

Safety First



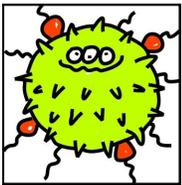
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5,000 employees get flu shots

More employees than ever signed up this year to get their seasonal flu vaccination, and perhaps it was because last season's virus made the news more than any other since 2004-05. That was the last "bad" year for seasonal flu before last season's February peak of activity.

However, every year the virus takes its toll: on average, about 5% to 20% of the U.S. population gets the flu, about 200,000 are hospitalized and 36,000 people die from it. Worldwide more than 500,000 die from the flu each year, so, peak season or not, flu is dangerous.



How the flu spreads.

Flu viruses spread mainly from person to person through coughing or sneezing of people with influenza. Sometimes people may become infected by touching something with flu viruses on it and then touching their mouth or nose. Most healthy adults may be able to infect others beginning 1 day **before** symptoms develop and up to 5 days **after** becoming sick. **That means that you may be able to pass on the flu to someone else before you know you are sick, as well as while you are sick.**

Find a clinic near you.

The employee flu clinics are over for the season, but you can find a clinic near you by going to <http://www.flucliniclocator.org>. This service of the American Lung Association lets you enter your zip code and then it will give you a list of the flu clinics near that zip code.

John Covely, EHS Administration

Holidays & Hazards

Does it seem like you are barraged with safety information around the holiday season? Well, we often are and for good reason. Annually, emergency rooms treat around 12,500 people for injuries sustained during the holiday season. Falls (from ladders), cut and shocks related to holiday lights, decorations, Christmas trees, and candles account for 1,200 injuries. (See page 2 for candle safety).



For starters, let's talk trees. The National Fire Protection Association (NFPA) reports that there is an estimated annual average of 210 home structure fires that begin with Christmas trees. Based on data from 2002 through 2005, these fires caused an average of 24 civilian deaths, 27 civilian injuries, and \$13.3 million in direct property damage per year. So, please remember these facts if you put a tree up at the university.

When choosing an artificial tree, look for the "fire resistant" label. If buying a live tree, check for freshness: it should be green with a root ball wrapped in burlap and the needles should be hard to pull from branches. The butt of a fresh tree is sticky with resin. Cut off about two inches of the trunk to expose fresh wood for better water absorption. Keep the tree stand filled with water above the cut of the tree, and if the tree becomes dry or brittle, remove it immediately. If using on the UNC campus, live trees must be sprayed with a fire retardant material.

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Candles

UNC Safety Regulations prohibit the use of candles on the UNC campus.

Christmas Trees

Christmas trees for public assemblies (rooms of 50 or more people) will need prior approval from the UNC Fire Marshal at 962-5708.

Tree Pick-up

Contact Jill Crowder in Grounds for free tree pick-up at 962-0785 or Jcrowder@fac.unc.edu.



CANDLE SAFETY

1. Always put *out* your lit candles before leaving a room or going to bed.
2. Don't allow children to keep or use candles.
3. Never use candles on or near a Christmas tree and never use candles near combustibles.

A safe alternative to traditional candles are the new very realistic battery-operated candles. Statistics from the U.S. Consumer Product Safety Commission (CPSC) state that candles start approximately 11,600 fires annually, with 150 deaths, 1,200 injuries, and cause 173 million in property loss and damage.

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PHOTO CONTRIBUTORS Daniel Gilleski, Conor Keeney,

Set the tree up away from exits, fireplaces, approved heaters, radiators, heat sources and lamps. Trees are not to be left in buildings during the holiday season when the building is unoccupied. Contact Jill Crowder in Grounds for tree pick-up at your dumpster: Jcrowder@fac.unc.edu, or 962-0785. See video of a tree fire at: <http://www.youtube.com/watch?v=IPyrJbKJpIY>

Be sure your holiday lights have been tested by a recognized testing laboratory (Underwriters Laboratory is a good one), and check old light strings for broken or cracked sockets, frayed or loose connections. Because you don't want to overload your electrical outlets, never connect more than three sets of lights, and NEVER use electric lights on a metallic tree. The tree can become charged with electricity from faulty lights, and a person touching a branch could be electrocuted. Keep "bubbling" lights away from children. These lights with their bright colors and bubbling movement can tempt curious children to break candle-shaped glass, which can cut, and children may attempt to drink the hazardous liquid. Be sure your outdoor lights have been certified for such use. Turn off all holiday lights when you go to bed or leave the house. Outdoor lights should be plugged into circuits protected by ground fault circuit interrupters.



Trim your tree with non-combustible, or flame resistant materials. Tinsel and icicles, especially the leaded type, are hazardous to children and animals. Don't use decorations that are sharp, breakable or have movable parts that can be swallowed or inhaled by children or pets. Artificial snow sprays can irritate lungs if inhaled. To avoid injury, read container labels; follow directions carefully. If you have a fireplace, here are two tips to put you more squarely in the "safe holiday season" category. Don't burn wrapping papers in the fireplace as wrapping paper ignites suddenly and burns intensely and may result in a flash fire. Keep the fireplace screen close to the fireplace, and closed to prevent dangerous sparks from reaching combustible materials in the home.

Kitty Lynn, Fire Safety Officer

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Want to know if the flu virus is coming to a town near you? Well, now you can through Google's innovative analysis of its keyword searches.

Google "Predicts" Flu Activity

Very simply, Google identified 53 high scoring influenza-like illness related key search terms like "flu symptoms, runny nose, fever," etc., and then using internet protocol (IP) addresses, they geographically plotted those numbers right down to the major cities in the U.S. (The 54th highest scoring off-topic search term was "high school basketball," since the basketball season tends to coincide with influenza in the U.S.).

Google then compared their data to years of influenza data from the Centers for Disease Control and Prevention (CDC) and found an amazing correlation between actual flu activity and their key search terms. But what is most important here, is that because searches generally reflect what people are immediately interested in, Google can practically see flu activity in real time.

Google's data is usually about two weeks ahead of the CDC.

That means that Google's data is usually about two weeks ahead of the CDC because it takes the CDC about two weeks to collect and compile the data from hospitals, physicians' offices and laboratories. Google is hoping to extend this system to enhance global influenza surveillance realizing that it could play a major role in detecting any new strain of pandemic influenza, giving health organizations more time to mount an effective response.

Google is also working with the CDC to see if this system can detect other communicable disease activity.

But for now, you can use this innovative system to give you a heads up about this season's flu activity by going to the EHS website at <http://ehs.unc.edu/ueohc/flushot.shtml>, or go to Google's Flu Trends at <http://www.google.org/flutrends>.

John Covely, EHS Administration

Fat, Oil & Grease



Bad for your Heart Bad for your Drain

The holidays are upon us which means we generally find ourselves cooking and eating more than normal.

Cooking many holiday foods generates fats, oils, and grease (also known as FOG), and should be disposed of properly. FOG should never be disposed of down the drain, because it will eventually clog the sewer system, resulting in overflows and costly repairs – and if clogs occur on your property, you will be responsible for the repairs. When a sewer overflows, the untreated sewage usually ends up in the nearest creek, river, or lake.

Common Sources of FOG

- Meats and Poultry
- Dairy and Pasta Products
- Vegetable and Plant Oils
- Soups, Gravies, Chilly Sauces & Condiments

You should dispose of small amounts (1 quart or less) of FOG in a sealed container with your normal household garbage. In general, liquids should not be disposed of in the garbage. Therefore, please make an effort to "solidify" fat, oil, and grease by absorbing it into paper towels, or adding cat litter. If you generate larger quantities, you may dispose of these items at your local household hazardous waste facility for free. Contact your local county offices for a Hazardous Waste Facility near you.

Conor Keeney, Environmental Specialist



FIRE EXTINGUISHER SAFETY TIPS

1. Use portable fire extinguishers for putting out small fires or containing them until firefighters arrive.
2. Your first priority is to be able to get out of the building safely. Remember that fires grow and spread very quickly, within minutes.
3. Make sure these conditions exist before using your fire extinguisher:
 - The fire is confined to a small area and isn't spreading,
 - Everyone else has left the house or building,
 - Someone has called the fire department, and
 - the room isn't filled with



To use a fire extinguisher

<http://ehs.unc.edu/fire/principles.shtml>

Remember P-A-S-S

- **P**ull the pin. Hold the extinguisher with the nozzle pointing away from you, and pull the pin out.
- **A**im low. Point the extinguisher at the base of the fire.
- **S**queeze the lever slowly and evenly.
- **S**weep the nozzle from side-to-

The holiday travel season is here with long lines, uncomfortable airplanes, and awkward packages to carry. Here are some tips!

ERGONOMIC HOLIDAY TIPS



- Use lightweight, durable luggage with extending handles and good wheels that swivel in all directions.
- Use a light backpack instead of a shoulder bag.

Backpacks distribute the weight evenly on both sides instead of overly straining your shoulder and neck.

- Only carry essential items. You can reduce the weight of your travel items significantly by reducing items to one magazine, Sudoku crosswords, and an iPod instead of heavier items like books, laptops, and DVD players.
- If you need to use your laptop during travel, try placing it on a pillow or laptop holder rather than on your lap. In most instances, the pull-



down trays on airplanes are located at a height higher than their seated elbow height, which causes poor hand and wrist postures while typing.

- When seated, prop your feet up on a carry-on bag to improve circulation and decrease muscle strain.
- Place a small pillow or blanket in the lumbar region of your back to help reduce back strain.
- Use a "U-shaped" travel pillow that fits around your neck if you need to sleep during travel.

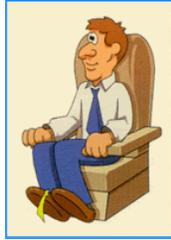


Moving your body around is important.

Try these exercises!

& TRAVEL EXERCISES

1. Squeeze a tennis ball or a pair of socks with your hands until they're tired.
2. Keep the balls of your feet planted and raise your legs using your calf muscles. If this is too easy you can place your carry-on bag on your knees.
3. Plant your heels firmly and flex your ankles and toes. Hold for five seconds and relax.
4. Place your hands on your armrests and raise your knees slowly (together is harder than one at a time) toward your chin. Lower them slowly.
5. Cross your legs. Rotate the dangling foot in as wide a circle as possible. Continue until tired.
6. Stretch your neck by keeping your chin close to your throat and tilting your head forward.
7. Roll your head from one shoulder to the other, but avoid rotating it backward.
8. Lower your shoulders and raise them up toward your ears into a shrug. Hold for five seconds. Continue until tired.
9. Arch your torso gently backward and forward to stretch like a cat.
10. Flex and relax your gluteus muscles, holding for as long as possible. Squeezing your rear like this could earn you strange glances, but you may even look better during swimsuit season!



Victoria Jacobson, Ergonomist
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Green is not just for the holidays!

The Energy Services Cogeneration Facility recently replaced an older solvent based parts washer tank with a new “environmentally friendly” parts washer in their maintenance shop.

This is the first industrial shop on campus to use this type of parts washer, which is a greener alternative for industrial parts, because it washes parts by using a bioremediant agent to break down the oil and grease instead of using a solvent.

Solvent tanks are commonly used in industrial shops on campus to degrease metal parts and components. Greased or oiled parts are washed in a tank with a chemical agent like Varsol or Naphtha, and then are often hand scrubbed by the operator, a process that can cause skin irritation.

With the new “green parts washer”, the surfactant solution breaks down the oils and greases while microorganisms in the surfactant solution consumes them. The byproduct results in formation of carbon dioxide and water as a byproduct instead of waste solvent. As a result, waste, disposal, and health and safety issues are minimized.



Employees and management have expressed positive reviews with the new system. One of the maintenance mechanics at the plant is quite happy with the new system, noting, “there is less of a potential skin contact hazard compared to traditional parts cleaning [as when operators uses traditional] solvents like Varsol. And, the new product has a nice ‘apple-cider’ smell, not like the unpleasant solvent odor”.

The U.S. Environmental Protection Agency also considers water-based cleaners a better alternative compared to solvent based cleaners from an overall human health and environmental standpoint.

Daniel Gilleski, Workplace Safety Officer

