

Important Resources: Cleaning, Disinfection and Ventilation in Schools US Environmental Protection Agency, Region 5 (IL, IN, MI, MN, OH, WI), November 2020

Background: EPA realizes this is an extremely challenging time for schools. Several school reopenings have involved the use of disinfectant products and practices that may not be effective against the coronavirus. EPA is providing you with helpful tools and resources to support your reopening and operations efforts. Over the past few months, you have likely had many planning discussions with key staff, local and state health officials to develop reopening and operations plans that minimize the spread of coronavirus. Given that the understanding and the management of the coronavirus is changing, it is likely that you will continue to modify your current reopening and operations plans and strategies, as new information emerges. The information provided here is intended to inform your efforts in this.

Cleaning and Disinfection: In addition to hand washing, social distancing strategies and adhering to guidelines implemented by local and state health officials, a central feature for minimizing the spread of the coronavirus in your schools will be implementing effective cleaning and disinfection practices, which include selecting effective and properly tested disinfection products. Paramount to this effort is focusing on cleaning and disinfecting high-touch surfaces to reduce exposure to students and staff. High-touch surfaces include tables, doorknobs, light switches, countertops, handles, desks, phones, keyboards, toilets, faucets, sinks, etc. Effectively disinfecting these surfaces will depend on the disinfectant products chosen and following the label directions, including surface pre-cleaning as needed, application to appropriate surfaces and ensuring that the surface wetting time needed to destroy the coronavirus is achieved. To that end, all products that claim to be effective against the coronavirus must be properly tested and registered with the EPA and must also have an EPA registration number. There are numerous illegal products in the marketplace that have not been tested and may not be effective against the coronavirus. See EPA's May 2020 Compliance Advisory, "*What You Need to Know Regarding Products Making Claims to Kill the Coronavirus Causing COVID-19*" for detailed information regarding product testing and registration: <https://www.epa.gov/sites/production/files/2020-05/documents/coronavirus-compliance-advisory.pdf>. Current EPA-CDC guidance on proper cleaning and disinfecting to create healthy school environments may be found at: <https://www.cdc.gov/coronavirus/2019-ncov/community/disinfecting-building-facility.html>.

All the disinfecting products that are effective against the coronavirus and registered with the EPA can be found at this EPA website: <https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2-covid-19>. This information is updated regularly as new disinfecting practices and products are identified. EPA's registration process ensures products are effective, safe, and properly labeled. The EPA will not register a product claiming to be effective against coronavirus until it has determined that the product will not pose an unreasonable risk and it will be effective when used according to the label directions. The effectiveness of these products depends on following all label directions including the specified application methods as well as heeding the recommended contact time, which is the amount of time the product needs to remain wet on a surface.

Only apply disinfectants according to the application methods specified on the product label. Do not apply disinfectants to skin, food or cloth face coverings. Please note that children should not apply disinfectants, including pre-moistened disinfectant wipes and sprays. Disinfectants bear a child-warning statement, so keeping disinfectants out of reach of children is part of following the label directions.

Please be aware that EPA does not routinely review the safety or efficacy of pesticidal devices (unlike chemical pesticides which EPA publishes on List N), and therefore cannot confirm whether, or under what circumstances, such products might be effective against the spread of coronavirus. Pesticidal devices (ozone generators and UV lights among other devices) making such claims have NOT been reviewed and may not be able to make claims against coronavirus where devices have not been tested for efficacy or safety for use against the coronavirus or harder-to-kill viruses.

Ventilation and Indoor Air: EPA also has guidance related to indoor air quality and COVID-19. Increasing ventilation with outdoor air and improved air filtration, in addition to following other CDC guidelines, can help reduce risk from indoor transmission of the virus. Also, ventilation during and after cleaning is helpful in reducing exposure to cleaning products, byproducts, and any particles resuspended during cleaning, including those potentially carrying viruses. Sensitive people, including children with asthma, should avoid exposure to cleaning products, which can exacerbate symptoms.

Resources: We encourage Facility Management and Custodial staff to utilize the information found in the resource list below. This information provides valuable insight into cleaning and disinfecting and ventilation best practices, to guide decisions when considering the need for potential improvements or revisions to existing protocols.

- To preview the National Pesticides Information Center webinar about Disinfectant Safety During the COVID-19 Pandemic, follow this link:
<https://www.youtube.com/watch?v=epSQQTAMRc4>
- EPA's coronavirus disinfection frequently asked questions (FAQ's) webpage:
<https://www.epa.gov/coronavirus/frequent-questions-about-disinfectants-and-coronavirus-covid-19>
- EPA's infographic on disinfectants can be found here:
<https://www.epa.gov/sites/production/files/2020-04/documents/disinfectants-onepager.pdf>
- EPA's webpage on indoor air quality and COVID-19, including ventilation guidance:
<https://www.epa.gov/coronavirus/indoor-air-and-coronavirus-covid-19>
- EPA's on demand webinars on maintaining a healthy learning environment:
<https://www.epa.gov/iaq-schools/healthy-indoor-environments-schools-plans-practices-and-principles-maintaining-healthy>
- EPA's Frequent Questions about Indoor Air and Coronavirus (COVID-19), including "*Where can professionals who manage school, office, and commercial buildings get information on ventilation and filtration to respond to COVID-19?*"
<https://www.epa.gov/coronavirus/frequent-questions-about-indoor-air-and-coronavirus-covid-19>
- CDC Reopening guidance for Cleaning and Disinfecting Schools:
<https://www.cdc.gov/coronavirus/2019-ncov/community/reopen-guidance.html>
- FDA Updates on Hand Sanitizers Consumers Should Not Use:
<https://www.fda.gov/drugs/drug-safety-and-availability/fda-updates-hand-sanitizers-consumers-should-not-use#products>

School or district staff should feel free to reach out to us with questions or concerns through our EPA Region 5 Hotline at 800-621-843 or via email at r5hotline@epa.gov. Inquiries will be assigned to the appropriate staff expert on the subject matter for a response.