

UNDER THE MICROSCOPE

MEDDAC Bavaria Preventive Medicine Newsletter





For all current and updated COVID-19 limitations visit: www.7atc.army.mil and the U.S. Army Garrison Bavaria Facebook Page



August 1 is World Lung Cancer Day



Currently, 1 in 15 people in the U.S. can expect to receive a lung cancer diagnosis. That's 1 out of every 14 men, and 1 out of every 17 women. Lung cancer kills almost twice as many women as breast cancer, and more than three times as many men as prostate cancer. During the past 39 years, the lung cancer death rate has fallen 29% among men while increasing 102% among women.

While Smoking isn't the only cause of lung cancer, it is still the highest-risk factor for it. There were an average of 130,659 lung cancer deaths due to smoking each year between 2005 and 2010; every year, approximately 7,330 lung cancer deaths are due to secondhand smoke exposure.

Fewer than 1 in 7 lung cancer patients will be diagnosed in the earliest stage, when the disease is most treatable. If lung cancer is caught before it spreads, the likelihood of surviving 5 years or more improves to 55%. While there is currently no cure for lung cancer, new research is making it possible for people to live with their lung cancer, managing it like a chronic disease.

www.lung.org/lung-force/about-lung-force/featured-campaigns/world-lung-cancer-day; lcfamerica.org

DID YOU KNOW THAT YOUR LOCAL CLINICS WILL GIVE YOU FREE SUPPORT TO QUIT TOBACCO?

Healthy Habits = Healthy Eyes

If you wear contact lenses, keep your eyes healthy and prevent eye infections by following these tips:

Contact Lens Health Week

August 19-23

And remember: always be prepared! Carry a pair of glasses in case you need to take out your contact lenses.

Wash and dry your hands before touching your contact lenses.

Don't sleep in your contact lenses (unless your eye doctor tells you otherwise).

Avoid wearing contact lenses while showering, swimming, or using a hot tub.

YOUR SUPPLIES

Rub and rinse your contact lenses with solution each time you clean them. Never use water or spit!

Use only the solution your eye doctor tells you to use.

Only use fresh disinfecting solution in your case—don't mix new with old.

| Never store your contact lenses in water.
| Replace your contact lenses as often as your eye doctor says.

Rub and rinse your case every day with solution, dry with a clean fissue, and store upside down with the caps off.

Get a new case at least every three months.

YOUR EYE DOCTOR

Visit your eye doctor once a year or more often if needed.

Ask questions about how to care for your lenses and case.

Take out your contact lenses and call your eye doctor if you have eye pain, red eyes, or blurred vision.



August is here! August is **National Immunization Month** (**NIAM**). NIAM is a yearly observance in August to highlight the importance of vaccination for people of all ages from infants to elderly. The goal of NIAM is to raise awareness about the important role vaccines play in preventing serious, sometimes deadly, diseases. Who all needs vaccines? Everyone!

<u>Children:</u> Getting vaccinated according to the recommended immunization schedule is one of the most important things a parent can do to protect their child's health. Diseases can quickly spread among groups of children who aren't vaccinated. Whether it's a baby starting at a new child care facility- or even a college freshman – parents should check their child's vaccination records.

<u>Preteens and Teens:</u> By making sure vaccines are up to date, parents can send their preteens and teens to middle school and high school – and also off to college – with protection from vaccine preventable diseases

Adolescents and Adults: All adults should get vaccines to protect their health. Even healthy adults can become seriously ill, and can pass certain illnesses on to others. Everyone should have their vaccination needs assessed at their doctor's office, pharmacy or other visits with healthcare providers. Certain vaccines are recommended based on a person's age, occupation or health conditions such as asthma, chronic obstructive pulmonary disease (COPD), diabetes or heart disease.

<u>Pregnant Woman:</u> Women should be up to date on their vaccines before becoming pregnant and should receive flu and whooping cough vaccines during pregnancy.

<u>Seniors</u>: Seniors may need one or more vaccines, even if they received vaccines as a child or as a younger adult. Ask your doctor which ones are right for you. Don't forget if you are traveling, you may need additional vaccines.

Vaccines are the best defense we have against these and other serious diseases, and it's important to make sure that you're up to date on all recommended vaccines.

Source: www.cdc.gov/vaccines

💭 Just a thought (a Preventive Medicine Column) Facts about vaccines that you might have never heard:

- The process of vaccination is centuries old. Edward Jenner was the first to vaccinate in the West in 1796, 100 years before viruses were even discovered. Jenner used an inoculation derived from cowpox, a mild disease, to prepare the immune system for the much more deadly smallpox. Smallpox was eradicated by an improved vaccine in 1979, but in the 20th century alone, it killed over 300 million people worldwide.
- Vaccination is a natural way to combat diseases. A vaccine contains a dead or weakened virus, or a protein or toxin from a bacterium, called an antigen. Similar to allowing a bloodhound to sniff an article of clothing, showing your immune system and antigen allows it to prepare for the disease. One of your immune responses to an antigen is to produce proteins called antibodies, which inactivate the antigen.
- In 1885, Louis Pasteur developed a vaccine from inactivated rabies virus. Rabies vaccination was able to prevent a disease with a mortality rate of 100 percent and was the first of many vaccines using inactivated viruses as antigens.
- The last virus that led to widespread closure of movie theaters and swimming pools was the polio outbreak in the 1950s. In 1952, the number of polio cases in the US peaked at 57,879, with over 3000 deaths. Those who survived would end up with some form of paralysis some in wheelchairs, or some put in an iron lung to allow them to breathe. Polio was eliminated in the Western Hemisphere by vaccine developed by Jonas Salk using an inactivated polio virus as the antigen.
- Vaccines using weakened viruses have been phenomenally successful. One example is the measles vaccine, which eliminated a virus that caused over 2 million infections, 50.000 hospitalizations, and 500 deaths every year in the U.S.
- The first mRNA vaccine, the type of vaccine used in the Pfizer and Moderna COVID-19 vaccines, was tested 30 years ago. Since 2000, dozens of clinical trials using mRNA vaccines to fight cancer, Zika virus, HIV, and veterinary diseases have been published. Moderna was founded 10 years ago specifically to develop mRNA-based vaccines and therapies.

Things you need to know: Heat illness can strike quickly—learn to recognize the symptoms

- Heat niness can strike quickly—realit to recognize the synthesis.
 Workers with heat illness should stop working, get cool, and Altered mental state can be a sign of heat stroke and requires
- When treating severe heat illness, cooling is the first priority.

HEAT STRESS First Aid for **Heat Illness**

Cooling is key. Know the symptoms and treatment of heat illness. What to Do

Signs and Symptoms

Symptoms can occur in any order. For example, a person will not always experience heat cramp before they suffer from heat exhaustion.

Heat Rash/Prickly Heat

Red cluster of pimples or small blisters, usually on neck, upper chest, groin, under breasts, and in

elbow creases · Extensive areas of skin that do not sweat on heat exposure, but present gooseflesh appearance that

subsides with cool environments

- When possible, a cooler, less humid work environment is the best treatment
- Keep rash area dry
- Powder can be applied to increase comfort
- Do not use ointments or creams, as they may impair cooling—warm, moist skin can make the rash worse

Heat Cramps

- Muscle cramps, pain, or spasms in the abdomen, arms, or legs
- Drink fluids every 15 to 20 minutes and eat a snack or sports drink
- Avoid salt tablets
- Get medical help if the worker has heart problems, is on a low sodium diet, or if cramps do not subside within 1 hour

Heat Syncope (Fainting)

Fainting, dizziness, or lightheadedness after standing or suddenly rising from a sitting/ Sit or lie down in a cool place when beginning to feel faint or dizzy Slowly drink water or clear juice

Heat Exhaustion

Headache

- · Nausea
- Dizziness, weakness
- Irritability Thirst, heavy sweating
- Elevated body temperature
- Decreased urine output

Confusion, altered mental state, slurred speech, loss of consciousness Hot, dry skin or profuse sweating

- Very high body temperature
- Fatal if treatment delayed

- Call for medical help or take worker to a health facility for evaluation
- Stay with worker until help arrives
- Remove worker from hot area and give liquids to drink
- Remove unnecessary clothing, including shoes and socks
- · Cool worker with water, cold compresses, an ice bath, or fans
- Encourage frequent sips of cool water

Heat Stroke

This is an emergency! Call for emergency care immediately!

Move worker to a cool area and remove outer clothing Cool worker with water, cold compresses, an ice bath, or fans Place cold, wet cloths or ice on head, neck, armpits, and groin Stay with worker until emergency medical services arrive

August is Children's Eve Health and Safety Month

With a large number of states beginning the school year earlier, August is the new September!

Along with school supply shopping and purchasing those back-to-school clothing items, it's time to make comprehensive eve exam appointments for the kids.

Conveniently, August is designated as Children's Eye Health and Safety Month!

A good rule of thumb is to have your children's eyes examined during well-child visits, beginning around age three. Your child's eye doctor can help detect refractive errors such as nearsightedness, farsightedness and astigmatism as well as the following diseases:

- Amblyopia (lazy eye)
- ्रेंड Strabismus (crossed eyes)
- Strain Proof (drooping of the eyelid)
- 🔆 Color deficiency (color blindness)

If you or your doctor suspects that your child may have a vision problem, you can make an appointment with your local ophthalmologist for further testing. There are some specific warning signs that may indicate that your child has a vision problem. Some of these include:

- **Wandering or crossed eyes**
- & A family history of childhood vision problems
- Disinterest in reading or viewing distant objects
- 🖐 Squinting or turning the head in an unusual manner while watching television

Keeping your children's eyes safe is another part of maintaining healthy vision. Eye injuries are the leading cause of vision loss in children. There are about 42,000 sports-related eye injuries every year in America, and children suffer most of these injuries. Help prevent your child from being one of the more than 12 million children who suffer from vision impairment by remembering a few basic rules of safety

- 🗱 All children should wear protective eyewear while participating in sports or recreational activities.
- 🔆 Purchase age-appropriate toys for your children and avoid toys with sharp or protruding parts.

Help your children have a successful school year by scheduling a comprehensive eye exam and taking safety measures to ensure their eyes are free from injury.

Sources: www.cdc.gov/visionhealth;

www.yoursightmatters.com/august-childrens-eye-health-safety-month





Pools, waterparks, hot tubs, splash pads, and spray parks are great places to have fun, be active, or just relax. But you can get sick if germs contaminate the water.

People who get into the water can carry in and spread germs.

and make a healthy splash!



Why is this so important?

Most outbreaks linked to the water we swim, relax, and play in are outbreaks of diarrhea. These outbreaks are caused by germs like *Cryptosporidium* (or "Crypto" for short), norovirus, and *E. coli*.

These germs—sometimes millions at a time—can spread when someone who is sick has diarrhea in the water. Other people can get sick if they swallow the germy water—even just a mouthful.

Pool chemicals, like chlorine or bromine, are added to the water to kill germs. But they don't work right away, if used properly, they can kill most germs within a few minutes. However, some germs, like Crypto, can live in properly treated pool water for several days.

Follow these **4 easy steps to** help keep germs out of the water and stay healthy:

- Stay out of the water if you have diarrhea.
- Shower before you get in the water.
- (1) Don't pee or poop in the water.
- On't swallow the water.

Let the chemicals use their po on germs—not on your pee, poop sweat, and dirt.

The job of pool chemicals is to kill germs. But when pee, poop, sweat, and dirt rinse off our bodies and into the pool vater, the chemicals break down these other things instead of killing germs. This uses up the chemicals 'power, which means there's less to kill germs. That's why it's important to **follow the 4 easy steps**.



Next Issue: September 2021

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take your

Protect yourself and your loved ones. **Get vaccinated** against COVID-19.



Check the Facebook of your local health clinic for more information on vaccination events!

What is happening in August:

Children's Eye Health and Safety Month National Breastfeeding Month National Immunization Awareness Month Summer Sun Safety Month World Lung Cancer Day (August 1)



HOHENFELS - AUGUST 5

GRAFENWOEHR/VILSECK

- AUGUST 21

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