Taking the Enjoyment out of Deployment: Employee Health Issues During Floods / Hurricanes

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Gathering of Eagles, March 3, 2018
• **37** Texas counties – almost all were affected
• **18,192** patients transported
• **271** Acadian ambulances involved in response
• **592** Acadian medics & support team members deployed
• **7** AirMed helicopters assisted in evacuation
Acadian during Harvey

- City of Pasadena
- City of Webster
- Beaumont / Port Arthur / SE Texas
- Texas Emergency Medical Task Force
  - Ambulance Strike Teams
  - Critical Care Trucks
  - Ambulance Strike Team Leaders
  - Medical Incident Support Team Leaders
  - Air Medical Strike Teams
Water issues

- Water borne illness
  - *Vibrio vulnificus*
  - *E. coli* – GI illness
  - Leptospirosis
  - Arsenic, lead
  - Toxic chemicals
  - Hepatitis A

- Dehydration

- Must plan for potable water resources
Food safety

• Some GI illness
• Improper refrigeration / storage
• Hand hygiene
• Lack of adequate hot meals
• Accepting food from community

• Round-the-clock cooks
• Proper storage (ice chests)
• Time-stamping all food
Tetanus Prophylaxis

- Per CDC, simple exposure to flood waters does NOT increase the risk of tetanus, and tetanus immunizations NOT needed
  - Fear, adverse effects, unnecessary use of limited resource
- *Clostridium tetani* spores are less likely to have sporulated in water, and are less likely to cause illness, then in a dry puncture wound
- If an employee sustains an open wound, Td would then be indicated if not up-to-date (booster within 10 years)
Injuries

• Electrocution (live wires in salt water)
• Bruises and soft-tissue injuries
• Back injuries
• Wounds from glass and debris
• Preposition antibiotics and Td
Rashes / Skin

- Infections
- Abscesses
- Dermatitis
- Folliculitis
- Conjunctivitis
- Dirty, wet clothes
“Trench foot”

- We really just saw foot maceration (immersion injury) – no hypothermia!
- Constant battle to get clean, dry socks and boots to responders
- Skin protection
Rashes / Skin / Wounds
Mental health / support
Take home points, our lessons learned...

• **Food** – adequate and safe
• **Water** - hydration and safety (waterborne illness, skin protection)
• **Clothing & hygiene** – clean, dry, adequate
• **Shelter / sleep** – “homeless employees”
• **Emotional support** – ongoing, long-term
Thank you!