Early warm temperatures may bring on mosquitoes, ticks

There have been many reports this spring about a possible increase in mosquito and tick populations due to a mild winter. But, experts agree that winter temperatures have to be extremely cold for a long period of time to affect mosquitoes and ticks. So, while a mild winter may help our heating bills, it may not mean that there will be more mosquitoes. More important is the early emergence of spring temperatures, which may mean that mosquitoes and ticks become active earlier.

Let’s discuss information about mosquitoes first. Mosquitoes lie dormant as eggs during the winter and begin to hatch when the days get longer and temperatures get warmer. Above normal temperatures could lead to earlier mosquito activity which may result in increased breeding and more generations of mosquitoes in 2012. Rainfall, another factor in mosquito production, is an unknown variable but has a big impact on mosquito breeding. A dry spring and summer could affect the laying of eggs by

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Above average number of severe weather events predicted for 2012

Both the National Weather Service and Accu-Weather have forecasted that the U.S. will experience an above average number of severe weather events in 2012. Tornadoes and flash floods can result from severe thunderstorms and from January 1, to April 3, 2012 tornadoes have resulted in 57 deaths and billions of dollars in property damage in the United States. Neighboring states, Alabama and Tennessee have been especially hard-hit by tornadoes, and other states, including Texas, Arkansas, and Illinois have also experienced horrific tornadoes this year. In 2011, there were nearly 1,700 tornadoes, falling short of the record 1,817 tornadoes set in 2004. In comparison, the average yearly number of tornadoes over the past decade is around 1,300. According to the National Oceanic and Atmospheric Administration (NOAA), there have already been 132 confirmed tornadoes from January through March in the U.S. in 2012. April has also been a very active month as 223 preliminary tornadoes (eyewitness accounts) have been reported but are still being investigated to determine if all of these events were tornadoes.

Because changes in weather can occur rapidly and become severe events, everyone should have a plan. Your plan should include what to do in your home, what to do if your family is in separate locations, (school, work, etc...) and if you are outside or traveling in your automobile.

What to do during a tornado:
• If you are in a structure, go to a pre-designated shelter area such as a safe room, basement, storm cellar, or the lowest building level. If there is no basement, go to the center of an interior room on the lowest level (closet, interior hallway) away from corners, windows, doors, and outside walls. Put as many walls as possible between you and the outside. Get under a sturdy table and use your arms to protect your head and neck. Do not open windows.
• If you are outside, lie flat in a nearby ditch or

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tick that infects people with babesiosis usually must stay attached 24-36 hours to transmit disease. Because they are so small that they are often overlooked when inspecting for ticks.

**Here are some facts about ticks:**
- Ticks are commonly found in shady areas, moist ground litter, tall grass, brush, low tree branches, along trails in the woods, and in yards that abut wooded areas,
- Ticks do not fly or jump,
- Not all ticks carry diseases,
- Ticks must be attached for a few hours (usually 24-36) to transmit disease,
- To remove ticks, grasp the tick as close to the skin surface as possible with fine-tipped tweezers. Pull the tick straight out slowly. Do Not squeeze or twist the tick, light the tick on fire, or cover the tick with petroleum jelly, nail polish, alcohol, or kerosene,
- Wash and treat the bite areas with a disinfectant,
- See your doctor if you develop early symptoms of tick-borne disease within the next 30 days.

**Protect yourself from both mosquitoes and ticks:**
- Wear light-colored clothing, including long pants, long sleeved shirts, and a hat as weather permits. Tuck shirt into pants and pants into socks,
- Use insect repellent containing DEET® on exposed skin, and products containing permethrin on clothes. Follow the directions on the label,
- Avoid contact with overgrown grass, weeds, and brush by hiking in the center of the trail and removing excess brush on your property. Avoid sitting on the ground - use a blanket or a towel,
- Do tick checks frequently during the day and a full body tick check at the end of the day. Use a mirror to check behind ears, behind knees, under arms, and groin. Ask someone to help you check your back and scalp,
- Take a shower and wash your hair before going to bed,
- Check your indoor pets for fleas and ticks when they have been outdoors,
- Never allow outdoor pets on furniture or bedding,
- Ask your veterinarian about products to protect your pets from mosquitoes and ticks.

For more information about insect borne diseases visit http://www.health.state.ga.us/pdfs/epi/vbd/mosquitoandtickdiseases.pdf

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depression and cover your head with your hands. Be aware of the potential for flooding.
- Do not get under an overpass or bridge. You are safer in a low, flat location. Never try to outrun a tornado in urban or congested areas in a car or truck. Instead, leave the vehicle immediately for safe shelter. Watch out for flying debris. Flying debris from tornadoes causes most fatalities and injuries.

**Here are some facts about tornadoes:**
- They may strike quickly, with little or no warning.
- They may appear nearly transparent until dust and debris are picked up or a cloud forms in the funnel.
- Generally, tornadoes moves Southwest to Northeast, but they have been known to move in any direction.
- The average forward speed of a tornado is 30 MPH, but may vary from stationary to 70 MPH. Tornadoes can accompany tropical storms and hurricanes as they move onto land.
- Waterspouts are tornadoes that form over water.
- Tornadoes are most frequently reported east of the Rocky Mountains during spring and summer.
- Peak tornado season in the southern states is March through May; in the northern states, it is late spring through early summer.
- Tornadoes are most likely to occur between 3 p.m. and 9 p.m., but can occur at any time.

Severe thunderstorms often produce tornadoes and can cause property damage or death. Many people do not take the threat of severe weather seriously and become trapped by the effects of weather by not taking precautions. **Here are some steps that you can take to be ready for thunderstorms:**
- Remove dead or rotting trees and limbs that could fall and cause damage during a storm
- Remember the 30/30 lightning rule: go indoors, if after seeing lightning, you cannot count to 30 before hearing thunder. Stay indoors at least 30 minutes after hearing the last clap of thunder.

**What to do if a thunderstorm is likely in your area:**
- Postpone outdoor activities
- Get inside a home, building or hard top automobile (not a convertible). Although you might be injured if lightning strikes your vehicle, you are much safer inside a vehicle than outside.

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(continued from page 1) mosquitoes, because without water they would have fewer places to lay their eggs. Still, there is the possibility of scattered spring and summer storms occurring every few days and providing enough water for mosquitoes to breed. Also, water trapped when watering lawns and shrubs can provide a breeding ground for mosquitoes. The best way to limit mosquito production is to remain vigilant in removing standing water from your property and protecting yourself when outside.

Here are some tips from the Georgia Department of Public Health to reduce mosquito populations:

- Store containers that can collect water upside down including, wheelbarrows, tubs, buckets, barrels, and kiddy pools,
- Do not leave saucers under outside flowerpots, or remove the water from the saucers once a week,
- Dump rain barrels once a week, place tight-fitting screens or covers on barrels, or treat with larvicide,
- Change the water in bird baths and small wading pools at least once a week. Aerate ornamental ponds, stock them with mosquito eating fish, or treat with larvicide,
- Make sure outside garbage cans have tight fitting lids and do not hold water,
- Properly maintain swimming pools and ensure that pool covers do not collect and hold rainwater,
- Ensure that water doesn’t pool in boats or on covers,
- Keep children’s toys inside,
- Make sure roof gutters drain properly. Clean gutters in the spring and fall as needed,
- Make sure screens on windows and porches are tight-fitting to keep mosquitoes out,
- Clean up trash along roadway,
- Properly dispose of old tires and drill drain holes in tire swings,
- Discard outside pet food (if you pet does not eat it all) and change the water bowl daily,
- Fill in low places in your yard if water stands for several days,
- Treat retention/detention ponds that cannot be drained with larvicide.

Mosquito facts:

- Only female mosquitoes bite,
- Not all kinds of mosquitoes bite humans, some feed only on animals,
- Mosquitoes need water to breed. Anything that can hold water for one week can breed mosquitoes,
- Mosquitoes that carry West Nile Virus do not fly far from where they breed.

Next let’s look at some information about ticks. Ticks differ from mosquitoes because their breeding depends more on a blood host than temperature and environmental factors. For instance, according to a study by the Cary Institute of Ecosystems Studies in New York, a large crop of acorns in 2010 led to a larger mouse population. Ticks feeding on this plentiful mouse population actually increased their production of nymphs, which results in more ticks. Because the acorn crop was smaller last fall, there will be fewer mice this year and ticks will be looking for a new blood host, most likely other animals and humans.

People become infected with the Lyme disease bacteria when they are bitten by an infected blacklegged tick. Data from the Centers for Disease Control and Prevention show that Lyme disease doubled to nearly 23,000 cases between 1992 and 2010 in the US. But officials at CDC say the number may be even higher, as in 2010 there were over 7,000 probable cases that were never confirmed.

Ticks also carry other diseases like babesiosis and anaplasmosis, and Rocky Mountain spotted fever. While not all ticks carry disease, some may be infected with more than one and spread two or more infections with a single bite. Babesia microti is spread by Ixodes scapularis ticks, which are most apt to be found in wooded, brushy, or grassy areas, in certain regions and seasons. The scapularis (Continued on page 3)
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- Remember that rubber soled shoes and tires provide no protection from lightning. However, the steel frame of a hard-topped car provides protection if you are not touching metal.
- Secure outdoor items that could blow away or cause damage.
- Shutter windows and secure outside doors. If shutters are not available, close window blinds, shades, or curtains.
- Avoid showering or bathing. Plumbing and bathroom fixtures can conduct electricity.
- Use a corded telephone only for emergencies. Cordless and cell phones are safer.
- Unplug appliances and other electrical items such as computers and turn off air conditioners. Power surges from lightning can damage appliances.
- Use your battery-powered NOAA weather radio for updates from officials.

Avoid the following:
- Natural lightning rods such as a tall, isolated tree in an open area.
- Hilltops, open fields, the beach or a boat on the water.
- Isolated sheds or other small structures in open areas.
- Anything metal – tractors, farm equipment, golf carts, golf clubs, and bicycles.

Flash flooding can also occur from thunderstorms and is dangerous when it occurs. Most flash flooding is caused by slow-moving thunderstorms, thunderstorms repeatedly moving over the same area, or heavy rains from hurricanes and tropical storms. Flash floods occur within a few minutes or hours of excessive rainfall, a dam or levee failure, or a sudden rising of river waters. Flash floods can roll boulders, tear out trees, destroy buildings and bridges, and wash out new channels. Rapidly rising water can reach heights of 30 feet or more. You will not always have a warning that these deadly, sudden floods are coming. Most flood deaths are due to FLASH FLOODS.

What you can do before a flood:
- Know your flood risk and elevation above flood stage.
- Do your local streams or rivers flood easily? If so, be prepared to move to a place of safety. Know your evacuation routes.
- Keep your automobile fueled; if electric power is cut off, gas stations may not be able to operate pumps for several days.
- Store drinking water in clean bathtubs and in various containers. Water service may be interrupted.
- Keep a stock of food that requires little cooking and no refrigeration; electric power may be interrupted.
- Keep first aid supplies on hand.
- Keep a NOAA Weather Radio, a battery-powered portable radio, emergency cooking equipment, and flashlights in working order. Install check valves in building sewer traps to prevent flood water from backing up into the drains of your home.

When a flash flood WATCH is issued Be alert to signs of flash flooding and be ready to evacuate on a moment’s notice.

When a flash flood WARNING is issued for your area, or the moment you realize that a flash flood is imminent, act quickly to save yourself. You may have only SECONDS!
- Go to higher ground Climb to safety!
- Get out of areas subject to flooding. This includes dips, low spots, canyons, washes, etc.
- Avoid already flooded and high velocity flow areas. Do not attempt to cross flowing streams.
- If driving, be aware that the road bed may not be intact under flood waters. Turn around and go another way. NEVER drive through flooded roadways!
- If the vehicle stalls, leave it immediately and seek higher ground. Rapidly rising water may engulf the vehicle and its occupants and sweep them away. Remember, it’s better to be wet than dead!
- Be especially cautious at night when it is harder to recognize flood dangers.
- Do not camp or park your vehicle along streams and washes, particularly during threatening conditions.

When you receive a FLOOD WARNING:
- If advised to evacuate, do so immediately.
- Move to a safe area before access is cut off by flood water.
- continue monitoring NOAA Weather Radio, television, or emergency broadcast station for information.

During the flood:
- Avoid areas subject to sudden flooding.
- If you come upon a flowing stream where water is above your ankles, STOP! Turn around and go another way.
- Do not attempt to drive over a flooded road. The depth of water is not always obvious. The road bed may be washed out under the water, and you could be stranded or trapped.
- Children should NEVER play around high water, storm drains, viaducts, or arroyos.

After the flood:
- If fresh food has come in contact with flood waters, throw it out.
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• Boil drinking water before using. Wells should be pumped out and the water tested for purity before drinking. If in doubt, call your local public health authority.
• Seek necessary medical care at the nearest hospital. Food, clothing, shelter, and first aid are available from the Red Cross.
• Do not visit disaster areas. Your presence might hamper rescue and other emergency operations.
• Electrical equipment should be checked and dried before being returned to service.
• Use flashlights, not lanterns, torches or matches, to examine buildings. Flammables may be inside.
• Report broken utility lines to appropriate authorities. For more information visit, http://www.spc.noaa.gov/climo/online/monthly/newm.html

Piedmont College Nursing Department and Habersham County Responders Hold Mass Casualty Exercise

District 2 Public Health participated in a mass casualty exercise in Habersham County. This exercise was an annual event involving the Piedmont College Nursing Department, Demorest Police and Fire departments, Habersham EMS, Habersham County Medical Center, and other external partners.

The scenario included multiple injuries resulting from a mock explosion at a protest rally at the college. It involved over 60 victims acted out by junior year nursing students from Piedmont College. Over 25 senior year nursing students provided triage and care. The victims’ wounds and injuries (moulage) were provided by the Piedmont College Theatre Department. Mass communications students portrayed the media. Exercise victims were triaged at the scene, then treated and/or transported to the local hospital. Emergency planning is an ongoing task and exercises allow all involved to test their plans and responses.

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