

COVID-19 Outbreaks in Washington State K-12 Schools

Washington State Department of Health

May 31, 2022

To request this document in another format, call 1-800-525-0127. Deaf or hard of hearing customers, please call 711 (Washington Relay) or email civil.rights@doh.wa.gov.

Publication Number: 420-312

Executive Summary

- This report describes COVID-19 outbreaks in K-12 schools that have been reported to the Washington State Department of Health (DOH) during the 2021/2022 school year.
- A total of 1546 COVID-19 outbreaks occurred in K-12 schools between August 1, 2021 and April 30, 2022.
- 10848 COVID-19 cases were associated with outbreaks in K-12 schools. Ninety percent of COVID-19 cases associated with outbreaks were among those aged 19 and under.
- This report includes outbreaks that were reported to DOH in April 2022. Some LHJs had a backlog of outbreaks to report, as surges in cases and outbreaks strained LHH resources for outbreak reporting.
- There may be underreporting of outbreaks as a result of ongoing limitations of capacity to investigate and report COVID-19 outbreaks in K-12 schools.

Methods

This report was created using information from COVID-19 test results and COVID-19 outbreaks reported by local health jurisdictions to DOH. The investigation of COVID-19 cases to confirm that an event meets Washington State's cluster or outbreak definition is time intensive. Therefore, the number of cases and outbreaks reported by a local health jurisdiction may change over time as outbreak details become available.

Definition of a COVID-19 Outbreak in Washington State K-12 Schools

The Washington State Department of Health (DOH) has updated our school outbreak definition for the 2021/2022 school year. During the 2020/2021 school year, the case count threshold to meet outbreak definition was two epidemiologically linked cases. For the 2021/2022 school year, the threshold has been raised to 3 cases or 10% of a specified core group, as defined below. This change was made to bring DOH in alignment with national standards based on the Council of State and Territorial Epidemiologists (CSTE) definition (<https://preparedness.cste.org/wp-content/uploads/2021/08/CSTE-Standardized-COVID-19-K-12-School-Surveillance-Guidance-for-Classification-of-Clusters-and-Outbreaks.pdf>)

K-12 school outbreak definition:

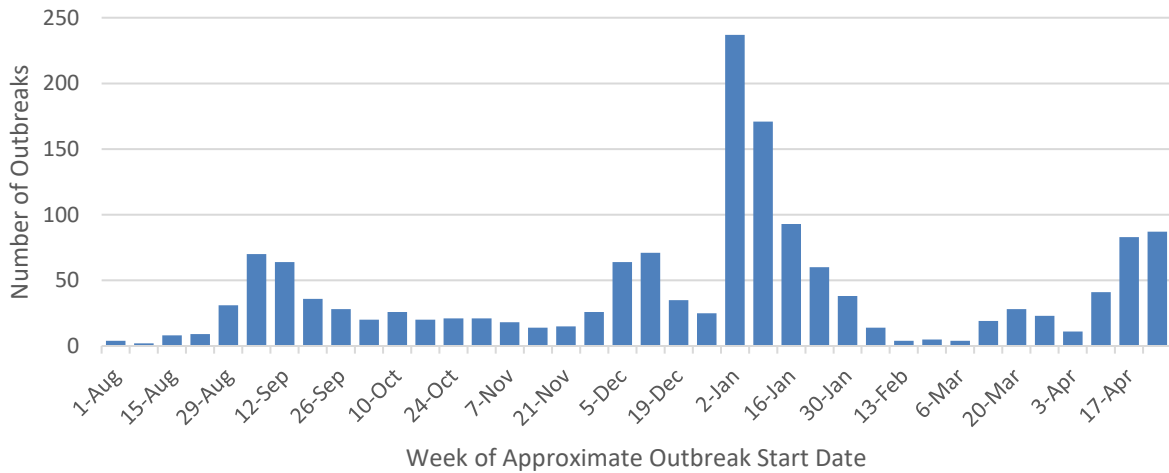
- Multiple probable or confirmed COVID-19 cases comprising at least **10% of students, teachers or staff within a specified core group***
- OR
- At least **3 cases within a specified core group*** meeting criteria for a probable or confirmed COVID-19 case
- AND
- Cases have symptom onset or positive test result within 14 days of each other, AND
 - Cases were not identified as close contacts of each other in another setting (i.e., household) outside of the school setting, AND
 - Cases were epidemiologically linked in the school setting or a school-sanctioned extracurricular activity

*A "core group" includes but is not limited to extracurricular activity†, cohort group, classroom, before/after school care, etc.)

† A school sanctioned extracurricular activity is defined as a voluntary activity sponsored by the school or local education agency (LEA) or an organization sanctioned by the LEA. Extracurricular activities include, but are not limited to, preparation for and involvement in public performances, contests, athletic competitions, demonstrations, displays, and club activities.

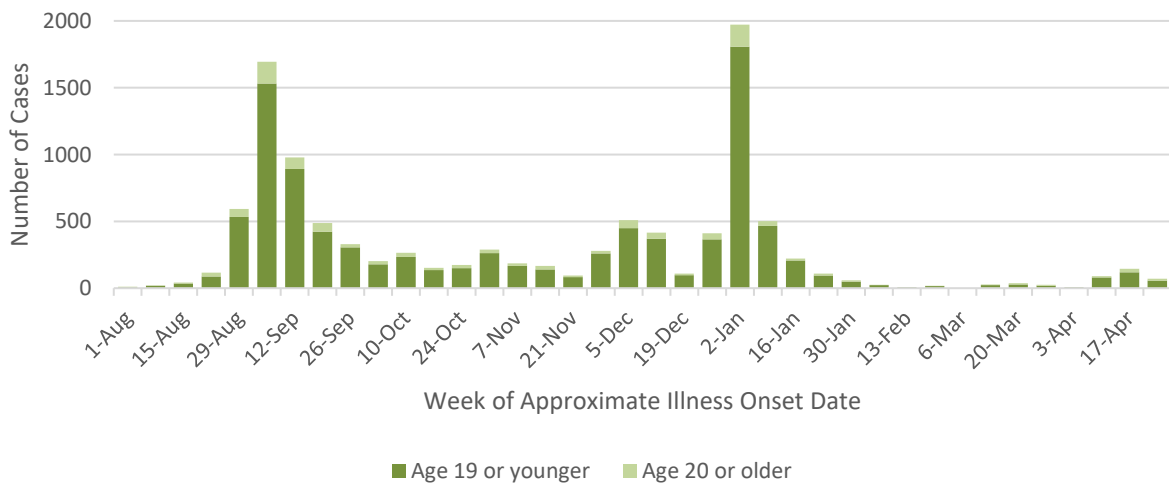
COVID-19 outbreaks in Washington State K-12 schools between August 1, 2021 and April 30, 2022.

The following epidemiologic curve shows the weekly count of the 1546 COVID-19 outbreaks in Washington State K-12 schools by week of approximate outbreak start date. Of the 1546 outbreaks reported, 222 outbreaks started between April 1, 2022 and April 30, 2022. Reporting of COVID-19 outbreaks and associated cases for the most recent months is ongoing, so the number of outbreaks and associated cases may change.



Cases associated with COVID-19 outbreaks in Washington State K-12 schools between August 1, 2021 and April 30, 2022.

The following epidemiologic curve shows the week of approximate illness onset of the 10,848 COVID-19 cases that were associated with outbreaks in K-12 schools. The approximate illness onset date is defined as the date when a case’s COVID-19 symptoms began. If the case was asymptomatic, or the symptom start date is unknown, the illness onset date is when the case was tested for COVID-19. Cases from a specific outbreak can be spread out over time, so the cases reported in a given week may not all be associated with the outbreaks reported in the same week. Reporting of COVID-19 outbreaks and associated cases is ongoing, so the number of outbreaks and associated cases may change.



COVID-19 outbreaks in Washington State K-12 schools, by county, between August 1, 2021 and April 30, 2022.

Local health jurisdictions reported 1546 COVID-19 outbreaks that occurred in K-12 schools across 28 counties. Two hundred and twenty-two outbreaks occurred in April 2022. The number of outbreaks by county ranged from 1 to 566. A total of 10848 COVID-19 cases were associated with these outbreaks. Not all outbreaks have case level information available due to resource limitations at the school or local health jurisdiction level. The median number of cases per outbreak was five. Reporting of COVID-19 outbreaks and associated cases is still occurring, so the number of outbreaks and associated cases may change

County	Number of Outbreaks	% of Schools with Outbreaks	Number of Associated Cases	Median Cases Per Outbreak
Benton	24	17	118	4
Chelan*	1	2	NA	--
Clallam*	1	3	NA	--
Clark	29	13	91	5
Cowlitz	39	32	130	3
Douglas*	2	5	NA	--
Ferry*	1	8	NA	--
Franklin	5	7	25	4
Garfield*	1	50	NA	--
Grant	33	27	131	4
Grays Harbor	13	17	70	5
Island	9	13	27	3
Jefferson	5	29	29	5
King	566	37	841	5
Kitsap	79	38	531	4
Klickitat*	1	4	NA	--
Lewis*	2	4	NA	--
Pend Oreille*	3	17	NA	--
Pierce	144	28	561	3
San Juan	15	21	80	5
Skagit	22	29	137	5
Skamania*	1	10	NA	--
Snohomish	268	71	7116	14
Spokane	33	13	179	5
Stevens	16	20	129	7
Thurston	161	56	418	3
Walla Walla*	2	5	NA	--
Whatcom	50	34	144	5
Yakima	20	9	38	3
Total	1546	28	10848	5

*To protect privacy, counts of less than 10 are not reported. Some additional values that could allow someone to calculate those small numbers are also not reported.

Characteristics of COVID-19 Outbreaks in Washington State K-12 schools, between August 1, 2021 and April 30, 2022.

Among the 1546 COVID-19 outbreaks that occurred in K-12 schools, 151 (11%) were in private schools, and 1379 (90%) were in public schools. Fifty-eight percent of outbreaks involved elementary schools, and 44% were suspected to have transmission in classroom settings. The 469 outbreaks with an undetermined suspected transmission location could have been in classroom, sports, lunch room, or other locations, though the data are incomplete.

	N	%
Public/Private		
Public	1379	90
Private	151	10
Grade Level Served*		
Elementary	884	58
Middle	339	22
High	449	29
Suspected Transmission Location		
Classroom	679	44
Office	4	<1
Cafeteria/meal space	3	<1
Sports	314	20
Performing arts	23	1
Transportation/bus	59	4
Undetermined	469	30

*Grade level served is not a mutually exclusive category. Percent reflects the percentage of total schools serving each grade level.

Proportion of K-12 schools with COVID-19 Outbreaks in Washington State, between August 1, 2021 and April 30, 2022.

There were 1546 COVID-19 outbreaks in K-12 schools between August 1, 2021 and April 30, 2022. The Washington State Office of the Superintendent (OSPI) education directory lists 2,552 public K-12 schools on their [website](#). Among these 2,552 public K-12 schools, 747 (29%) have experienced a COVID-19 outbreak since the beginning of the school year. The Washington State Board of Education [licenses](#) 505 private K-12 schools, and among them, 102 (20%) have experienced a COVID-19 outbreak since the beginning of the school year.

	Total K-12 schools with outbreaks (N)	Total Schools (N)	%
Public	747	2552	29
Private	102	505	20
Total	849	3057	28

Characteristics of cases associated with COVID-19 outbreaks in Washington State K-12 schools, between August 1, 2021 and April 30, 2022.

Among the 10848 COVID-19 cases that were linked to outbreaks in K-12 schools, the median age was 13 years. Forty-six percent of COVID-19 cases were Non-Hispanic White, and 51% were male.

	N	%
Median Age	13	--
Age Group		
0-3	23	<1
4-10	3841	35
11-13	1988	18
14-19	3877	36
20-29	164	2
30-39	280	3
40-49	328	3
50-59	236	2
60+	110	1
Race/Ethnicity		
Hispanic	1110	10
Non-Hispanic American Indian/Alaskan Native	89	1
Non-Hispanic Asian	716	7
Non-Hispanic Black	396	4
Non-Hispanic Multiracial	310	3
Non-Hispanic Native Hawaiian or Other Pacific Islander	110	1
Non-Hispanic White	4992	46
Non-Hispanic Other Race	71	1
Unknown	3054	28
Sex		
Female	5112	49
Male	5360	51
Other*	18	<1
Hospitalization overnight	35	<1
Deaths*	<10	--

*To protect privacy, counts of less than 10 are not reported. Some additional values that could allow someone to calculate those small numbers are also not reported.