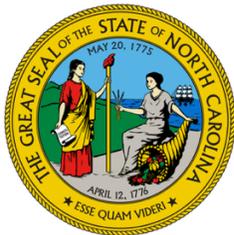


North Carolina Shelter Assessment Guidance

North Carolina Department of Health and Human Services
Division of Public Health
Environmental Health Section



NC DEPARTMENT OF
**HEALTH AND
HUMAN SERVICES**
Division of Public Health

The objective of this guidance is to provide Environmental Health Specialists in North Carolina background information on Emergency Shelters and when shelter assessment is utilized. This guidance follows the North Carolina Shelter Assessment Form and gives additional information to assist Local Health Departments in the evaluation of emergency shelters and provides some information on specific parameters needed to protect occupants and staff in shelters during an emergency.

Shelter Type

Understanding the different types of shelters available is essential for effectively assessing and addressing the housing needs of affected populations during disaster response and recovery efforts. The different forms of shelters provided below are an overview of the various shelter options that may be utilized depending on the specific circumstances and needs of the affected community. By categorizing individuals and facilities into the groups listed within **Figure 1**, emergency response teams can better evaluate and address the diverse needs and priorities of different stakeholders during disaster management and recovery processes. Individual counties or Local Health Departments may evaluate some shelters differently, depending on policy.

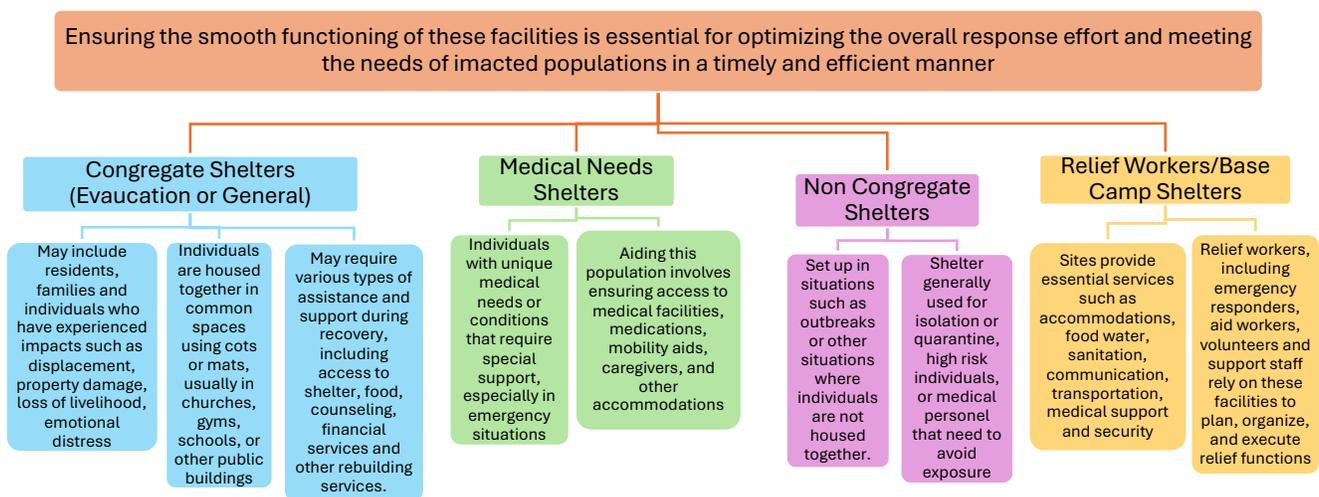


Figure 1. Shelter Type Categorization

Each type of shelter plays a critical role in disaster response and recovery. Congregate shelters focus on the public and general population, ensuring their safety and basic needs are met. This is the primary type of shelter assessment that is done in North Carolina. Congregate shelters can be either categorized as an evacuation shelter, or a general population shelter, depending on the circumstances. Medical needs shelters provide tailored care for individuals with specific medical or other requirements. Proper planning and execution of these shelters are essential for effective disaster management and community recovery.

Assessment Justification

Shelter assessments provide a systematic means of collecting data and information to gain insights into various aspects of a situation, program, or operation. Regular assessments of shelters at various stages of operation are fundamental for ensuring their safety, effectiveness, and the well-being of their occupants. Preoperational assessments focus on readiness before opening, initial assessments check functionality after opening, routine assessments maintain ongoing standards, and other assessments address specific incidents or complaints. Each type of assessment illustrated in **Figure 2** helps in identifying and resolving issues, ensuring shelters provide safe and adequate support to those in need. This information serves as a foundation for decision-making, planning, and resource allocation for driving continuous improvement across a wide range of contexts and initiatives. By understanding the different reasons for assessment and their respective objectives, stakeholders can proactively manage risks, optimize performance, and achieve desired outcomes.



Figure 2. Reason for Assessment

Current Census

The current census provides a snapshot of the total number of individuals, including residents and workers, present in the shelter at the time of inspection. To provide an accurate count of the total number of individuals, conduct physical headcounts at designated times to verify the number of individuals present. Count all individuals currently residing in the shelter, including adults, children, and any individuals with needs beyond that of the general population. Also acquire count of all staff, volunteers, and relief workers

present in the shelter, including administrative, medical, security, and support personnel. It is also important to review intake and registration records to tally the number of residents. Provide daily updates on the current census to relevant authorities and stakeholders to ensure accurate tracking and resource management. Shelter management and public health nurses assigned to the shelter should have updated census information.

Facility

When evaluating the condition and suitability of facilities, several critical factors must be considered. These factors must be taken into consideration because they directly impact the safety, health, comfort, and overall functionality of the environment for occupants. Each factor plays a critical role in safeguarding that the facility can effectively serve its intended purpose, whether it is for temporary shelter, long-term housing, or any other type of use. **Figure 3** provides a detailed description of why each factor is important. By carefully assessing and addressing these factors, facilities can be ensured to be safe, functional, and comfortable for their intended use.



Figure 3. Facility Suitability

Sanitation

When assessing the sanitation conditions of a facility, various considerations must be made to confirm that hygiene standards are met and maintained. Proper sanitation practices prevent disease outbreaks, promote overall health, and create a safe and dignified living environment for residents. Shelter facilities often serve vulnerable populations, operate in

environments where hygiene is crucial, and must comply with health regulations to ensure the safety and well-being of all individuals involved. These sanitation factors are also fundamental for upholding the dignity of the facility's occupants while complying with regulations, maintaining public trust, and protecting vulnerable populations. The condition factors assessed in **Figure 4** provide an in-depth explanation of each of the factors that are needed for evaluation, such as having sufficient toilet facilities to prevent the spread of gastrointestinal diseases and other infections. They reduce the risk of contamination from human waste. Adequate toilets provide privacy and security, which is particularly important for vulnerable populations such as women, children, and the elderly. Regular cleaning of facilities reduces the presence of pathogens, allergens, and pests, creating a healthier environment for residents. Each factor plays a critical role in creating a safe and supportive environment, contributing to the well-being and dignity of those who rely on shelter services.

Sanitation			
<p>14. Adequate Laundry Services</p> <p>Separation of Laundry: Facilities should have distinct areas for soiled and clean laundry to prevent cross-contamination.</p> <p>Capacity and Equipment: Ensure that there are enough machines and space to handle the laundry needs of the facility's population.</p> 	<p>15. Adequate Number of Operational Toilets</p> <p>Ratio: There should be at least one operational toilet per 20 persons, with considerations for gender-specific facilities.</p> <p>Accessibility and Maintenance: Toilets must be accessible, regularly cleaned, and maintained to ensure they remain functional and sanitary.</p>	<p>17. Adequate Number of Operational Hand-Washing Stations</p> <p>Ratio: One operational hand-washing station per 15 persons is required.</p> <p>Accessibility: Stations should be conveniently located near toilets, dining areas, and high-traffic zones.</p>	<p>19. Toilet Supplies Available</p> <p>Essential Supplies: Toilets should be stocked with toilet paper, feminine hygiene supplies, and diapers/pads for children and adults.</p> <p>Regular Restocking: Supplies should be regularly checked and restocked to ensure continuous availability.</p> 
	<p>16. Adequate Number of Operational Showers/Bathing Facilities</p> <p>Ratio: There should be one operational shower or bathing facility per 15 persons.</p> <p>Privacy and Safety: Shower facilities should provide privacy and be safe to use, with features such as non-slip surfaces and grab bars if necessary.</p>	<p>18. Hand-Washing Supplies Available</p> <p>Essential Supplies: Each hand-washing station should be stocked with water, soap, and paper towels.</p> <p>Alternative Options: If water is unavailable, hand sanitizers with at least 60% alcohol should be provided to maintain hygiene.</p>	
<p>20. Acceptable Level of Cleanliness</p> <p>Routine Cleaning: Facilities should maintain a high level of cleanliness through regular cleaning schedules.</p> <p>Sanitation Standards: Ensure that cleaning protocols meet health and sanitation standards to prevent the spread of germs and diseases.</p>		<p>21. Sewage System Type</p> <p>System Type: Identify the type of sewage system in use (e.g., septic tank, municipal sewer).</p> <p>Maintenance: Regular maintenance and monitoring are essential to prevent leaks, backups, or other issues that could compromise sanitation.</p>	

Figure 4. Sanitation Condition Assessments

Health and Medical

When conducting a shelter assessment, evaluating the availability and quality of medical care services is crucial for several reasons such as ensuring the health, safety, and well-being of shelter residents. These services are essential for addressing the health needs of shelter residents, many of whom may be in vulnerable or crisis situations. This evaluation helps to identify potential health risks, maintain a standard of care, and provide comprehensive support to individuals in need. **Figure 5** provides an expanded overview of the components for medical care services, including the types of care and counseling services that should be available.

MEDICAL SERVICES 		
 1. PRIMARY CARE SERVICES <ul style="list-style-type: none"> • Routine Check-ups: Regular health assessments to monitor and manage chronic conditions and general health. • Vaccinations: Immunization services to prevent the spread of infectious diseases. • Minor Injury Treatment: Care for minor cuts, bruises, and other non-critical injuries. 	2. EMERGENCY MEDICAL SERVICES <ul style="list-style-type: none"> • First Aid: Immediate care for injuries and acute medical conditions. • Emergency Response: Capability to handle medical emergencies and provide stabilization until advanced care is available. • Transport Services: Arrangements for transportation to hospitals or advanced medical facilities if needed. 	
3. CHRONIC DISEASE MANAGEMENT <ul style="list-style-type: none"> • Diabetes Care: Monitoring blood sugar levels, providing insulin, and dietary advice. • Hypertension Management: Regular blood pressure checks and medication management. • Asthma and COPD Care: Providing inhalers, nebulizers, and other respiratory support. 	4. PHARMACY SERVICES <ul style="list-style-type: none"> • Medication Dispensing: Access to necessary prescription medications. • Medication Management: Assistance with understanding and managing medication regimens. 	
5. SPECIALTY CARE REFERRALS <ul style="list-style-type: none"> • Mental Health Services: Access to psychiatrists and psychologists for more complex mental health needs. • Specialist Consultations: Referrals to cardiologists, endocrinologists, or other specialists as required. 	6. PEDIATRIC CARE <ul style="list-style-type: none"> • Child Health Services: Specialized care for infants and children, including growth monitoring and immunizations. • Parental Guidance: Support and advice for parents on child health and development. 	

23. Counseling Services		
1. Mental Health Counseling <ul style="list-style-type: none"> • Crisis Intervention: Immediate support for individuals experiencing acute mental health crises, such as panic attacks, suicide, or severe anxiety. • Individual Therapy: One-on-one sessions with licensed therapists to address mental health issues like depression, anxiety, PTSD, and other disorders. • Group Therapy: Facilitated group sessions for individuals to share experiences and support each other under professional guidance. 	2. Substance Abuse Counseling <ul style="list-style-type: none"> • Addiction Treatment Programs: Support for individuals dealing with substance use disorders, including counseling and referral to rehabilitation programs. • Harm Reduction Strategies: Providing information and resources to reduce the negative consequences of substance use. 	3. Trauma-Informed Care <ul style="list-style-type: none"> • Support for Trauma Survivors: Specialized counseling for individuals who have experienced trauma, such as abuse, violence, or natural disasters. • Coping Strategies: Teaching effective coping mechanisms and resilience-building techniques. 
4. Family Counseling <ul style="list-style-type: none"> • Family Therapy: Counseling sessions aimed at improving family dynamics and resolving conflicts. • Parenting Support: Guidance and support for parents dealing with stress and challenges. 	5. Grief Counseling <ul style="list-style-type: none"> • Bereavement Support: Counseling for individuals who have experienced loss, helping them navigate their grief and emotions. • Crisis Grief Counseling: Immediate support for those dealing with recent or traumatic losses. 	6. Employment & Financial Counseling <ul style="list-style-type: none"> • Job Readiness Programs: Support in preparing for employment, including resume writing, interview skills, and job search strategies. • Financial Management: Assistance with budgeting, debt management, and financial planning.

Figure 5. Medical Care Services vs. Counseling Services

By ensuring the availability of a wide range of medical and counseling services, shelters can substantially improve the well-being and overall health outcomes of their residents. Many shelter residents may arrive with pre-existing medical conditions or acute health issues. Due to the conditions of living within closed-quarter living environments, the risk of infectious disease outbreaks is often high. The availability of medical care makes certain that their needs are properly met to help prevent the spread of illnesses and maintain a healthier population within the shelter.

Companion Animals

When shelters accommodate both people and their companion animals, it is essential to ensure that the animals' needs are met while maintaining a safe and healthy environment for all occupants. Proper animal care involves several key components to ensure the well-being of the animals and the safety and comfort of the human residents. Several key components contributing to achieving these goals, each with its own relevance and impact can be seen in **Figure 6**. The North Carolina Department of Agriculture Emergency Programs provide additional guidance and assistance to shelter partners when companion animals will be located on site at an emergency shelter.

Housing animals in a designated area away from human living spaces reduces the risk of allergies, noise disturbances, and potential injuries. This separation ensures a peaceful environment for both animals and humans. A secure and comfortable designated area prevents animals from escaping and protects them from potential hazards. It also provides a space where animals can feel safe and stress-free.

Providing comprehensive care for companion animals enhances the shelter's reputation and fosters trust within the community, encouraging more people to seek help and support from the shelter. By addressing these components, shelters can provide a safe, healthy, and supportive environment for both the human and animals, ensuring well-being for all.

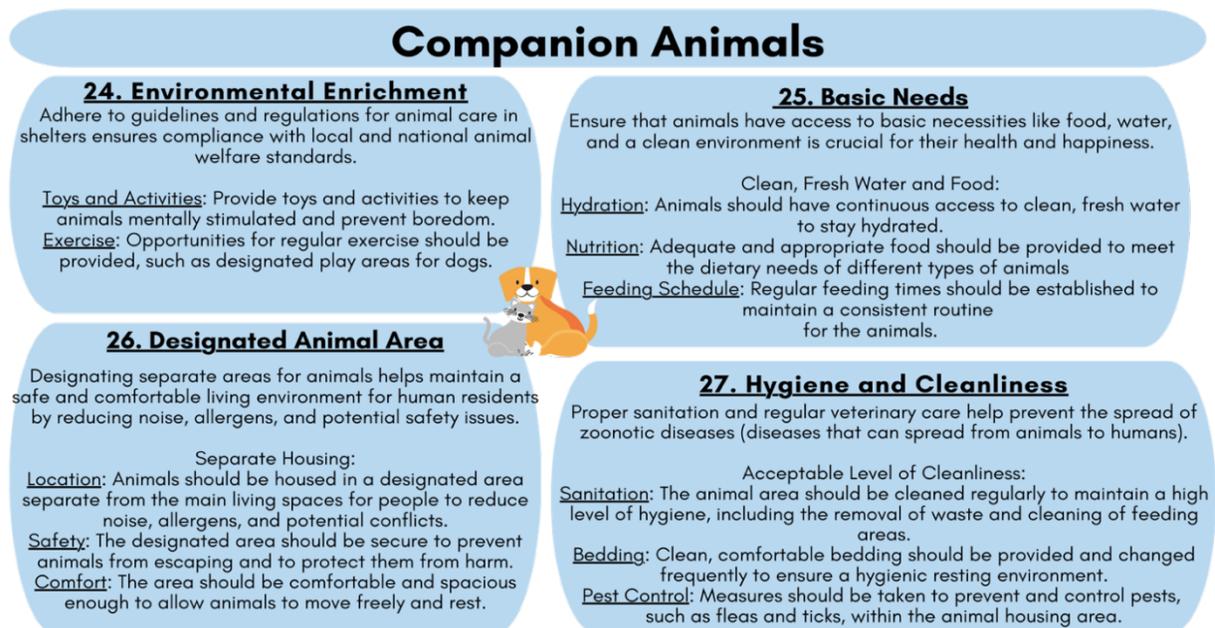


Figure 6. Companion Animals Care and Management

Food and Water

Evaluating the food and water conditions in shelters ensures the safety, health, and well-being of residents. Health and safety precaution establishes access to safe, nutritious food and clean water, while preventing foodborne and waterborne illnesses. When food is prepared on site, always check and ensure the kitchen is equipped with necessary utensils and equipment. Food should always be cooked and handled properly to prevent foodborne illnesses. Observe food handlers for compliance with safe food handling practices, such as using gloves, avoiding cross-contamination, and using appropriate utensils. Provide proper portion control and hygiene practices during serving to establish that there is enough food for all residents. Regarding appropriate food storage, verify that food is stored according to safe storage practices to prevent contamination or spoilage, and prevent bacterial growth. Adhering to local health codes and regulations aids in avoiding legal issues and ensuring operational standards are managed efficiently with reducing waste and ensuring steady availability.

The typical supply of drinking water ranges from 1-2 gallons per person per day, and for all uses 3-5 gallons per person per day. By rationing water within the provided range, residents have sufficient water for drinking, cooking, and hygiene needs. In addition to water, ensure that there is sufficient ice to maintain cold food temperatures. This practice also helps in preserving perishable food items and maintaining food safety. Additional food and water key points are detailed in **Figure 7** and **Figure 8**.



Figure 7. Safe Food Handling



Figure 8. Safe Water

Solid Waste

Proper solid waste management is crucial for maintaining a safe, hygienic, and comfortable environment in shelters. Each of the following key points listed in **Figure 9** make certain that solid waste products are handled appropriately to prevent health hazards and ensure compliance with regulations.



Figure 9. Solid Waste management

Sleeping Quarters

Assessing sleeping conditions in shelters provides the opportunity to ensure the health, safety, and well-being of residents. A safe, comfortable, and clean sleeping environment helps alleviate stress and anxiety, which are common among shelter residents. Providing each person with their own cot, bed, or mat, along with adequate bedding, significantly enhances physical comfort, contributing to better sleep quality. Good sleep is essential for maintaining physical health and recovering from the stresses of displacement.

Proper sleeping arrangements, clean environments, and clean bedding are critical for preventing the spread of contagious diseases like colds, flu, and more serious conditions such as COVID-19. Clean bedding is critical for maintaining high hygiene standards and preventing the spread of diseases as well. Additional key points in **Figure 10** outline the necessary standards and practices for effective shelter management.

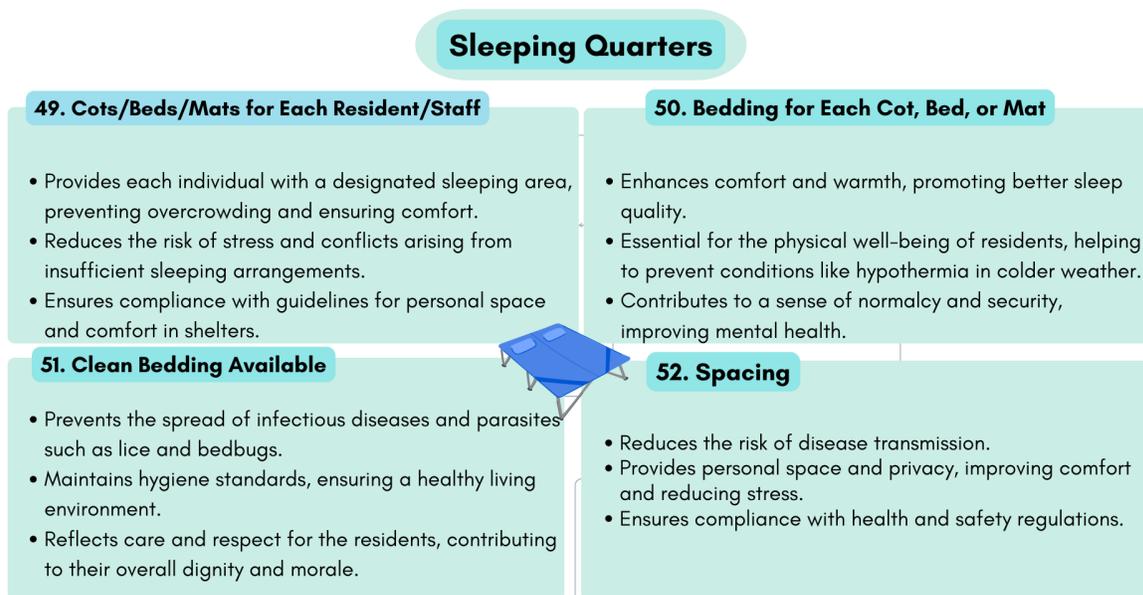


Figure 10. Assessing Sleeping Conditions

Childcare

Ensuring children have safe, engaging environments and adequate supervision supports their emotional well-being and reduces stress for their parents. Clean diaper-changing facilities, and proper toy hygiene are critical for maintaining high hygiene standards and preventing the spread of diseases as well. Cleanliness in food/bottle preparation areas and overall shelter hygiene helps prevent foodborne illnesses and ensures a healthy living environment. **Figure 11** provides additional information on childcare requirements for shelters.



Figure 11. Childcare Conditions

Demobilization

The demobilization of an emergency shelter involves a comprehensive and detailed process to ensure the facility is safe, clean, and ready for its original use. Environmental Health Specialists play a crucial role in ensuring that emergency shelters, particularly those set up in schools, are safely and efficiently demobilized. Their responsibilities include assessing facility readiness, coordinating with emergency management, partnering with nonprofit organizations, conducting thorough cleaning and inspections, restoring infrastructure, managing waste, and ensuring effective communication with all relevant stakeholders, including school officials, local authorities, and community members involved in the demobilization process. Through these efforts as well as other readiness functions explained in **Figure 12**, they help ensure that schools are safely and swiftly returned to their original function, providing a secure and healthy environment for students and staff.

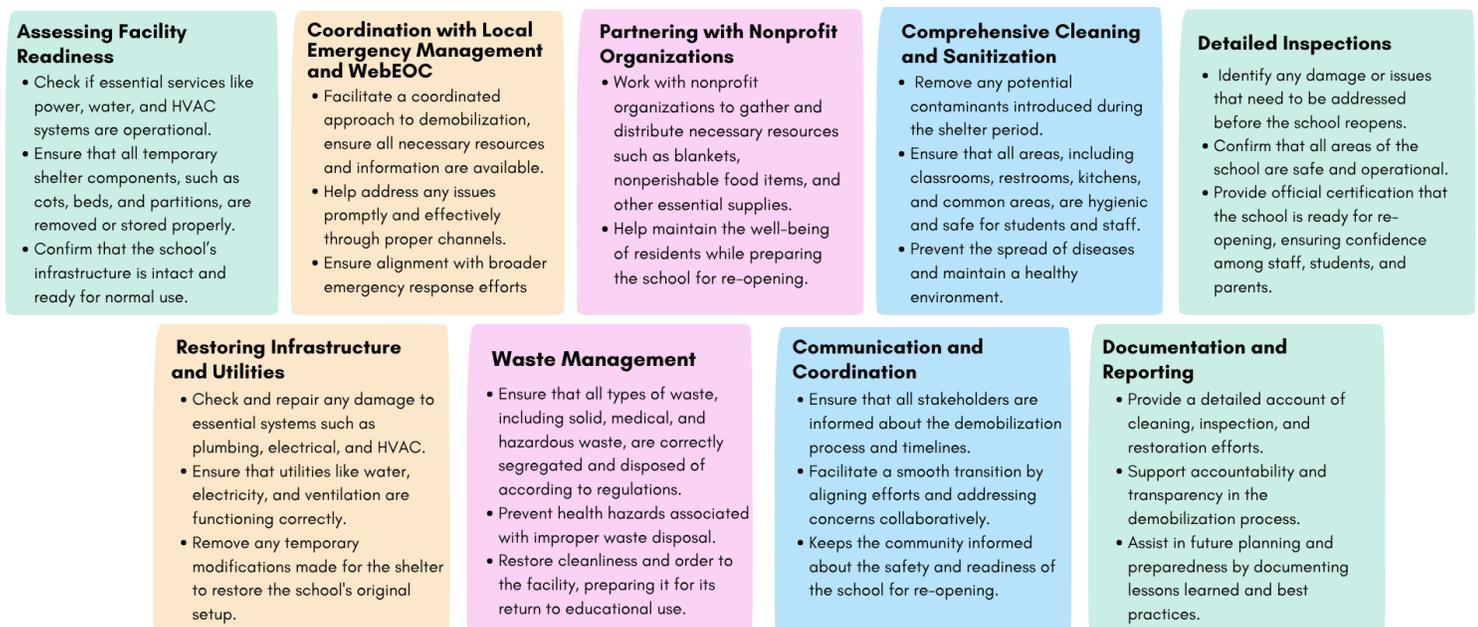


Figure 12. Environmental Health Readiness Functions

The demobilization process is critical to transitioning the facility back to its primary function as an educational institution, as well as the prevention of health hazards for students and staff returning to the school. During this, all parties are to be informed about the process and timelines. This helps facilitate a smooth transition by aligning efforts and addressing concerns collaboratively. As the process takes place, the temporary modifications made for the emergency shelters are safely removed and restore the school environment to its original, safe, and functional state. The inspection and certification ensure that all health and safety standards are met, as well as identifying any lingering issues that need to be addressed before the facility can be used as a school again. The post-shelter cleanup should include disinfection of surfaces, proper disposal of waste, and restoration of school equipment and facilities. Provide documentation that the school is ready for re-opening, instilling confidence in staff, students, and parents.

By following these after-action criteria, Environmental Health Specialists and facility managers can ensure a smooth transition, maintaining the health and safety of all future occupants. Proper documentation, communication, and ongoing monitoring are vital components of a successful demobilization process. Ongoing monitoring provides data that can be analyzed to identify trends and areas for improvement, as well as helping with refining emergency preparedness and response plans, on top of enhancing the facility's resilience to future emergencies.

Links

[North Carolina Shelter Assessment Form](#)
[National Mass Care Sheltering Strategy](#)