



THE SENTINEL



Reporting on Preparedness

Public Health

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Students learn about community disaster response

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Students at North Georgia College and State University in Dahlonega learned how public health fits into a community emergency response during a seminar and table top exercise on March 6, 2009. The seminar, led by District 2 Public Health Emergency Preparedness section, gave students an overview of how agencies worked together during an emergency and what roles they might assume when they enter the medical field.

The day long training gave students the opportunity to “role play” in various responder positions. Among the jobs they could choose to portray were EMA Director, public health nurse, hospital manager, law enforcement officer, public health director, and mayor. The event was sponsored by the CHI ETA PHI Sorority for upperclassmen nursing students. For many of the students, this was

their first exposure to a table top exercise.

The exercise scenario was a suspected anthrax release at a local bank. The mock release of a biological agent had students answering questions about steps that could be taken to protect the people who were exposed, keep others from being exposed and decide how to clean up the incident site.

The students were given background information about anthrax and the roles they would assume before the exercise began. During the exercise, they continued to receive information to help them make decisions about what actions to take. Public health partnerships with colleges and universities help improve the educational experiences that students receive and open doors to new learning opportunities in health care and emergency response.

Nursing students learn from EMS, EMA and hospital staff in Habersham

Piedmont College School of Nursing students and faculty participated in a recent exercise with Habersham County Medical Center. The exercise scenario called for students attending a concert to be injured by an out-of-control vehicle containing a mobile methamphetamine lab.

The drill gave students a first hand look at how responders such as law enforcement, emergency medical technicians, and fire departments work together during emergencies.

Students played different roles during the exercise. Some served as triage nurses and others served as victims. Scene surveillance and initial decontamination were provided on-site for exercise participants and some “victims” were transported to Habersham County Medical Center.

A walk-through decontamination process for responders was demonstrated and each step was explained to the students.

As with any exercise, opportunities for improvement were identified and are being addressed by the participating organizations.

Lightning, a deadly force

Lightning has proven to be one of nature’s most deadly forces with the capability to strike 10 miles outside of a storm. The National Weather Service (NWS) estimates that 100,000 thunderstorms occur annually in the United States and NWS statistics show that lightning kills as many people as tornadoes and hurricanes combined. For each lightning death, approximately 10 more people are injured, so people need move to a safe place when they know a storm is approaching.

City and town managers are responsible for numerous activities that pose a particularly high lightning risk, including swimming pools, recreation activities, golf courses, and outdoor civic events. Structures such as picnic shelters, dugouts, and partially open sheds, often found in these settings, do not offer proper protection. But sometimes they are the best option for people caught out in the open.

Lightning detection equipment should be used by organizations to alert people of impending lightning. When used appropriately, this equipment can give officials the time they need to move large groups of people to safe areas and know when to safely resume activities.



News Briefs

Disposal of Unused Medications - SMARXT Disposal Campaign is designed to raise awareness about the potential environmental impact from improperly disposed medications and to provide proactive guidance through proper disposal alternatives. It is a joint venture of the U.S. Fish and Wildlife Service, American Pharmacists Association and Pharmaceutical Research and Manufacturers of America.

The SMARXT Disposal Program recommends that medications are not flushed down toilets or poured down sinks. Instead, be proactive and discard unused medication in household trash. When discarding in the trash take precautions to protect children and pets. Pour liquid medications into a sealable plastic bag. If medication is solid - pill or capsule - crush it or add water to dissolve it. Then add kitty litter, sawdust or coffee grounds to the liquid and liquified solid medicine in the plastic bag to make it less desirable for children and pets to eat. Seal the plastic bag and place it in the trash. Remove and destroy the prescription label from all medication containers before throwing them away.

Another option is to check for approved state or local collection programs. Some communities have household hazardous waste collection programs and this might be an alternative. Ask your pharmacist if you have questions about how to dispose of your unused medications.

There are some exceptions to this recommendation. The U.S. Food Drug and Administration (FDA) advises that certain drugs should be flushed down the toilet. For a complete list of these drugs go to www.phdistrict2.org, www.fda.gov/consumer/updates/drug_disposal062308.pdf, or www.smarxtdisposal.net.

PPE for Responders - The National Institute for Occupational Safety and Health (NIOSH) recently revised its recommendations about personal protective equipment for protecting first responders from airborne pathogens in potential bioterrorism situations. The recommendations were updated to reflect changes in equipment ratings and standards since the previous version was issued in 2001.

The revised version includes respirators rated for chemical, biological, radiological, and nuclear (CBRN) hazards. The new expanded recommendations also include updated National Fire Protection Association (NFPA) standards for protective clothing.

The recommendations call for using CBRN respirators



and the highest level of protective clothing for suspected biological incidents when the type of airborne agent or dissemination method is unknown. The guidance describes circumstances that allow for lower levels of protections, such as when the agent is known and it was disseminated in a letter or package that can be easily bagged.

The document also describes circumstances in which non-CBRN respirators can be used, and it addresses decontamination of protective equipment after use. It says the use of personal protective equipment should be part of a worker health and safety program that also includes preexposure immunizations and postexposure preventive treatment and medical monitoring.

For the full report, visit <http://www.cdc.gov/niosh/2009-132/>

FEMA Warns of Mold Problems - This year's heavy rains have caused floods in Georgia and other states. Mold growth is one of the common occurrences in flood-damaged homes and other damp environments. Mold could become a problem in your home if there is enough moisture to allow it to thrive and multiply. Dampness in basements, walls, carpets, and wood provides an environment for mold to flourish.

Mold is made up of simple microscopic organisms that are found virtually everywhere. It can be seen in the form of discoloration, ranging from white to orange and from green to brown and black. Mold gives off a musty or earthy smell and should be treated.

Exposure to mold can cause health problems, especially in infants, children, persons that are immune-compromised, pregnant women, persons with respiratory problems, and the elderly.

There is no practical way to eliminate all of the molds and mold spores in your home. However, there are many ways to help control moisture and mold growth inside the home. The basic rule is if you can see or smell mold, take steps to reduce the excess moisture, and to cleanup and remove mold.

Stop the water. Fix leaks in pipes and replace or repair damp areas around tubs and sinks so mold spores don't have a growing environment. Use water resistant building materials for repairs such as tile, stone, deep-sealed concrete, galvanized or stainless hardware, and waterproof wall board. Find and prevent seepage of water from outdoors into your house. Landscape around your home to take water away from the basement or crawl space and

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Severe storms in Georgia, southeast stress need for preparedness

Recent severe and damaging storms swept across the southeast creating disaster for many here in Georgia. Falling trees left some people homeless while tornadoes have destroyed buildings and property. Strong winds demolished structures on area lakes and left boat owners searching for their watercraft as they were scattered about lakes. Floods in low lying areas forced many to leave their homes and seek shelter on higher ground.

With the arrival of warmer weather, those of us in the southeast can expect some severe weather. But are we prepared? Do you know what to do in case of severe weather? There are some steps that you can take to better prepare yourself and your family for disasters.

Watch weather forecasts for your area. Know when weather is likely to take a turn for the worst. Listen to your local weather experts for tips on what to do if caught in severe weather like a violent thunderstorm or tornado.

Thunderstorms occur frequently in the spring and summer months and often appear with little or no warning. Every thunderstorm produces lightning and in the U.S. about 300 people are injured and 80 people die each year from lightning.

About ten percent of thunderstorms are classified as severe. These produce hail up to 3/4 of an inch in diameter, have winds of more than 58 miles per hour or produce a tornado. Tornadoes are the most violent storms and occur as a result of thunderstorms. They appear as a rotating funnel shaped cloud with powerful winds that can reach 300 miles per hour.

Damage paths from tornadoes can extend more than a mile wide and fifty miles long. Every state is at some risk for tornadoes but they are more common in the mid-west and south. Tornadoes generally form near the trailing edge of a thunderstorm and it is not unusual to see clearing skies behind a tornado. Formation of tornadoes is more common between 3 pm and 9 pm but can occur at any time. In the South, they are most likely between March and May, and in the northern states from late spring to mid-summer.

Tornadoes can happen quickly and without warning. Often, they may appear transparent until they pick up dust and debris that defines their shape. The average tornado moves from the southwest to the northeast but they have



been known to move in any direction.

If a tornado strikes, seek shelter in the lowest part of the structure that you are in. If the structure does not have a basement, go to the center of an interior room or hallway and stay there. Stay away from windows and outside doors.

If you are outside, lie flat in a nearby ditch or depression and cover your head with your hands. Be aware of the potential for flooding. Never try to outrun a tornado in your vehicle. Leave your vehicle and find safe shelter. Do not get under an overpass or bridge.

Hurricanes are severe tropical cyclones with winds in excess of 74 miles per hour. As they move ashore, they bring high winds, torrential downpours, tornadoes and flooding.

Hurricanes are classified into five categories based on wind speed, central pressure, and damage potential. Category 3 and higher are classified as major hurricanes. Here in north Georgia we often get severe weather as a result of a coastal or Gulf of Mexico hurricane.

To help protect yourself and your property during any storm, remove dead or rotting trees and limbs that could fall and cause damage. Remember the 30/30 lightning rule; go indoors if after seeing lightning you can't count to 30 before hearing thunder. Stay indoors for at least 30 minutes after hearing the last clap of thunder.

If a thunderstorm is likely in your area, you should postpone outdoor activities and secure outdoor items that could blow away or cause damage. Get inside a home or building or hard top automobile (not a convertible). Although you might be injured if lightning strikes your automobile, you are much safer inside a vehicle than outside. Remember that rubber soled shoes and tires do not provide protection from lightning.

It is also helpful to close windows and outside doors and lower and close blinds or shades and curtains. Avoid showering or bathing during a storm because plumbing and bathroom fixtures can conduct electricity. Unplug appliances and other electrical items because power surges can damage appliances. If you are outside during a storm, avoid tall isolated trees in open areas as they act as lightning rods. If you are in an open field, on the beach, or in a boat on the water, get to safety as quickly as possible. Stay away from anything metal like tractors, farm equipment, golf carts, golf clubs, and bicycles.



News Briefs

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install gutters to take water away from the house.

Clean fabrics such as curtains and upholstery often and keep them dry. Soiled fabrics can promote mold growth. Store clean fabric items in dry, well-ventilated areas. Consider having air ducts professionally cleaned if you suspect mold exists on the inside surface of the duct, or if the duct insulation has been wet.

Reduce the moisture in the air by using dehumidifiers, fans and open windows or air conditioners. Do not use fans if mold spores already exists because they will spread the spores. Try to keep the humidity in your home below 40 percent. In moisture-prone areas choose carpets of man-made fibers.

Routinely check problem spots like basements and laundry rooms for mold. Clean these areas with a disinfectant made of 1/4 cup of bleach to one gallon of water. Be careful not to spill this mixture on fabrics, carpets, or other items that could be discolored by the bleach.

Spring brings warm weather, rain, and mosquitoes -

The recent rains in Georgia are certainly needed after the drought that the state experienced for the past couple of years. However, along with the rain comes the potential for standing water that can become breeding pools for mosquitoes. Fertilized mosquitoes eggs can lie dormant for years. Then when conditions become favorable for them to hatch they will. Therefore, we all must remember to do certain things to help prevent the breeding of mosquitoes.

Start by eliminating standing water on your property. Water can be trapped in old tires, cans and buckets, boats, old vehicles, pots, and wheelbarrows. Dispose of items like

these that you do not need. Others that you want to keep should be turned over so they cannot collect water or fixed to drain water.

Install or repair window screens to prevent mosquitoes from entering your home and make sure that gutters are draining properly. Change the water in bird baths, small wading pools, and pet dishes at least once a week. Aerate ornamental ponds or stock them with fish. If you have a rain barrel, cover or screen it so mosquitoes cannot lay eggs in the water.

Limit your time outdoors during the early morning and late evening when mosquitoes are most active. Wear long pants, long sleeved shirts and socks while outside. Use a mosquito repellent that contains deet on exposed skin. Always follow the instructions on the label for adults and children. If you are pregnant or if you have an infant, consult your physician before using insect repellents. When your mosquito exposure has ended wash skin treated with repellent as soon as possible.

Mosquitoes are pests, but some can transmit diseases that make humans or animals sick. While it is important to know about diseases that mosquitoes carry, it is also important to know other facts about mosquitoes. Not all species of mosquitoes bit humans. Only the female mosquitoes of certain species bite humans and animals, and they do so to get a blood meal to produce eggs.

Infections in humans caused by mosquito bites are rare. Only a few people in Georgia are infected by mosquitoes each year. Most insect-borne infections are mild, but in rare cases, an arboviral infection can cause serious illness or death. For more information on these diseases go to www.health.state.ga.us/epi/vbd

Public health disaster relief assets include fully-equipped mobile hospitals

District 2 Public Health along with the other health districts in the state received four trailers of equipment to be used during a disaster or emergency. These are public health assets for use in our district or we could send to another affected district upon request. Special funding provided these trailers at no cost to the districts.

Among the assets is one trauma trailer containing equipment and supplies to provide acute care to victims of natural disasters, terrorist events or any trauma-related incident. These materials would help local hospitals with surge capacity issues. Another trailer contains cots that could help hospitals with bed capacity, and two trailers contain a portable, stand-alone hospital to be used for pa-

tient care if a hospital is rendered uninhabitable or if additional capacity is needed. These trailers are self-contained, towable units that can be deployed and set up in a short period of time. The trailers include enough equipment and supplies to operate the stand-alone 50-bed hospital facility for several days before requiring resupplying. There are hospital beds, surgical equipment for minor procedures, and a few ventilators.





Public Health disaster relief assets include fully-equipped mobile hospitals



Trailers with a fully functional hospital would be used in the event that an existing hospital becomes uninhabitable or to provide surge capacity during a large scale disaster. The mobile hospital includes all equipment to make it a self-sustaining hospital including generators, beds, medical equipment and supplies.



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H1N1 Influenza outbreak proves good test of plans

The 2009 H1N1 influenza outbreak generated a flurry of activity among health organizations around the globe. According to news sources, the virus apparently originated in Mexico; the first cases believed to have originated near La Gloria in the eastern Mexican state of Veracruz. While residents in the area believe they were sickened with the H1N1 virus, Mexican officials have been slow to say that this was the origin of the swine origin influenza virus outbreak.

Piecing together a timeline for the outbreak is fairly easy as the media reported lots of information about the spread of the virus. From December 2005 to January 2009, the Centers for Disease Control (CDC) recorded at least 12 human cases of swine flu infection in the U.S. During the month of March 2009 several people in the Perote Valley (Veracruz, MX) experienced respiratory illness. On April 13 a 39 year old woman in the area died from atypical pneumonia. Mexico began to see an increase in the number of people reporting for medical care for influenza like illness during the month.

On April 23, Mexico reports 20 deaths from respiratory illness and on this day, the U.S. reports 7 confirmed cases of swine flu in Texas and California.

On April 24, Mexico reports respiratory ILI in three regions of the country. By now the counts are climbing in Mexico City (800 cases and 59 deaths), San Luis Potosi (24 cases and 3 deaths), and Mexicali, Baja CA (4 cases).

On April 25, the World Health Organization (WHO) issues a statement that the situation constitutes a public health emergency and Mexico City closes museums and cancels scheduled cultural events.

On April 26, Mexico City closes churches. The U.S. reports that 20 laboratory confirmed cases of swine flu has affected 5 states. The virus has now been detected in Texas, California, New York, Kansas and Ohio.

On April 27, WHO raises the pandemic alert level from 3 to 4, which is characterized by "verified human-to-human transmission of an animal or human-animal influenza reassortment virus able to cause 'community-level outbreaks'". CDC issues a travel advisory for Mexico. District 2 Public Health receives several media inquiries about the influenza situation in our district and in Georgia. At this time there are no confirmed cases in Georgia. Public Health's message is to prepare in case this situation changes and to be diligent in prevention hygiene.

On April 28, several countries issue travel advisory for Mexico. Cuba and Argentina cancel flights to Mexico. The District Health Emergency Assessment Response Team (DHEART) meets to discuss what actions need to be taken by public health. A letter, fact sheet and talking points are developed for distribution to school systems and health departments in our district.

A request is sent to the state epidemiologists to develop guidelines for specimen collection and investigation. The state health director reported that 4 samples had been received at the Georgia Public Health Lab and that the Strategic National Stockpile antiviral assets had been requested.

On April 29, WHO raises the pandemic influenza alert from

4 to 5 and urges all countries to activate their pandemic flu plans. The U.S. reports 91 cases and the first death in the U.S. - a toddler from Mexico that is visiting in Texas. Nine countries have confirmed cases. District 2 public health continues to field media inquiries and calls from residents in the area. The director of nursing holds a conference call with County Nurse Managers to review sending samples to the lab and the criteria for testing persons with ILI. Several counties have decided to hold meetings of their pandemic influenza planning committees.

On April 30, countries that had previously reported confirmed cases continue to see their numbers of cases rise. Additional countries report confirmed cases and there are now 11 countries with confirmed cases. Georgia reports its first confirmed case which is an out-of-state resident hospitalized in LaGrange. The Georgia Division of Public Health begins daily telephone news conferences.

On May 1, Mexico is beginning to feel the economic impact of reduced tourism. Cancun reports that there is only a 20% occupancy rate in hotels and airlines cancel several flights because they aren't full. Public health continues to respond to media inquiries and by now, misinformation is growing. The Atlanta Journal Constitution incorrectly reports that there are two confirmed cases in Carroll County. The Georgia Division of Public Health establishes a hotline and the CDC testing criteria modified again. The CDC guidance for school recommends dismissing students from schools and daycares if they have one confirmed case.

On May 2, it is reported that the virus has now spread to 16 countries. Mexico continues to see the highest number of cases.

On May 3, WHO reports that 18 countries have now confirmed cases of the virus.

On May 4, there are now more than 1,000 cases worldwide and 21 countries have confirmed cases. In the U.S. there are now 286 cases in 38 states. Georgia reports the first confirmed case in a Georgia resident, a 14 year old male in Henry County. The GEMA joint information center conference call is initiated between GEMA and public health.

On May 5, WHO reports that the virus appears to be declining in Mexico. Georgia reports 2 more confirmed cases, a 3 year old in Cherokee County (first reported as Cobb) and 36 year old in DeKalb County. The U.S. reports its second influenza death which is a 33 year old female in Texas.

On May 6, cases are now in 23 countries. More probable cases are reported by the Georgia Division of Public Health.

On May 7, 4 new probable cases are reported by GDPH.

On May 8, testing criteria has changed to test only patients hospitalized. This will measure the severity of the illness. The specimens from sentinel providers will continue to monitor the spread of the illness. Situation seems to be declining at this time.

On May 11, DHEART met to discuss actions taken so far and to determine next steps for this event.

The CDC has determined that H1N1 virus is behaving similar to seasonal flu and recommends the same actions for H1N1 as seasonal influenza. For more information about H1N1 flu and the CDC, go to www.cdc.gov/h1n1flu