Our Mission

“To assure the highest possible level of health for the people of the communities we serve.”

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Rip Current Awareness Week June 4-10, 2017 Tid Bits: Where and Why Rip Currents Form

Normal Vision Development in Children

Focus, tracking, depth perception, and other aspects of vision continue to develop throughout early and middle childhood. Convergence, the ability of both eyes to focus on an object simultaneously, becomes more fully developed by about age seven; this is one reason any problems a child has with focusing or eye alignment should be treated before that age.

Most children are naturally somewhat farsighted (hyperopic) but can see well at other distances. More pronounced myopia (nearsightedness) and astigmatism are thought to be inherited. There is some evidence from recent studies in the United States and Australia that the amount of time school-aged children spend outdoors, in natural light, may have some impact on whether they develop mild myopia.

Refractive errors are just one potential cause of blurred vision, so it is important for your child to have an examination right away if they are experiencing symptoms.

The most common refractive errors in children are:

- **Myopia** (also called nearsightedness)
- **Hyperopia** (also called farsightedness)
- **Astigmatism** (distorted vision)

It is possible to have two or more types of refractive error at the same time.

- **Myopia**: A myopic eye is longer than normal or has a cornea that is too steep, so that the light rays focus in front of the retina. Close objects look clear, but distant objects appear blurred.

- **Hyperopia**: A hyperopic eye is shorter than normal. Light from close objects cannot focus clearly on the retina. The words on a page will seem blurry, or it will be difficult to see well enough to do close-up tasks, like threading a needle.

- **Astigmatism**: Astigmatism distorts or blurs vision for both near and far objects. It’s almost like looking into a fun house mirror in which you appear too tall, too wide or too thin. When you have astigmatism, the cornea (the clear front window of the eye) curves more in one direction than in the other — like a football. A normal cornea is round and smooth, like a basketball. It is possible to have astigmatism in combination with myopia or hyperopia.

The Health Department offers free hearing and vision clinics at area elementary schools starting next Fall. For those of you who have a Kindergartener starting next year, we do hold summer clinics here at the Health Department. To learn more or to get your Kindergartener ready for the upcoming school year call the Health Department at 774-1868 or 265-9913 to get tested today!

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Public Health: Bringing important health topics to you
Lyme Disease: What You Should Know

What is Lyme disease? Lyme disease is caused by infection with Borrelia bacteria following a bite from an infected tick.

How common is Lyme disease? Lyme disease is endemic to North America, Europe, Russia and China. It is the most common tick-borne disease in the United States. The Northeast/Mid-Atlantic coast, as well as areas of the upper Midwest, accounted for more than nine out of 10 cases reported in 2013 in the United States with the total number of cases reported numbering around 20,000.

How is Lyme disease spread, and who is at risk for it? Lyme disease is transmitted by the bite of infected ticks, mainly blacklegged (deer) ticks. The majority of transmissions occur following bites by immature ticks or nymphs. Due to the lifecycle of ticks, the majority of infections occur in the spring and summer months. Lyme disease is not transmitted from person to person. While infection during pregnancy may cause an infection of the placenta that result in stillbirth, no recognizable pattern of congenital Lyme infection has been identified.

What are the signs and symptoms of Lyme disease? Symptoms of Lyme disease differ based on how long ago the tick bite occurred. Early stages include the appearance of a rash that typically looks like a red bull’s-eye. Other symptoms can include flu-like symptoms such as fever, headache, muscle and joint aches, and fatigue. Only about seven or eight people out of 10 who are infected will develop a rash. If left untreated, other symptoms can include additional rashes, pain and swelling in joints, loss of muscle control in the face, severe headaches, and heart palpitations. Some of these symptoms will resolve themselves; however, severe complications, such as arthritis and joint pain, may be prolonged if left untreated.

Can Lyme disease be treated? A variety of tests are available to detect Lyme disease, so people should consult their doctor if they believe they may have it. Lyme disease can be treated by antibiotics and, if caught early, usually leads to a full recovery.

Is there a Lyme disease vaccine? From 1998 to 2002 there was an approved vaccine for Lyme disease in the United States. Though the vaccine was safe and was able to prevent infection in 10 out of 10 children and almost eight out of 10 adults, the vaccine was removed from the market due to low demand. The low demand resulted from reports linking the vaccine with risk of arthritis or development of autoimmunity. However, these reports were investigated by the Food and Drug Administration (FDA) and Centers for Disease Control and Prevention (CDC), and no unusual connection was found between the vaccine and development of these side effects. Unfortunately, because of low sales and unfounded safety concerns, people in the United States can no longer protect themselves from Lyme disease by vaccination.

How can Lyme disease be prevented? In many cases, a tick must be attached for 36 to 48 hours before the bacteria is transmitted. Thus, one of the best ways to prevent Lyme disease is to check for ticks immediately after being outdoors, especially in forested areas. Other preventative measures include wearing long sleeves and pants to prevent attachment of ticks, using insecticides that contain DEET and treating clothing with permethrin, an insect repellent.

Under certain circumstances, the tick can be tested. Please contact the Health Department for further information at 779-7239.

Source: The Children’s Hospital of Philadelphia Vaccine Education Center, Volume 2, Fall 2016
June 27, 2016 is National HIV Testing Day, a time to promote one of our best tools for HIV prevention. An estimated 1.2 million people in the United States are living with HIV, and that number grows by almost 50,000 every year. Too many people—one in eight—who are living with HIV are not aware of it. That means they aren’t getting the medical care they need to stay healthy and avoid passing HIV to others.

HIV can be spread when someone with HIV has sex or shares injection drug equipment with someone who does not have HIV. If the partner with HIV is on medicine to treat HIV (antiretroviral therapy, or ART), or the partner who is HIV-negative is on medicine to prevent HIV infection, the risk can be much lower.

CDC recommends that everyone between the ages of 13 and 64 get tested for HIV at least once as part of routine health care, and that people with certain risk factors get tested more often. People with more than one sex partner, people with sexually transmitted diseases (STDs), and people who inject drugs are likely to be at high risk and should get tested at least once a year. Sexually active gay and bisexual men may benefit from even more frequent testing, depending on their risk. To protect your own health, you should also get tested if you have been sexually assaulted.

If you are pregnant or planning to become pregnant, CDC recommends HIV testing with each pregnancy, both for your own benefit and to reduce the risk of transmitting HIV to your baby.

When you know your HIV status, you can take care of yourself and your partner(s). If you find out that you are infected with HIV (if you test positive), you can seek medical care and get treatment. Besides allowing you to live a longer, healthier life, being on ART can protect the health of your partners because it can greatly reduce the risk that you can pass HIV to others.

If you don’t have HIV (if you test negative), you can take steps to stay negative, such as using condoms consistently. Remember that if you have risky sex or share needles for drug use after you’ve tested negative for HIV, you need to get tested again to make sure you are still HIV-negative. Your HIV test result "expires" every time you have risky sex or share needles or related works.

Getting tested for HIV is easier than ever. You can ask your doctor for a test, call 1-800-CDC-INFO, or text your ZIP code to "KNOWIT" (566948), and you will receive a text back with a testing site near you.

Locally, the Dickinson-Iron District Health Department offers HIV testing and counseling services. In observance of National HIV Testing Day, the Health Department will offer free HIV testing in each of its offices on Monday, June 12th at the Iron County office and on Monday, June 19th at the Dickinson County office. Testing is anonymous and confidential. To schedule an appointment with the Health Department, please call 265-9913 in Iron County and 774-1868 in Dickinson County.

For additional information on HIV testing please visit http://www.cdc.gov/Features/HIVtesting/.
Coastal scientists have been investigating rip currents for more than 75 years. This research has been conducted through field observations and measurements, laboratory measurements and wave tank experiments, and computer and numerical modeling. The mechanics of rip current development are complex and involve interactions between waves and currents, waves and water levels, waves and the shape of the nearshore bottom (bathymetry), as well as wave-wave interaction.

Rip currents can occur along any coastline that features breaking waves. Scientific investigations of wave and current interactions along the coast have shown that rip currents are likely present on most beaches every day as a component of the complex pattern of nearshore circulation.

As waves travel from deep to shallow water, they eventually break near the shoreline. As waves break, they generate currents that flow in both the offshore (away from the coast) and the alongshore directions. Currents flowing away from the coast are called rip currents.

Rip currents are a result of complex interactions between waves, currents, water levels and nearshore bathymetry. These current systems such as alongshore and cross-shore (onshore/offshore) water motion. Along all coastlines, nearshore circulation cells may develop when waves break strongly in some locations and weakly in others. These weaker and stronger wave breaking patterns are most often seen on beaches with a sand bar and channel system in the nearshore zone. A rip current forms as the narrow, fast-moving section of water travels in an offshore direction. Rip currents can also result from a wave's natural variability or when a current traveling along the shoreline encounters a structure such as a groin or jetty and is forced offshore.

Rip current strength and speed varies. This variability makes rip currents especially dangerous to uninformed beachgoers. Rapid fluctuations or pulses in wave groups can quickly generate rip currents with velocities measured up to 8 feet per second.