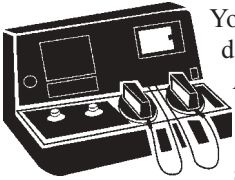


**Occupational Health Group** is a service offered to the business community of North Alabama by Decatur General Hospital and Huntsville Hospital Systems

## Automated External Defibrillators (AED) in the Workplace

Susie W. Lynn, M.D.



You may already be aware of the AED, a medical device that is simple to use and saves lives. Airline travelers, casino players, mall shoppers, and much closer to home, a fellow Huntsvillian just completing a golf game, have been successfully resuscitated with such a device.

But have you considered the use of an AED in your workplace?

*You may ask, "Why should I?"* Consider this fact. Cardiac arrest due to ventricular fibrillation, a life-threatening condition in which the heart's normal electrical signals become disorganized and erratic, causing the heart to cease pumping blood effectively, remains the leading cause of death in the United States. Sudden cardiac arrest can strike anybody, anyplace and often without warning, although increasing age and existing coronary problems place an individual at increased risk.\* This is unlike a heart attack where one usually experiences warning signs. The only definitive treatment for sudden cardiac arrest is defibrillation or restoring the heart's natural rhythm by applying an electrical shock. An AED is just such a device which analyzes cardiac rhythm and prompts a user to deliver a shock when necessary. It's about the size of a laptop computer, is portable, and fairly easy to use, allowing people with modest training to safely deliver effective cardiac defibrillation. Units have a long shelf life (battery operated) and upkeep is minimal. The cost varies based on features; however, most run in the \$3000-\$3500 range.

*Why not rely on the pre-existing medical emergency protocols, i.e., call 9-1-1?* Simply because minutes count when a heart is in defibrillation. It has been estimated that chances for survival decrease approximately 7-10% with each passing minute and survival rates after 12 minutes are only 2-5%. Conversely, survival rates as high as 90% have been reported when the collapse-to-defibrillation time is within one minute. There are many situations when traditional EMS responders simply cannot respond in sufficient time and the layperson can make the difference between life and death.

*What is my liability?* Three federal initiatives support public access defibrillation: the Cardiac Arrest Survival Act, the "Guidelines for Public Access Defibrillation in Federal Facilities" providing guidance for the use in federal facilities, and, the FAA issued "Emergency Medical Equipment: Final Rule. Forty-nine out of fifty states have good Samaritan laws that cover the use of AEDs. Essentially, any person who in good faith and without compensation used the AED to care for a victim of cardiac arrest would be protected as long as they acted prudently. This immunity extends to the layperson, anyone instructing them, and the physician or supervising medical authority. Alabama is included in those 49 states. Indeed, the evolving legal

trend may ultimately lead to higher risks for businesses that fail to purchase and train their employees in the use of AEDs.

*How do I establish such a program for early response?* The American College Of Occupational and Environmental Medicine (ACOEM) has established recommendations for the employer-sponsored programs for the use of AEDs in workplaces and public settings. Key elements include:

- Establishing a centralized management system with appropriate medical direction and control.
- Note: FDA regulates AEDs as prescription devices. Acquisition requires written authorization from a medical provider.
- Proper training in CPR and use of the AED with annual skills review.
- Coordination with local EMS.
- Integration of the AED program into an overall emergency response plan.
- Periodic review of program protocol as well as case review after each use with documentation.

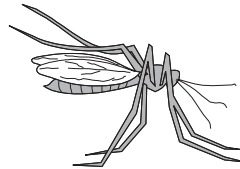
The physicians at OHG are BLS/ACLS certified and would be pleased to assist your company in establishing an AED program. If you would like more information on AEDs, visit our website, [www.OHGonline.org](http://www.OHGonline.org), and click on "In The News".

*\*OSHA reported that from 1991-93, 15% of workplace deaths were due to sudden cardiac arrest.*

## West Nile Virus Mosquitoes Can Carry Serious Illness

Shanon D. Smith, M.D.

The West Nile Virus has emerged in recent years and has recently reached North America, presenting a threat to public, equine and animal health. The most serious manifestation of the West Nile Virus infection is fatal encephalitis (inflammation of the brain) in humans and horses, and mortality in certain domestic and wild birds. The Center for Disease Control reports 854 laboratory confirmed human cases and 43 deaths from West Nile Virus illness in the United States. In Alabama, there were 14 reported cases in humans between January 1, 2002 and September 6, 2002.



To learn more about this serious illness and steps you can take to protect yourself, visit our website, [www.OHGonline.org](http://www.OHGonline.org) and click on "In The News".

## OHG Directory

Administration .....	256/864-3697
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Billing Department .....	256/864-3695
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OHG - Madison .....	256/774-7300
OHG - Scottsboro .....	256/259-1555
Wellness Services .....	256/864-3736

[www.OHGonline.org](http://www.OHGonline.org)

### Beat the Bug!



For the 10th year, the Wellness Services Department will be offering on-site flu shots to employers in North Alabama. The flu season is right around the corner. The good news is that the influenza vaccine is almost 90% effective in preventing this serious illness. With those odds, you can't afford to miss this convenient opportunity.

The cost for on-site flu shots is as follows:

Over 500 participants .....	\$12.00
301-500 participants .....	\$13.00
101-300 participants .....	\$14.00
10-100 participants .....	\$15.00

For more information or to schedule an appointment for on-site flu shots, please call OHG Wellness Services at (256) 864-3736.

## To Eat Fat, or Not to Eat Fat, That is the Question

Shanna Grissom, OHG Wellness Services

There are many types of fat that we consume through foods daily. Fat is an essential part of our diet. Some of these fats are good (unsaturated fats and Omegas), some are bad (saturated fats). Let's examine some of these types of fat to see what types we should be eating.

**Saturated fats.** Saturated fats are found in all animal foods such as butter, lard, meat and meat products, coconut oils, palm oils and cocoa butter. This fat is usually solid at room temperature. Saturated fats can increase the amount of LDL "bad" cholesterol in your blood.

**Trans Fatty Acids** (or trans fat). Trans fats are a type of saturated fat. These fats are produced when a vegetable oil is exposed to high temperatures under pressure with hydrogen to make a solid fat (hydrogenation). These fats are found in foods containing hydrogenated or partially hydrogenated oils such as margarines, shortening, commercial baked goods, coffee whiteners, artificial whipped toppings and snack foods. Trans fats are associated with an increased risk of cardiovascular disease (they may lower HDL "good" cholesterol levels and raise the LDL "bad" cholesterol levels). Trans fats are not currently reported on food labels. If a food is labeled low in saturated fat, it still may be high in trans fats. The FDA is currently working on a method to add trans fats to the food label. Until then, the best way to check for trans fat is to check the list of ingredients on the label. If hydrogenated oil appears far down the list, there is no cause for alarm, but if it's near the top, a different product would probably be a better choice.

**Polyunsaturated Fats.** Polyunsaturated fats are found in corn, cottonseed, safflower, soybean and sunflower oils. These fats are liquid at room temperature. Polyunsaturated fats may lower the LDL "bad" cholesterol, but should not be consumed in excess because they may also lower HDL "good" cholesterol levels.

**Monounsaturated Fats.** Monounsaturated fats are unsaturated fats from vegetable sources found in canola oil, olive oil, peanut oil, avocado, seeds, nuts and their oils. This type of fat may lower LDL "bad" cholesterol levels and possibly lower triglyceride levels in the blood without lowering HDL "good" cholesterol levels. These fats are considered to be one of the most healthful fats you can eat but should be consumed in moderation.

**Omega-6 and Omega-3 Fatty Acids.** These are unsaturated fats that are essential fatty acids (meaning they cannot be produced in our bodies and must be obtained from foods we eat). These fats are widespread in our diet so it is easy to meet the daily requirements of these fat. Omega-3 fatty acids are beneficial because they may lower triglyceride levels, possibly reduce LDL cholesterol while increasing HDL cholesterol, and make the platelets in the blood less sticky. Omega-3 is found in cold water fatty fish such as salmon, mackerel, anchovies, rainbow trout, blue fish and sardines. They are also present in flaxseed oil, flax meal, canola oil, walnuts, pumpkin seeds, shellfish, soybeans and green leafy vegetables.

**Oxidized Fats.** These are unsaturated fats that change due to prolonged exposure to heat and/or oxygen. Oxidized fats may damage the lining of the blood vessels increasing the risk for atherosclerosis. They should be eaten in very limited amounts. These fats are present in rancid

foods, powdered coffee whiteners, powdered cheese and the oils used over and over for deep fat frying (like the oil used in fast food restaurants).

At this point, it is important to mention how cholesterol is involved in this process.

Cholesterol is a waxy substance found in the blood that is necessary for many body functions such as the formation of hormones, building and repairing of cell walls, and the production of substances necessary for digestion.

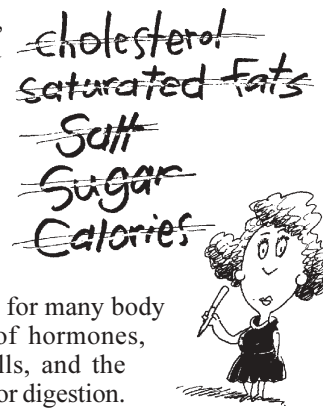
Cholesterol comes from two sources: cholesterol manufactured in the liver and cholesterol consumed from foods in the diet. Cholesterol is found only in animal foods such as organ meats, egg yolks, fatty meats, milk products, butter and lard. Too much cholesterol can clog arteries and increase the risk of cardiovascular disease. It is important to note that a food can be labeled "cholesterol free" if it does not contain animal fat, but these foods may still be high in fat from other sources.

You need to consume some fat to maintain good nutrition, but all you need is one tablespoon a day. Most Americans consume an average of six to eight times this amount. Five grams of fat is equivalent to one teaspoon (three teaspoons of fat is equivalent to one tablespoon of fat). So if you were to eat a serving of potato chips with 12 grams of fat, that's almost 2.5 teaspoons of fat; a bowl of ice cream with 34 grams of fat contains 6.8 teaspoons (or the equivalent of three-quarters a stick of butter). With all this information, it is confusing to know what fats to eat and how much to eat of each one. Fat, whether it comes from plant or animal sources, contains more than twice the number of calories as an equal amount of carbohydrate or protein (each gram of fat contains nine calories). The Committee on Dietary Allowances has made the following diet recommendation for a healthy adult individual:

- Cholesterol should be limited to less than 300 mg daily
- Saturated fat intake should be 10 percent or less of the fat calories allowed per day
- Fat intake should be limited to 30 percent or less of total calories per day

A person consuming 2,000 calories per day should have 600 calories or less from fat (roughly 65 grams). Of those fat calories, only 200 or less should come from saturated fats (roughly 22 grams). If your goal is to lose weight, your fat intake along with total calories should be more limited. Eating a very low-fat diet may lower LDL "bad" cholesterol, but if you're not losing weight and exercising, you may be lowering HDL "good" cholesterol also.

The bottom line: a low-fat diet (especially low in trans fats) with aerobic exercise equals successful weight loss. OHG Wellness Services offers many on-site screening services and nutrition classes. If you would like more information, please call 256/864-3736 or visit our website, [www.OHGonline.org](http://www.OHGonline.org).



# OHG

OCCUPATIONAL  
HEALTH GROUP

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### Holiday Closings

All OHG Clinics will be closed in observance of the following holidays:



November 28, 2002 – Thanksgiving Day  
November 29, 2002 – Thanksgiving (Observance)

December 24, 2002 – Clinics will close at 2:00 p.m.  
December 25, 2002 – Christmas Day