

Safety Beacon

Department of Environmental Health and Safety

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Everyone is a Pedestrian



With the start of another academic year, Newark makes its annual transition from the quiet town to a bustling college community. This means a marked increase in the number of students, faculty, and staff on the streets and sidewalks in and around campus and the increased traffic means an increased chance for pedestrian traffic accidents. As drivers, walkers, and bicyclists, it is now even more important to be aware of traffic around us.

Drivers should

- Look out for pedestrians, especially in hard-to-see conditions such as at night or in bad weather.
- Slow down and be prepared to stop when turning or entering a crosswalk where pedestrians are likely to be.
- Stop at the crosswalk stop line to give drivers in other lanes an opportunity to see and yield to the pedestrians, too.
- Be cautious when backing up – pedestrians, especially young children, can move across your path.
- Do not assume pedestrians can see you- they may be distracted by cell phones or electronic devices.

Pedestrians should

- Be predictable. Follow the rules of the road, cross at crosswalks or intersections, and obey signs and signals.
- Walk facing traffic and as far from traffic as possible if there is no sidewalk.
- Pay attention to the traffic moving around you. This is not the time to be texting or talking on a cell phone.
- Make eye contact with drivers as they approach. Never assume a driver sees you.
- Wear bright clothing during the day and reflective materials (or use a flashlight) at night.
- Look left-right-left before crossing a street.

New Assistant Director of EHS Named!

EHS is proud to announce that Krista Murray has been named assistant director for the University of Delaware Department of Environmental Health and Safety effective June 1, 2013. Michael Gladle, director of EHS noted that Krista brings with her a depth of institutional knowledge regarding the University as well as being well respected within the research community. It's a win-win for the University.



Krista joined Environmental Health and Safety in January 1994 as the Biosafety Officer. She earned a Bachelor of Science degree in Medical Technology, with a minor in Biology, from the University of Delaware, and she completed a Master of Science in Public Health from West Chester University. Krista became a Registered Biosafety Professional in 1999, a Specialist Microbiologist in Biological Safety Microbiology and a Certified Biological Safety Professional in 2003.

Krista will retain the responsibilities as the University's Biosafety Officer in addition to her new duties as the assistant director.

Congratulate Krista on her well-deserved success the next time you see her!

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New-rDNA Research Training

In order to maintain compliance with the NIH *Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules*, the University Biosafety Committee has released a new training specific for users of recombinant DNA materials. Anyone who works on an rDNA project that is covered by the NIH *Guidelines* is required to complete the training prior to work with the materials, and then every 3 years. This will include the PI and any lab staff listed on the project. Staff working on exempt category projects do not need to complete this training. The training must be completed prior to initiating any new covered rDNA research projects. If a researcher has active projects at this point, the training must be completed prior to their next annual update.

The training is available online at <http://ehs.facil.udel.edu:1569/>, or it is offered during monthly training sessions at the EHS office. The schedule for these sessions is on the EHS webpage, and is listed below. If you have any questions regarding this, please feel free to contact Krista Murray at 831-1433 or klmurray@udel.edu.

Upcoming rDNA Research Training Session dates and times (all sessions in room 130 General Services Building) :

(9/6/13 12-1pm)

(10/11/13 10-11am)

(11/8/13 2-3pm)

(12/6/13 12-1pm)

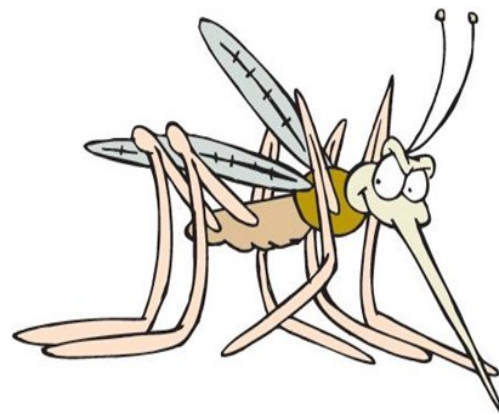
Mosquitoes and West Nile Virus in Delaware

What is West Nile Virus?

West Nile Virus (WNV) is a mosquito-borne virus commonly found in humans, birds, and other vertebrates in Africa, Eastern Europe, West Asia and the Middle East. The virus, which can lead to an infection of the brain called encephalitis, was first identified in the United States in New York City in the late summer of 1999.

What are the symptoms of WNV?

People become infected with WNV from the bite of an infected mosquito. After 3 to 15 days, most people develop mild symptoms including fever, headache and body aches, occasionally with skin rash and swollen lymph glands. More severe infections are marked by high fever, neck stiffness, tremors, muscle weakness, disorientation, and other signs of increasing illness. Symptoms should be evaluated by your health care provider.



How likely am I to get sick?

The chances of becoming severely ill from any one mosquito bite are extremely small. Even in areas where mosquitoes carry the virus, very few mosquitoes—much less than 1%—are infected. If the mosquito is infected, less than 1% of people who get bitten and become infected will become severely ill.

Where do mosquitoes live and breed?

- Mosquitoes live in tall grass, weeds, and brush near inhabited locations such as homes and other buildings.
- Mosquitoes breed in stagnant, standing fresh water oftentimes found around the home.
- In tin cans, buckets, discarded tires and other artificial containers that hold stagnant water.
- In untended pools, birdbaths, clogged rain gutters, and plastic wading pools that hold stagnant water.
- In storm drains and catch basins in urban areas.
- In septic seepage and other foul water sources above or below ground level.

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What can I do to reduce mosquito breeding near my house?

- Whenever water stands for four to seven days, mosquitoes can multiply.
- Eliminating even small amounts of standing water eliminates mosquitoes.
- Dispose of empty cans, buckets, flowerpots, old tires, trashcans, etc.
- Clear clogged roof gutters.
- Change water in bird baths and fountains at least once a week.
- Flush sump pump pits weekly.
- Empty plastic swimming pools when not in use.
- Drain swimming pool covers.
- Clean and chlorinate swimming pools, outdoor saunas and hot tubs.
- Drill holes in the bottoms of recycling containers that are kept outdoors.
- Use landscaping to eliminate stagnant water that collects on your property.
- Clip tall grass or weeds standing near the house or where people use the yard.
- Clean vegetation and debris from the edges of ponds.

A Brief History on Stormwater Management



While stormwater maintenance may seem like a recent idea, people have been managing stormwater since antiquity.

Before development of the East Coast in Colonial times, stormwater flow was managed by indigenous forests with large canopy trees which slowed rain fall, absorbed the water in its roots, and infiltrated water into creeks and or into groundwater. As agriculture was introduced to the land, these forests were removed, resulting in uncontrolled storm runoff. The first attempt to control this runoff in Delaware was in the form of “tax ditches” which were dug to reduce flooding of farmland. These ditches are still maintained in lower Delaware.

Further development increased impervious surfaces such as asphalt, concrete, roofing, and roadways, and the increased stormwater runoff created more flooding. In response, municipalities built underground sewers to whisk the water, untreated, to the nearest stream. While this solution reduced local flooding but in some cases created downstream flooding and stream bank erosion from the increased volume of water entering the streams from the storm sewers. This in turn created problems for aquatic plants and animals in addition to the human communities living downstream.

The modern approach to stormwater management began with the construction of ponds to detain rain water so that it could drain more slowly to the local waterways. Detention ponds (or “dry ponds”) follow the same concept but are designed to completely drain 24 to 72 hours after a storm. More recent stormwater management designs use bio-retention basins (or rain gardens) which use a mix of special soils, under drains, and vegetation to reduce the volume of runoff while also removing contaminants before discharging rainwater into our creeks. In some ways, bio-retention ponds are mimicking the effects of the forests which originally covered Delaware. You may have noticed bio-retention ponds on campus; they look like landscaped areas in a slight depression.

Another trend in stormwater management is to mimic the original hydrology of the area so that rain water runoff can infiltrate into the soil or be absorbed by plants. Grass median strips, landscaped swales, porous pavers, and green roofs are examples of this technique.

The next generation of stormwater management will be in the form of nature’s original stormwater management: large canopy trees. You may have noticed that during construction projects on campus, efforts are taken to protect large trees from damage. This not only keeps our campus beautiful but also helps to manage our stormwater.

HazWaste Tip of the Month

Question:

I am looking to minimize chemical waste from labware glass cleaning. Currently, acetone, IPA and ethanol are used (all at least 70% strength). EHS collects the waste. Are you aware of an EXCELLENT substitute that your research and teaching labs are using to wash/rinse lab glassware and does not need to be collected as regulated waste—and is sink disposal friendly as well?

Answer:

For a laboratory glass cleaner that doesn't have to be collected as chemical waste, use Cascade dish washing detergent with Dawn and add a touch of vinegar or lemon juice in the rinse water. It works really well except for really baked in problems. Otherwise, check with VWR Scientific or Fisher Scientific for more specialized cleaners, but make sure you verify they are sink disposal friendly.



What to do During a Power Outage?



Power outages are disruptive. They are annoying. They can even be scary, especially if you don't know what you should do. Although most of our buildings have emergency power, that power is only designed to allow you to safely leave the building. To ease the confusion EHS has developed a few guidelines to help you find your way out of the dark.

In office or classroom buildings you should move to an area with natural light and check with your manager or instructor for more instructions.

In laboratory buildings where there are many sources of hazardous substances (chemicals, compressed gases, etc.) you must leave the building immediately any time the ventilation goes down. Check in with your manager, the building manager, or your instructor for more information.

If you are at a public event like a basketball game, wait for information from the building/event manager.

Remember if it's more hazardous outside (extreme cold, tornado warning, or a severe thunderstorm etc.) stay inside in a naturally lighted area.

**COMING SOON: Be on the lookout for the NEW
Lab Safety Video!**