Disinfectant Use – Do It Right!

Guidance for New Jersey Schools

The purpose of this fact sheet is to inform New Jersey schools about safe disinfectant usage (including choosing appropriate methods of applying to large areas) and avoiding potential hazards that can occur. The following outlines three important steps that schools need to follow to foster the overall health of students, teachers, staff, and surrounding communities:

1) Learn about the different application methods to avoid potential hazards that can occur.
2) Select disinfectants focusing on the approved method of application.
3) Integrate precautions to protect the health of children and staff.

STEP 1 Understanding Application Methods

It is critical to understand the differences in application methods (traditional spraying and wiping, fogging, and electrostatic spraying) to ensure that a disinfectant product is used correctly. The two methods described to the right are being widely promoted for use in large areas such as classrooms, hallways, school buses, gyms, and cafeterias.

ELECTROSTATIC SPRAYERS VS FOGGERS

Electrostatic sprayers:

- ✓ Deliver positively charged droplets that are **actively** attracted to all sides of surfaces providing touchless disinfection that wraps around and *evenly* coats all types of surfaces for complete coverage.

Foggers/misting systems:

- ✓ Deliver very small droplets that **passively** deposit on surfaces based on the direction of spray and the effect of gravity, which may result in *uneven* coverage. These small droplets do not wrap around surfaces and objects, like electrostatic spraying does.

STEP 2 Choosing Disinfectants

a. Select an EPA-approved disinfectant against COVID-19. The list of EPA-approved disinfectants titled "List N: Disinfectants for Use Against SARS-CoV-2 (COVID-19)" is available online or can be quickly accessed on a smartphone by scanning this QR code. If you can't locate the name of the product, try searching using the product's EPA registration number. Please note that EPA is updating List N on a regular basis. *(continued on next page)*

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b. Verify that the disinfectant product is approved to be used in the method you are planning, as described on the product label and in accordance with the manufacturers' instructions. Always follow the directions on the label including timing for re-entry after use. Check "use sites" and "surface types" to find out where the product can be used. Pay close attention to "precautionary statements."

Make sure that companies your school hires are using products on the EPA-approved list and that the **method of application** follows product label directions **to avoid chemical hazards**.

c. Utilize **CDC's Toolkit for cleaning and disinfecting schools**. The toolkit provides practical solutions on how to integrate safe cleaning and disinfection into a daily plan.

STEP 3 Eliminating Potential Hazards

It is well known that hazardous chemicals are common in cleaning, sanitizing, and disinfecting products. According to the CDC, the number of calls to poison centers for inhalation of disinfectants increased by 109% in March 2020 compared to the prior year.[1] In New Jersey, emergency medical services (EMS) personnel experienced adverse health effects after their ambulance was fogged with disinfectants.[2] Recently, three New Jersey workers who were disinfecting buses with no personal protective equipment (PPE) or adequate ventilation or training became sick from a chemical exposure and went to the hospital with vomiting, respiratory issues and esophageal chemical burns. Therefore, factors such as effects on human health and the environment should be considered when selecting disinfectants and application methods. Consider the following:

a. Choose the least toxic EPA-approved products for COVID-19 and methods by reviewing the following resources:
Fact Sheet: SF Environment Fact Sheet: Safe, effective cleaning & disinfection for businesses
Web Tool: SF Approved: Safer Cleaning

b. Be aware that most of the products certified by EPA have not been approved for fogging, misting or aerosolizing, therefore we recommend refraining from fogging disinfectants. If a broad application of a disinfectant is necessary, then electrostatic spraying is a more effective and safer method than fogging because it is more targeted since surfaces attract the disinfectant and the user has control over the volume sprayed.

c. Ensure that staff applying disinfectants are trained and wear appropriate PPE which should be selected by reviewing the information on the product's Safety Data Sheet (SDS).

d. Follow the product label directions for re-entry time after broad applications of disinfectants. Note that children should not be present during such applications.

e. **Children should not be applying disinfectants including using disinfectant wipes.**

Did You Know?

EPA classifies disinfectants as pesticides. NJ schools are required to follow NJ School Integrated Pest Management (IPM) Program when applying pesticides.

Additional Resources for Safe Cleaning and Disinfecting

- USEPA: 6 Steps for Safer & Effective Disinfectant Use
- AIHA: Effective and Safe Practices, Guidance for Custodians, Cleaning, and Maintenance Staff
- AIHA: Workplace Cleaning for COVID-19
- AIHA: Employers Guide to COVID-19 Cleaning and Disinfection in Non-Healthcare Workplaces
- USEPA: Can I use fogging, fumigation, or electrostatic spraying or drones to help control COVID-19?

References:
1. CDC: Cleaning and Disinfectant Chemical Exposures and Temporal Associations with COVID-19 – National Poison Data System, United States, January 1, 2020-March 31, 2020
2. NJDOH Health Alert Bulletin: Fogging Ambulances with Toxic Disinfectants May Cause Illness