

# North Carolina Wing Weekly Safety Blast



# 2018 - Topic #30 - The Myth of Locked Knees

## **Reason for this Blast:**

Personnel standing in formation occasionally have a loss of consciousness episode. This has been attributed in the past to the member "locking their knees" which prevented proper blood flow to the brain. This is a half-truth. The loss of blood flow is true, and it's called Vasovagal syncope.



#### Facts:

- Vasovagal syncope occurs when the part of your nervous system that regulates heart rate and blood pressure malfunctions in response to a trigger, such as the sight of blood.
  - Common Triggers Include:
    - Standing for long periods of time
    - Heat exposure
    - Seeing blood
    - Having blood drawn
    - Fear of bodily injury
- Your heart rate slows, and the blood vessels in your legs widen (dilate.) This allows blood to pool in your legs, which lowers your blood pressure. Combined, the drop in blood pressure and slowed heart rate quickly reduce blood flow to your brain, and you faint.

#### Symptoms:

- The following symptoms may present:
  - Pale skin, Lightheadedness, Tunnel vision, Nausea, Feeling warm, A cold, clammy sweat, Yawning, and Blurred vision.
- Bystanders may notice the following during an episode:
  - Jerky, abnormal movements, a slow, weak pulse, and dilated pupils

#### **Prevention:**

- You may not always be able to avoid a vasovagal syncope episode. If you feel like you might faint, lie down and lift your legs.
- This allows gravity to keep blood flowing to your brain. If you can't lie down, sit down and put your head between your knees until you feel better.

### MAIN DISCUSSION POINT OF THIS SAFETY BLAST

Know and be able to recognize the signs of possible Vasovagal syncope. Keep hydrated and take plenty of breaks. Avoid long formations during high temperatures. Watch out for each other!