



**Massachusetts Department of Public Health**

# **Cleaning and Disinfecting Products: Resources for Prevention**

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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](mailto: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



CLEANER SOLUTIONS ▾ 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](http://www.mass.gov/doc/on-site-consultation-program-brochure/download)

**FREE Safety and  
Health Consultation**

[www.mass.gov/on-site-consultation-program](http://www.mass.gov/on-site-consultation-program)



THE COMMONWEALTH OF MASSACHUSETTS  
EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT  
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# Thank you

Work-Related Respiratory Disease Project  
Occupational Health Surveillance Program

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[www.mass.gov/dph/ohsp](http://www.mass.gov/dph/ohsp)  
[www.mass.gov/work-related-asthma](http://www.mass.gov/work-related-asthma)

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