Welcome to the Department of Public Health October Newsletter! With the official kick-off of Fall Season last month on 23 September, the temperature cooled down. The change in temperature might cause influenza-like symptoms. Therefore, we want you to keep in mind safety tips as the Flu Season is Upon Us! Don’t forget to get your flu shot.

For more information, please contact Public Health or visit our website below:

Public Health 24/7 Hotline: 910-916-3544
DPH Website: https://tricare.mil/mtf/Womack/Health-Services/M_S/Fort-Bragg-Department-of-Public-Health

Feature: The 2019-2020 Flu Season is upon Us!

Flu is a contagious respiratory illness caused by the influenza virus that infects the nose, mouth, throat and sometimes the lungs. It is different from the common cold because it comes on suddenly. Mild infections can keep you home for a couple of days while severe infections can lead to an extended hospital stay. The respiratory illness can range from mild to severe and sometimes lead to death. Some of the symptoms of flu may include:

- Fever or feeling feverish/chills
- Cough
- Sore throat
- Runny or stuffy nose
- Muscle or body aches
- Headaches
- Fatigue (tiredness)
- Some people may have vomiting and diarrhea, though this is more common in children than adults.

The Centers for Disease Control and Prevention (CDC) estimates that the burden of illness during the 2017–2018 season was also high with an estimated 48.8 million people getting sick with influenza, 22.7 million people going to a health care provider, 959,000 hospitalizations, and 79,400 deaths from influenza. The number of influenza-associated illness cases that occurred last season was the highest since the 2009 H1N1 pandemic, when an estimated 60 million people were sick with influenza.

Prevention with the flu vaccine is always the best practice when it comes to avoiding the “Flu Bug”. The vaccine offers protection and many benefits against the flu virus. Benefits include:

- Prevents you from getting sick from the flu.
- Reduces the risk of flu associated hospitalizations for all.
- Helps prevent serious medical events with people that have chronic conditions.
- Helps pregnant women during and after pregnancy.
- Reduces the severity of illness if you do get the flu.
- Can reduce children risk of dying with the flu.
- Getting vaccinated helps protect the people around you, love ones that maybe unable to get vaccinated.

The flu vaccine is recommended for everyone six months and older and it is highly recommended during pregnancy. Getting a flu vaccine is particularly important for people with chronic conditions who are at risk of having serious complications if they get the flu. Generally people that should not get the flu vaccine are children younger than 6 months old.

Things to remember when getting the flu vaccine:

- The flu vaccine is an inactivated (killed) virus that cannot give you the flu.
- People can get body aches, pain and fever after getting the flu shot due to their body’s intensified response to the vaccine. The duration of these symptoms are usually short lived compared to the actually flu.
- People can experience soreness, redness and swelling at the injection site.
- In rare cases serious problems can occur such as a severe allergic reaction.

For any additional questions regarding flu vaccinations please contact the Defense Health Agency-Immunization Healthcare Branch (DHA-IHB) toll free at 1-877-GETVACC (1-877-438-8222).

Reference
https://www.cdc.gov/flu/
Vaping has been in the news almost daily since the Centers for Disease Control and Prevention (CDC) announced an outbreak of a lung disease associated with electronic cigarette use on 11 September 2019. According to the CDC, as of 1 October 2019, there have been 1,080 cases of lung illness reported from 48 states and 1 United States territory. Eighteen deaths have been confirmed in 15 states. All reported cases have a history of electronic cigarette use, however, the investigation has not identified any specific electronic cigarette, vaping product, or substance linked to all cases.

Electronic cigarettes are relatively new, as they were commercially introduced to the United States in 2006-2007. Scientists are still learning about the long-term health effects associated with their use. At this point, there are more questions than answers. According to the CDC, here is what we know so far: Most electronic cigarettes contain nicotine which is highly addictive, contributes to heart disease by constricting blood vessels, is dangerous to pregnant women and toxic to developing fetuses, and can harm adolescent brain development which continues into the early to mid-20s. The aerosol produced by e-cigarettes may also contain substances that harm the body such as cancer-causing chemicals, volatile organic compound, Cannabidiol (CBD) oil, Tetrahydrocannabinol (THC), and heavy metals such as nickel, tin, and lead. Many contain the flavoring diacetyl which has been associated with another serious lung disease known as bronchiolitis obliterans (commonly referred to as popcorn lung).

Other dangers associated with electronic cigarette use is serious injury caused by fires, explosions, and accidental poisoning. Most explosions, but not all, occur while charging the battery in the device. Since nicotine is very toxic, many adults, children, and pets have been accidentally poisoned by swallowing, breathing, or absorbing e-cigarette liquid through their skin or eyes. The CDC released a study that found poison center calls involving electronic cigarette devices rose from one call in September 2010 to 215 per month on February 2014. More than half (51%) of the calls to poison centers due to e-cigarettes involved young children under age 5, and about 42% of the poison calls involved people age 20 and older.

In conclusion,
- Adults who do not currently use tobacco products should not start using e-cigarette products.
- If you recently used an e-cigarette or vaping product and experience symptoms such as coughing, shortness of breath, chest pain, nausea, vomiting, diarrhea, fatigue, fever, or abdominal pain contact a healthcare provider for evaluation.
- E-cigarettes or vaping products should not be purchased off the street, and should not be modified or include any additional substances to these products that are not intended by the manufacturer.
- Women who are pregnant and young adults should not use e-cigarette products.

For information regarding tobacco cessation services offered on Fort Bragg, please contact the Army Public Health Nursing, Tobacco Cessation Program Manager at 910-907-6628. To report any concerns regarding use of e-cigarettes, please call the DPH number.

References
- https://www.cdc.gov/tobacco/basic_information/e-cigarettes/severe-lung-disease.html
- https://www.cdc.gov/tobacco/basic_information/e-cigarettes/about-e-cigarettes.html
- https://www.yalemedicine.org/stories/teen-vaping/
- https://www.webmd.com/lung/popcorn-lung
EpiSode: Fall Fun Tailgating

Don’t let foodborne illness spoil your fall tailgating fun. Follow these simple steps to ensure your team enjoys a safe and delicious tailgating party.

When grilling, use a food thermometer to ensure meat reaches the proper temperature to kill illness causing bacteria. Raw beef, pork, lamb, and veal steaks, chops, and roasts should be cooked to a minimum internal temperature of 145°F for at least 15 seconds for steaks and chops, and at least 4 minutes for roasts. Allow meat to rest for three minutes before carving or eating. All raw ground beef, pork, lamb, and veal should be cooked to an internal temperature of 155°F for 15 seconds. All poultry should be cooked to an internal temperature of 165°F for at least 15 seconds.

Wash vegetables and produce under cold running tap water to remove any lingering dirt (do not use soap or detergent). If there is a firm surface (i.e. apples or potatoes) scrub the surface with a brush. When preparing fruits and vegetables, cut away any bruised or damaged areas, as illness causing bacteria can thrive in those places. Refrigerate any fresh cut items immediately for best quality and food safety.

Checklist for safe food prep:

- Pack meats, fruits, and vegetables separately in individual, sealable bags. To prevent cross contamination, wrap securely any meats/poultry/fish that may leak or drip before placing them in the cooler.
- Hot food should be kept at 136°F (57.7°C) or warmer.
- Cold food should be kept at 40°F (4.4°C) or cooler.
- Use separate plate/utensils for raw and cooked meats. This also applies to the cutting boards, coolers, and serving items. Food contact surfaces should be washed, rinsed and sanitized anytime you begin working with another type of food and after each use.
- Don’t forget to include a meat thermometer and a minimum cooking temperature chart, along with your grill, fuel, and cooking utensils.
- Be sure to bring coolers, ice or frozen gel packs, and clean containers for storing leftovers. (The best practice is to bring only the amount of food that will be eaten!). Keep in mind that there is a two-stage process for cooling food. Cool food from 135°F to 70°F within two hours and then from 70°F to 41°F within the next four hours. Cold-stored leftovers should be used within 72 hours and reheated to at least 165°F.
- Provide for hand hygiene- bring soap, water (if none available at the site), wet disposable cloths, and hand sanitizer. Hands should be washed after using the restroom, before and after handling raw meat, poultry, and fish, after touching the face, hair or body, after sneezing, coughing, or using a tissue, or after smoking, eating, drinking, or chewing gum or tobacco.
- Prevent cross contamination between uncooked meats and other foods by washing hands with hot soapy water before and after handling raw meats. Also wash cutting boards, utensils, and other surfaces with hot soapy water before preparing other foods.
- When serving food buffet style, keep food hot with chafing dishes, slow cookers, and warming trays.
- Keep cold foods cold by nesting small dishes in bowls of ice.

Be especially careful with leftovers with proper disposal procedures. Perishable food should not be left out for more than 2 hours at room temperature, or 1 hour if the temperature is > 90°F. Remember, you cannot tell if harmful bacteria are present in foods just by looking at or smelling them- if in doubt, throw it out!

References

https://www.cdc.gov/foodsafety/index.html
https://armypubs.army.mil/epubs/DR_pubs/DR_a/pdf/web/ARN15052_TB_MED_530_FINAL.pdf
Stay Safe: Algae on the Rise

In recent news, several pet owners mourn the loss of their dogs due to exposure to Cyanobacteria. On 12 August 2019, CNN reported three dog deaths in Wilmington, North Carolina (NC), and highly advised all pet owners to “look out for algae.” CNN also followed with “there’s no cure.” North Carolina’s Department of Health and Human Services (NCDHHS) showed support by warning residents to reduce recreational use of “warm, stagnant shallow waters,” as they are breeding grounds for algae.

Algae, of all substances? Harmful algal blooms (HABs), contain Cyanobacteria, a compound of Nitrogen and Phosphorus. These additive nutrients found in fertilizers from agricultural runoffs combined with increased temperatures from global warming facilitate the growth of HABs in all of our water sources.

HABs appears as bluish-greenish film of algae primarily visible on the water’s surface. Environmentalists refer to it as “scum,” for its mucky nature. Cyanobacteria is harmful to all forms of life with three modes of exposure to the toxin: skin contact, inhaling water vapors, and swallowing water or fish life.

A comprehensive study researched the B. Everett Jordan Lake, NC from 2002-2008 using a sensitive high efficacy water method of Solid Phase Adsorption Toxin Tracking (SPATT) and found that 86% of all collections sites contained HABs. The study concluded that HABs are found year-round, with levels just under the Environmental Protection Agency (EPA) threshold. Throughout the United States, algal blooms exist. A national survey found concentrations of 92% of algal toxins in 1100 lakes.

Why are dogs dying? North Carolina is known for its outdoors destinations, attracting thousands of visitors annually. The state’s enticing nature and extreme sports activity lure people and their pets to engage in such activities in recreational waters. When HABs are present and a dog swims in this water, they can accidentally ingest it. How? Your dog swims and upon coming out of the water shakes off and licks its fur, or perhaps drinks it while swimming.

Tips on Prevention:
- Both the Centers for Disease Control and Prevention (CDC) and NCDHHS recommend staying clear of waters with visible algae.
- Signs and symptoms can include, but are not limited to: skin irritation, body aches, fever and respiratory issues.
- If you come in contact with algae, please wash hands and body immediately, including all pets.
- If you become ill after being exposed, immediately seek medical care.

References
https://www.cdc.gov/habs/exposure-sources.html
https://www.onsiteinstaller.com/online_exclusives/2017/10/an_installers_guide_to_phosphorus

When in doubt, algae out!