ENVIRONMENTAL HEALTH INFORMATIONAL BULLETIN

Subject: **Protecting Yourself From Mold After Natural Disasters**

After natural disasters such as hurricanes, tornadoes, and floods, excess moisture and standing water contribute to the growth of mold in homes and other buildings. When returning to a home that has been flooded, be aware that mold may be present and may be a health risk for your family.

The following groups of people may be at greater risk than others for mold:

- Infants and children
- The elderly
- People with asthma, allergies, and other respiratory (breathing) conditions
- People with weakened immune systems (such as people with HIV infection, cancer patients taking chemotherapy, and people who have received an organ transplant)

Any person at risk from mold should not be in an area that is likely to be contaminated with mold.

Possible Health Effects of Mold Exposure

- Stuffy nose, irritated eyes, or wheezing can occur in people who are sensitive to molds.
- Wheezing, difficulty in breathing, and shortness of breath can be an allergic reaction to mold and can sometimes be severe.
- Skin reactions can develop.
- Mold infections can develop in the lungs of people with weakened immune systems and with chronic lung diseases such as obstructive lung disease.

Treating Symptoms of Mold Exposure

If you or your family members have health problems after exposure to mold, contact your doctor or other health care provider.

Recognizing Mold

You may recognize mold by:

- **Sight** (Are the walls and ceiling discolored, or do they show signs of mold growth or water damage?)
- **Smell** (Do you smell a bad odor, such as a musty, earthy smell or a foul stench?)

Note: Controlling moisture in your home is the most critical factor for preventing mold growth.

COUNTY OF ORANGE HEALTH CARE AGENCY / ENVIRONMENTAL HEALTH
1241 E. DYER RD. #120 SANTA ANA, CA 92705
Telephone: (714) 433-6000 / FAX: (714) 754-1732

When you reenter your home, first dry out your house. Mold spores may be present and can become airborne.

Taking Steps to Protect Yourself

Note: If the cleanup is a large job, you should consult or contract with a professional who is experienced in cleaning up mold. If it is a smaller job that you can do yourself, then take these precautions:

- Protect your eyes with glasses or goggles.
- Wear rubber boots and waterproof gloves during cleanup.
- Wear outer clothing (long-sleeved shirts and long pants) that can be easily removed and laundered or discarded.
- Shorten the amount of time you are in the area.
- Minimize the spread of airborne spores by using work practices such as
    - decreasing foot traffic in the area,
    - avoiding dry sweeping,
    - avoiding rapid movements (such as jerking or throwing moldy objects), and
    - covering moldy objects when removing them.

Deciding Whether to Wear Respiratory Protection

Respirators are most commonly used in workplaces, where employer programs ensure that the correct type is selected and properly fitted. Employees in workplaces with such programs understand the limitations and whether they are physically capable of wearing a respirator. Homeowners using respirators for short periods don't have the support of a workplace program.

When wearing a respirator, please be aware of the following limitations:

- **People should check with their doctor** to ensure that they are physically capable of wearing a respirator. Wearing a respirator can pose a health risk.
- For example, if a wearer has preexisting respiratory issues, the pressure drop created by a well-fitted respirator can put the wearer at risk.
- Wearers should read the instructions that come with the respirator on how to get the best fit. Proper adjustment and fit is important to lessen leakage into the respirator.
- Without proper training, wearers often use respirators for purposes for which the respirator was not intended. The N-95 respirator is designed to protect only against dusts and particles the size of mold spores with 95 percent or greater efficiency. (The N-95 is the respirator to use for mold clean-up if the decision has been made to wear one.)
- Wearers are not protected from disinfectant vapors.
- Wearers often think they are protected in hazardous areas when they are actually not protected.

Cleaning Up Mold

After drying out your house and taking protective measures, remove items that cannot be cleaned, and then clean your home and household items.

Removal and cleaning are important because even dead mold may cause allergic reactions in some people.

- Make sure the working area is well ventilated.
- Remove all porous items that have been wet for more than 48 hours and that cannot be thoroughly cleaned and dried. These items can remain a source of mold growth and should be removed from the home. **When in doubt, take it out!** However, homeowners may want to temporarily store items outside of the home until insurance claims can be filed. See recommendations by the Federal Emergency Management Agency (FEMA).
- Porous, noncleanable items include carpeting and carpet padding, upholstery, wallpaper, drywall, floor and ceiling tiles, insulation material, clothing, leather, paper, wood, or food.
- Clean nonporous surfaces such as walls, floors, and counter surfaces with soap and water. **(Use non-ammonia soap or detergent.)** Use a stiff brush on rough surface materials such as concrete.
- If you wish to disinfect, refer to the U.S. Environmental Protection Agency (EPA) document, A Brief Guide to Mold and Moisture in Your Home at http://www.epa.gov/iaq/molds/images/moldguide.pdf.

Preventing Mold from Coming Back

The key to preventing mold from coming back is to control moisture. Mold spores are found in outdoor air, so mold can grow again if conditions are suitable indoors. **Previously damp areas must be kept completely dry.**

- Clean fabrics (curtains, upholstery, bedding, etc.) often and keep them dry.
- Store clean fabric items in well-ventilated areas.
- Reduce moisture in the air with dehumidifiers, open windows, or air conditioners, especially in hot weather.
- Keep the humidity in your home between 40% and 60%.Humidity in the home can be measured with a household humidity sensor available at your local hardware store.
- Reduce condensation on cold surfaces by insulating. Examples include insulating air-conditioning ducts, cold water pipes, etc.
- Routinely check potential problem spots such as the bathroom and laundry for moisture and moldy odors.
- Fix leaks in pipes, and investigate any damp areas around tubs and sinks.
- Vacuum and clean surfaces frequently.
- Seek the advice of a mold remediation company if mold growth persists.