Public Health Notes

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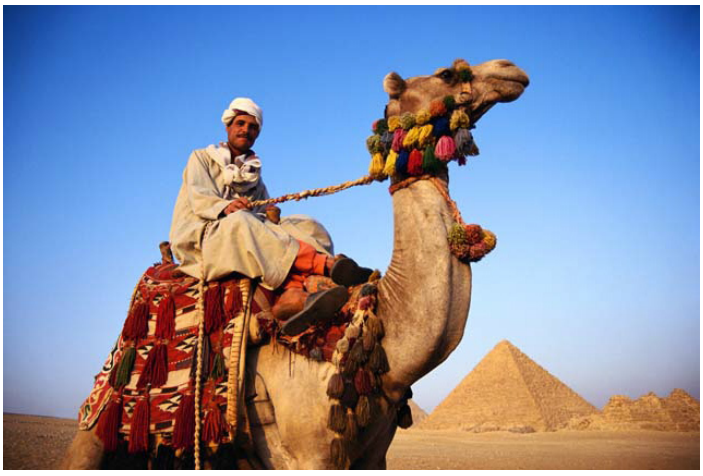
NH DHHS Mission Statement: To join communities and families in providing opportunities for citizens to achieve health and independence.

MERS-CoV Update

Middle East Respiratory Syndrome (MERS) is a respiratory illness caused by a virus that is new to humans. It was first reported in Saudi Arabia in 2012 and has since spread to several other countries. Most people infected with MERS-CoV, the name of the virus since it is caused by a coronavirus, developed severe acute respiratory illness, including fever, cough, and shortness of breath. About 3–4 out of every 10 patients infected have died. MERS affects the respiratory system (lungs and breathing tubes).

Health officials first reported the disease in Saudi Arabia in September 2012. Through retrospective investigations, health officials later identified that the first known cases of MERS occurred in Jordan in April 2012. So far, all cases of MERS have been linked to countries in and near the Arabian Peninsula ((specifically Bahrain, Iraq, Iran, Israel [including the West Bank, and Gaza], Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syria, the United Arab Emirates (UAE), and Yemen). Since May 2015, the Republic of Korea has been investigating an outbreak of MERS felated to a traveler to the Middle East. It is the largest known outbreak of MERS outside the Arabian Peninsula. For more information go to the World Health Organization site (http://www.who.int/csr/disease/coronavirus_infections/risk-assessment-3june2015/en/). The U.S. Centers for Disease Control and Prevention (CDC) does not recommend that Americans change their travel plans to the Republic of Korea or other countries because of MERS.



Important Dates

July is Fireworks Safety Month
National Council on Fireworks Safety
www.fireworkssafety.org

July is Ultraviolet Safety Month
American Academy of Ophthalmology
www.aao.org

July is National Cleft & Craniofacial Awareness and Prevention Month
AmeriFace
www.nccapm.org

July 28 is World Hepatitis Day
World Hepatitis Alliance
www.worldhepatitisday.info

August is National Breastfeeding Month
United States Breastfeeding Committee
www.usbreastfeeding.org

August is National Immunization Awareness Month
Centers for Disease Control and Prevention
www.cdc.gov/vaccines

August 1-7 is World Breastfeeding Week
La Leche League International
www.llli.org

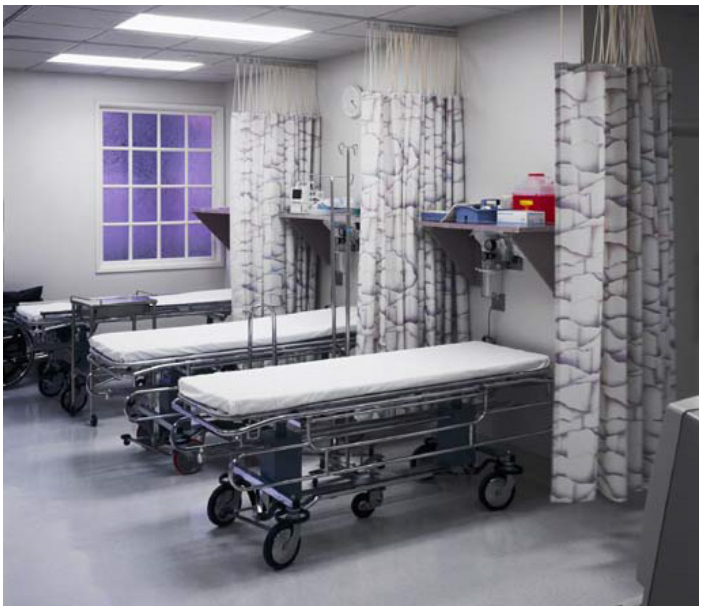
New Hampshire Department of Health and Human Services
Division of Public Health Services
29 Hazen Drive, Concord, NH 03301
www.dhhs.nh.gov

MERS-CoV has spread from ill people to others through close contact, such as caring for or living with an infected person. MERS can affect anyone. MERS patients have ranged in age from younger than 1 to 99 years old. CDC continues to closely monitor the MERS situation globally and work with partners to better understand the risks of this virus, including the source, how it spreads, and how infections might be prevented. CDC recognizes the potential for MERS-CoV to spread further and cause more cases globally and in the U.S. The CDC has provided information for travelers and are working with health departments, hospitals, and other partners to prepare for this. The New Hampshire Department of Health and Human Services (DHHS), Division of Public Health Services is collaborating with the CDC to monitor the virus and prepare in the event further cases are imported to the United States. In May 2014, two cases of MERS were identified in travelers to Florida and Indiana from the Middle East. No additional cases resulted.

Most people confirmed to have MERS-CoV infection have had severe acute respiratory illness with symptoms of fever, cough, and shortness of breath. Some people also had gastrointestinal symptoms including diarrhea and nausea/vomiting. For many people with MERS, more severe complications followed, such as pneumonia and kidney failure. Most of the people who died had an underlying medical condition. Some infected people had mild symptoms (such as cold-like symptoms), or no symptoms at all, and recovered.

Based on what researchers know so far, people with pre-existing medical conditions (also called comorbidities) may be more likely to become infected with MERS-CoV, or have a severe case. Pre-existing conditions from reported cases for which we have information have included diabetes; cancer; and chronic lung, heart, and kidney disease. Individuals with weakened immune systems are also at higher risk for getting MERS or having a severe case.

The incubation period for MERS (time between when a person is exposed to MERS-CoV and when they start to have symptoms) is usually about 5 or 6 days, but can range from 2–14 days. MERS-CoV, like other coronaviruses, is thought to spread from an infected person's respiratory secretions, such as through coughing. However, the precise ways the virus spreads are not currently well understood. The source of the MERS-CoV virus is not yet fully clear. A coronavirus very similar to the one found in humans has been isolated from camels in Egypt, Oman, Qatar, and Saudi Arabia. It is possible that other reservoirs exist, however no other animals have yet been found to have the virus. These studies support the premise that dromedary camels are a likely source of infection in humans.



Person-to-person spread of MERS-CoV, usually after close contact, such as caring for or living with an infected person, has been well documented. Infected people have spread MERS-CoV to others in healthcare settings, such as hospitals. Researchers studying MERS have not seen any ongoing spreading of MERS-CoV in the community.

Currently, there is no vaccine to prevent MERS-CoV infection. The U.S. National Institutes of Health is exploring the possibility of developing one. There is no specific antiviral treatment recommended for MERS-CoV infection. Individuals with MERS can seek medical care to help relieve symptoms. For severe cases, current treatment includes care to support vital organ functions.

The CDC routinely advises that people help protect themselves from respiratory illnesses by taking everyday preventive actions:

- Wash your hands often with soap and water for 20 seconds, and help young children do the same. If soap and water are not available, use an alcohol-based hand sanitizer.
- Cover your nose and mouth with a tissue when you cough or sneeze, then throw the tissue in the trash.
- Avoid touching your eyes, nose and mouth with unwashed hands.
- Avoid personal contact, such as kissing, or sharing cups or eating utensils, with sick people.
- Clean and disinfect frequently touched surfaces and objects, such as doorknobs.

All reported cases have been linked to countries in and near the Arabian Peninsula. Most infected people either lived in the Arabian Peninsula or recently traveled from the Arabian Peninsula before they became ill. A number of people became infected with MERS-CoV after having close contact with an infected person who had recently traveled from the Arabian Peninsula. If you develop a fever and symptoms of respiratory illness, such as cough or shortness of breath, within 14 days after traveling from countries in or near the Arabian Peninsula, you should call ahead to a healthcare provider and mention your recent travel. While sick, stay home from work or school and delay future travel to reduce the possibility of spreading illness to others.

If you have had close contact, which is defined as being within approximately 6 feet (2 meters) or within the room or care area for a prolonged period of time (e.g., healthcare personnel, household members) having direct contact with infectious secretions (e.g., being coughed on) with someone within 14 days after they traveled from a country in or near the Arabian Peninsula, and the traveler has/had fever and symptoms of respiratory illness, such as cough or shortness of breath, you should monitor your health for 14 days, starting from the day you were last exposed to the ill person. If you develop a fever and symptoms of respiratory illness, such as cough or shortness of breath, within 14 days, you should call ahead to a healthcare provider and mention your recent presence in the healthcare facility. While sick, stay home from work or school and delay future travel to reduce the possibility of spreading illness to others.

Public health agencies, including the CDC and the World Health Organization (WHO) continue to investigate clusters of cases in several countries to better understand how MERS-CoV spreads from person to person.

Highly Pathogenic Avian Influenza in the United States

There has been a great deal in the news in recent years about avian influenza (also called avian flu or bird flu). Currently, highly pathogenic avian influenza (HPAI) H5 infections have been reported in U.S. domestic poultry (backyard and commercial flocks), captive wild birds, and wild birds. HPAI H5 detections began in December 2014 and have continued to date in 2015. As of June 9th, the U.S. Department of Agriculture (USDA) is reporting H5 bird flu virus detections in 21 states (15 states with outbreaks in domestic poultry or captive birds and 6 states with H5 detections in wild birds only).

At this time there is no evidence that circulating viruses have infected people or made anyone ill, however similar viruses have infected people in other countries and caused serious illness and death in some cases. Human infections with other avian influenza viruses have occurred after close and prolonged contact with infected birds or the excretions/secretions of infected birds (e.g., droppings, oral fluids). While the health risk posed to the general public by these

domestic HPAI outbreaks is low at this time, it is possible that human infections with these viruses may occur.

There are three viruses associated with the current outbreak: H5N1, H5N8, and H5N2. The H5N1 virus identified in the U.S. is not the same one that is causing human illness in other parts of the world. There were three previous outbreaks of HPAI in domestic birds, but this is the first time HPAI has been identified in wild birds and is considered a foreign animal disease.

The current outbreak is a great concern to poultry farmers because it can be deadly to birds and the only way to stop it is to depopulate the flock. There is no medical treatment for birds. It is strongly recommended that any person or facility that has poultry review their biosecurity protocols and measures. The New Hampshire Department of Agriculture, Markets and Foods (DAMF) and the USDA have resources available or for order to help improve the biosecurity of both commercial and backyard flocks. Any person noticing respiratory illness or mortality in a commercial or backyard flocks should immediately contact their private veterinarian or the State Veterinarian at DAMF at (603) 271-2404.

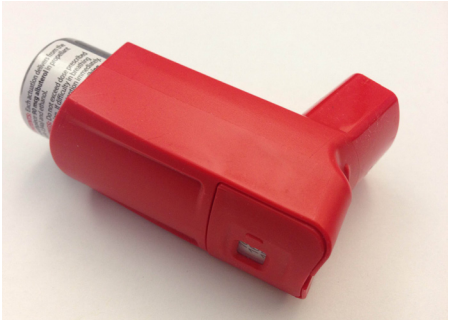
For more information on H5 viruses in the U.S. and the human concern, visit the CDC website at http://www.cdc.gov/flu/avianflu/h5/index.htm or the NH Department of Health and Human Services at http://www.dhhs.nh.gov/dphs/cdcs/avian/pathogenic.htm.

Action Steps for Asthma

Asthma is a chronic lung disease that can be successfully controlled with proper care and management. Common symptoms include coughing, chest tightness, wheezing, and shortness of breath. New Hampshire and New England as a whole have some of the highest rates of asthma in the country. In 2013, 145,000 New Hampshire residents reported having asthma. Asthma is expensive. The annual cost of lost wages due to asthma care in New Hampshire is $21 million, while the direct medical costs associated with asthma are $167 million. People with asthma should get their asthma in control to stay healthy and lead active lives.

Approximately 50% of adults and 33% of children do not have their asthma well-controlled.

Asthma control is the degree to which asthma symptoms, functional impairments, and risks of negative events are minimized and the goals of therapy are met. The goal is for people with asthma to experience few if any asthma symptoms.



Asthma patients can achieve their goal to experience fewer days with asthma symptoms by:

- Completing an Asthma Action Plan with your doctor and following it: Planned visits with your health care provider are the best way to review whether or not your asthma is under control and modify treatment if necessary. Work with your provider to maintain an updated and current Asthma Action Plan that can be used to better manage your asthma.
- Know your symptoms and take medications as prescribed: Asthma symptoms vary from person to person—know yours. Inhaled corticosteroids are the most effective medications to manage persistent asthma—take them and other medications as prescribed.
- Know your triggers and take steps to avoid them: Find out what triggers make your asthma worse—is it dust, mold, tobacco smoke, cold air, pet dander, and/or stress? Some suggestions on avoiding triggers are: Wash sheets with hot water and cover your mattresses and pillows with dust proof covers. Clean regularly with a wet cloth, microfiber cloth, or a HEPA vacuum for carpets and furniture. Keep pets out of the bedroom. Pet dander can increase symptoms.
- Take steps to manage other important aspects of your health: Flu, tobacco and overweight or obesity are no friends of asthma. Get a yearly flu shot, avoid all tobacco smoke, and maintain a healthy weight to control your asthma better.

To learn more about asthma control and management, visit http://www.dhhs.nh.gov/dphs/cdpc/asthma or http://www.asthmanownh.net or contact the New Hampshire Asthma Control Program at 1-800-852-3345 x0855.