

**WorkCare Briefing: Preventing and Managing COVID-19 in the Workplace  
Questions & Answers – Week 46  
January 27, 2021**

*The following questions were asked during WorkCare's weekly webinar series on Preventing and Managing COVID-19 in the Workplace – Week 46. Anthony Harris, M.D., M.B.A., M.P.H., WorkCare's Chief Innovation Officer and Associate Medical Director - Onsite Clinical Operations, presented the webinar and provided these answers. If your question is not answered here, it was answered in a previous Q&A.*

Here are links for your reference:

- [January 27 Webinar Recording](#)
- [Questions & Answers from the January 20 Webinar](#)

**RETURN TO WORK**

- Q:** Should businesses still be having employees teleworking? If so, how long do you think teleworking should continue in 2021?
- A:** Teleworking is still advised. How long will that be extended into 2021? Good question. It won't be until we are well below the COVID-19 reproductive rates we have now, which in some cases are 1.8 to 2.5 for individuals who are infected and can transmit the coronavirus. Community and workplace transmission rates will need to be low enough for teleworkers to return to workplaces. If you can telework, you are likely to be teleworking for much if not all of 2021 before we reach that low level of transmission, and there will still likely be preventive precautions in place with return to the workplace.

**PREVENTION**

- Q:** Do think Dr. Fauci's recent comments about double-masking will result in a change to CDC recommendations?
- A:** Without commenting on potential changes in CDC recommendations, if you are asking about double-masking, or wearing an N95 versus a cloth mask, then yes, those higher protective methods are recommended. Let's imagine that at the beginning of this pandemic the supply of N95 masks was bountiful. Everyone could afford to have not just one but several N95 masks. If that had been the case, would we have made the recommendation then to wear N95s? Yes, because of the protective factors and impact afforded by them. Now that the supply of N95 masks has increased dramatically, more and more people will be advised to wear them at work and in social settings.
- Q:** How would workforces approach the fit testing and respiratory clearance requirements if they were to move to N95 masks?
- A:** Employers subject to OSHA regulations who are required to use or are permitted voluntary use of respiratory protection must manage their respiratory protection programs (RPPs) in accordance with the OSHA respirator standard. Paragraph (d)(1)(iii) in section 1910.134 requires such employers to identify and evaluate respiratory hazards in the workplace, and paragraph (c)(1) requires employers to develop and implement written RPPs with worksite-specific procedures and to update their written programs as necessary to reflect changes in workplace conditions that affect respirator use. You may want to keep an eye on OSHA notices. The agency issued guidance for COVID-19 workplace prevention programs on Jan. 29, and the agency is expected to take further actions under the Biden Administration.

**Q:** When you spray the workplace down with bleach, do the fumes kill the coronavirus?

**A:** The bleach or chlorine fumes don't necessarily kill the virus. It's the pH level that matters. Raising the pH level high enough usually requires surface contact with liquid bleach versus fumes from the bleach. We know that cleaning surfaces is something that should be done when we can. We also know the impact on reduction of transmission is not as substantial as we once believed it to be for surface contact cleaning and decontamination, but you should still do it if you can, for sure.

## **ANIMALS/DETECTION**

**Q:** Is it possible pets could be asymptomatic carriers of COVID-19?

**A:** They could be, in the same way that humans can be. A canine could contract COVID-19 and be asymptomatic. In those few cases we've seen in animals, the symptoms have been either non-existent or mild. We also know the risk of transmission to humans is very low.

**Q:** How are canines trained to detect COVID in humans, and how does the dog indicate a positive result?

**A:** Canines are trained to smell samples, most often of sweat on swabs placed in sterile containers, and to sit or paw the floor when they detect signs of infection. Volatile organic compounds produced during respiratory infections can cause specific scent imprints. Dogs are trained to detect specific scents using positive reinforcement, including praise and treats.

**Q:** Can dogs contract COVID by sniffing an infected person's sweat?

**A:** As far as we know, no. They are detecting an exposure to VOCs from the person's sweat, but shedding viral particles in a substantial volume in sweat is something we have not seen so far as a mode of transmission. You usually need respiratory droplets with viral particles in transmissible volume to contract an infection. We have talked about hospitalized patients transmitting virus through fecal matter, which can have a high viral load. It can be high in tears, as well. But canines wouldn't be exposed to those type of scenarios.

**Q:** Are the dogs being used to detect COVID in people being vaccinated?

**A:** A COVID-19 vaccine has not been approved for use in canines. The likelihood of being exposed to the virus during detection is considered minimal.

**Q:** Are "artificial noses" being used for COVID-19 detection?

**A:** The term "artificial nose" could be interpreted as gas chromatography or gas spectrometry. There are kiosks that have been developed that can detect viral particles in breath. They are not necessarily detecting the VOCs that canines are detecting. However, they have the sensitivity and accuracy to pick up on viral particles suspended in respiratory droplets a person blows into a straw on the kiosk. The machine can detect whether the person is infected within a few seconds. There is a substantial capital outlay for these devices, and we haven't seen the technology scaled up yet.

## **VACCINE**

**Q:** We keep hearing reports that about half of available vaccine doses have not been distributed, but states are saying they are out of vaccine. Where are all the missing doses?

**A:** That's the million-dollar question. I have not seen any reports that can directly identify what the hold-up is regarding distribution of half of the doses that are available. It is likely they are not in a substantial stockpile location. We are talking about vaccine distribution across all 50 states. In aggregate it seems like large quantities are being sequestered, but doses are likely distributed in much smaller numbers in locations such as hospitals and pharmacies.

- Q:** How effective is the first dose of vaccine prior to receiving the second dose?
- A:** In phase 3 clinical studies, the effectiveness of the Pfizer and Moderna vaccines is around 80 percent with the first dose and 94 to 95 percent after the second dose. People develop immunity in 14 to 21 days after each dose. There are indications in the United Kingdom and other countries that more doses will be directed to those who have not yet received the vaccine than those who have received the first dose because the protective level is substantial enough, and the numbers play out well enough statistically speaking, to decrease overall risk in the general population with just a single dose.
- Q:** If our workforce is using the WorkCare's WorkMatters portal for online COVID screening, how is the COVID vaccine affecting our employees who are being screened?
- A:** If an employee reports mild pain, swelling or redness at the vaccination site, a nurse can clear that person for work during the screening process. However, because certain vaccination-adverse event symptoms overlap with COVID-19 symptoms, such as fatigue, headache, muscle and joint pain, fever or chills, WorkCare continues to adhere to established protocols and assume that systemic symptoms within 24-72 hours after vaccination could be COVID. If the symptoms resolve within the expected 72 hours after vaccination, the employee should be able to return to work. Otherwise, existing protocols are followed, including diagnostic testing to determine whether the person should remain at home. Respiratory symptoms of COVID would constitute a presumed case/close contact and isolation/quarantine scenario until proven otherwise.

#### **HERD IMMUNITY**

- Q:** The CDC has estimated that the total number of COVID cases in the U.S. is likely around 90 million people. Many of these people have recovered and hopefully are immune or at least resistant to reinfection. There have been approximately 25 million vaccine doses administered. So, there may be around 125 million Americans with at least some resistance to COVID. The daily number of new cases appears to have peaked, at least for the time being, earlier this month. Could you discuss the possibility that we are trending toward herd immunity and therefore transmissibility of the virus is being decreased because the percentage of susceptible victims is decreasing?
- A:** That assessment is accurate in how it is articulated. We are woefully underestimating the number of people affected by COVID in the U.S. There are suggestions that the number of cases may be four to five times greater than what we are picking up on. If we assume 90 to 100 million Americans have been infected, and we add to that to the number of individuals who have been vaccinated, we still don't get to that immunity number yet...which is closer to over 200 million people. When we talk about a 1.2-1.5 reproductive rate, 60 percent of the population would need to be vaccinated to reach herd immunity, or about 196 million Americans. That is where we need to be. If the number of infected people is higher, more like 80 percent of the population would need to have had the virus or been vaccinated to reach herd immunity. That puts us closer to 220 to 250 million Americans. So, we still have a long way to go. We can look to the trend of daily cases on a seven-day rolling average; a downward trend may indicate we have a population that is now at a level where those who are susceptible is low enough to see benefits from herd immunity.

#### **CASE TRACKING**

- Q:** When reviewing case rates, is it possible to include countries to determine which ones have the most effective prevention strategies?
- Q:** Is there a decent website that someone could use to track SARS-CoV-2 reproduction rates at a state, county, or more local level?
- A:** For answers to both of these questions, refer to this [WorkCare blog post](#), which provides a number of helpful resources.