5b. Safety Awareness

1. Heat and Cold Related Illnesses
Working on an open beach or shoreline can be challenging at times – spring conditions are often cool and drizzly, while summer humidity and heat can be oppressive. Hypothermia and heat exhaustion or stroke are serious illnesses that can sneak up on those who work in cold or hot environments. Being prepared and knowing the warning signs to watch for are important for your safety.

Heat Exhaustion and Stroke
- **What is it?** Medical conditions where your body overheats and can’t cool itself down.
- **Prevention:**
  - Bring at least 2 liters of water for fieldwork. Hydrate, hydrate, hydrate! Carry a water bottle with you everywhere you go.
  - Wear a sun hat and light-colored clothing.
  - Check in and out at the end of the day with a supervisor or designated refuge staff member.

Heat Exhaustion
- **Signs:** Dizziness, thirst, heavy sweating, nausea, weakness
- **If you start to feel too hot, take a break in the shade (or in car with AC), drink water and if you are near water use it to cool off.**
- **Don’t return to work until you feel cooler.**

Heat Stroke
- **Signs:** Confusion, dizziness, becoming unconscious
- **If you start experiencing symptoms of heat stroke, immediately stop working, get to an air-conditioned car or submerge yourself in water.**
- **Call 911, this is serious!**
Figure 1. Symptoms of heat exhaustion and heat stroke

**Hypothermia**

- **What is it?** A medical condition where your body loses heat faster than it can produce heat, causing dangerously low body temperature.
- **Prevention:**
  - Wear enough layers. Don’t forget about your hands, feet, and head.
  - Stay hydrated and eat snacks.
  - Stay out of the cold when you can (create report in the car rather than outside)
  - Try to pick warmer days when possible.
  - If someone is with you, ask once an hour if you are getting too cold.
  - Check in and out at the end of the day with a refuge staff member.
- **Signs:**
  - Confusion
  - Irritability
  - Shivering
  - Slurred speech
  - Slow, shallow breathing
- **If you start to feel too cold:**
  - Get out of the cold as soon as possible.
  - Move around if possible (jumping jacks).
  - Eat food and drink water.

2. Preventative Measures and Self-care

Planning ahead for your shift can make all the difference between an enjoyable workday and a not-so-pleasant one. Consider the following recommended precautions:
2a. Ticks

- Ticks are prevalent year-round, especially at the coast. Experts suggest wearing light colored clothing (easier to spot ticks), pant legs tucked into socks, long sleeves, and a hat. Using gaiters (cover from shoe to top of ankle) can also be helpful in sealing the bottom of your pants from tick entry.
- It is necessary to do a tick check each time you return from work outside. If you find an embedded tick, remove it (use tweezers or a tick removal tool) immediately and cleanse the area with rubbing alcohol. Should you develop a bulls-eye type rash, seek medical advice right away. If you remove a tick, be sure to record the date for reference. Let your supervisor know if you have been bitten.
- Lyme disease, which may be transmitted by deer (aka, black-legged) ticks, is common throughout the region. Other tick-borne diseases include Babesiosis, Anaplasmosis, and the Powassan virus. Tick-borne illnesses can be severe and taking steps to avoid tick bites is important.

2b. Mosquitos and Greenheads

- Expect a heavy presence during July and August. Bugs are quite active during the summer, especially if the wind is light or blowing off-shore. The use of repellant is encouraged.

2c. Sun / Wind / Severe Weather

- Be sure to use sunscreen and wear a hat when outside. Use a beach umbrella for shade if wind conditions allow. During the summer months, the weather can become unstable in the afternoons and severe thunderstorms can move in unexpectedly. Always check the weather forecast before your shift, then keep an eye on the horizon for signs of an approaching storm.
3. Medical Emergencies

Regardless of your training or background, the two most important things you can do when there is a medical emergency on the beach are to notify others of the emergency and stay on the line to direct others to where the victim is located on the refuge. Getting help on the way quickly in an emergency can save a life.

1. Phone the EMERGENCY NUMBER.
   a. *911*

2. Give the following information:
   b. Location of emergency.
   c. Your name and phone number from where you are calling.
   d. Where ambulance should go (door, gate, etc.).
   e. *If possible, stay on the phone line until released by the Emergency Personnel.

3. Notify appropriate Service Officials:
   a. Wildlife Refuge Officer: _____________________
   b. Immediate Supervisor: ______________________
   c. Refuge Manager: __________________________

4. If a qualified First-Aid/CPR trained responder is available on site (including self), render FIRST AID if appropriate. If not, continue to monitor the victim until help arrives. Never attempt to offer medical assistance above your level of training.