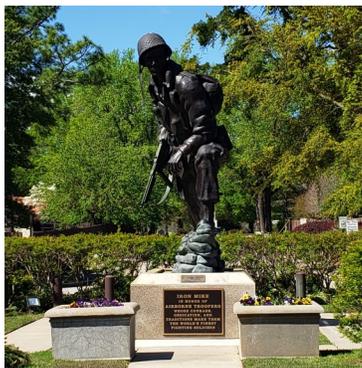


April 2020

Issue 5



An Ounce of Prevention



FORT BRAGG
DEPARTMENT
OF
PUBLIC HEALTH
PREVENT. PROMOTE. PROTECT.

Message from Public Health Director

Congratulations to the Fort Bragg Department of Public Health for achieving status as a nationally accredited health department through the Public Health Accreditation Board. We are and will continue to be committed to achieving the highest standards of public health practice and strengthening our community partnerships.

The first full week of April is National Public Health Week! Although we are practicing social distancing to stop the spread of COVID-19, we can still celebrate the power of prevention, advocate for healthy and fair policies, and recognize the contributions of public health and highlight issues that are important to improving the nation's health.

As we deal with COVID-19, in order to stop the spread and "flatten the curve" take precautions. Remember to practice hand hygiene by thoroughly washing hands for at least 20 seconds and proper cough etiquette. You can also "act as if you have the virus, [and] stay at home" as VADM Adams said.

Inside this issue:

Social Distancing	1
Mask or Respirator	2
Fight the Bite	3
Heat Kills	4
Sanitation vs. Disinfection	5

Social Distancing: Spread Out to Stop the Spread

The World Health Organization declared coronavirus disease 2019 (COVID-19) a pandemic on March 11, 2020, due to the rapid spike in global cases within a two-week period. From the Centers for Disease Control and Prevention to brick-and-mortar retailers, social distancing has taken center stage as a crucial practice to curtail the transmission of COVID-19.

Although the term has become mainstream recently, social distancing is not new. In fact, it is a commonly recommended approach to deter the spread of contagious illnesses such as influenza. Moreover, Merriam-Webster lists the term's first known usage in 2003.

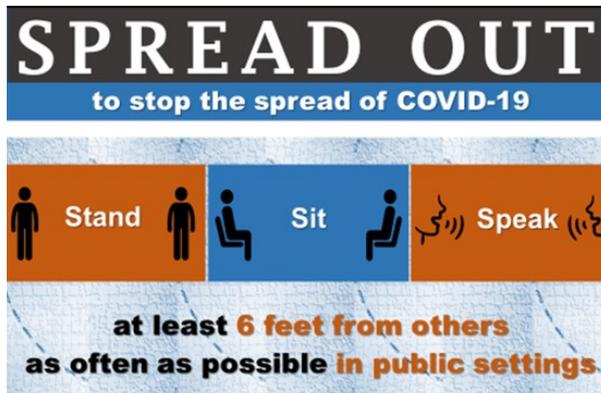
While social distancing may not be novel, the extent of its current application is unprecedented in modern times. The infectious nature of COVID-19, unknowns about its spread, and undiagnosed people with mild or no symptoms have warranted restrictions on our movement and interactions.

In addition to observing high-level social-distancing practices such as shelter-in-place/stay-at-home orders, what other daily precautions should we take at home, work, and in public? Wash your hands with soap and water for 20 seconds frequently; refrain from touching your face, nose and eyes; disinfect high-touch surfaces and objects regularly (including your mobile phone).

How to Spread Out:

- Do not gather in-person with more than 10 people
- If feasible, work and attend school from home
- Use restaurants' takeout, drive-thru or delivery service

- Refrain from non-emergency travel, shopping trips and social visits
- Exercise at home or outdoors, remaining mindful of your proximity to others
- Stay connected; check on elderly family members regularly via phone and/or social media



Although challenging, this behavioral shift is imperative to halting the spread of COVID-19. We will move freely again. When we do, ideally our heightened appreciation for meaningful social interaction, proper hygiene and good health remains. For more information about social distancing, visit:

- <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/index.html>
- <https://www.samhsa.gov/sites/default/files/tips-social-distancing-quarantine-isolation-031620.pdf>



Mask or Respirator

Approved and Limited Use of Personal Protective Equipment with COVID-19 Emergency and Healthcare Response

The Center for Disease Control (CDC) approves of disposable N95 and P100 filtering face piece respirators (FFR) use in the healthcare setting. Medical clearance or screening, then training with fit testing are required for occupational use to ensure the correct sizing and appropriate wear of respiratory protection.

As an additional barrier, full face shields should be worn over these FFR. By design, disposable N95 and P100 (FFR) are not the same as surgical masks, since they are layered polypropylene/polyester material worn to achieve a very close facial fit and very efficient filtration of airborne solid or liquid particles containing infectious agents that would otherwise be transmitted to and from health care professionals and patients.



CDC Recommended Guidance for Extended Use and Limited Reuse of N95 FFR in Healthcare Settings

The decision to implement these practices should be made on a case by case basis due to risk of infectious respiratory pathogens remaining on respirator surfaces for extended periods of time. Cleanable full face shield should be worn to reduce the potential for respirator contamination. When the manufacturer has not provided guidance, the CDC recommends no more than 5 reuses of the same N95 or P100 FFR, if extended and limited reuse is necessary due to a shortage of respirators. Use gloved hands to remove FFR, avoid touching face and dispose of the used FFR in designated container inside the ante room (room outside the patient's room). Clean hands with soap and water or approved hand sanitizer prior to donning a new FFR. Label individual storage bag in the designated area identified for this purpose.

When Should Wearers Dispose and Don a New FFR?

Change out when the disposable N95 or P100 FFR if

- Soiled (has been worn during care/treatment of persons in isolation with airborne transmitted disease),
- Wet (has a build-up of moisture inside due to wearer's own respiration or perspiration),
- Deformed or damaged in any manner (torn, holes in face piece, missing straps, mark on/drawn on or altered from its original design) or
- Wearer can no longer complete a fit check

Use gloved hands to remove FFR, avoid touching face and dispose of the used FFR in designated container inside the ante room (room outside the patient's room). Clean hands with soap and water or approved hand sanitizer prior to donning a new FFR.

Is the Respirator Donned Properly? Complete the User Seal Check

The only way to verify that respirator is worn correctly is to follow these **important** steps:

- **Negative pressure check:** Place both hands completely over the N95 filtering face piece respirator and inhale sharply. Be careful not to disturb the position of the respirator. The respirator should pull into your face. If air leaks around your face or eyes, adjust the nosepiece and straps and repeat the negative pressure check.

- **Positive pressure check:** Put your hands over the filtering face piece and breathe out sharply. If your respirator has an exhalation valve (like the inserted digital image #2) be sure to cover the exhalation valve when you exhale. No air should leak out of the mask if it fits properly. If air leaks out, re-adjust the nosepiece and straps and repeat the positive pressure check.

Safe removal of any PPE

It is important to avoid direct contact with contaminated materials. Ensure proper hand hygiene and clean of any potentially exposed areas of face, neck.

Options for the General Public and Alternatives to Disposable N95/P100 FFR

For the general population in public health medical emergencies. These FFR are not identified for occupational use:

- 3M™ Particulate Respirator 8670F
- 3M™ Particulate Respirator 8612F
- Pasture™ F550G Respirator
- Pasture™ A520G Respirator

In the event disposable N95 / P100 FFR are no longer available, the alternatives are:

- Hooded powered air purifying respirator with N95 or P100 filter cassettes (no fit test required)
- Half Face and Full Face elastomer type respirators with N95 or P100 Filter cassettes (fit test required)
- Full face Supplied air respirators (with compressed air pack)
- Full containment suites with supplied air
- High performing Surgical Face Mask + Full Face Shield



Clean surfaces of all non-disposable equipment after each use adopted WAMC IC practices (if none have been adopted, use follow manufacturer's instruction).

High performing surgical face masks are not respirators but provide limited protections as a physical barrier. If worn properly, a facemask is meant to help block large-particle droplets, splashes, sprays or splatter that may contain germs, keeping it from reaching your mouth and nose. Face-masks may also help reduce exposure of your saliva and respiratory secretions to others. Face shields should also be worn with the high performing surgical face mask.



Additional Information is provided on the CDC Website: http://www.cdc.gov/niosh/nppt/topics/respirators/disp_part/RespSource3healthcare.html

For additional information on N95 or other types of respirator, you can contact WAMC Department of Public Health (910) 916-3577



Fight the Bite. Tick Season is Approaching

Although ticks are present throughout the year in North Carolina, April is typically when tick populations really begin to boom. Almost all ticks found in North Carolina are known to be capable of transmitting disease to humans.

What do you need to know to keep you, your family, and friends safe?

WHAT DO I NEED TO KNOW ABOUT TICKS?

- Ticks are often found in shrubby areas, leaf litter, woods, and high grasses.
- Ticks cannot jump or fly; they attach to unsuspecting humans and animals walking by high grass or shrubs.

HOW DO I REDUCE TICK EXPOSURE?

Use your PPE!

- Wear clothing that protects exposed skin and use insect repellent (20% DEET, picaridin, and IR3535 are the best) when outdoors.
- Consider treating your clothes and equipment with permethrin.
- For your furry friends, use tick preventative if okayed by your veterinarian.

Stay vigilant!

- Employ self / buddy checks. You can't have tick bites if there aren't any ticks on you.
- Check dark and damp areas – behind your knees, arm pits, in your hair, in your ears, and the groin are some of the ticks' favorite spots to stop for a meal.
- Wearing bright clothing helps quickly identify hitchhikers that get past your PPE countermeasures.

Avoid when possible!

- Avoid high brush. If trails are available, use those instead.
- Remove leaf litter and cut grass and weeds in your yard as needed.

WHAT DO I DO IF I FIND A TICK ON ME?

- Remove the tick immediately.
- If it is actively biting you, use fine-tip tweezers to grasp the head near the skin and pull straight up. Avoid jerking or twisting motions.
- DO NOT: Crush a tick with your hands.
- DO NOT: Burn the tick off the body.

WHAT KIND OF TICKS ARE IN NC?

 **Amblyomma americanum (Lone Star ticks)**



 **Amblyomma maculatum (Gulf Coast Tick)**



 **Dermacentor variabilis (American Dog ticks)**



 **Ixodes scapularis (Blacklegged ticks or Deer ticks)**



 **Rhipicephalus sanguineus (Brown Dog Tick)**



REFERENCES

- TickEncounter Resource Center (tickencounter.org)
- Tick-Borne Infections Council of North Carolina, Inc. (tic-nc.org)
- Centers for Disease Control and Prevention (cdc.gov/ticks/index.html)



Heat Kills

If you have lived in the Fayetteville area long enough you would probably not blink an eye if the temperature outside hit 85°F or even 90°F degrees. While still hot, these temps are the norm when the hot season gets here. Here are some tips and information to use to prevent heat related injuries to ourselves and families before it gets hot.

First and foremost: Heat Kills. Although common knowledge, we hear about tragic heat related deaths each year such as:

- Heartbreaking stories of children left in cars overcome by the relentless heat
- Elderly taken from us by excessive heat exposure
- Pets left in cars or outside in excessive heat with no water

Our Soldiers training regimen pushes them to extremes and this training produces heat injury casualties and sometimes fatalities.

Understanding how to prevent heat related injuries is best understood if we look at components of hot weather. "The heat" has three mechanisms that we feel:

- Radiant Heat: The sun radiates heat that is felt directly no matter what day of the year.
- Humidity: The Sandhill's, where Fayetteville and Fort Bragg are located, really packs in and holds humidity close to the chest.
- Heated Shade temps: Lastly even if we can get out of the direct heat and get into shade, there is still a threat from heat in the shade as that temperature goes up also.

These three components share in heat injury development. There other significant components in describing climatic radiant energy however we can make significant use of these three components to prevent heat injury.

Besides the components of heat/hot weather, our bodies may NOT be ready for heat. If we aren't used to the heat we can easily be overcome by it. Before jumping in to picnics, heavy duty training, or summer time work projects, we should acclimatize, give ourselves anywhere from a couple of weeks to nearly a month to allow our bodies to adapt physiologically to the increased heat stress.

Additionally, hydration or lack of, is a significant factor that contributes to heat injuries. Anywhere from not consuming enough fluids to being denied fluids from the excessive use of alcohol to dietary supplement intake also causes us to be prone to heat injuries. Getting enough to drink PRIOR to getting too hot is key. Hydrate PRIOR to being exposed to hot weather.

Remember, you can consume too much water, also known as hyponatremia which can be deadly, due to low sodium. If you're overheated, do not chug water, drink it slowly.

Heat Stroke at a Glance

Heat stroke occurs when the human body can no longer regulate its core temperature, and is characterized by a temperature of 104 degrees Fahrenheit or higher. It can quickly affect the central nervous system. Death comes from organ failure and because the heart stops pumping effectively.

HOW OVERHEATING CAN LEAD TO DEATH

- ⚠ Heat stroke requires aggressive treatments, including rapid cooling and therapies to stabilize organ function.
- ⚠ Even people who survive can face permanent brain damage or other organ injury if their core temperature has been above 105°F for more than an hour or two.
- ⚠ High exertion coupled with multiple layers of clothing may produce heat illness even in more moderate temperatures.
- ⚠ Hyponatremia, or low sodium levels in the blood, results from overhydration and can be deadly.

COMPOUNDING FACTORS

- Solar radiation
- Temperature
- Humidity
- Wind

inside climate news
Flickr photo courtesy of USARAK via Creative Commons permissions

SOURCES: National Weather Service; Centers for Disease Control and Prevention PAUL HORN / InsideClimate News

Work/Rest and Water Consumption Table

		Easy Work		Moderate Work		Hard Work		
		Work/Rest (min)	Water Intake (qt/hr)	Work/Rest (min)	Water Intake (qt/hr)	Work/Rest (min)	Water Intake (qt/hr)	
• Weapon Maintenance	• Walking Loose Sand at 2.5 mph, No Load	• Walking Hard Surface at 3.5 mph, > 40 lb Load						
• Walking Hard Surface at 2.5 mph, < 30 lb Load	• Walking Hard Surface at 3.5 mph, < 40 lb Load	• Walking Loose Sand at 2.5 mph with Load						
• Marksmanship Training	• Calisthenics	• Field Assaults						
• Drill and Ceremony	• Patrolling							
• Manual of Arms	• Individual Movement Techniques, i.e., Low Crawl or High Crawl							
	• Defensive Position Construction							

Heat Category	WBGT Index, F°	Easy Work		Moderate Work		Hard Work	
		Work/Rest (min)	Water Intake (qt/hr)	Work/Rest (min)	Water Intake (qt/hr)	Work/Rest (min)	Water Intake (qt/hr)
1	78° - 81.9°	NL	½	NL	¾	40/20 min	¾
2 (green)	82° - 84.9°	NL	½	50/10 min	¾	30/30 min	1
3 (yellow)	85° - 87.9°	NL	¾	40/20 min	¾	30/30 min	1
4 (red)	88° - 89.9°	NL	¾	30/30 min	¾	20/40 min	1
5 (black)	> 90°	50/10 min	1	20/40 min	1	10/50 min	1

For our Soldiers, local supporting Preventive Medicine assets can assist in setting up monitoring and employment of smart heat injury prevention. They can assist in training leaders to use work rest schedules, personnel rotations, and uniform modifications to safely complete localized tasks in support of broader mission tasks. The work rest schedules also take into account water consumption. Take in mind that these are recommendations but in all instances where they can be employed they should.

The hot season is nearly here and it can turn out to be the worst of time if we don't prepare ourselves, families, and Soldiers. Prevention strategies do work and can be the difference in life and death. Remember to:

- Recognize what heat injury symptoms may look like
- Acclimatize
- Follow work/rest cycles
- Comfortably consume enough fluids
- Work smart in the hot weather



Differentiating Sanitation and Disinfection

As you may know, transmission of COVID-19 occurs via respiratory droplets. It is not documented if it is transmitted to persons from surfaces, however, evidence suggests that it may remain viable for hours to days on surfaces made from different materials. Therefore, it is best to disinfect to prevent the spread of COVID-19 and other viral respiratory illnesses in households and community settings.

There are differences in the terms:

- Cleaning refers to the removal of germs, dirt and impurities from surfaces. **It does not kill germs, but it can remove them, lowering the risk of spreading infection.
- Sanitizing refers to the killing of germs on skin and objects by removing the dirt and destroying the germs, most commonly used on food-processing equipment and surfaces.
- Disinfecting refers to using chemicals, for example, EPA-registered disinfectants to kill germs on surfaces. **This does not necessarily clean dirty surfaces or remove germs, but by killing germs on a surface after cleaning can further lower the risk of spreading infection.

Clean and Disinfect high touch surfaces daily

- Tables, Desks, and Hard-backed Chairs
- Doorknobs and handles
- Light Switches
- Phones/ Tablets/ Touch Screens/ Keyboards
- Remote Controls
- Toilets and Sinks

Clean and Disinfect Non-Porous Surfaces:

- Wear disposable gloves
- Clean dirty surfaces with a detergent or soap prior to disinfection

- EPA-registered disinfectants can be found at: https://www.epa.gov/sites/production/files/2020-03/documents/sars-cov-2-list_03-03-2020.pdf
- You may also dilute household bleach to 1000ppm.
- Ensure a wet contact time of 1-minute to achieve adequate disinfections.

Clean and Disinfect Soft Porous Surfaces (i.e. carpeted floor, rugs, drapes, laundry)

- Wear gloves and wash hands afterwards
- Remove visible contamination (if present)
- Clean with appropriate cleaners indicated for use on these surfaces (look at the tag)
- Launder items (as appropriate) in accordance with the manufacturers instructions (i.e. use the warmest appropriate water setting for the items)
- Dry items completely
- Note: Ensure laundry basket is lined or clean and disinfect laundry basket between uses

Clean and Sanitize food equipment and food contact surfaces such as cutting boards and food prep areas with concentrated chlorine bleach of 100-200 ppm.

For electronics follow the manufacturer’s instructions and consider using wipeable covers. If there is no guidance, consider using alcohol-based wipes or sprays containing at least 70% alcohol.

*Use separate wiping cloths for cleaning, sanitizing, and disinfecting tasks.

Target Conc. PPM	Household Bleach Base Strength	
	5.25%	8.25%
100	.5 tbsp. per 1 gallon	1 tsp per 1 gallon
200	1 tbsp. per 1 gallon	2 tsp per 1 gallon
1000	1/3 cup per 1 gallon	3 tbsp. per 1 gallon

Upcoming Public Health Awareness:

- April
- National Public Health Week
 - Sexual Assault Awareness and Prevention Month
 - STD Awareness Month
- May
- World Hand Hygiene Day
 - National Physical Fitness and Sports Week
 - Better Hearing and Speech Month
- June
- Alzheimer’s and Brain Awareness Month
 - Men’s Health Month

For more information, please contact the Department of Public Health at:

DPH 24/7 Hotline: 910-916-3544

By email at:

usarmy.bragg.medcom-wamc.mbx.dphd@mail.mil

DPH Website:

https://tricare.mil/mtf/Womack/Health-Services/M_S/Fort-Bragg-Department-of-Public-Health

