

General Environmental Safety

- Important for us to consider potential safety concerns when you return to your homes and there are things you can do to prevent injury and illness as you return to flood-affected homes/buildings.
- Ensure building is structurally sound before entry.
- Ensure electric and gas utilities are turned off before entry. If the odor of gas is present do not enter the building.
- Keep children out of the building.
- **Protect yourself before entry** – use boots, gloves, protective clothing if available, goggles and an N-95 respirator. Try to limit or avoid direct contact with flood water. Flood water can contain a variety of chemicals including, oil, gasoline, pesticides, agriculture chemicals and raw sewage.
- Try to work in teams or make others aware of entering the building.
- Have a first aid kit available for to treat minor cuts and abrasions to prevent infection.
- Have cleaning materials on hand. Bleach and water solution, disinfectants or other cleaning product. **NEVER MIX CLEANING PRODUCTS.**
- Never use gasoline powered generators or power washers inside the building. Carbon monoxide is a major constituent in exhaust and a significant health concern.
- Use personal protection when conducting the cleaning. Killing germs can help prevent health issues including diarrhea, infections and asthma attacks.
- If available use a shop vacuum equipped with a HEPA filter to trap mold spores and fine dust.
- Cleaning the ventilation system ductwork may be necessary to remove debris caused by flooding. The system should be inspected prior to using. Mold and bacteria can be spread by the HVAC system so disinfection may be necessary. Not all disinfectants are appropriate for use in cleaning the ventilation system. Make sure the products being used are approved for use in the ventilation system before using them. Professional assistance may be needed for proper cleaning of the system.
- Crawlspace beneath the building may be difficult to clean and dry out. Mold growth can be a significant concern in these areas. Crawlspaces are often small

spaces to work and could be considered a confined space. Without proper ventilation and safety precautions do not enter these areas. Seek professional assistance to evaluate and clean these areas.

- Damaged asbestos containing materials and lead-based paint may also be encountered during clean-up. Be cautious and if there are any concerns about possibly disturbing these materials, do not disturb them. Seek professional help for testing and remediation of these materials.
- **Wash hands routinely and thoroughly to prevent infection. Wash all clothing worn during clean-up in hot water separate from the laundering of routine clothing.**
- If any clean-up work is too large, call for professional help.

General mold talking points

- Mold can be a health concern but unfortunately it's not known how much mold is needed to cause health problems.
- Molds release spores and chemicals as part of their normal life cycles, and these releases are microscopic and, once airborne, can be inhaled easily.
- Some people might have reactions when exposed to molds.
- Some individuals may be at increased risk for mold-related health problems—individuals w/ allergies or lung conditions (asthma, emphysema), very young and elderly might exhibit health effects from mold exposure.
- Mold spores may contain allergens that can cause irritation in the nose, throat and respiratory tract; common allergic reactions include sneezing, nasal congestion, coughing and skin rashes and might even trigger asthma attacks.
- Molds also may release chemical compounds that have strong and unpleasant odors and are associated w/ musty smells. These chemical compounds have been linked to headaches, nausea and dizziness among some people.
- Some molds produce toxic substances called mycotoxins that can be inhaled, ingested or absorbed through the skin and could cause significant health problems.

Cleaning home, stopping mold

- The focus should be on correcting any moisture problems, cleaning up the contamination, and ensuring that areas are completely dry before performing any repair or construction work.
- Identifying mold begins with a thorough visual inspection by the homeowner or by qualified environmental consultants. Your local health department might be able to assist or you can look at our website for resources.
- Take out items that have soaked up water and that cannot be cleaned and dried effectively (e.g., carpets, furniture, mattress)
- Use fans and dehumidifiers and open doors and windows to remove moisture.
- To remove mold, mix 1 cup of bleach in 1 gallon of water; wash items w/ bleach mixture, scrub rough surfaces w/ a stiff brush, rinse the items w/ clean water, then dry
- To clean hard surfaces that don't soak up water and that may have been in contact w/ floodwater, first wash w/ soap and clean water. Then disinfect w/ a mix of 1 cup bleach in 5 gallons of water. Then allow to air dry.

- Wear rubber boots/gloves and goggles when cleaning w/ bleach and open the windows to get fresh air. Never mix ammonia and bleach b/c the fumes could kill you.
- Remove all water soaked sheetrock up to at least the water-line initially. Remove the insulation between wall joists and allow the wall cavity areas to dry. If power is available use fans to circulate the air and dehumidifiers to assist in drying.
- **Remove building materials with visible mold growth.** Be sure to use gloves and a respirator. Individuals with asthma and allergies should not remove mold. Exposure may exacerbate symptoms in sensitive individuals.
- Clean all hard surfaces with bleach and water solution (1 cup bleach to 1 gallon of water) to kill germs and mold.