

Spotlight: COVID-19 Breakthrough Cases & the Delta Variant in Cowlitz County

The COVID-19 pandemic continues to rapidly evolve. It is normal to have questions or feel uncertain. To help you make informed decisions about your health, we are providing answers to common questions we have heard from the community.

If you still have questions after reading this report, please let us know by emailing AskCowlitzHealth@co.cowlitz.wa.us. Your questions may be featured in a future report!

When did the delta variant become the dominant strain in Cowlitz County?

The delta variant of SARS-CoV-2 (the virus that causes COVID-19) became the dominant strain in Washington state around late June, according to a [recent report](#) from the state Department of Health.

The delta variant likely became dominant in Cowlitz County around late June.

The state uses a process called genomic sequencing to detect the delta variant and other COVID-19 variants. Due to the high number of COVID-19 cases in the state, sequencing can only be performed on a representative sample of cases. Statewide, during July, 20% of all confirmed COVID-19 cases were sequenced. Between July 25 – August 7, the delta variant accounted for 97% of all cases sequenced statewide, which is up from 34% June 13-26. A smaller proportion of Cowlitz County cases has historically been sequenced than the statewide average.

Variants spreading in Cowlitz County typically reflect statewide trends, which means it is highly likely a recent positive COVID-19 test result indicated infection with the delta variant.

To date, 71 Cowlitz County residents have tested positive for one of three [variants of concern](#) out of 165 total residents whose specimens have been sequenced. Seven (7) Cowlitz County residents were found to be infected with the delta variant as of August 25. The true number of people infected with the delta variant in Cowlitz County is likely much higher, since only a very small proportion of cases are sent for genetic sequencing. Just 14 Cowlitz County specimens have been sequenced from cases identified on June 27 or later.

Is the delta variant affecting children differently than prior strains?

The delta variant is more than two times as contagious as previous variants.

From late June through early August, COVID-19 case counts in Cowlitz County increased more than five-fold in children age 0-17, which was higher than the county average and the steepest of any age group.

The number of children getting infected with COVID-19 continues to be below the county average. However, because children are experiencing a higher-than-average increase in case incidence, they are closer to the county average than they have been in the past.

Fewer than 10 Cowlitz County children age 0-17 have been hospitalized for COVID-19 since the beginning of the pandemic. That number is too small to assess trends over time. A [recent report from the state DOH](#) states that statewide COVID-19 hospitalizations in children are also too small to assess time trends. [Nationwide data](#) show that hospitalization rates among children 0-17 have increased fourfold since early July. Children continue to have the lowest per capita hospitalization rate of any age group.

Children age 0-17 in Cowlitz County experienced the steepest increase in cases between late June and early August.

Nationally, hospitalizations among children aged 0-17 have increased fourfold since early July.

Children continue to have the lowest per capita hospitalization rate of any age group.

How many people are becoming infected or hospitalized after getting vaccinated?

As early as mid-January, Cowlitz County residents started becoming fully vaccinated against COVID-19. Since then, an estimated 7% of total cases (297 residents) and 8% of total hospitalizations (19 residents) among Cowlitz County residents were among those age 12 years and older who were fully vaccinated. These 297 breakthrough cases represent 0.59% of the 50,321 Cowlitz County residents who are fully vaccinated.

Children younger than 12 are not eligible to receive the vaccine; all of those cases and hospitalizations were unvaccinated.

In Cowlitz County, the proportion of cases among residents aged 12+ who are fully vaccinated is higher since late June, when the delta variant became dominant in Washington State. And, residents over age 65 have a higher proportion of cases that are fully vaccinated than younger age groups. More residents have gotten vaccinated over time, and a higher proportion of 65 and older residents are vaccinated compared to younger age groups. These may at least partially explain these differences.

Since mid-January, 7% of cases and 8% of hospitalizations in Cowlitz County among residents age 12 years and older were fully vaccinated.

How well are the COVID-19 vaccines protecting people from infection?

To estimate how well the vaccines protect against COVID-19 infection, we compare the proportion of people who are vaccinated that have become infected or severely ill with the proportion of those who are unvaccinated.

Community members are interested in how well the vaccine is protecting against the Delta variant. In response to that, this analysis looked at cases identified between June 27, approximately when the Delta variant became dominant, and August 14, the most recent date with complete case data. This analysis shows Cowlitz County residents who are fully vaccinated are less likely to become infected with COVID-19.

The table below displays the difference in per capita case rates between partially- and fully-vaccinated Cowlitz County residents compared to those who are unvaccinated, between June 27 and August 14. A sample sentence to help the reader interpret these figures is: After the delta variant became the dominant strain in late June, fully-vaccinated residents were between 81-84% less likely to develop COVID-19 than those who were unvaccinated.

After the delta variant became the dominant strain in late June, fully-vaccinated residents were between 81-84% less likely to develop COVID-19 disease than those who were unvaccinated.

Per capita case rates of partially- and fully-vaccinated residents compared with those who are unvaccinated, by age group, Cowlitz County, June 27 – August 14

	Fully-vaccinated vs unvaccinated	Partially-vaccinated vs unvaccinated
Ages 12-34	84% lower per capita case rate	76% lower per capita case rate
Ages 35-64	81% lower per capita case rate	69% lower per capita case rate
Ages 65+	83% lower per capita case rate	50% lower per capita case rate

These data are consistent with [findings from the CDC](#), which state that mRNA provide protection against the Delta variant.

We provide the most accurate figures possible at the time each of our reports is released, balancing the public's desire for timely data with our desire to use the most up-to-date analysis methods and data available. Please note that the figures in today's report may change as we refine our data analysis.

How well are the COVID-19 vaccines protecting people from severe disease?

We counted the number of Cowlitz County cases aged 18 and older who were identified as a case between June 27 and August 14 and were subsequently hospitalized for COVID-19. Fewer than 10 of these have been identified as partially or fully vaccinated so far; this number is too small to calculate statistically reliable figures. We will continue to monitor these data.

No Cowlitz County children age 0-17 who tested positive for COVID-19 between June 27 and August 14 were hospitalized for COVID-19.

A [recent local report](#) measured the risk of COVID-19 hospitalization among residents of SW Washington by vaccination status between late-March and June. This report supports the initial clinical trial findings that COVID-19 vaccines have been highly effective at preventing severe illness that can lead to hospitalization and death.

The report found:

- **For residents age 65+:** being partially vaccinated reduces the risk of COVID-19 hospitalization by 75% and being fully vaccinated reduces the risk of hospitalization by 90%.
- **For residents ages 45-64:** fewer than 10 of the 61,620 residents who were fully vaccinated in the spring were hospitalized for COVID-19.
 - 91% of COVID-19 hospitalizations in this age group in SW Washington were unvaccinated, compared with 49% of the population in that age group in SW Washington.

Earlier this spring, fully-vaccinated Cowlitz County residents aged 65+ were 90% less likely to be hospitalized than their unvaccinated counterparts.

Note the time frame used in this report includes dates before the delta variant became dominant in the state.

What is a breakthrough case and how do we identify cases who were vaccinated?

A breakthrough case is defined as someone who becomes infected with COVID-19 after they are fully vaccinated.* To identify a breakthrough case, we match the cases in our COVID-19 case data with individuals identified in the Washington State Immunization Information System (WAIIS) as having received one or more doses of a COVID-19 vaccine.

We know some people have received a COVID-19 vaccine but are not in WAIIS. These include residents vaccinated through the military and/or in another state. We also know that some “breakthrough” cases will be missed during our matching process because of data entry issues, such as a typo in someone’s name.

Our analysis adjusts for these issues and is consistent with the methods used in the [state DOH Modeling Situation Reports](#), which adjust for missing doses and missed matches. More information on our analysis methods can be found on page 3 of [this report](#). Our breakthrough case counts may be different than those reported in some state DOH reports. We continue to monitor the data and will update our analysis to provide the most accurate figures possible.

**A person is considered fully vaccinated two weeks after receiving the final dose in their vaccine series.*