



Massachusetts Department of Public Health

Cleaning and Disinfecting Products: Resources for Prevention

February 1, 2024

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Occupational Health Surveillance Program

MA Occupational Health Surveillance Program (OHSP)

- **Occupational Health Surveillance Program (OHSP)**
 - We promote the health, safety, and well-being of all working people in Massachusetts by using occupational health data for action.
 - As a program within a state public health department, we conduct surveillance, as well as investigations and referrals to outside enforcement agencies.
 - We approach work as a social determinant of health and aim to integrate occupational health within the broader public health model.

Today's Presentation

- Describe a case of work-related respiratory disease in town maintenance workers
- Discuss prevention strategies for keeping workers safe
- Share resources available

Work-Related Respiratory Disease Project

- Work-related asthma and other respiratory disease are reportable to the state health department in Massachusetts. (105 CMR 300.180)
- Possible cases are identified using multiple sources and followed up for an interview.
 - Sources include case reports from health care providers, emergency department visit data, and workers' compensation claims.
- Information is used to identify individual workplaces, hazardous exposures, occupations, and industries that need tailored interventions.

Case Description

- In early 2020, two town maintenance employees had respiratory symptoms attributed to misuse of spraying disinfectants at work.
- This was part of a new and extensive cleaning effort in response to the COVID-19 pandemic.
- Over this time, the affected maintenance workers experienced ongoing and worsening respiratory symptoms, with one reporting specific symptoms of shortness of breath, coughing and wheezing.
- In addition, non-maintenance town employees, including firefighters and police officers, who were also exposed at work to the same disinfectants, reported respiratory and other symptoms, ranging from nosebleeds to seizures.



Factors that Contributed

1. Misuse of disinfectants and cleaning equipment
2. Insufficient personal protective equipment (PPE)
3. Chosen disinfectants and cleaning methods linked to respiratory effects

Cleaning and Disinfecting Products

- Work-related asthma is asthma caused or made worse by exposures in the workplace.
- Cleaning chemicals are a leading exposure among work-related asthma cases.
 - 12% of all work-related asthma cases are from cleaning and disinfecting products in five states including MA.
 - Some cleaning chemicals can cause asthma in someone who has never had asthma.
- The COVID-19 pandemic highlighted this problem as many employees used more cleaning and disinfectant products frequently.

What Can You Do?

- Search for safer cleaning products and support others in your city or town in doing so by sharing resources*
 - Toxics Use Reduction Institute (TURI) Cleaner Solutions
 - Third-party certified: Green Seal and EcoLogo
 - Statewide Contract through MA Operational Services Division

*Links provided at end of PowerPoint.

What Can You Do?

- Ensure equipment, application method, and chemical used are compatible and used according to manufacturer's instructions.
 - Disinfectants should be diluted to manufacturer's guidelines.
- Develop and follow a Hazard Communication program.
 - Safety Data Sheets on all chemicals
 - Written safety procedures for job tasks
 - Trainings for employees
 - Chemical warning labels, manufacturer's instructions, chemical hazards, PPE use, and emergency procedures
- Provide appropriate PPE (respirators, gloves, etc.).
 - Consult the SDS and manufacturer's directions for guidance.

Resources

- Find environmentally preferable cleaning products available on Statewide Contract through the [Operational Services Division \(mass.gov\)](#).
 - Statewide Contract [FAC118: Environmentally Preferable Cleaning Products Equipment and Supplies \(mass.gov\)](#)
 - [Why use Statewide Contracts? \(mass.gov\)](#)
 - [Find a Statewide Contract User Guide \(mass.gov\)](#)
 - Explore other [Environmentally Preferable Products \(mass.gov\)](#) on Statewide Contracts.

For additional assistance in navigating the wide selection of Statewide Contracts and COMMBUYS (the Commonwealth's e-procurement marketplace), contact the OSD [Local Government Enablement Team \(mass.gov\)](#). They provide technical assistance to municipalities in implementing purchasing and procurement solutions.

Resources

- UMass Lowell's Toxics Use Reduction Institute (TURI)
 - [Toxics Use Reduction Institute's \(TURI\) Cleaner Solutions website \(cleanersolutions.org\)](https://cleanersolutions.org)
 - [Safer Disinfecting Products](#)
 - [Vendor Search](#)
 - [Product search](#)
- UMASS Lowell Toxics Use Reduction Institute (TURI) can help advise on chemical products and related health effects. Contact Jason Marshall at Jason_Marshall@uml.edu.

Vendor Search



CLEANERSOLUTIONS ▾ VENDORS ▾ FORMS ▾ ABOUT ▾ CONTACT

Vendor Search Results

Current Search Information

SEARCH CRITERIA

Product Name: 3M

RESULTS

Found 19 records
Showing records 1 - 19

HELP

Search Results Field Definitions
Contact the lab

REFINE YOUR SEARCH BY SAFETY EVALUATION

- 6 < 8 High concern (1)

SEARCH AGAIN

COMPARE	VENDOR NAME ▾	PRODUCT NAME ▾	CLASSIFICATION ▾	ENVIRONMENTAL CERTIFICATION ▾	CONTAINS CLASSIFICATION ▾	SAFETY SCORE ^
<input type="checkbox"/>	3M	3M Glass Cleaner Aerosol	Alkaline Aqueous			6.6
<input type="checkbox"/>	3M	3M 3-in-1 Floor Cleaner Concentrate 24A, 3M Flow Control System - Floor Care	Neutral Aqueous	FAC 118 Green Seal	FAC 118 General Purpose GS 37	-
<input type="checkbox"/>	3M	3M 3-in-1 Floor Cleaner Concentrate 24H, 3M Twist 'n Fill Dispensing System - Floor Care	Neutral Aqueous	FAC 118 Green Seal	FAC 118 General Purpose GS 37	-
<input type="checkbox"/>	3M	3M Bathroom Cleaner Concentrate 44A, 3M Flow Control System - General Purpose Cleaners	Acidic Aqueous	FAC 118 Green Seal	FAC 118 General Purpose GS 37	-

Product Search



CLEANERSOLUTIONS ▾ VENDORS ▾ FORMS ▾ ABOUT ▾ CONTACT

Find a Cleaner Search Results

Current Search Information

SEARCH CRITERIA

Contaminant: Dirt, Food
Cleaning Type: Any
Environmental Certifications: FAC 118

RESULTS

Found 17 records
Showing records 1 - 17

HELP

Search Results Field Definitions
Contact the lab

REFINE YOUR SEARCH BY SAFETY EVALUATION

- 2 < 4 Lower concern (2)
- 4 < 6 Medium concern (13)
- 6 < 8 High concern (2)

SEARCH AGAIN

[Download Results](#)

COMPARE	COMPANY NAME PRODUCT NAME	SAFETY EVALUATION ▽	CLASSIFICATION ▾	CONTAMINANT ▾	SUBSTRATE ▾	EQUIPMENT ▾	CLIENT # PROJECT # TRIAL #	ENVIRONMENTAL CERTIFICATION ▾	CONTAINS CLASSIFICATION ▾	EFFECTIVE
<input type="checkbox"/>	Seventh Generation Free & Clear All Purpose	5.3	Alkaline Aqueous	Food Greases Oil	Ceramics	Manual Wipe	416 1 0	FAC 118 USDA Biobased	FAC 118 General Purpose	✓
<input type="checkbox"/>	Seventh Generation Free & Clear All Purpose	5.3	Alkaline Aqueous	Food Greases Oil	Vinyl Composite Tiles	Manual Wipe	409 1 0	FAC 118 USDA Biobased	FAC 118 General Purpose	✗
<input type="checkbox"/>	Seventh Generation Free & Clear All Purpose	5.3	Alkaline Aqueous	Food Greases	Ceramics Plastic White Board	Manual Wipe	388 5 0	FAC 118 USDA Biobased	FAC 118 General Purpose	✓
<input type="checkbox"/>	Seventh Generation Free & Clear All Purpose	5.3	Alkaline Aqueous	Food Greases	Plastic Porcelain Steel	Manual Wipe	376 1 0	FAC 118 USDA Biobased	FAC 118 General Purpose	✗

Resources

Department of Labor Standards (DLS): On-Site Consultation Program

Can help with your safety program
(Hazard Communications, PPE
program, etc.)

More Information:

www.mass.gov/doc/on-site-consultation-program-brochure/download

**FREE Safety and
Health Consultation**

www.mass.gov/on-site-consultation-program



THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT
DEPARTMENT OF LABOR STANDARDS

Acknowledgement

- Julia Wolfe, Director of Environmental Purchasing at Massachusetts Operational Services Division
- Dr. Jason Marshall, Laboratory Director at UMass Lowell Toxic Use Reduction Institute

Thank you

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Occupational Health Surveillance Program

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www.mass.gov/dph/ohsp
www.mass.gov/work-related-asthma

This work is funded by
CDC-NIOSH Cooperative Agreement U60/OH008490