

## COVID-19 mythbusting series

### What can we clean a patient with? Will this kill COVID-19?

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COVID-19 is a coronavirus, which are enveloped viruses. A viral envelope is a phospholipid and glycoprotein outer membrane that encloses the virus and its genetic material. This protects the virus outside the body as well as allowing it to bind to and fuse with host cells during infection.

The lipid envelope is relatively sensitive to heat, drying, detergents and disinfectants, making these viruses relatively straightforward to control through washing and disinfection. Soaps, detergents, alcohols, bleach (sodium hypochlorite), hypochlorous acid and most other disinfectants will disrupt the lipid envelope. This is why hand washing, surface cleaning and disinfection are emphasised in controlling COVID-19.

Enveloped viruses are also vulnerable to heat and drying. They typically transfer directly from host to host but may survive for limited periods on animate and inanimate surfaces. These can act as fomites and facilitate indirect transmission of the virus. It is possible that animals from COVID-19 positive households can be fomites and carry the virus on their skin and hair. It is highly unlikely that this would be significant in animals from other households where COVID-19 is not circulating.

In theory, any viral particles could be removed by washing or wiping with detergents and/or disinfectants. However, to be fully effective the whole animal must be thoroughly treated. This could increase exposure through more staff interaction, closer and longer contact, aerosols, and movement to other parts of the practice that would otherwise have been unnecessary.

A decision on cleansing should therefore be risk-based and take into account the risk of fomite transmission, whether thorough treatment is feasible, any extra exposure of staff and facilities, and the level of PPE required.

**For more free COVID-19 resources for veterinary professionals, visit [rcvsknowledge.org/covid-19](https://rcvsknowledge.org/covid-19)**



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