



AMERICORPS NCCC SAFETY GUIDE



AmeriCorps

February 2022 Edition

Table of Contents

Introduction and Guiding Principles	3
Emergencies.....	3
Emergency Preparedness	3
Emergency Response	4
CPR/First Aid	4
First Responder	4
Extreme Weather and Disaster Preparedness.....	5
Tornado.....	5
Thunderstorms and Lightning.....	6
Earthquakes	6
Hurricanes.....	7
Wildfires.....	7
Extreme Heat	7
Signs and treatment of heat-related illnesses	8
Snowstorms and Extreme Cold.....	9
Signs and treatment of cold-related illnesses.....	10
Precautions for Extreme Weather	11
Safety Procedures for Vehicle Use.....	11
Camping Safety Tips.....	12
Camping Orientation.....	13
General Project Site Safety	13
Roles in Safety.....	13
Project Orientation	14
Project Specific Trainings	15
Personal Protective Equipment (PPE).....	15
Type of PPE	15
Environmental Impacts on Outdoor Projects	18
Plants and Animals.....	18
Hand and Power Tools.....	19
Holding and Carrying Tools.....	20
Vehicle Loading.....	20

Power Tools.....	21
Height Safety.....	22
Ladders.....	22
Scaffolding.....	23
Roofing.....	23
Working with Hazardous Materials	24
Lead or Lead Based Paints (LBP)	24
Asbestos.....	24
Chemicals and Biohazards on Disaster Response Projects	25
Mold.....	26
Herbicides and Pesticides	26
Safety Data Sheet (SDS)	26
Sanitation and Hygiene	26
Safe Water	26
Handwashing.....	27
Bathing.....	27
Dental Hygiene.....	27
Food Sanitation.....	27
Cold and Flu Prevention.....	27
Appendices.....	29
Guidelines for Working with Children.....	29
Basic Food Safety	30
Guide to Working With Hazardous Materials.....	33
Working on a Disaster Response Project	35

Introduction and Guiding Principles

A top priority of AmeriCorps National Civilian Community Corps (NCCC) is the health and safety of members. To this end, the purpose of this Safety Guide is to identify and promote safe practices for NCCC members.

NCCC projects are unique and sometimes unpredictable. The communities served, weather, road conditions, and a variety of other factors are all different, making it difficult to provide guidance for all circumstances that may arise. This Safety Guide addresses common scenarios for NCCC teams and details the steps that members, Team Leaders and sponsors can take to be prepared, safe, and mitigate risks.

The guidance included here should be combined with the following guiding principles:

1. NCCC members are not expected to undertake a task that the Member feels is unsafe.
2. If a NCCC member encounters a situation they believe puts their health or safety at risk, the member has an obligation to notify their Team Leader (TL), Unit Leader (UL), Site Supervisor and/or Project Sponsor.
3. NCCC members are expected to communicate questions and concerns regarding safety to their TL and/or UL.
4. NCCC teams are expected to seek out the expertise of project sponsors and site supervisors in regards to safety. This applies to safety of a service location, host community and/or technical tasks members will assume.
5. While NCCC and our community partners can provide guidance to promote member safety, responsibility ultimately lies with each individual. Members should follow the guidance reflected in the member handbook and in this safety guide to protect themselves and others.
6. The NCCC Core Expectations stipulate that each member will, “**Promote your safety and the safety of your teammates.**” While serving in NCCC, members are responsible for their own safety, but also have a responsibility to the safety of their teammates, their Unit, their Region, and the full NCCC community nationwide.

Emergencies

Emergency Preparedness

In order to promote preparedness for an emergency or critical incident, NCCC advises the following:

- Prior to each deployment, members should ensure that the TL has their current emergency contact information. Unit Leaders will also maintain access to this information.

- TLs should ensure that emergency contact information is available in each assigned vehicle and in a common area of the team's lodging. This information should be secured from view in a sealed envelope to be viewed only during an emergency. In an emergency situation where a member is incapacitated, this information may be shared upon request with emergency medical providers or law enforcement officials. Team Leaders and Members are not to contact family of another member at any time.
- Members are encouraged to keep personal ID cards and Insurance Cards on their person at all times.
- Prior to deployment, each team should research and locate the emergency medical resources closest to their project location (for both work and housing locations). This will include local hospitals, urgent care centers and medical providers in the IMG network.
- Emergency phone numbers for the local area should be posted in a common area of housing location.
- An up-to-date first aid kit will be in each NCCC vehicle that a team may bring in to the lodging site. Inventory of the first aid kit should be verified and restocked prior to each deployment.
- NCCC members are encouraged to wear a medical alert bracelet if they have a potentially serious medical condition such as epilepsy, diabetes, heart disease, or allergies.

Emergency Response

CPR/First Aid

While many AmeriCorps NCCC members receive CPR/First Aid training while in the program, NCCC members are not professional health care providers. Only in the event of a critical medical condition or emergency should CPR/First Aid be provided by an NCCC member. Even then, this should only happen after attempts are made to call 911 to engage trained medical professionals.

When possible, minor medical issues not requiring the attention of medical professionals, such as scrapes, should be addressed by the injured member themselves, in order to avoid risk exposure.

First Responder

In the event of an emergency requiring an NCCC member to serve as a first responder, NCCC members are expected to:

1. Call 911 immediately
2. Secure the scene for the safety of one's self and others before providing assistance
3. Communicate with a TL and/or NCCC staff member as quickly as possible after the situation has been stabilized
4. Remain calm and focus on the immediate need to get a member to a safe location
5. Support the health needs of the victim up to the level of comfort and certification the member has received
6. Gather facts and detailed documentation about the emergency, when possible

7. Maintain confidentiality and privacy rights by re-directing questions about the emergency from external parties (family, friends, sponsor, local residents, the press, etc.) to NCCC staff

Extreme Weather and Disaster Preparedness

Extreme weather can include thunderstorms, tornadoes, hurricanes, damaging winds, hail, flooding and flash flooding. Winter storms are associated with freezing rain, snow, sleet and strong winds.

Tornado

Tornadoes are violently rotating columns of air that extend from a thunderstorm to the ground. Tornadoes can happen anytime and anywhere and bring intense winds with a potential to cause tremendous damage and flying debris.

It is important to know the difference between tornado watches and tornado warnings. Tornado watches just mean the conditions may be favorable for a tornado; watches may last several hours. Tornado warnings, which are far more serious, mean actual cloud rotation has been detected, so a tornado may be in or approaching your area. Teams on campus or on spike may stay apprised of tornado warnings and other local emergencies by subscribing to the local emergency notification service (if available), which can provide notifications via calls or text messages.

IF UNDER A TORNADO WARNING, FIND SAFE SHELTER RIGHT AWAY

If you can safely get to a sturdy building, do so immediately.

Go to a safe room, basement, or storm cellar.

If you are in a building with no basement, then get to a small interior room on the lowest level.

Stay away from windows, doors, and outside walls.

Do not get under an overpass or bridge. You're safer in a low, flat location.

Watch out for flying debris that can cause injury or death.

Use your arms to protect your head and neck.

For additional information concerning tornadoes, use the following link:

<https://www.ready.gov/sites/default/files/2020-03/tornado-information-sheet.pdf>

Flooding

Flooding is a temporary overflow of water onto land that is normally dry. Floods are the most common natural disaster in the United States and can develop slowly or quickly. Flash floods can come with no warning. Failing to evacuate flooded areas, entering flood waters, or remaining after a flood has passed can result in injury or death. When flooding danger subsides, the ongoing threats of landslides remain.

IF UNDER A FLOOD WARNING, FIND SAFE SHELTER RIGHT AWAY

Do not walk, swim, or drive through flood waters. Turn around, don't drown!

Six inches of moving water can knock you down. One foot of moving water can sweep a vehicle away.

Stay off of bridges over fast-moving water.

Determine how best to protect yourself based on the type of flooding.

Evacuate if told to do so.

Move to higher ground or a higher floor.
Stay where you are.

For additional information regarding flooding, use the following link: <https://23fw321trq9c3wwiyfy66giv-wpengine.netdna-ssl.com/wp-content/uploads/Floods.pdf>

Thunderstorms and Lightning

Lightning is a violent and sudden electrostatic discharge where two electrically charged regions in the atmosphere temporarily equalize themselves, usually during a thunderstorm. Although most lightning victims survive, people struck by lightning often report a variety of long-term, debilitating symptoms. Thunderstorms are dangerous storms that include lightning and can include powerful winds, create hail, and potentially cause flash flooding and/or tornadoes.

IF UNDER A THUNDERSTORM WARNING, FIND SAFE SHELTER RIGHT AWAY

When thunder roars, go indoors!

Move from outdoors into a building or car.

Pay attention to alerts and warnings.

Unplug appliances to protect them against electrical surges.

Do not use landline/corded phones that are connected by wires and may shock users.

For additional information regarding thunderstorms and lightning, use the following link: <https://www.ready.gov/sites/default/files/2020-03/thunderstorm-information-sheet.pdf>

Earthquakes

An earthquake is the sudden, rapid shaking of the earth, caused by the breaking and shifting of underground rock. Earthquakes can cause buildings to collapse and heavy items to fall, resulting in injuries and property damage. Earthquakes can happen anywhere and may cause tsunamis, landslides, and avalanches.

IF AN EARTHQUAKE HAPPENS, PROTECT YOURSELF RIGHT AWAY

Drop, cover, then hold on!

Get under the nearest sturdy table or desk. Do not look for a safer location as you may be thrown around.

If in a vehicle, pull over and stop.

If in bed, stay there and protect your head with a pillow.

If outdoors, stay outdoors.

Do not get in a doorway – it's not the safest place to be.

Do not run outside – it's not the safest place to be.

For additional information regarding earthquakes, use the following link: https://www.ready.gov/sites/default/files/2021-12/ready_earthquake-information-sheet.pdf

Hurricanes

Hurricanes are storm systems that form over warm ocean waters and move toward land. Potential threats from hurricanes include powerful winds, heavy rainfall, storm surges, coastal and inland flooding, rip currents, tornadoes, and landslides. The Atlantic hurricane season runs from June 1 to November 30. The Pacific hurricane season runs May 15 to November 30. Teams in the path of hurricanes or tropical storms, or their remnants, should pay attention to local advisories and consult with campus on shelter-in-place or evacuation protocol.

IF UNDER A HURRICANE WARNING, FIND SAFE SHELTER RIGHT AWAY

Determine how best to protect yourself from high winds and flooding.

Evacuate if told to do so.

Take refuge in a designated storm shelter, or an interior room for high winds.

Listen for emergency information and alerts.

Only use generators outdoors and away from windows.

Turn around, don't drown! Do not walk, swim, or drive through flood waters.

For additional information regarding hurricanes, use the following link:

https://www.ready.gov/sites/default/files/2020-03/hurricane_information-sheet.pdf

Wildfires

A wildfire is an unplanned fire burning in a natural area such as a forest, grassland, or prairie. Wildfires are often caused by humans or lightning and cause flooding or disrupt transportation, gas, power, and communications. Wildfires can happen anywhere. Risk of wildfire increases during drought conditions and high winds.

IF UNDER A WILDFIRE WARNING, GET TO SAFETY RIGHT AWAY

Leave if told to do so.

If trapped, call 911.

Listen for emergency information and alerts.

Use N95 masks to keep particles out of the air you breathe.

For additional information regarding wildfires, use the following link:

https://www.ready.gov/sites/default/files/2021-12/ready_wildfire_info-sheet.pdf

Extreme Heat

Extreme heat often results in the highest number of annual deaths among all weather-related hazards. In most of the United States, extreme heat is defined as a long period (2 to 3 days) of high heat and humidity with temperatures above 90 degrees. Extreme heat can lead to death by overworking the human body and can occur quickly and without warning.

The Heat Index demonstrates how heat and humidity combine to create hazardous working conditions. Precautions must be taken, both outdoors and indoors, in extremely hot and humid weather.

IF UNDER AN EXTREME HEAT WARNING, DO THE FOLLOWING

Find air conditioning.

Avoid strenuous activities.

Watch for heat illness.

Wear light clothing.

Check on other members.

Drink plenty of fluids.

Never leave people or animals in a closed car.

Watch for heat cramps, heat exhaustion, and heat stroke.

Avoid working outdoors at mid-day.

Wear SPF 15 sunscreen at a minimum.

Take frequent breaks.

Be monitored frequently.

Signs and treatment of heat-related illnesses

DEHYDRATION

Signs and symptoms: Thirst, dry or sticky mouth, headache, muscle cramps, little or no urine, having very dark yellow urine, very dry skin, feeling dizzy, rapid heartbeat, rapid breathing, sunken eyes, sleepiness, lack of energy, confusion or irritability, or fainting.

Actions: Dehydration must be treated by replenishing the fluid level in the body. This can be done by consuming clear fluids such as water, clear broths, frozen water or ice pops, or sports drinks (such as Gatorade). Some dehydration patients, however, will require intravenous fluids in order to rehydrate.

HEAT CRAMPS

Signs and symptoms: Muscle pains or spasms in the stomach, arms, or legs.

Actions: Go to a cooler location. Remove excess clothing. Take sips of cool sports drinks or water with salt and sugar. Get medical help if cramps last more than an hour.

HEAT EXHAUSTION

Signs and symptoms: Heavy sweating, paleness, muscle cramps, tiredness, weakness, dizziness, headache, nausea or vomiting, or fainting.

Actions: Go to an air-conditioned place and lie down. Loosen or remove clothing. Take a cool bath. Hydrate by drinking cool sports drinks and water. Get medical help if symptoms worsen or last more than an hour.

HEAT STROKE

Signs and symptoms: High body temperature (over 103), hot and dry skin, lack of perspiration, rapid pulse and dizziness.

Actions: Call 911 or get the person to a hospital immediately. Cool down with whatever methods are available until medical help arrives.

For additional information regarding extreme heat, use the following link:

https://www.ready.gov/sites/default/files/2021-01/ready_extreme-heat_info-sheet.pdf

The table below outlines suggestions for rest and hydration rates based on the difficulty of the work and the air temperature. Heat index refers to the feels like temperature and is available on weather websites and mobile device apps. The heat index includes factors that intensify the heat, like humidity.

The recommendations for rest and hydration assume that the Member is physically fit, well-rested, and fully hydrated. Modifications to the recommendations may need to be made based on these factors.

	Light Work		Moderate Work		Heavy Work	
	Sitting with light manual work using hands and arms. Standing with some light arm work and occasional walking. Casual walking (2 miles per hour) Using small bench tools or small power tools. Inspecting and sorting materials. Assembling small parts.		Carrying equipment/supplies weighing 20-40 lbs. Using hand tools (shovel, trail tools) for short periods. Picking vegetables or other vegetation (bending, squatting). Painting with a brush. Pushing or pulling lightweight carts or wheelbarrows. Weeding or hoeing.		Carrying equipment/supplies weighing 40 lbs or more. Using hand tools or chainsaws for extended periods. Transferring heavy materials, shoveling. Sledgehammer work. Hand mowing, digging. Concrete block laying. Pushing or pulling loaded hand carts or wheelbarrows.	
Heat Index*	Work/Rest (Minutes)	Water Intake (Qt/Hr)	Work/Rest (Minutes)	Water Intake (Qt/Hr)	Work/Rest (Minutes)	Water Intake (Qt/Hr)
80 – 83 °F	No Limit	.5	No Limit	.75	50/10	.75
84 – 87 °F	No Limit	.5	50/10	.75	40/20	1
88 – 91 °F	No Limit	.75	40/20	.75	30/30	1
92 – 95 °F	40/20	.75	30/30	1	20/40	1
96 < °F	30/30	1	20/40	1	10/50	1

Snowstorms and Extreme Cold

Winter storms create a higher risk of car accidents, hypothermia, frostbite, carbon monoxide poisoning, and heart attacks from overexertion. Winter storms and blizzards can bring extreme cold, freezing rain, snow, ice, and high winds. A winter storm can last a few hours or several days; knock out heat, power, and communication services. Individuals who are sick will be at greater risk as access to health services can be limited.

Precautions must be taken, both outdoors and indoors, in extremely cold weather. The wind chill factor makes the body’s internal temperature regulating mechanisms feel as though it is much colder than the

thermometer indicates. The Wind Chill Index should be used in making a decision. A lower limit of 20 degrees Fahrenheit (when adjusted for wind chill) is the guideline for outside work. Outdoor activities may be authorized at colder temperatures for short periods of time, but only after the following safety precautions have been taken. Members should be:

- trained to recognize the symptoms of frostbite and hypothermia
- properly clothed for the temperature – foul weather gear for rain and wool or synthetic fabrics for cold extremes;
- assigned to work in pairs;
- assigned outside for limited periods of time;
- able to access a readily available warm-up location; and regularly monitored by Team Leaders and/or unit staff.

IF UNDER A WINTER STORM WARNING, FIND SHELTER RIGHT AWAY

Stay off roads.

Stay indoors and dress warmly.

Prepare for power outages – have shelf stable food, water, flashlights, and charged batteries.

Use generators outside only and away from windows to prevent inhaling fumes.

Listen for emergency information and alerts.

Signs and treatment of cold-related illnesses

FROSTBITE

Frostbite causes loss of feeling and color around the face, fingers, and toes.

Signs and symptoms: Numbness, white or grayish-yellow skin, firm or waxy skin.

Actions: Go to a warm room. Soak in warm water. Use body heat to warm, not a heating pad.

HYPOTHERMIA

Hypothermia is an unusually low body temperature. A temperature below 95 degrees is an emergency.

Signs and symptoms: Shivering, exhaustion, confusion, fumbling hands, memory loss, slurred speech, or drowsiness.

Actions: Go to a warm room. Warm the center of the body first—chest, neck, head, and groin. Keep dry and wrapped up in warm blankets, including the head and neck.

For additional information regarding winter storms, use the following link:

https://www.ready.gov/sites/default/files/2020-11/winter-storm_information-sheet.pdf

Precautions for Extreme Weather

- Subscribe to local weather reports and alerts, connect with local information sources for the most accurate forecast.
 - When working in extreme temperatures, heat or cold, members should work in pairs, aka the “buddy system”.
 - Keep track of the weather, note changes in temperature and wind speed.
 - Use warming/cooling shelters for relief from severe temperatures.
 - Frequent breaks should be incorporated into the work day.
 - Plan in advance for work in cold/hot weather.
 - Wear the appropriate uniform items. When in cold weather, bring extra layers to the worksite allowing members to change out of wet clothing. When in hot weather, wear loose, light colored clothing that is breathable such as cotton.
 - Ensure access to water and stay hydrated.
-

Safety Procedures for Vehicle Use

Safety is the responsibility of every person operating or riding in a vehicle. It is incumbent upon each individual to familiarize themselves with NCCC Manual Section 571 and to support compliance.

Vehicles must always be driven with the lights on. Continuous running lights in new vehicles are sufficient to meet the requirements of this policy.

Drivers and passengers should always be aware of the vehicle’s location in the event of a sudden emergency. Markers such as mile posts or most recent major intersections should be noted in order to quickly notify responders in the event assistance is needed.

Proper seat belt usage is mandatory for all persons in all government vehicles at all times. No vehicle will be placed into motion until every passenger in the vehicle has fastened their lap and shoulder belt. No vehicle will be operated with more passengers than seat belts. Damaged or inoperative seat belts must be reported to the Unit Leader and make arrangements to be repaired immediately. The driver is ultimately responsible to ensure the vehicle is not operated without everyone in the vehicle properly wearing their seat belt. No member may ride in the bed of any pick-up or in the cargo compartment of a cargo van. Cargo must be properly stored and secured to preclude movement during transit – gasoline and other flammable materials may not be transported within the passenger compartment and must be transported externally.

Vehicle inspections (three types) must be conducted and include: pre-spike travel inspection coordinated by the operations department, monthly full vehicle inspection, and a daily pre-trip check. Vehicles are not to be operated if anyone is concerned about the safety of the vehicle and until that problem is rectified. While on campus, all Member concerns must be reported to the UL, who will report all incidents to the operations department. When on spike, vehicles with mechanical difficulties must be checked by a trained mechanic. Training concerning the use of the GSA Fleet Service Card and associated policies is mandatory. When a question arises that can't be answered locally, the GSA Fleet Maintenance Center (the number is located on the back of the Fleet Service Card) shall be contacted.

Backing and Maneuvering

To avoid accidents, vehicles should be parked so that the first movement will be forward.

Vehicles should be parked away from other vehicles in parking lots, when possible.

- Ground guides are mandatory for backing, and when maneuvering around, or in close proximity of objects such as gas pumps, or parked vehicles. An NCCC-trained ground guide will give directions to the driver when operating fifteen passenger vans, cargo vans, or other vehicles with limited visibility. A ground guide is a person who assists the driver in areas of limited mobility, visibility, and potentially unsafe situations. The person serving as the ground guide must be trained in the proper use of hand and arm signals. All members will receive ground guide training at the beginning of the year.
- The ground guide must always wear safety vests.
- Team Leaders may be excused from using ground guides under specific circumstances such as conducting sick call, carrying out administrative and/or logistical duties and emergency situations when the Team Leader is the only person available. The Team Leader must still walk around the vehicle to determine if it is safe to proceed. However, reasonable efforts should always be taken to locate a ground guide before backing up a vehicle without a ground guide.
- NCCC vehicles will not enter parking garages unless there is approval from the Unit Leader or operations department.

Camping Safety Tips

When a team is required to camp for their project lodging, project sponsors shall provide, or coordinate, an orientation to the campsite and camping equipment for the team covering the following Camping Safety Tips. This section does not apply to FEMA responder camps.

Access

Site shall support the navigation of and parking space for a 15-passenger van with front wheel drive.

Site shall be at least 200 feet away from large bodies of water.

Site shall support the sending and receiving of emergency communications.

Safety and Security

Site shall have a stable ground surface upon which the appropriate number of tents can be safely secured.

Site shall not be in an area that recently or regularly has experienced natural disasters.

Site shall not be located on or within minimal distance of an exposed cliff, hilltop, or ridgeline.

Site shall have an inclement weather shelter identified and within reasonable distance from the site where the team can temporarily spend the night in case of storms.

Site placement shall consider the presence of dangerous wildlife including snakes, spiders, and bears.

Capacity

Site shall be suitable to the quantity and quality of the camping equipment available to the team, provided by either by AmeriCorps NCCC or the project sponsor.

Camping Orientation

When establishing a campsite, consider these additional tips:

- Site selection (terrain, wind & sun exposure, overhead and ground hazards, etc.)
- Site set up to include:
 - Proximity of site from a body of water
 - Proximity of sleeping, dining, cooking, and food storage areas from each other
 - Proximity of fire circle, if applicable and available for use, from sleeping area will follow the camp site layout or be established 25 feet from the sleeping area,
- Tent set up and considerations (tarp underneath, sleep with head uphill, etc.)
- Food storage, preparation, and sanitation to include:
 - Access to potable water or method for water treatment
 - Safe food storage (refrigeration, bear box/bag, vehicle, etc.)
 - Outdoor cooking set up, use of camp stoves, and proper storage of fuels
 - Proper dishwashing tools and techniques (biodegradable soap, 200 feet from streams or bodies of water, scatter strained water, etc.)
 - Plan for waste management (trash/recycling) and camp cleanliness
- Campfire safety (firewood availability, fire location, construction and size, attendance, appropriate starters, and extinguishing methods, etc.)
- Hygiene to include:
 - Washing body and brushing teeth (200 feet from water source, 100 feet from site, etc.)
 - Bathroom protocol and waste management (indoor, pit toilets, or cat-holes, 200 feet from water source, pack out paper and products, etc.)
 - Toiletry storage (bear box/bag, vehicle, etc.)
- Environmental safety considerations (plants, wildlife, encounter mitigation and response, etc.)
- Environmental stewardship guidance available at <https://int.org/learn/7-principles>

General Project Site Safety

Members should comply with all state and federal safety regulations and laws, as well as NCCC and sponsoring organization policies when on a project work site. Communication and situational awareness is necessary to maintain a safe environment among NCCC members/staff and a sponsoring organization's staff, volunteers, and community beneficiaries.

Roles in Safety

Sponsors - A project sponsor's role is to provide or coordinate on-site supervision, a project orientation and project specific trainings. Prior to team arrival, the sponsor shall secure all permits. The sponsor shall also participate in regular meetings with the TL and team.

Site Supervisors - A site supervisor's role is to possess the technical knowledge, skills, and abilities to perform the tasks at the project site. The site supervisor should be well-versed in safety protocol for each task to include: necessary protective equipment, proper operation of tools/materials, and techniques for effectively executing project tasks, and knowledge of the presence of hazardous substances (i.e. mold, asbestos, lead) and a plan for avoiding or safely mitigating these substances. The site supervisor should monitor and instruct the team on safety protocol from the onset of the project, ongoing throughout the project work, and as new equipment and tasks are introduced.

APD - The Assistant Program Director's role is to discuss site safety, required PPE, and relevant NCCC policies during project development with the sponsor. The APD shall also review orientation and training plans.

UL - As Project Manager and supervisor of the TL and team, the UL shall be kept apprised of all safety concerns and work with the TL, team, and directly with the project sponsor to mitigate risk.

NCCC TLs - The TL's role is overall monitoring and enforcement of NCCC and sponsoring organization safety protocols among members. This includes, but is not limited to:

- Discuss importance of, and goals to, achieving a safe and healthy project site with members
- Assess site conditions daily for potential hazards
- Ensure tools and necessary protective equipment are in good working order prior to use
- Conduct a safety briefing with team prior to starting work each day
- Clearly assign tasks to team members as a group so expectations are known by all
- Report any safety concerns to site supervisor and update the UL

NCCC Corps Members - The member's role is to be accountable for their personal safety and the safety of those around them. CMs shall adhere to all NCCC and sponsoring organization policies, whichever is more stringent, and report any concerns regarding safety of the site, tools, or member non-compliance.

Project Orientation

Project sponsors shall provide on-site orientation upon the team's arrival at any and all project locations to include the following areas of safety:

- Team, sponsor, site supervisor, and other staff and volunteer introductions, including their role and how they will engage with the team
- A tour of the organization's facilities
- Overview of training and work plans
- Organization policies, general health and safety requirements, and key site specific hazards
- Review of emergency procedures at project sites to include:
 - Communication methods and list of phone numbers
 - Evacuation procedures and rally points or sheltering locations and protocols
 - Location, and instruction for use, of first aid kits, AEDs, fire alarms, fire extinguishers, and other health and safety equipment
 - Location of, and/or procedure for, electric, water, and gas shut-offs and reporting actions if necessary

Project Specific Trainings

Prior to beginning project tasks, the sponsor or site supervisor should provide, or coordinate, the technical training necessary to use project-specific tools/materials and accomplish project tasks safely and effectively. Trainings shall be designed as introductory in nature and facilitated to address all members' skill and experience levels. Members shall not operate any piece of equipment unless qualified and authorized to do so by the TL and the site supervisor. Training resources are available through the United States Department of Labor Occupational Safety and Health Administration (OSHA) at <https://www.osha.gov/training/library/materials>.

Personal Protective Equipment (PPE)

PPE is required on most AmeriCorps NCCC worksites. PPE is any protective clothing, helmet, goggle, or other garment or equipment designed to protect the wearer's body from injury.

Each project, and tasks on a project, will require unique PPE. The TL, along with the UL and Site Supervisor, will determine the proper PPE for the project. TLs and CMs will wear uniforms and appropriate PPE for the work and weather conditions. The TL is ultimately responsible for the wearing of proper uniforms and PPE while on the work site. Vehicle, Safety, and Tools Officer (VSTs) and other members should help everyone stay accountable. It is mandatory for members to wear the minimum PPE as determined by the TL.

Disaster response projects will require special and unique PPE that will be addressed as teams are trained for, deployed to, or arriving at a specific disaster location.

Type of PPE

Members will be given PPE for their project by AmeriCorps NCCC staff, or by the sponsoring organization. Some PPE that is provided by AmeriCorps NCCC (when needed) are:

- Safety boots
- Hard Hat
- Work Gloves
- Eye Protection
- Hearing Protection
- Chaps
- Face Shields
- Respirators

Considerations when using/wearing PPE

<u>SHOULD</u>	<u>SHOULD NOT</u>
Wear hard-toed boots at all times when on a project work site. Exceptions may be made for roof work, chain sawing, fire work, hiking in and out of remote worksites, or other situations approved by the UL.	Wear loose-fitting clothing or loose hair while operating power tools.
Wear gloves while working on project sites and when carrying or sharpening tools, except in rare cases such as a lack of dexterity causing safety issues.	Wear exposed, loose jewelry (hoop earrings, rings, bracelets, and/or necklaces, etc.).
Wear safety glasses when operating a power tool; installing anything overhead; when in danger of objects chipping or performing a task that may throw off small particles; hammering; in the presence of falling particles or if in a situation that could potentially damage the eyes; Under no circumstances will face shields be worn in place of safety glasses; they may be worn over the safety glasses.	Wear face shields in place of safety glasses. Face shields may be worn over the safety glasses.
Use hearing protection when operating power tools or during other loud, noisy operations; or any area where the TL determines there is the potential for hearing damage.	
Wear N95s masks or respirators when installing insulation, drywall, scraping paint, cutting wood, sanding, in very dusty environments, or when instructed by a TL or Site Supervisor.	
Tie long hair back and out of the way.	
Wear hard hats in all demolition activities, when using a swinging tool, when framing (standing up walls), installing trusses, performing demolition activities, or at any time there is risk of head injury.	
Check with a TL or Site Supervisor if a respirator is recommended for the work.	

<u>Tool or Task</u>	<u>Hard Hat</u>	<u>Ear Plugs</u>	<u>Safety Glasses</u>	<u>Work Gloves</u>	<u>Coveralls</u>	<u>NCCC Issued Boots</u>	<u>Other Requirements and Notes</u>
							X = Required at all times S = Situationally Required
Swinging Tools (including hammers, sledge hammers, crowbars, and cats paws)	X	S	X	S		X	Maintain 10 feet of space between people using swinging tools (also referred to a blood circle)
Power Tools (e.g. drills, saws, nail guns, etc.)	S	X	X	S		X	
Painting	S		S		X	X	N95 Respirator and gloves may be desired situationally
Ladder	S		S			X	Hard hat required for spotters
Pulaski, Mattock, Rhino, Pick Axe, McLeod	X		S	S		X	Maintain 10 feet of space between people using swinging tools (also referred to a blood circle)
Chainsaw	X	X	X	X		X	Chaps, chainsaw helmet that includes a face shield (in addition to safety glasses and ear plugs), long pants, long sleeve shirt, and specialized boots. Blood Circle (10 foot minimum)
Wood Chipper	X	X	X	X		X	Feeding the chipper requires: chainsaw helmet (in addition to safety glasses and ear plugs), long pants, long sleeve shirt.
Auger		X	X	X		X	N95 Respirator may be needed in dusty situations.
Lead Based Paint			X	X	X	X	P100 Respirator with HEPA filter, disposable gloves (under work gloves), disposable shoe covers, wash hands before eating. Wet-scraping only!
Mucking and Gutting (including spraying mold suppressant and other follow up tasks)	X	X	X	X	X	X	P100 Respirator, disposable gloves (under work gloves), goggles (protects sides of eyes) or full face P100 respirator, wash gloves with coveralls daily, wash hands before eating. Tyvek suits will substitute coveralls. Muck boots or disposable booties worn over NCCC issues boots are recommended, if available.

Safety Gear with Chain Saw - Safety chaps, bibs, or pants must be worn any time a member uses a chain saw. Also, members must wear NCCC safety boots, protective gloves, eye protection, hearing protection and a helmet (face shield and ear muff attachments are acceptable, provided ear plugs and safety glasses are also worn). Members must receive chainsaw training from an AmeriCorps NCCC-approved trainer before operating a chainsaw, even if the member has prior experience.

Life Jackets - Members working in water above their knees or as determined by the project requirements must wear approved life jackets. This includes, but is not limited to, persons working in boats or barges and cleaning streams in deep areas (where members can no longer stand) or on piers and docks over knee high water. When waders and/or hip boots are required, they must be equipped with steel toes.

Some PPE will need to be fitted for each individual member and there may need to be training in its proper use. Examples of this are respirators and Tyvek suits for working with hazardous materials.

Environmental Impacts on Outdoor Projects

This portion of the Safety Guide is to assist teams on outdoor projects. If information related to a specific project is not in this section, Members should coordinate with NCCC staff and speak to the project sponsor. Teams should research poisonous plants, hazardous animals, and typical weather conditions in the area they will be working. Sponsors, site supervisors, lodging sponsors and local residents will be an additional source of information. Tools, PPE, and weather are things to keep in mind during an outdoor project that are covered in different sections of this Guide. It is required to wear protective clothing and equipment when working outdoors. Examples include boots, long trousers and long-sleeved shirts, safety glasses, work gloves, and hard hats. Use appropriate tools, not just your muscles, to do the hard work.

Plants and Animals

While serving outdoors members may be exposed to plants, insects, and other creatures that carry diseases or can cause injury. Members should educate themselves, or receive a training on the hazards they may be exposed to on a project. Planning for what Members will do if exposed to risk is necessary. Talking to staff and the project sponsor, using the internet, and discussing risks with members from teams that previously were assigned to the project or area is essential. Some examples of potential risks include snakes, ticks, mosquitos, poison ivy, poison oak, and poison sumac. Members working in wooded areas should be especially mindful of thoroughly checking their bodies for ticks every day. Ticks, which can transmit numerous debilitating diseases, usually take several hours to settle on the body and begin extracting blood, so diligent checking is key.

General Considerations when Working Outdoors:

<u>SHOULD</u>	<u>SHOULD NOT</u>
Ensure nothing is overlooked at the project orientation meeting.	Take safety for granted.
Research the hazards that may be encountered at the location of the project.	Let an unsafe condition continue.
Have a weather radio or internet access to keep up with the weather.	Cut corners. Many accidents occur when we don't take the time to do a job the correct way.
Schedule daily safety briefings. Ask questions and get everyone involved.	Use chemicals unless an individual has been trained on their use and using proper PPE.
Plan for the unexpected.	Operate equipment Members have not properly been trained to use by a qualified individual.
Wear clothing that covers as much of the body as possible.	Touch or eat poisonous plants.

Wear protective gloves and change them when necessary.	Burn poisonous plants. Burning can release poison into the air.
Shower with warm water and soap as soon as possible. Bathtub washing can cause the chemical from poisonous plant to cling to your body.	Disturb nests of bees, fire ants, wasps, hornets or yellow jackets. Site supervisors should be the ones to remove the nests.
Wash clothes separately in hot water and clean shoes with alcohol and water.	Flood a nest with water since this will only make stinging insects angry.
Check before working near vines, brush, overgrown grass, and wooded habitats.	Wear perfumes, colognes, or scents. They may attract bees.
Consider all snakes and other animals dangerous. Leave them alone.	Strike or swing at a wasp or bee. Use a gentle pushing or brushing motion to deter them.
Research the nearest medical facility that can treat snake bites.	Swing a tool without knowing location of others.
Research and procure the most effective repellent for the insects in your project area.	Spray repellants in or near eyes.
Inspect all tools prior, during, and after use on the project. As they are issued to the team, clean and sharpen them to specifications.	Use tools for anything other than the intended purpose. Operate tools according to the manufacturers' instructions and training from the site supervisor.
Flag or mark unsafe tools and place in a separate location.	Over exert oneself when using or carry a tool.
Use PPE and "tool wheels" (see "Hand and Power Tools" section below for reference).	Transport tools in vehicles unless properly stored.
Properly transport all tools. Details listed below.	Use hand or fingers as a guide to start a cut with a hand saw.

Hand and Power Tools

Hand and power tools are common with many AmeriCorps NCCC projects. If a hazardous situation is encountered, it should be brought immediately to the attention of the TL, Site Supervisor and sponsor. NCCC members must be properly equipped, trained, and supervised when using any power tool by the Project Sponsor or Site Supervisor. Members should be able to recognize hazards associated with tools and subsequent safety precautions on the worksite. This section is to provide a summary of the basic safety procedures and safeguards associated with hand and power tools.

NCCC members who use hand and power tools and are exposed to the hazards of falling, flying, abrasive, and splashing objects, or to harmful dusts, fumes, mists, vapors, or gases must be provided with the appropriate PPE. Appropriate PPE such as safety goggles/glasses and gloves must be worn to protect against hazards that may be encountered while using hand tools. Ear protection should be worn when using power tools. Before using any tool, each member should evaluate the situation with the site supervisor to determine the necessary PPE.

Basic safety rules can help prevent hazards associated with the use of hand and power tools

Keep all tools in good condition with regular maintenance

Members must use and treat tools in a professional and appropriate manner. For example, handles should be tightly fitted, secured with a wedge, and inspected for splitting, warping, and absence of splinters.

Always use sharp tools, as dull tools are dangerous.

Keep tool guards in position on cutting edges during transportation to and from project sites and while not in use.

Never throw or play with tools.

Inventory and clean all tools at the end of each day and return them to their appropriate storage areas.

Use the right tool for the job.

Examine each tool for damage before use and do not use damaged tools.

Operate tools according to the manufacturers' instructions.

Provide and properly wear the correct PPE.

Do not disengage tool safety mechanisms.

When using hand tools, be aware of your surroundings. When using hand saw blades, knives, axes, picks or other tools, members should direct the tools away from aisle areas and away from others working in close proximity. For swinging type tools, maintain appropriate distance (at least 10 feet). Iron or steel hand tools may produce sparks that can be an ignition source around flammable substances. Where this hazard exists, spark-resistant tools made of non-ferrous materials should be used.

Holding and Carrying Tools

- Hold all tools at their balance point, the place where you can hold the tool steady with low effort.
- While on flat ground, carry the tool in your dominant hand.
- When on a slope, the tool should be carried on the downhill side. This allows the tool to be dropped out of the way in the event of a slip or trip.
- When carrying a long handled tool, carry it so that it is parallel to the ground.
- When carrying a short handled tool, carry it so that the handle is pointed up toward your shoulder.
- You should always keep 10 feet between you and anyone else while carrying a tool.

A "tool wheel" is a safe way to store tools on a project, as well as to keep an accurate count of the tools. In a proper tool wheel, the handles of each tool face out of the circle and the sharp edge in the middle of the circle. Also, similar tools should be placed next to each other in the tool circle.

Vehicle Loading

- Tools should not be carried in passenger vans where members are subject to danger unless safety precautions are implemented.
- When loading tools into the truck or van, the heaviest items should be placed towards the front, as low as possible. When possible, load all tools across the van in lieu of toward the front.
- Sheaths, if available must be used on tools with sharp blades.
- After loading the vehicle a staff member or a TL should inspect the load to ensure it is properly secured.

- Bulky and more lightweight items should be placed near the back of the truck. If several people are loading and unloading tools, set up a “continuous line” to pass the tools or other equipment.
- It’s helpful to have one person in the vehicle, “directing” the loading operation by sorting and organizing the tools.
- Stack loaded water jugs only when properly braced.
- If tools must be loaded into a passenger van, they need to be stored and secured in areas that they will not present a hazard such as behind the last row, or secured under seat benches.

Power Tools

The types of power tools are determined by their power source; electric, pneumatic, liquid fuel, hydraulic, and powder-actuated. All electrical connections for these tools must be suitable for the type of tool and working conditions (wet, dusty, flammable vapors). When a temporary power source is used, a ground-fault circuit interrupter should be used.

General Considerations when using Power Tools

<u>SHOULD</u>	<u>SHOULD NOT</u>
Fit tools with guards and safety switches.	Carry a tool by the cord or hose.
Keep cords and hoses away from heat, oil, and sharp edges.	Yank the cord or the hose to disconnect it from a receptacle.
Unplug tools when not using them, before servicing and cleaning them, and when changing accessories such as blades, bits and cutters.	Hold fingers on the switch button while carrying a plugged-in tool.
Keep unassociated personnel a safe distance from the work area.	Use electric tools in damp or wet locations unless they are approved for that purpose.
Secure work with clamps or a vise, freeing both hands to operate the tool.	
Maintain tools with care; keep them sharp and clean for best performance.	
Follow instructions in the user’s manual for lubricating and changing accessories.	
Be sure to keep good footing and maintain good balance when operating power tools.	
Wear proper apparel for the task. Loose clothing, ties, or jewelry can be caught in moving parts.	
Remove all damaged electric tools from use and tag them: “Do Not Use”.	
Store power tools in a dry place when not in use.	

For some power tools such as chainsaws, only those who have been properly trained may use them and this would usually entail only bucking and limbing of already-fallen trees. Felling (cutting down) of trees more than six inches in diameter at chest height, should never be attempted without undergoing a

felling course by an approved instructor. Powder-actuated tools must be treated with extreme caution and under supervision of the sponsor.

Fuel will only be transported in approved containers. At no time will fuel or other hazardous chemicals be transported in the passenger compartment of any vehicle. When using fuel powered tools, be sure to use the proper type of fuel (gas/oil mix, diesel, etc.)

Height Safety

For projects that require work at heights, the sponsor and/or site supervisor must ensure that proper training, supervision, equipment, and fall protection are in place. Fall protection is defined as spotters, guardrails, and/or harness/anchor system adequate for the height and performance of the task. No member should be required to work at heights if they are uncomfortable doing so, and sufficient alternate work should be coordinated.

Ladders

Members must use a spotter when using straight or extension ladders. Spotters should wear proper PPE when performing this role including hard hats and eye protection. Duties of a spotter include holding and stabilizing the ladder and act as a buffer at the base of the ladder so that other individuals on the site are aware someone is on the ladder and can stay clear.

General Considerations when using Ladders

<u>SHOULD</u>	<u>SHOULD NOT</u>
Use a spotter anytime a height of 6 feet is reached, measured from the bottom of the boots when using a straight or extension ladder	At any time reach a height of 20 feet on any ladder, measured from the bottom of the boots
Ensure set up on stable, level, dry surfaces and clear of doorways	Ascend higher than the 2 nd rung from top of an A-frame and 4 th rung from top of an extension ladder
Ensure ladders are fully open and locks/latches are engaged (refer to Figure A)	Carry heavy loads while on ladders
Secure feet at the base	Use as a horizontal platform
Position ladder to the center of work space in order to maintain balance and avoid overreaching	Place ladder in the vicinity of overhead power lines
Maintain three points of contact when ascending and descending	Have more than one person on one ladder at one time.
Maintain appropriate base position to height, one foot out for every four feet of height to the point of structural support (refer to Figure B)	Work on ladders when conditions are wet
Extend extension ladders at least 3 feet above the top of a structure when using the ladder to climb onto the	Do not leave items on the top of a ladder. They can fall and hit someone.

<p>structure. This allows for a clean transition from ladder to structure.</p>	
--	--

Figure A

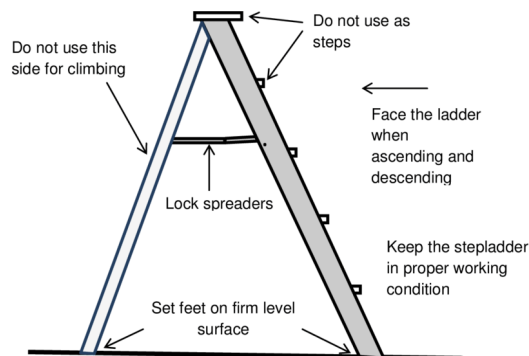
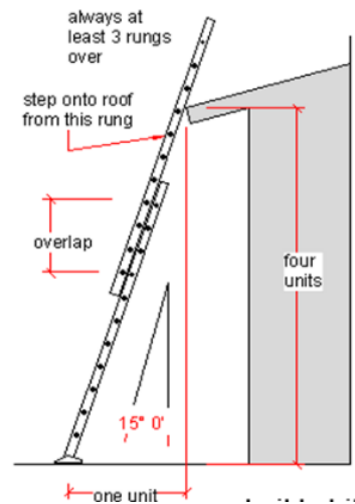


Figure B



Scaffolding

A Site Supervisor skilled in scaffolding construction should monitor the setup at all times to ensure the structure is sound and fitted with fall protection such as safety railings if over 6 feet. Members working on scaffolding should:

- Know the maximum weight capacity prior to use
- Move around on scaffolding slowly and carefully
- Keep platforms clear of trip hazards
- Ensure that all footing and anchorage for scaffolds are sound. Unstable objects such as bricks, concrete blocks, or small pieces of wood should not be used to support scaffolding. Base plates with adjusting screws should be used instead which allow for leveling on uneven ground.
- Inspect scaffolding each day before starting work and ensure that safety features are in place.
- Ensure that scaffolding is erected level and plumb on a firm base.

Roofing

A Site Supervisor should ensure the set up and utilization of proper fall protection depending on height and pitch of roof. Only skilled Site Supervisors should design and operate hoists to handle loads of materials being relocated to roofs. Members working on roofs should:

- Only work on roofs that are a maximum 2 stories high, as measured from the ground, at a reasonable pitch, and with the Sponsor taking reasonable measures to keep members safe. When working on a second-story roof, members must wear a harness and appropriate footwear and be approved by a representative of the Regional Leadership.
- Wear appropriate footwear with good traction which may included sneakers and not NCCC issued safety boots
- Wear hard hats and eye protection when on the ground and people are working above

- Minimize exertion level and carrying distance
- Never work on a roof alone

Working with Hazardous Materials

This portion of the NCCC Safety Guide is to assist teams in the identification and reduction of risk associated with hazardous materials. Anytime you come in contact with hazardous materials, extreme caution should be taken and a supervisor must be present. The poisons and toxins that can most often be found on project sites are lead, asbestos, oxides, animal feces, adhesives, solvents, sewage, herbicides and biohazards associated with natural disaster clean up. Site Supervisors should make members aware of any hazardous materials they might come in contact with and the risks associated with those materials.

Lead or Lead Based Paints (LBP)

Lead is a potentially hazardous material members may come in contact with. Lead in dust form, which is often invisible, is the most common way people are exposed. People can also get lead in their bodies from soil or paint chips. LBP was used in more than 38 million homes until it was banned for residential use in 1978. People who cut, sand, scrape, burn, brush, or otherwise disturb LBP put themselves at risk for coming into contact with LBP.

If known in advance, sponsors should include details of exposure risks to LBP in their project application and proper safety protocol for working with the LBP while on the project site.

WORKING WITH LBP

NCCC members do not engage in disturbing or removing of LBP without proper training and PPE.

Teams may work at a site where lead paint is present and may safely paint over LBP without PPE if the LBP remains undisturbed and the surface being painted requires no conditioning.

Even when LBP is not present, members are required to wear, at minimum, an N-95 particulate filter whenever cutting, sanding paint, or scraping paint.

If the TL cannot confirm an LBP-free work area, then it should be assumed that LBP is present, and scraping, sanding or otherwise removing paint should not occur without proper training and safety gear provided by the project sponsor. Sponsors may purchase tests for outer surfaces at local Home Centers.

When/if LBP is encountered at a work site, the team should cease work immediately and notify the TL and site supervisor. The TL and project sponsor should communicate with the UL as soon as possible. Work with the LBP **cannot continue** until a safety plan has been put in place by the UL and Sponsor, and the team has received appropriate training and proper PPE, as determined by the UL. This plan should include supervision of the team's work to mitigate any safety risks related to LBP and follow lead safe work practices.

Asbestos

Asbestos became a popular commercial product to manufacturers and builders in the early 1900's to the 1970's. It is durable, fire retardant, resists corrosion, and insulates well. It is estimated that 3,000 different types of commercial products contain some amount of asbestos. Asbestos is made up of microscopic bundles of fibers that become airborne when disturbed. These fibers get into the air and

may become inhaled into the lungs where they may cause significant health problems. Additionally, exposure can occur when working in buildings with asbestos insulation or pipe coverings.

In most circumstances, NCCC does not work in areas where asbestos is airborne. NCCC members are not to remove, disturb, or work around damaged or airborne asbestos.

If a Member suspects to have found asbestos with the potential to become airborne: stop work, avoid the area, immediately and contact the TL, site supervisor and/or NCCC staff.

- Project sponsors are responsible for identifying asbestos issues to the TL at every work site.
- Treat any fibrous material as asbestos until confirmed otherwise.
- If asbestos fiber is discovered, stop work and contact the TL and Site Supervisor immediately.

Where asbestos hazards may be found in a home:

Some roofing and siding shingles are made of asbestos cement.

Houses built between 1930 and 1950 may have asbestos as insulation.

Asbestos may be present in textured paint, and in patching compounds used on wall and ceiling joints.

Artificial ashes and embers sold for use in gas-fired fireplaces may contain asbestos.

Older products such as stove-top pads may have some asbestos compounds.

Walls and floors around wood burning stoves may have asbestos paper, millboard, or cement sheets.

Asbestos is found in some vinyl floor tiles and the backing on vinyl sheet flooring and adhesives.

Hot water and steam pipes in older houses may be coated with asbestos covering such as a wrap or tape.

Oil and coal furnaces and door gaskets may have asbestos insulation.

If known in advance, sponsors should include details of exposure risks to airborne asbestos in their project application for NCCC consideration.

When/if airborne asbestos is unexpectedly encountered at a work site, the team should cease work immediately and notify the TL and site supervisor. The TL and project sponsor should communicate with the UL as soon as possible. Work with potential for airborne asbestos **cannot continue** until a safety plan has been put in place by the UL and Sponsor, and the team has received appropriate training and proper PPE, as determined by the UL. This plan should include supervision of the team's work to mitigate any safety risks related to airborne asbestos.

In the majority of cases, NCCC will aim to have members reassigned to other work that does not involve exposure risk to airborne asbestos.

[Chemicals and Biohazards on Disaster Response Projects](#)

When working in any environment that has been exposed to a natural disaster, the flooding and resulting debris will often contain hazardous materials. Teams should consult with the TL, UL, and Site Supervisor to ensure a safe work environment prior to beginning work under these circumstances. Use of Tyvek suits or coveralls, mucking boots with safety toes, impermeable gloves, and respirators may be necessary once the site is deemed safe.

Mold

To limit exposure to mold and mold spores while doing mold remediation, as well as techniques on how best to perform mold remediation, members are advised to:

Limit exposure to mold and mold spores

Avoid inhaling mold or mold spores by wearing a respirator.

Wear long gloves that extend to the middle of the forearm.

Wear goggles that do not have ventilation holes.

If known in advance, sponsors should include details of exposure risks to mold in their project application for NCCC consideration.

When/if mold is unexpectedly encountered at a work site or lodging location, the team should cease work immediately and/or notify the TL and site supervisor. The TL and project sponsor should communicate with the UL as soon as possible. Work with mold **cannot continue** until a safety plan has been put in place by the UL and Sponsor, and the team has received appropriate training and proper PPE (see page 17), as determined by the UL. This plan should include supervision of the team's work to mitigate any safety risks related to mold.

Herbicides and Pesticides

Some service projects will involve the application of herbicides or pesticides. An herbicide is a substance that destroys plants, usually used for invasive species control. A pesticide is a substance that destroys insects, or other pests. Prior to any member applying a pesticide, he/she should be informed on what the exact substance being used is. When using any herbicide or pesticide, members should refer to the Safety Data Sheet and sponsor training and guidance for proper safety gear.

Safety Data Sheet (SDS)

An SDS is a document containing information on potential health effects of exposure to chemicals or potentially dangerous substances, as well as guidance on safe working procedures for handling chemical products. A merchant is required to provide an SDS to a customer when a substance requiring an SDS is sold. An employer is also required to provide an SDS to employees. While AmeriCorps NCCC may provide the SDS for products members may come into contact with, it is incumbent on the Project Sponsor to take the lead in this area given their project-specific knowledge and expertise. As such, Sponsors should provide SDS for any and all chemicals or substances a team may use during the course of a project. If unavailable at the project site, SDS can be found online.

Sanitation and Hygiene

Safe Water

If you don't have a safe source of water, or are unsure of water safety, you should boil it prior to drinking. Boiling is the surest method to kill disease-causing organisms, including viruses, bacteria, and parasites. To ensure potential health hazards are killed off, bring the water to a rolling boil for one minute. At elevations above 6,500 feet, boil for three minutes. Boiling water will not always make water which may have chemical or material contaminants safe to drink. Water filters are needed to remove such contaminants.

You can improve the flat taste of boiled water by pouring it from one container to another and then allowing it to stand for a few hours or by adding a pinch of salt for each quart or liter of boiled water.

Handwashing

Keeping hands clean helps prevent the spread of germs and ingesting harmful substances. Hand washing prior to eating, preparing or handling food is required. If your tap water is not safe to use, wash your hands with soap and water that has been made safe to use through boiling. Follow the following steps:

- Wet your hands with clean, running water (warm or cold), turn off the tap, and apply soap.
- Lather your hands by rubbing them together with the soap. Be sure to lather the backs of your hands, between your fingers, and under your nails.
- Scrub your hands for at least 20 seconds. Need a timer? Hum the “Happy Birthday” song from beginning to end twice.
- Rinse your hands well under clean, running water.
- Dry your hands using a clean towel or air dry them.

Bathing

Bathing or showering should only be done with clean, safe water. Only if unavailable, water that is not safe to drink can be used for bathing. In such a situation, be careful not to swallow any water or get it in your eyes. Do not bathe in water that may be contaminated with sewage or toxic chemicals. This includes rivers, streams, or lakes that are contaminated by flood water.

Dental Hygiene

Similarly, brushing your teeth should only be done with clean, safe water.

Food Sanitation

To promote food sanitation and safety when on Spike and when on campus, the following four pillars of food preparation are recommended:

- Clean - Wash hands and surfaces often.
- Separate - Don't cross-contaminate (for example, store raw meat separate from fruits and vegetables).
- Cook - Cook to the right temperature.
- Chill - Refrigerate promptly.

AmeriCorps NCCC recommends adherence to the more detailed guidance found in the Food Safety Information of the U.S. Department of Agriculture, included in this Guide as Appendix 2.

Cold and Flu Prevention

The single best way to prevent seasonal flu is to get vaccinated each year, but good health habits like covering your cough and washing your hands often can help stop the spread of germs and prevent respiratory illnesses like the flu. The tips below will help you learn about steps you can take to protect yourself and others from flu and help stop the spread of germs.

- **Avoid close contact.** Avoid close contact with people who are sick. When you are sick, keep your distance from others to protect them from getting sick too.
- **Stay home when you are sick.** If possible, stay home from work, school, and errands when you are sick. This will help prevent spreading your illness to others.
- **Cover your mouth and nose.** Cover your mouth and nose with a tissue when coughing or sneezing. It may prevent those around you from getting sick. Flu and other serious respiratory illnesses, like respiratory syncytial virus (RSV), whooping cough, and severe acute respiratory syndrome (SARS), are spread by cough, sneezing, or unclean hands.
- **Clean your hands.** Washing your hands often will help protect you from germs. If soap and water are not available, use an alcohol-based hand rub.
- **Avoid touching your eyes, nose or mouth.** Germs are often spread when a person touches something that is contaminated with germs and then touches his or her eyes, nose, or mouth.
- **Practice other good health habits.** Clean and disinfect frequently touched surfaces at home, work or school, especially when someone is ill. Get plenty of sleep, be physically active, manage your stress, drink plenty of fluids, and eat nutritious food.

Appendices

Guidelines for Working with Children

When it comes to safety within a school, camp, etc. abide by the rules, regulations, and guidelines they have set in place. The organization shall provide a copy of the rules, regulations, and guidelines to the Assistant Program Director to be shared with the Team Leader, Unit Leader, and team before the team arrives on the project. In the case of an emergency, the Team Leader will notify the Unit Leader of the situation as soon as possible. Below are safety measures that Corps Members will follow.

In the event of a child being involved in an accident, injury or illness, the member will notify the site supervisor and Team Leader immediately. The site supervisor and sponsor will follow up with necessary next steps.

Before beginning work identify the following:

- Fire, explosions, or other disasters: be familiar with the evacuation routes for the various areas of the agency, and the safety shelters that may be located on site;
- Unwanted intruders: know how the agency addresses an unwanted intruder;
- Child abuse: be aware of policies on reporting abuse informed of or seen. It is the sponsor's responsibility to train Members in physical and sexual abuse warnings and reporting requirements, according to state and local laws. Also, understand how to avoid being placed in a situation where you could be considered an abuser;
- Disciplinary standards: know what disciplinary actions are regularly taken by faculty and staff, and what your role is with discipline;
- Other safety concerns: if you ever feel uncomfortable in a situation, seek clarification from the site supervisor and sponsor to have your question(s) addressed.

Basic Food Safety



United States Department of Agriculture
Food Safety and Inspection Service

Food Safety Information



Basics for Handling Food Safely

Safe steps in food handling, cooking, and storage are essential to prevent foodborne illness. You can't see, smell, or taste harmful bacteria that may cause illness. In every step of food preparation, follow the four steps of the Food Safe Families campaign to keep food safe:

- Clean - Wash hands and surfaces often.
- Separate - Don't cross-contaminate.
- Cook - Cook to the right temperature.
- Chill - Refrigerate promptly.

Shopping

- Purchase refrigerated or frozen items after selecting your non-perishables.
- Never choose meat or poultry in packaging that is torn or leaking.
- Do not buy food past "Sell-By," "Use-By," or other expiration dates.

Storage

- Always refrigerate perishable food within 2 hours--1 hour when the temperature is above 90 °F (32.2 °C).
- Check the temperature of your refrigerator and freezer with an appliance thermometer. The refrigerator should be at 40 °F (4.4 °C) or below and the freezer at 0 °F (-17.7 °C) or below.
- Cook or freeze fresh poultry, fish, ground meats, and variety meats within 2 days; other beef, veal, lamb, or pork, within 3 to 5 days.
- Perishable food such as meat and poultry should be wrapped securely to maintain quality and to prevent meat juices from getting onto other food.
- To maintain quality when freezing meat and poultry in its original package, wrap the package again with foil or plastic wrap that is recommended for the freezer.
- Canned foods are safe indefinitely as long as they are not exposed to freezing temperatures, or temperatures above 90 °F. (32.2 °C) If the cans look ok, they are safe to use. Discard cans that are dented, rusted, or swollen. High-acid canned food (tomatoes, fruits) will keep their best quality for 12 to 18 months; low-acid canned food (meats, vegetables) for 2 to 5 years.

Preparation

- Always wash hands before and after handling food.
- Don't cross-contaminate. Keep raw meat, poultry, fish, and their juices away from other food. After cutting raw meats, wash hands, cutting board, knife, and counter tops with hot, soapy water.
- Marinate meat and poultry in a covered dish in the refrigerator.
- Sanitize cutting boards by using a solution of 1 teaspoon chlorine bleach in 1 quart of water.

Thawing

- **Refrigerator:** The refrigerator allows slow, safe thawing. Make sure thawing meat and poultry juices do not drip onto other food.
- **Cold Water:** For faster thawing, place food in a leak-proof plastic bag. Submerge in cold tap water. Change the water every 30 minutes. Cook immediately after thawing.
- **Microwave:** Cook meat and poultry immediately after microwave thawing.

Cooking

- Cook all raw beef, pork, lamb and veal steaks, chops, and roasts to a minimum internal temperature of 145 °F (62.8 °C) as measured with a food thermometer before removing meat from the heat source. For safety and quality, allow meat to rest for at least three minutes before carving or consuming. For reasons of personal preference, consumers may choose to cook meat to higher temperatures.
- **Ground meat:** Cook all raw ground beef, pork, lamb, and veal to an internal temperature of 160 °F (71.1 °C) as measured with a food thermometer.
- **Poultry:** Cook all poultry to an internal temperature of 165 °F (73.9 °C) as measured with a food thermometer.

The Food Safety and Inspection Service (FSIS) is the public health agency in the U.S. Department of Agriculture responsible for ensuring that the nation's commercial supply of meat, poultry, and egg products is safe, wholesome, and correctly labeled and packaged.

USDA Meat & Poultry Hotline
1-888-MPHotline
(1-888-674-6854)

Basics for Safe Food Handling

Serving

- Hot food should be held at 140 °F (60 °C) or warmer.
- Cold food should be held at 40 °F (4.4 °C) or colder.
- When serving food at a buffet, keep food hot with chafing dishes, slow cookers, and warming trays. Keep food cold by nesting dishes in bowls of ice or use small serving trays and replace them often.
- Perishable food should not be left out more than 2 hours at room temperature--1 hour when the temperature is above 90 °F (32.2 °C).

Leftovers

- Discard any food left out at room temperature for more than 2 hours--1 hour if the temperature was above 90 °F (32.2 °C).
- Place food into shallow containers and immediately put in the refrigerator or freezer for rapid cooling.
- Use cooked leftovers within 4 days.
- Reheat leftovers to 165 °F (73.9 °C).

Refreezing

Meat and poultry defrosted in the refrigerator may be refrozen before or after cooking. If thawed by other methods, cook before refreezing.

COLD STORAGE CHART

These short, but safe, time limits will help keep refrigerated food from spoiling or becoming dangerous to eat. Because freezing keeps food safe indefinitely, recommended storage times are for quality only.

Product	Refrigerator 40 °F (4.4 °C)	Freezer 0 °F(-17.7 °C)
EGGS		
Fresh, in shell	3 to 5 weeks	Do not freeze
Raw yolks & whites	2 to 4 days	1 year
Hard cooked	1 week	Does not freeze well
LIQUID PASTEURIZED EGGS, EGG SUBSTITUTES		
opened	3 days	Does not freeze well
unopened	10 days	1 year
Mayonnaise Commercial, refrigerate after opening	2 months	Do not freeze
FROZEN DINNERS & ENTREES		
Keep frozen until ready to heat	—	3 to 4 months
DELI & VACUUM-PACKED PRODUCTS		
Store-prepared (or homemade) egg, chicken, ham, tuna, & macaroni salads	3 to 5 days	Does not freeze well
HOT DOGS & LUNCHEON MEATS		
Hot dogs		
opened package	1 week	1 to 2 months
unopened package	2 weeks	1 to 2 months

Product	Refrigerator 40 °F (4.4 °C)	Freezer 0 °F(-17.7 °C)
Luncheon meat		
opened package	3 to 5 days	1 to 2 months
unopened package	2 weeks	1 to 2 months
BACON & SAUSAGE		
Bacon	7 days	1 month
Sausage, raw — from chicken, turkey, pork, beef	1 to 2 days	1 to 2 months
Smoked breakfast links, patties	7 days	1 to 2 months
Hard sausage — pepperoni, jerky sticks	2 to 3 weeks	1 to 2 months
SUMMER SAUSAGE labeled "Keep Refrigerated"		
Opened	3 weeks	1 to 2 months
Unopened	3 months	1 to 2 months
HAM, CORNED BEEF		
Corned beef, in pouch with pickling juices	5 to 7 days	Drained, 1 month
Ham, canned labeled "Keep Refrigerated"		
Opened	3 to 5 days	1 to 2 months
Unopened	6 to 9 months	Do not freeze

Basics for Safe Food Handling

Product	Refrigerator 40 °F (4.4 °C)	Freezer 0 °F (-17.7 °C)
HAM, FULLY COOKED		
Vacuum sealed at plant, undated, unopened	2 weeks	1 to 2 months
vacuum sealed at plant, dated, unopened	"Use-By" date on package	
Whole Half Slices	7 days 3 to 5 days 3 to 4 days	
HAMBURGER, GROUND & STEW MEAT		
Hamburger & stew meat	1 to 2 days	3 to 4 months
Ground turkey, veal, pork, lamb, & mixtures of them		
FRESH BEEF, VEAL, LAMB, PORK		
Steaks	3 to 5 days	6 to 12 months
Chops	3 to 5 days	4 to 6 months
Roasts	3 to 5 days	4 to 12 months
Variety meats — tongue, liver, heart, kidneys, chitterlings	1 to 2 days	3 to 4 months
Pre-stuffed, uncooked pork chops, lamb chops, or chicken breasts stuffed with dressing	1 day	Does not freeze well
SOUPS & STEWS		
Vegetable or meat added Cooked meat & meat casseroles	3 to 4 days	2 to 3 months

Product	Refrigerator 40 °F (4.4 °C)	Freezer 0 °F (-17.7 °C)
COOKED MEAT LEFTOVERS		
Gravy & meat broth	3 to 4 days	2 to 3 months
	3 to 4 days	
FRESH POULTRY		
Chicken or turkey, whole	1 to 2 days	1 year
Chicken or turkey, pieces	1 to 2 days	9 months
Giblets	1 to 2 days	3 to 4 months
COOKED POULTRY LEFTOVERS		
Fried chicken	3 to 4 days	4 months
Cooked poultry casseroles	3 to 4 days	4 to 6 months
Pieces, plain	3 to 4 days	4 months
Pieces covered with broth, gravy	3 to 4 days	6 months
Chicken nuggets, patties	3 to 4 days	1 to 3 months
OTHER COOKED LEFTOVERS		
Pizza, cooked	3 to 4 days	1 to 2 months
Stuffing, cooked	3 to 4 days	1 month

Food Safety Questions?

Call the USDA Meat & Poultry Hotline

If you have a question about meat, poultry, or egg products, call the USDA Meat and Poultry Hotline toll free at **1-888-MPHotline (1-888-674-6854)**. The hotline is open year-round



Monday through Friday from 10 a.m. to 4 p.m. ET (English or Spanish).

Recorded food safety messages are available 24 hours a day. Check out the FSIS Web site at

www.fsis.usda.gov.

Send E-mail questions to MPHotline.fsis@usda.gov.

AskKaren.gov

FSIS' automated response system can provide food safety information 24/7 and a live chat during Hotline hours.



Mobile phone users m.askkaren.gov PregunteleaKaren.gov

FSIS encourages the reprint and distribution of this publication for food safety education purposes. However, USDA symbols or logos may not be used separately to imply endorsement of a commercial product or service.

The USDA is an equal opportunity provider and employer. Revised August 2013

Guide to Working With Hazardous Materials

Some types of hazardous materials are more likely to be encountered by AmeriCorps NCCC teams than others.

Guidelines for Specific Materials:

Mold

Mold is the common term for certain types of fungi, and is commonly found in areas with high levels of moisture and some type of organic matter for food. Mold is often encountered in buildings that have been flooded, or where water or other moisture has leaked into the building. Some types of mold produce spores that can aggravate allergies or respiratory problems in high concentrations, and a few types produce toxins that can harm human health.

To maximize the safety of NCCC members the following shall be considered:

- 1) A sponsor led briefing and training on the dangers of working with mold, and the safe procedures for mold remediation.
- 2) NCCC Members working on mold remediation projects must wear proper PPE (see page 17) as determined by the project sponsor and NCCC staff.
- 3) Appropriate “clean zones” must be established, along with procedures for decontaminating prior to eating, drinking, and at the end of the work day. This includes proper handling of PPE.

Lead

When working with lead based paint, always follow the safety instructions from the sponsor and site supervisor. In addition to those guidelines here are some tips on working with lead based paint:

Follow the guidance in EPA document: “Reducing Lead Hazards When Remodeling Your Home”, EPA 747-K-97-001. Available at <http://www.epa.gov/lead/pubs/rrpamph.pdf>

APPROVED TECHNIQUES

Wet scraping techniques are the ONLY safe way to work with lead based paint. Wet scraping means misting loose point with water before scraping it and it includes the additional safety precautions below:

- Paint should be sprayed with a mister bottle frequently to keep the amount of dust to a minimum
- Work a small area at a time. Spray a small area, scrape it off and move to

the next section

- Briefing and training on the part of the sponsor on safe procedures for dealing with scraping lead paint.
- Half or Full-Face Respirators with HEPA Filters
- Tyvek suits or Coveralls – (If coveralls are used, they should be washed every day)
- Gloves (both outer leather and inner latex or nitrile disposable)
- Disposable shoe covers
- Appropriate clean-up and disposal (HEPA-equipped vacuums)
- Using plastic sheets and appropriate containment techniques both inside and out.
- Establish appropriate “clean zone” and procedures for decontaminating prior to eating, drinking, and at the end of the work day. This includes proper handling of PPE.

Encapsulating lead based paint is a safe and allowable technique. This includes Priming or painting directly over the top of pre-existing lead based paint without any scraping.

PROHIBITED TECHNIQUES:

- Any dry scraping or sanding
- Use of heat guns or torches to soften paint
- Use of grinders and/or drill-driven wire brushes
- Use of sand-blasting or power washing to remove paint
- Wet sanding without HEPA-equipped dust capture.
- Vacuum cleanup without HEPA filters on equipment.

Asbestos

Do not disturb or remove asbestos under any circumstances. Before possibly working near any asbestos, a qualified person should check for the presence of asbestos containing materials and adhere to the following:

- Treat any fibrous material in pipe coverings, heating or furnace insulation, floor tile, shingles, or other insulation as asbestos until told otherwise.
- If asbestos fiber is suspected, the Team Leader will notify the Site Supervisor and the Unit Leader immediately, and the team will stop all work in the area where asbestos is suspected until further guidance is received.

Working on a Disaster Response Project

Entering a Structure for the First Time

- If building has been closed for an extended period of time, enter briefly to open doors and windows. Let building air out at least 30 minutes before reentering.
- Crew leader and one other person (preferably someone experienced in gutting) should enter the house first to evaluate the situation for potential hazards and familiarize themselves with the house. If you are leading a crew, make sure they know not to enter until you instruct them.
- Disconnect electrical, gas, and water.
- Always meet before you enter a house at the beginning of the day and come up with a plan of action. Make sure you know where everyone is at all times. Agree on a location away from the house and debris where respirators can be removed.

Debris Disposal

Before gutting begins, a specific location for debris should be agreed upon. Debris should be placed near road and piled up towards the house. Always build piles up not out.

Debris should be separated into the following piles:

- White goods: Any objects with an electrical cord or battery
- Chemicals: Any substances that would not usually be consumed. If bleach or ammonia is found, they should be placed on opposite ends of the yard, away from each other and other chemicals. Ammonia and bleach create a toxic gas when mixed, which cannot be filtered by respirators.
- Gas driven machine: Lawn mowers, gas grills, etc.
- House hold debris: Drywall, furniture, unsalvageable belongings

When gutting remember you are working in someone's home and most of the items you will find are important to the owner. Create a separate pile for salvageable articles. Always save legal documents.

Never touch fire arms, ammunition, or explosives. If you encounter any of these items, contact the local law enforcement agency and have them remove the items.

Never open a closed refrigerator. Refrigerators can create a seal which holds water and toxic materials. Seal the refrigerator with duct tape and remove it with a hand cart.

Demolition Safety

Whenever Members are conducting demolition activities, supervision is required. Cease working on demolition whenever you feel unsafe. Address unsafe conditions to your Team Leader or site supervisor. Supervisors are responsible for making sure that block energy sources are completely turned off before work begins. Pipes and vessels must also be purged. It must be communicated to Members if there are any support structures that cannot be torn down.

Demolition activities present the most danger if workers are not in communication with one another about falling objects, work zones and when swinging tools.



To maintain a safe environment:

- Remove and dispose of properly, or bend, nails in boards and place boards in a secure place;
- Before beginning demolition identify ahead of time anything that can be displaced by taking apart one structure and remove those objects;
- Schedule housekeeping at frequent intervals, to limit debris pile-ups within the building structure;
- Make sure that collapsing walls, debris, and any other structures torn down will not exceed the weight capacity of the floor on which Members are working;
- Do not over-exert yourself. If the job seems too hard, you may be doing it improperly, using the incorrect tool, are too tired, or need the assistance of another worker;
- Have clear work schedules so everyone knows where other people are working;
- Know what is on the other side of a wall before tearing it down.
- Only use welders, reciprocating saws, or other special tools if authorized and appropriately trained. Practice with every tool before using.