

December 5, 2012

TO: Healthcare Providers, Hospitals, Healthcare Facilities, Pharmacists, Long Term Care Providers, Home Care Providers and Local Health Departments (LHDs)

FROM: New York State Department of Health (NYSDOH) Bureau of Communicable Disease Control (BCDC)

**HEALTH ADVISORY: RESPIRATORY HEALTH AND RELATED ILLNESS
IN AREAS IMPACTED BY HURRICANE SANDY**

For healthcare facilities, please distribute immediately to the Infection Control Department, Emergency Department, Infectious Disease Department, Director of Nursing, Medical Director, Director of Pharmacy, Laboratory Service, and all patient care areas.

Many areas of New York State continue to be impacted by the effects of Hurricane Sandy. NYSDOH is actively working with healthcare providers, hospitals, healthcare facilities, pharmacists, long term care providers, home care providers and LHDs to assure access to care for residents and to monitor for potential health impacts from the storm and clean-up.

NYSDOH analysis of emergency department visits shows that respiratory related visits increased slightly in the immediate days following Hurricane Sandy, but quickly returned to baseline. Analysis of data from other sources did not reveal any unusual patterns and surveillance is ongoing. Additionally, routine monitoring of outdoor air quality by the New York State Department of Environmental Conservation has not identified any new air quality risks since Hurricane Sandy but continues to monitor the air and will continue to assess the monitoring data.

Even though there does not currently appear to be a significant or sustained increase in respiratory illness in heavily storm damaged areas, providers who are seeing patients with signs and symptoms should consider the following:

1) Viral respiratory infections. Respiratory viruses, particularly influenza, rhinoviruses, and respiratory syncytial virus, are a common cause of respiratory illness this time of year. During the week ending December 1, influenza activity level was categorized as widespread. All counties impacted by hurricane Sandy are reporting laboratory-confirmed influenza. Statewide reports of patient visits for influenza-like illness were above the regional baseline and the number of patients admitted with influenza increased 126% over the previous week. Weekly updates are available at <http://goo.gl/c7xci>.

Providers should continue to offer or refer everyone 6 months and older for influenza vaccine. A partial list of vaccination clinics is available at <http://goo.gl/GawFr>. Likewise, providers should assure that patients are vaccinated against pneumococcal disease. Pneumococcal conjugate vaccine (PCV) is recommended for use in infants and young children. The vaccine should be given to all

infants at 2, 4, and 6 months of age, followed by a booster dose at 12 through 15 months of age. Previously unvaccinated, healthy children 24 months through 4 years of age only need to receive one dose of vaccine. Additional doses of PCV13 may be recommended, depending on the child's age and health status. Pneumococcal polysaccharide vaccine (PPSV) is recommended for use in all adults who are 65 years and older and for persons who are 2 years and older and at high risk for disease such as persons with sickle cell disease, HIV infection, or other immunocompromising conditions. It is also recommended for use in adults 19 through 64 years of age who smoke cigarettes or who have asthma and adults living in nursing homes or long-term care facilities.

2) Insufficient use of maintenance medications for pre-existing asthma, chronic obstructive pulmonary disease (COPD) or related illnesses. In the immediate days and weeks after the storm, there were reports that persons in heavily storm damaged areas may have had difficulty obtaining routine prescription medications, because their provider and/or pharmacies were not operating or because they have been unable to visit these facilities. Access to medications is improving, most pharmacies have re-opened and many offer delivery services. A list of pharmacies in New York State is available at <http://goo.gl/IZZQ8>. Providers should ensure that patients with asthma and COPD are prescribed and use an appropriate treatment regimen. National Institutes of Health (NIH) Guidelines for the Diagnosis and Management of Asthma are available at <http://goo.gl/3OLxu> and their COPD Resources for Healthcare Professionals are available at <http://goo.gl/iQRvV>.

3) Indoor irritants and exposures among those performing clean-up. Some people in heavily damaged areas may be exposed to irritants, including dust produced from home repairs, cleanup and debris removal, mold growth caused by wet and damaged building materials, fumes and gases from using stoves and portable gas heaters for heat, and strong cleaning products. Dust, mold and fumes can irritate eyes, throat and lungs, exacerbating conditions, such as asthma or allergies. Providers should advise patients regarding appropriate respiratory precautions (see below) during all clean up activities to protect themselves from potential indoor and cleanup-related respiratory irritants, including dust, mold, dangerous fumes and gases, and strong cleaning products.

4) Air temperature. Cold, damp air in unheated residences can increase respiratory symptoms and may exacerbate asthma or COPD.

5) Recommendations for Respiratory Precautions in Areas Impacted by Hurricane Sandy. People who are cleaning up or living in affected homes can protect themselves by following these tips:

- Open windows and doors to air out the area as much as possible.
- Keep children and pets away from areas being cleaned.
- Use a dust mask and safety glasses or goggles if cleaning will produce dust. Dust masks that fit the face and nose, as well as respirators (N-95s) provide better protection.
- Clean with soap (e.g., dish detergent) and water. Do not use full-strength bleach or mix bleach with other cleaning products, like ammonia. Use only diluted bleach on areas that need to be disinfected.
- If your home has a lot of flood damage, consider hiring a professional to do the cleanup and repairs.
- Never use portable generators or gas-powered tools indoors.
- Wash your hands often with soap and water, especially before eating or drinking. Alcohol-based hand sanitizers can be used if water is not available.

Many individuals and patients may be concerned about mold and how to remediate the problem.

- The first step to mold cleanup is to control the moisture problem. The source of the water must be identified and corrected.
- Porous materials with extensive mold growth should be discarded (e.g., drywall, carpeting, paper, and ceiling tiles).
- All wet materials must be thoroughly dried. If that is not possible, they should be discarded.
- Mold growing on hard surfaces (e.g. wood and concrete) can be cleaned. Small areas can be scrubbed with a cleaning rag wetted with diluted detergent. Rubber gloves and a dust mask are recommended for jobs other than routine cleaning. For a large mold problem or if you are highly sensitive to mold, an experienced professional should do the work.
- In areas where it is impractical to eliminate the moisture source, a 10% bleach solution can be used to keep mold growth under control. In areas that can be kept dry, bleach is not necessary, as mold cannot grow in the absence of moisture. When using bleach, ensure that enough fresh air is available because bleach may cause eye, nose, or throat irritation.
- Continue to monitor the area for new mold growth and signs of moisture. This may indicate the need for further repairs or material removal.

Additional information on mold and its remediation is available at <http://goo.gl/LmiVD>.

6) Tetanus Prevention In most settings, a disaster does not increase the risk for tetanus. However, the risk of tetanus among disaster survivors and emergency responders can best be minimized by following standard immunization recommendations and providing proper wound care. Providers should remember these key points:

- Tetanus diphtheria toxoid and acellular pertussis (Tdap) or tetanus diphtheria toxoid (Td) can be used for patients who are not up to date on the primary series or have not received a booster with Td or Tdap in the last 10 years. If history is unknown, Td or Tdap can be received without concern about the interval from the last dose. *Tdap is preferred because of the additional protection conferred against pertussis.*
- Patients without a clear history of at least three tetanus vaccinations who have any wound other than clean and minor NEED tetanus immune globulin (TIG) not just a tetanus toxoid containing vaccine.
- Tetanus in the United States is most commonly reported in older persons who are less likely to be adequately vaccinated than younger persons. Older women are especially susceptible; a majority of those >55 years of age do not have protective levels of tetanus antibody.
- Diabetics are at increased risk. Reported tetanus is about 3 times more common in diabetics and fatalities are about 4 times more common.

Specific information on tetanus vaccines and TIG for wound management is available at <http://goo.gl/2kL4P>.

If you have any questions regarding this information, please contact your LHD or the NYSDOH Bureau of Communicable Disease Control's Public Health Emergency Epidemiology Program at bcdc@health.state.ny.us or (518) 486-2151.

Respiratory Concerns and Mold Cleanup After Hurricane Sandy



Hurricane Sandy left some New York homes with major damage, many from floodwaters. With moist conditions, mold spores can grow and multiply. Extensive mold contamination can cause health effects in some people. The most common are allergic reactions such as hay fever or asthma, and eye, nose, throat or lung irritation. People who already have allergies and asthma may be more likely to have health problems. The information below will help you learn how to clean mold, who should clean mold, and how to protect yourself during mold cleanup.

Recognizing Mold

- Mold comes in many different colors, may look furry, slimy, or powdery, and often smells musty, stale, or earthy. The type of mold present does not affect how it should be cleaned. If you can see or smell mold, assume you have a mold problem. Don't waste your money on air testing, because mold spores are always in the air.
- Mold can grow on ceiling tiles, wood products, paint, wallpaper, carpeting, sheetrock, clothing, furniture and other materials. Aside from obvious areas where mold is visible, inspect hidden areas for discoloration, mold growth and odors, such as crawl spaces, attics, and behind wallboards or paneling. Look also at carpet backing and padding, wallpaper, moldings (e.g., baseboards), and insulation.
- Check the home's exterior and under/behind siding to look for damage and wetness. You may have to remove the siding to allow the structure to dry out thoroughly.



What to do About Mold in Flood Damaged Homes

- Protect yourself by wearing an N95 dust mask (available at hardware stores) rubber gloves, and washable work clothes when doing repairs.
- Isolate wet/moldy/work areas from living areas.
- Ventilate the work area with open windows and fans.
- Remove wet sheetrock, carpeting, furnishings and other building materials to prevent mold growth.
- Reduce dust by wetting down flood and mold-damaged materials before removal and disposal.

- Clean off mold from metal, glass and other hard surfaces with water and detergent, such as liquid dish detergent.
- Use dilute bleach on surfaces contacted by flood waters or sewage. Use three tablespoons of unscented chlorine bleach per gallon of water. Do not use full strength bleach or mix bleach with ammonia or other cleaning products – this can cause hazardous fumes.
- Dry out your home before replacing walls and flooring. Use dehumidifiers, ventilation and heating.
- Consider getting professional help if you have a large mold problem or are highly sensitive to mold.

Common Symptoms of Mold Exposure:

- Nasal and sinus congestion
- Eye irritation, such as itchy, red, watery eyes
- Respiratory problems, such as wheezing and difficulty breathing
- Cough
- Throat irritation
- Skin irritation, such as a rash
- Headache

Exposure to high amounts of mold is not healthy for anyone. However, some individuals may be more susceptible to health problems from mold exposure. These include:

- Individuals with current respiratory sensitivities (e.g., allergies, asthma, or emphysema)
- Individuals with a compromised immune system (e.g., HIV/AIDS infection, organ transplant patients, or chemotherapy patients)

About Asthma:

Dust and other indoor irritants can make asthma worse. People may also not be able to take their usual asthma medication due to the storm, which can lead to asthma attacks. If you have asthma or allergies:

- Make sure you or your children take prescribed medications.
- Avoid tobacco smoke, dust and other irritants as much as possible.
- Get your annual influenza vaccine.
- If you have asthma, follow your treatment plan to help keep it under control.
- See your doctor if you are having health problems.

More information:

New York State Department of Health
health.ny.gov
518-402-7530 or 1-800-458-1158

New York State Governor's Hurricane Sandy Website
www.governor.ny.gov
1-255-NYS-SANDY (1-855-697-7263)

Federal Emergency Management Agency (FEMA)
1-800-621-3362