Fact Sheet: Safely Disinfecting for Coronavirus
Best practices to help keep your home safe, clean, and healthy

Purpose of this Fact Sheet
This fact sheet compiles reliable resources on effective methods to remove and kill coronavirus microbes and includes some of the science behind why these methods are effective. Remember, hand washing and social distancing are the most effective ways to prevent the spread of this respiratory disease. And please, please use disinfectants safely to protect you and your family from harmful and unintended health effects including accidental poisonings, skin and eye irritation, and poor indoor air quality triggering respiratory symptoms such as asthma.

Soap is your first line of defense!
Clean surfaces with hot, soapy water. Frequently wash your hands with soap and water, scrubbing vigorously for at least 20 seconds. Coronavirus, as with many similar viruses, are easily destroyed by soap! Soap molecules have a head that bonds with water and a tail that avoids water and bonds to oil and fat. Coronavirus microbes have a fat (lipid) membrane which soap molecules can easily rupture. Soap bubbles trap dirt and bits of destroyed viruses allowing them to be washed away!

Alcohol based hand sanitizer (with at least 60% alcohol) is also effective at killing coronavirus microbes and similar viruses. Use enough sanitizer to cover your hands and rub your hands together for 20 seconds or until your hands feel dry. Note, hand sanitizer will not be effective on visibly dirty or greasy hands.

Finding an Effective Disinfectant to Kill Coronavirus
Disinfectants must be registered with the Environmental Protection Agency (EPA) as an antimicrobial pesticide (kills a "pest"). EPA verifies their effectiveness and safety and registers the pesticide. If your disinfectant does not have an EPA registration number, EPA has no data to be able to verify the product is effective nor safe for use. The disinfectant label specifically lists what viruses, germs, or pests the disinfectant is effective against. Since coronavirus (COVID-19 or SARS-CoV-2) is completely new, no commercial labels will have SARS-CoV-2 listed on their label. EPA is working to approve disinfectants for use against coronavirus and has identified products already registered to kill similar viruses or harder to kill viruses which will also be effective at killing SARS-CoV-2. Products with ‘human coronaviruses’ listed on the label will effectively kill the new coronavirus. Products with ‘animal coronaviruses’ listed on the label will not be effective against the new coronavirus. You can find EPA’s list of disinfectants verified for use against SARS-CoV-2 (COVID-19) here: https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2 . The list is frequently updated as new information and data becomes available. Check this list to verify your disinfectant meets the criteria for use against coronavirus (SARS-CoV-2). You can search by product name, EPA registration number, and active ingredient.

Look for the EPA registration number on the label!
Using Disinfectants Safely and Protecting your Indoor Air Quality

Make sure your surface is first cleaned, rinsed, and dried. (See our Factsheet on Safely Cleaning and Disinfecting!) Disinfectants will not work on dirty or soiled surfaces. When using your disinfectant, always follow the label directions exactly to ensure safe and effective use. Make sure to strictly follow the contact or dwell time, which is the amount of time the surface should be visibly wet to ensure the virus is killed.

Cleaning and disinfecting with chemicals can result in poor indoor air quality. Some disinfectants are safer than others and some disinfectants can trigger asthma symptoms. To help with identifying safer options, the Environmental Working Group (EWG) evaluated the EPA list of products effective against SARS-CoV-2 and identified disinfectants which had fewer ingredient concerns and would be safer for use in your home, especially if you or a family member suffers from asthma. In general, protect your indoor air quality by choosing a safer disinfectant, ventilate the area while cleaning, never spray products directly into the air (no aerosols), and never mix cleaning products or disinfectants together as this could result in the creation of harmful gases.

Look for safer active ingredients listed on the disinfectant label!

<table>
<thead>
<tr>
<th>Asthma-Safer Active Ingredients</th>
<th>Ingredients that may Cause Asthma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrogen peroxide</td>
<td>Sodium hypochlorite (bleach)</td>
</tr>
<tr>
<td>Ethyl alcohol</td>
<td>Quaternary ammonium compounds</td>
</tr>
<tr>
<td>Isopropyl alcohol</td>
<td>Glutaraldehyde</td>
</tr>
<tr>
<td>Lactic acid</td>
<td>Thymol</td>
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<tr>
<td>Citric acid</td>
<td>Peracetic acid</td>
</tr>
<tr>
<td>Acetic Acid</td>
<td></td>
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</tbody>
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More Resources

Soap

Preventative Measures

Effective Cleaning and Disinfectants
10. Tribal Healthy Homes Network—Safe and Proper Use of Disinfectants and Household Cleaners (recorded webinar) - https://mediaspace.nau.edu/media/THHN+WebinarA+Safe+and+Proper+use+of+Disinfectants+%26+Household+Cleaners/0_gywugqfv

Resources compiled by the Morongo Environmental Protection Department
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