

Public Health

E-Magazine

Volume 3 Issue 1
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A photograph of two hands, one on the left and one on the right, held up in a gesture of holding or supporting. In the center, a large, full green tree stands in a grassy field under a clear sky. The text 'Healthy Environment' is arched over the top of the tree, and 'Healthy Living' is arched under the bottom of the tree, both in a green, sans-serif font.

Healthy Environment
Healthy Living

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Message from the Director



"Only within the moment of time represented by the present century has one species – man – acquired significant power to alter the nature of this world." These are words of Rachel Carson from her 1962 literary bombshell, "Silent Spring". In this book Rachel Carson made the average American aware of the havoc which indiscriminate reliance on pesticides could reek on the environment and on human health. The publication of "Silent Spring" made "ecology" a household word and was probably the most important single event in what became the environmental movement of the 1970s. Over 45 years after its publication we are still in a bit of denial of the impact humans have on the environment and consequently how that affects human health. We have an obligation not only to protect our citizens from environmental hazards but also protect our environment from the impact of our citizens.

The environment is everything around us - the air we breathe, the water we drink and use, and the food we consume. It's also the chemicals, radiation, microbes and physical forces with which we come into contact. Our interactions with the environment are complex and are not always healthy. That is why it is vitally important to have strong environmental health programs that provide an invisible blanket of protection for our citizens. The day to day work of our environmental health professionals assure clean air and water, wholesome food and a City and County free of environmental health hazards. The tireless and often unrecognized work of our environmental health program staff is essential for a healthy community. Take the time to tell the story of the work of our environmental health programs and the work that we do every day to protect our environment and the people that live in it. I think it is a story worth telling.

Yours in good health.

<http://health.springfieldmo.gov>

News and Technology

The CDC launches a new study on **chronic fatigue syndrome** to better understand how it affects people and lead to more successful treatment.

<http://www.cdc.gov/news/2008/04/CFS.html>

More than one million people have called the CDC's 1-800-QUIT-NOW hotline for free coaching, a plan, educational materials, and referrals to local resources in their state — all to help them **quit smoking**.

<http://www.cdc.gov/news/2008/04/QuitNow.html>

Nutrient-dense foods add vitamins, minerals and flavor to foods and help you pack more benefit into every bite.

<http://www.cnn.com/2008/HEALTH/diet.fitness/04/23/cl.calories/index.html>

Prevention—Small Steps Protect Environment and Health

Hotter temperatures, melting glaciers, more natural disasters—experts say climate change is not a matter of if, but when. And, they add, it does impact our health.

The World Health Organization reports that changes in the Earth's climate caused by humans, now lead to at least 5 million cases of illness and more than 150,000 deaths each year. Negative health impacts can include an increased risk of heat stroke, hypothermia, asthma, cardiovascular and pulmonary illness.

The health department works daily to prevent climate change from negatively impacting public health. Programs such as air quality control, stream testing and weeds and trash removal address environmental issues. But more help is needed from partner agencies and from the public.

Each person in the community can take just one step to better protect the environment and our community's health.

Be prepared – learn about climate change and its impact on your health

Travel differently – walk, carpool, bicycle, use public transportation

Eat differently – buy from a community farmer's market, eat less meat and more fruits and vegetables

Green your work – use recycled paper, purchase an energy-saver computer, telecommute

Green your home – insulate to conserve energy, reuse or recycle materials, conserve water

Each of us has an opportunity to make smart decisions about the lifestyle we lead. Many times what is good for our health is also good for the environment.

For more information contact

Jaci McReynolds, at

(417) 874-1205. ☺



The Environment—Where We Live, Work and Play

By Barbara Lucks, Materials Recovery/Education Coordinator, City of Springfield

Protecting our natural environment for the next generation is seen as being responsible stewards of the resources we inherited from the generation before us. But what about protecting the environment for our generation?

More and more scientific evidence is being presented that connects the quality of our natural environment with the quality of our own human health. What we do to the environment can come back to us as what the environment is doing to us.

In my capacity as Materials Recovery/Education Coordinator, a position I've been privileged to hold for over 13 years, I am very fortunate to consider the talent and support of the Springfield/Greene County Health Department as one of my valuable resources. Over the years, we have collaborated on a number of projects designed to protect both our natural environment and human health and well-being.

The recently completed, five-year-in-the-making, State of the Environment in Springfield/Greene County Report began with an assembly of stakeholders, agreement on a statement of values and an assessment of the local natural environment. The general community assisted with setting priorities and recommendations outlined to be presented to our elected officials, staff of various agencies and organizations, and generous citizen volunteers. Work is now underway toward meeting those recommendations.

Water quality and quantity concerns have brought us together during times of drought and flood. As the City and County have been granted, and work to comply with, our Storm Water Permits, the assistance of the health department is an integral part of monitoring, educating and reporting activities. Whether surface water (swimming holes), groundwater, or well water—water is the resource that makes the Ozarks so special and, at the same time, so fragile. Many agencies and organizations are working together to safeguard and conserve our water.

An important component of the Show-Me Yards & Neighborhoods Project draws attention to chemicals and pesticides, as they relate to the natural environment and the safety and health of our children, pets, wildlife and adults. The health department was active early in recognizing this connection.

Making the citizens of Springfield and Greene County aware of the services of the City's Household Chemical Collection Center (HCCC) provides them with the option of safe and responsible disposal/recycling of a variety of household hazardous waste materials. We appreciate the health department's efforts to include information about our HCCC in their educational publications and presentations.

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Under the Microscope



Mold. People often think to throw their bread away when they see green spots growing on it, but mold can be found almost anywhere, not just on your food.

Mold can grow on wood, paper and carpet. Mold may grow in your home, especially after flooding.

Mold can be a potential health threat if it is not taken care of quickly. It can cause allergies, asthma, respiratory complications, eye irritation, wheezing or skin irritation. People who have serious allergies to mold may see more severe symptoms if mold grows in their home.

According to the Environmental Protection Agency (EPA), to control mold you have to control moisture. Areas and items that have been saturated by flood water should be cleaned and dried within 24 to 48 hours to prevent mold from growing.

Items that have been wet for more than 24 hours will have mold growing on them, even if you cannot see it.

Mold can be washed off of hard surfaces with detergent and water. If mold has reached absorbent materials (such as ceiling tiles, carpet, drywall, mattresses, furniture and stuffed animals) they should be replaced.

Currently, there are no laws governing mold, and the Springfield-Greene County Health Department cannot respond to mold complaints.

For more information, call the health education office at (417) 864-1667 or visit the EPA at www.epa.gov. ☺



Sources of Volatile Organic Compounds and Nitrogen Oxides

Sources of VOCs and NOx include:

- ◆ automobiles
- ◆ off-road vehicles
- ◆ gas-powered lawn care equipment
- ◆ power plants
- ◆ industrial sources (I.E. manufacturing facilities)
- ◆ residential use of solvents, cleaners, paints, etc.
- ◆ gasoline stations (fuel evaporation)
- ◆ small businesses (solvent-based coating and printing operations, solvent use, boilers, etc.)



Ground-level ozone is a pollutant that causes negative health effects in humans and damages plants and ecosystems. It is formed during the day when volatile organic compounds (VOCs) and nitrogen oxides (NOx) react in the air with sunlight and heat.

Often, ozone levels are highest during mid to late afternoon. However, depending on weather conditions, high ozone levels can occur as early as late morning. Since ground-level ozone requires sunlight and heat to form, it is only a concern from April through October.

Breathing in ground-level ozone can trigger a number of health problems, including chest pain, coughing and throat irritation. It can worsen symptoms of asthma, bronchitis and emphysema. It can inflame the lining in the lungs, reduce lung function and permanently scar lung tissue.

Scientists have found that about one in three people in the U.S. are at higher risk of experiencing ozone-related health effects. But when ground-level concentrations reach high levels, even people who are otherwise healthy may experience difficulty breathing – especially people who spend more time outdoors, such as children, outdoor workers and people who are exercising.

One way to reduce your exposure to ground-level ozone is to limit periods of heavy exertion outdoors. Exertion causes you to breathe harder and faster, meaning that more ground-level ozone is being taken into your lungs and reaching tissue that is susceptible to injury. So postpone mowing your yard. Move your basketball game indoors. Ride a stationary bike instead of cycling outdoors.

Simple Steps to Reduce Ozone Pollution

Trip chain. Combine your errands into one trip. Get things done more efficiently while saving gas and reducing traffic congestion and air pollution.

Fact: The average driver spends about 56 cents per mile including vehicle ownership and maintenance.

Fact: A car started after sitting for more than an hour, pollutes up to five times more than when the engine's warm.

Ride share. Take mass transit or carpool. Traveling differently just once a week will reduce traffic congestion and pollution and save money.

Fact: Vehicles on the road create more than 25% of all air pollution nationwide.

Fact: Every time you share a ride, you're helping reduce emissions by almost half.

Park it. Instead of driving to work or school, ride a bicycle, walk or rollerblade. You'll cut down on vehicle emissions and get some great heart-healthy exercise at the same time.

Fact: Walking, biking, and in-line skating are healthier ways to travel—for both you and the environment.

Care for your car. Regular maintenance and tune-ups, changing the oil and checking tire inflation can improve gas mileage, extend your car's life, and increase its resale value. It can also reduce traffic congestion due to preventable breakdowns and it could reduce your car's emissions by more than half.

Fact: A poorly-maintained or malfunctioning car can release up to 100 times the pollution of a well-maintained car.

Ground-level Ozone

Air Quality Control Coordinator

Some people who live in areas where ozone levels are frequently high may find that symptoms go away after time, but this does not mean that their bodies are not being damaged. Ozone continues to cause lung damage even when symptoms are not present.

Historically, the Springfield Metropolitan Statistical Area has been in compliance with the national air quality standards for ground-level ozone pollution. However, on March 12, 2008 the Environmental Protection Agency (EPA) announced new standards for ground-level ozone. As a result, the Springfield region currently exceeds the new acceptable levels. This puts the region at a significant risk of being classified as "non-attainment" by the EPA in 2010. The EPA revised the ozone standard based on current studies that show people experience adverse health effects and vegetation is adversely effected from lower levels of ozone pollution. The EPA reviews these standards every five years.

A group of 35 Southwest Missouri organizations called the Ozarks Clean Air Alliance (OCAA) formed to identify voluntary strategies that can be adopted by local government, transportation organizations, industrial and commercial businesses and the general public to reduce ozone pollution. These strategies will make up the Clean Air Action Plan (CAAP). The OCAA will also recommend mandatory strategies in the event that the voluntary efforts are not effectively adopted.

To reduce our risk of health damage from ground-level ozone, each of us needs to take small steps to reduce the pollutants that help create it.

For tips and general information visit www.showmecleanair.com or www.airnow.gov or call Doug Neidigh at (417) 864-1086. ☺

Health Effects of Ground-Level Ozone

Ground-level ozone can cause the following health effects:

- ◆ aggravate asthma, or other respiratory illnesses
- ◆ irritate respiratory systems, causing coughing and throat irritation
- ◆ inflame and damage cells that line the lungs
- ◆ reduce lung capacity, making it difficult to take deep breaths
- ◆ increase susceptibility of respiratory illnesses
- ◆ increase hospitalizations by aggravating respiratory illnesses
- ◆ repeated exposure may permanently scar lung tissue



Fuel when it's cool. Refueling during cooler periods of the day or in the evening can prevent gas fumes from heating up and creating ozone.

Don't top off the tank. It releases gas fumes into the air, which cancels the benefits of the pump's anti-pollution devices. Stopping short of a full tank keeps gas off of you, is safer and reduces pollution.

Spread the word. If each of us takes just one step, makes just one change or spreads just one word, together we can make a big difference.

Conserve Electricity - Insulate your home. Lower your thermostat by two degrees. Turn off lights. Reducing your energy consumption can help reduce emissions of ozone-forming pollutants from coal-fired power plants.

Telecommute. Work at home sometimes. You'll save time and money, and reduce emissions and traffic congestion.

Know before you go. If your area has a travel and transit information network, use it. Call, visit their Web site, or tune in to the local cable station. Get travel and transit updates before you leave home so you won't get slowed down.

For more information, call Doug Neidigh at (417) 864-1086. ☺

Public Health Emergencies—Preparedness Survey

To help us determine the preparedness level of our community in the event of a public health emergency or other disaster, we ask that you take a few minutes to fill out this survey. Print the completed survey and mail it to:

Jaci McReynolds, 227 E Chestnut Expressway, Springfield, MO 65802. Include your name and address if you'd like to be entered into a drawing for a **Ready in 3 starter kit** (duffle bag, radio, flashlight and first-aid kit).

1. Do you have a three day supply of food, water and medicine stored at your home in case your electricity is cut off, you are asked to shelter in place or another emergency situation occurs?

Yes No

2. Do you have a two week supply of food, water and medicine stored at your home in case of an extended emergency such as a long-term power outage, severe winter weather or influenza pandemic?

Yes No

3. If you answered no to one or both of the above questions, what is the biggest barrier you face? (**Check one**)

Not interested Finances Too busy Other _____

4. Do you have a back-up source for heat? For electricity (such as a generator)?

Yes No Yes No

5. Do you have a plan for how your children will be cared for if their school or daycare center closes for two weeks or more?

Yes No No children in school or daycare

6. Would you be willing to stay home in isolation or quarantine for 10 days or more if you were asked to do so by your health care provider or the local public health department?

Yes No

7. If not, what would be the barrier that would keep you from being willing to stay home?

8. Does anyone in your household have a special need?

Yes No Please describe: _____

9. Where do you look for information on what to do during a disaster?

(Please number in order of how often you use these sources, with 1 being most often.)

Newspaper Television Radio Internet School Employer

Church Other _____

Please tell us about yourself (optional).

Male Female Age: 18-30 31-40 41-50 51-64 65+

Education: Master's degree College Degree High school diploma No high school diploma

Thank you for completing this survey. Your valuable input will help guide future public information efforts.

Community Heroes—National Volunteer Week

By Rebecca Ray

National Volunteer Week is fast approaching. From April 27 to May 3, 2008, this special week offers opportunities to thank some of America's most valuable assets—our volunteers—and to recognize the myriad of ways they improve our communities.

National Volunteer Week reflects the power that volunteers have to "inspire by example." Volunteers both encourage those they help and motivate others to serve! National Volunteer Week was created in 1974 when President Richard Nixon signed an executive order to establish the week as an annual celebration of volunteering. Every year since, each U.S. President, along with many governors, mayors and other elected officials, has signed a proclamation promoting National Volunteer Week.

This year's theme is "Volunteer to Change the World." Discover how simple it is to nominate volunteers for awards (visit www.pointsoflight.org) including the President's Volunteer Service Award. Community Heroes is qualified to present the President's Volunteer Service Award to deserving volunteers. This top volunteering award is sponsored by the President's Council on Service and Civic Participation. In order for a Community Hero to receive this award, the volunteer must track volunteer hours and meet specific requirements for time volunteered.

Lastly, celebrate volunteers by joining them. With the Foundation's help, you can easily find opportunities locally to lend a helping hand. For additional information about volunteering, contact the Regional Community Heroes office at (417) 874-1297. ☺

Portions of this article were obtained from www.pointsoflight.org.

Volunteer Spotlight—Carol Burton



Q: Where do you live? My husband and I live in Battlefield, which is in Greene County.

Q: Why did you decide to become a Community Hero? I enjoy helping people, especially if there is a real need. I was able to help out in the recent ice storm because I had signed up to volunteer before an emergency happened. Also, the Community Heroes program gives me the flexibility to volunteer as much or as little as I am able to. It is easy to fit into my busy work schedule.

Q: Why do you think it's important to be prepared?

If you are prepared, there will be less loss of life in an emergency situation. If we are personally prepared, we will be able to volunteer to assist in the response and recovery effort, which makes the recovery time more efficient.

Q: What is your family like?

I have been married to Randy for nearly 34 years. We have two grown children who are married and have given us five wonderful grandchildren (four girls and a boy). I am the second oldest of nine and we have always been involved in volunteering and helping others. It makes me proud to know that we have passed that compassion on to our children and grandchildren.

Q: What is your philosophy on life?

I try to live my life to glorify God. To be the best example I can be. Even though that doesn't always happen, I want to model Christ as much as possible. ☺

Calendar of Events

April 29. "The Road Ahead." Lebanon. 9:30 a.m. to 3:30 p.m. This day long training/meeting is designed for nurses, healthcare providers, counselors, and other professions working in family care and/or a primary care setting. Participants can expect an overview of HIV epidemiology, current trends in HIV and AIDS, legal issues associated with HIV, and interventions by the Missouri Department of Health. Participants are asked to register by April 23 by calling (417) 827-6052. Registration includes lunch, training materials, and certificate of attendance.

April 29. Webster County Community Heroes Training. 5:15 p.m.

Marshfield. All Community Heroes are invited to attend the ICS and Public Health (Tier 1) training session at the Webster County Health Unit. This session will include information about organizational structure during a public health emergency introduce volunteers to the Incident Command Structure (ICS). Registration is required. To register contact Pam at (417) 859-2532.

May 2-3. FCC Amateur Radio License. The Ozarks Amateur Radio Society (OARS) is sponsoring a "one week-end" class to prepare you for the entry FCC Amateur Radio license. This is an intensive 12-hour class held on Friday evening and all day Saturday with the Federal Communications Commission exam held immediately after the class. There is no Morse code requirement for an amateur radio license. There is no charge for the class. A book is not required; however, books can be obtained for \$30. The FCC testing fee will be \$14 paid to the examiners. A photo ID is required. There is a limit of 20 students per class. Only enroll if you are certain you can attend. To enroll send an e-mail with your name and contact phone number to Jim Martin at jmartin@truveine.net.

For more information, visit www.beacommunityhero.com or contact Rebecca Ray at (417) 874-1297 or rray@springfieldmo.gov. ☺

Calendar

May 13	"Lyme Disease & Other Tick Borne Diseases"	660 S Scenic	7:00 pm—8:00 pm	Register at 864-1496
	"Melanoma, Skin Cancers, Prevention & Treatment"	660 S Scenic	8:10 pm—9:10 pm	Register at 864-1496
	Ozarks HELP (Herpes) Support Group	3850 N National, 4th Fl	7:00 pm	Learn more 864-1303
	Food Handlers' Food School	227 E Chestnut Expy	2:00 pm—4:00 pm	Learn more 864-1685
May 26	Closed for Memorial Day			
Jun 10	Ozarks HELP (Herpes) Support Group	3850 N National, 4th Fl	7:00 pm	Learn more 864-1303
Jun 11	Food Handlers' Food School	227 E Chestnut Expy	8:30 am—10:30 am	Learn more 864-1685
Jun 13	"Food Safety in the Child Care Setting"	660 S Scenic	7:00 pm—8:00 pm	Register at 864-1496
	"Food Borne Illness"	660 S Scenic	8:10 pm—9:10 pm	Register at 864-1496
Jul 4	Closed for Independence Day			
Jul 8	"Helping Kids Grow Up Healthy"	660 S Scenic	7:00 pm—9:00 pm	Register at 864-1496
	Ozarks HELP (Herpes) Support Group	3850 N National, 4th Fl	7:00 pm	Learn more 864-1303
	Food Handlers' Food School	227 E Chestnut Expy	2:00 pm—4:00 pm	Learn more 864-1685

* No charge for events unless noted.

Protecting our Natural Environment—Community Partnerships

(continued from page 3)

Environmental and conservation educators are working hard to return children to the outdoors. Richard Louv, in his best selling, landmark book, "Last Child in the Woods" identified "nature deficit disorder" as the effect of children removed from the stimulus and activity of playing outdoors and interaction with nature and the environment. Health officials are equally alarmed by childhood obesity, diabetes and other health-related threats made worse by low activity levels. We are now working together on "No Child Left Indoors" – reintroducing kids to the wonders of the outdoors.

Recently, federal air quality standards were reviewed in light of growing evidence of the negative impact on a variety of human health issues connected with poor air quality. As a result of the lowering of these limits, Springfield, for the first time ever, now has serious concerns about the quality of the air we breathe. Through the Environmental Collaborative of the Community Partnership of the Ozarks, led by the Air Quality Control Section of the health department, the Ozarks Clean Air Alliance has been formed to move us back to levels that meet the Federal standards. Can we do that? We don't know, but we are giving it every effort we can through educational programs, applying for grants to implement programs, bringing the region together to move the effort forward. We are working together to protect our natural environment and the health and well-being of our citizens.

I view the Springfield/Greene County Health Department as a strong, valuable partner in all of these efforts and many more. Whether it's talented graphics support on an educational piece or technical assistance on mosquitoes breeding habits or dependable and credible data to support a position or measure our progress, we see the challenge together and we work together to safeguard our natural environment—where we live, work and play.

Summer Issue—

- Ticks and Other Biting Critters
- Food and the 4th
- Swim Safe
- Too Hot to Handle

For more information call Barbara Lucks at (417) 864-2005. ☺



Public Health E-Magazine is published by the Springfield-Greene County Health Department. Kevin Gipson, Director of Health; Clay Goddard, Assistant Director of Health; Pam Bryant, Administrator of Maternal, Child and Family Health; Kendra Williams, Administrator of Community Health and Epidemiology; Jaci McReynolds and Rebecca Ray, Managing Editors. **Springfield-Greene County Health Department, 227 E Chestnut Expwy, Springfield, MO 65802, (417) 864-1658, <http://health.springfieldmo.gov>.** Copyright © 2005 SGCHD. All rights reserved.

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The Springfield-Greene County Health Department is committed to helping people live longer, healthier, happier lives.



Springfield-Greene County
Health Department
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