NH Asian/Pacific Islander	14%			13%			13%		
Hispanic/Latino	21%			13%			13%		
NH Multiple races/multiracial									
Other/unknown									
NH White	21%			18%			18%		
COUNTY	2011-15			2014-17			2014-17		
Baker	24%			26%			26%		
Benton	11%			9%			9%		
Clackamas	17%			16%			16%		
Clatsop	21%			24%			24%		
Columbia	20%			21%			21%		
Coos	30%			28%			28%		
Crook	26%			20%			20%		
Curry	26%			27%			27%		
Deschutes	17%			16%			16%		
Douglas	24%			25%			25%		
Gilliam									
Grant	15%†			19%			19%		
Harney	11%†			14%†			14%†		
Hood River	9%†			14%			14%		
Jackson	20%			22%			22%		
Jefferson	13%†			13%			13%		
Josephine	25%			28%			28%		
Klamath	23%			22%			22%		
Lake	19%†			10%			10%		
Lane	19%			19%			19%		
Lincoln	32%			29%			29%		
Linn	20%			19%			19%		
Malheur	22%			24%			24%		
Marion	17%			16%			16%		
Morrow	16%			18%†			18%†		
Multnomah	18%			17%			17%		
North Central PH District§	20%			20%			20%		
Polk	14%			15%			15%		
Sherman									
Tillamook	31%			22%			22%		
Umatilla	18%			20%			20%		
Union	14%			15%			15%		
Wallowa	11%†			14%†			14%†		
Wasco									
Washington	12%			12%			12%		
Wheeler	12%†			‡			‡		
Yamhill	18%			19%			19%		

*Numerators and denominators not provided for weighted survey estimates.

†Indicates estimates that have relative standard error ≥ 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.

Adult Smoking Prevalence

Local Public Health Process Measure

Percent of population reached by tobacco-free county properties policies

Table 13

Data source

Tobacco-free Properties Evaluation in Counties Data Tables, Oregon Health Authority, Public Health Division, Health Promotion Chronic Disease Prevention (HPCDP) Section, 2016, 2017, 2018, 2019

Benchmark

100%, 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 14.

Additional notes

- Baseline year for tobacco-free county properties policies is 2016.
- Calculation of the statewide percentage is as follows: 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.
- Washington County has a smoke-free, but not a tobacco-free county properties policy, which does not meet the criteria for this process measure.

Adult Smoking Prevalence

Local Public Health Process Measure

Percent of population reached by tobacco-free county properties policies

Table 14

	2016	Num.	Den.	2017	Num.	Den.	2018	Num.	Den.	2019	Num.	Den.
STATEWIDE	63%	2,575,630	4,076,350	70%	2,916,290	4,141,100	70%	2,951,920	4,195,300	73%	3,106,550	4,236,400
NH African American/Black												
NH Am. Indian Alaska Native												
NH Asian												
NH Hawaiian/Pacific Islander												
NH Asian/Pacific Islander												
Hispanic/Latino												
NH Multiple races/multi-racial												
Other/unknown												
NH White												
COUNTY												
Baker	0%		16,510	0%		16,750	0%		16,765	0%		16,820
Benton	100%	91,320	91,320	100%	92,575	92,575	100%	93,590	93,590	100%	94,360	94,360
Clackamas	0%		404,980	0%		413,000	0%	419,425	419,425	0%		423,420
Clatsop	100%	38,225	38,225	100%	38,820	38,820	100%	39,200	39,200	100%	39,330	39,330
Columbia	100%	50,795	50,795	100%	51,345	51,345	100%	51,900	51,900	100%	52,750	52,750
Coos	100%	63,190	63,190	100%	63,310	63,310	100%	63,275	63,275	100%	63,290	63,290
Crook	100%	21,580	21,580	100%	22,105	22,105	100%	22,710	22,710	100%	23,440	23,440
Curry	0%		22,600	0%		22,805	0%	22,915	22,915	0%		23,000
Deschutes	100%	176,635	176,635	100%	182,930	182,930	100%	188,980	188,980	100%	193,000	193,000
Douglas	100%	110,395	110,395	100%	111,180	111,180	100%	111,735	111,735	100%	112,250	112,250
Gilliam	0%		1,980	0%		1,995	0%	1,985	1,985	0%		1,990
Grant	0%		7,410	100%	7,415	7,415	100%	7,400	7,400	100%	7,360	7,360
Harney	0%		7,320	100%	7,360	7,360	100%	7,380	7,380	100%	7,360	7,360
Hood River	100%	24,735	24,735	100%	25,145	25,145	100%	25,310	25,310	100%	25,480	25,480
Jackson	0%		213,765	100%	216,900	216,900	100%	219,200	219,200	100%	221,290	221,290
Jefferson	0%		22,790	100%	23,190	23,190	100%	23,560	23,560	100%	23,840	23,840
Josephine	100%	84,675	84,675	100%	85,650	85,650	100%	86,395	86,395	100%	86,750	86,750
Klamath	100%	67,410	67,410	100%	67,690	67,690	100%	67,960	67,960	100%	68,190	68,190
Lake	0%		8,015	0%		8,120	0%	8,115	8,115	0%		8,080
Lane	100%	365,940	365,940	100%	370,600	370,600	100%	375,120	375,120	100%	378,880	378,880
Lincoln	0%		47,735	100%	47,960	47,960	100%	48,210	48,210	100%	48,260	48,260
Linn	0%		122,315	0%		124,010	0%	125,575	125,575	100%	126,550	126,550
Malheur	100%	31,705	31,705	100%	31,845	31,845	100%	31,925	31,925	100%	32,030	32,030
Marion	100%	333,950	333,950	100%	339,200	339,200	100%	344,035	344,035	100%	347,760	347,760
Morrow	0%		11,745	0%		11,890	0%	11,885	11,885	0%		12,680
Multnomah	100%	790,670	790,670	100%	803,000	803,000	100%	813,300	813,300	100%	821,730	821,730
N Central PH District												
Polk	100%	79,730	79,730	100%	81,000	81,000	100%	82,100	82,100	100%	82,940	82,940
Sherman	0%		1,795	0%		1,800	0%	1,785	1,785	0%		1,770
Tillamook	100%	25,920	25,920	100%	26,175	26,175	100%	26,395	26,395	100%	26,500	26,500
Umatilla	100%	79,880	79,880	100%	80,500	80,500	100%	80,765	80,765	100%	81,160	81,160
Union	100%	26,745	26,745	100%	26,900	26,900	100%	26,885	26,885	100%	26,840	26,840
Wallowa*	100%	7,140	7,140	100%	7,195	7,195						
Wasco	0%		26,700	0%		27,100	0%	27,200	27,200	0%		27,240
Washington	0%		583,595	0%		595,860	0%	606,280	606,280	0%		613,410
Wheeler	0%		1,465	0%		1,480	0%	1,450	1,450	0%		1,440
Yamhill	100%	104,990	104,990	100%	106,300	106,300	100%	107,415	107,415	100%	108,060	108,060

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

Adult Smoking Prevalence

Local Public Health Process Measure

Percent of population reached by tobacco retail licensure policies

Table 15

Data source

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

Benchmark

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

Measure specification

County percentages are calculated from the count of the population of jurisdictions that have passed a tobacco retail licensure policy, such as city, unincorporated portions of a county, or entire county, (numerator) divided by the population of the entire county (denominator). Population estimates were obtained from the U.S. Census Bureau. The statewide percentage is a sum of all jurisdiction numerators divided by total state population. Numerator and denominator data are shown in Table 16.

Additional notes

- Baseline year for tobacco-free county properties policies is 2016.

Adult Smoking Prevalence

Local Public Health Process Measure

Percent of population reached by tobacco retail licensure policies

Table 16

	2016	Num.	Den.	2017	Num.	Den.	2018	Num.	Den.	2019	Num.	Den.
STATEWIDE	23%	939,771	4,093,465	26%	1,060,545	4,093,465	26%	1,089,110	4,195,300	32%	1,359,300	4,236,400
NH African American/Black												
NH Am. Indian Alaska Native												
NH Asian												
NH Hawaiian/Pacific Islander												
NH Asian/Pacific Islander												
Hispanic/Latino												
NH Multiple races/multiracial												
Other/unknown												
NH White												
COUNTY												
Baker	29%	26,125	89,385	93%	83,235	89,385	97%	91,105	93,590	98%	92,820	94,360
Benton												
Clackamas												
Clatsop												
Columbia												
Coos												
Crook												
Curry												
Deschutes												
Douglas												
Gilliam												
Grant												
Harney												
Hood River												
Jackson												
Jefferson												
Josephine												
Klamath				96%	63,664	66,443	96%	65,210	67,960	97%	66,070	68,190
Lake												
Lane	31%	113,880	369,519	31%	113,880	369,519	32%	119,495	375,120	33%	123,995	378,880
Lincoln												
Linn												
Malheur												
Marion												
Morrow												
Multnomah	100%	799,766	799,766	100%	799,766	799,766	100%	813,300	813,300	100%	821,730	821,730
N Central PH District												
Polk												
Sherman												
Tillamook												
Umatilla												
Union												
Wallowa*												
Wasco												
Washington												
Wheeler												
Yamhill												

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

All Opioid Mortality

Health Outcome Measure

All opioid mortality rate per 100,000 population

Table 17

Data source

Oregon Vital Events Registration System (OVERS). Data available from online Opioid Data Dashboard <https://www.oregon.gov/oha/ph/preventionwellness/substanceuse/opioids/pages/data.aspx>.

Benchmark

Less than 6/100,000, provided by the Injury and Violence Prevention Section, Public Health Division, Oregon Health Authority

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 limited to Oregon residents and shown in Table 18.

Case definition: Based on Consensus Recommendations for National and State Poisoning Surveillance: <https://cdn.ymaws.com/www.cste.org/resource/resmgr/injury/ISW7.pdf>

Underlying Cause of Death = Accidental poisoning (ICD 10 = X40-X44) or suicide (ICD 10 = X60-X64) or homicide by drugs (ICD 10= X85) or undetermined intent (ICD10= Y10-Y14) and contributing causes of death includes one or more of the following: opium (ICD 10 = T400), heroin (ICD 10 = T401), prescription opioids (ICD 10 = T402), methadone (ICD 10 = T403), synthetic opioids (ICD 10 = T404), or other narcotics (T=406).

Additional notes

- All opioid mortality rate is new for the 2020 edition of the Accountability Metrics report. Previously, prescription opioid mortality rate was reported and is not shown in this report.
- All rates are 5-year average crude rates per 100,000 for 2014-2018.
- Population estimates are from the National Center for Health Statistics (NCHS) bridged-race annual population estimates.
- Numerator and denominator data are limited to Oregon residents.
- Rates not displayed for groups with 5 or fewer deaths or relative standard error ≥ 30 .

Additional information about opioid use and prevention can be obtained from the Oregon Injury and Violence Prevention Section, Public Health Division, Oregon Health Authority website at: healthoregon.org/ipv

All Opioid Mortality

Health Outcome Measure

All opioid mortality rate per 100,000 population

Table 18

	2014-18	Num.	Den.
STATEWIDE	8	1579	4,081,947
NH African American/Black	12	45	77,026
NH Am. Indian Alaska Native	11	26	45,603
NH Asian			
NH Hawaiian/Pacific Islander			
NH Asian/Pacific Islander*			196,968
Hispanic/Latino	3	78	523,962
NH Multiple races/multiracial	5	31	127,792
Other/unknown			
NH White	9	1386	3,110,596
COUNTY			
Baker*			15,984
Benton	4	17	89,780
Clackamas	6	117	405,788
Clatsop	11	22	38,562
Columbia	10	26	50,851
Coos	4	14	63,308
Crook*			22,337
Curry*			22,507
Deschutes	5	49	180,640
Douglas	8	42	108,323
Gilliam†	0	0	1,883
Grant*			7,183
Harney*			7,228
Hood River*			23,131
Jackson	8	88	214,267
Jefferson*			23,143
Josephine	10	43	85,481
Klamath	6	20	66,310
Lake*			7,843
Lane	11	194	368,882
Lincoln	10	24	47,881
Linn	8	47	122,870
Malheur*			30,431
Marion	5	83	335,553
Morrow*			11,215
Multnomah	12	476	798,647
North Central PH District			
Polk	5	20	81,427
Sherman†	0	0	1,712
Tillamook	15	19	26,076
Umatilla	4	17	76,898
Union	9	12	26,028
Wallowa*			6,924
Wasco*			25,866
Washington	6	162	581,821
Wheeler†	0	0	1,343
Yamhill	6	33	103,820

*Suppressed for 5 or fewer events or relative squared error ≥ 30

†Zero counts

Active Transportation

Health Outcome Measure

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

Table 19

Data source

U.S. Census Bureau, American Community Survey (ACS) 1-year (2018, 2017, 2018) and 5-year (2012-16, 2013-17, 2014-18) estimates online query system, accessed at data.census.gov

Benchmark

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

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 20.

Additional notes

- Baseline year is 2016 (statewide) and 2012-2016 (county).
- Data are not available 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 as a margin of error. Margins of error are not shown in the charts.
- County data are 5-year average estimates.

Additional information about active transportation is available at the Health Promotion Chronic Disease Prevention Section, Public Health Division, Oregon Health Authority website at: healthoregon.org/npa and the Environmental Public Health Tracking Program, Public Health Division, Oregon Health Authority website at: healthoregon.org/epht

Active Transportation

Health Outcome Measure

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

Table 20

	2016	Num.*	Den.*	2017	Num.*	Den.*	2018	Num.*	Den.*
STATEWIDE	10%			10%			10%		
NH† African American/Black									
NH Am. Indian Alaska Native									
NH Asian									
NH Hawaiian/Pacific Islander									
NH Asian/Pacific Islander									
Hispanic/Latino									
NH Multiple races/multiracial									
Other/unknown									
NH White									
COUNTY	2012-16			2013-17			2014-18		
Baker	8%			7%			8%		
Benton	18%			18%			19%		
Clackamas	6%			6%			6%		
Clatsop	9%			10%			11%		
Columbia	4%			3%			3%		
Coos	6%			5%			5%		
Crook	3%			4%			4%		
Curry	6%			7%			6%		
Deschutes	5%			5%			4%		
Douglas	4%			4%			4%		
Gilliam	11%			9%			9%		
Grant	5%			6%			9%		
Harney	7%			8%			8%		
Hood River	7%			7%			7%		
Jackson	6%			6%			6%		
Jefferson	4%			4%			5%		
Josephine	4%			4%			5%		
Klamath	5%			4%			4%		
Lake	9%			7%			7%		
Lane	12%			12%			12%		
Lincoln	7%			7%			6%		
Linn	4%			4%			4%		
Malheur	7%			7%			7%		
Marion	6%			6%			5%		
Morrow	4%			3%			3%		
Multnomah	22%			22%			22%		
North Central PH District									
Polk	5%			4%			4%		
Sherman	7%			8%			6%		
Tillamook	7%			7%			8%		
Umatilla	5%			4%			4%		
Union	10%			9%			8%		
Wallowa	12%			12%			11%		
Wasco	5%			6%			5%		
Washington	10%			10%			10%		
Wheeler	14%			15%			17%		
Yamhill	7%			7%			7%		

*Numerators and denominators not provided for weighted survey estimates †Estimates not provided by race/ethnicity.

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

Table 21

Data source

Survey of Local Public Health Authorities, 2018

Benchmark

100% of LPHAs that have eligible initiatives or activities

Measure specification

Statewide percentage calculated as the number of counties that implemented or participated 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 22.

Additional notes

- Baseline year is 2018.
- Data were not collected in 2019.

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

Table 22

	2018	Num.	Den.
STATEWIDE	59%	17	29
NH† African American/Black			
NH Am. Indian Alaska Native			
NH Asian			
NH Hawaiian/Pacific Islander			
NH Asian/Pacific Islander			
Hispanic/Latino			
NH Multiple races/multiracial			
Other/unknown			
NH White			
COUNTY			
Baker	no		√
Benton	yes	√	√
Clackamas	yes	√	√
Clatsop	no		√
Columbia	no		√
Coos	no		√
Crook	yes	√	√
Curry	no		√
Deschutes	yes	√	√
Douglas	yes	√	√
Gilliam			
Grant	yes	√	√
Harney	yes	√	√
Hood River	no		√
Jackson	no		√
Jefferson	yes	√	√
Josephine	*		
Klamath	yes	√	√
Lake	no		√
Lane	yes	√	√
Lincoln	yes	√	√
Linn	†		
Malheur	†		
Marion	yes	√	√
Morrow	no		√
Multnomah	yes	√	√
North Central PH District‡	yes	√	√
Polk	†		
Sherman			
Tillamook	yes	√	√
Umatilla	no		√
Union	no		√
Wallowa§			
Wasco			
Washington	yes	√	√
Wheeler	no		√
Yamhill	yes	√	√

*LPHA did not respond to survey.

†LPHA responded either no planning initiatives or unsure to all.

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

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

Drinking Water

Health Outcome Measure

Percent of community water systems meeting health-based standards

Table 23

Data source

Safe Drinking Water Information System (SDWIS) Federal Reporting Services, the Environmental Protection Agency's (EPA) national regulatory compliance database, 2016, 2017, 2018, 2019

Benchmark

EPA standard is 92%

Measure specification

Data are based on violations for the federal fiscal year, October-September.

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 24.

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. Health-based violations include Maximum Contaminant Level (MCL), Treatment Technique (TT), and Reporting (RPT) violations, except for outdated Total Coliform Rule violations (type 21 and 22).
- Unit of analysis is water systems; race/ethnicity data do not apply.

Additional information about gonorrhea can be obtained from the Oregon Drinking Water Services website at: healthoregon.org/dws

Drinking Water

Health Outcome Measure

Percent of community water systems meeting health-based standards

Table 24

	2016*	Num.	Den.	2017*	Num.	Den.	2018*	Num.	Den.	2019*	Num.	Den.
STATEWIDE	89%	794	891	95%	846	891	94%	845	901	93%	839	902
NH African American/Black												
NH Am. Indian Alaska Native												
NH Asian												
NH Hawaiian/Pacific Islander												
NH Asian/Pacific Islander												
Hispanic/Latino												
NH Multiple races/multiracial												
Other/unknown												
NH White												
COUNTY												
Baker	78%	7	9	78%	7	9	89%	8	9	78%	7	9
Benton	93%	14	15	100%	15	15	100%	15	15	93%	14	15
Clackamas	84%	68	81	95%	77	81	94%	78	83	94%	78	83
Clatsop	100%	21	21	95%	20	21	81%	17	21	76%	16	21
Columbia	91%	32	35	91%	32	35	100%	35	35	100%	35	35
Coos	94%	17	18	94%	17	18	67%	12	18	59%	10	17
Crook	89%	17	19	100%	19	19	95%	18	19	95%	18	19
Curry	92%	11	12	92%	11	12	86%	12	14	100%	11	11
Deschutes	88%	58	66	97%	64	66	99%	66	67	100%	68	68
Douglas	86%	25	29	86%	25	29	93%	27	29	86%	25	29
Gilliam	67%	2	3	100%	3	3	100%	3	3	100%	3	3
Grant	75%	6	8	88%	7	8	88%	7	8	88%	7	8
Harney	100%	3	3	100%	3	3	100%	3	3	100%	3	3
Hood River	100%	7	7	100%	7	7	100%	7	7	100%	7	7
Jackson	90%	54	60	95%	57	60	93%	57	61	92%	58	63
Jefferson	75%	3	4	100%	4	4	100%	4	4	100%	4	4
Josephine	100%	32	32	100%	32	32	97%	31	32	94%	30	32
Klamath	93%	25	27	100%	27	27	100%	27	27	100%	27	27
Lake	33%	1	3	67%	2	3	67%	2	3	100%	3	3
Lane	94%	64	68	93%	63	68	93%	64	69	88%	61	69
Lincoln	80%	24	30	93%	28	30	90%	28	31	94%	29	31
Linn	95%	39	41	100%	41	41	93%	37	40	98%	39	40
Malheur	25%	2	8	63%	5	8	63%	5	8	50%	4	8
Marion	85%	63	74	95%	70	74	97%	73	75	99%	74	75
Morrow	71%	5	7	86%	6	7	88%	7	8	88%	7	8
Multnomah	96%	22	23	100%	23	23	100%	23	23	100%	23	23
North Central PH District												
Polk	75%	9	12	92%	11	12	58%	7	12	58%	7	12
Sherman	100%	4	4	100%	4	4	100%	4	4	100%	4	4
Tillamook	97%	34	35	97%	34	35	97%	35	36	92%	33	36
Umatilla	89%	32	36	92%	33	36	97%	35	36	94%	34	36
Union	90%	9	10	100%	10	10	100%	10	10	100%	10	10
Wallowa	80%	4	5	80%	4	5	100%	5	5	80%	4	5
Wasco	85%	17	20	95%	19	20	90%	18	20	95%	19	20
Washington	97%	28	29	100%	29	29	96%	27	28	100%	29	29
Wheeler	100%	3	3	100%	3	3	100%	3	3	100%	3	3
Yamhill	94%	32	34	100%	34	34	100%	35	35	97%	35	36

*Data are based on violations for the federal fiscal year, October-September.

Drinking Water

Local Public Health Process Measure

Percent of water systems surveys completed

Table 25

Data source

Safe Drinking Water Information System (SDWIS), 2016, 2017, 2018, 2019

Benchmark

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

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 26.

Additional notes

- Baseline year is 2016.
- Data are for county-regulated systems only (approximately 75% of all EPA systems).
- Surveys completed for systems that were not on the due list are not included; survey must be entered in SDWIS to count as completed.
- Surveys not completed for systems that are currently inactive or non-EPA are not included.

Drinking Water

Local Public Health Process Measure

Percent of water systems surveys completed

Table 26

	2016	Num.	Den.	2017	Num.	Den.	2018	Num.	Den.	2019	Num.	Den.
STATEWIDE	97%	414	428	99%	429	432	99%	416	419	97%	401	413
NH African American/Black												
NH Am. Indian Alaska Native												
NH Asian												
NH Hawaiian/Pacific Islander												
NH Asian/Pacific Islander												
Hispanic/Latino												
NH Multiple races/multiracial												
Other/unknown												
NH White												
COUNTY												
Baker*				100%	1	1						
Benton	100%	6	6	100%	7	7	100%	9	9	100%	9	9
Clackamas	100%	45	45	100%	44	44	98%	43	44	100%	42	42
Clatsop	100%	7	7	100%	6	6	100%	6	6	100%	7	7
Columbia	100%	13	13	100%	12	12	100%	10	10	100%	12	12
Coos	100%	9	9	100%	9	9	100%	6	6	100%	8	8
Crook	100%	9	9	100%	9	9	100%	10	10	100%	9	9
Curry	83%	5	6	88%	7	8	100%	8	8	100%	6	6
Deschutes	100%	29	29	100%	30	30	100%	30	30	100%	31	31
Douglas	100%	14	14	100%	15	15	93%	14	15	100%	14	14
Gilliam	100%	2	2	100%	2	2	100%	2	2	100%	1	1
Grant*												
Harney*												
Hood River	100%	3	3	100%	4	4	100%	4	4	75%	3	4
Jackson	100%	36	36	100%	37	37	100%	37	37	100%	37	37
Jefferson	100%	5	5	100%	5	5	100%	6	6	100%	5	5
Josephine	56%	14	25	100%	31	31	100%	28	28	67%	14	21
Klamath	100%	24	24	100%	24	24	100%	23	23	100%	24	24
Lake*												
Lane	98%	46	47	98%	42	43	98%	39	40	100%	43	43
Lincoln	100%	7	7	100%	8	8	100%	8	8	100%	9	9
Linn	100%	31	31	100%	31	31	100%	26	26	100%	28	28
Malheur	100%	2	2	100%	1	1	100%	2	2	100%	2	2
Marion	100%	37	37	100%	36	36	100%	37	37	100%	33	33
Morrow*												
Multnomah	100%	10	10	100%	9	9	100%	11	11	100%	10	10
North Central PH District												
Polk	100%	4	4	100%	4	4	100%	4	4	100%	5	5
Sherman	100%	4	4	100%	2	2	100%	2	2	25%	1	4
Tillamook	100%	13	13	100%	11	11	100%	10	10	100%	9	9
Umatilla*												
Union	100%	4	4	100%	4	4	100%	4	4	100%	4	4
Wallowa* †												
Wasco	89%	8	9	100%	10	10	100%	11	11	90%	9	10
Washington	100%	15	15	94%	15	16	100%	15	15	100%	15	15
Wheeler*												
Yamhill	100%	12	12	100%	13	13	100%	11	11	100%	11	11

*No water systems surveys in years where no data are shown.

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

Drinking Water

Local Public Health Process Measure

Percent of water quality alert responses

Table 27

Data source

Safe Drinking Water Information System (SDWIS), 2016, 2017, 2018, 2019

Benchmark

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

Measure specification

Numerator: count of water quality alerts responded to. Denominator: unique alert IDs. Numerator and denominator data are shown in Table 28.

Additional notes

- Baseline year is 2016.
- Data are for county-regulated systems only (approximately 75% of all EPA systems).
- Systems that are currently inactive or non-EPA are not included.
- 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.

Drinking Water

Local Public Health Process Measure

Percent of water quality alert responses

Table 28

	2016	Num.	Den.	2017	Num.	Den.	2018	Num.	Den.	2019	Num.	Den.
STATEWIDE	87%	653	749	89%	642	718	91%	626	685	96%	725	759
NH African American/Black												
NH Am. Indian Alaska Native												
NH Asian												
NH Hawaiian/Pacific Islander												
NH Asian/Pacific Islander												
Hispanic/Latino												
NH Multiple races/multiracial												
Other/unknown												
NH White												
COUNTY												
Baker* †	0%	0	1				†		0	†		0
Benton	86%	18	21	81%	13	16	36%	4	11	78%	18	23
Clackamas	97%	71	73	86%	56	65	86%	50	58	100%	65	65
Clatsop	93%	13	14	91%	10	11	100%	12	12	67%	6	9
Columbia	70%	7	10	100%	18	18	100%	4	4	80%	12	15
Coos	100%	15	15	100%	21	21	100%	11	11	100%	30	30
Crook	68%	13	19	94%	16	17	92%	11	12	100%	9	9
Curry	35%	6	17	68%	13	19	100%	6	6	100%	15	15
Deschutes	88%	37	42	94%	67	71	91%	41	45	100%	43	43
Douglas	94%	33	35	91%	20	22	94%	29	31	89%	24	27
Gilliam†	50%	2	4	100%	1	1	†		0	100%	1	1
Grant*												
Harney*												
Hood River	73%	8	11	57%	4	7	100%	2	2	89%	8	9
Jackson	85%	70	82	99%	67	68	92%	72	78	96%	100	104
Jefferson	100%	1	1	100%	3	3	100%	5	5	100%	2	2
Josephine	77%	26	34	100%	17	17	82%	14	17	77%	23	30
Klamath	85%	17	20	100%	20	20	100%	28	28	100%	23	23
Lake*												
Lane	97%	63	65	96%	70	73	100%	64	64	100%	79	79
Lincoln	100%	34	34	96%	23	24	94%	15	16	94%	17	18
Linn	94%	60	64	93%	42	45	100%	50	50	100%	55	55
Malheur	80%	4	5	57%	8	14	71%	10	14	69%	11	16
Marion	93%	55	59	98%	65	66	100%	81	81	100%	63	63
Morrow*												
Multnomah	100%	21	21	100%	16	16	100%	10	10	100%	15	15
North Central PH District												
Polk	75%	18	24	94%	17	18	100%	32	32	100%	28	28
Sherman	67%	6	9	43%	3	7	86%	6	7	100%	1	1
Tillamook	75%	12	16	85%	11	13	100%	13	13	92%	11	12
Umatilla*												
Union	57%	4	7	82%	9	11	100%	9	9	100%	12	12
Wallowa* ‡												
Wasco	67%	12	18	45%	10	22	51%	21	41	91%	20	22
Washington	93%	14	15	73%	11	15	100%	12	12	100%	21	21
Wheeler*												
Yamhill	100%	13	13	61%	11	18	88%	14	16	100%	13	13

*Water quality alerts not applicable in years where no data are shown.

†Zero water quality alerts for Baker County in 2018, 2019; for Gilliam County in 2018.

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

Drinking Water

Local Public Health Process Measure

Percent of priority non-compliers resolved

Table 29

Data source

Safe Drinking Water Information System (SDWIS), 2016, 2017, 2018, 2019

Benchmark

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

Measure specification

Numerator: count of resolved priority non-compliers (PNCs). Denominator: all PNCs. Numerator and denominator data are shown in Table 30.

Additional notes

- Baseline year is 2016.
- Data are for county-regulated systems only (approximately 75% of all EPA systems).
- Systems that are currently inactive or non-EPA are not included.
- "Resolved" status is based on data at the time the query was run, regardless of when the PNC status began.

Drinking Water

Local Public Health Process Measure

Percent of priority non-compliers resolved

Table 30

	2016	Num.	Den.	2017	Num.	Den.	2018	Num.	Den.	2019	Num.	Den.	
STATEWIDE	100%	76	76	100%	57	57	100%	59	59	100%	54	54	
NH African American/Black													
NH Am. Indian Alaska Native													
NH Asian													
NH Hawaiian/Pacific Islander													
NH Asian/Pacific Islander													
Hispanic/Latino													
NH Multiple races/multiracial													
Other/unknown													
NH White													
COUNTY													
Baker†			0			0			0			0	
Benton†	100%	2	2			0			0	100%	1	1	
Clackamas	100%	4	4	100%	5	5	100%	6	6	100%	8	8	
Clatsop†	100%	1	1			0			0	100%	1	1	
Columbia	100%	4	4	100%	3	3	100%	3	3	100%	2	2	
Coos	100%	2	2	100%	2	2	100%	2	2	100%	2	2	
Crook†	100%	1	1			0			2	2		0	
Curry	100%	7	7	100%	5	5	100%	3	3	100%	1	1	
Deschutes	100%	3	3	100%	3	3	100%	6	6	100%	4	4	
Douglas	100%	5	5	100%	5	5	100%	1	1	100%	2	2	
Gilliam†	100%	1	1			0			0			0	
Grant*													
Harney*													
Hood River†			0			0			0			0	
Jackson	100%	6	6	100%	2	2	100%	7	7	100%	10	10	
Jefferson†			0			0			0			0	
Josephine	100%	4	4	100%	5	5	100%	3	3	100%	2	2	
Klamath†	100%	3	3			0			0			0	
Lake*													
Lane	100%	8	8	100%	7	7	100%	2	2	100%	4	4	
Lincoln	100%	1	1	100%	1	1	100%	1	1	100%	1	1	
Linn	100%	7	7	100%	2	2	100%	2	2	100%	4	4	
Malheur†			0			0			3	3	100%	1	1
Marion	100%	7	7	100%	5	5	100%	6	6	100%	3	3	
Morrow*													
Multnomah†	100%	2	2	100%	1	1			0			0	
North Central PH District													
Polk†	100%	1	1			0			0			0	
Sherman†			0			0			0			0	
Tillamook	100%	1	1	100%	3	3	100%	3	3	100%	1	1	
Umatilla*													
Union	100%	1	1	100%	1	1	100%	2	2	100%	1	1	
Wallowa* ‡													
Wasco†			0	100%	4	4	100%	4	4	100%	2	2	
Washington	100%	5	5	100%	3	3	100%	2	2	100%	2	2	
Wheeler*													
Yamhill†			0			0	100%	1	1	100%	2	2	

*Priority non-compliers not applicable

†Zero priority non-compliers in years where 0 is shown.

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

Effective Contraceptive Use

Health Outcome Measure

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

Table 31

Data source

Behavioral Risk Factor Surveillance System, 2016, 2017, 2018

Benchmark

70%, 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"
 - 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 32).

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.
- Because of small numbers, there are no estimates by race/ethnicity or by county. Multiple years of combined data (not yet available) are required for reporting.
- 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.

Additional information about reproductive health services can be found at the website of the Reproductive Health Program, Adolescent and Genetic Health Section, Public Health Division, Oregon Health Authority at: healthoregon.org/rh

Effective Contraceptive Use

Health Outcome Measure

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

Table 32

	2016	Num.*	Den.*	2017	Num.*	Den.*	2018	Num.*	Den.*
STATEWIDE	69%			68%			68%		
NH African American/Black†									
NH Am. Indian Alaska Native									
NH Asian									
NH Hawaiian/Pacific Islander									
NH Asian/Pacific Islander									
Hispanic/Latino									
NH Multiple races/multiracial									
Other/unknown									
NH White									
COUNTY†									
Baker									
Benton									
Clackamas									
Clatsop									
Columbia									
Coos									
Crook									
Curry									
Deschutes									
Douglas									
Gilliam									
Grant									
Harney									
Hood River									
Jackson									
Jefferson									
Josephine									
Klamath									
Lake									
Lane									
Lincoln									
Linn									
Malheur									
Marion									
Morrow									
Multnomah									
North Central PH District									
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.

Effective Contraceptive Use

Local Public Health Process Measure

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

Table 33

Data source

LPHA annual reporting, Oregon Health Authority, Public Health Division, Reproductive Health Program, 2018, 2019

Benchmark

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

Measure specification

Numerator: number of LPHAs that have written an annual strategic plan that identifies gaps, barriers and opportunities for improving access to contraceptive services. Denominator: all LPHAs that participate in the Reproductive Health Program Element. Numerator and denominator data are shown in Table 34.

Additional notes

- LPHAs work collaboratively within their communities to identify gaps and barriers in access to reproductive health services. All LPHAs receive limited state funding 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.
- No LPHAs had developed a strategic plan as of 2019.

Effective Contraceptive Use

Local Public Health Process Measure

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

Table 34

	2018	Num.	Den.	2019	Num.	Den.
STATEWIDE	0%	0	34	0%	0	34
NH† African American/Black						
NH Am. Indian Alaska Native						
NH Asian						
NH Hawaiian/Pacific Islander						
NH Asian/Pacific Islander						
Hispanic/Latino						
NH Multiple races/multiracial						
Other/unknown						
NH White						
COUNTY						
Baker	no		√	no		√
Benton	no		√	no		√
Clackamas	no		√	no		√
Clatsop	no		√	no		√
Columbia	no		√	no		√
Coos	no		√	no		√
Crook	no		√	no		√
Curry	no		√	no		√
Deschutes	no		√	no		√
Douglas	no		√	no		√
Gilliam						
Grant	no		√	no		√
Harney	no		√	no		√
Hood River	no		√	no		√
Jackson	no		√	no		√
Jefferson	no		√	no		√
Josephine	no		√	no		√
Klamath	no		√	no		√
Lake	no		√	no		√
Lane	no		√	no		√
Lincoln	no		√	no		√
Linn	no		√	no		√
Malheur	no		√	no		√
Marion	no		√	no		√
Morrow	no		√	no		√
Multnomah	no		√	no		√
North Central PH District*	no		√	no		√
Polk	no		√	no		√
Sherman						
Tillamook	no		√	no		√
Umatilla	no		√	no		√
Union	no		√	no		√
Wallowa†						
Wasco	no		√	no		√
Washington	no		√	no		√
Wheeler	no		√	no		√
Yamhill	no		√	no		√

*North Central Public Health District is comprised of Gilliam, Sherman, and Wasco Counties

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

Dental Visits Children Aged 0-5

Developmental Metric

Percent of children aged 0-5 with any dental visit

Table 35

Data source

Medicaid administrative claims data, 2016, 2017, 2018

Benchmark

48%, State Health Improvement Plan (SHIP) 2020 target

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 36.

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.

Additional information about oral health can be found at Oral Health, Public Health Division, Oregon Health Authority at: healthoregon.org/oralhealth

Dental Visits Children Aged 0-5

Developmental Measure

Percent of children aged 0-5 with any dental visit

Table 36

	2016	Num.	Den.	2017	Num.	Den.	2018	Num.	Den.
STATEWIDE*	48%	33,772	71,022	51%	38,657	75,875	51%	39,785	77,575
NH African American/Black†	50%	649	1,305	54%	770	1,434	56%	806	1,434
NH Am. Indian Alaska Native	48%	402	846	54%	512	957	57%	508	893
NH Asian	54%	616	1,150	57%	721	1,256	61%	717	1,184
NH Hawaiian/Pacific Islander	40%	140	353	37%	124	332	38%	128	334
NH Asian/Pacific Islander									
Hispanic/Latino	55%	4,359	7,872	61%	4,934	8,061	63%	4,780	7,595
NH Multiple races/multiracial									
Other	43%	326	765	52%	449	867	55%	397	716
Unknown	48%	17,190	35,446	50%	19,801	39,521	49%	21,072	42,842
NH White	43%	10,090	23,285	48%	11,346	23,447	50%	11,377	22,577
COUNTY									
Baker	44%	137	312	48%	170	354	46%	168	364
Benton	41%	363	891	47%	458	984	43%	413	954
Clackamas	46%	2,293	4,969	48%	2,484	5,209	47%	2,441	5,150
Clatsop	28%	189	665	38%	255	677	43%	303	704
Columbia	32%	238	738	40%	310	776	47%	381	818
Coos	49%	618	1,270	53%	733	1,371	54%	782	1,436
Crook	35%	180	508	46%	241	520	44%	260	588
Curry	43%	142	331	51%	190	372	42%	170	402
Deschutes	51%	1,536	2,989	56%	1,801	3,225	55%	1,865	3,376
Douglas	51%	1,084	2,114	52%	1,183	2,264	46%	1,140	2,486
Gilliam	50%	10	20	63%	15	24	72%	18	25
Grant	41%	37	91	48%	47	98	47%	55	116
Harney	51%	77	152	68%	127	187	60%	115	191
Hood River	58%	332	573	68%	404	594	69%	384	560
Jackson	48%	2,225	4,645	51%	2,579	5,044	53%	2,787	5,282
Jefferson	53%	303	569	55%	314	572	57%	359	634
Josephine	46%	920	1,985	53%	1,133	2,142	53%	1,224	2,318
Klamath	51%	697	1,379	48%	697	1,463	48%	795	1,667
Lake	33%	37	111	41%	57	138	44%	56	126
Lane	50%	3,192	6,430	49%	3,379	6,839	49%	3,508	7,169
Lincoln	38%	321	834	42%	389	927	45%	424	933
Linn	44%	1,138	2,577	50%	1,347	2,700	46%	1,368	2,943
Malheur	46%	409	881	53%	533	1,012	56%	605	1,090
Marion	48%	4,005	8,347	52%	4,699	9,050	53%	4,868	9,197
Morrow	51%	150	293	62%	179	290	62%	198	319
Multnomah	50%	5,996	12,038	53%	6,984	13,218	54%	6,799	12,650
North Central PH District									
Polk	40%	549	1,364	40%	598	1,477	45%	709	1,590
Sherman	41%	7	17	39%	7	18	35%	7	20
Tillamook	35%	159	451	43%	191	447	44%	192	441
Umatilla	49%	887	1,824	54%	1,019	1,886	54%	1,048	1,938
Union	40%	210	528	44%	261	592	47%	285	606
Wallowa	42%	56	134	46%	66	144	45%	66	146
Wasco	52%	321	614	64%	431	677	67%	466	697
Washington	48%	3,819	7,958	51%	4,207	8,240	51%	4,173	8,151
Wheeler	24%	4	17	54%	13	24	60%	21	35
Yamhill	47%	882	1,873	49%	965	1,961	55%	1,121	2,026

*Medicaid claims data



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