

# OSHA Policies Regarding Mold

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# Executive Summary

- OSHA has no standard for mold exposure
- OSHA has no enforcement directive for mold exposure
- Most Compliance Officers use 1910.22(a)(1) to require employer to clean up surface mold
- The OSHA website has several publications related to mold and mold remediation – [www.osha.gov](http://www.osha.gov)

# Mold in the Workplace

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# Possible Citation Strategies

## Mold in the Workplace

- General Duty Clause of OSH Act
  - Employer must provide employment and a place of employment free of recognized hazards that are causing or are likely to cause death or serious physical harm to his employees
- 1910.22(a)(1)
  - All places of employment, passageways, storerooms, and service rooms shall be kept clean and orderly and in a sanitary condition.

# Serious Physical Harm

- Impairment of the body in which part of the body is made **functionally useless** or is **substantially reduced in efficiency** on or off the job. Such impairment may be permanent or temporary, chronic or acute. Injuries involving such impairment would usually require treatment by a medical doctor.
- Illnesses that could shorten life or significantly reduce physical or mental efficiency by inhibiting the normal function of a part of the body.

# General Duty Clause Citation Language

- Employees were exposed to various species of fungi, including *Aspergillus versicolor*, *Aspergillus ustus*, and several *Penicillium* sp. due to water intrusion at the Longview Post Office. Fungi were identified in locations including, but not limited to, ceiling tile in the basement adjacent to the gallery door, and in leachate from a concrete wall in the civil service/training room. Exposure to fungi can cause a variety of respiratory disorders including allergic diseases such as asthma and pneumonitis. Mycotoxins have also been linked to symptoms such as sore throats, headaches, fatigue, dermatitis and generalized malaise. Abatement Note: Feasible methods of abating this hazard include, but are not limited to, effectively repairing the roof in order to stop leaks into the building, replacing water- damaged ceiling tiles, use of a mild bleach solution to clean contaminated surfaces, and applying fungicidal paints, where appropriate.

# Puerto Rico Language

- ... employees were exposed to the hazard of working in an environment with levels of airborne microorganisms over the acceptable level. The concentration of microorganisms in the air was over the acceptable exposure indicator level of 1,000 colony forming units per cubic meter of air (CFU/m<sup>3</sup>). The exposure to high levels of microorganisms can cause allergies and respiratory conditions. All samples were taken on 04-27-2005.
  - 1.Special Education Record Room - the sampled exposure level was 1,046.1 CFU/m<sup>3</sup> of the combined fungi and bacteria levels in the air, 46.1 CFU/m<sup>3</sup> over the acceptable exposure indicator.
  - 2.CLA - the sampled exposure level was 1,045.3 CFU/m<sup>3</sup> of the combined fungi and bacteria levels in the air, 45.3 CFU/m<sup>3</sup> over the acceptable exposure indicator.
  - 3.Occupational Therapy Area - the sampled exposure level was 1,003.4 CFU/m<sup>3</sup> of the combined fungi and bacteria levels in the air, 3.4 CFU/m<sup>3</sup> over the acceptable exposure indicator.
  - 4.Fiscal Component office - the sampled exposure level was 1,670.4 CFU/m<sup>3</sup> of the combined fungi and bacteria levels in the air, 670.4 CFU/m<sup>3</sup> over the acceptable exposure indicator.

# 1910.22(a)(1)

- Usually cited as Other Than Serious
- This is used to require the employer to clean up the moldy area. It is not used to require extensive building modification.



# Mold Remediation

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# Caveat

- Data stated here is not based on a particularly good review method
- Difficult to mine our Management Information System and identify cases.
- These contractors may have been performing asbestos or lead remediation when inspected

# Some Cited Items

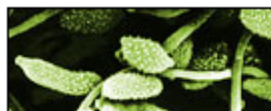
- 1926.59 Hazard Communication
- 1910.134 Respiratory Protection
- 1926.404 Reverse Polarity/GFCI
- 1926.1052 Stairways
- 1926.1053 Ladders
- 1926.20(b)(2) *Competent Person*

# Anticipated Rulemaking Efforts

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# Indoor Air Quality Standard

- Federal Register, 12/17/01:
  - “OSHA is withdrawing its Indoor Air Quality proposal and terminating the rulemaking proceeding. “
  - the portion of the proposal not related to environmental tobacco smoke (ETS) received little attention during the rulemaking proceedings ... As a result, record evidence supporting the non-ETS portion of the proposal is sparse.



## Safety and Health Topics

# Molds and Fungi

Poor indoor air quality is one of the most important health issues we face today. Molds and fungi are found in virtually every environment and can be detected, both indoors and outdoors, year round. The number of species of existing molds and fungi is estimated from tens of thousands to three hundred thousand or more. Molds and fungi produce and release millions of spores small enough to be air-, water-, or insect-borne. They can also produce toxic agents known as mycotoxins. Spores and mycotoxins can have negative effects on human health including allergic reactions, asthma and other respiratory problems.

The following questions link to information relevant to molds and fungi in the workplace.



### [What standards apply?](#)

OSHA | National Consensus and Industry Standards and Guidelines



### [What are molds and fungi and what are their associated health effects?](#)

Health Effects



### [How do I detect molds and fungi in my workplace?](#)

Sampling and Analysis



### [How do I control and clean-up mold and fungal contamination?](#)

Clean-up Procedures | Mold Remediation

#### In Focus

- [Hurricane Recovery](#)
- [News Releases](#)
- [Alliances](#)

## Safety and Health Topics

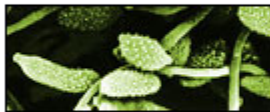
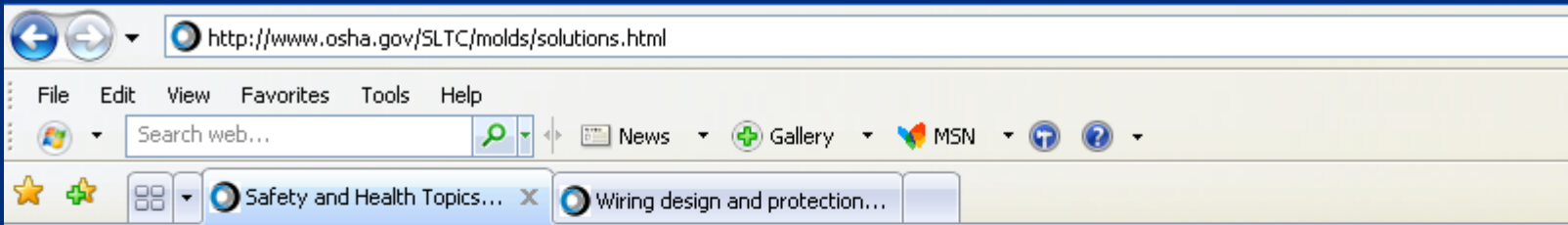
### Molds and Fungi

- [Standards](#)
- [Hazard Recognition](#)
- [Detection Methods](#)
- [Control and Clean-up](#)
- [Additional Information](#)
- [Credits](#)

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## Molds and Fungi Control and Clean-up

Emphasis should be placed on preventing contamination through proper building maintenance and prompt repair of water damaged areas. The following resources contain information to help prevent and control workplace hazards.

- [A Brief Guide to Mold in the Workplace](#). OSHA Safety and Health Information Bulletin (SHIB) 03-10-10, (2003, October 14). Provides recommendations for the prevention of mold growth and describes measures designed to protect the health of building occupants and workers involved in mold cleanup and prevention.
- [Guidelines on Assessment and Remediation of Fungi in Indoor Environments](#). New York City Department of Health and Mental Hygiene, Bureau of Environmental and Occupational Disease Epidemiology, (2002, January). Addresses mold contamination of building components that are chronically moist or water damaged such as, walls, ventilation systems, and support beams. It provides information about assessment, inspection, sampling, and controls.
- [Asthma and Allergy Prevention](#). National Institute of Environmental Health Sciences, (2001, April 6). Definition and description of mold spores and strategies for asthma and allergy prevention.
- *Fungal contamination in public buildings: A guide to recognition and management*. Federal-Provincial Committee on Environmental and Occupational Health, Environmental Health Directorate, Health Canada, (1995, June), 517 KB [PDF](#), 88 pages. Provides information on molds in indoor environments, including investigation protocols, remediation, and prevention strategies. Fungi can and do cause a myriad of diseases. Potentially pathogenic fungi are not uncommon in the indoor environment, and diseases caused by indoor fungi have been documented in

### Safety and Health Topics

#### Molds and Fungi

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# Guidance Documents

- Safety and Health Information Bulletin: A Brief Guide to Mold in the Workplace
- Mold Quick Card
- Fungi & Mold