



# LUCE-MACKINAC-ALGER-SCHOOLCRAFT DISTRICT HEALTH DEPARTMENT PUBLIC HEALTH UPDATE JULY 2010

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### July is "Cord Blood Awareness" month

#### Why bank cord blood?

Birth is a one-time opportunity to help society by donating your child's cord blood to a public bank. Cord blood contains stem cells that can save lives. Patients requiring a stem cell transplant will receive cells from one of three sources: bone marrow, circulating blood, or umbilical cord blood. The first two exist in all healthy adults, but cord blood can only be harvested and stored at birth. The section on cord blood transplants explains that it is easier to match transplant patients with cord blood than with the two sources of adult blood. Hence, establishing public banks of cord blood from donors with diverse tissue types can save many lives.



Birth is also a one-time opportunity to help your own family by saving your child's cord blood. Transplant patients recover better when they receive stem cells from a related donor, instead of an unrelated donor. In the future, if there are regenerative medicine advances which can repair the body with the patient's own stem cells, then children whose parents saved their cord blood will have better access to those treatments.

There is virtually no reason not to save your child's cord blood. The only cautionary remarks which can be made about cord blood banking is that the cord should not be clamped too soon after birth.

#### Why doesn't everybody bank cord blood?

Because it costs money. Whereas a bone marrow registry is based upon a computer data base of potential donors, a cord blood bank is based upon a laboratory where staff process the cord blood, freeze it in liquid nitrogen, and monitor the freezers.

Only a limited number of institutions have the funding to maintain public banks which take donations for free. For most parents, cord blood donation is not an option because the number of locations served by public banks is very limited. In that case, parents have to decide if they want to and can afford to pay a private bank to process the cord blood and preserve it for the family.

Info Source: <http://www.parentsguidecordblood.org/>

Germs only cause disease, right? But a common bacterium, E. Coli, found in the intestine helps us digest green vegetables and beans (also making gases - pew!). These same bacteria also make vitamin K, which causes blood to clot. If we didn't have these germs we would bleed to death whenever we got a small cut!



Info Source: [www.funology.com](http://www.funology.com)

### Promoting GBS Awareness Worldwide

#### Group B strep (GBS) is a big deal!

Approximately 1 in 4 pregnant women carry GBS, the most common cause of life-threatening infections in newborns according to the U.S. Centers for Disease Control and Prevention (CDC). GBS can also infect babies during pregnancy and the first few months of life.

Not all babies exposed to GBS become infected, but, for those who do, the results can be devastating. GBS can cause babies to be miscarried, stillborn, born prematurely, become very sick, have lifelong handicaps, or die.

Fortunately there are ways to help protect babies from Group B Strep. Please e-mail us at [info@pbs-intl.org](mailto:info@pbs-intl.org) for information as to how to participate in Group B Strep International's upcoming "Group B Strep is a Big Deal" campaign.

Info Source: <http://www.groupbstrepiinternational.org>

## Adolescent Vaccines at Local Health Departments Why Do Adolescents Need Vaccines?

## Firework Safety Tip

**Vaccines have changed since kindergarten** - Just like technology has grown and changed, so have vaccines. We now have the ability to protect against more diseases than ever before! Vaccines are now available to guard against serious diseases like meningitis and human papillomavirus (HPV).



**Protection from childhood vaccines does not last forever** - Some vaccines protect for a short time - even years - but not your whole life. Examples are tetanus, diphtheria and pertussis (whooping cough) vaccines. Children 11-12 years of age need another dose to be fully protected.

**The virus may change** - Viruses can change enough that you will no longer be protected against the disease. Influenza is like this. You need a flu vaccine every year to be protected.

Children from birth through 18 years of age can get Vaccines for Children (VFC) vaccine free of charge if they:

- are on Medicaid
- do not have health insurance
- are American Indian or Alaskan Native
- are under-insured\*

\*If your health insurance does not pay anything for vaccines, your child may be able to get VFC vaccine. Check with your doctor or your local health department.

Many vaccines are available - for a limited time - at no or little cost through your local health department. In order to prepare for the new school immunization rules, some local health departments can provide the following vaccines:

- Tetanus, diphtheria, pertussis (Tdap/Td)
- Meningococcal (MCV4)
- Varicella, also known as chickenpox (Var)

If your child is 11 years of age and is entering sixth grade or is 11 through 18 years of age and is changing school districts, they may be eligible to receive vaccines through this program. Check with your local health department to see if vaccines are available.

If you are 19 years of age or older and have no insurance or have insurance that does not cover vaccines, contact your local health department.

Info Source: <http://www.michigan.gov/mdch>

To help you celebrate safely this Fourth of July, the Consumer Product Safety Commission and the National Council on Fireworks Safety offer the following safety tips:



- Always read and follow label directions.
- Have an adult present.
- Buy from reliable sellers.
- Use outdoors only.
- Always have water handy (a garden hose and a bucket).
- Never experiment or make your own fireworks.
- Light only one firework at a time.
- Never re-light a "dud" firework (wait 15 to 20 minutes and then soak it in a bucket of water).
- Never give fireworks to small children.
- If necessary, store fireworks in a cool, dry place.
- Dispose of fireworks properly by soaking them in water and then disposing of them in your trashcan.
- Never throw or point fireworks at other people.
- Never carry fireworks in your pocket.
- Never shoot fireworks in metal or glass containers.
- The shooter should always wear eye protection and never have any part of the body over the firework.
- Stay away from illegal explosives.

Info Source: <http://www.fireworksafety.com>

## July is Juvenile Arthritis Month

Juvenile arthritis (JA) refers to any form of arthritis or arthritis-related condition that develops in children or teenagers who are less than 18 years of age. Approximately 294,000 children under the age of 18 are affected by pediatric arthritis and rheumatologic conditions. Read below to see how the Arthritis Foundation is reaching out to these children and their families.



The Arthritis Foundation is the only national not-for-profit organization that supports the more than 100 types of arthritis and related conditions. Founded in 1948, with headquarters in Atlanta, the Arthritis Foundation has multiple service points located throughout the country. The Arthritis Foundation is the largest private, not-for-profit contributor to arthritis research in the world, funding more than \$380 million in research grants since 1948. The foundation helps people take control of arthritis by providing public health education; pursuing public policy and legislation; and conducting evidence-based programs to improve the quality of life for those living with arthritis.

The Arthritis Foundation offers information and tools to help people live a better life with arthritis. Whether it's advice from medical experts to specialized arthritis self-management or exercise classes, the Arthritis Foundation has your solution.

There are a number of ways to become involved with the Arthritis Foundation. Whether you become a member, make a donation or remember us in your will, your contribution goes to support cutting-edge research and scientifically proven programs designed to help people with arthritis. For every dollar donated to the Arthritis Foundation, more than 76 cents goes directly to fund research and activities for people with arthritis.

However, getting involved doesn't require a major donation or major time commitment. Attending a fundraising event - be it a fun run, breakfast or gala, or the Arthritis Walk, our signature event - is another way to help. Raise awareness about arthritis' effects on your life and the needs of people with arthritis as an advocate.

Info Source: <http://www.arthritis.org>

## July is UV Safety Month

The sun's rays, also called ultraviolet or UV rays, can damage your skin and eyes. The short-term results of unprotected exposure to UV rays are sunburn and tanning. Long-term exposure may cause early wrinkles, loss of skin elasticity, dark patches, skin cancer, and potentially blinding conditions such as cataracts and macular degeneration. Your eyes can also receive a sun burn known as photokeratitis, which can cause pain, redness, and tearing. Reflected sunlight--light that bounces off water, for example--can be the most dangerous type of UV light because it is intensified.



People of all ages are at risk for damage from UV rays, including children. To ensure protection, wear sunglasses and a broad-rimmed hat. When selecting sunglasses, make sure they block 99 to 100 percent of UV-A and UV-B rays. But don't be deceived by color or cost. The ability to block UV light is not dependent on the darkness of the lens or the price tag.

It is thought that even just a single day of sun exposure can be harmful to your eyes. Reflected UV light from sand, snow, or roads may burn the eye's surface. And although the surface burns typically disappear within days, they may result in longer term eye complications.

The National Weather Service and EPA advise you to regularly check the UV Index, which they developed as a way to predict the next day's UV radiation levels on a 1-11+ scale, helping people determine appropriate sun-protective behaviors. EPA will issue a UV Alert when the level of solar UV radiation is predicted to be unusually high and the risk of over-exposure is consequently greater. Also at the EPA site ([www.epa.gov](http://www.epa.gov)), you can check the UV Index forecast map, which shows contour lines of predicted UV Index values during the solar noon hour. The map is created daily from National Weather Service forecast data. (To find the time of solar noon at your location, use the sunrise-sunset-solar noon calculator at the NOAA Web site.)

Info Source: <http://ohsonline.com>

## H1N1 UPDATES



Every autumn, as predictably as falling leaves, flu season descends upon us. Every spring, just as predictably, the season comes to a close. This cyclical pattern, common in temperate regions, is well known, but the driving forces behind it have been in question.

Do existing strains die off each spring, only to be replaced each fall by new founding strains from other parts of the world, or does a "hidden chain of sickness" persist over the summer, seeding the next season's epidemic? A genetic analysis by University of Michigan postdoctoral fellow Trevor Bedford and colleagues at U-M, Howard Hughes Medical Institute and Florida State University reveals that in the United States, not all strains of influenza die off at the end of winter; some move southward to South America, and some migrate even farther.

"The prevailing view that has developed over the past three years or so is the out-of-tropics hypothesis, in which the strains that bring about each temperate flu season originate from China and Southeast Asia, where influenza A is less seasonal," Bedford said. He and his colleagues tested that hypothesis by analyzing genetic sequences from influenza A (H3N2) viruses collected from patients around the world between 1998 and 2009 and constructing a tree showing relationships among the viruses.

"We found that although China and Southeast Asia play the largest role in the influenza A migration network, temperate regions---particularly the USA---also make important contributions," Bedford said. Rather than dying off at the end of our flu season, many strains simply move on to more favorable environments.

The results have implications for public health efforts aimed at combating the disease. For example, the new knowledge that influenza frequently migrates out of the U.S. argues for caution in using antivirals, which can promote development of drug-resistant strains. If, as previously thought, those strains died out at the end of the season, they would not be a problem, but their newly-discovered ability to survive and circulate means resistant strains can spread from the U.S. throughout the world. On the flip side, the finding also means that vaccination programs outside of China and Southeast Asia can be effective in curbing influenza's spread.

In addition, growing knowledge about patterns of flu migration eventually may make it possible to tailor vaccines to particular locations, Bedford said. "We found, for instance, that South America gets almost all of its flu from North America. This would suggest that rather than giving South America the same vaccine that the rest of the world gets, you could construct a vaccine preferentially from the strains that were circulating in North America the previous season. As we gather more data from other regions, this could be done for the entire world."

The research also can inform disease surveillance, Bedford said. "By doing this kind of research, we get a clearer idea of where in the world flu is actually coming from. We know that it's mostly Southeast Asia, but now we see that it can come out of temperate regions as well, so our surveillance needs to become more global."

Source: MI FluFocus, June 3, 2010