

COVID-19 Cases, Hospitalizations, and Deaths in Persons Who Are Not Fully Vaccinated

Washington State Department of Health

August 11, 2021



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Publication Number: 421-010

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August 11, 2021

COVID-19 vaccines are effective and critical tools to aid in the control of the COVID-19 pandemic. This report provides an overview of confirmed and probable COVID-19 cases, hospitalizations, and deaths among persons who are not fully vaccinated in Washington state. The purpose is to provide a more comprehensive look at the impact of vaccines on COVID-19.

People who are **not** fully vaccinated include:

- Those who have not received any dose of a COVID-19 vaccine **or**
- Those who have received one or more doses of a COVID-19 vaccine but are not yet fully protected. Full protection from vaccination occurs about 2 weeks after receiving the final dose of an authorized COVID-19 vaccine because it typically takes that long for the body to build a high enough level of protection to fight the disease.

Even when a vaccine is highly effective, a small percentage of people who are fully vaccinated will still get COVID-19 if they are exposed to the virus that causes it. While vaccination rates are slowly increasing in Washington state, our case rates are surging. Increasing vaccination rates is the most important tool we have to ultimately decrease the number of COVID-19 cases that lead to hospitalization and death.

Summary Findings

At a glance ¹

- 95.5% of COVID-19 cases from February 1, 2021 – July 31, 2021 were not fully vaccinated
- 95.4% of COVID-19 cases from February 1, 2021 – July 24, 2021 who were hospitalized were not fully vaccinated
- 94.3% of COVID-19 cases from February 1, 2021 – July 10, 2021 who died from COVID-19 were not fully vaccinated

Context for understanding findings in this report

- More than 94.3% of all cases, hospitalizations, and deaths in individuals 12 years or older from Washington state can be attributed to individuals who have **not** been fully vaccinated.
- As of July 31, 2021, 60.6% of those in Washington state who are eligible to receive vaccines have completed an approved vaccination series. While the percentage of fully vaccinated individuals

¹ The dates included in this section are based on the most complete information available for COVID-19 cases, hospitalizations, and deaths. More information can be found in the Methods section of this report.

increased by nearly 1% from July 24-31, 2021, 31.1% of eligible individuals still had not initiated vaccination by July 31.

- **Vaccinations save lives.** Vaccination prevents severe illness and hospitalization and lowers your risk of dying from COVID-19.
- With the emergence of the Delta variant as the dominant strain in Washington and the U.S., it is more urgent than ever to ensure that everyone who is eligible gets vaccinated.
- The more than 4 million fully vaccinated Washingtonians are overwhelmingly avoiding severe illness from COVID-19 variants, including Delta.

COVID-19 cases in persons who are not fully vaccinated by county

COVID-19 cases in persons not fully vaccinated and the percent of the Washington state population that has not been fully vaccinated by county, *February – June 2021*

County	Number (%) cases in not fully vaccinated persons	Number (%) cases in fully vaccinated persons	Percent of population who are not fully vaccinated (12+)	Percent of population who are fully vaccinated (12+)
Adams	308 (96%)	13 (4%)	55.5%	44.5%
Asotin	226 (97%)	7 (3%)	67.5%	32.5%
Benton	3225 (97.7%)	77 (2.3%)	56.5%	43.5%
Chelan	983 (96.9%)	31 (3.1%)	43.7%	56.3%
Clallam	425 (93.8%)	28 (6.2%)	43.8%	56.2%
Clark	7204 (96.7%)	244 (3.3%)	49.3%	50.7%
Columbia	15 (88.2%)	2 (11.8%)	67%	33%
Cowlitz	2351 (96.5%)	85 (3.5%)	53%	47%
Douglas	580 (98%)	12 (2%)	50%	50%
Ferry	176 (97.8%)	4 (2.2%)	67.1%	32.9%
Franklin	1921 (98%)	40 (2%)	63.7%	36.3%
Garfield	25 (100%)	0 (0%)	73.5%	26.5%
Grant	1830 (97.3%)	51 (2.7%)	57.4%	42.6%
Grays Harbor	1244 (94.4%)	74 (5.6%)	53.3%	46.7%
Island	593 (96.7%)	20 (3.3%)	48.1%	51.9%
Jefferson	117 (92.1%)	10 (7.9%)	32.8%	67.2%
King	28364 (96.7%)	975 (3.3%)	31.4%	68.6%
Kitsap	3029 (96.7%)	103 (3.3%)	50.4%	49.6%
Kittitas	1082 (98.1%)	21 (1.9%)	55.2%	44.8%
Klickitat	220 (98.7%)	3 (1.3%)	58%	42%
Lewis	1702 (97.1%)	50 (2.9%)	61.4%	38.6%

Lincoln	321 (95.3%)	16 (4.7%)	59.4%	40.6%
Mason	620 (96.6%)	22 (3.4%)	52.4%	47.6%
Okanogan	598 (95.8%)	26 (4.2%)	48.3%	51.7%
Pacific	280 (95.2%)	14 (4.8%)	50.8%	49.2%
Pend Oreille	204 (98.6%)	3 (1.4%)	70.8%	29.2%
Pierce	18855 (98%)	388 (2%)	53.5%	46.5%
San Juan	74 (97.4%)	2 (2.6%)	24.6%	75.4%
Skagit	1652 (97.3%)	45 (2.7%)	44.6%	55.4%
Skamania	122 (94.6%)	7 (5.4%)	67.9%	32.1%
Snohomish	10648 (97.2%)	306 (2.8%)	43%	57%
Spokane	10587 (97.1%)	315 (2.9%)	54.3%	45.7%
Stevens	778 (97.9%)	17 (2.1%)	73.2%	26.8%
Thurston	3736 (96.4%)	138 (3.6%)	47.2%	52.8%
Wahkiakum	74 (96.1%)	3 (3.9%)	53.7%	46.3%
Walla Walla	812 (93.7%)	55 (6.3%)	50.8%	49.2%
Whatcom	3536 (97.3%)	98 (2.7%)	40.6%	59.4%
Whitman	1056 (98.2%)	19 (1.8%)	66%	34%
Yakima	4669 (98%)	93 (2%)	54%	46%
Unknown	175 (99.4%)	1 (0.6%)	NA%	NA%

COVID-19 cases, hospitalizations, and deaths in persons who are not fully vaccinated by age group

The proportion of cases, hospitalizations, and deaths in persons not fully vaccinated is lowest among older age groups (65 years and older). The most likely contributing factor is the higher percentage of fully vaccinated persons in this age group. As other age groups become fully vaccinated, the percent of cases among those not fully vaccinated is expected to decrease.

Washington state COVID-19 cases in persons not fully vaccinated by age group

February – June 2021

AgeGroup	Total case count	Percent of cases in not fully vaccinated persons (12+)	Percent of Washington state population who are not fully vaccinated (12+)	Percent of Washington state population who are fully vaccinated (12+)
12-17	11,419	11408 (99.9%)	70.3%	29.7%
18-34	45,406	44744 (98.5%)	51.9%	48.1%
35-49	30,942	30028 (97%)	42.1%	57.9%
50-64	20,859	20038 (96.1%)	36.6%	63.4%
65+	9,205	8196 (89%)	24.2%	75.8%

Washington state COVID-19 hospitalizations in persons not fully vaccinated by age group

February – June 2021

AgeGroup	Total hospitalization count	Percent of hospitalizations in not fully vaccinated persons (12+)	Percent of Washington state population who are not fully vaccinated (12+)	Percent of Washington state population who are fully vaccinated (12+)
12-17	75	75 (100%)	70.3%	29.7%
18-34	887	883 (99.5%)	51.9%	48.1%
35-49	1,535	1512 (98.5%)	42.1%	57.9%
50-64	2,212	2165 (97.9%)	36.6%	63.4%
65+	2,560	2335 (91.2%)	24.2%	75.8%

Washington state COVID-19 deaths in persons not fully vaccinated by age group

February – June 2021

AgeGroup	Total death count	Percent of deaths in not fully vaccinated persons (12+)	Percent of Washington state population who are not fully vaccinated (12+)	Percent of Washington state population who are fully vaccinated (12+)
12-17	0	0 (0%)	70.3%	29.7%
18-34	23	23 (100%)	51.9%	48.1%
35-49	81	81 (100%)	42.1%	57.9%
50-64	231	228 (98.7%)	36.6%	63.4%
65+	664	610 (91.9%)	24.2%	75.8%

Methods

Data sources

There are three data sources for these metrics:

- Washington Disease Reporting System (WDRS) and
- Washington Immunization Information System (WAIIS)
- Washington Health and Life Events System (WHALES)

WDRS receives case, hospitalization, and death information for all COVID-19 cases in Washington residents. WAIIS collects COVID-19 vaccination data from healthcare providers for people vaccinated in Washington. Not all federal correction facilities and federal healthcare organizations (e.g., Department of Defense and Veterans Administration facilities) submit data to WAIIS. WAIIS may not include vaccination data from all tribal health facilities.

All rates presented in this report are calculated using the Washington state population distribution based on the Office of Financial Management's (OFM) April 1, 2020 population estimates. To better reflect the true rates of COVID-19 cases, hospitalization, and deaths in this report, calculations include only the 12 and older population because they are eligible to be vaccinated.

Definitions

All case, hospitalization, and death data reported are based on positive molecular or antigen test results.

A fully vaccinated COVID-19 case is a person with a positive molecular or antigen test result and a specimen collection date 2 weeks after receiving the final dose of an authorized COVID-19 vaccine.

- For reporting purposes, DOH and CDC use strict criteria to classify breakthrough cases, including requiring information about the vaccine lot number and other details. The [SARS-CoV-2 Vaccine Breakthrough Surveillance and Case Information Resource \(wa.gov\)](#) report has information

about cases that meet the breakthrough case definition. The report is posted on the [COVID-19 Data Dashboard :: Washington State Department of Health](#) and is updated every Wednesday.

- Because the purpose of this report is to provide a more comprehensive look at the impact of vaccines on COVID-19, it therefore uses a more flexible definition of 'fully vaccinated' rather than 'breakthrough case' to classify individuals.

A COVID-19 hospitalization is a Washington resident who has been identified using case investigation data in the Washington Disease Reporting System (WDRS) or links with Rapid Health Information Network (RHINO) records as hospitalized with confirmed or probable COVID-19.

Deaths are reported to the state by health care providers, medical examiners or coroners, local health departments, or others to the official vital records database, the Washington Health and Life Events System (WHALES). COVID-19 deaths included in this report are identified in WHALES where the cause of death was confirmed or suspected to have been COVID-19.

Timeframes

The first COVID-19 vaccines were administered in Washington in mid-December 2020. Full protection from the vaccine in those vaccinated early would occur about the first week in February. Therefore, we are reporting cases, deaths, and hospitalizations beginning with the month of February 2021.

It takes up to 8 days from specimen collection date for DOH to receive 90% of reported cases, 12 days for DOH to identify hospitalizations, and 28 days to identify deaths. For this reason, we consider data from the 4 weeks just prior to the report to be incomplete.

Linking methods

All information on COVID-19 cases, hospitalizations, and deaths provided by this report use WDRS data linked to WAIS COVID-19 vaccination data. The links are based on a comparison of the first name, last name, and date of birth of cases to the first name, last name, and date of birth of those with COVID-19 vaccination in WAIS. Only exact matches on all three items are considered the same person. Missing or misspelled names and incorrect dates of birth may lead to some vaccinated persons being incorrectly classified as unvaccinated. Cases with vaccines not reported to WAIS as described above are also reflected as not fully vaccinated.