Fact Sheet for health professionals

Coronavirus disease (COVID-19): environmental management

This information summarises the recommendations for environmental management for prevention of transmission of coronavirus via environmental surfaces and fomites (note: this advice does not apply to reusable medical devices). Also refer to the Australian Government Department for Health Environmental cleaning and disinfection principles for COVID-19 and to local policies and procedures.

Coronaviruses are a group of enveloped RNA viruses, similar in structure to the influenza virus. There is limited scientific evidence on the survival of coronaviruses in the environment; however recent evidence suggests they may survive for up to several days on surfaces, especially in the presence of organic material.

General principles

Cleaning and disinfection is recommended. This can be accomplished using a two-step process, or a combined detergent/disinfectant product. Disinfectants that are used within a healthcare setting must be either:

- a TGA approved (registered or listed) hospital-grade disinfectant, preferably with label claims against coronavirus, or
- a chlorine-base product such as sodium hypochlorite at 1,000 ppm available chlorine.

Detergent and/or disinfectant-impregnated wipes with appropriate claims for activity against coronavirus can be used for small items of patient care equipment (see below).

For further details on cleaning chemicals also see the SA Health Cleaning Standard for healthcare facilities (section 4.1 Cleaning chemicals). Care should be taken to ensure that the cleaning chemical is used appropriately and in accordance with the manufacturer’s specifications. All claims regarding the efficacy of a chemical should be carefully assessed and clarified if necessary. For effective disinfection it is important to ensure that the recommended contact time for the product is adhered to.

Use disposable cleaning equipment and cloths where possible or launder as per the SA Health Cleaning Standard for healthcare facilities (section 4.2 Cleaning equipment).

Environmental surfaces should be cleaned on a regular basis: at least once daily; following aerosol-generating procedures or other activities that might contaminate the environment; and on patient discharge. Frequently touched surfaces such as handles and door knobs should be cleaned more often.

Cleaning and disinfection of patient rooms should only be performed by staff trained in the use of the appropriate personal protective equipment including disposable face mask, long-sleeved gown, gloves, and eye protection.

Patient Care Equipment

Use disposable or dedicated patient care equipment wherever possible and clean and disinfect between each use. Disinfectant wipes can be used on small items of equipment, but care must be taken with the use of chemicals on electrical equipment, where an alcohol wipe may be
more appropriate. Always refer to equipment manufacturer’s instructions for suitable cleaning and disinfection products.

No special treatment of patient cutlery and crockery is required.

**Linen**

Used linen should be bagged inside the room and managed as for patients on transmission-based precautions. A linen chute should not be used as this may create aerosols.

**Waste**

Dispose of waste as per transmission-based precautions in the medical waste stream.

**Which disinfectants are active against coronaviruses?**

A recent review\(^2\) lists the following “active at in-use” concentrations of commonly used disinfectants against coronavirus. These results do not include the 2019-nCoV, but it is likely the new strain has similar physical properties to the tested strains. **Note:** this is a general guide only and some products may have combinations of ingredients that may have proven activity against coronavirus or similar non-enveloped viruses.

<table>
<thead>
<tr>
<th>Compound</th>
<th>Active at in-use concentrations?</th>
<th>Minimum effective concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hypochlorite</td>
<td>Yes</td>
<td>0.1% (1,000ppm available chlorine)</td>
</tr>
<tr>
<td>Alcohol (ethanol)</td>
<td>Yes</td>
<td>70%</td>
</tr>
<tr>
<td>Quarternary ammonium compounds + 70% ethanol</td>
<td>Yes</td>
<td>0.04% + 70% ethanol</td>
</tr>
<tr>
<td>Quarternary ammonium compounds + HCl (acidified Quat)</td>
<td>Yes</td>
<td>0.04% + 1% HCl</td>
</tr>
<tr>
<td>Quarternary ammonium compounds (Quat)</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

*Adapted from Reference 2.*

**References**


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For more information

**Infection Control Service**

Communicable Disease Control Branch

11 Hindmarsh Square

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