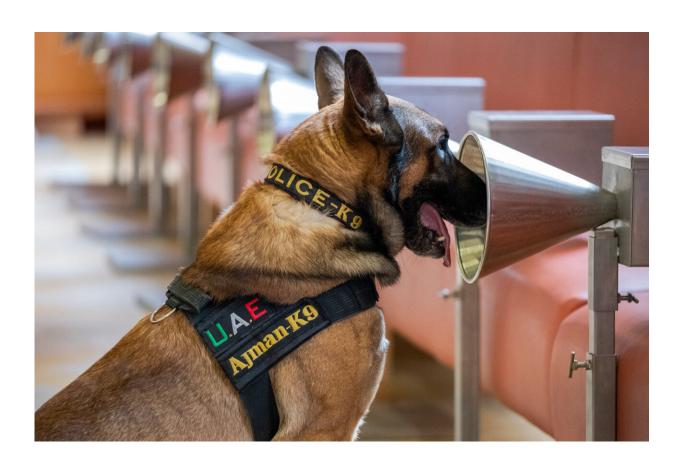# Dogs found to be effective for mass screening people for COVID-19

June 3 2022, by Bob Yirka

Positive marking by a U.A.E. dog during the trial. Credit: Nosaïs Team, CC-BY 4.0 (creativecommons.org/licenses/by/4.0/)

A team of researchers affiliated with several institutions in France and one in the United Arabian Emirates, has found via testing that dogs may

be as effective at mass screening people for COVID-19 as publicly available tests. In their paper published on the open-access site *PLOS ONE*, the group describes how they tested multiple dogs sniffling human sweat samples for COVID-19 and how well they did.

Prior research has suggested that dogs can smell it when someone near them has a disease, such as cancer. Some research has also suggested that dogs might be able to do the same with COVID-19. To find out if that is indeed the case, the researchers tested the sniffing ability of multiple dogs faced with multiple sweat samples.

To test their ability to recognize COVID-19, multiple dogs were trained to sniff samples of human sweat and to sit down if they detected the virus. Training was done in ways similar to that done with dogs trained to sniff out explosives. Once they were tested, the dogs were taken to the Alfort School of Veterinary Medicine where cones had been set up with sweat samples in them.

In all the dogs sniffed sweat samples collected from 355 human volunteers. The researchers found them to be 97% accurate in identifying those people who had already tested positive by a PCR test. And they were 100% accurate in detecting COVID-19 in people who were not experiencing any symptoms. In other tests, the dogs were found to be more accurate in identifying people with COVID-19 than antigen tests, which are the type most commonly used at home.

The researchers note that sweat samples were collected from armpits, from the back of the neck and from used face masks, demonstrating that samples can be collected from multiple body sites. They also note that it is still not known how it is that dogs are able to smell infections in people. And they point out that dogs are much faster at detecting COVID-19 than any of the tests that humans have created, providing results nearly instantly. The only drawback the team could find was the

limited availability of trained dogs.

More information: Dominique GRANDJEAN et al, Diagnostic accuracy of non-invasive detection of SARS-CoV-2 infection by canine olfaction, *PLOS ONE* (2022). DOI: 10.1371/journal.pone.0268382