

COVID-19 Breakthrough Report

Oregon's Weekly Surveillance Summary



Breakthrough case report - August 26, 2021

Background

Data for the weekly breakthrough case report will include data through the most recent Sunday. It will be published every Thursday.¹ Vaccine breakthrough cases are defined as instances in which an individual tested positive for COVID-19 at least 14 days following the completion of any COVID-19 vaccine series.² Vaccine breakthrough cases that result in hospitalization or death are reported to the CDC.

COVID-19 cases in vaccinated and unvaccinated people

Weekly summary³

During the week of Aug. 15-21, there were 14,523 cases of COVID-19. 12,784 (88.0%) were unvaccinated and 1,739 (12.0%) were vaccine breakthrough cases. The median age of breakthrough cases was 48 years. 36 (2.1%) breakthrough cases were residents of care facilities, senior living communities or other congregate living settings. Four hundred twenty-eight (24.6%) of breakthrough cases were 65 or older. There were 31 (1.8%) cases aged 12-17 years.

OHA publishes the most up-to-date information about cases from the most recently completed MMWR week. However, not all information about a case's vaccination status may be available at the time of publication. The following table (Table 1) includes updated totals of cases by vaccine breakthrough case status for the previous six weeks.

¹ The weekly summary uses the date that cases are reported to OHA to provide summary information on the most recently identified cases. All other dates in this report use specimen collection date to align with the breakthrough case definition.

² This definition is consistent with the CDC's definition, available here: <https://www.cdc.gov/vaccines/covid-19/downloads/COVID-vaccine-breakthrough-case-investigations-Protocol.pdf>

³ Previously, this report was published monthly. Going forward, this report will be published weekly.

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Table 1. Updated totals for vaccine breakthrough cases

MMWR week ending	Total cases	Breakthrough cases	Percent breakthrough case
2021-07-17	1,876	334	17.8
2021-07-24	3,054	611	20.0
2021-07-31	5,659	1,112	19.7
2021-08-07	7,497	1,419	18.9
2021-08-14	13,145	2,219	16.9
2021-08-21	14,523	1,739	12.0

Cumulative summary

Overall, there have been 9,539 vaccine breakthrough cases identified in Oregon. The median age of breakthrough cases is 48 years (range: 12-106). Four hundred fifty-six (4.8%) breakthrough cases were residents of care facilities, senior living communities or other congregate living settings. Two thousand four hundred eighteen (25.3%) of cases were 65 or older. There have been 138 (1.4%) total cases aged 12-17. Breakthrough cases have been reported in all 36 counties.

Cases of COVID-19 are much more common in unvaccinated⁴ Oregonians than in vaccinated Oregonians (Figure 1). The rate of COVID-19 cases among unvaccinated individuals in the most recent week remains approximately six times the rate of COVID-19 cases among fully vaccinated individuals. Community spread remains elevated throughout the state and is particularly high in areas with lower vaccination rates. As COVID-19 cases have increased across Oregon, vaccine breakthrough cases have also increased, but at a much lower rate than in the unvaccinated. Vaccination remains the most effective tool to reduce the spread of COVID-19.

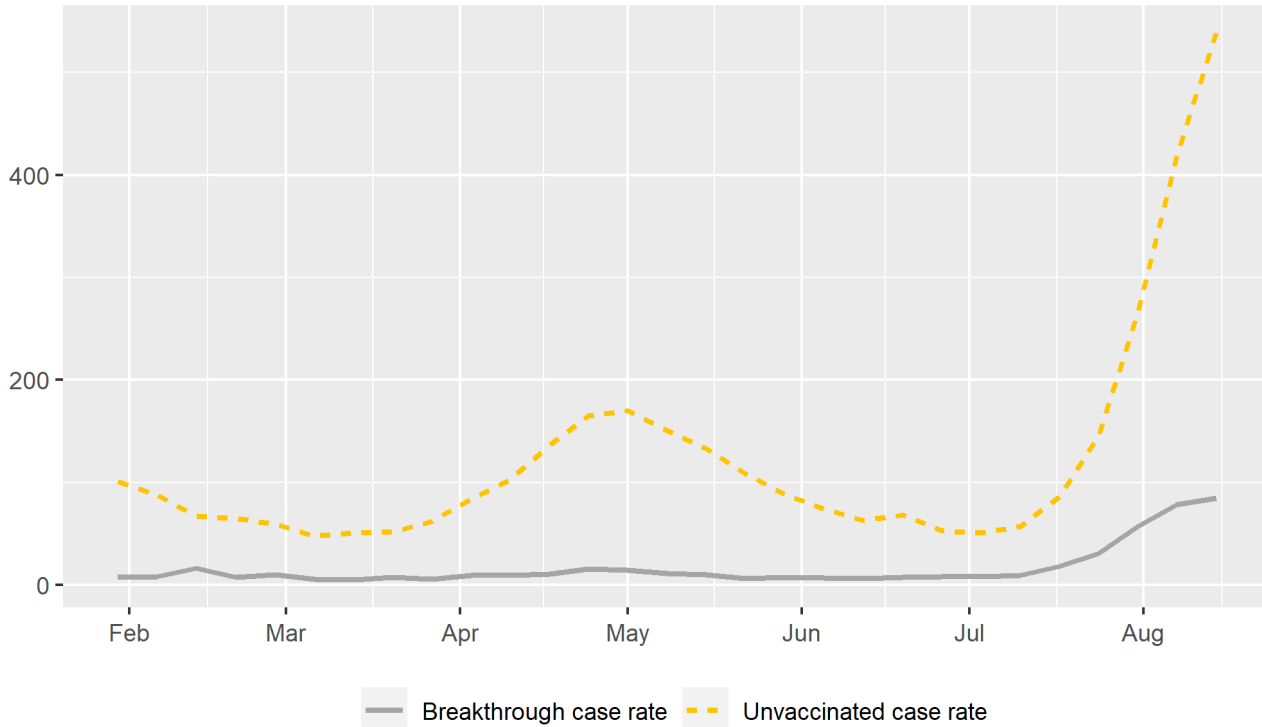
⁴ Unvaccinated persons are defined as people who have not received an approved COVID-19 vaccine, or who have not completed the vaccine series.

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Figure 1. Rates of COVID-19 cases, by vaccination status



Vaccine breakthrough cases and severity

The Pfizer, Moderna and Johnson & Johnson COVID-19 vaccines are highly effective at preventing severe COVID-19 illness and death. Relatively few breakthrough cases have been hospitalized, and even fewer have died (Figure 2).

To date, 5.5% of all known breakthrough cases have been hospitalized (n=523), and only 0.9% have died (n=82). The median age of the people who died was 83 (49-101).

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Figure 2. Cases, hospitalizations and deaths among breakthrough cases

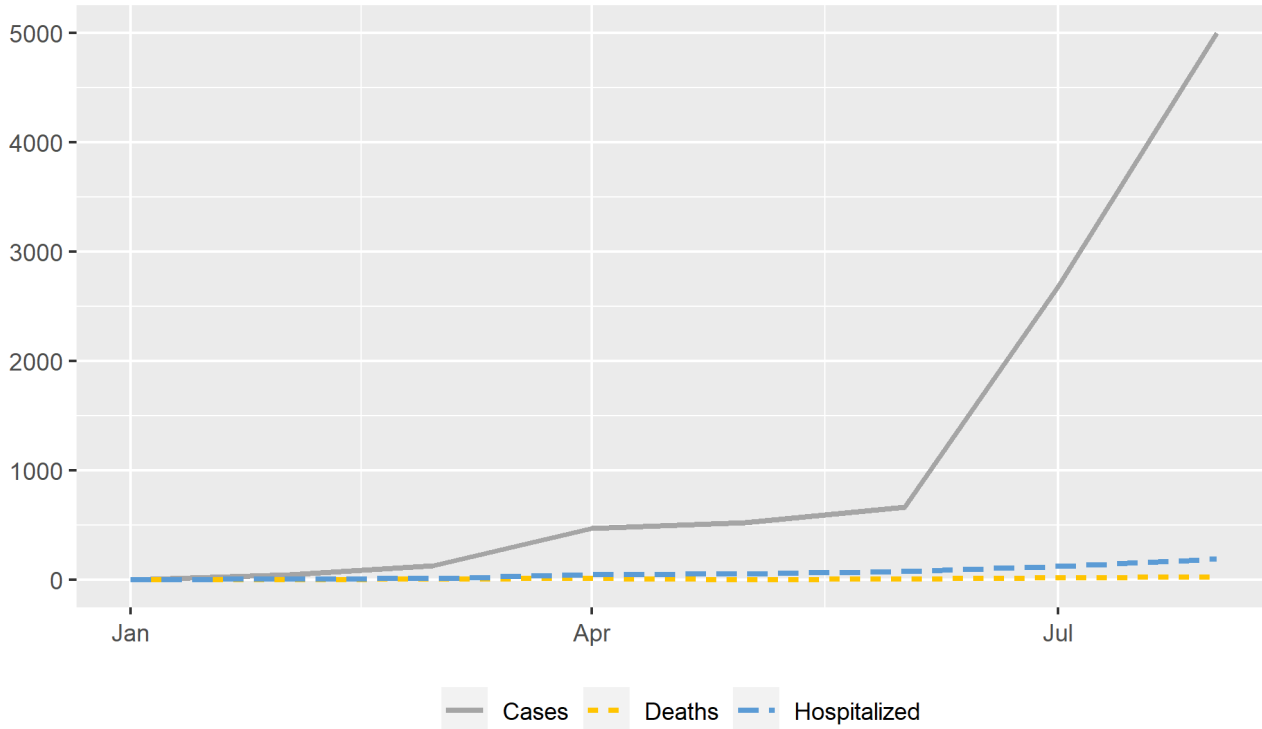


Table 2. Breakthrough cases by age group and severity

Age group	Cases	Hospitalized	Deaths
12-19	309	2	0
20-29	1,417	12	0
30-39	1,643	20	0
40-49	1,593	22	2
50-59	1,482	51	2
60-69	1,338	94	9
70-79	1,047	148	24
80+	710	174	45
Total	9,539	523	82

Data are provisional and subject to change.

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Variants of concern and variants of interest

Table 3. Variants of concern

Overall, 5.2% of positive specimens in Oregon have been sequenced. Delta is currently the dominant variant circulating in Oregon. At this time, vaccine breakthrough cases reflect the variants circulating in the community. Additional information on variants can be found here:

<https://public.tableau.com/app/profile/oregon.health.authority.covid.19/viz/GISAIDVariantDashboardUpdated/OregonVariantDashboard>

Subtype	Cases
B.1.1.7 (Alpha)	137
B.1.351 (Beta)	16
B.1.617.2 (Delta)	304
P.1 (Gamma)	42

Table 4. Variants of interest

Subtype	Cases
B.1.427/B.1.429 (Epsilon)	38
B.1.526 (Iota)	29

Table 5. Breakthrough cases by county of residence⁵

County	Cases
Baker	36
Benton	197
Clackamas	799
Clatsop	90
Columbia	76
Coos	73

⁵ Counties that have fewer than 10 total cases will be reported as 1-9 cases.

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County	Cases
Crook	55
Curry	32
Deschutes	610
Douglas	323
Gilliam	1-9
Grant	1-9
Harney	1-9
Hood River	72
Jackson	592
Jefferson	40
Josephine	380
Klamath	79
Lake	1-9
Lane	1,289
Lincoln	114
Linn	265
Malheur	32
Marion	894
Morrow	42
Multnomah	1,609
Polk	176
Sherman	1-9
Tillamook	97
Umatilla	278
Union	57

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County	Cases
Wallowa	15
Wasco	98
Washington	902
Wheeler	1-9
Yamhill	186