

COVID-19 Outbreaks in Washington State K-12 Schools

Washington State Department of Health

April 29, 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 1296 COVID-19 outbreaks occurred in K-12 schools between August 1, 2021 and March 31, 2022.
- 10165 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 March 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:

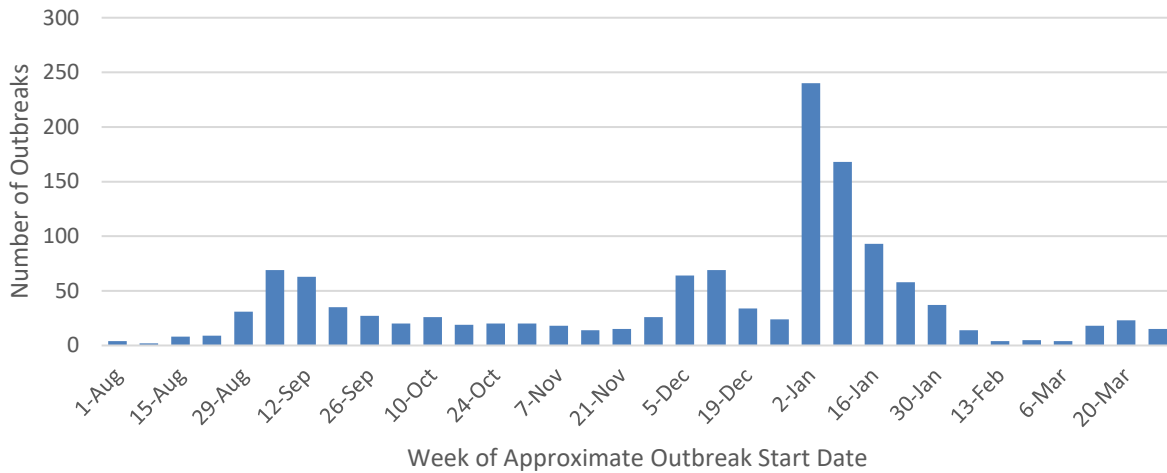
- Multiple probable or confirmed COVID-19 cases comprising at least **10% of students, teachers or staff within a specified core group***
- OR
- At least **3 cases within a specified core group*** meeting criteria for a probable or confirmed COVID-19 case
- AND
- Cases have symptom onset or positive 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.

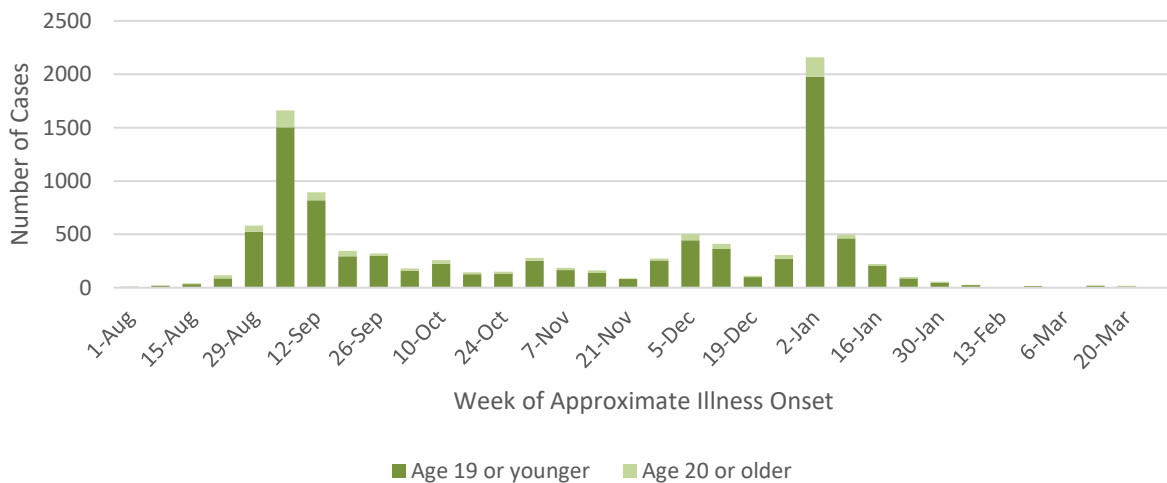
COVID-19 outbreaks in Washington State K-12 schools between August 1, 2021 and March 31, 2022.

The following epidemiologic curve shows the weekly count of the 1296 COVID-19 outbreaks in Washington State K-12 schools by week of approximate outbreak start date. Of the 1296 outbreaks reported, 60 outbreaks started between March 1, 2022 and March 31, 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 March 31, 2022.

The following epidemiologic curve shows the week of approximate illness onset of the 10,165 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 March 31, 2022.

Local health jurisdictions reported 1296 COVID-19 outbreaks that occurred in K-12 schools across 28 counties. Sixty outbreaks occurred in March 2022. The number of outbreaks by county ranged from 1 to 435. A total of 10165 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	23	17	116	4
Chelan*	1	2	NA	--
Clallam*	1	3	NA	--
Clark	14	6	82	6
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	26	3
Jefferson	5	29	29	5
King	435	26	841	5
Kitsap	71	32	491	4
Klickitat*	1	4	NA	--
Lewis*	2	4	NA	--
Pend Oreille*	3	17	NA	--
Pierce	136	26	469	3
San Juan	15	21	80	5
Skagit	19	19	135	5
Skamania*	1	10	NA	--
Snohomish	224	65	5821	17
Spokane	32	13	176	5
Stevens	16	20	87	7
Thurston	154	53	406	3
Walla Walla*	2	5	NA	--
Whatcom	18	15	135	6
Yakima	20	9	38	3
Total	1296	23	10165	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 March 31, 2022.

Among the 1296 COVID-19 outbreaks that occurred in K-12 schools, 125 (11%) were in private schools, and 1156 (89%) were in public schools. Fifty-four percent of outbreaks involved elementary schools, and 40% were suspected to have transmission in classroom settings. The 409 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	1156	89
Private	125	11
Grade Level Served*		
Elementary	695	54
Middle	294	23
High	421	32
Suspected Transmission Location		
Classroom	513	40
Office	2	<1
Cafeteria/meal space	3	<1
Sports	309	24
Performing arts	19	1
Transportation/bus	56	4
Undetermined	409	32

*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 March 31, 2022.

There were 1296 COVID-19 outbreaks in K-12 schools between August 1, 2021 and March 31, 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, 612 (24%) 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, 89 (18%) have experienced a COVID-19 outbreak since the beginning of the school year.

	Total K-12 schools with outbreaks (N)	Total Schools (N)	%
Public	612	2552	24
Private	89	505	18
Total	701	3057	23

Characteristics of cases associated with COVID-19 outbreaks in Washington State K-12 schools, between August 1, 2021 and March 31, 2022.

Among the 10165 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	21	<1
4-10	3601	35
11-13	1837	18
14-19	3693	36
20-29	153	2
30-39	257	3
40-49	301	3
50-59	203	2
60+	98	1
Race/Ethnicity		
Hispanic	1069	11
Non-Hispanic American Indian/Alaskan Native	88	1
Non-Hispanic Asian	622	6
Non-Hispanic Black	363	4
Non-Hispanic Multiracial	302	3
Non-Hispanic Native Hawaiian or Other Pacific Islander	102	1
Non-Hispanic White	4687	46
Non-Hispanic Other Race	66	1
Unknown	2866	28
Sex		
Female	4761	49
Male	5038	51
Other*	18	<1
Hospitalization overnight	34	<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.