

The District 105 Covid-19 Saliva Screener is used as another mitigation measure along with masks, 6ft physical distancing, air purifiers, advanced level air filters and desk shields to help prevent the spread of the virus. Scientists and medical professionals are learning each day about this novel Covid-19 virus and a lot is still unknown as more studies are needed. We know that there is a time of exposure that leads to a length of time where the virus loads into the body. Once there is a substantial viral load, an individual can start to have symptoms or not and progress to the recovery phase. (Figure 1) Each individual will react to the virus differently as well as have a different timeline of exposure, viral load, symptoms/infection period, and recovery. The saliva screen detects high, contagious amounts of virus. The window for those times will differ among individuals. (Figure 1, 2) The diagnostic PCR is more sensitive in detecting low amounts of the virus even when not contagious and is preferred to diagnose Covid-19. Currently, there is not a Covid-19 test with a 100% specificity or sensitivity rate and both the saliva screener and the diagnostic PCR will have false positives and false negatives. One important factor that will impact the accuracy of the saliva screen is eating, drinking, or chewing gum before saliva collection.

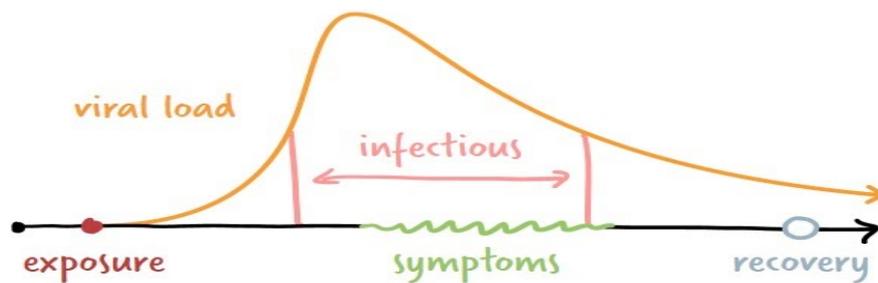


Figure 1

<https://www.nytimes.com/interactive/2020/10/02/science/charting-a-coronavirus-infection.html>

In an effort to detect more of the highly contagious, asymptomatic individuals, we are starting twice a week screening. As shown on figure 2, higher participation and an increase in testing frequency helps detect and mitigate.

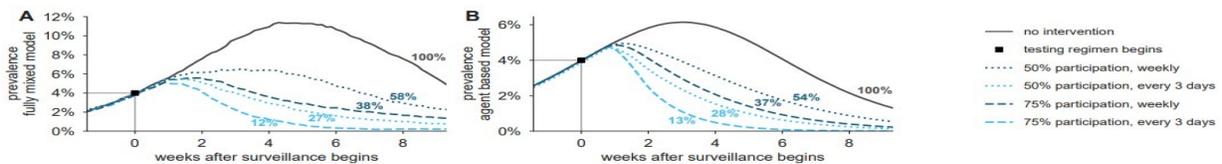


Figure 2

*Test sensitivity is secondary to frequency and turnaround time for COVID-19 surveillance

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<https://www.medrxiv.org/content/10.1101/2020.06.22.20136309v2.full.pdf>

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