Disaster Strikes, Now What?

NC Quality Management
NC Office of Emergency Medical Services

July 15th , 2025

Disaster Strikes, Now What?

General Considerations

ReadyNC.gov

Plan. Prepare. Stay Informed.

Ready NC Challenge - Prep a Little, Save a Lot

Disaster Strikes, Now What?

- Pay close attention to your "Trusted Sources of Information"
  - Local Emergency Management
  - Local Social Services
  - Local Emergency Services
  - Verified Websites

Disaster Strikes, Now What?

- Loss of Resources
  - Power/Electricity
  - Drinkable Water (potable)
  - Food
  - Waste Water Services
  - Transportation Access

Medical Preparedness for Disasters

- Shortfall in Medical Preparedness Operations
  - Emergency Department Beds Above Capacity
  - Just-in-Time Supplies, Equipment & Pharmaceuticals
  - Decline in Ratio of Trained Healthcare Workers to Number Patients
  - Advanced Technology – providing complex medical situations opportunity to live at home
  - Aging Population in United States

****Disasters only exacerbate an already stressed system****

https://www.cdc.gov/aging/emergency/pdf/guide.pdf & https://apps.cce.csus.edu/sites/cdph/eptw15/docs/pres/1B-Medical_Sheltering.pdf

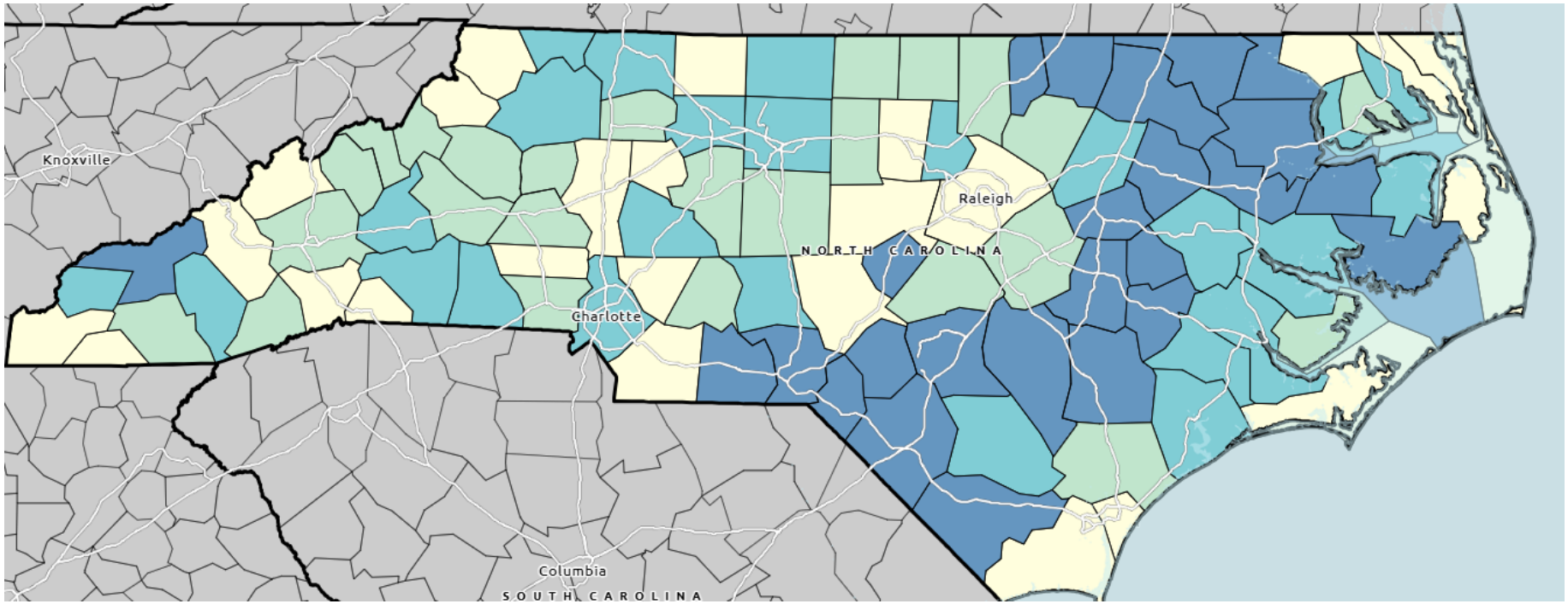
Impact to Medical Operations

- Outpatient Clinics have shorter hours or are closed
- Pharmacies have shorter hours or are closed
- Emergency Department Overcrowding
- Increased number of patients needing to stay in a hospital leads to decreased ability to move patients from Emergency Department to an in-patient bed
- Increased number of 911 calls for EMS Support

Social Vulnerability Index

- Made up of 16 U.S. Census variables to identify communities that may need more support before, during, and after disasters.
  - Socioeconomic Status (e.g., unemployed, housing cost burden, no health insurance etc.)
  - Household Characteristics (e.g. Aged 65 & Older, Aged 17 & Younger, Civilian with Disability, etc.)
  - Racial & Ethnic Minority Status (Hispanic or Latino, Black or African American, Asian, etc.)
  - House Type & Transportation (Mobile Homes, No Vehicle, Group Quarters etc.)

Overall Social Vulnerability Index 2022



Level of Vulnerability

Low	Low-Medium	Medium-High	High

Social Vulnerability Index

- Data can be used to help emergency planners decide:
  - The number of and location for emergency shelters
  - The amount of food, water, and other supplies that may be required
  - Community based health promotion initiatives

State Medical Support Shelters (SMSS)

Provide shelter for individuals requiring specialized healthcare attention due to a disruption in their community healthcare support

Three Main Pathways to SMSS

- Evacuating from their homes due to the disaster, and are affected with non-acute/non-infectious health conditions requiring a higher level of medical skill or resource than can be provided in a general population shelter;

- Being moved from a general population shelter and have a reasonable expectation of requiring a higher level of medical care to maintain their usual level of health after evaluation by a medical professional (e.g. telehealth or EMS); or

- Discharged from an in-patient healthcare facility after receiving stabilizing medical care and a medical provider is requiring a higher level of medical skill or resource than can be provided in a general population shelter.

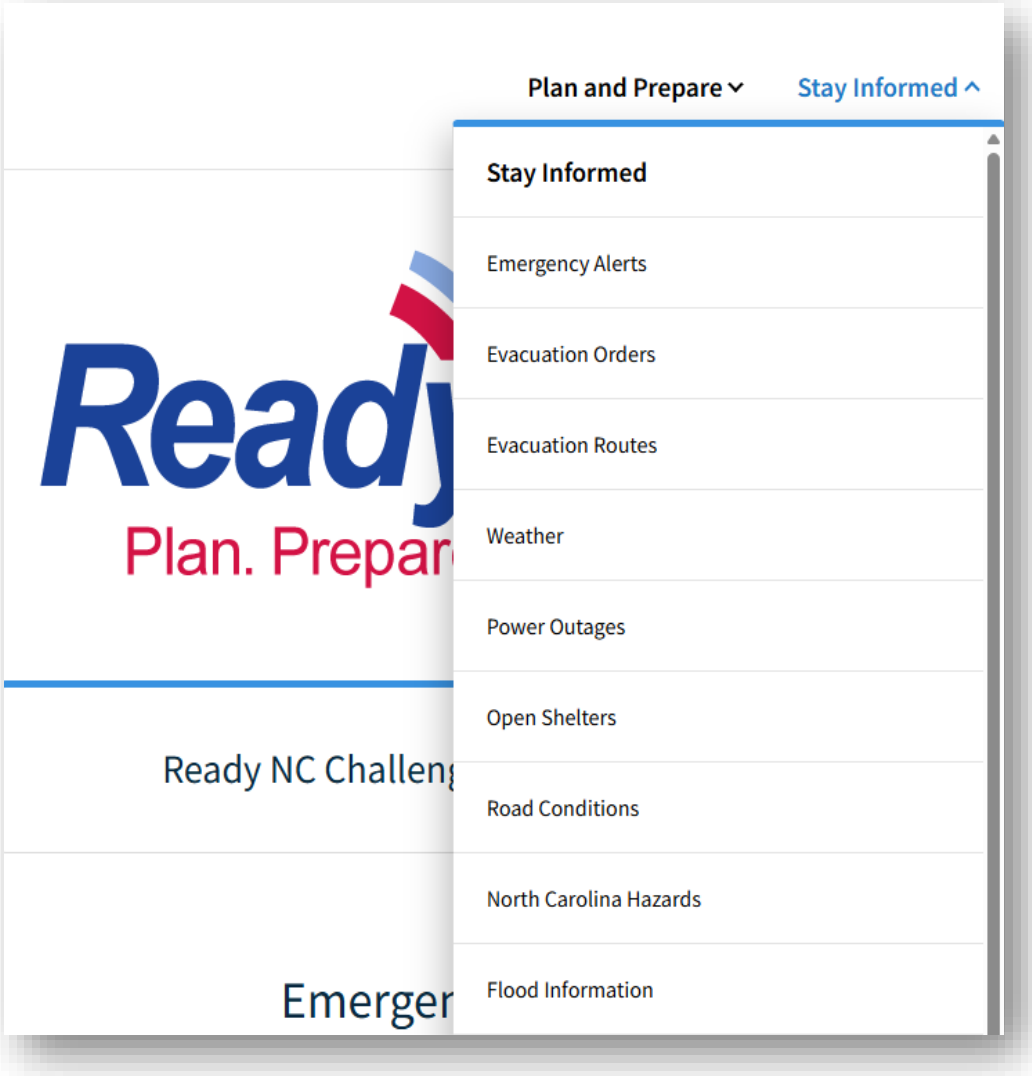

GUEST
HOME
PERIOD
NDMS

State Medical Support Shelters (SMSS)

All patients must receive triage prior to acceptance at SMSS – Patients may bring caregivers into SMSS to assist with their care

How do I know if I need to evacuate?

- Individual Situation
- Local Impacts
- Flood Concerns
- Ongoing Impacts
  - Power
  - Water
  - Sewer



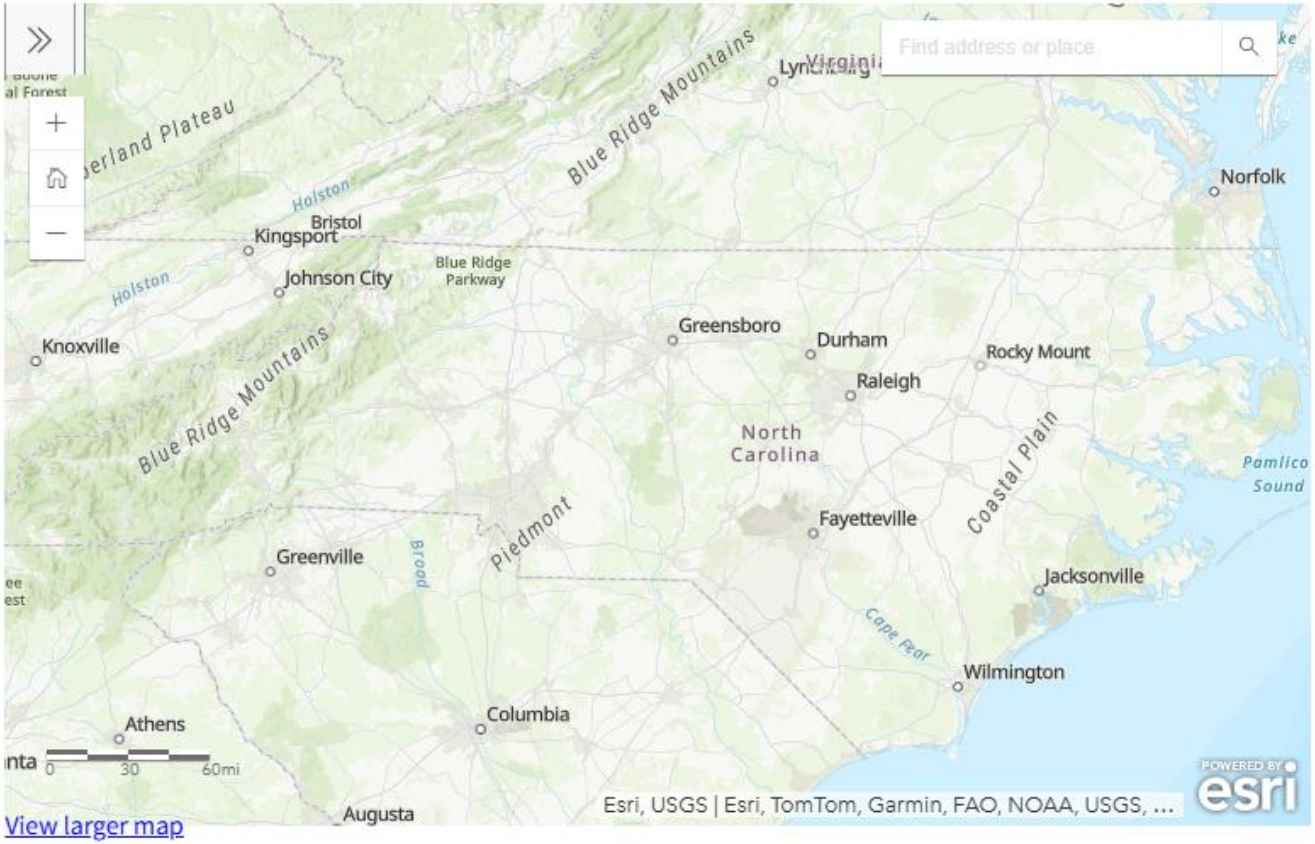
What are my Evacuation Options?

- Step 1: Have a Plan
- Step 2: Communication
- Step 3: ReadyNC.gov can be used to find open shelters in the community
- Step 4: Outreach to local Emergency Services or Social Services for information on SMSS

What are my Evacuation Options?

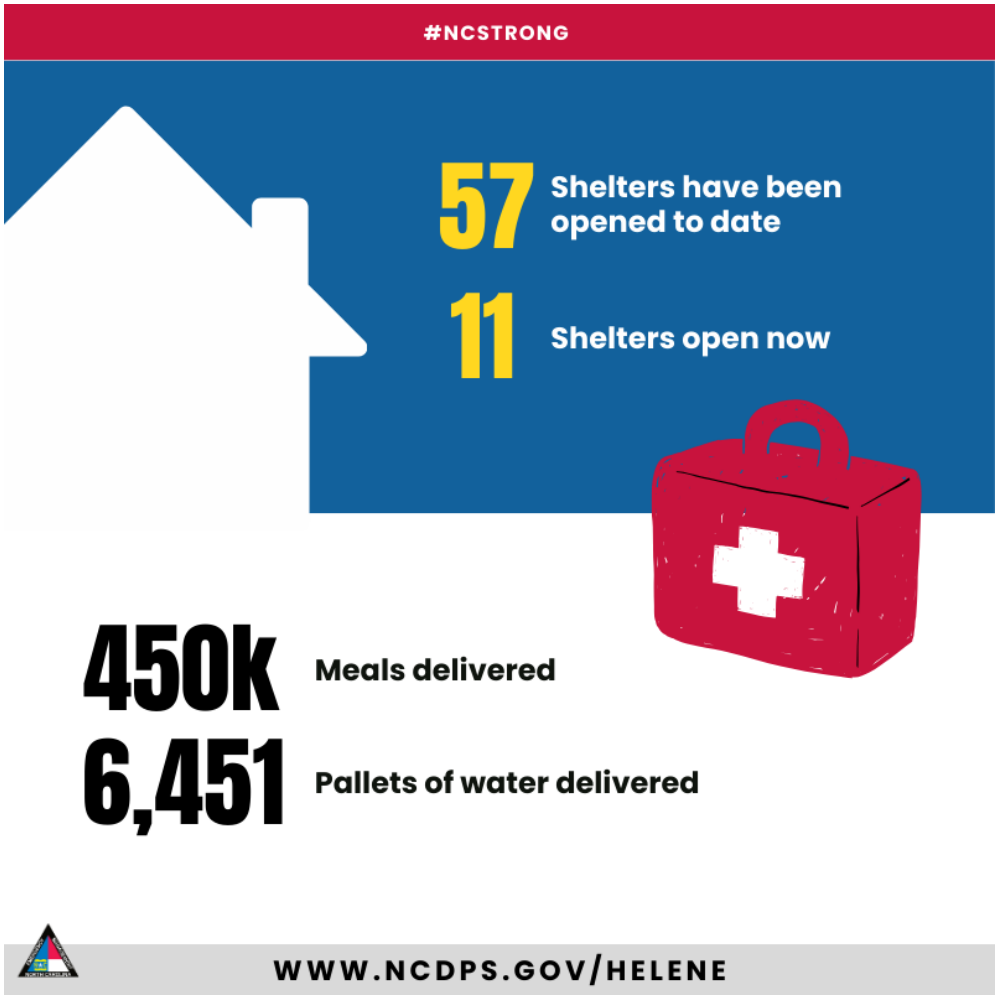
Emergency shelters are open at these locations:

No Open Shelters



View larger map

Points of Distribution



- Emergency Management Agencies have plans for "Points of Distribution" where food, water, supplies can be provided to the public.

What are my options for Medications?

- Lost or damaged medications
- Out of Network Pharmacies
- Extended Prescriptions
- Emergency Prescription Assistance Program

HEALTHCARE READY
STRENGTHEN. SAFEGUARD. RESPOND.

Pharmacy Coordination: EPAP

- Emergency Prescription Assistance Program
  - Helps people in federally-declared disaster areas, who do not have insurance, get prescription drugs, medical supplies and durable medical equipment, at no cost
  - Federal program/contract that must be requested by the state

NC EPAP Activation:

239 Days	12,941 Claims	820 Unique Pts	$2,516,286 Spent

What are my options for Durable Medical Equipment?

- Coverage for loss or damage to Durable Medical Equipment (DME)
- Ensure backup batteries and electricity source

Reuse and Exchange

What is Equipment Reuse at NCATP?

Definition: The redistribution of pre-owned assistive technology devices and durable medical equipment to residents of North Carolina.

Sources of equipment reuse:

AT devices and durable medical equipment that was purchased by taxpayer dollars for the NCATP demo/loan program and is no longer available for purchase from a manufacturer and/or is no longer being supported by the manufacturer.

AT devices and durable medical equipment that is donated by the public to NCATP for redistribution to consumers in need.

North Carolina emPOWER Data

	Services	Services	Services	Services	All Power Dependent
# Medicare Beneficiaries in State	# In-Facility ESRD Dialysis (3 months)	# O2 services [tanks] (13 months)	# Home health (3 months)	# At-Home Hospice (3 months)	# Electricity-Dependent Devices and DME
1,837,847	13,166	33,847	50,243	5,137	94,178

FEMA Planning Factor = 10% Estimated Population Requiring Mass Care Services in Public Shelters

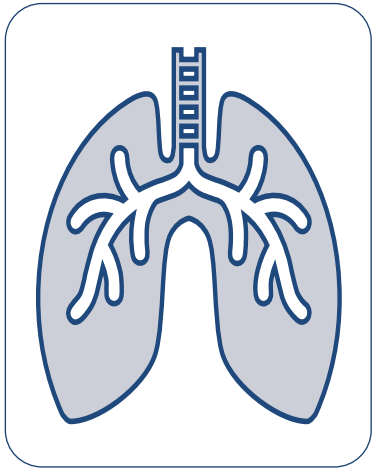
https://empowermap.hhs.gov/ & https://www.fema.gov/media-library-data/1533580334064-72e9356ed35b726b1a25f4a8c3372c9d/DRAFT_Planning_Considerations_Evacuation_and_Shelter-in-Place_201808.pdf

Specific Health Considerations

Cardiovascular

- Increased stress and physical exertion can contribute to increased incidence of heart attack, hypertension, pulmonary embolism, heart failure, hypertension, arrhythmias, stroke and acute coronary syndrome. Increased risk for these conditions occurs quickly after disaster events and can remain elevated for weeks to months post event.

- Encourage adherence to medication regimen, access to emergency medications, knowing and practicing stress reduction techniques and when to seek emergency care



Respiratory

- Poor air quality can cause exacerbation of respiratory conditions specifically acute asthma exacerbations. Water damage may lead to mold which in turn can cause allergic reaction, respiratory irritation or infection.

- Encourage use of PPE like masks, adherence to preventative medication regimen, and access to emergency medications. Dehumidifiers and HEPA filters may help by decreasing mold, dust and debris in the air.

Maternal & Infant Health

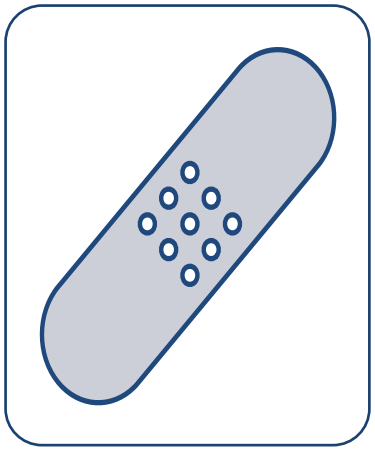
- Evidence suggests that natural disasters may be correlated with increased incidence of early term and preterm labor as well as increased incidence of low-birth-weight infants. Etiology is unclear but could be associated with stress and/ or dehydration.
- Encourage healthy stress management techniques and educate individuals on the importance of good hydration and access to clean drinking water. Encourage pregnant individuals to evacuate early with and have a clear route to hospital incase of preterm labor.

Diabetes

- Natural disasters can have significant negative impacts on short term diabetes management an may also increase disparities in treatment. This impact in short term diabetes management is particularly seen in older adult patients.
- Discourage members from clean up efforts which involve clearing debris and ensure home is clear from debris before returning. Educate individuals on the importance of wearing sturdy closed toe shoes. Under emergency situations members may need to use insulin that has been stored at >86° F make sure members understand potential decreased efficacy of insulin stored at higher temperatures. Encourage frequent blood sugar checks. Educate not to use insulin that has been frozen

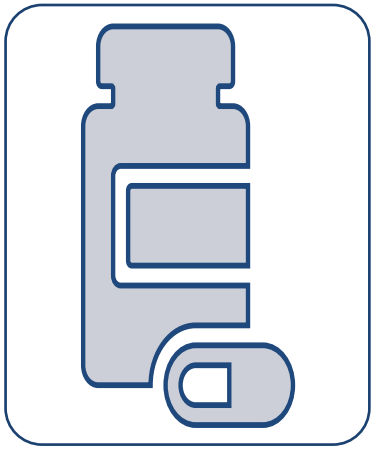
Mental & Behavioral Health

- Individuals may experience a wide variety of mental health effects acutely post disaster and those with pre-existing mental or behavioral health disorders are at risk for exacerbations of these conditions. Specifically, anxiety, depression, sleep disturbances, and PTSD are common post disaster event.
- Natural disasters may precipitate onset of PTSD and major depressive disorders.
- Individuals with Serious Mental Illness (SMI) or cognitive disorders often have greater difficulty coping and greater likelihood of adverse reactions after natural disaster events.
- Individuals with certain mental health conditions may be at higher risk during periods of extreme heat because their medications may interfere with their body's ability to cool itself. Those with cognitive disabilities may not be able to understand or expressing how the heat affects them. They also may not be able to perceive or communicate discomfort or need for hydration well.
- Public health whole community approaches and individualized therapies can be helpful in reducing and managing symptoms for individuals acutely post disaster especially those with SMI. Try to maintain routines as much as possible for those with cognitive disorders.



Skin Concerns

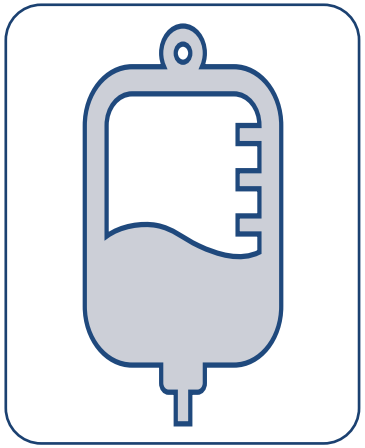
- Increases risk for tetanus, wound infections and skin rashes or irritation.
- Encourage proactive immunizations prior to disaster event as access to vaccines may be more limited post event. Educate members on proper skin and wound care and emphasize the importance of keeping skin clean and dry. Educate members at risk for skin infection about concerning signs and symptoms



Immunocompromise

- Those with immunocompromise are at higher risk for infection due to contamination of food, drinking water, or poor air quality, as well as communicable diseases at crowded evacuation sites.
- Educate members who are immunocompromised to avoid assisting in clean up efforts and wait to return from evacuation site until they are certain their home is safe. Encourage use of PPE, especially if sheltering in a communal shelter. Educate on the importance of good hygiene and encourage members to wash hands frequently and/or use hand sanitizer. Educate members on the importance of ensuring food and water is safe before consuming.

Additional Considerations



- Extreme temperature changes can increase incidence of sickle cell crises, so it is important that these individuals have weather appropriate clothing, stay in temperature-controlled environments as much as possible and stay properly hydrated.
- Individuals with spinal cord injuries may be at increased risk during periods of high heat due to decreased ability to control body temperature through sweating.
- Extreme heat and low access to potable drinking water can lead to dehydration and heat stroke. Infants and older adults are particularly at risk due to extreme heat.
- Increase in vector born illnesses due to increased breeding sites post disaster. Increase in diarrheal illnesses due to contamination of drinking water. Increase spread of diseases associated with crowding at evacuation sites and shelters.

Shelter

- State Medical Support Shelter placement guidance
- State Medical Support Shelter website
- Emergency Shelters
- Text Shelter to 43362 to locate disaster recovery centers (DRCs)

Medical

- Managing Chronic Conditions after a Natural Disaster
- Insulin storage guidelines
- CDC heat risk dashboard
- (800) 238-3773 (ESRD)
- End Stage Renal Disease Support Network
- Open Pharmacies
- Medicaid Waivers

Food & Water

- Information on D-SNAP in North Carolina
- Emergency Disinfection of Drinking Water
- Guidelines for food safety in a disaster or emergency
- Food Bank of Central and Eastern North Carolina
- Feeding America: Find a Food Bank

Care Management Recap

Prepare

- Encourage members to be as prepared as possible and encourage early evacuation.
- Encourage members to have emergency kits and response plans and clearly communicate with all members involved in the plan. Review annually
- Contact members ahead of disaster events to assess their readiness and connect them with needed resources and information

Connect

- Connect members with the reliable information sources
- Educate members on resources available to them for pharmacy assistance, state medical support shelters, D-SNAP, EmPower
- Connect with local emergency management, social services and emergency management
- Remain up-to-date on local and regional supports

Respond

- Prioritize contacting high-risk members post disaster to assess impact and needs
- Understand widespread ramifications of disaster on health and wellbeing of members and help them find resources
- Advocate for members' mental and behavioral health needs
- Coordinate with emergency management and hospital care management for ongoing placement needs

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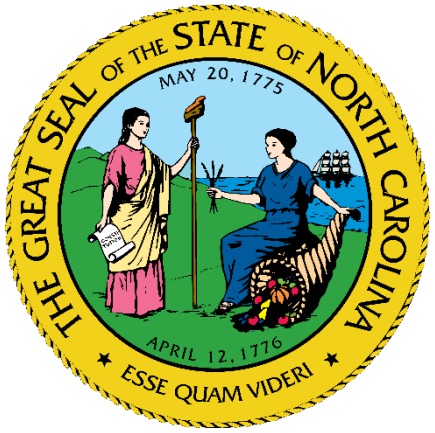
Questions?

- Kimberly Clement, HPP Manager
  - Kimberly.Clement@dhhs.nc.gov
  - Phone: (919) 210-1463
- Website
  - https://hpp.nc.gov/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Thank you