AIR FILTER SAMPLING

The goal of Healthy Davis Together is to prevent the spread of COVID-19 and get the Davis community back to regular city activities as quickly and safely as possible. Environmental monitoring (regularly testing wastewater, indoor air, and certain surfaces) is another way we are learning about COVID-19 and opportunities to prevent its spread. While wearing masks, staying six feet apart, and free COVID-19 testing at least once a week for everyone who lives or works in Davis are the most important actions for all of us to take, environmental monitoring is an important learning component that helps us see how our community is doing and where we can step up prevention efforts even more.

One of the environmental monitoring tools Healthy Davis Together is deploying is air filter sampling with a particular focus on Davis schools.

What is air filter sampling?

Air filter sampling complements wastewater monitoring and surface sampling by monitoring whether the virus has been present in a particular building or room.

Why is air filter sampling important?

HVAC or portable HEPA filters collect most of the particles present in the air, including viruses. Therefore, these filters can be sampled for the COVID-19 virus, which can be detected at potentially early stages of the infection. If a significant concentration is detected, people who have been in a specific room or building can be alerted and encouraged to get tested.

How does air filter sampling work?

In any given building, all the air in a space will typically pass through an HVAC filter before being vented outside or recirculated in the space. In many cases, these filters can be sampled for the virus. However, this requires that the HVAC system is both operating properly and is accessible. Healthy Davis Together and Davis schools have worked together to fit every classroom with portable HEPA filter units which have been shown to be very effective at reducing the risk of virus transmission. These filters are also easy to sample for the presence of the COVID-19 virus. If a significant concentration is detected, teachers, staff, and student families will be notified and encouraged to get tested.

How are results used?

Results will be used to alert school staff and student families to get tested and remain vigilant by following health behavior guidance, should the virus be detected.

Just as higher concentrations are a signal the virus is present, lower (and no) concentrations are a signal we’re making progress. Consistently low levels will give Davis schools and families the data and confidence we need to keep our schools and classrooms safely open.

How long will environmental monitoring be in place?

Even once we achieve widespread vaccination in Davis, monitoring of wastewater, air, and surface samples will be an important tool to stay ahead of and prevent possible spread.

Healthy Davis Together is a joint project between the UC Davis and the City of Davis to prevent the spread of COVID-19 and facilitate a coordinated and gradual return to normal city activities and student life.