



NEW YORK CITY DEPARTMENT OF
HEALTH AND MENTAL HYGIENE
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Commissioner

2012 ALERT # 34

Respiratory Health in New York City Neighborhoods Most Affected by Hurricane Sandy

Please Share this Alert with All Physicians and Clinical Staff in Your Facility

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Hurricane Sandy damaged many neighborhoods in New York City. Over this past week, the New York City Department of Health and Mental Hygiene (DOHMH) has received reports from clinicians working in heavily storm damaged areas that they are seeing patients presenting with respiratory illness, such as cough and asthma.

DOHMH has interviewed healthcare providers working in mobile units throughout the Rockaways, one of the most heavily damaged areas. Providers in the Rockaways have identified patients with respiratory symptoms that they have attributed to viral respiratory infections, exposure to respiratory irritants due to clean-up work, or exacerbations of asthma and chronic obstructive pulmonary disease (COPD). According to these providers, many patients with signs and symptoms of asthma or COPD had a pre-existing diagnosis of these conditions and had run out of their regular medications. DOHMH analysis of NYC emergency department visits shows that asthma visits increased slightly in the immediate days following Hurricane Sandy in the Rockaways, Coney Island, and Staten Island, but have now returned to baseline. Analysis of data from other sources is ongoing. 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.

Even though there does not currently appear to be a significant or sustained increase in respiratory illness in heavily storm damaged areas, patients in these areas may experience a new or worsening cough for several reasons:

- 1) *Viral respiratory infections.* Starting this time of year, respiratory viruses, particularly influenza, rhinoviruses, and respiratory syncytial virus, are a common cause of respiratory illness. DOHMH surveillance is currently detecting very low levels of influenza, rhinoviruses, and respiratory syncytial virus. Weekly updates are available at <http://home2.nyc.gov/html/doh/flu/html/data/data.shtml>.
- 2) *Insufficient use of maintenance medications for asthma or COPD.* In the Rockaways and other heavily damaged areas, many persons have had difficulty obtaining their routine prescription medicines. This problem has been verified in DOHMH's syndromic surveillance system and in interviews with providers and patients. Patients have reported that they have had difficulty refilling prescriptions, because their provider and/or pharmacies are not operating or because they have been unable to visit these facilities. Some patients have also been unable to use nebulizers, because their home has no electricity. Access to medications is improving; many pharmacies have now re-opened, including 18 in the Rockaways, and at least one major chain pharmacy (CVS) has waived prescription medication co-pays and deductibles for patients who cannot pay until the end of November.
- 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.
- 4) *Air temperature.* Cold, damp air in unheated residences can increase respiratory symptoms and may exacerbate asthma or COPD.

Clinicians can help address these issues for people living or working in storm affected areas by doing the following:

- 1) *Ensure that patients with asthma and COPD obtain their prescriptions.* Patients can be directed to assistance on obtaining prescription medications or for temporary housing while their home is being fixed by visiting a NYC Restoration Center (Current locations can be found by calling 311 or online at <http://www.nyc.gov/html/misc/html/2012/dasc.html>).
- 2) *Ensure that patients with asthma and COPD are prescribed and use an appropriate treatment regimen.* More detailed guidance on managing asthma in children is available in a DOHMH City Health Information publication at: <http://www.nyc.gov/html/doh/downloads/pdf/chi/chi27-10.pdf>. Patients who ordinarily administer their medications using a nebulizer be switched to an HFA inhaler with spacer and trained on its proper use.
- 3) *Advise patients regarding appropriate respiratory precautions (see below) during all clean up activities to protect themselves from potential indoor and cleanup-related respiratory irritants, such as dust, mold, dangerous fumes and gases, and strong cleaning products.*
- 4) *Vaccinate everyone 6 months and older against influenza.* For more information on influenza prevention see http://www.nyc.gov/html/doh/html/chi/chi31-4_index.html. Many clinics and pharmacies, including mobile providers in heavily damaged areas, are offering influenza vaccination. Patients can find a facility that offers influenza vaccine at the following site: <https://a816-healthpsi.nyc.gov/DispensingSiteLocator/mainView.do>

Recommendations for Respiratory Precautions in Areas Impacted by Hurricane Sandy:

People who are cleaning up or still living in affected homes can protect themselves by following these tips:

During clean up

- 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.

If your home does not have heat or electricity

- Do not use your oven or a portable gas heater to heat your home. They create gases that can be irritating and cause deadly levels of carbon monoxide.
- Boiling water in pots to keep your home warm increases humidity and can lead to mold growth.
- Turn off the stove while you are sleeping or if you leave home.
- To stay warm, wear loose, layered clothing, hats and gloves indoors. Patients who are especially vulnerable should relocate until heat or electricity is restored. Seek warmth during the day. New York City has many warming centers, listed at <http://nyc.gov>.

Sincerely,

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