MOLDS AND YOUR HEALTH

STRAIGHT TALK FROM THE UFT

This booklet provides information about molds that may grow in damp, humid or water-damaged areas of school buildings and may be associated with allergic reactions in school staff and students. For information on other indoor air quality problems — some of which can produce similar allergy symptoms — consult *Indoor Air Quality: Straight Talk from the UFT.*

Q: ***Why is the UFT distributing a pamphlet about molds?***

A: In dozens of schools, the UFT has identified molds in damp, humid or water-damaged areas as the source of allergic reactions or asthmatic symptoms that were plaguing some staff and students. The union then helped secure repairs that successfully eliminated the troubling symptoms.

By reading this pamphlet, you can get the information you need to protect yourself, your coworkers and your students from health problems associated with molds.

Q: ***What are molds?***

A: A mold is a fungus. Have you ever discovered black, gray or white fuzz on food long forgotten in your refrigerator? That's mold. Mildew (the black spots sometimes found on clothes or bedding that remains damp) is a mold, too.

Often molds have a musty smell — like a damp basement. You can often see mold growth on water-damaged surfaces. However, you cannot see mold spores. These spores, which molds use to reproduce, are microscopic and travel with the air currents.

Q: ***Why and where do molds develop?***

A: Molds are found everywhere, indoors and out, but they flourish in places that are damp and humid and on surfaces such as wood, wallboard, insulation, and carpets which retain moisture and/or provide nutrients for mold growth. The type of molds that grow in severely water-damaged building spaces are often different from those normally found outdoors. This is one reason why people feel symptoms inside the building and recover when they go outside.

Q: ***What are the symptoms of an indoor mold problem?***

A: Rashes, nasal congestion, runny nose and sneezing, watery eyes, coughing, wheezing and difficulty breathing. Generally these symptoms improve when the victims leave the school and get worse when they return.

Other reactions to molds may include fatigue, headaches and dizziness, but these symptoms also may be associated with other indoor air quality problems such as lack of adequate ventilation.

Q: ***A few students in my classroom complain of allergy-type symptoms every time they come to school, but everyone else feels fine. If molds in the room are responsible, wouldn't everyone feel sick?***

A: No. It's very common for molds to affect only a small number of people who are exposed. Some people — including those with a history of asthma or severe sinusitis — appear to be particularly vulnerable to molds. Their sensitive airways react to a variety of irritants, making breathing difficult.

Also, people who have had an allergic reaction to molds in the past may be more likely to feel sick when exposed again because the original exposure sensitized their bodies.

Q: ***How can we protect our school against molds?***

A: The first step is to find and eliminate leaks and excessive moisture.

You and your colleagues can take a close look at classrooms and common spaces like the cafeteria and auditorium. Ask the principal to check with the custodial staff to help identify problem areas and to check the heating, ventilating and air conditioning (HVAC) system for any places where stagnant water has accumulated or molds may be present.

Pay special attention to:

- Leaking roofs or water pipes.
- Infiltration of moisture through poorly sealed windows, brickwork and other parts of the building's exterior.
- Condensation of moisture on cold surfaces such as windows, window sills, external walls, cold water pipes or the cooling coils in the air conditioning system.
- Inadequate ventilation in damp areas such as bathrooms, kitchens and basements.
- HVAC systems that are not properly maintained.

A brown stain or other discoloration on ceiling tiles may be a sign of periodic leaks. A musty odor also may alert you to excessive moisture and mold growth.

Q: ***What do we do after the inspection?***

A: Your UFT chapter leader can work with the principal and custodian to develop a remediation plan that includes:

- Repairing all leaks.
- Periodically inspecting and cleaning all air handling units to be sure they are clean and free of excess moisture.
- Keeping the relative humidity under 60 percent, such as by adjusting the HVAC system or installing local exhaust fans in damp areas.

These steps will help to prevent molds from developing in the future, but it is essential that the remediation plan also include the removal or cleaning of materials already damaged by water.

Q: ***Please describe exactly what should be done about water-damaged materials.***

A: All porous (water-absorbing) materials that have been damaged by water *must be removed and replaced.* This includes materials that do not show any visible sign of mold growth. Porous materials include ceiling tiles, plaster, wallboard, carpets, cork bulletin boards and books.

Your school shouldn't wait until staff or students develop allergic reactions. Talk to your chapter leader, who may call your UFT district representative. They will insist that the principal have the custodian or the board remove the materials as quickly as possible.

Your principal should make sure any problems with leaks, condensation or accumulation of stagnant water are taken care of before the school replaces damaged materials. Otherwise the replacement materials may become moldy as well.

Q: ***What about non-porous materials that become wet as a result of a flood or leak? Do they have to be removed as well?***

A: No. Materials that don't absorb water — such as the tops of metal desks or file cabinets and concrete, cement or tile floors — can be cleaned by the custodial staff using a solution of one part bleach to 10 parts water. (The work area should be ventilated when using bleach.) Custodians should *not* use ammonia or ammonia-containing cleansers, because residual ammonia can encourage mold growth.

Q: ***We just had a flood. Can we save any furnishings and materials that got wet?***

A: If carpets or other furnishings become soaked with water, the school may be able to avoid replacement if the custodian dries them aggressively within 24 hours. Aggressive drying might involve sending carpets out for professional cleaning or hanging them to dry in front of several powerful fans or heaters. Carpets that are clean and dry within 24 hours after a flooding rarely have mold growth. It becomes increasingly harder to save those that remain wet for many days.

The same holds true for books and other educational materials: If they're dried quickly, you may be able to save them; if not, as difficult as they may be to replace, throw them out rather than risk mold.

Q: ***What about materials that were dampened by sewage-contaminated water.***

A: Don't try to save any materials if a flood involves sewage-contaminated water because exposure to sewage carries a risk of infection with the hepatitis A virus.

Q: ***Weeks ago, the ceiling tiles in my classroom were damaged by a roof leak, but the tiles are dry now and no one is complaining about allergic reactions. Does our school need to remove the tiles?***

A: Yes. Water-damaged materials can support mold growth long after they appear dry. In addition, even after molds die, mold spores and other mold debris can remain and cause allergic reactions.

Q: ***There are no signs of water damage in my classroom, but some of us are experiencing severe allergic symptoms. Our school is a closed building (no operable windows) and we depend entirely on the HVAC system for fresh air. Could molds be traveling to our room through the ventilation system?***

A: Yes. The HVAC system can serve as a highway for molds traveling from contaminated areas in other parts of the building. Or the HVAC system itself may have become contaminated with molds.

Q: ***What can be done about a contaminated HVAC system?***

A: That depends on the problem. Your custodian should pay particular attention to the following components in an HVAC system: cooling coils, the cooling coils drainage area and ductwork downstream from the cooling coils. Contaminated drip pans may need to be cleaned and repositioned to ensure proper drainage. Contaminated air duct insulation may need to be removed and replaced with materials that are more resistant to mold growth.

Q: ***Some of our staff and students are having allergy-type problems that may be related to molds. But when we inspected the school we couldn't identify any areas where molds may be growing. What should we do?***

A: Ask your chapter leader to call in the district representative, who will refer the matter to the UFT's Safety and Health Committee. The committee will arrange to visit he school, identify problems and recommend remedial action.

Q: ***Will the union or the Board of Education take air samples to determine if the air is contaminated with molds? Will they take samples of moldy materials for laboratory analysis?***

A: Air sampling is expensive, takes time and is sometimes unreliable. There are no numerical standards for mold in air and the government has not established any regulated exposure limits. A better indicator of a possible mold problem is the presence of water damage or visible mold growth on building materials and/or furnishings. In most cases where mold contamination is the source of staff health problems, sampling is not necessary. A visual inspection will identify the presence of molds and the source of excess moisture. Once the source of moisture is eliminated and the damaged materials are replaced, the health problems usually are resolved.

Q: ***Does the process of removing water-damaged materials pose any hazards?***

A: Yes. Disturbing moldy materials can release tiny mold particles into the air, making it even more likely that staff and students will inhale them and experience allergic-type reactions.

Q: ***What can be done to protect school occupants during removal work?***

A: Water-damaged materials must be removed in a manner that minimizes the release of mold spores and other mold debris into the air. This applies to removal of books, files and furnishings as well as construction materials such as ceiling tiles and wallboard.

Plastic sheeting can confine debris to the work area. Once materials are removed and bagged, room surfaces can be cleaned with a HEPA (high efficiency particulate air) vacuum to ensure removal of dust particles not visible to the naked eye. Whenever possible, clean-up work should be scheduled when the area is not occupied. If asbestos materials or materials painted with lead-based paint are to be removed, special precautions must be followed as required by city, state and federal regulations as well as Board of Education policy and the UFT contract.

Q: ***Should school personnel participate in removal work?***

A: No. Removal of water-damaged materials as well as other flood clean-up work should be handled by custodial staff, the board's Division of School Facilities (DSF) or the School Construction Authority, depending on the nature of the work.

Q: ***Our school administration wants to replace water-damaged materials and repair leaks and our custodian has submitted the appropriate paperwork requesting the repairs, but DSF has not responded. What should we do?***

A: Ask your chapter leader to notify your UFT district representative who, in turn, will contact the UFT Safety and Health Committee. The committee will do a visual inspection of the school, recommend remedial action, and follow up with the DSF until appropriate work is done. The union has an excellent track record in obtaining necessary repairs for mold problems.

Q: ***Tell me more about the union's experience helping schools with mold problems.***

A: The union has helped staff in dozens of schools to end mold problems so that they and their students could return to their classrooms without

troubling allergic reactions.

At an elementary school in Staten Island, for example, a number of students and teachers were suffering from allergy-type symptoms. Some parents were so upset that they demanded to have their children sent to a different school. When the UFT's health and safety experts inspected, they discovered water-damaged ceiling tiles in several rooms. Once the leaks were repaired and the tiles removed, the troubling symptoms were virtually eliminated.

At a high school in the Bronx, staff had been experiencing shortness of breath and one teacher was hospitalized with severe bronchitis. Staff suspected that the problems were related to lack of fresh air in rooms located below ground level, but tests by the UFT's industrial hygienist showed that the flow of air from the ventilation system was adequate. The hygienist did find, however, that a large quantity of mold had developed on some pipe insulation. Once again, removal of the damaged material and control of moisture sources alleviated the health problems.

Besides inspecting schools and pushing the DSF to resolve mold problems, the UFT:

- Lobbies for funding to repair school exteriors to prevent water infiltration and moist conditions conducive to mold growth.
- Collaborates with the American Lung Association, the New York City Department of Health and the board to educate staff, parents and children about mold as a potential trigger of asthma.