

Tips for cleaning surfaces during COVID-19

Keep yourself and your employees safe around the farm during the COVID-19 pandemic with the following tips for cleaning surfaces.

We know that COVID-19 can survive on some surfaces for as long as 72 hours. However regular cleaning can greatly reduce this time. Focus on areas that are 'touched often' such as handles, gate latches, rails and switches.

Remember that the main route of transmission is directly from person to another, via coughing or sneezing. So, the most crucial steps to reduce spread of the COVID-19 are:

- Remain at home if sick,
- Direct coughs and sneezes away from others
- Wash hands regularly throughout the day
- Wear gloves when possible at work

What can we use to sanitise surfaces on horse properties?

Most properties have a ready supply of detergents and chemicals that can be used to sanitise surfaces against microbes, including bacteria and viruses.

Most EPA-registered cleaning products on the market are efficient at cleaning surfaces.

For disinfection, the Centres for Disease Control and Prevention (CDC) states that household bleach solutions should be effective, too.

Common products used on the farm are VIRKON, F10 and Shoof Equine's disinfectant.

Surface	What to use	Mode of action
Hands	Soap and water. Wash hands regularly e.g. after removing gloves, when arriving home etc.	Soap interferes with the fats in the virus shell, lifting it from a surface, and it is then rinsed off by water.
Robust or hard materials e.g. railings, gate latches, bucket handles, farrier gear	Acid detergent solution Use it to scrub or wipe down rails, pipework, gates and latches where people regularly touch. Ensure gloves are worn.	Acid detergents contain inorganic acids, e.g. phosphoric or sulphuric acid, or organic acids, e.g. lactic acid, citric acid etc. All are effective at destroying undesirable organisms, including viruses on surfaces.

Walls and Floors	Dilutions of 100 - 200 ppm hypochlorite solution (chlorine) and 2 minutes contact time are sufficient to kill the virus. NOTE: Too high a concentration can be corrosive. Appropriate PPE should be worn i.e. masks, gloves etc.	Hypochlorite is particularly effective against viruses, by destroying the protein and RNA.
Work clothes & overalls	Laundry detergent and warm/hot water. Wash work clothes daily when possible.	All detergents are active against bacteria, most moulds, yeasts and viruses.
Electronics, soft materials e.g. touch screens, phone cases, motorbike handles, steering wheels etc.	70% alcohol-based wipes e.g. antibacterial hand wipes Use to wipe down surfaces and allow to air-dry. Discard wipes that have dried out, as they are no longer active.	Ethanol can kill viruses within 30 seconds, by destroying the proteins and RNA (genetic material). Best results when ethanol is at a 70% concentration
Plastics, delicate materials e.g. light switches, control buttons, door handles, fridge handle, toilet flush button, etc.	Dilute hypochlorite solution Make up a dilute mix e.g. 100 to 200 ppm chlorine or 0.01% to 0.02% active chlorine in a spray bottle. Spray on a cloth to wipe down frequently touched surfaces. (NB This is equivalent to a product with 140g/L Chlorine. Add 1.5mL solution per 1L of water to give a chlorine level of 200ppm)	Hypochlorite is particularly effective against viruses, by destroying the protein and RNA.

What are some of the shared touchpoints?

Common shared touch points to consider sanitising include:

- Door handles and light switches
- Pens and writing surfaces
- Gates, latches and handrails
- Grooming kits and farrier gear
- Taps and hoses
- Cupboard and fridge handles
- Vehicle door handles, keys, steering wheels / handlebars

How long does coronavirus survive on different surfaces?

Some surfaces are better than others at harbouring viruses. Unfortunately, it can survive well on the hard and shiny surfaces that are commonly found around farms and equine properties.

Material or Surface	Time	Notes
Air	3 hours	Amount of time coronavirus can remain infectious in airborne droplets. Use a mask if 2 metre separation cannot be achieved.
Copper	4-8 hours	Copper is remarkably effective at killing viruses
Cardboard	24 hours	Amount of time to find no more viable traces, in research situation. Good guide for porous surfaces
Stainless Steel	48 hours	Amount of time to find no more viable traces of virus on these materials. They represent many hard, shiny surfaces we find on farms.
Plastic	72 hours	Amount of time to find no more viable traces of virus on these materials. They represent many hard, shiny surfaces we find on farms.

In summary:

Cleaning a surface first is an essential part of disinfection, as organic matter (dirt, faeces etc) can inactivate most disinfectants.

Where possible wear disposable gloves, or gloves that can be cleaned, when conducting cleaning tasks.

Soap and water should be used for hand hygiene when hands are visibly soiled. Alcohol-based hand rub or soap and water can be used when hands are visibly clean but have been contaminated from contact with environmental surfaces

Gloves should be worn when handling and preparing disinfectant solutions.

Protective eye wear should be worn to protect against splashing.

Note: this is our best interpretation of the information available to date. It may well change over time as more information comes to hand.