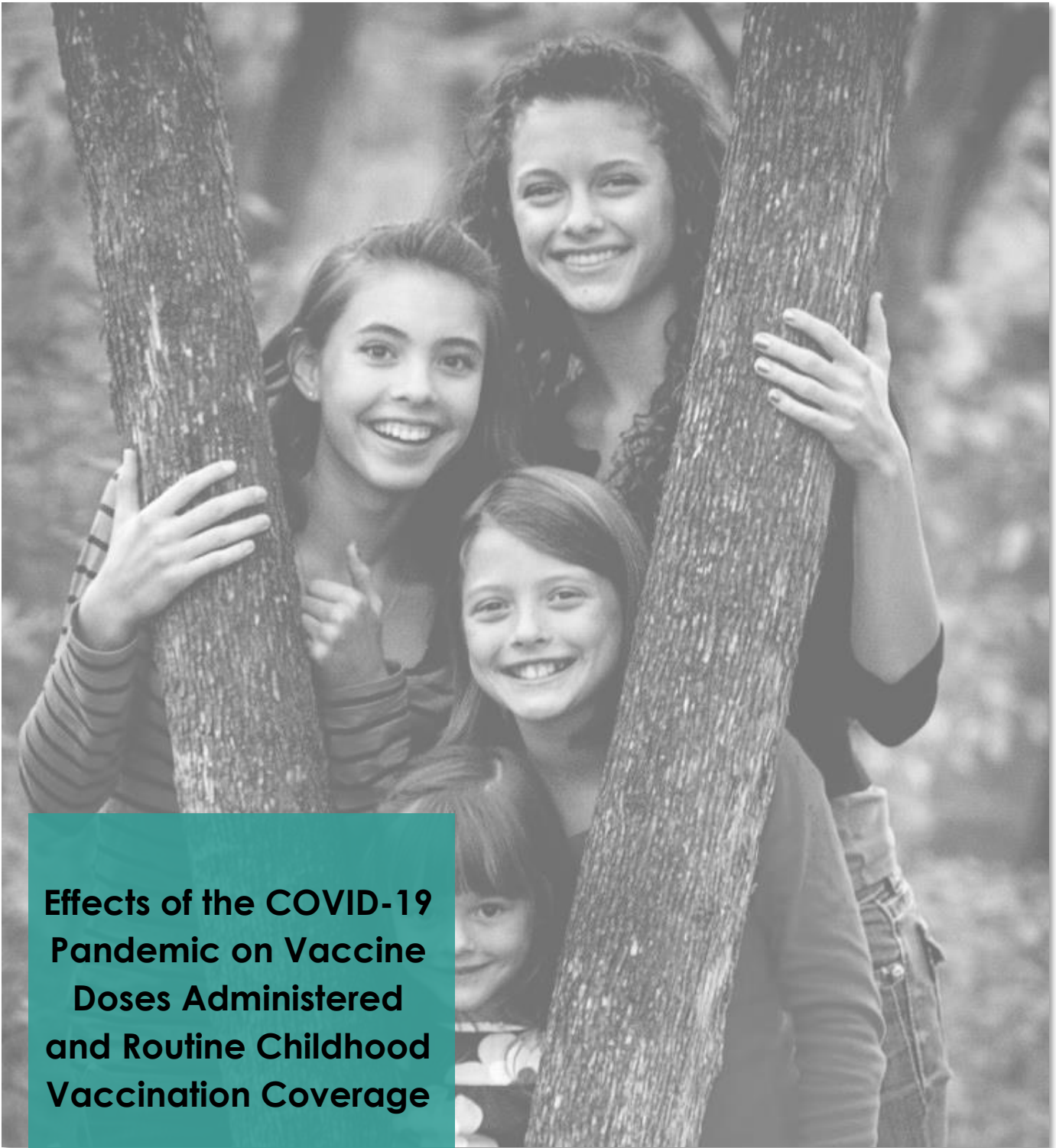


May 2022



**Effects of the COVID-19
Pandemic on Vaccine
Doses Administered
and Routine Childhood
Vaccination Coverage**

June 2019 –
December 2021



DOH 348-867 May 2022

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Executive Summary

The COVID-19 pandemic and the resulting disruptions in health care delivery, widespread lockdowns, and school closures starting in March 2020, resulted in delays to routine well child visits. The Washington State Department of Health Office of Immunization explored vaccine doses administered and coverage for four age groups, to describe effects of these delays.

Main Takeaways

- Vaccine administration in 0-18 year-olds remains below pre-pandemic levels, and efforts should focus on promoting routine vaccinations for all children and adolescents.
- Vaccination coverage declined in all age groups except in 13-17 year-olds. Efforts should focus on increasing coverage as the pandemic continues, to increase rates back to pre-pandemic levels.

Doses Administered

- The number of vaccines administered to 0-18 year-olds began to sharply decline in March 2020. This decline persisted through December 2021.
- In 2020, every county administered fewer doses to 4-6 year-olds, 11-12 year-olds, and 13-17 year-olds compared to the average from 2015-2019. In the 0-24 month age group, 34 of 39 counties administered fewer doses than the average.¹
- In 2021, the number of vaccines administered to 0-18 year-olds improved slightly from the absolute decline seen in 2020 but was still below average (-13.1%), and varied by age group (-13.3% in 4-6 year-olds, -5.8% in 11-12 year-olds, and -16.8% in 13-17 year-olds).
 - This trend was not seen in the 0-24 month age group, where, when compared to the average number of doses administered, fewer doses were administered in 2021 (-13%) than in 2020 (-9.7%).

Vaccination Coverage

- Throughout the pandemic, effects on coverage varied by age group:
 - A clear decline in coverage was observed in 4-6 year-olds (3.9%) and 11-12 year-olds (3.6%) from June 2019 to December 2021. However, there was a slight increase (1.8%) in 11-12 year-olds between June 2021 and December 2021.
 - The coverage pattern among 19-35 month-olds is unclear. While there was a 9.6% decline in coverage between June 2019 and December 2021, coverage varied by time of year. Comparing June time points showed a 5.8% overall decline, while only 0.8% decline when comparing December time points.
 - Coverage remained relatively stable in the 13-17 year-old group.
- More counties saw a greater than 5.0% decrease in coverage among the youngest ages compared to the oldest age groups.
- The pandemic had the largest impact on vaccination rates in the youngest age groups, whereas the oldest age groups saw the least impact.

¹The population between 2015-2021 has remained stable.

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Introduction

In late 2019, novel coronavirus SARS-CoV-2 began spreading rapidly worldwide, with the World Health Organization declaring a pandemic in early 2020. Named human coronavirus 2019, or COVID-19, Washington state (WA) was the first location in the United States (US) to identify the presence of the virus and declared a state of emergency on February 29, 2020, becoming one of the earliest adopters of public health measures in the US. On March 23, WA's "Stay Home, Stay Healthy" order was implemented to limit social interactions. While these measures helped limit the spread of COVID-19, the postponement of elective medical care also impacted preventive care, including routine childhood vaccinations.

The Department of Health aimed to assess the effect of the COVID-19 pandemic on routine childhood immunizations by comparing doses administered and vaccination coverage among children at time points prior to and during the pandemic. We chose to assess childhood immunization milestone age groups including children ages 0 through 18 years, including 19 through 35 months, 4 through 6 years, 11 through 12 years, and 13 through 17 years.

Methods

Washington State Immunization Information System (WAIS)

This report uses data from the Washington State Immunization Information System (WAIS), a lifetime immunization registry for residents. WAIS is managed by the Washington State Department of Health and captures immunization information reported by licensed healthcare providers. Healthcare providers, including hospitals, primary care providers, and healthcare plans voluntarily report immunizations for their patients to the WAIS. WAIS data are considered medically verified.

Doses Administered

The number of doses administered can be used to assess the amount of vaccine demand throughout the state. In this report, the number of doses administered in 2020 and 2021 reflect the time periods of January 01, 2020 to December 31, 2020 and January 01, 2021 to December 31, 2021, respectively. The average doses administered between 2015-2019 was calculated by taking the number of vaccines administered between January 01, 2015 to December 31, 2019 divided by 5 (the numbers of years included in this time-period). Patient age was determined by vaccine date and date of birth. County was based on the address of the facility where the vaccine is administered. Any doses administered to individuals with an address outside of Washington state were excluded. It also excluded doses reported by a facility different than the facility that gave the dose. The number of doses administered did not include influenza or COVID vaccines.

Vaccination Coverage

Vaccination coverage was calculated for each milestone age group every six months from June 2019 through December 2021. Rates measured during June and December 2019 represent the pre-pandemic period. Rates measured during June and December of 2020 represent the pandemic with more strict

activity restrictions. Rates measured during June and December 2021 represent the period after WA lifted most of the -activity restrictions.

Vaccination coverage was calculated for all vaccines. Specifically, this includes coverage of individual vaccines, completion of specific vaccine series, and vaccines recommended by the Advisory Committee on Immunization Practices (ACIP) for each respective age group. Definitions of vaccine coverage by age group and by series are shown below:

- 19 through 35 month milestone age group: Fully vaccinated was defined as the completion of the 4:3:1:3:3:1:4 series, which includes 4 doses of DTaP (diphtheria, tetanus, and acellular pertussis), 3 doses of polio vaccine, 1 dose of MMR (measles, mumps, and rubella), 3 doses of hepatitis B, 3 doses of Hib (Haemophilus influenzae type B), 1 dose of varicella (chickenpox), and 4 doses of pneumococcal vaccines.
- 4-6 year old age group: Fully vaccinated was defined as completion of the 5:4:4:3:2:2:2:4 series, which includes 5 doses of DTaP (diphtheria, tetanus, and acellular pertussis), 4 doses of Hib (Haemophilus influenzae type B), 4 doses of polio vaccine, 3 doses of hepatitis B, 2 doses of MMR (measles, mumps, and rubella), 2 doses of varicella (chickenpox), 2 doses of hepatitis A, and 4 doses of pneumococcal vaccines.
- 11-12 year old age group: Fully vaccinated was defined as completion of the 1:1:1 series, which includes 1 dose of Tdap (diphtheria, tetanus, and acellular pertussis), 1 dose of MCV (meningococcal conjugate), and 1 dose of HPV (human papillomavirus) vaccines.
- 13-17 year old age group: Fully vaccinated was defined as the completion of the 1:1:UTD series, which includes 1 dose of Tdap (diphtheria, tetanus, and acellular pertussis), 1 dose of MCV (meningococcal conjugate), and UTD (up-to-date) HPV (human papillomavirus) vaccines. UTD includes those who completed the recommended doses appropriate for their age at initiation.

Coverage was assessed at the state level, by county of residence, and by individual age month or year. Change in vaccination coverage was assessed by comparing pre-pandemic time points to time points throughout the pandemic.

Vaccination coverage was calculated as the total number of children vaccinated (numerator) divided by total children living in WA (denominator) for each age group. Numerator data were extracted from WAIS in January 2022 for the following time periods: June 2019, June 2020, June 2021, and December 2021. Denominators for both 2021 coverage estimates were also from the January 2022 WAIS data extraction. Previously published coverage estimates were used for the December 2019 and December 2020 time points.² Due to issues with accurately identifying persons living in WA at past time points, denominators from the previously published estimates were also used for the June 2020 and June 2021 time points to allow for better comparability. Of note - data for children fully vaccinated by age in years were unavailable for the pre-pandemic time periods (June and December 2019).

² Public Health Immunization Measures by County Dashboard:
<https://www.doh.wa.gov/DataandStatisticalReports/WashingtonTrackingNetworkWTN/ImmunizationData/CountyPublicHealthMeasuresDashboard>

Results

Milestone age group 19-35 months

Summary Points

Doses Administered

- Statewide for the 0-24 month age group, there were 13% fewer doses administered in 2021 compared to the average number of doses administered between 2015-2019. (Table 1)
- Most counties saw reductions in the number of vaccines administered in 2021 compared to the average doses administered between 2015-2019 (Figure 1, Table 1).
 - Reductions ranged from 96.5% fewer doses administered in Garfield County (note that the absolute number of doses is very small, 1 dose administered in 2021 compared to an average of 28 doses) to a 1.3% absolute reduction in Mason County.
 - Only two counties, Clallam and San Juan, administered more vaccine doses to this age group than the average number administered in 2015-2019.
- Fourteen counties (Pierce, Kitsap, Franklin, Grant, Island, Skagit, Pacific, San Juan, Whatcom, Asotin, Klickitat, Stevens, and Wahkiakum) administered more doses in 2021 compared to the number of doses administered in 2020 (Table 1).

Vaccination Coverage

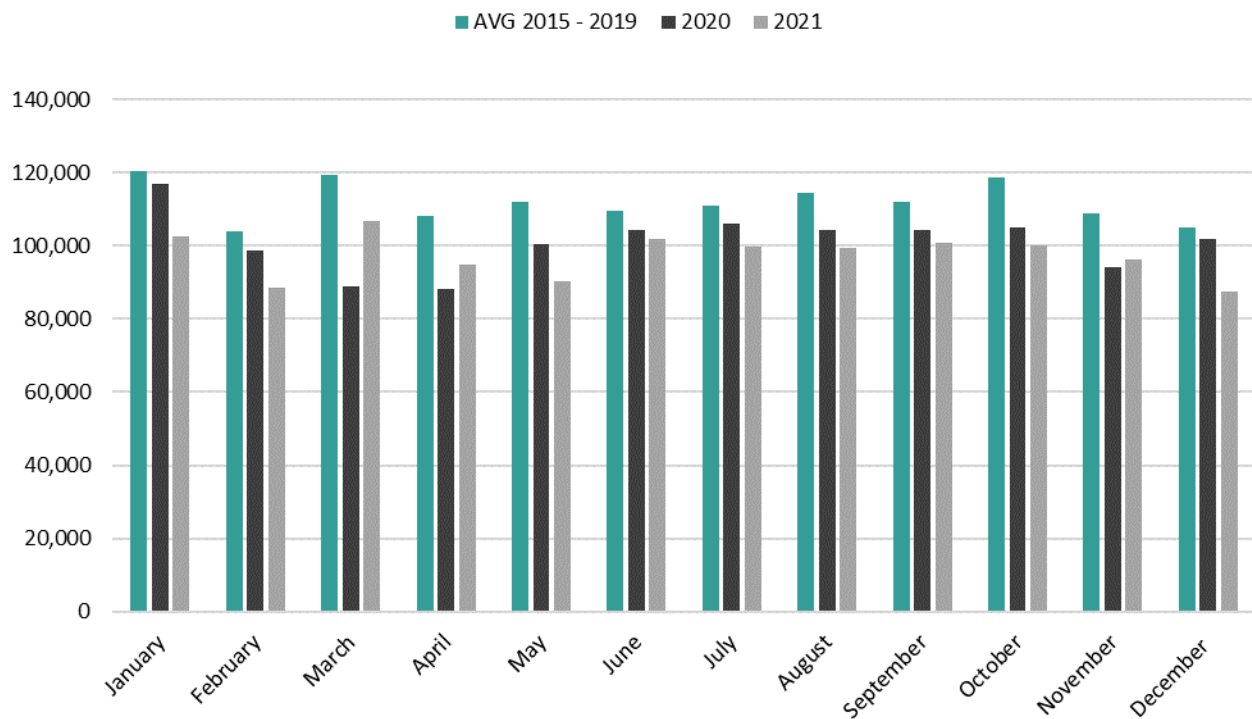
- Vaccination coverage for the recommended series among 19 through 35 month-olds was 56.8% as of December 31, 2021, a 9.6% decrease in coverage compared to June 15, 2019 (Figure 2).
 - Coverage for completion of individual vaccines within the series also decreased. The largest decrease was observed with MMR, which decreased 11.0%, from 85.3% to 74.3%. DTaP had the second largest decrease at 10.8%, from 74.6% to 63.8%.
- We observed that vaccination coverage may vary by different times of the year. When comparing June time points, coverage decreased 5.8% from June 2019 to June 2021. However, there was only a 0.8% decrease in coverage when comparing December 2019 to December 2021. More exploration is needed to understand this pattern.
- Vaccination coverage varied by age. Between June 2020 and December 2021, those aged 19 through 23 months saw a larger decline (7.8% decrease, from 58.8% to 51.0%) compared to those aged 24 through 35 months (4.0% decrease, from 63.1% to 59.1%) (Figure 3).
- Change in vaccination coverage between June 2019 and December 2021 varied by county (Figure 4).
 - Vaccination coverage decreased 5% or more in 34 of 39 counties.
 - Columbia was the only county to have coverage increase by more than 5% (51.0% to 59.6%, +8.6%).

- The five counties with the largest decreases were: Garfield (108.0%³ to 26.5%, -81.5%), Island (67.3% to 44.5%, -22.8%), Kitsap (78.1% to 50.1%, -28.0%), Mason (103.1%³ to 55.7%, -47.4%), and Pacific (61.5% to 28.3%, -33.2%).
- Data are also shown in Tables A1-A3 of the Appendix at the end of this report.

Doses Administered

Figure 1:

Monthly Vaccines Administered to Children 0 through 24 months old in Washington State Comparing Average Number in 2015-2019 with 2020 and 2021



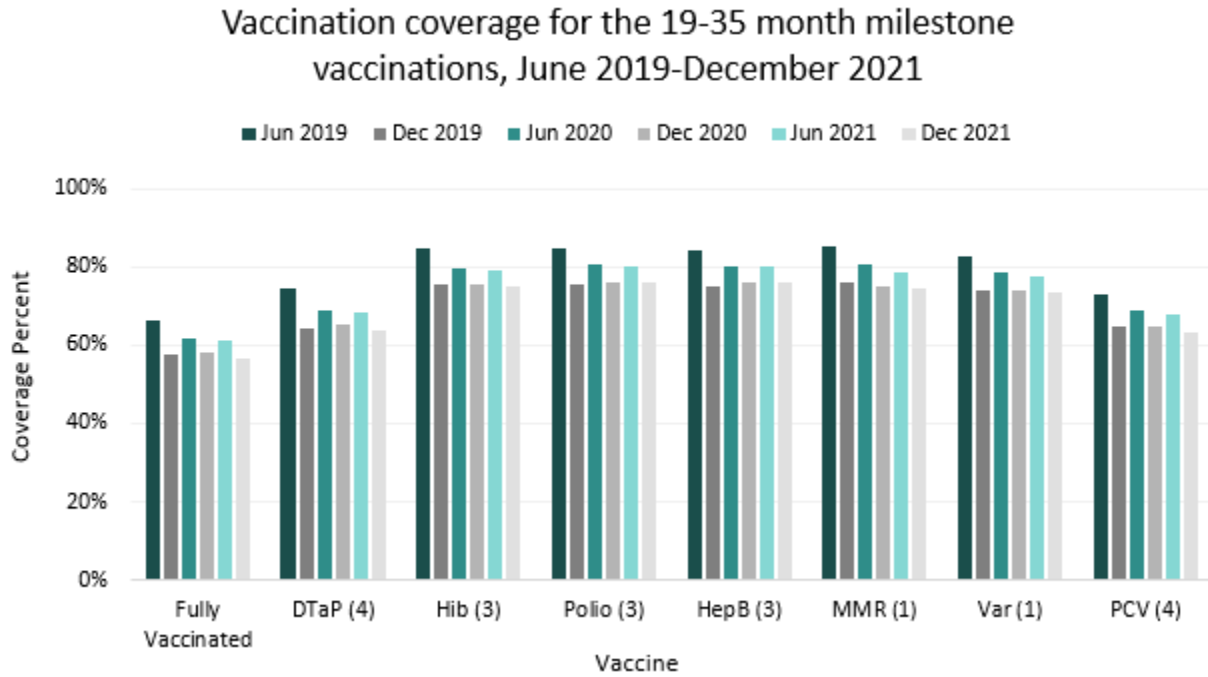
³ Garfield and Mason counties produced June 2019 vaccination coverage rates over 100% due to the use of previously published coverage data denominators (see methods section).

Table 1: 0-24 Months Age Group: Number of Vaccine Doses Administered by County and Year of Administration

County	Average Doses Administered 2015-2019	Doses Administered 2020	2020 Percent Change from Average	Doses Administered 2021	2021 Percent Change from Average
ADAMS	7,271	6,795	-6.5%	5,935	-18.4%
ASOTIN	2,920	560	-80.8%	585	-80.0%
BENTON	52,571	51,112	-2.8%	46,233	-12.1%
CHELAN	20,447	19,842	-3.0%	19,061	-6.8%
CLALLAM	7,750	8,120	4.8%	8,098	4.5%
CLARK	80,640	74,684	-7.4%	73,196	-9.2%
COLUMBIA	115	114	-0.5%	87	-24.1%
COWLITZ	19,087	17,798	-6.8%	16,252	-14.9%
DOUGLAS	3,845	3,868	0.6%	3,228	-16.0%
FERRY	275	152	-44.8%	95	-65.5%
FRANKLIN	18,197	15,662	-13.9%	17,559	-3.5%
GARFIELD	28	4	-85.8%	1	-96.5%
GRANT	22,592	19,053	-15.7%	19,352	-14.3%
GRAYS HARBOR	8,449	7,960	-5.8%	7,830	-7.3%
ISLAND	8,069	5,200	-35.6%	5,417	-32.9%
JEFFERSON	2,184	2,112	-3.3%	1,820	-16.7%
KING	448,518	404,994	-9.7%	367,742	-18.0%
KITSAP	42,967	34,720	-19.2%	36,805	-14.3%
KITTITAS	5,650	5,243	-7.2%	5,018	-11.2%
KLICKITAT	1,157	1,019	-11.9%	1,039	-10.2%
LEWIS	12,934	13,049	0.9%	11,840	-8.5%
LINCOLN	572	529	-7.5%	370	-35.3%
MASON	5,778	6,234	7.9%	5,701	-1.3%
OKANOGAN	6,765	5,144	-24.0%	5,142	-24.0%
PACIFIC	371	169	-54.4%	245	-33.9%
PEND OREILLE	928	970	4.5%	861	-7.2%
PIERCE	159,991	136,020	-15.0%	144,796	-9.5%
SAN JUAN	914	966	5.7%	1,038	13.6%
SKAGIT	24,931	23,481	-5.8%	23,643	-5.2%
SKAMANIA	398	265	-33.5%	235	-41.0%
SNOHOMISH	123,436	113,162	-8.3%	109,031	-11.7%
SPOKANE	87,476	86,322	-1.3%	84,774	-3.1%
STEVENS	3,153	3,000	-4.8%	3,017	-4.3%
THURSTON	47,843	45,596	-4.7%	45,219	-5.5%
WAHKIAKUM	35	18	-49.2%	33	-6.8%
WALLA WALLA	12,888	10,646	-17.4%	10,315	-20.0%
WHATCOM	34,463	29,411	-14.7%	29,455	-14.5%
WHITMAN	7,066	6,221	-12.0%	6,114	-13.5%
YAKIMA	60,220	53,045	-11.9%	51,173	-15.0%
TOTAL	1,342,892	1,213,260	-9.7%	1,168,355	-13.0%

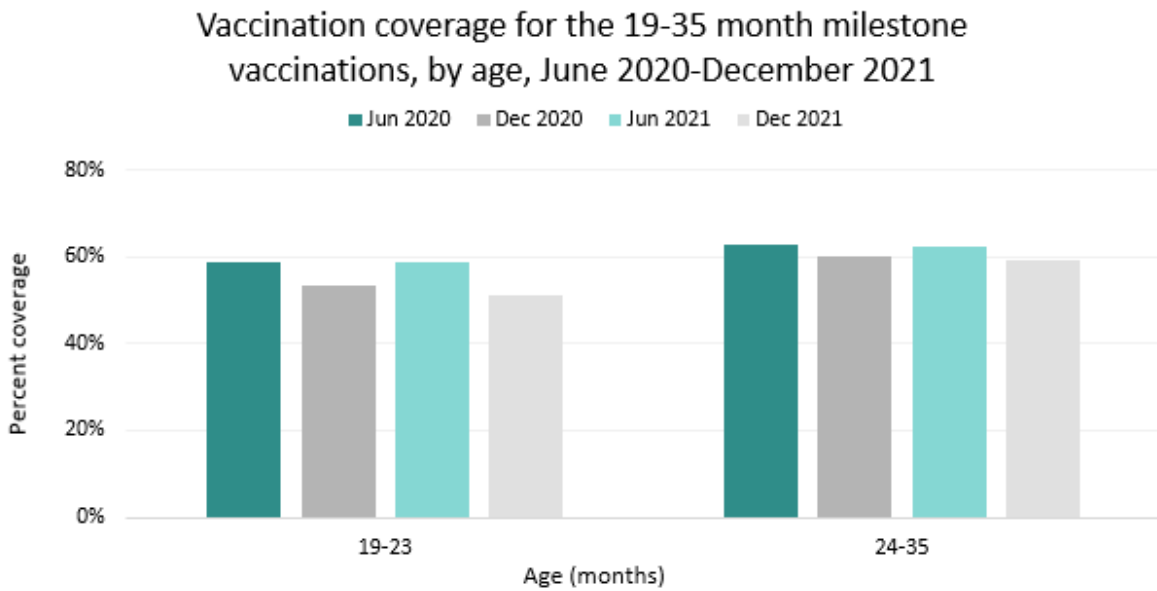
Vaccination Coverage

Figure 2:



Age

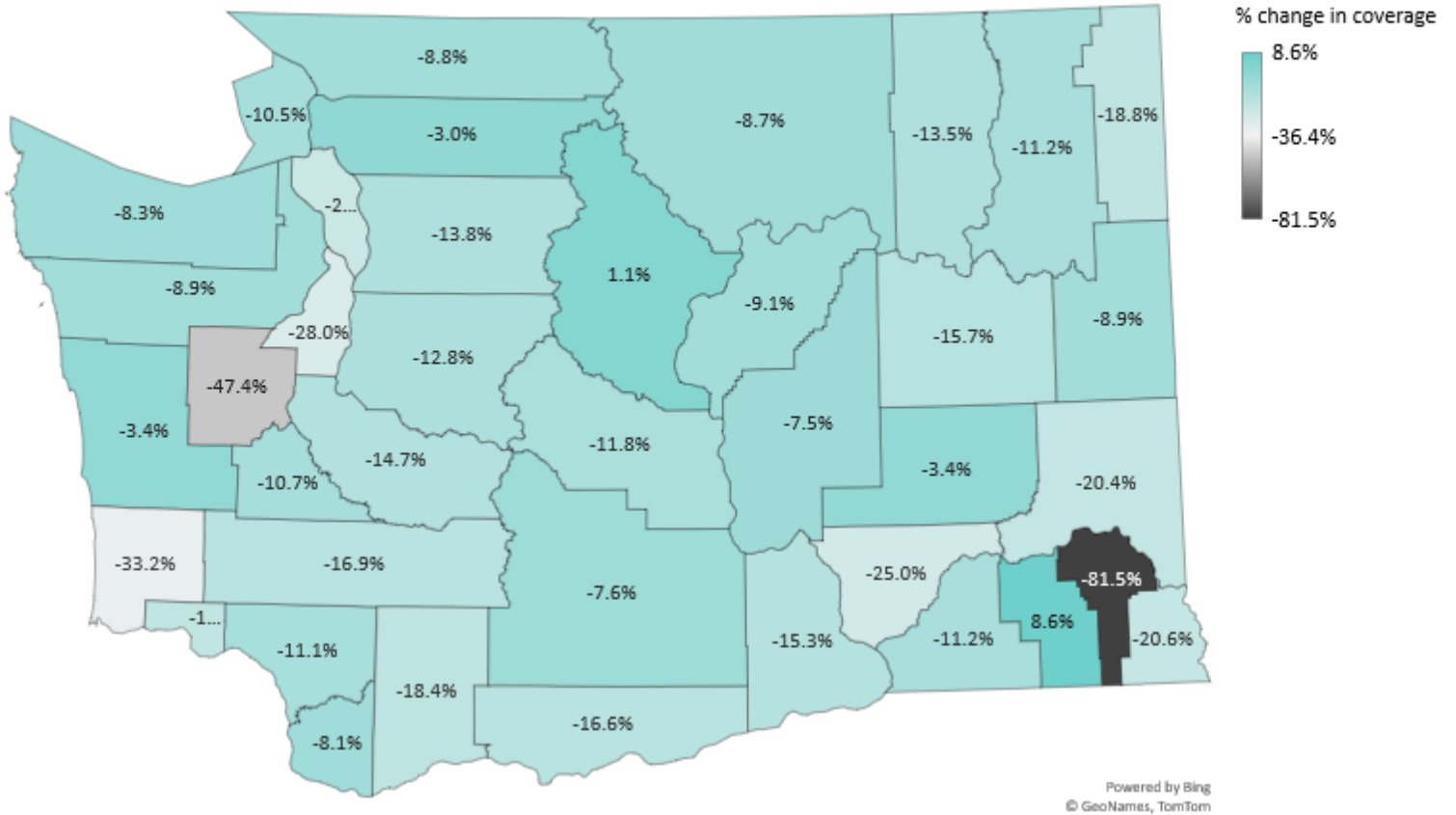
Figure 3:



County

Figure 4:

Percent change in coverage for fully vaccinated children 19-35 months, by county, from June 2019 to December 2021



Milestone age group 4-6 years

Summary Points

Doses Administered

- Statewide, the cumulative number of doses administered to 4 through 6 year-olds in 2021 was 13.3% fewer than the average doses administered in 2015-2019. This was an improvement over 2020 where there were 20.8% fewer doses administered compared to average.
- Most counties saw reductions in the number of vaccines administered in 2021 compared to the average doses administered between 2015-2019 (Figure 5).
 - Asotin county saw the greatest change from average with only 118 vaccine doses administered compared to an average of 588, representing a 79.9% absolute reduction (Table 2).
 - Franklin, Mason, and Clallam counties saw improvements in the number of vaccines administered in 2021 compared to average, 2.8%, 3.9%, and 7.4% increases, respectively (Table 2).
- There were more doses administered in 2021 compared to 2020 in 30 counties. However, most counties remained below average (Figure 5).

Vaccine Coverage

- Vaccination coverage for the recommended series among 4-6 year-olds was 41.7% as of December 31, 2021, a 3.9% decrease in coverage as compared to June 15, 2019 (Figure 6).
 - After a steady decline from June 2019 through June 2020, coverage remained stable at a lower rate.
 - Coverage for completion of all individual vaccines within the series also decreased. The largest decrease was observed with MMR (decreasing 9.0% from 70.8% to 61.8%). PCV saw the smallest decrease of 4.5% from 72.8% to 68.3%.
- Vaccination coverage varied by age, with the largest decline among 5 year-olds. Between June 2020 and December 2021, 5 year-olds saw a 3.8% decrease in coverage (from 48.1% to 44.3%), and both 4 year-olds and 6 year-olds saw a slight increase in coverage (1.3% and 0.8% increase respectively) (Figure 7).
- Change in vaccination coverage between June 2019 and December 2021 varied by county (Figure 8).
 - Vaccination coverage decreased 5% or more in over half (23 of 39) of counties.
 - Douglas and Wahkiakum counties saw the largest decreases (19.1% and 26.7%, respectively).
 - Two counties showed coverage increases of greater than 5.0%: Skagit (9.6%) and Walla Walla (7.4%).
- Data are also shown in Tables A4-A6 of the Appendix at the end of this report.

Doses Administered

Figure 5:

Monthly Vaccines Administered to Children 4 - 6 years old in Washington State Comparing Average Number in 2015-2019 with 2020 and 2021

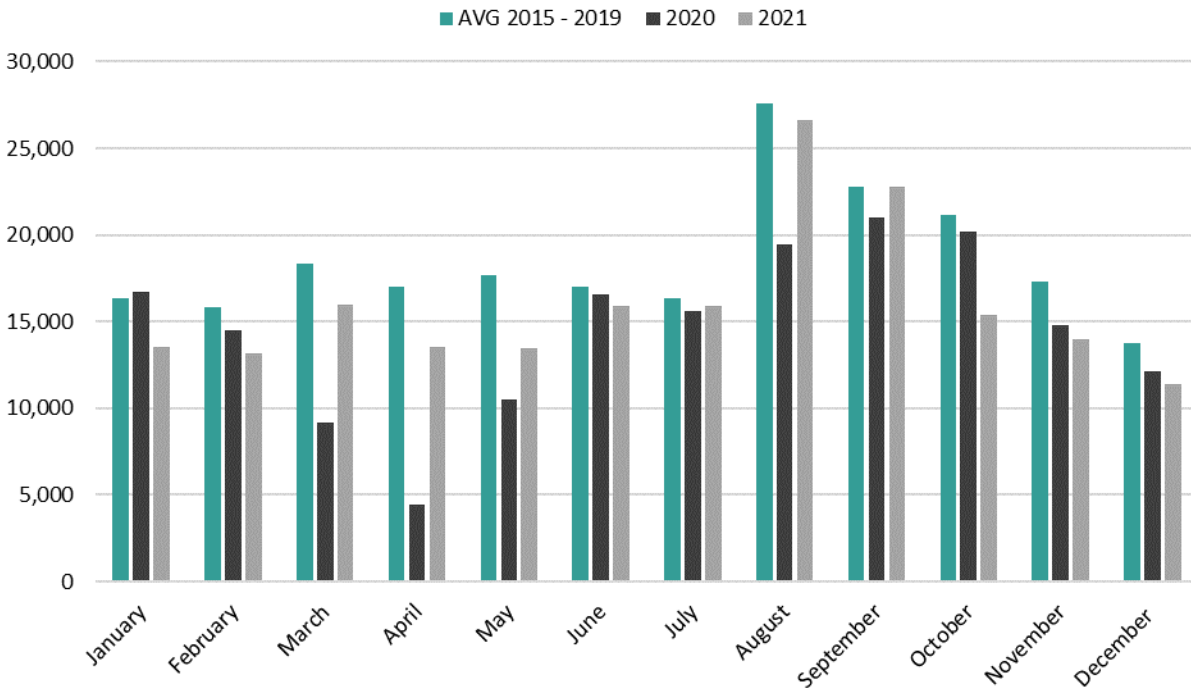
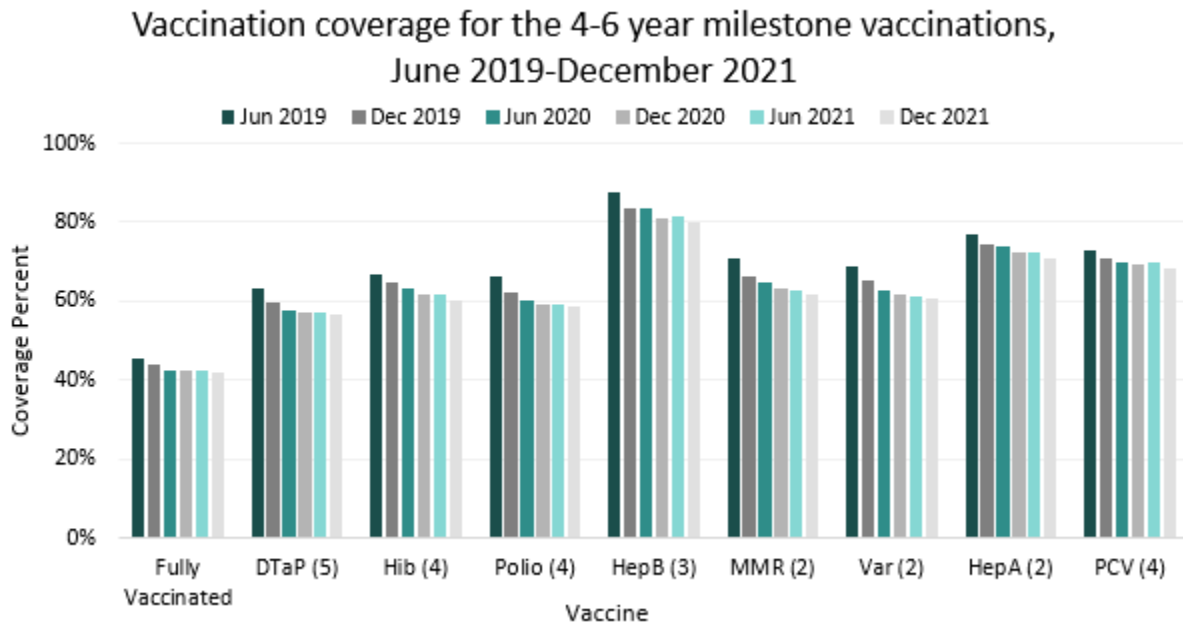


Table 2: 4-6 Years Age Group: Number of Vaccine Doses Administered by County and Year of Administration

County	Average Doses Administered 2015-2019	Doses Administered 2020	2020 Percent Change from Average	Doses Administered 2021	2021 Percent Change from Average
ADAMS	1,157	967	-16.4%	1,090	-5.8%
ASOTIN	588	123	-79.1%	118	-79.9%
BENTON	7,587	6,794	-10.4%	6,483	-14.5%
CHELAN	3,021	2,618	-13.3%	3,004	-0.6%
CLALLAM	1,401	1,265	-9.7%	1,504	7.4%
CLARK	14,910	11,758	-21.1%	13,435	-9.9%
COLUMBIA	39	43	10.3%	38	-2.6%
COWLITZ	3,149	2,364	-24.9%	2,753	-12.6%
DOUGLAS	664	607	-8.6%	606	-8.7%
FERRY	112	88	-21.3%	98	-12.3%
FRANKLIN	3,676	3,111	-15.4%	3,779	2.8%
GARFIELD	30	7	-76.8%	12	-60.3%
GRANT	3,379	2,661	-21.3%	2,888	-14.5%
GRAYS HARBOR	1,553	1,301	-16.2%	1,459	-6.0%
ISLAND	1,301	831	-36.1%	882	-32.2%
JEFFERSON	450	300	-33.3%	381	-15.3%
KING	70,714	56,075	-20.7%	58,534	-17.2%
KITSAP	7,223	5,139	-28.9%	6,160	-14.7%
KITTITAS	1,104	788	-28.6%	864	-21.7%
KLICKITAT	432	308	-28.6%	348	-19.4%
LEWIS	2,123	1,928	-9.2%	1,747	-17.7%
LINCOLN	207	168	-18.8%	150	-27.5%
MASON	1,149	1,082	-5.8%	1,194	3.9%
OKANOGAN	1,324	919	-30.6%	1,043	-21.2%
PACIFIC	235	160	-31.8%	218	-7.1%
PEND OREILLE	280	213	-23.9%	167	-40.3%
PIERCE	26,798	18,918	-29.4%	22,881	-14.6%
SAN JUAN	278	240	-13.7%	242	-13.0%
SKAGIT	4,213	3,428	-18.6%	3,808	-9.6%
SKAMANIA	147	80	-45.7%	76	-48.4%
SNOHOMISH	20,322	16,113	-20.7%	17,930	-11.8%
SPOKANE	15,063	13,050	-13.4%	13,500	-10.4%
STEVENS	792	628	-20.7%	670	-15.4%
THURSTON	7,092	6,043	-14.8%	6,777	-4.4%
WAHIAKUM	29	26	-9.7%	20	-30.6%
WALLA WALLA	1,941	1,579	-18.7%	1,711	-11.9%
WHATCOM	5,952	4,636	-22.1%	5,033	-15.4%
WHITMAN	1,159	964	-16.9%	1,029	-11.2%
YAKIMA	9,478	7,831	-17.4%	9,033	-4.7%
TOTAL	221,072	175,154	-20.8%	191,665	-13.3%

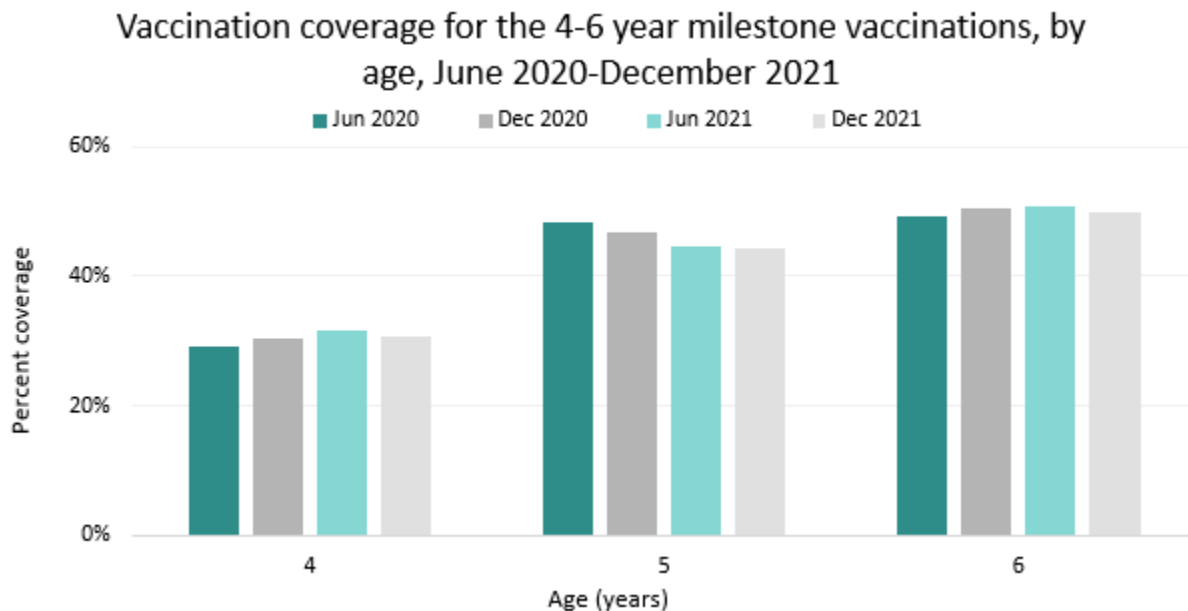
Vaccination Coverage

Figure 6:



Age

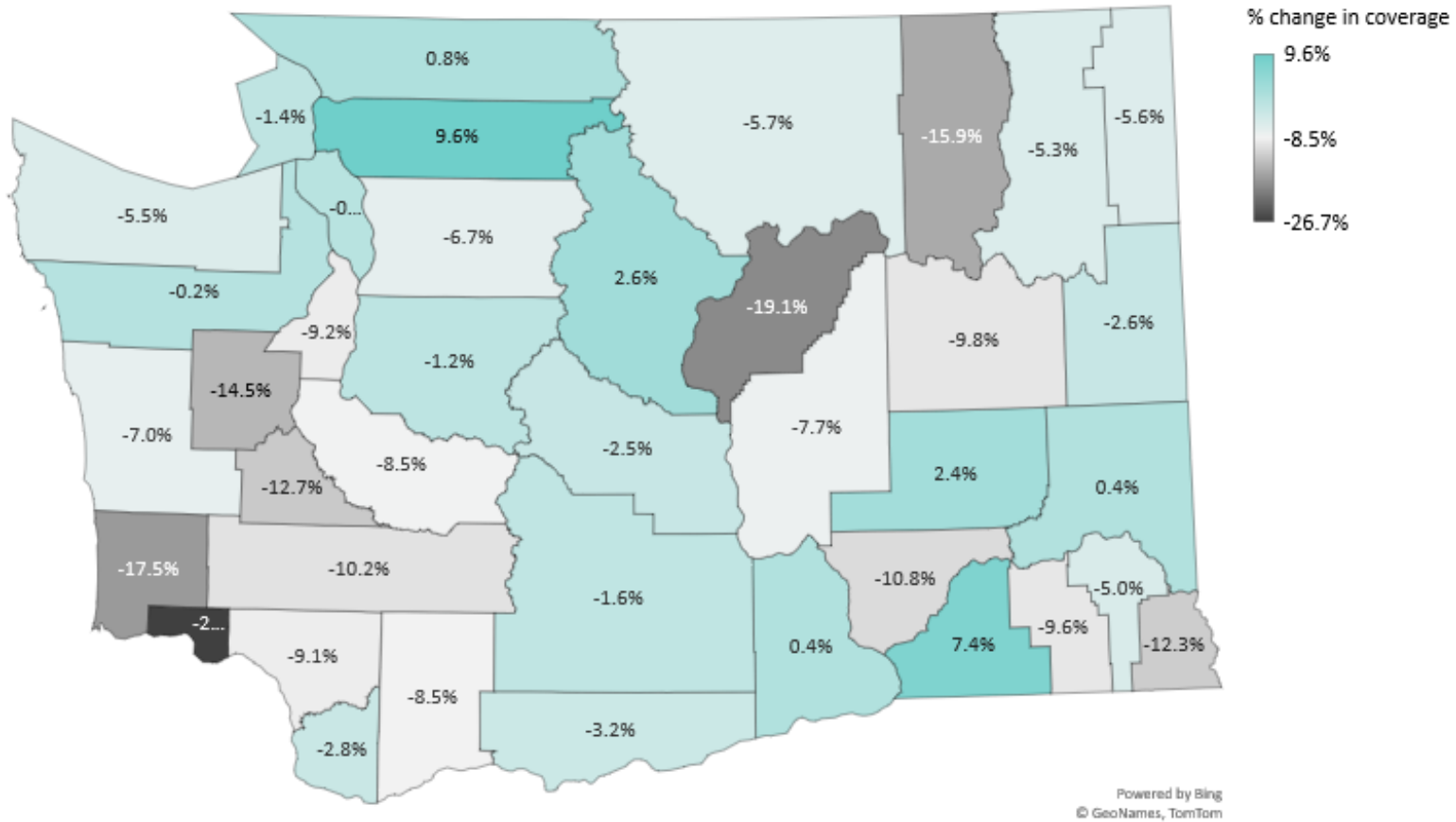
Figure 7:



County

Figure 8:

Percent change in coverage for fully vaccinated children 4-6 years, by county, from June 2019 to December 2021



Milestone age group 11-12 years

Summary Points

Doses Administered

- The cumulative number of doses administered statewide to 11-12 year-olds in 2021 came closest to the pre-pandemic average, but was lower by 5.8%. Temporal trends were observed with the greatest number of vaccines in this group administered in late summer and early fall. In September 2021, the number of doses administered was greater than both those administered in 2020, as well as the pre-pandemic average.
- In the 11-12 year age group, 31 of 39 counties saw reductions in the number of vaccines administered in 2021 compared to the average doses administered between 2015-2019 (Figure 9 and Table 3).
 - Asotin county saw the greatest reduction in vaccine doses administered: 142 doses in 2021 compared to an average of 520, representing a 72.7% decrease.
 - Eight counties (Whitman, Kittitas, Grays Harbor, Mason, Franklin, Chelan, San Juan, and Adams) saw an increase in doses administered compared to average. The percent difference ranged from 0.4% to 15.1%.
- All counties administered more doses in 2021 than they did in 2020. Mason, Franklin, Chelan, San Juan, and Adams county administered greater than 5% more doses than the average doses administered in 2015-2019 (Table 3).

Vaccination Coverage

- Vaccination coverage for the recommended series among 11-12 year-olds was 33.2% as of December 31, 2021, a 3.6% decrease in coverage as compared to June 15, 2019 (Figure 10).
 - While coverage decreased slightly every six months from June 2019 to June 2021, in December 2021, coverage slightly increased (1.8%).
 - Coverage for completion of individual vaccines within the series also decreased. The largest decrease was observed with Tdap (decreasing 9.1%, from 57.9% to 48.8%). MCV saw the next greatest decrease of 6.5%, from 48.7% to 42.2%. HPV decreased by 3.2% (39.6% to 36.4%).
- Vaccination coverage varied by age. Between June 2020 and December 2021, rates of fully vaccinated 11 year-olds increased 2.4% (from 21.2% to 23.6%), while rates of fully vaccinated 12 year-olds decreased by 4.8% (from 47.3% to 42.5%) (Figure 11).
- Change in vaccination coverage between June 2019 and December 2021 varied by county (Figure 12).
 - Vaccination coverage decreased 5% or more in 14 of 39 counties.
 - Ferry (14.2% decrease) and Wahkiakum (11.3% decrease) counties saw the largest decreases.

- No counties showed increases in coverage of greater than 5.0%. Adams county showed the greatest increase in coverage (3.1% increase).
- Data are also shown in Tables A7-A9 of the Appendix at the end of this report.

Doses Administered

Figure 9:

Monthly Vaccines Administered to Adolescents 11 - 12 years old in Washington State Comparing Average Number in 2015-2019 with 2020 and 2021

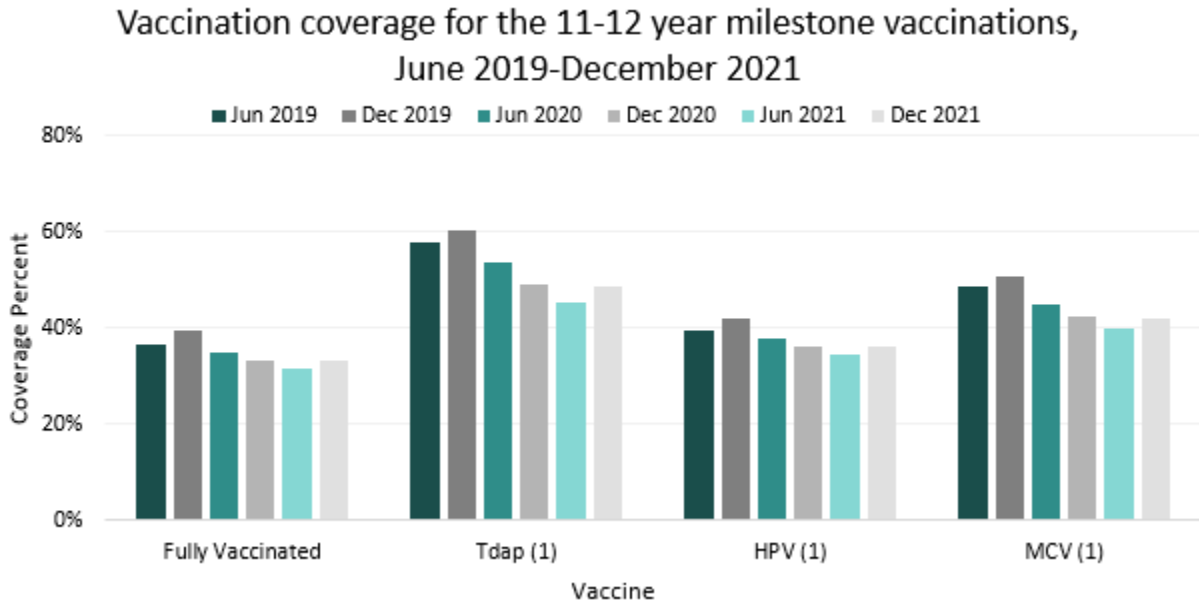


Table 3: 11-12 Year Age Group: Number of Vaccine Doses Administered by County and Year of Administration

County	Average Doses Administered 2015-2019	Doses Administered 2020	2020 Percent Change from Average	Doses Administered 2021	2021 Percent Change from Average
ADAMS	1,743	1,077	-38.2%	2,006	15.1%
ASOTIN	520	121	-76.7%	142	-72.7%
BENTON	8,463	6,250	-26.1%	7,592	-10.3%
CHELAN	4,089	2,838	-30.6%	4,507	10.2%
CLALLAM	1,496	815	-45.5%	1,461	-2.3%
CLARK	17,106	12,154	-28.9%	16,989	-0.7%
COLUMBIA	75	23	-69.5%	29	-61.5%
COWLITZ	3,842	2,417	-37.1%	3,220	-16.2%
DOUGLAS	1,117	617	-44.8%	1,046	-6.3%
FERRY	152	66	-56.6%	123	-19.1%
FRANKLIN	4,638	3,211	-30.8%	4,876	5.1%
GARFIELD	37	16	-57.2%	27	-27.8%
GRANT	4,689	3,244	-30.8%	4,213	-10.2%
GRAYS HARBOR	1,988	1,392	-30.0%	2,026	1.9%
ISLAND	1,390	858	-38.3%	1,008	-27.5%
JEFFERSON	462	274	-40.7%	416	-10.0%
KING	82,237	60,881	-26.0%	77,714	-5.5%
KITSAP	8,121	4,735	-41.7%	7,023	-13.5%
KITTITAS	983	691	-29.7%	987	0.4%
KLICKITAT	404	215	-46.8%	339	-16.0%
LEWIS	2,424	1,974	-18.6%	2,297	-5.2%
LINCOLN	268	175	-34.8%	220	-18.0%
MASON	1,232	937	-23.9%	1,295	5.1%
OKANOGAN	1,629	823	-49.5%	1,222	-25.0%
PACIFIC	340	189	-44.4%	276	-18.9%
PEND OREILLE	210	159	-24.2%	184	-12.3%
PIERCE	30,086	18,751	-37.7%	28,226	-6.2%
SAN JUAN	278	175	-37.1%	314	12.9%
SKAGIT	5,145	3,868	-24.8%	4,667	-9.3%
SKAMANIA	123	50	-59.5%	84	-31.9%
SNOHOMISH	23,426	15,762	-32.7%	21,773	-7.1%
SPOKANE	16,702	12,877	-22.9%	16,436	-1.6%
STEVENS	846	457	-46.0%	666	-21.3%
THURSTON	8,297	6,434	-22.5%	8,030	-3.2%
WAHKIAKUM	42	20	-52.8%	39	-8.0%
WALLA WALLA	2,620	1,769	-32.5%	2,495	-4.8%
WHATCOM	6,561	4,646	-29.2%	5,841	-11.0%
WHITMAN	1,143	876	-23.4%	1,148	0.4%
YAKIMA	13,680	8,606	-37.1%	12,730	-6.9%
TOTAL	258,607	180,443	-30.2%	243,687	-5.8%

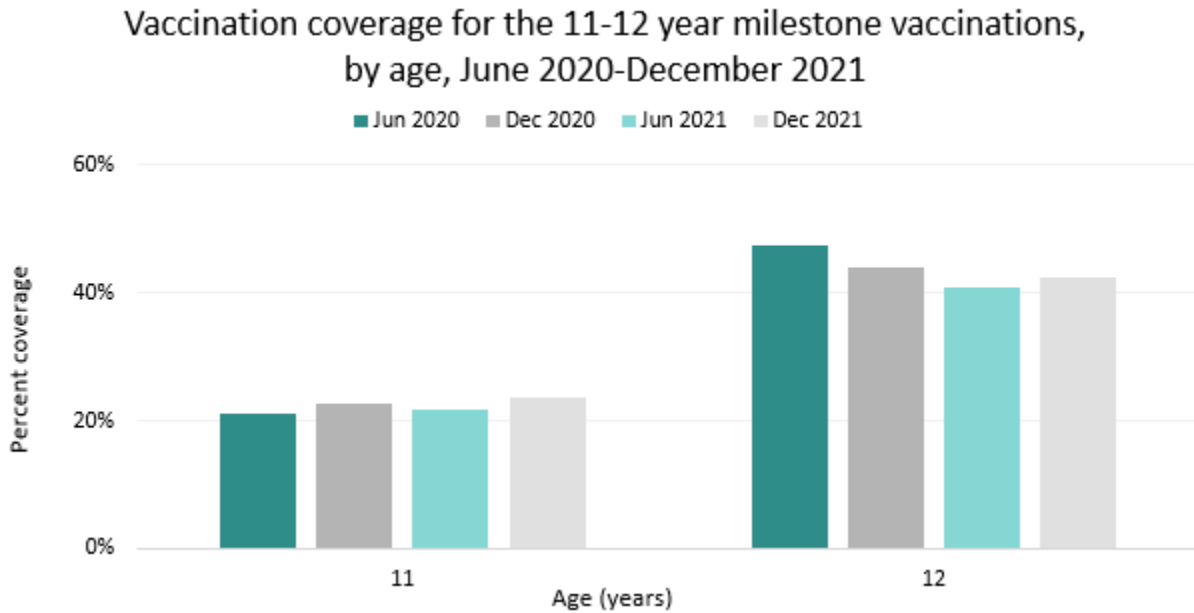
Vaccination Coverage

Figure 10:



Age

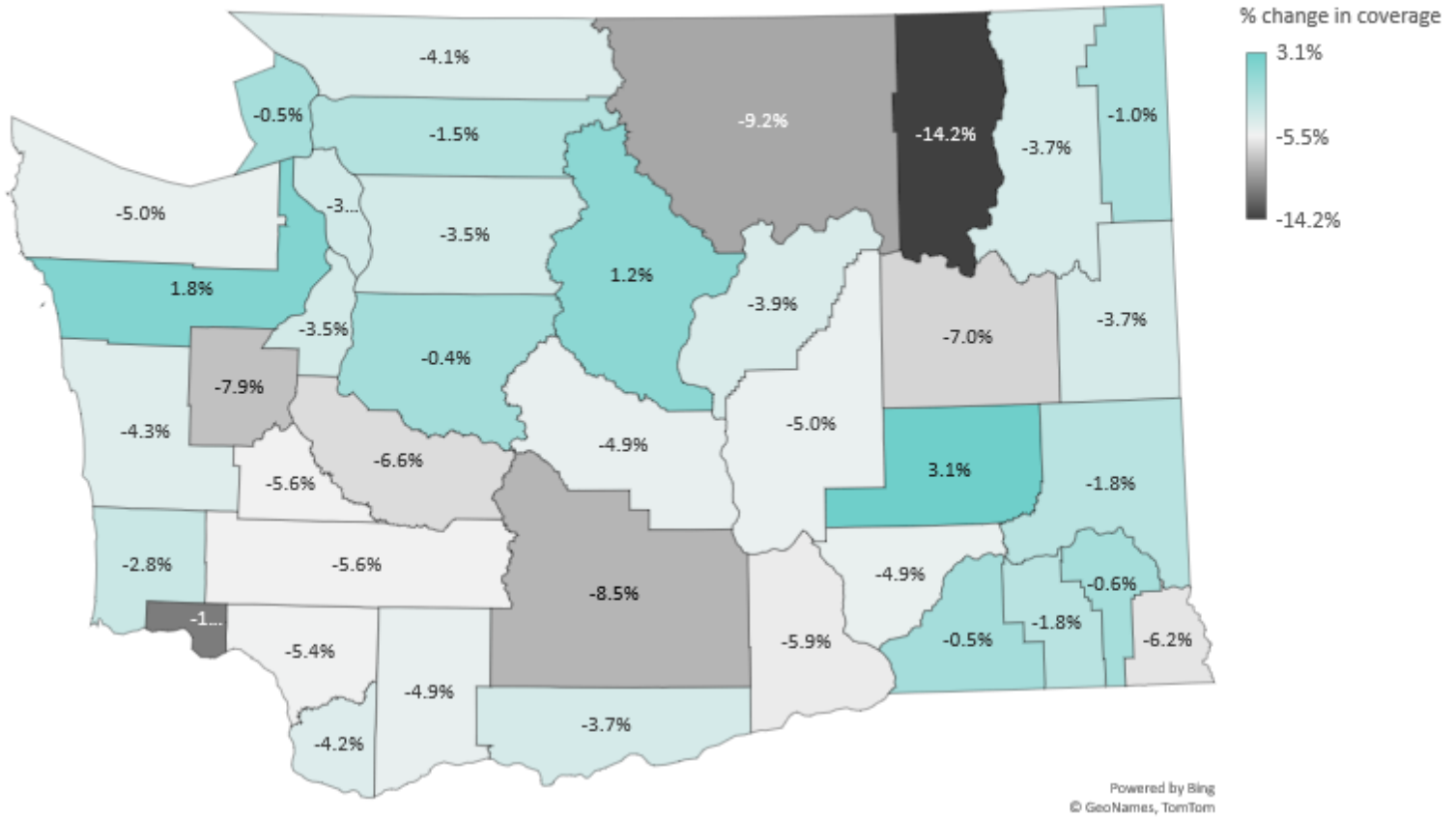
Figure 11:



County

Figure 12:

Percent change in coverage for fully vaccinated children 11-12 years, by county, from June 2019 to December 2021



Milestone age group 13-17 years

Summary Points

Doses Administered

- The number of doses administered to 13-17 year-olds in 2021 was 16.8% fewer than the average number of doses administered in 2015-2019. From March to September 2021, the number of doses administered was greater than in 2020, with the number of doses administered in March and September returning to pre-pandemic average dose administration levels.
- In the 13-17 year age group, the majority of counties saw absolute reductions in the number of vaccines administered in 2021 compared to the average doses administered between 2015-2019 (Table 4).
 - Only four counties (Whitman, Franklin, Skagit, and Grays Harbor) administered more vaccine doses in 2021 compared to the pre-pandemic average.

Vaccination Coverage

- Vaccination coverage for the recommended series among 13 to 17 year-olds was 42.1% as of December 31, 2021, a 1.3% increase in coverage as compared to June 15, 2019 (Figure 14).
 - Coverage of each vaccine within the series also remained relatively stable.
- Vaccination coverage varied by age. Between June 2020 and December 2021, rates for fully vaccinated 13 year-olds decreased by 0.6% (from 33.1% to 32.5%), while rates for fully vaccinated 14, 15, 16 and 17 year-olds increased (1.4%, 1.2%, 2.3%, and 3.1%, respectively) (Figure 15).
- Change in vaccination coverage between June 2019 and December 2021 varied by county, but the majority remained relatively stable (Figure 16).
 - Vaccination coverage decreased 5% or more in two counties (5.1% of all counties): Ferry (5.8% decrease) and Kittitas (8.3% decrease).
 - Skagit (5.7% increase) and Skamania (5.1% increase) were the only two counties to have coverage increase by more than 5%.
- Data are also shown in Tables A10-A12 of the Appendix at the end of this report.

Doses Administered

Figure 13:

Monthly Vaccines Administered to Teens 13 - 17 years old in Washington State Comparing Average Number in 2015-2019 with 2020

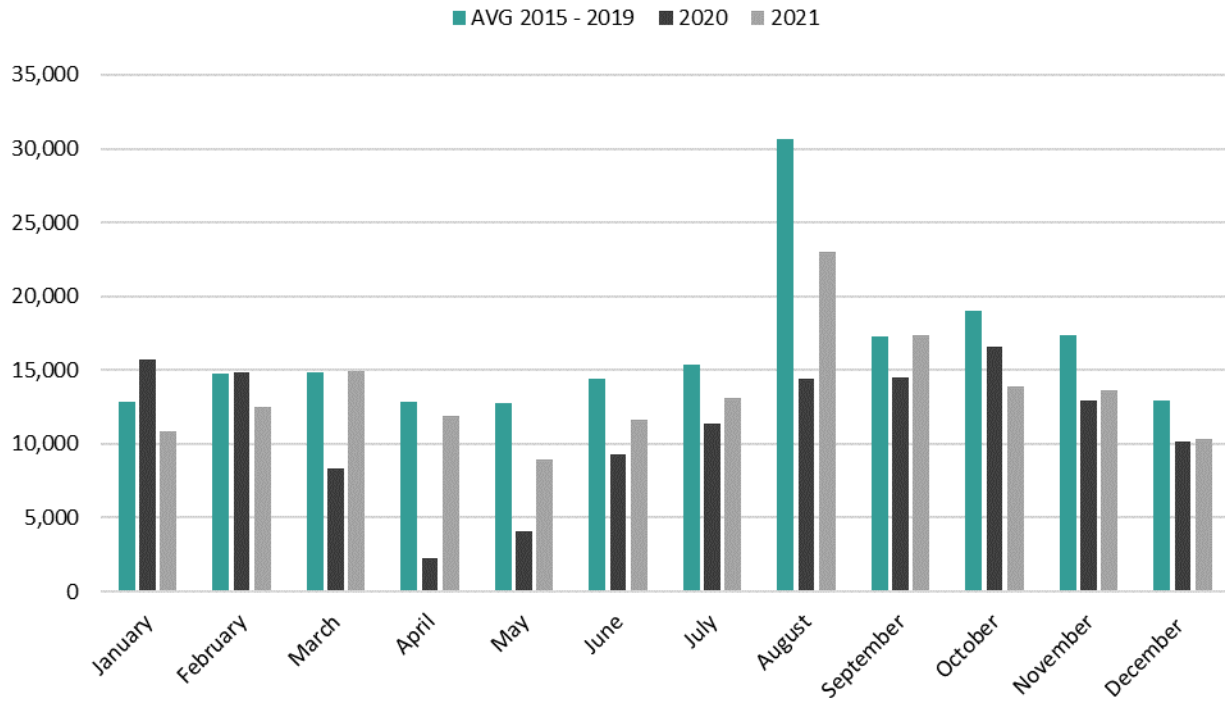
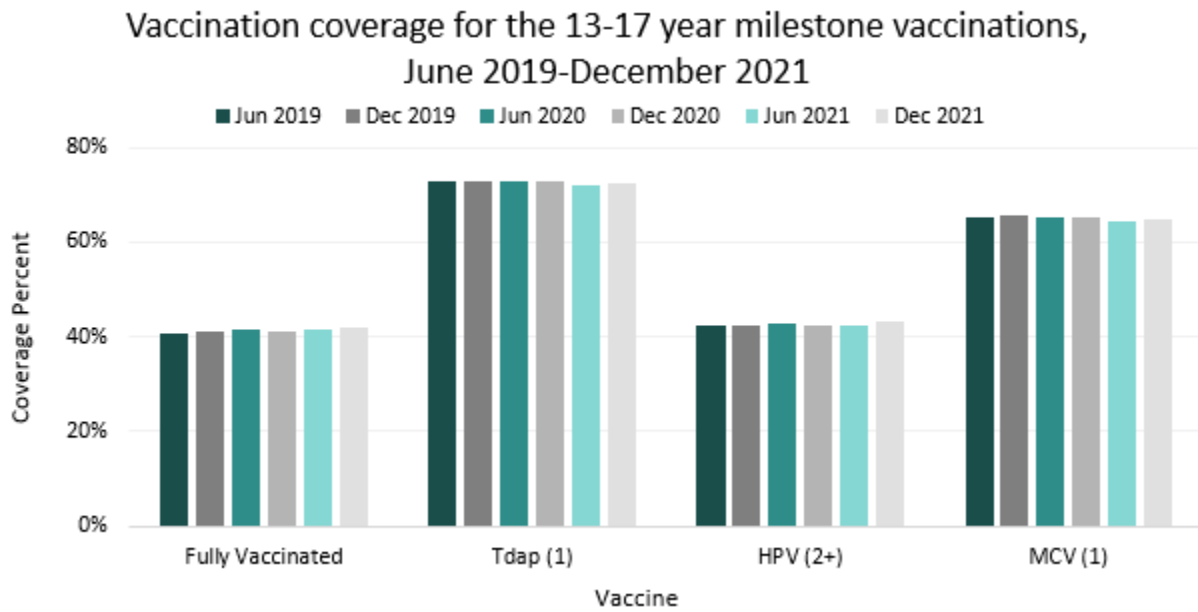


Table 4: 13-17 Age Group: Number of Vaccine Doses Administered by County and Year of Administration

County	Average Doses Administered 2015-2019	Doses Administered 2020	2020 Percent Change from Average	Doses Administered 2021	2021 Percent Change from Average
ADAMS	1,110	668	-39.8%	1,097	-1.2%
ASOTIN	310	146	-52.9%	160	-48.4%
BENTON	6,190	5,260	-15.0%	5,172	-16.4%
CHELAN	2,803	1,702	-39.3%	2,356	-15.9%
CLALLAM	1,263	936	-25.9%	1,092	-13.5%
CLARK	12,864	8,875	-31.0%	10,574	-17.8%
COLUMBIA	55	23	-57.9%	23	-57.9%
COWLITZ	2,749	1,586	-42.3%	1,691	-38.5%
DOUGLAS	769	375	-51.3%	562	-27.0%
FERRY	104	55	-47.3%	97	-7.1%
FRANKLIN	3,201	2,199	-31.3%	3,247	1.4%
GARFIELD	41	19	-53.4%	10	-75.5%
GRANT	3,107	1,930	-37.9%	2,538	-18.3%
GRAYS HARBOR	1,240	1,046	-15.6%	1,464	18.1%
ISLAND	1,184	860	-27.4%	918	-22.5%
JEFFERSON	489	339	-30.6%	432	-11.6%
KING	64,214	44,466	-30.8%	52,754	-17.8%
KITSAP	6,684	3,904	-41.6%	4,822	-27.9%
KITTITAS	848	755	-10.9%	742	-12.5%
KLICKITAT	367	280	-23.6%	313	-14.6%
LEWIS	1,837	1,574	-14.3%	1,448	-21.2%
LINCOLN	270	167	-38.1%	230	-14.8%
MASON	1,028	841	-18.2%	992	-3.5%
OKANOGAN	1,369	695	-49.2%	893	-34.8%
PACIFIC	558	343	-38.5%	357	-36.0%
PEND OREILLE	211	190	-10.0%	128	-39.3%
PIERCE	19,988	13,352	-33.2%	17,822	-10.8%
SAN JUAN	424	268	-36.8%	263	-38.0%
SKAGIT	3,520	3,306	-6.1%	3,595	2.1%
SKAMANIA	99	46	-53.3%	47	-52.3%
SNOHOMISH	18,670	12,135	-35.0%	15,600	-16.4%
SPOKANE	13,225	10,050	-24.0%	10,818	-18.2%
STEVENS	826	414	-49.9%	595	-28.0%
THURSTON	6,814	5,155	-24.3%	5,934	-12.9%
WAHKIAKUM	32	12	-62.5%	10	-68.8%
WALLA WALLA	1,755	1,051	-40.1%	1,387	-21.0%
WHATCOM	5,843	3,991	-31.7%	4,322	-26.0%
WHITMAN	810	664	-18.0%	817	0.9%
YAKIMA	8,032	4,875	-39.3%	6,833	-14.9%
TOTAL	194,901	134,553	-31.0%	162,155	-16.8%

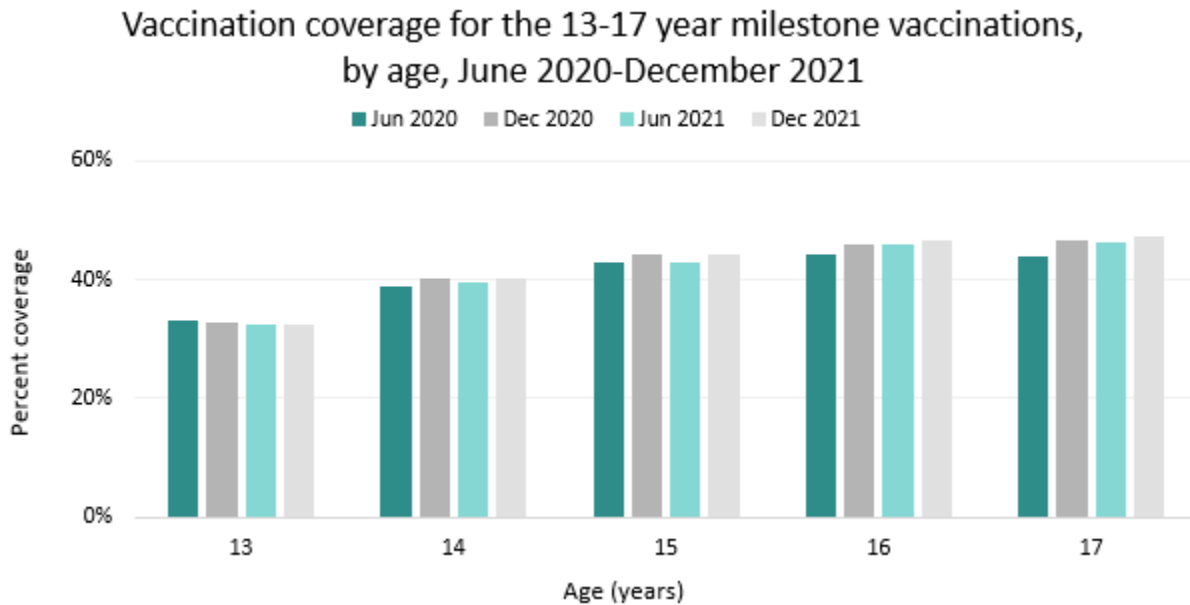
Vaccination Coverage

Figure 14:



Age

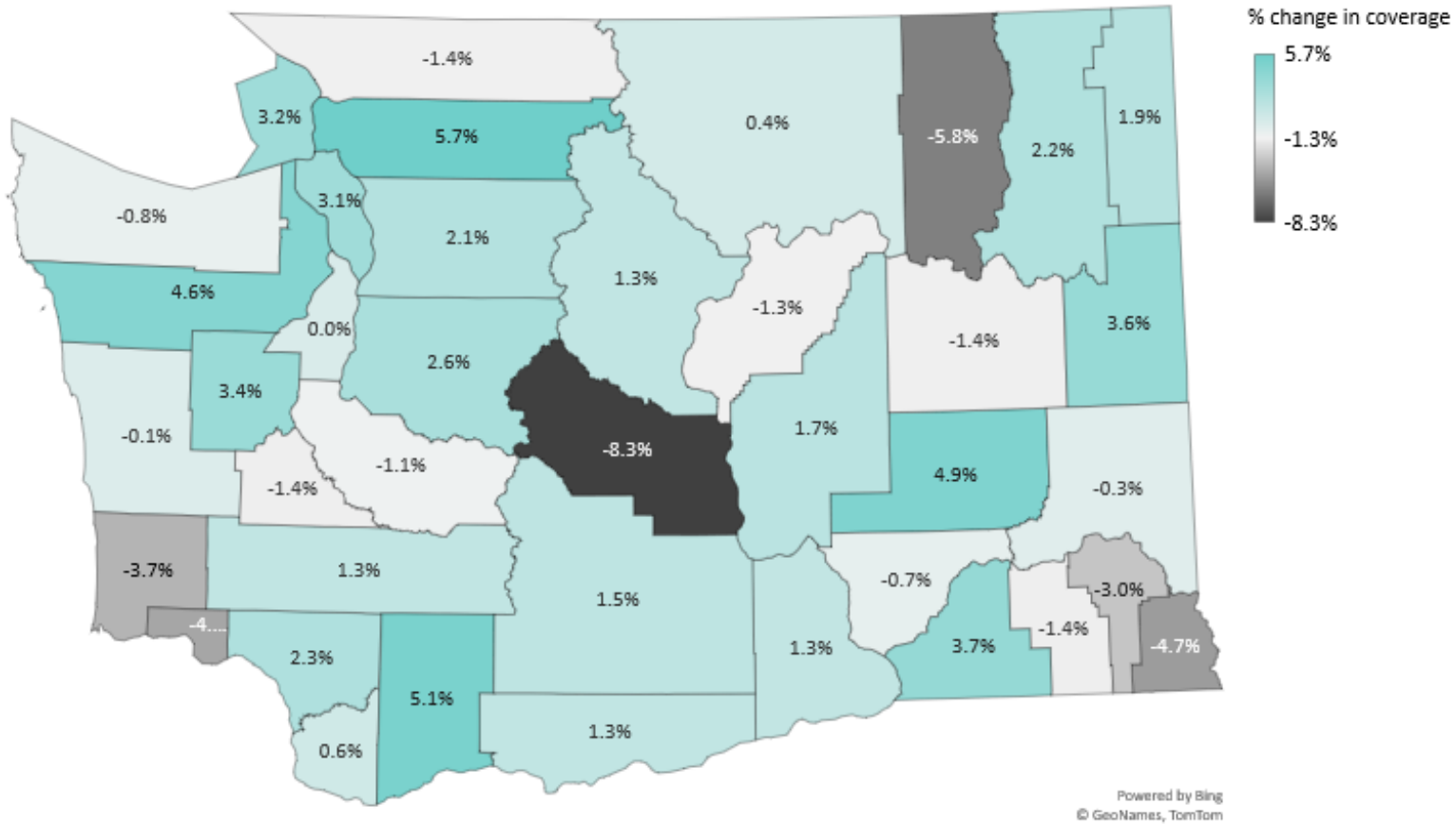
Figure 15:



County

Figure 16:

Percent change in coverage for fully vaccinated children 13-17 years, by county, from June 2019 to December 2021



Limitations

This project has several limitations to the data used in this report, including:

- Because reporting to WAIS is voluntary, not all providers report all immunization for their patients. This means that WAIS estimates of immunization administration and coverage will be lower than the true immunization numbers.
- The population of patients captured in the IIS may not reflect the true population of WA due to how patients are loaded into and removed from WAIS.
- The COVID-19 pandemic is ongoing, and it is unclear how each wave of COVID-19 impacted access to healthcare or providers capacity to report data.

Appendix

Table A1: Vaccination coverage for the 19-35 month milestone vaccinations, June 2019-December 2021

Vaccine	Jun 2019	Dec 2019	Jun 2020	Dec 2020	Jun 2021	Dec 2021
Fully Vaccinated	66.4%	57.6%	62.0%	58.4%	61.2%	56.8%
DTaP (4)	74.6%	64.1%	69.2%	65.1%	68.3%	63.8%
Hib (3)	84.6%	75.6%	79.8%	75.4%	79.2%	74.9%
Polio (3)	84.8%	75.8%	80.4%	76.1%	80.1%	75.9%
HepB (3)	84.3%	75.0%	80.2%	75.9%	80.3%	76.2%
MMR (1)	85.3%	75.8%	80.6%	75.1%	78.7%	74.3%
Var (1)	83.0%	73.9%	78.6%	73.9%	77.5%	73.4%
PCV (4)	73.3%	65.0%	68.8%	64.8%	67.9%	63.4%

Table A2: Vaccination coverage for the 19-35 month milestone vaccinations by age, June 2020-December 2021

Age (months)	Jun 2020	Dec 2020	Jun 2021	Dec 2021
19-23	58.8%	53.3%	58.8%	51.0%
24-35	63.1%	60.3%	62.2%	59.1%

Table A3: Percent change for fully vaccinated children 19-35 months, by county, from June 2019-December 2021

County	Jun 2019	Dec 2019	Jun 2020	Dec 2020	Jun 2021	Dec 2021
ADAMS	73.9%	70.4%	66.5%	69.1%	78.5%	70.5%
ASOTIN	35.9%	19.7%	12.9%	11.4%	16.6%	15.3%
BENTON	78.4%	63.8%	65.4%	61.1%	66.0%	63.1%
CHELAN	66.5%	63.1%	68.2%	64.0%	70.9%	67.6%
CLALLAM	60.5%	54.8%	54.9%	51.2%	54.4%	52.2%
CLARK	56.8%	45.1%	53.4%	50.4%	51.9%	48.6%
COLUMBIA	51.0%	43.1%	77.8%	68.5%	71.2%	59.6%
COWLITZ	69.5%	51.0%	64.4%	60.8%	62.4%	58.4%
DOUGLAS	76.5%	66.1%	74.7%	66.4%	68.4%	67.4%
FERRY	50.5%	43.2%	48.4%	43.0%	39.0%	37.0%
FRANKLIN	91.2%	63.7%	66.6%	63.7%	67.1%	66.1%
GARFIELD	108.0%	0.0%	33.3%	0.0%	26.5%	26.5%
GRANT	72.9%	67.9%	68.5%	66.4%	69.8%	65.4%
GRAYS HARBOR	61.5%	58.0%	58.1%	57.5%	62.9%	58.1%
ISLAND	67.3%	34.2%	46.5%	45.2%	48.5%	44.5%
JEFFERSON	66.7%	51.6%	53.3%	54.7%	59.4%	57.7%
KING	73.4%	63.4%	68.0%	64.1%	66.4%	60.6%
KITSAP	78.1%	46.7%	56.8%	52.1%	55.8%	50.1%
KITTITAS	70.9%	64.8%	66.5%	63.0%	62.7%	59.0%
KLICKITAT	35.9%	31.2%	27.3%	26.3%	23.6%	19.3%
LEWIS	75.8%	63.9%	66.5%	64.8%	62.4%	58.9%
LINCOLN	72.1%	62.8%	66.7%	59.8%	61.5%	56.4%
MASON	103.1%	49.6%	61.6%	59.9%	59.4%	55.7%
OKANOGAN	57.2%	52.2%	52.3%	48.7%	54.1%	48.5%
PACIFIC	61.5%	42.8%	41.8%	36.3%	29.1%	28.3%
PEND OREILLE	53.2%	40.5%	40.8%	39.1%	39.6%	34.4%
PIERCE	64.0%	46.0%	53.0%	49.0%	53.1%	49.4%
SAN JUAN	55.8%	49.2%	41.7%	43.6%	47.1%	45.3%
SKAGIT	61.2%	53.5%	58.6%	59.2%	61.1%	58.2%
SKAMANIA	45.1%	40.7%	37.0%	32.4%	31.0%	26.7%
SNOHOMISH	73.2%	61.2%	65.0%	62.0%	63.9%	59.4%
SPOKANE	64.3%	58.1%	60.4%	57.0%	58.4%	55.4%
STEVENS	47.3%	41.2%	45.8%	41.2%	41.7%	36.1%
THURSTON	65.1%	52.6%	54.4%	52.7%	58.5%	54.5%
WAHAKIUM	47.2%	41.7%	58.1%	44.2%	36.1%	27.8%
WALLA WALLA	73.2%	62.9%	67.1%	62.7%	67.5%	62.0%
WHATCOM	68.7%	62.4%	67.0%	62.0%	63.4%	59.9%
WHITMAN	79.8%	54.8%	65.7%	57.3%	63.3%	59.4%
YAKIMA	71.3%	64.3%	70.2%	64.7%	68.3%	63.6%

Table A4: Vaccination coverage for the 4-6 year milestone vaccinations, June 2019-December 2021

Vaccine	Jun 2019	Dec 2019	Jun 2020	Dec 2020	Jun 2021	Dec 2021
Fully Vaccinated	45.6%	44.1%	42.3%	42.6%	42.4%	41.7%
DTaP (5)	63.5%	59.5%	57.8%	57.2%	57.4%	56.6%
Hib (4)	66.8%	64.6%	63.1%	62.0%	61.9%	60.1%
Polio (4)	66.4%	62.0%	60.3%	59.4%	59.4%	58.5%
HepB (3)	87.5%	83.4%	83.4%	81.2%	81.6%	79.8%
MMR (2)	70.8%	66.5%	64.7%	63.1%	62.8%	61.8%
Var (2)	69.0%	65.1%	63.0%	62.0%	61.4%	60.5%
HepA (2)	76.8%	74.5%	73.7%	72.3%	72.4%	71.0%
PCV (4)	72.8%	70.9%	70.1%	69.2%	69.6%	68.3%

Table A5: Vaccination coverage for the 4-6 year milestone vaccinations by age, June 2020-December 2021

Age (years)	Jun 2020	Dec 2020	Jun 2021	Dec 2021
4	29.3%	30.3%	31.5%	30.6%
5	48.1%	46.8%	44.6%	44.3%
6	49.1%	50.4%	50.8%	49.9%

Table A6: Percent change for fully vaccinated children 4-6 years, by county, from June 2019-December 2021

County	Jun 2019	Dec 2019	Jun 2020	Dec 2020	Jun 2021	Dec 2021
ADAMS	59.3%	63.3%	60.1%	61.1%	61.6%	61.8%
ASOTIN	21.4%	13.1%	13.4%	10.5%	10.6%	9.1%
BENTON	49.1%	51.9%	50.3%	49.7%	50.4%	49.5%
CHELAN	53.6%	58.8%	54.5%	56.2%	57.4%	56.2%
CLALLAM	37.6%	37.0%	34.0%	33.6%	33.1%	32.1%
CLARK	27.6%	25.3%	23.9%	24.4%	25.2%	24.8%
COLUMBIA	51.6%	39.8%	36.9%	46.2%	41.2%	42.0%
COWLITZ	40.7%	34.9%	32.9%	31.7%	32.1%	31.6%
DOUGLAS	78.6%	59.5%	60.3%	61.2%	59.7%	59.5%
FERRY	36.9%	28.9%	27.3%	24.5%	23.9%	21.0%
FRANKLIN	64.3%	54.9%	50.3%	53.5%	53.2%	53.5%
GARFIELD	41.7%	36.5%	40.0%	30.5%	44.6%	36.6%
GRANT	61.2%	54.4%	55.3%	54.7%	55.1%	53.5%
GRAYS HARBOR	52.1%	48.9%	43.5%	45.6%	46.6%	45.1%
ISLAND	25.1%	21.2%	22.6%	22.7%	25.2%	24.5%
JEFFERSON	17.8%	21.7%	19.5%	18.4%	19.1%	17.5%
KING	47.9%	49.2%	46.7%	48.3%	47.1%	46.7%
KITSAP	42.9%	37.9%	36.5%	35.3%	34.7%	33.7%
KITTITAS	53.3%	50.0%	52.1%	50.7%	52.9%	50.8%
KLICKITAT	16.7%	14.0%	14.6%	13.5%	13.0%	13.6%
LEWIS	56.8%	50.8%	48.6%	48.9%	49.6%	46.6%
LINCOLN	52.8%	41.6%	43.8%	44.4%	42.8%	43.0%
MASON	52.7%	41.8%	41.2%	38.4%	39.0%	38.2%
OKANOGAN	47.1%	46.1%	39.7%	41.5%	40.7%	41.4%
PACIFIC	46.4%	35.3%	27.1%	29.2%	28.9%	28.9%
PEND OREILLE	21.1%	18.4%	16.3%	15.6%	16.5%	15.4%
PIERCE	43.9%	42.2%	39.1%	37.4%	37.2%	35.4%
SAN JUAN	29.9%	22.0%	27.9%	25.8%	28.5%	28.5%
SKAGIT	38.8%	42.0%	45.5%	48.0%	49.1%	48.4%
SKAMANIA	28.7%	21.0%	19.1%	19.4%	18.9%	20.2%
SNOHOMISH	54.8%	48.5%	48.0%	48.2%	48.2%	48.1%
SPOKANE	40.2%	36.9%	37.2%	36.8%	37.8%	37.6%
STEVENS	25.9%	21.6%	22.6%	21.8%	21.5%	20.6%
THURSTON	41.7%	35.3%	33.7%	31.8%	31.8%	29.0%
WAHKIAKUM	51.5%	35.0%	40.2%	28.0%	30.3%	24.8%
WALLA WALLA	46.0%	46.9%	46.8%	50.7%	53.6%	53.4%
WHATCOM	46.2%	44.3%	45.4%	46.6%	47.5%	47.0%
WHITMAN	41.6%	40.2%	39.3%	40.5%	41.5%	42.0%
YAKIMA	58.7%	58.4%	56.6%	56.8%	57.1%	57.2%

Table A7: Vaccination coverage for the 11-12 year milestone vaccinations, June 2019-December 2021

Vaccine	Jun 2019	Dec 2019	Jun 2020	Dec 2020	Jun 2021	Dec 2021
Fully Vaccinated	36.8%	39.4%	34.9%	33.4%	31.5%	33.2%
Tdap (1)	57.9%	60.3%	53.7%	49.2%	45.6%	48.8%
HPV (1)	39.6%	42.0%	38.0%	36.4%	34.5%	36.4%
MCV (1)	48.7%	50.7%	44.8%	42.3%	40.0%	42.2%

Table A8: Vaccination coverage for the 11-12 year milestone vaccinations by age, June 2020-December 2021

Age (years)	Jun 2020	Dec 2020	Jun 2021	Dec 2021
11	21.2%	22.6%	21.8%	23.6%
12	47.3%	43.9%	40.7%	42.5%

Table A9: Percent change for fully vaccinated children 11-12 years, by county, from June 2019-December 2021

County	Jun 2019	Dec 2019	Jun 2020	Dec 2020	Jun 2021	Dec 2021
ADAMS	43.7%	55.1%	45.3%	42.8%	42.0%	46.8%
ASOTIN	10.6%	8.6%	6.7%	6.0%	4.3%	4.5%
BENTON	34.5%	36.3%	32.2%	30.2%	28.5%	28.6%
CHELAN	37.1%	44.6%	36.1%	35.2%	35.0%	38.3%
CLALLAM	24.0%	26.0%	22.5%	19.0%	17.0%	19.0%
CLARK	31.5%	32.6%	28.9%	27.7%	26.0%	27.3%
COLUMBIA	21.2%	25.0%	18.3%	14.8%	14.0%	19.4%
COWLITZ	37.6%	40.9%	35.5%	34.6%	32.5%	32.3%
DOUGLAS	45.7%	49.2%	42.4%	39.2%	39.5%	41.8%
FERRY	27.5%	20.8%	16.4%	16.9%	15.1%	13.4%
FRANKLIN	42.2%	45.1%	38.1%	38.2%	36.0%	37.2%
GARFIELD	18.8%	21.3%	19.5%	14.6%	16.7%	18.2%
GRANT	43.0%	48.5%	43.9%	39.9%	36.9%	38.0%
GRAYS HARBOR	36.1%	40.7%	34.2%	31.5%	29.3%	31.8%
ISLAND	24.1%	21.3%	24.0%	20.8%	19.7%	20.7%
JEFFERSON	20.7%	29.5%	22.7%	23.4%	18.4%	22.5%
KING	40.3%	44.7%	39.3%	38.8%	36.6%	39.9%
KITSAP	31.5%	32.8%	31.0%	28.8%	26.6%	28.1%
KITTITAS	32.0%	33.1%	27.1%	26.3%	25.4%	27.1%
KLICKITAT	13.2%	14.2%	11.0%	10.8%	10.1%	9.5%
LEWIS	33.7%	36.7%	32.9%	30.2%	28.2%	28.1%
LINCOLN	33.5%	30.5%	28.3%	30.4%	25.7%	26.6%
MASON	38.8%	37.5%	32.9%	29.0%	28.0%	30.9%
OKANOGAN	31.8%	31.5%	26.4%	23.6%	21.4%	22.6%
PACIFIC	22.0%	22.8%	19.8%	19.8%	17.2%	19.1%
PEND OREILLE	11.5%	12.1%	11.5%	11.8%	10.8%	10.6%
PIERCE	36.5%	36.4%	33.0%	30.2%	28.9%	29.9%
SAN JUAN	21.8%	24.0%	16.8%	15.7%	14.7%	21.3%
SKAGIT	37.3%	42.4%	39.2%	38.5%	36.4%	35.8%
SKAMANIA	19.7%	25.7%	24.1%	19.6%	15.5%	14.8%
SNOHOMISH	38.2%	41.0%	36.0%	34.9%	32.8%	34.7%
SPOKANE	34.5%	37.1%	32.1%	31.5%	29.4%	30.8%
STEVENS	19.8%	22.2%	18.3%	16.7%	15.1%	16.1%
THURSTON	33.8%	31.6%	31.8%	30.8%	29.5%	28.2%
WAHKIAKUM	37.1%	28.9%	33.7%	28.8%	27.6%	25.9%
WALLA WALLA	37.7%	42.0%	37.1%	36.5%	35.4%	37.2%
WHATCOM	33.1%	36.3%	32.2%	31.2%	28.2%	29.0%
WHITMAN	28.7%	32.6%	26.5%	25.4%	23.8%	26.9%
YAKIMA	50.8%	54.2%	47.1%	42.7%	40.1%	42.3%

Table A10: Vaccination coverage for the 13-17 year milestone vaccinations, June 2019-December 2021

Vaccine	Jun 2019	Dec 2019	Jun 2020	Dec 2020	Jun 2021	Dec 2021
Fully Vaccinated	40.8%	41.1%	41.5%	41.3%	41.5%	42.1%
Tdap (1)	72.6%	72.6%	72.7%	72.7%	71.9%	72.3%
HPV (2+)	42.6%	42.5%	43.0%	42.5%	42.6%	43.0%
MCV (1)	65.0%	65.5%	65.2%	65.3%	64.5%	64.7%

Table A11: Vaccination coverage for the 13-17 year milestone vaccinations by age, June 2020-December 2021

Age (years)	Jun 2020	Dec 2020	Jun 2021	Dec 2021
13	33.1%	32.9%	32.5%	32.5%
14	38.8%	40.1%	39.4%	40.2%
15	42.9%	44.1%	43.0%	44.1%
16	44.2%	45.8%	45.7%	46.5%
17	44.0%	46.6%	46.3%	47.1%

Table A12: Percent change for fully vaccinated children 13-17 years, by county, from June 2019-December 2021

County	Jun 2019	Dec 2019	Jun 2020	Dec 2020	Jun 2021	Dec 2021
ADAMS	50.2%	51.6%	52.1%	52.1%	53.3%	55.1%
ASOTIN	16.7%	13.5%	14.2%	12.9%	13.2%	12.0%
BENTON	37.0%	37.0%	36.9%	37.2%	37.7%	38.3%
CHELAN	48.3%	50.4%	50.3%	49.7%	49.4%	49.6%
CLALLAM	30.8%	29.7%	31.5%	29.0%	30.0%	30.0%
CLARK	34.2%	33.9%	34.4%	34.5%	34.4%	34.8%
COLUMBIA	24.1%	27.4%	26.1%	25.7%	22.6%	22.6%
COWLITZ	39.4%	39.6%	40.5%	40.8%	41.5%	41.7%
DOUGLAS	54.9%	52.7%	53.9%	52.5%	52.9%	53.5%
FERRY	29.8%	28.2%	27.1%	27.3%	24.4%	24.0%
FRANKLIN	46.3%	46.0%	45.9%	45.7%	45.5%	45.6%
GARFIELD	26.7%	20.6%	24.0%	20.7%	21.6%	23.6%
GRANT	50.1%	51.4%	51.4%	51.5%	51.3%	51.9%
GRAYS HARBOR	40.1%	42.1%	39.9%	41.1%	40.1%	40.0%
ISLAND	23.8%	21.3%	25.9%	23.8%	26.4%	26.9%
JEFFERSON	26.4%	28.9%	30.6%	31.0%	30.8%	31.0%
KING	45.7%	47.2%	47.2%	47.4%	47.1%	48.3%
KITSAP	37.2%	37.1%	38.3%	36.4%	37.3%	37.2%
KITTITAS	46.2%	37.5%	39.0%	38.0%	38.4%	37.9%
KLICKITAT	13.9%	13.2%	13.9%	14.3%	15.0%	15.2%
LEWIS	38.1%	37.3%	38.8%	38.3%	39.6%	39.4%
LINCOLN	39.2%	37.1%	36.0%	37.9%	37.4%	37.8%
MASON	35.2%	37.2%	38.6%	38.0%	39.4%	38.6%
OKANOGAN	38.5%	41.4%	40.0%	39.9%	39.6%	39.0%
PACIFIC	28.2%	24.6%	25.2%	25.0%	24.4%	24.5%
PEND OREILLE	14.2%	13.7%	14.4%	14.3%	15.6%	16.1%
PIERCE	38.3%	37.4%	38.0%	37.1%	37.0%	37.2%
SAN JUAN	25.7%	26.6%	26.9%	28.9%	28.4%	28.8%
SKAGIT	40.7%	42.5%	43.0%	44.9%	45.9%	46.5%
SKAMANIA	19.1%	20.6%	21.2%	21.1%	23.1%	24.2%
SNOHOMISH	41.7%	41.6%	42.0%	42.2%	42.8%	43.7%
SPOKANE	35.9%	36.0%	37.4%	37.6%	38.9%	39.5%
STEVENS	21.6%	22.1%	23.2%	22.0%	23.4%	23.8%
THURSTON	40.2%	38.4%	38.9%	38.7%	38.6%	38.7%
WAHKIAKUM	37.1%	36.7%	39.8%	37.8%	34.0%	32.8%
WALLA WALLA	42.7%	42.5%	43.0%	43.9%	45.4%	46.4%
WHATCOM	43.4%	40.2%	42.1%	40.9%	41.2%	42.0%
WHITMAN	33.8%	31.7%	34.4%	29.8%	31.7%	33.5%
YAKIMA	53.4%	54.5%	54.4%	54.2%	54.5%	54.9%