Audio file: Smart Dental Project

Transcript

The transmission of viruses such as coronavirus through the air means that extra precautions need to be taken to mitigate risks.

Since respiratory air is invisible, this risk is typically very difficult to manage. In order to mitigate this risk, we need to first understand and see where the risk is.

In the following video you'll see the use of our sensors for detecting the movement of respiratory air from a person. We have deployed nine sensors, each spaced 20 centimetres apart in an enclosed environment.

Initially the person is breathing through their nose so no jet is moving past the sensors and no movement is detected. Then the subject is asked to mouth breathe periodically in the direction from left to right in the video.

As you can see, there is a Mexican wave travelling from left to right which indicates the speed and direction of the moving breath. We are currently working to incorporate this into real dental surgery so that we can track in real time the movement of potentially contaminated air.