Cleaning and disinfecting to reduce COVID-19 transmission

Building and construction sites
4 April 2020

Purpose

The current outbreak of coronavirus (COVID-19) has been declared a pandemic. The Victorian government is working with health services, agencies and businesses to keep the Victorian community safe.

As more people are diagnosed with coronavirus (COVID-19), practicing good personal hygiene will be critical to help prevent the spread of this disease. It will also be important to clean and disinfect premises, including non-healthcare settings, where cases worked or studied.

This guide aims to provide advice on cleaning and disinfecting to reduce the risk of coronavirus (COVID-19) transmission in building and construction sites. Note that this advice applies to all non-healthcare settings in Victoria. The principles in this guide apply equally to domestic settings, office buildings, small retail businesses, social venues and all other non-healthcare settings.

How coronavirus (COVID-19) is transmitted

- Coronavirus (COVID-19) spreads through close contact with an infected person and is typically transmitted via respiratory droplets (produced when an infected person coughs or sneezes). It may also be possible for a person to acquire the disease by touching a surface or object that has the virus on it and then touching their own mouth, nose or eyes, but this is not thought to be the main way that the virus is spreading in this pandemic.
- Current evidence suggests the virus causing coronavirus (COVID-19) may remain viable on surfaces for many hours and potentially for some days. The length of time that coronavirus (COVID-19) survives on inanimate surfaces will vary depending on factors such as the amount of contaminated body fluid (e.g. respiratory droplets) present, and environmental temperature and humidity. In general, coronaviruses are unlikely to survive for long once droplets produced by coughing or sneezing dry out.

Cleaning and disinfection

- **Cleaning** means physically removing germs, dirt and organic matter from surfaces. Cleaning alone does not kill germs, but by reducing the numbers of germs on surfaces, cleaning helps to reduce the risk of spreading infection.
- **Disinfection** means using chemicals to kill germs on surfaces. This process does not necessarily clean dirty surfaces or remove germs, but by killing germs that remain on surfaces after cleaning, disinfection further reduces the risk of spreading infection. Cleaning before disinfection is very important as organic matter and dirt can reduce the ability of disinfectants to kill germs.
- Transmission or spread of coronavirus occurs much more commonly through direct contact with respiratory droplets than through contaminated objects and surfaces. The risk of catching coronavirus when cleaning is substantially lower than any risk from being face-to-face without appropriate personal protective equipment with a confirmed case of coronavirus (COVID-19) who may be coughing or sneezing.

Importance of cleaning your hands regularly

- Soap and water should be used for hand hygiene when hands are visibly soiled. Use an alcohol-based hand rub at other times (for example, when hands have been contaminated from contact with environmental surfaces).
- Cleaning hands also helps to reduce contamination of surfaces and objects that may be touched by other people.

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- Avoid touching your face, especially their mouth, nose, and eyes when cleaning.
- Always wash your hands with soap and water or use alcohol-based hand rub before putting on and after removing gloves used for cleaning.

Cleaning and disinfection

Routine cleaning and disinfection

Workplaces should routinely (at least daily) clean frequently touched surfaces (for example, tabletops, door handles, light switches, desks, toilets, taps, TV remotes, kitchen surfaces, cupboard handles and other equipment and materials relevant to construction and building sites). Also, clean surfaces and fittings when visibly soiled and immediately after any spillage. Where available, a disinfectant may be used following thorough cleaning. See below for choice, preparation and use of disinfectants.

What to clean and disinfect and when

Clean and disinfect all areas (for example, offices, bathrooms and common areas) that were used by the suspected or confirmed case of coronavirus (COVID-19). Close off the affected area before cleaning and disinfection. Open outside doors and windows to increase air circulation and then commence cleaning and disinfection.

The department will notify employers when a worker has been diagnosed with coronavirus (COVID-19) and has been infectious while on a building and construction site. The department will advise if cleaning and disinfection is required. It is the responsibility of employers to apply the principles in this document to conduct relevant cleaning and disinfection.

How to clean and disinfect

1. Wear gloves when cleaning and disinfecting. Gloves should be discarded after each clean. If it is necessary to use reusable gloves, gloves should only be used for coronavirus (COVID-19) related cleaning and disinfection and should not be used for other purposes. Wash reusable gloves with soap and water after use and leave to dry. Clean hands immediately after removing gloves.
2. Thoroughly clean surfaces using detergent (soap) and water.
3. Apply disinfectant to surfaces using disposable paper towel or a disposable cloth. If non-disposable cloths are used, ensure they are laundered and dried before reusing.
4. Ensure surfaces remain wet for the period of time required to kill the virus (contact time) as specified by the manufacturer. If no time is specified, leave for 10 minutes.

A one-step detergent/disinfectant product may be used as long as the manufacturer's instructions are followed regarding dilution, use and contact times for disinfection (that is, how long the product must remain on the surface to ensure disinfection takes place).

Cleaning and disinfection of items that cannot withstand bleach

Soft furnishings or fabric covered items (for example, fabric covered chairs or car seats) that cannot withstand the use of bleach or other disinfectants or be washed in a washing machine, should be cleaned with warm water and detergent to remove any soil or dirt then steam cleaned. Use steam cleaners that release steam under pressure to ensure appropriate disinfection.

Use of personal protective equipment (PPE) when cleaning

Gloves are recommended when cleaning and disinfecting. Use of eye protection, masks and gowns is not required when undertaking routine cleaning.

Always follow the manufacturer's advice regarding use of PPE when using disinfectants.

For cleaning and disinfection for suspected and confirmed cases, when available, a surgical mask and eye protection may provide a barrier against inadvertently touching your face with contaminated hands and fingers, whether gloved or not.

For cleaning and disinfection for suspected and confirmed cases, wear a full-length disposable gown in addition to the surgical mask, eye protection and gloves if there is visible contamination with respiratory secretions or other body fluid. Get advice from your work health and safety consultants on correct procedures for wearing PPE.

Choice, preparation and use of disinfectants

- Where possible, use a disinfectant for which the manufacturer claims antiviral activity (meaning it can kill viruses). Chlorine-based (bleach) disinfectants are one product that is commonly used. Other options include common household disinfectants or alcohol solutions with at least 70% alcohol (for example, methylated spirits).
- Follow the manufacturer's instructions for appropriate dilution and use. Table 1 below provides dilution instructions when using bleach solutions.

Chlorine dilutions calculator

Household bleach comes in a variety of strengths. The concentration of active ingredient — hypochlorous acid — can be found on the product label.

Table 1. Recipes to achieve a 1000 ppm (0.1%) bleach solution

Original strength of bleach		Disinfectant recipe		Volume in standard 10L bucket
%	Parts per million	Parts of bleach	Parts of water	
1	10,000	1	9	1000 mL
2	20,000	1	19	500 mL
3	30,000	1	29	333 mL
4	40,000	1	39	250 mL
5	50,000	1	49	200 mL

For other concentrations of chlorine-based sanitisers not listed in the table above, a dilutions calculator can be found on the department's website <https://www2.health.vic.gov.au/public-health/infectious-diseases/infection-control-guidelines/chlorine-dilutions-calculator>.

Management of linen, crockery and cutlery

If items can be laundered, lauder them in accordance with the manufacturer's instructions using the warmest setting possible. Dry items completely. Do not shake dirty laundry as this may disperse the virus through the air.

Wash crockery and cutlery in a dishwasher on the highest setting possible. If a dishwasher is not available, hand wash in hot soapy water.

Reducing the risk of transmission in social contact settings

Social contact settings or environments include (but are not limited to), transport vehicles, shopping centres and private businesses.

To reduce the risk of spreading coronavirus (COVID-19) in these settings:

- Promote cough etiquette and respiratory hygiene.

- Routinely clean frequently touched hard surfaces with detergent/disinfectant solution/wipe.
- Provide adequate alcohol-based hand rub for staff and consumers to use. Alcohol-based hand rub stations should be available, especially in areas where food is on display and frequent touching of produce occurs.
- Train staff on use of alcohol-based hand rub.
- Consider signs to ask shoppers to only touch what they intend to purchase.

Vehicle air-conditioning should be set to fresh air ☒  ☑