

# COVID-19 and Food Safety

*By Sanja Ilic*

Coronaviruses are a large family of viruses whose members cause the common cold, but also more severe illnesses like Severe Acute Respiratory Syndrome (SARS), and Middle East Respiratory Syndrome (MERS), all of which can infect both humans and animals, according to the World Health Organization (WHO). COVID-19 is the new coronavirus that causes symptoms that include fever, coughing, shortness of breath, breathing difficulties and other, and range from mild to severe respiratory illness. Advanced age, or conditions such as various cancers, chronic pulmonary diseases, asthma, heart disease and even diabetes, are associated with an increased severity of COVID-19 infections and higher fatality rates.

COVID-19, like other coronaviruses, transmits person-to-person through droplets that are produced when an infected individual coughs or sneezes. Most often, the virus is transferred from an infected to a healthy individual when droplets carrying the virus directly reach their nose, mouth, or eyes, or through close contact such as a handshake. The virus can also transmit by touching an object or surface with the virus on it and then touching the mouth or eyes before washing the hands.

Studies with a bovine (an animal of the cattle group, which also includes buffaloes and bison) coronavirus have shown that the virus can be stable on the surface of lettuce in laboratory conditions. Coronaviral RNA was detectable on the lettuce surface for 30 days, and infectious bovine coronavirus was detected on the lettuce surface for at least 14 days after inoculation. However, from experience with previous outbreaks of SARS and MERS, the transmission through food consumption is not likely to occur. COVID-19 is not suited to infect gastrointestinal tract, the receptors for this virus are in lung cells. There is currently no information as to whether or not COVID-19 infected produce handlers could contaminate fresh produce that is not further treated.

Although COVID-19 transmissions from food has not been shown, consumers should follow good hygiene practices when handling food. It's important to protect yourself, your loved ones,

and your consumers that may be at risk from the severe form of COVID-19. Wash your hands often with soap and water for at least 20 seconds, refrain from touching your face, mouth, nose. Use hand sanitizer that has at least 60% alcohol. Remember hand sanitizer is only effective if your hands are clean.

Cleaning and sanitation of the surfaces are critical. A recent study found that the coronaviruses can persist up to nine days on inanimate surfaces like metal or plastic.

Coronaviruses persist longer at lower temperatures and when the humidity is higher. Surface disinfection with 0.1% sodium hypochlorite or 62-71% ethanol significantly reduces the infectivity of coronavirus on surfaces within one minute of contact. In addition, everyone should avoid crowded spaces and any contact with people that may be infected and asymptomatic carriers.

**Grocery shopping.** During the lock down, you may have to be around other people during grocery shopping. Use hand sanitizer before entering the store and after finishing the shopping. Maintain physical distance. The biggest risk of transmission of COVID-19 is being around individuals who carry the virus. Minimal distance recommended to avoid droplet transmission from another person is 6 feet, however, the research has shown that the smallest droplets carrying the virus can travel much further than that and up to 8 meters. Avoid isles with other shoppers. Come prepared with the list and spend minimal time grocery shopping. When in produce section, avoid touching produce. Do not come to the store if symptomatic.

**Take outs and delivery.** There are currently no reports that take-out or drive-through lead to increased illness. To minimize the risk practice handwashing and use hand sanitizer after handling packaging. Food delivery presents similar risks only if the restaurant practices no touch/no interaction policy. However, if physical distancing is not practiced, the delivery may present the risks to transmission of virus.

**COVID-19 information can be found at:** <https://producesafety.osu.edu/covid-19>

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