

Calculating ISD Community-Wide Covid Case Rate

This calculation is based on 14-day case rates per 100,000 population, using data from the COVID-19 data dashboard provided by Public Health – Seattle & King County.

Public Health’s data dashboard does not segment by school district, so we have used the dashboard’s maps and tools to cover the ISD’s geographic area, which is comprised of 5 different reporting areas (4 zip codes and 1 census track).

To see the data used for the calculations, visit the King County COVID-19 data dashboard:

<https://www.kingcounty.gov/depts/health/covid-19/data/daily-summary.aspx>

Follow these steps to find the data for the reporting areas that make up the ISD’s geographic area:

1. Click on the “geography over time” tab
2. Select the “ZIP” icon to get data for these ZIP codes:
 - 98075
 - 98029
 - 98027
 - 98059
3. Select the “Census” icon to get data for Census Track 250.03
4. Make sure “Positives” is selected to the right of the icons

Follow these steps to calculate the case rate:

1. To determine the population for each area:
 - a. Divide the area’s number of positive test results by its rate
 - b. Multiply by 100,000.
2. To determine the final ISD community-wide case rate per 100,000 for this 14-day period:
 - a. Add up the positive cases from each reporting area to determine the total cases
 - b. Add up the population from each reporting area to determine the total population
 - c. Divide the total positive test results by the total population
 - d. Multiply by 100,000.

Using the data for the period from 11/30/2020 to 12/14/2020, the calculations produce these results:

- ZIP Code 98075
 - Positive Test Results: 54
 - Rate per 100k: 221.9
 - Population based on rate: 24,335
- ZIP Code 98029
 - Positive Test Results: 94
 - Rate per 100k: 321.3
 - Population based on rate: 29,256

- ZIP Code 98027
 - Positive Test Results: 81
 - Rate per 100k: 269
 - Population based on rate: 30,112
- ZIP Code 98059
 - Positive Test Results: 138
 - Rate per 100k: 345.9
 - Population based on rate: 39,896
- Census Tract 250.03
 - Positive Test Results: 11
 - Rate per 100k: 152.7
 - Population based on rate: 7,204

Total case rates for five areas: 378

Total population of five areas: 130,803

Total case rate divided by total population multiplied by 100,000 = $378/130,803 \times 100,000 = 288.98$

ISD Case Rate per 100,000 over 14 days = **288.98**