SARS-CoV-2, the virus that causes COVID-19, is primarily transmitted through the air. Basic measures to reduce the transmission of the virus and curb its spread remain the same, and they include:

- wear multi-layer, well-fitting mask
- keep at least 2 metres apart
- being outdoors
- avoid unnecessary encounters
- ventilate with outdoor air to lessen viral load

Cleaning, sanitizing, and disinfecting, have almost become second nature during the COVID-19 pandemic. Before applying these practices, it is important to consider your surrounding environment, the type of product you choose to clean with, and your personal health.

This information sheet provides guidance on COVID-19 prevention strategies as well as for other viruses while keeping in mind individual differences and Multiple Chemical Sensitivities (MCS).
Know the Difference!

It’s important to know the differences between cleaning, sanitizing, and disinfecting as these terms are often used interchangeably.

**Cleaning**
- Use soap and water to physically remove dust, dirt, and debris from surfaces
- Wash hands with soap for at least twenty seconds is effective in eliminating the SARS-CoV2 virus
- Just as hand washing is effective, scrubbing or wiping with soap removes the virus from surfaces and reduces viral load to safe levels at home and in the community
- Must be done prior to sanitizing or disinfecting, but cleaning with soap and water also sanitizes
- Removes moulds and allergens that can trigger asthma
- Use of microfibre cleaning clothes in addition to cleaning products has been found to remove up to 99% of viruses and bacteria

**Sanitizing**
- When soap and water are not available
- Reduces viral loads to safe levels
- Most often used on contact surfaces
- Specific products for each surface, follow label instructions
- In Canada, hand-sanitizers that contain more than a single active ingredient such as ethanol or isopropanol need to be registered with a drug identification number (DIN) on the label.

**Disinfecting**
- This is carried out in healthcare settings, public washrooms, and high-touch surfaces in public areas where strong measures are essential
- Eliminates or inactivates viruses and bacteria
- Must remain on the surface for a specific amount of time, this is called “Contact” time.
- Disinfectants and sanitizer products for sale must be registered with Health Canada
How Long Do Viruses Last on Surfaces?

In general, the virus causing COVID-19 lasts longer on smooth surfaces like countertops than on porous surfaces such as textiles. It is believed that porous surfaces draw water away unlike waterproof and smooth surfaces. As viruses need water to survive, their longevity is often shortened on porous surfaces.¹ ²

<table>
<thead>
<tr>
<th>Duration</th>
<th>Surfaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 hours or less</td>
<td>Air, Paper, Tissue paper</td>
</tr>
<tr>
<td>3-5 hours</td>
<td>Cardboard, Copper</td>
</tr>
<tr>
<td>1-2 days</td>
<td>Wood, Cloth</td>
</tr>
<tr>
<td>4 days +</td>
<td>Glass, Stainless steel, Plastic, Surgical mask</td>
</tr>
</tbody>
</table>

Ingredients to Avoid

Some common disinfectants may contain chemicals that can worsen asthma or cause other negative symptoms. Some of these include:

Bleach or sodium hypochlorite: Can irritate eyes, throat, and skin, and can trigger asthma

Quats (quaternary ammonia): Can cause sudden symptoms such as skin and throat irritation as well as asthma. Some animal studies have found reproductive harm.

Peracetic acid: Can cause asthma

Triclosan: Can cause asthma and skin irritation in children³

Fragrances: They do not improve the effectiveness of cleaning, sanitizing, or disinfecting and contribute to symptoms and increased disability, and lack of accessibility to essential services in people suffering from MCS, and allergic reactions, especially to asthma.
Look for these Ecolabels

You can find these labels on cleaning or disinfecting products that have a reduced effect on human health and the environment. You can find more ecolabels and where they can be found by consulting our Eco Living Guide. Read labels every time you purchase a product. Make sure you are aware if they contain essential oils.

Wearing a mask is recommended when you’re in shared indoor spaces or when you cannot keep a 2-metre distance from others. However, here are some considerations on how to safely use a mask or face covering.

Do’s

- Wash your mask daily after each use, preferably using non-fragranced products with an ecolabel
- Wear a mask with at least 3 layers (2 layers of woven material fabric and 1 layer of filter-type fabric)
- Encourage wearing well-fitting reusable or cloth masks to minimise your environmental impact
- Consider airing out your medical mask at least for a week, to ‘off gas’ chemicals on the materials
- Wash cloth material at least twice using eco products to get rid of chemicals present on the new material before making your own mask, Otherwise, you risk breathing in those chemicals

Dont’s

- Use a scented soap or fabric softener to wash your mask
- Wear a face shield in lieu of a mask if you cannot tolerate a mask. You still must practice physical distancing in this case.
- Place a mask on children under the age of 2 or between the ages of 2 and 5 without supervision or if they are unable tolerate it
- Use a mask that is wet, dirty, or damaged since it can make it harder to breathe and be less effective
- Consider washing your medical mask, if wearing a non-medical mask is not possible
Particularly Vulnerable Populations

Although it is always recommended to wear the appropriate protective equipment when cleaning, sanitizing, or disinfecting, some populations are particularly at risk of experiencing adverse health effects from exposure to these products.

**Safer disinfection for Surfaces**

The following ingredients are deemed safer, especially for vulnerable individuals since they have reduced impacts on human health and the environment\(^1,6\) Make sure to read the product’s labels to verify the contents in the product. It is also important follow the guidelines related to the “contact” time and the protective equipment that should be worn before applying the product.

- Alcohol – ethanol, isopropyl
- Hydrogen peroxide
- L-Lactic acid
- Citric acid
- Thymol (thyme essential oil)\(^7\)
Handling Food and Mail Items

There is currently no evidence that COVID-19 has been spread through food or packaging materials; however, if you are still concerned, you can follow some of the following guidelines.

Food items or produce:

► Before handling foods items, wash your hands with soap and warm water for at least 20 seconds.
► Wash the produce under running water. Using soap or other chemicals is not recommended unless specified on the ecolabel.
► If washing food items is not possible, consider wearing gloves before handling the items to avoid the transfer of any chemicals, fragrances, or viruses to the skin.
► Any non-perishable food packaging can be stored for the recommended period of time to ensure all virus are eliminated or it may be rinsed under warm running water using soap products, preferably with an ecolabel.

Mail items:

► Designate a separate area or room to store any items from the mail for the recommended period of time, considering that the COVID-19 causing virus can last up to 4 hours on cardboard and 4 days on plastic.
► Packaging may be sprayed with at least 60% isopropyl alcohol solution or with 3% hydrogen peroxide. Read the manufacturer’s instructions to ensure the product stays on the surface for the required amount of time to disable the virus. Use eye protection and spray the alcohol solution in a well-ventilated area, away from any sources of fire since it can easily ignite.
## How Viruses Can Be Spread

<table>
<thead>
<tr>
<th>Direct Contact</th>
<th>Indirect Contact</th>
<th>Through the Air</th>
<th>Recirculation of Indoor Air</th>
</tr>
</thead>
<tbody>
<tr>
<td>An infected person can expose an individual by direct contact such as by handshaking, or not wearing a mask</td>
<td>Objects or surfaces (doorknobs, faucets, toys, etc.) that came into contact with the infected individual can be touched by another person</td>
<td>Virus droplets can increase in the air from activities by the infected person (for example, sneezing, talking, or singing). It can stay in the air from a few seconds to a few hours depending on their size</td>
<td>Viruses can be spread through the recirculation of air in a building by fans or through air ducts for example. It is important to decrease viral load by opening windows or through the use of an air exchanger</td>
</tr>
</tbody>
</table>

*9, 10*
Decision Tree for Cleaning, Sanitizing, or Disinfecting

Pandemic or not, it is often not clear what the best practices are for safe cleaning and disinfecting. The following decision tree can guide you on making an informed decision before cleaning, sanitizing, or disinfecting.

Where is this product being applied?

**Skin or hands**
Do you have access to soap and water?

- **Yes**
  - Consider washing your hands with soap and water as it eliminates all types of viruses.

- **No**
  - Use an eco label hand-sanitizer, or minimum 60% alcohol. Consider avoiding products with ingredients listed above such as fragrances.

**Surface or object**
Has the area or object been in use in the past 7 days?

- **Yes**
  - Is this a frequently touched surface or object (doorknob, countertop, keyboard, etc.)?
    - **No**
      - Continue your normal cleaning routine without using sanitizers. Most viruses do not survive on surfaces for more than a week. Consider safer products with an ecolabel.
    - **Yes**
      - **No**
        - Use only eco label products or 60% alcohol or 3% hydrogen peroxide. Avoid using product on the skin. Spray away from face in well-ventilated area.
        - **Yes**
          - Will the item or surface be in contact with vulnerable individuals such as children or people with asthma?
            - **Yes**
              - Clean frequently touched surfaces at least 2 times a day. Consider products with ecolabels to protect vulnerable populations. Always remember to read the product label and wear the appropriate protective equipment. Ensure proper ventilation (open windows). Direct contact with children should be avoided.
            - **No**
              - Use only eco label products or 60% alcohol or 3% hydrogen peroxide. Avoid using product on the skin. Spray away from face in well-ventilated area.

- **No**
  - Continue your normal cleaning routine without using sanitizers. Most viruses do not survive on surfaces for more than a week. Consider safer products with an ecolabel.
Resources:

ASEQ-EHAQ’S Eco Living Guide to promote healthier living and environmentally safer products:

Information and Resources for Seniors and Caregivers for COVID-19:

Information and Resources for Parents and Children for COVID-19:

Information and Resources for Indigenous Communities for COVID-19.
https://www.sac-isc.gc.ca/eng/1581964230816/1581964277298

Instructions on how to make your own mask or face covering using everyday materials:

List of recalled hand sanitizers by Health Canada. You may search a product by name, company, or by NPN or DIN number:
References:


