



Analysis of Child COVID-19 Cases and Close Contacts in Schools

All data is from **January 1, 2021 to May 10, 2021**, and includes both Barry and Eaton Counties. It is important to remember that these statistics reflect the mitigation efforts in place during this time: isolation, quarantine, mask-wearing, social distancing, etc. *If these measures were to be relaxed, these rates (called attack rates in epidemiology) would increase.*

For children who get COVID-19, how many got it from school? How many could have spread COVID at school?

In this time period, we have had **1,598** confirmed cases between the ages of 0 to 18. **542** of these were students who were infectious while on school grounds. **150** of the 1,598 cases were associated with a school outbreak. Put another way,

For every 100 child COVID-19 cases, 34 were infectious while at school.

For every 100 child COVID-19 cases, 9 got COVID as a result of a school outbreak.

For children who were exposed to COVID-19 at school, did they develop COVID-19?

In this time period, 4,232 students were close contacts of a COVID-19 case resulting from school exposure (as opposed to a household contact or other setting). Of these, 193 developed COVID-19 symptoms and/or tested positive for COVID-19. 1,776 students did not respond to the contact tracing system for symptom monitoring, so their status is unknown. This leaves 2,263 students who did not develop symptoms of COVID-19. Additionally, many people with COVID-19 do not have symptoms, so the 193 cases is likely an undercount.

We estimate that during this time period, the secondary attack rate (people who became COVID-19 positive while in quarantine) for school exposures is at least 4.6%. The secondary attack rates in community settings as a whole for COVID-19 are estimated to be approximately 7-10%. Given distancing, masking, current isolation/quarantine policies, and rising vaccination rates of teachers and school staff, a lower attack rate would be expected.

For every 20 students that were a school-exposed close contact...



11 students did not go on to develop COVID-19 symptoms.



8 students did not respond to contact tracing/symptom tracking, so their status is unknown.



1 student is a probable or a confirmed case of COVID-19 because they tested positive or developed symptoms but did not get tested.