National Park Service
U.S. Department of the Interior

Northeast Temperate Network
Inventory & Monitoring Division

# Safety Plan for the Northeast Temperate Network Long-term Forest Monitoring Protocol

**ON THE COVER**
Sam Bietsch and Alex Gould sampling a forest plot, NPS photo

# Safety Plan for the Northeast Temperate Network Long-term Forest Monitoring Protocol

Kate M. Miller[1], Camilla E. Seirup[1], and Aaron S. Weed[2]

[1]National Park Service
Acadia National Park
PO Box 177
20 McFarland Hill Drive
Bar Harbor, ME 04609

[2]National Park Service
Northeast Temperate Network
54 Elm Street
Woodstock, VT 05091

May 2022

Northeast Temperate Network
54 Elm St
Woodstock, VT 05091

This is a self-published addendum to the Northeast Temperate Network's Long-term Forest Monitoring Protocol. The current protocol, standard operating procedures, data, and other information can be found online on the IRMA Data Store at https://irma.nps.gov/Datastore/Reference/Profile/2189101.

For more information on NETN's Long-term Forest Monitoring Protocol, visit NETN's website at https://www.nps.gov/im/netn/forest-health.htm

Views, statements, findings, conclusions, recommendations, and data in this report do not necessarily reflect views and policies of the National Park Service, U.S. Department of the Interior. Mention of trade names or commercial products does not constitute endorsement or recommendation for use by the U.S. Government.

Please cite this publication as:

Miller, K.M, C. E Seirup, and A. S. Weed. 2020. Safety Plan for the Northeast Temperate Network Long-term Forest Monitoring Program. Northeast Temperate Network. National Park Service, Woodstock, Vermont.

May 2022

# Contents

Page

Executive Summary ..... iv

Definitions (alphabetical) ..... 5

Overview ..... 6

Responding to an Incident ..... 6

Life-Threatening Medical Emergency ..... 6

Non-Emergency Incidents ..... 6

# Executive Summary

This safety plan documents the procedures used by the Northeast Temperate Network for activities related to the implementation of monitoring as described in NETN's Permanent Freshwater Wetland Monitoring Protocol (https://irma.nps.gov/Datastore/Reference/Profile/2208704). This safety plan was largely based on the NETN Forest Health Monitoring Protocol's safety plan, which involves many of the same safety concerns, and is implemented by the safe staff.

## Definitions (alphabetical)

Designated office staff (DOS): Refers to the Inventory and Monitoring (I&M) staff member who is designated to remain in the office and available to provide daily field work plans and emergency response services for the Forest Crew. The default DOS is the protocol lead.

Field team: Refers to the 2-3 person group of forest crew members and other monitoring staff who are working together at a sampling plot. A typical field day consists of 2 field teams who are working at separate forest plot locations.

Forest crew: Refers to the collective team of 3-4 NPS seasonal employees and 1 forest crew leader who conduct the majority of the field work for the forest protocol.

Forest crew leader: Refers to the field team leader for the forest crew. The forest crew leader is responsible for planning and making changes to the daily field work plans, communicating those changes to the DOS and other field team, following daily check-in procedures, and acting as alternative DOS when appropriate (see Daily Communication and Planning).

Monitoring staff: Refers to all personnel engaged in field activities related to this protocol. This includes National Park Service (NPS) employees, contractors, and volunteers either actively participating in or observing monitoring activities. Volunteers are required to have read and signed a Volunteer Agreement and all monitoring staff must read and sign the Job Safety Analysis form before participating in any surveys.

Protocol lead: Refers to the individual responsible for coordinating implementation of the forest protocol (plant ecologist in NETN, and MIDN program manager in MIDN). The protocol lead is the default DOS, unless he/she will be in the field or otherwise unavailable. The protocol lead is responsible for ensuring the forest crew is properly trained in NPS Safety procedures.

# Overview

The Northeast Temperate Network (NETN) and the Mid-Atlantic Network (MIDN) consider the occupational health and safety of their employees, cooperators, and volunteers to be of utmost importance, and are committed to ensuring that all monitoring staff receive adequate training on National Park Service (NPS) safety procedures, incident reporting, and emergency response prior to field work. This SOP and supporting appendices were designed to provide a summary of safety issues that should be covered during the pre-season training on long-term forest monitoring protocol, and to serve as a first reference in case of an incident. Topics covered include emergency procedures

and contacts, incident reporting, field preparation, safe field procedures, vehicle safety, and workers compensation procedures. A Job Safety Analysis (JSA), which documents hazards associated with this protocol and recommends approaches to mitigate these hazards, is included as an appendix (Appendix A) to this SOP. The JSA must be read and signed by all monitoring staff who conduct field work for this protocol. In addition to the JSA, members of the forest crew must read the entire Safety SOP, including all appendices. A Green-Amber-Red assessment of risk is included in Appendix B. This SOP does not cover first aid.

## Responding to an Incident

### *Life-Threatening Medical Emergency*

1. **Call 9-1-1 or park emergency number. If in an NETN park, use park radios to contact dispatch.** Uninjured, assisting personnel: Administer first aid to the best of your knowledge, ability and training. If appropriate, transport to emergency room. Directions to the nearest hospital from each park are in Appendix C and emergency numbers are in Appendix D. Locations of the nearest hospital to each park have also been programmed into the GPS navigation units that are provided to the forest crew.

2. Uninjured, assisting personnel: As soon as it is practical to do so, inform the protocol lead and the park's emergency contact of the incident (Appendix D).

3. For injured NPS employees and NPS volunteers, complete Worker's Compensation paperwork within 48 hours of incident (Appendix E). For other, non-NPS monitoring staff (i.e., contractors and cooperators), follow your organization's procedures for documenting accidents.

### *Non-Emergency Incidents*

1. For a non-emergency incident that may require medical attention, injured monitoring staff must contact the protocol lead immediately after incident.

2. For injured NPS staff and NPS volunteers, complete Worker's Compensation paperwork (must be done within 48 hours of incident, Appendix E). For contractors and cooperators, follow your organization's procedures for documenting accidents.

3. Injured monitoring staff should seek medical attention, if needed.

*NOTE: Never discard original paperwork related to workers compensation claims (including information from doctor's visits, CA-1, CA-2, CA-16 or CA-17 forms).*

## Field Preparation

All monitoring staff are responsible for maintaining a safe work environment for themselves and their coworkers.

### *Job Safety*

An important tool used to promote safe conduct is the Job Safety Analysis (JSA; sometimes called a Job Hazard Analysis or JHA). This approach is consistent with NPS Directors Order 50 and Reference Manual 50B for Occupational Health and Safety. The JSA process is to (1) identify hazards associated with field and laboratory settings, as appropriate, and (2) develop approaches to mitigate those hazards. All monitoring staff who conduct field work for this protocol must read and sign the JSA in Appendix A. In addition to the JSA, members of the forest crew must read the entire Safety SOP, including all appendices.

### *First Aid Kits and Training*

Every NETN and MIDN vehicle must have a first aid kit that is to remain with the vehicle at all times. In addition to the vehicle first aid kit, a backpacking first aid kit should be with each field team at all times while in the field. An inventory of first aid kits must be performed prior to each field season by the forest crew leader to ensure that all medical supplies are in sufficient quantity and haven't expired. Each first aid kit will have an inventory list of the supplies it must contain. Items in first aid kits that are used must be promptly replaced.

At the beginning of every field season the forest crew will receive basic first aid and CPR training, if they do not already have current certifications. In addition, permanent I&M staff, including the NETN protocol lead and forest crew leader, who work closely with the forest crew will be certified in Wilderness First Aid.

### *Daily Communication and Planning*

Field teams are expected to carry three modes of communication at all times while in the field. In all parks except ACAD, cell phones are the primary mode of communication. In ACAD, park radios are the primary mode of communication. Procedures for proper use of park radios are detailed in Appendix F. The secondary mode of communication can be a park radio (when not the primary). The third backup mode of communication is a personal locator beacon (PLB) to be used only for emergency situations. All modes of communication must be fully charged and tested at the beginning of each day. For directions on proper use of park radios during normal communications and during emergency situations, refer to Appendix F. To use the PLB, follow the directions on the beacon. For information on routine PLB maintenance, refer to Appendix G.

The forest crew leader must check in with a designated office staff (DOS) at the end of each field day, and forest crew members cannot leave lodging until everyone is accounted for at the end of the day. When the forest crew leader is safely out of the field, but other crew members are not, the crew leader will contact and relieve the DOS of his/her responsibilities. In this case, the crew leader assumes the role of the DOS until all crew members are out of the field. If the crew leader is not able

to reach crew members by the 6:30 pm deadline (or other mutually agreed-upon time), the crew leader should contact the program lead and local emergency response personnel. In the event that the forest crew leader is not in the field with the forest crew, then another member of the forest crew must be assigned check-in responsibilities for each day the forest crew leader is absent. The default DOS will be the protocol lead for each network, unless this person is in the field or unavailable (Table S1.1). Backup DOS will be appointed in the order listed in Table S1.1, and should be notified at least 24 hours in advance of when they will be needed. Additional contact information for potential DOS will be provided to the forest crew during the first week of training. All potential DOS will be provided with a full set of field maps and plot GPS coordinates, forest crew and personal cell numbers, and GSA vehicle information prior to the start of the field season.

If plans for the next field day were not finalized in time for the evening check-in, monitoring staff must check-in with the DOS the next morning. The morning check-in must include which plots each team is visiting and possible backup locations. If plans change, teams must contact each other, and let the DOS know of the change. Evening check-in must occur before 6:00 pm. It is recommended that crew members set an alarm for 5:30 pm to remind them to contact the DOS; likewise, it is also recommended that DOS set an alarm for 6:00 pm as a reminder that a call should be received from the field crew members. If one or more of the field teams are going to be in the field past 6:00 pm, they must contact each other, and the DOS at least 20 minutes before 6:00 pm to set a later check-in time. The preferred method of check-in is by cell phone.

**If the forest crew leader does not contact the DOS by 6:00 pm, or one of the field teams has been unaccounted for, the DOS should attempt to contact forest crew members using all possible modes of communication (e.g., forest crew and personal cell phones). If no contact is made by 6:30 pm, the DOS should contact park or local emergency response personnel to inform them of the situation and provide emergency response with the unaccounted for field team's last known location, a vehicle description, and names of monitoring staff involved.**

**Table S1.1.** Designated office staff for each network. The forest crew will all be supplied with office staff home and/or cell phone numbers during training.

| Network | Contact | Office | E-mail |
|---|---|---|---|
| NETN | 1. Kate Miller | 207-288-8736 | kathryn_miller@nps.gov |
| NETN | 2. Jim Comiskey | 703-258-2145 | jim_comiskey@nps.gov |
| NETN | 3. Aaron Weed | 802-359-3896 | aaron_weed@nps.gov |
| NETN | 4. Adam Kozlowski | 802-457-3368 x240 | adam_kozlowski@nps.gov |
| MIDN | 1. Jim Comiskey | 703-258-2145 | jim_comiskey@nps.gov |
| MIDN | 2. Kate Miller | 207-288-8736 | kathryn_miller@nps.gov |
| MIDN | 3. Nathan Dammeyer | 202-380-8370 | nathan_dammeyer@nps.gov |

### *Personal Gear*

Monitoring staff are responsible for ensuring they are wearing field appropriate clothing and footwear such as long pants, a hat and hiking boots. Depending on the weather, rain gear or warm clothing should be taken into the field and it is recommended that an extra set of clothing be kept in the vehicle. Monitoring staff avoid over-exposure to the sun by wearing sunscreen and/or protective

clothing. Monitoring staff should always carry ample water (2-3 liters) and food when working in the field. Dehydration is a serious condition that can lead to more serious conditions if untreated, and must be avoided. It is important to drink liquid frequently to maintain hydration on a warm day, even if you don't feel thirsty.

## Field Safety

### *Slip, Trip, Fall Prevention*

Uneven terrain, slippery rocks, dense brush, and fatigue are all hazards that could result in a slip, trip, or fall. The following guidelines must be obeyed by monitoring staff to avoid injury from slips, trips, or falls:

- Always wear appropriate footwear such as sturdy hiking boots
- Pay attention to where you are going, and remain alert of potential hazards
- Walk at an appropriate pace and adjust pace for changes in terrain (e.g., slow down and take smaller steps on slippery surfaces)
- When hiking long distances, take breaks to avoid fatigue
- When navigating to a location off trail, choose the safest route (this may not be the shortest route). Avoid river crossings, excessively steep terrain and sudden drop-offs. Always be careful when navigating over piles of scree, and alert others of falling rocks.

### *Proper use of Backpacks*

Forest crew members are expected to carry ≥ 35-40 pound packs over uneven terrain on a daily basis, and it is important for everyone to understand appropriate ways to pack, lift, and carry a heavy backpack to avoid serious back, neck and shoulder injuries. Monitoring staff must follow these guidelines:

- Use a sturdy field pack with padded and adjustable hip and shoulder straps. Packs will be provided for forest crew members.
- Pack heavy items in the center of the pack and close to your back.
- Make sure weight is evenly distributed from side to side.
- Once equipment is packed, tighten the compression straps to minimize movement inside the pack during travel.
- When picking up a heavy pack, use your legs to do the lifting, and use slow, smooth movements. Keep your back straight, and keep the pack close to your body. Do not twist or bend at the waist, and do not swing the pack quickly over one shoulder.
- Always carry a pack with both shoulder straps and with the hip belt and chest straps secured.

- The pack should be positioned near the center of the back, and most of the weight should rest on your hips.
- Keep your pack organized, and only carry the necessary equipment, food, and water to reduce weight.

***Weather***

Weather conditions in the eastern U.S. can be hazardous and can change quickly. The forest crew leader is responsible for planning their day according to the local weather forecast. Individual field teams are responsible for being aware of their surroundings and changing conditions, and for consulting with the forest crew leader if plans need to change.

***Thunderstorms***

Storms that produce strong winds and lightning are dangerous and should be avoided in the field. If caught in a lightning storm, seek shelter in a building or car as soon as possible. If no shelter is available, spread out and move to an open space. Squat low to the ground on the balls of your feet with your hands on your knees (do NOT lie flat on the ground). Avoid high elevations, conductive materials, and tall structures such as trees or telephone poles. If you are in the open and feel your hair stand on end (indicating lightning is about to strike), immediately make yourself the smallest target possible and minimize contact with the ground.

*NOTE: A person struck by lightning can often be revived by prompt administration of CPR and oxygen.*

***Excessive Heat and Sun***

Over-exposure to heat and sun can cause dehydration, heat exhaustion, or heat stroke. All are serious conditions that can be life threatening, and must be avoided. When working in hot weather, be sure to drink plenty of water and eat foods that can replace electrolytes. Wear loose and light colored clothing, including a hat to block the sun's rays. It may help to shift the field schedule to avoid working outside during the hottest part of the day.

**WARNING**: Signs of heat stroke include hot, red or spotted (usually dry) skin, and the sufferer may be mentally confused, delirious, having convulsions, or unconscious. If heat stroke is suspected, seek immediate medical attention!

***Poor Air Quality***

Summer ozone and particulate matter levels occasionally exceed federal health standards. Young children, seniors, and those suffering from asthma, chronic bronchitis, chronic obstructive pulmonary disease or heart problems are especially sensitive to poor air quality and should minimize outdoor activity when poor air quality warnings are posted. The risks of occasional exposure to ozone and fine particulate matter are minimal for healthy individuals.

When poor air quality warnings occur, it is advisable for the field teams to avoid overly strenuous activity during the hottest part of the day (pollution levels tend to be lowest early in the morning), and to stick to lower elevations under a forest canopy.

To check local air quality forecasts, or learn more about health risks of air pollution, visit the AIRNow intergovernmental agency website: http://www.airnow.gov/.

***Deer ticks and Lyme Disease***

Several species of ticks are commonly encountered in eastern U.S. parks while working in the field (Figure S1.1). This includes the deer tick (*Ixodes scapularis*), which is a known vector of Lyme disease and Ehrlichiosis. Monitoring staff must take the precautions outlined below to help minimize the chances of having an embedded tick that could lead to illness:

- Clothes treated with tick and insect repellents have been found to be fairly effective tick repellant. Therefore monitoring staff will be provided with deet and permethrin and encouraged to treat their clothing with permethrin periodically throughout the summer. Monitoring staff should carefully follow the application instructions on the spray bottles to ensure their safety. Permethrin will remain active for several weeks and through several washings.

- Monitoring staff should take additional precautions to protect themselves from ticks, including tucking pants in socks and tucking in shirts. Long sleeves and gaiters (especially when treated with permethrin) have been found to help. Monitoring staff may consider other barrier devises such as RynoSkin™, Under Armor®, elastic bands, and duct tape, when they are an option.

- Check clothes and skin for ticks regularly throughout the day. Ticks typically need to be embedded for at least 24 hours for disease transmission to occur; therefore, the earlier ticks are found and removed, the lower your chances are of acquiring a tick-borne illness.

- At the end of each field day, remove your clothes and inspect your ENTIRE body thoroughly for ticks. Have a co-worker inspect your back. Place your work clothing in a cloth laundry bag that has been treated with permethrin to keep ticks from escaping into your living quarters or vehicle.

- If you find a tick that is already embedded, use fine-tipped tweezers or a spoon-shaped tick remover to firmly grasp the tick close to your skin (Figure S1.2). Slowly and steadily pull the tick's body away from your skin. Do not twist or jerk the tick, as it may break off the head and leave it embedded. Be careful not to crush the tick's body to minimize the chances of it regurgitating fluids into the wound. Clean the bite area once the tick is removed with soap and water. Do not use heat or harsh fluids to get ticks to back out of skin.

- Consider saving the tick for later identification in a small plastic bag or firmly stuck to transparent tape. Tick ID can help in disease diagnosis.

- NPS staff or NPS volunteers who receive a deer tick bite, should fill out a complete record on the tick log. If this is the first tick bite, file a worker's compensation CA-1 claim to get a CA-16. Keep an eye out for any early symptoms of tick-borne diseases, If you start to notice symptoms, use the CA-16 to get medical treatment.

- Be sure to tell the doctor that you had an embedded tick, and that you regularly come in contact with ticks at work. Show the tick, if you saved it.

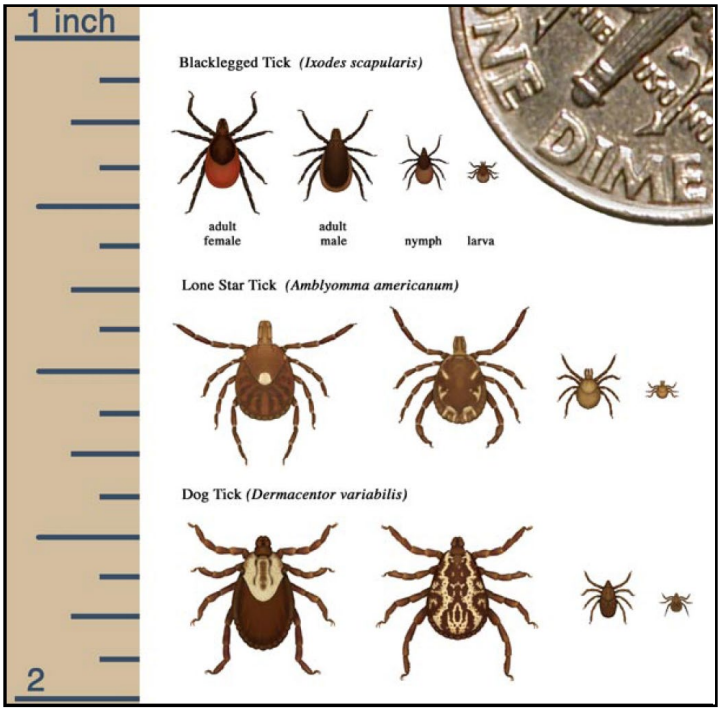



**Figure S1.1.** Tick species found in the eastern US.

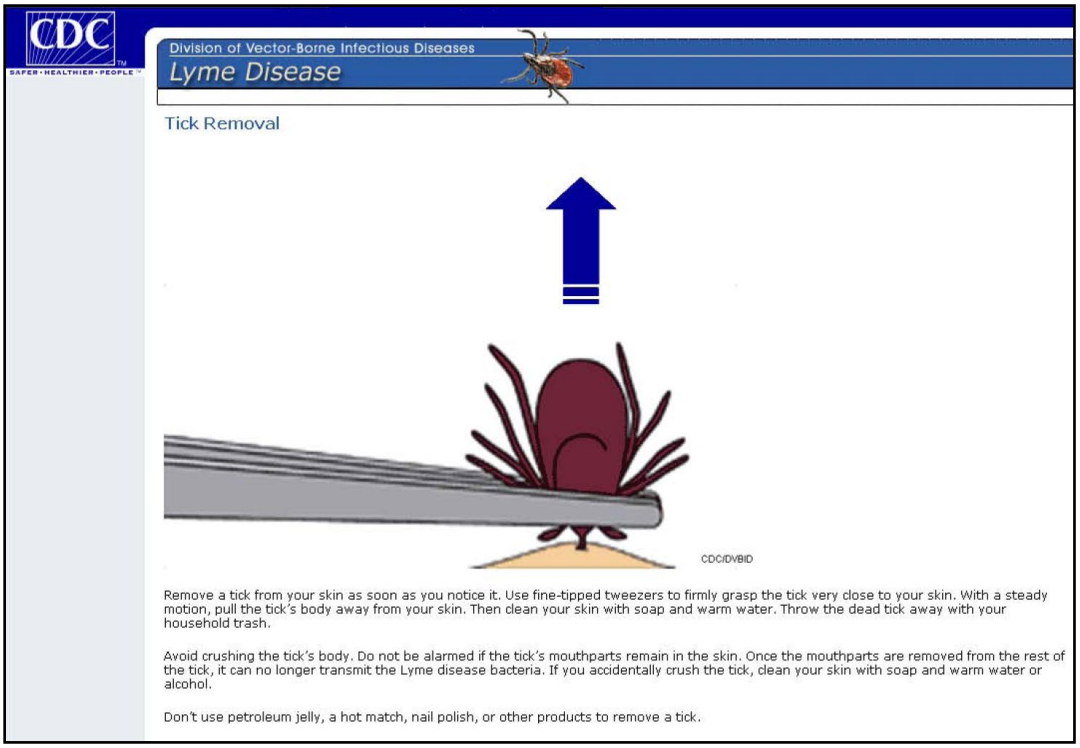



**Figure S1.2.** Centers for Disease Control recommended procedures for tick removal.

Signs and symptoms of tick-borne diseases:

1. **Lyme disease** symptoms may include a characteristic "bull's-eye" rash that develops a few days or weeks after the tick bite. At the same time, flu-like symptoms such as fever, malaise, fatigue, headache, muscle and joint aches appear. Other symptoms may include tingling or numbness in extremities, a spotted rash on extremities, bad headaches, high fever, joint aches, stiff neck, fatigue, or swollen glands. *Ixodes* ticks are most likely to transmit infection after feeding in skin for two or more days.

2. **Rocky Mountain. Spotted Fever** symptoms include sudden onset of fever, headache, and muscle pain, followed by development of spotted rash at wrists or ankles.

3. **Ehrlichiosis s**ymptoms are similar to Lyme disease, but differ with a rapid on-set of fever and severe headache and the absence of the rash around the tick bite.

4. **Babesiosis:** Most infected people have no symptoms. For those that do, there is a gradual on-set of not feeling well and loss of appetite and fatigue.

5. **Red Meat Allergy** symptoms may include an initial painful, itchy lesion greater than 50mm that lasts at least a week after the tick bite. Within 6 months a severe anaphylactic reaction may occur as much as 3-6 hours after eating beef, pork, or lamb.

Considerations for using repellents containing DEET:

- DEET products have been widely used for many years; these products have occasionally been associated with some adverse reactions. Frequently, reported reactions are about skin or eye irritation. There have been reports of central nervous system problems.

- By using products with lower concentrations of DEET and by applying as little of the product as needed for your outdoor work, you can reduce your expose to DEET.

- Products with about 20 – 30% DEET are considered effective for most insects, but do not seem to be effective against the black-legged or deer tick (*Ixodes scapularis)*

- Generally, products with about 20 – 30% DEET are considered safe for adults (except for those with allergies to DEET products) when applied as directed.

Considerations for using repellents containing permethrin:

- Products containing permethrin are for use on **clothing only – not for use on skin**. If permethrin is used improperly (e.g., sprayed directly on the skin), it can have negative health effects.

- Permethrin kills ticks that come in contact with treated clothing and one application lasts two weeks or more. Do not treat the clothing more than once every two weeks.

- Carefully read and follow manufacturer's instructions for application, and refer to the Material Safety Data Sheet (MSDS) if you have questions.

- Do not apply while clothing is being worn.
- Apply to clothing item in a well-ventilated outdoor area, protected from wind.
- Lightly moisten the fabric with permethrin – do not saturate the fabric.
- Allow clothing item to dry outdoors for at least two hours before wearing (4 hours in humid conditions).
- Keep treated clothes in a separate bag for storage and transport.
- Launder treated clothing separately from other clothing.

*More information on Permethrin:*
http://www.epa.gov/oppsrrd1/REDs/factsheets/permethrin_fs.htm
http://drugsafetysite.com/permethrin/

Prophylactic (preventative) use of antibiotics:
In addition to treating early stages of Lyme and other tick borne diseases, a new approach involves administering antibiotics to prevent Lyme disease transmission from the deer tick. While evidence is still preliminary, a single dose of antibiotics may reduce chances of Lyme transmission following a deer tick bite if 1) the tick was attached for 24 or more hours, 2) the bite occurred in an area where Lyme disease is common, AND 3) antibiotics can be started with 72 hours (3 days) of the time the tick was removed. It is only after symptoms of Lyme develop that a longer duration of antibiotics should be administered.

A few things to keep in mind about antibiotic therapy:
According to the US Public Health Service, Centers for Disease Control:

1. Every time a person takes antibiotics, sensitive bacteria are killed, but resistant germs may be left to grow and multiply. Repeated and improper uses of antibiotics are primary causes of the increase in drug-resistant bacteria.
2. Misuse of antibiotics jeopardizes the usefulness of essential drugs. Decreasing inappropriate antibiotic use is the best way to control resistance.
3. Antibiotic resistance can cause significant danger and suffering for people who have common infections that once were easily treatable with antibiotics. When antibiotics fail to work, the consequences are longer-lasting illnesses; more doctor visits or extended hospital stays; and the need for more expensive and toxic medications.

*More information on Lyme Disease and Ticks:*
Center for Disease Control:
http://www.cdc.gov/lyme/ (also a free webinar on tickborne diseases)

American Lyme Disease Foundation:
http://www.aldf.com/

Tick Management Handbook:
http://www.ct.gov/caes/lib/caes/documents/publications/bulletins/b1010.pdf

***Poisonous Plants and Animals***

Both for safety and protection of park resources, it is never advisable for monitoring staff to eat wild plants while working in a National Park, regardless of their confidence in plant identification. Keep a safe distance from wildlife.

Poison Ivy

Poison ivy (*Toxicodendron* spp.) is present in most NETN and MIDN parks, and can be very abundant in localized areas. Abundance of poison ivy is not a justification for excluding a plot. However, if anyone of the monitoring staff is susceptible to extreme allergic reactions to poison ivy, this person should avoid working in areas infested with poison ivy, and all gear that has been near poison ivy needs to be carefully cleaned. When working in areas with poison ivy, it is advisable that monitoring staff take precautions to avoid skin contact with any part of the poison ivy plant. Using a pre-exposure cream and wearing long sleeves and long pants, hats, and work or rubber gloves can help reduce amount of skin contact with the plant, and if needed, use poison ivy wipes after contact. Monitoring staff should be careful not to rub their faces when working around poison ivy. After working in an area with abundant poison ivy, monitoring staff should gently wash exposed skin in cool water with the specially provided poison ivy soap, and should change into fresh field clothes. At the end of a field day, the forest crew should also wash potentially contaminated equipment (e.g., quadrat, DBH tape, etc). If anyone has a minor allergic reaction, use the provided cream. If a severe allergic reaction occurs, the affected individual should seek medical attention, notify the protocol lead as soon as possible, and if an NPS employee or NPS Volunteer, file a workers compensation claim.

Venomous Snakes

The following species of venomous snakes may occur in some NETN and most MIDN parks: copperhead (*Agkistrodon contortrix*), cottonmouth (*Agkistrodon piscivorus*), and timber rattlesnake (*Crotalus horridus*). The best course of action is to avoid all snakes by keeping them at a safe distance. When in poisonous snake country, pay attention to where you put your hands and feet, and be aware around rock piles and bedrock outcrops. Note that many snake bites are purely defensive, and contain no venom. Bites from immature snakes are much more likely to contain a more dangerous amount of venom than bites from adult snakes. Should you receive a snake bite from a potentially poisonous snake, follow the procedure below:

- Treat all bites as if envenomation has occurred.
    - Time is of the essence
    - The field team should assign one person to use the radio or cell phone to call for assistance. This person should identify the call as a snakebite incident, and identify the victim's location and the closest possible point of access for responders.

  - In treating the victim, quickly remove rings, watches, shoes etc., before swelling begins.
  - Immobilize the bitten limb firmly with a splinted elastic (Ace) bandage and get the victim out of the woods and to a hospital as quickly as possible.
  - **Do not** use thin circulation restrictive cords, pack with ice for long periods (more than five minutes) or attempt to cut open or otherwise enlarge the fang punctures.

- Reassure the victim that they will be OK and otherwise attempt to maintain the calm both for the victim and for all others involved.
  - In a field team situation, begin leading the victim slowly out of the woods as soon as the bitten limb has been immobilized. **Move as slow as necessary to maintain a normal heart rate for the victim.** Waiting for assistance will only prolong the process of getting proper medical treatment.
  - In a solitary situation, establish radio contact and relay the necessary information as you walk slowly out of the woods. Focus on remaining calm and maintaining a normal heart rate.
  - It is better to spend your available time getting to proper medical treatment facilities than it is to fumble with field therapy and wait for assistance to reach you.

The range of the copperhead covers all MIDN parks, and the following NETN parks: Morristown NHP (MORR), Roosevelt Vanderbilt NHS (ROVA), Saratoga NHP (SARA) and Weir Farm NHS (WEFA). The likelihood of encountering a copperhead is low in NETN parks, but higher in MIDN parks, where the species is listed by NatureServe as “apparently secure” across the MIDN. Copperhead bites are not typically considered life threatening, and in most cases antivenin is not administered.

The range of the cottonmouth only covers the Southeastern corner of Virginia, and is listed by NatureServe as “vulnerable” (S3). Parks where this species may occur include Richmond NBP (RICH) and Petersburg NB (PETE). Cottonmouth bites that are defensive typically do not contain venom. However, cottonmouth bites are capable of delivering a lethal dose.

The range of the timber rattlesnake covers all MIDN and NETN parks except Acadia NP (ACAD). This species is listed by NatureServe as “critically imperiled” (S1: New Hampshire, Vermont, Massachusetts, and Connecticut) or “vulnerable” (S3: New York, Pennsylvania) throughout NETN, and the likelihood of encountering a timber rattlesnake in NETN parks is very low. The timber rattlesnake is more likely to occur in the MIDN parks located in Virginia such as, Appomattox Courthouse NHP (APPO), Booker T. Washington NM (BOWA), Fredericksburg and Spotsylvania NMP (FRSP), PETE, and RICH, where the species is listed as “apparently secure” (S4). Adult timber rattlesnakes are capable of delivering a lethal dose of venom.

Bees, Wasps, and Yellow Jackets

If any monitoring staff are allergic to bee stings, they should alert the forest crew leader and protocol lead and make sure to carry appropriate medications. If they carry an epinephrine injector, they should make sure all members of their field team know where it is carried and how to administer it. Be alert to potential hive and nest locations while hiking to plots and working on plots. Look for insects travelling in and out of one location (e.g., brush, ground holes, and hollow logs). If someone is stung, Benadryl and a cold compress may bring relief. If stinger is left behind, scrape it off of skin. Do not use tweezers as this squeezes the venom sack, worsening the injury. If the victim develops hives, asthmatic breathing, tissue swelling, or a drop in blood pressure, seek medical help immediately.

Black Bears

Black bears range throughout the Northeast and Mid-Atlantic states, but an encounter with a bear in the field is not likely since bears generally avoid people. Nevertheless, be alert for bears near dawn or dusk, and be especially aware of mother bears with cubs. Never approach cubs or come between a mother bear and her cubs. If a bear is encountered, face the animal but avoid eye contact, continually make noise, and slowly back away. Appear larger by standing tall, waving arms or jacket over your head. Do not freeze or remain silent, and NEVER run from a black bear. If charged or attacked, throw non-food objects and shout loudly. If bear begins to attack, fight back aggressively.

## Vehicle Safety

### *Responsibilities of NPS Vehicle Operators*

Field teams are responsible for inspecting their vehicles before every use to ensure the vehicles are in safe working condition. This includes visually checking tire pressure, adjusting mirrors, and making sure equipment is secure. Field teams must perform preventative maintenance in a timely manner (e.g., having oil changed by a qualified mechanic), and report any potential hazards or needed repairs to the protocol lead.

Rules that must be followed when operating an NPS vehicle:

- Everyone in a government vehicle is required to wear a seat belt.
- Use of cell phone (both talking and texting) is strictly prohibited while driving.
- Only NPS employees or authorized volunteers, cooperators and contractors are allowed to operate a government vehicle.
- Passengers who are not NPS employees or authorized volunteers, cooperators and contractors are forbidden from riding in a government vehicle.
- Drivers must adhere to all federal and state vehicle regulations, including all posted speed limits.

Because government vehicles are self-insured, damage resulting from government vehicle accidents are generally paid by the driver's program (e.g., NETN or MIDN). However, in cases of severe negligence, the driver found at fault for the accident may be personally liable.

### *GSA Rental Information*

Preventative maintenance records are monitored by GSA Fleet. When a service is required, the contact person for the rental (likely the protocol lead) will receive an e-mail that identifies the maintenance service required and when the vehicle is due for that service. Field teams must have requested services performed promptly after the notification.

If the GSA rental breaks down or requires immediate maintenance, consult the information on GSA roadside assistance (GSA Quick Facts) in the glove compartment of the vehicle on how to proceed.

### *Procedures for reporting a motor vehicle accident*

In the event of an automobile accident, a copy of this SOP (including all appendices) must be in every NPS and GSA vehicle at all times. Note that some procedures are different if vehicles are National Park Service (NPS) owned versus Government Services Administration (GSA) owned. Therefore GSA vehicles must also have a GSA Motor Vehicle Accident Reporting Kit (GSA Form 1627) in the glove compartment.

In case of an automobile accident in a **GSA-owned vehicle**, locate the GSA Motor Vehicle Accident Reporting Kit (GSA Form 1627) in the glove compartment, and follow the instructions therein. Also contact Duane Vallee at 603-666-7955 for NETN rental vehicles, and Darrell Thompson at 804-279-6800 for MIDN rental vehicles.

In the event of an automobile accident in an **NPS-owned** vehicle, follow the procedures listed in **Appendix H** to respond to the accident, follow the NER guidelines for reporting an accident (Appendix I), and complete the corresponding forms (SF-91 and SF-94) in Appendix J. Note that this SOP and corresponding appendices address Federal guidelines and requirements for accident reporting only. Cooperators and contractors may have additional reporting requirements.

## Contact Information

Northeast Temperate Network:
Kate Miller
Acadia National Park
PO Box 177 Eagle Lake Road
Bar Harbor, ME 04605
work: (207) 288-8736
e-mail: kathryn_miller@nps.gov

Mid-Atlantic Network:
Jim Comiskey
Fredericksburg & Spotsylvania NMP
120 Chatham Lane
Fredericksburg, VA 22405
work: (703) 258-2145
e-mail: jim_comiskey@nps.gov

## References and Additional Information

Acadia National Park. 2008. Acadia National Park Health and Safety Program Plan. Internal Document # A7619(ACAD-PB). U.S. Department of Interior, National Park Service, Acadia National Park, Bar Harbor, Maine.

American Lyme Disease Foundation. 2000. Tick ID Card. Tim Peters and Company Inc., Peapack, New Jersey.

Cass, W. 2007. Shenandoah National Park Long Term Ecological Monitoring System. SOP #2, version 1.2. U.S. Department of Interior, National Park Service, Shenandoah National Park, Luray, Virginia.

Sonoran Desert Network, National Park Service. 2008. SODN Field Safety Plan. Version 6.00. U.S. Department of Interior, National Park Service, Sonoran Desert Network Office, Tucson, Arizona.

# Appendix S1. A. Job Safety Analysis for the long-term forest monitoring protocol.

| | | |
|---|---|---|
| **JOB SAFETY ANALYSIS:**<br>General Field Work<br>Travel to, from, and within parks | **JOB TITLE:**<br>Field Crew Members<br><br>**DEPARTMENT:**<br>Northeast Temperate Network and Mid-Atlantic Network<br>**ANALYSIS BY:**<br>Kate M. Miller, NETN Plant Ecologist | ☒ **NEW**<br>☐ **REVISED**<br><br>☒ **REVIEWED**<br><br>Brian R Mitchell, NETN Program Manager |

**Required and/or Recommended Personal Protective Equipment:**

Required: Two modes of communication (e.g., radio and cell phone), first aid kit, driver's license, and poison ivy soil (e.g., tecnu).

Recommended as appropriate: rain gear, condition-appropriate footwear and clothing (preferably treated with permethrin), hat, safety glasses, and sufficient food and water.

| Tasks | Potential Hazards | Recommended Action or Procedure |
|---|---|---|
| Planning and Communication | Not being prepared and following plan/itinerary.<br>Communication breakdowns. | • Plan ahead. Know where you and each crew member will be going, particular hazards associated with travel routes, and sites to be visited that day. Check expected weather and stream conditions for day and sites to be visited.<br>• Understand itinerary of planned trip and follow carefully. Coordinate drop-off and pick-up times (or return times) and locations precisely.<br>• Check in with Designated Office Staff (DOS) prior to field work with a trip plan, and after field work to confirm crew safety. If return will be delayed, contact DOS before agreed-upon check-in time to establish a new check-in time. Always carry two methods of communication with full charges.<br>• Inform park staff when you are working in their park. |
| Emergency Preparedness | Not knowing emergency procedures.<br>Not having emergency supplies. | • Know who to contact and how to reach them in the event of a life-threatening or non-life-threatening emergency.<br>• Have current CPR and first aid certification, and know the certification status of co-workers.<br>• Keep a well-maintained first aid kit in each vehicle and with each field team. |

**Appendix S1. A.** Job Safety Analysis for the long-term forest monitoring protocol (continued).

| Tasks | Potential Hazards | Recommended Action or Procedure |
|---|---|---|
| General foot travel | Falling or tripping due to stream crossings, wading, wet areas, poor footing, uneven terrain, loose/rolling rocks and heavy pack. | • Use caution at all times. Walk carefully, watching footing.<br>• Wear appropriate boots for conditions especially stream wading. Stay aware of your feet. Address blisters and hot spots promptly.<br>• Avoid carrying excessive weight loads or unbalanced loads.<br>• When walking on a steep slope, lean upslope. Ensure that stems and vines are alive and can support your weight before relying on them.<br>• Use extreme caution traversing wet rocks, streams, steep slopes or blowdown areas. If crossing a stream, proceed cautiously, testing footing carefully and using a sturdy pole or walking stick for balance. |
| Working outdoors during | Being struck by falling trees or branches | • Listen to the weather forecast each morning (park radio and/or internet).<br>• Plan or adjust field work to avoid being out in thunderstorms.<br>• Postpone work if safety will be compromised by storm conditions. If you see or hear a thunderstorm coming, retreat from high ground and exposed areas. Go inside a sturdy building or vehicle, if possible.<br>• If you can't get inside and if you feel your hair stand on end, lightning is about to strike.<br>• Make yourself the smallest target possible and minimize contact with the ground.<br>• Crouch down on your pack on the balls of your feet and keep your feet close together. Place your hands on your knees and lower your head.<br>• During a thunderstorm members of the crew should stay separated by at least ten feet. |
| Poisonous plants, especially poison ivy | Contamination/toxicity from contact with poisonous plants | • Learn to identify poison ivy in its many growth forms.<br>• Wear long sleeves and pants.<br>• Be aware of poison ivy and avoid coming in direct contact with it.<br>• Thoroughly wash hands, equipment, and clothes with Tecnu or similar specialized soap after working in areas with poison ivy. |

**Appendix S1. A.** Job Safety Analysis for the long-term forest monitoring protocol (continued).

| Tasks | Potential Hazards | Recommended Action or Procedure |
|---|---|---|
| Working in bear territory | Black bear encounter | • Avoid working solo, if possible.<br>• Be especially alert near dawn or dusk.<br>• Be especially aware of mother bears with cubs. Never approach cubs or come between a mother bear and her cubs.<br>• Face the animal but do not make eye contact, continually make noise – do not freeze or remain silent.<br>• Appear larger by standing tall, waving arms or jacket over your head.<br>• Slowly back away – don't approach a bear.<br>• Never run from a bear.<br>• If bear charges, throw things and shout loudly.<br>• If bear attacks, fight back aggressively. |
| Bee, wasp, or yellow-jacket stings | Multiple stings from disturbing or stepping into nest areas | • Be alert to hives in brush, ground holes, or hollow logs. Watch for insects traveling in and out of one location.<br>• If you or anyone you are working with is known to have allergic reactions to be stings, tell the rest of the crew and your supervisor. Make sure you carry emergency medication with you at all times, and that your co-workers know where you keep it.<br>• Wear long sleeve shirts and pants, tuck in shirt. Bright colors and metal objects may attract bees or wasps.<br>• If you are stung, a cold compress may bring relief.<br>• If stinger is left behind, scrape it off of skin. Do not use tweezer as this squeezes the venom sack, worsening the injury.<br>• If the victim develops hives, asthmatic breathing, tissue swelling or a drop in blood pressure, seek medical help immediately. |
| Bites from mosquitoes, no-see-ums, and chiggers | Itchy reactions to multiple bites | • Wear long sleeves and pants.<br>• Avoid sitting on the ground or on logs, especially in dry sunny grassy areas.<br>• Use insect repellants. Do not apply Permethrin, Permanone, or greater than 30% DEET directly to skin, only to clothing.<br>• Carry after-bite medication to reduce skin irritation. |

**Appendix S1. A.** Job Safety Analysis for the long-term forest monitoring protocol (continued).

| Tasks | Potential Hazards | Recommended Action or Procedure |
|---|---|---|
| Poisonous snakes | Being bitten by a poisonous snake | • Wear snake gaiters when in known snake territories.<br>• Be alert for snakes in thick vegetation and rocky habitats.<br>• Look **before** putting hands or feet in places out of immediate view.<br>• Treat all bites as if evonomation has occurred.<br>• Immobilize the bitten area and keep it lower than the heart.<br>• Apply a bandage, wrapped two to four inches above the bite, to help slow the venom. This should **not** cut off the flow of blood from a vein or artery – the band should be loose enough to slip a finger under it.<br>• Remove rings, watches, shoes, etc. before swelling begins in earnest.<br>• Seek medical attention immediately and/or call for help. Remain calm.<br>• Rattlesnake bites are more likely to be life-threatening. |
| Ticks | Contracting diseases transmitted from ticks | • Use tick avoidance precautions, including pre-treating clothing with permethrin, tucking pants into socks and shirt into pants. Avoid sitting directly on the ground, especially in leaf litter, and check packs for ticks before putting them on.<br>• Wear clothes (including pants and long-sleeved shirts) that are l light colored and check for ticks on clothing periodically throughout the day.<br>• Conduct a thorough tick check every evening after completing field work.<br>• Know how to identify tick life forms, and the signs & symptoms of tick-borne diseases. |
| Walking through thick vegetation | Cut, scratched, or bruised by vegetation; Eye or ear injuries | • Shield your eyes and face with your hands, glasses, or hat when moving through tall thick brush. Keep your head and eyes pointed somewhat downward so your head hits obstacles before your eyes.<br>• Wear pants and long-sleeved shirts to protect bare skin.<br>• Look before you grab vegetation to avoid grasping thorny stems.<br>• Do not follow closely behind other people to avoid having branches snap back at you. |
| Working in heat, humidity, or cold | Heat exhaustion, sunburn, dehydration, hypothermia | • Evaluate the weather forecast each morning and plan field work accordingly.<br>• Carry and drink plenty of water.<br>• Take extra breaks during extreme weather events. Adjust the work routine to minimize exposure to extreme heat and humidity. |

**Appendix S1. A.** Job Safety Analysis for the long-term forest monitoring protocol (continued).

| Tasks | Potential Hazards | Recommended Action or Procedure |
|---|---|---|
| Hazard trees | Being struck by falling trees or branches. | 1. Take adequate garments for all possible weather conditions. Choose clothing that will keep you warm even if it gets wet.<br>2. Look up. Be alert for widow-makers, storm damaged trees with large broken limbs, and unstable standing dead trees.<br>3. Do not spend extended time in an area with hazard trees.<br>4. Do not attempt to tag or measure unstable snags. |
| High water stream crossings | Injuries from falling and/or drowning | 1. Thoroughly investigate area to find safest crossings<br>2. Wear appropriate foot gear for stream crossings.<br>3. It is safer to wade through high water, rather than rock hop across a stream trying to keep your boots dry.<br>1. Unbuckle your pack and be prepared to jettison gear should you lose your balance or fall in.<br>2. Use a sturdy pole or walking stick for balance. |
| Carrying a pack and other equipment | Injuries from improper packing, adjustment, and lifting of backpacks.<br>Injuries from improper carrying of gear. | • Learn how to properly pack, adjust, lift, and carry a pack.<br>• When hand-carrying gear, keep one hand free.<br>• If carrying long equipment, be aware of other people and never swing around quickly. Avoid allowing a long piece of equipment to project up and behind you, where you cannot see it. |

**Appendix S1. A.** Job Safety Analysis for the long-term forest monitoring protocol (continued).

| Tasks | Potential Hazards | Recommended Action or Procedure |
|---|---|---|
| General operation of a vehicle | Injuries from vehicle accident; Damage to vehicle | • Perform pre-operational check of vehicle (oil, tire pressure, tire condition, fluids, wipers, brakes, lights, gas, etc.). Report all needed repairs to the crew leader or supervisor promptly.<br>• Do not use the vehicle if it is unsafe.<br>• Wear seat belts with shoulder harnesses whenever vehicle is in motion. (E.O. 13043 4-16-97)<br>• Do not use cell phones or text while driving.<br>• Only NPS employees, volunteers, or authorized cooperators and contractors are allowed to operate or ride in a government vehicle.<br>• Ensure full visibility from all windows and mirrors. Clean windshield regularly.<br>• Always ride inside the vehicle.<br>• Properly store and secure all tools, equipment, and cargo so that they will not shift during sudden starts or stops.<br>• Plan your travel before you start. Know your route.<br>• Practice defensive driving; be alert to potential hazards.<br>• Obey all traffic laws and speed limits.<br>• Adjust speed to changing weather or traffic conditions<br>• Allow adequate following/stopping distance.<br>• Avoid distractions such as eating or adjusting navigation/GPS units while driving.<br>• Be alert for pedestrians or bicyclists using roadways.<br>• Be watchful for wildlife crossing roads, especially at early morning, dusk, and after dark.<br>• Do NOT drive if fatigued. Stay alert! |
| Driving on gravel, dirt, or un-maintained roads | Injuries from vehicle accident; Damage to vehicle | • Maintain a slow and safe speed for changing road conditions, such as loose gravel, large potholes, washed out road, fallen trees or rocks, etc.<br>• Be alert on narrow roads for oncoming vehicles and log trucks. Be prepared to slow down, pull over, or stop with little notice.<br>• Many roads require 4-wheel drive and/or high-clearance vehicles for safe passage. Use the appropriate vehicle for the terrain.<br>• Do not exceed the capacity of your vehicle or driving ability. When in doubt, turn around or back out.<br>Use spotters to assist in navigating obstacles and assessing water depth at stream crossings. |

*Mid-Atlantic Network /Northeast Temperate Network*

---

Please sign your name below to certify that you have read the Job Hazard Analysis and fully understand the Safety Standard Operating Procedures for the MIDN/NETN long-term forest monitoring protocol.

Print Name:_____ Signature:_____ Date:_____

Print Name:_____ Signature:_____ Date:_____

Print Name:_____ Signature:_____ Date:_____

Print Name:_____ Signature:_____ Date:_____

Print Name:_____ Signature:_____ Date:_____

Print Name:_____ Signature:_____ Date:_____

Print Name:_____ Signature:_____ Date:_____

Print Name:_____ Signature:_____ Date:_____

Print Name:_____ Signature:_____ Date:_____

# Appendix S1.B. Green-Amber-Red Risk Assessment.

This appendix describes application of the GREEN-AMBER-RED (GAR) Risk Assessment Model as outlined in the NPS Operational Leadership Student Manual (Version 2; July 2011) to the NETN Long-term Forest Monitoring Protocol. This GAR was adapted from the NETN Rocky Intertidal Monitoring Protocol by NETN Plant Ecologist (Kate Miller) on 21 March 2012, and approved by the NPS Northeast Region I&M Program Manager (John Karish) on 29 March 2012.

The GAR model allows for a general assessment of a task or operation and generates communication concerning the risks of an activity (in this case, conducting the field-based activities of the NETN Long-term Forest Monitoring Protocol). The most important part of the process is the team discussions leading to an understanding of the risks and how they will be managed.

The GAR is a seven step process. Each step is defined and explained in the context of the NETN Long-term Forest Monitoring Protocol below.

### Step 1: Define the Mission or Task

The NETN Long-term Forest Monitoring Protocol includes a field-based monitoring activity: sampling permanent forest plots. Monitoring staff are part of a team, and may work in multiple pairs when conducting the monitoring activities. The activity is conducted away from roads and trails, has been limited to locations with lower slopes (<30%). Potential safety hazards (along with mitigation measures) have been identified in a Job Safety Analysis (JSA; Appendix C). Of specific concern is that monitoring staff will regularly be working in fairly remote areas with limited communication options in the event of an emergency. A serious injury due to walking through thick brush or a trip and fall while traversing uneven or steep terrain are both possible and are the most significant risks encountered when conducting this activity.

### Step 2: Define the Threats

The threats/hazards for this activity along with mitigation measures are described in the associated JSA (Appendix A).

### Step 3: Assess Risk and Assign a Numerical Value

The numerical ranks (Table S1.B.1) were assigned by Kate Miller, the NETN Plant Ecologist, and the NPS project leader for the NETN Long-term Forest Monitoring Protocol. NETN and MIDN staff reviewed the ratings and analysis and their suggestions were incorporated. It should be noted that at the time numerical values were assigned (21 March, 2012) the protocol had been in operation for six years and considerable time and effort had already gone into evaluating and mitigating risks.

The GAR process is described in NPS Operational Leadership Student Manual (Version 2; July 2011).The activity risk can be visualized using the colors of a traffic light. If the total risk value falls in the GREEN ZONE (1-35), risk is rated as low. If the total risk value falls in the AMBER ZONE (36-60), risk is moderate and you should consider adopting procedures to minimize the risk. If the total value falls in the RED ZONE (61-80), you should implement measures to reduce the risk prior to starting the event or evolution.

**Appendix S1.B.** Green-Amber-Red Risk Assessment (continued).

The ability to assign numerical values or "color codes" to hazards using the GAR Model is not the most important part of risk assessment. What is critical to this step is team discussions leading to an understanding of the risks and how they will be managed.

**Table S1.B.1.** MIDN/NETN Long-term Forest Monitoring Protocol assigned risk codes of 0 (For No Risk) through 10 (For Maximum Risk) to each of the eight Green-Amber-Red Risk Assessment elements.

| Element | Rating |
|---|---|
| Supervision | 3 |
| Planning | 2 |
| Communication | 2 |
| Contingency Resources | 3 |
| Team Selection | 2 |
| Team Fitness | 4 |
| Environment | 6 |
| Event/Evolution Complexity | 6 |
| Total Risk Score | 28 |

## Step 4: Identify Risk Control Options

### *Supervision*

The MIDN/NETN Long-term Forest Monitoring Protocol clearly identifies personnel, roles and responsibilities, and a chain of command. The NETN Plant Ecologist is the supervisor in NETN and the MIDN Program Manager is the supervisor in MIDN. The supervisor is either in the field with one of the teams or is available to answer questions from monitoring staff. The Forest Crew Leader is the field coordinator, and is in the field with one of the field teams at all times. Monitoring staff will always work in teams of 2 or more, and will never work alone. Monitoring staff are required to follow check-in and check-out procedures as stated in this SOP. A score of 3 was assigned because there is often one team working without a Forest Crew Leader or supervisor. However teams maintain strong lines of communication and are always aware of the locations each team is working.

### *Planning*

The MIDN/NETN Long-term Forest Monitoring Protocol includes numerous SOPs that explain training, personal safety, emergency communication (equipment and contacts), and appropriate field activities. Monitoring staff are required to read the field SOPs during training week, and this includes a detailed Safety SOP, which they must sign in acknowledgement that they have read and understood the SOP. Monitoring staff receive first aid and CPR training during training week, if they are not already certified. In addition, permanent monitoring staff who work closely with the crew and the Forest Crew Leader receive more extensive first aid and safety training. Daily sampling plans are agreed upon by both field teams at the beginning of the day, and these plans are provided to a designated office staff member who has copies of field maps for each park. Due to this advance planning, written documentation, and training procedures, a low score (2) was assigned.

### *Communication*

Routine and emergency communication procedures are explained in the relevant SOPs, and monitoring staff are provided with the full SOP and laminated field note cards that cover

procedures and list contact information specific to each park. The procedures include coordination with park natural resource managers and other designated park staff. The Safety SOP also includes a daily check-out/check-in procedure that is required for monitoring staff to follow to ensure that a responsible party knows if someone has not returned from the field activity in a timely manner. Each field team is provided multiple modes of communication to ensure good communication between field teams. Due to this advance planning, written documentation, training procedures and multiple forms of communication, a low score (2) was assigned.

***Contingency Resources***

Contingency resources include communication equipment and procedures that explicitly involve park rangers, park dispatch, and 9-1-1. Monitoring staff are required to carry at least 3 of the provided modes of communication: 1) NPS issue cell phone pre-programmed with emergency contacts for each park, 2) a park radio with park frequencies and a direct NETN radio frequency, 3) SPOT messenger and 4) a personal locator beacon (PLB). In parks with poor cell coverage (ACAD), a cell phone does not count as one of the 3 modes of communication. With the PLB and SPOT Messenger, notification of emergency services should happen within minutes of an incident, but emergency services may not be able to reach the crew quickly due to the remoteness of some sites. A score of 3 was assigned instead of a lower score because of the potential delay before emergency services could reach the crew.

***Team Selection***

The monitoring protocol clearly identifies the essential skills and abilities required to execute this protocol in a competent manner. Prior field experience is strongly preferred for team members. Team members also attend a week long training the covers sampling and safety procedures in detail, and is prior to sampling. All team members will have basic first aid and CPR skills, and will receive first aid and CPR training during the first week of forest crew training if they do not have these skills. Team members who are less experienced are paired with a more experienced team member until they are sufficiently trained. Due to the strong preference for hiring experienced team members, and extensive pre-season training, a score of 2 was assigned.

***Team Fitness***

Team selection should ensure an overall high level of initial team fitness. Monitoring staff are in the field for long hours (averaging 10 hour days) and may be required to hike several miles over rough terrain and work in harsh weather conditions (i.e., high heat/humidity, cool and rainy). Team members are instructed to carry sufficient food and water, rain gear, and to be aware of the weather forecast. Team members are also given the option to adjust their schedule during heat waves so they are not working during the hottest part of the day. A score of 4 was assigned because the field days are long and the work can be strenuous. Monitoring staff must be diligent about adequate rest and nourishment to ensure that fatigue does not become a factor.

***Environment***

Environment was assigned a medium score (6) primarily because the work often involves activities in dense foliage away from trails, on uneven and occasionally steep terrain, and unexpected

**Appendix S1.B.** Green-Amber-Red Risk Assessment (continued).

encounters with dangerous wildlife (e.g., black bears, venomous snakes, etc.) are possible. Activities occur during a variety of weather conditions, but are cancelled by thunderstorms and high winds.

***Incident Complexity***

Incident complexity was also assigned a medium score (6) because daily field conditions change due to weather, and terrain can be highly variable. Individual monitoring staff must use judgment and experience to respond appropriately, and should involve the NETN Forest Crew Leader or the NETN Plant Ecologist in any decision where there is uncertainty.

### Step 5: Evaluate Risk vs. Gain

The NETN Program Manager has determined that the activity, if carried out in accordance with all SOPs, has an acceptable level of risk.

### Step 6: Execute Decision

The decision made by the NETN Plant Ecologist is to conduct the activity in accordance with NETN Long-term Forest Monitoring Protocol Standard Operating Procedures (SOPs).

### Step 7: Supervise – Watch for Change

The NETN Plant Ecologist continually solicits feedback from the contractor and NPS staff on safe execution of the protocol including risk control options not considered thus far.

# Appendix S1.C. Directions to nearest hospital from each park, separated by network.

### Northeast Temperate Network
### Acadia National Park– Headquarters

Directions to nearest hospital start at the **Headquarters building** (A) in Acadia National Park and end at the **Mount Desert Island Hospital** (B) in Bar Harbor, Maine. Destination is 1.6 miles and **five minutes** away.

**Phone Number:** (207) 288-5081.

**Location:** 10 Wayman Lane, Bar Harbor, ME 04609

**Directions:**

1. Head East (turn right) on Eagle Lake Road/ ME- 233 toward Arata Drive. Continue to follow ME-233 for 1.3 miles
2. ME-233 turns right and becomes Main St./ ME -3. Continue for 0.2 miles.
3. Turn left at Wayman Ln. MDI Hospital will be on the left (115 ft).

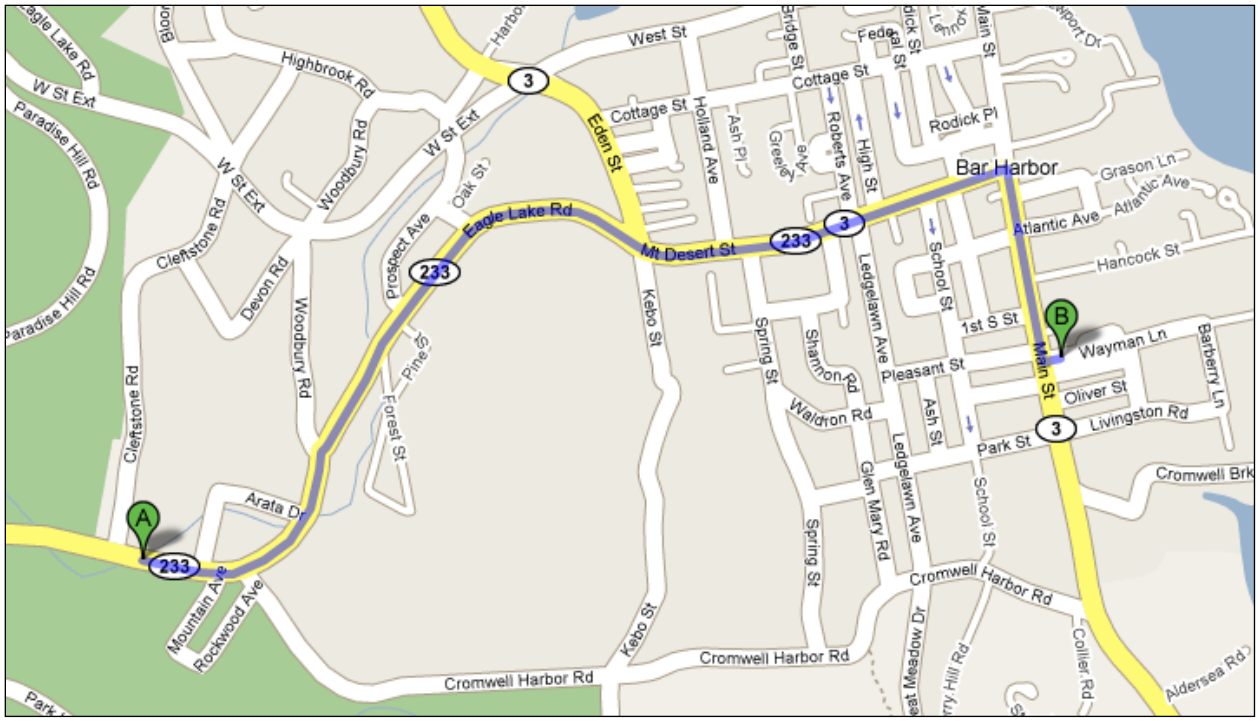



**Figure S1.C.1**. The route from Acadia NP Headquarters to the Mount Desert Island Hospital in Bar Harbor, Maine.

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

### Acadia National Park– Seawall

Directions to nearest health clinic start at the **Seawall Park Housing** (A) in Acadia National Park and end at the **Community Health Center** (B) in Southwest Harbor, Maine. This clinic has been good for treating Lyme disease, but does not have emergency services. Destination is 2.3 miles and **four minutes** away.

**Phone Number:** (207) 244-5630.

**Location:** 9 Village Green Way, Southwest Harbor, ME 04679

**Directions:**

1. Head east on ME-102 Alt N/Seawall Road toward Seascape Ln for 2.2 miles.

2. Turn right onto ME-102 N/ Main St. and go 0.7 mi.

3. Turn left onto Village Green Way and go 0.1 mi. Community Health Clinic is at 9 Village Green Way.

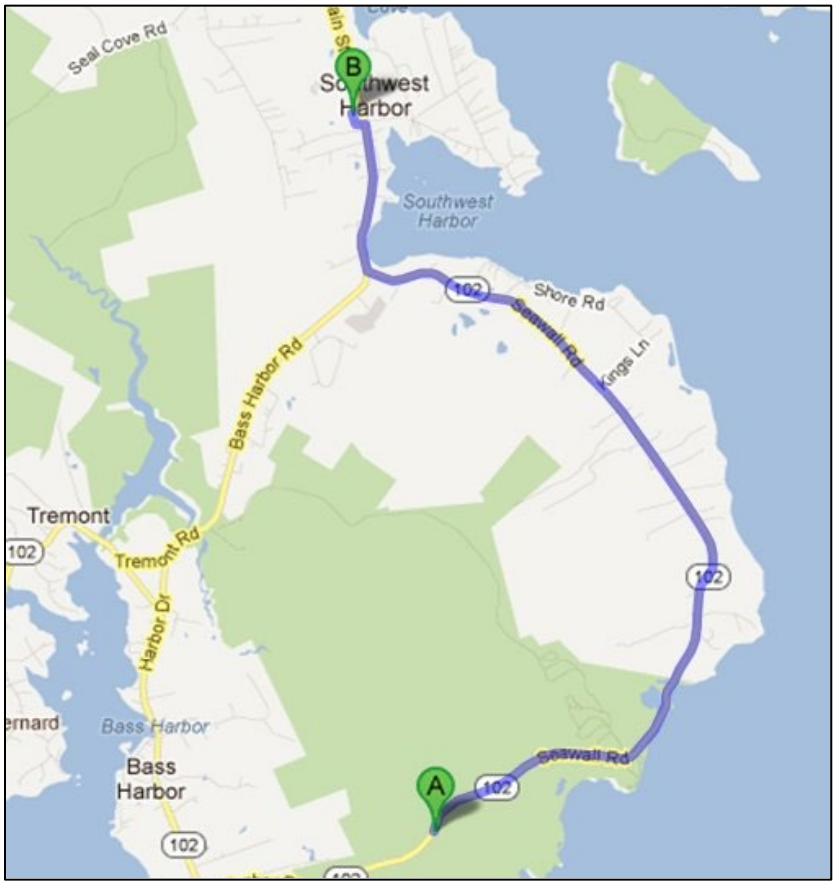



**Figure S1.C.2**. The route from Seawall Campground (A) to the Community Health Center (B) in Southwest Harbor, Maine.

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

## Acadia National Park– Schoodic

Directions to nearest health clinic start at the **Schoodic Education and Research Center Entrance** (A) in Acadia National Park and end at the **Eleanor Eidener Dixon Memorial Clinic** (B) in Gouldsboro, Maine. Destination is 11.5 miles and **24 minutes** away.

**Phone Number:** (207) 963-4066.
**Location:** 37 Clinic Road, Gouldsboro, ME 04607
**Directions:**

1. Head south out of parking lot and go about 240 feet.

2. Take the 1st left and go 0.1 miles.

3. Turn left toward Moore Rd and follow 3.3 miles.

4. Continue straight onto Moore Rd for 1.5 miles.

5. Turn left onto ME-186 W/Main St and proceed 0.6 miles.

6. Turn right onto ME-186 W/Newman St and follow for 6.0 miles.

7. Continue onto Clinic Rd and go 0.1 miles. Clinic will be on the left.

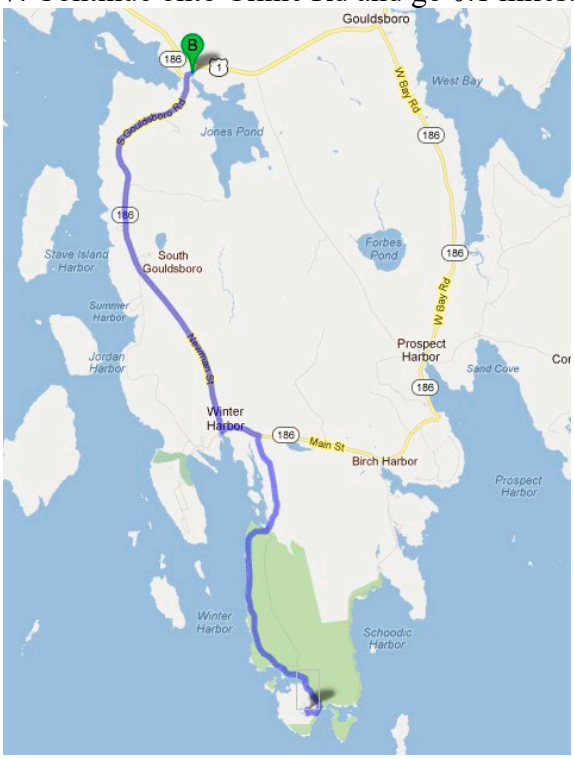



**Figure S1.C.3**. The route from Schoodic Education and Research Center (A) in Acadia National Park to Eleanor Widener Dixon Memorial Clinic (B) in Gouldsboro, Maine.

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

### Marsh-Billings-Rockefeller National Historical Park

The nearest hospital to Woodstock, Vermont is Dartmouth Hitchcock Medical Center (DHMC) in Lebanon, New Hampshire, and is about 22 miles and **31 minutes away**. Directions to nearest hospital start at the **Billings Farm parking lot** (A) in Woodstock, Vermont and end at the **Dartmouth Hitchcock Medical Center** (B) in Lebanon, New Hampshire:

**Phone Number:** (603) 650-5000
**Location:** 1 Medical Center Drive, Lebanon, NH.

**Directions:**

1. From the Billings-Farm parking lot, turn left at the Y onto Elm Street/ VT-12. Continue for 0.4 miles.

2. Turn left at Pleasant St./ VT-12. Continue for 0.6 miles.

3. Turn left at US-4/VT-12/Woodstock Rd. Continue to follow US-4 for 9.4 miles.

4. Turn right and go 0.1 miles.

5. Take the ramp onto 1-89 South and go 8.1 miles.

6. Take exit 18 for NH-120 toward Hanover and go 0.2 miles.

7. Turn left at Centerra Pkwy/Lahaye Drive and continue on Lahaye Drive for 0.5 miles.

8. Turn right at the Hitchcock Loop Road/ Medical Center Drive and continue for 0.3 miles.

9. Turn left at DHMC East Entrance, and turn right to stay on DHMC East Entrance.

**Figure S1.C.4**. Route from Marsh-Billings-Rockefeller NHP in Woodstock, Vermont to Dartmouth Hitchcock Hospital in Lebanon, New Hampshire.

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

### Minute Man National Historical Park

Directions to nearest hospital start at the **Brooks Village parking lot** (A) on 2A (N Great Road) in Minute Man National Historical Park, and end at **Emerson Hospital**. Destination is 3.9 miles and about **8 minutes** away:

**Phone Number:** (978) 369-1400
**Location:** 133 Old Road to 9 Acre Corner, Concord, MA 01742.
**Directions:**

1. Head west on Massachusetts 2A W/N Great Road/ Lexington Rd. toward Brooks Road. Continue for 3.8 miles.

2. Turn left onto Old Road to 9 Acre Corner. Destination will be on left side of road.

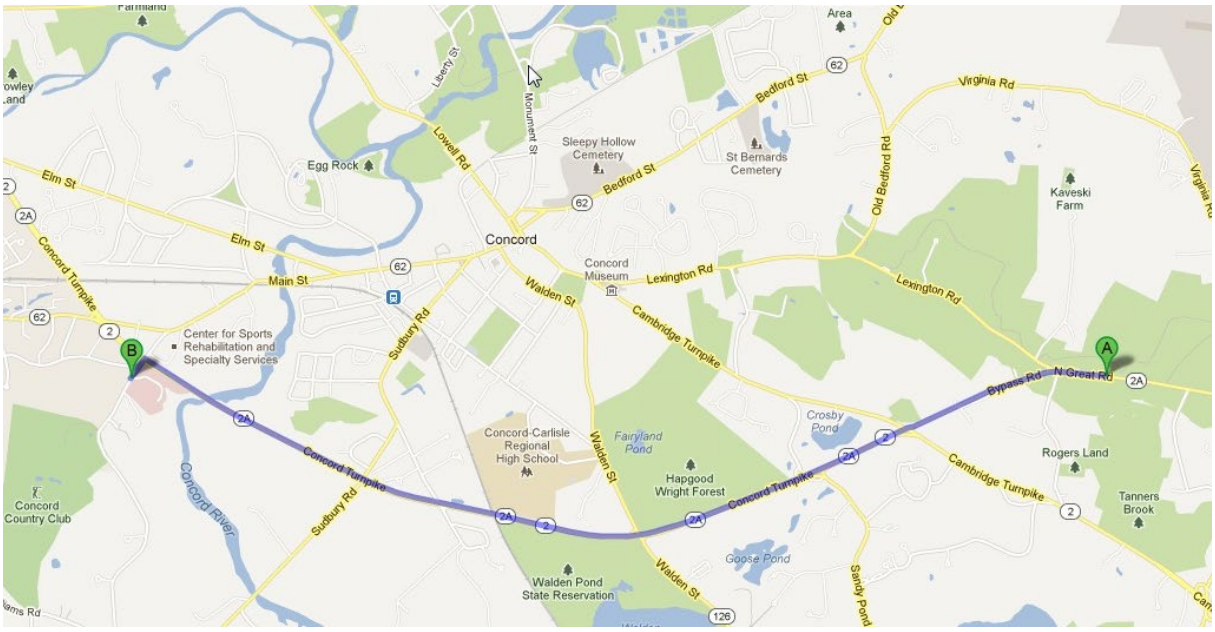



**Figure S1.C.5**. Route from Minute Man NHP Brooks Village parking lot in Concord, Massachusetts to Emerson Hospital, also in Concord.

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

### Morristown National Historical Park

Directions to nearest hospital start at the **Jockey Hollow Visitor Center** (A) in Morristown National Historical Park, and end at **Morristown Memorial Hospital** (B). Destination is 6.5 miles and about **18 minutes** away:

**Phone Number:** (973) 971-5000.
**Location:** 100 Madison Ave, Morristown, NJ 07962.

**Directions:**

1. Head northwest on Cemetary Rd. toward Sugarloaf Rd. Continue 1.2 miles.

2. Turn left at Sugarloaf Rd. Continue 1.3 miles

3. Turn left on Jockey Hollow Rd. Continue 0.8 miles

4. Continue on Western Ave. Continue 1.9 miles.

5. Turn right on NJ-124/ Washington St. Continue 0.2 miles.

6. Continue on NJ-124/ South St. for 0.7 miles.

7. Turn slight left at Madison Ave/ NJ-53. Continue 0.5 miles. Destination is on the left.

**Figure S1.C.6**. Route from Morristorn NHP Jockey Hollow Visitor Center to the Morristown Memorial Hospital, both in Morristown, New Jersey.

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

### Roosevelt-Vanderbilt National Historic Sites (ELRO, HOFR, VAMA)

Directions to nearest hospital start at the **Visitor Center parking lot** (A) at the Home of FDR National Historic Site**,** and end at **St. Francis Hospital** (B). Destination is 4.8 miles and about **9 minutes** away:

**Phone Number:** (845) 483-5000.
**Location:** 241 North Road, Poughkeepsie, NY 12601.

**Directions:**

1. Head south on Albany Post Rd./ Rte-9/ US-9 toward Kessler Dr. Continue for 3.7 miles.

2. Turn left onto Delafield St. Continue for 0.2 miles.

3. Turn left onto Spruce St. Continue for 308 ft.

4. Spruce St. turns right and becomes Talmadge St. Continue for 0.2 miles.

5. Turn left at NY-9G/ Washington St. Continue for 0.4 miles.

6. Destination is on the right side of Washington St.

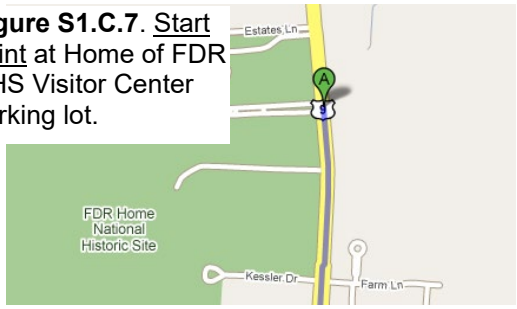



**Figure S1.C.7**. Start point at Home of FDR NHS Visitor Center parking lot.

**Figure S1.C.8**. End point at St. Francis Hospital.

**Figure S1.C.9**. The entire route.

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

### Saint-Gaudens National Historic Site (Option 1)

Directions to nearest hospital start at the **Visitor Center parking lot** (A) at Saint-Gaudens National Historic Site**,** and end at **Mount Ascutney Hospital** (B). Destination is 3.8 miles and about **10 minutes** away:

**Phone Number:** (802) 674-6711.
**Location:** 289 County Road, Windsor, VT 05089.

**Directions:**

1. Head southwest on St. Gaudens Rd. toward NH-12A/ NH Rte 12A/ Wilson Rd. Continue for 0.6 miles.

2. Take a slight left at NH-12A/ NH Rte 12A/ Wilson Rd, and continue for 1.5 miles.

3. Turn right onto Bridge St. and continue for 0.3 miles.

4. Turn left on State St. and go 0.7 miles.

5. Turn right at County Rd. and go 0.3 miles.

6. Destination is on the left side of County Rd.

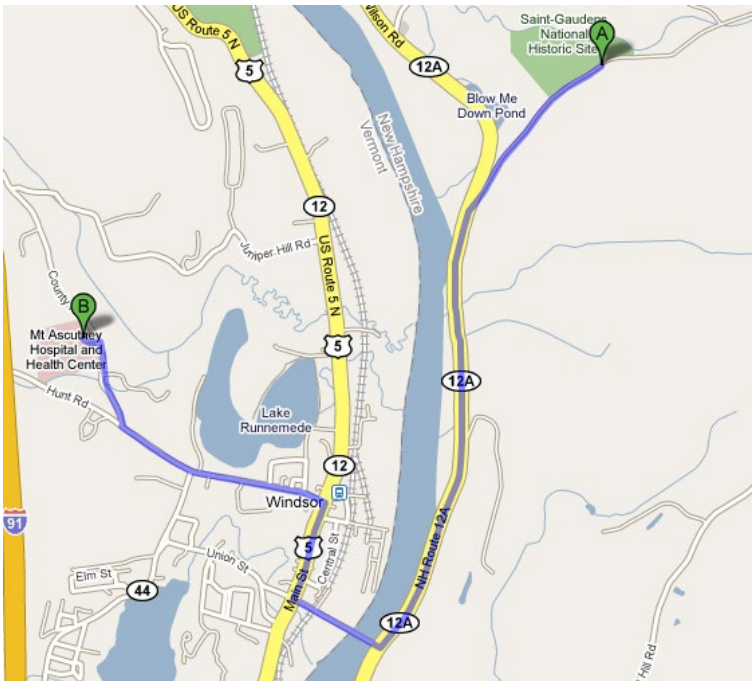



**Figure S1.C.10**. Option 1 route from Saint-Gaudens NHS Visitor Center parking lot to Mount Ascutney Hospital.

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

### Saint-Gaudens National Historic Site (Option B)

An alternative to Mount Ascutney Hospital is the Dartmouth Hitchcock Medical Center in Lebanon, New Hampshire. For injuries that are not life-threatening, DHMC is the better option. Directions to DHMC start at the Visitor Center parking lot (A) at Saint-Gaudens National Historic Site**,** and end at Dartmouth Hitchcock Medical Center in Lebanon, NH (B). Destination is 19.5 miles and about **33 minutes** away:

**Phone Number:** (603) 650-5000
**Location:** 1 Medical Center Drive, Lebanon, NH.

**Directions:**

1. Head southwest on St. Gaudens Road toward NH-12A/NH Route 12A/ Wilson Rd. Continue for 1 mile.

2. Turn sharp right at NH-12A/NH Route 12A/ Wilson Road, and continue on NH-12A for 11.4 miles.

3. Merge onto I-89 S via the ramp to Concord/Lebabon and go 3.8 miles.

4. Take exit 18 for NH-129 toward Hanover and go 0.2 miles.
5. Turn left at Centerra Pkwy/Lahaye Drive and continue on Lahaye Drive for 0.5 miles.

6. Turn right at the Hitchcock Loop Road/ Medical Center Drive and continue for 0.3 miles.

7. Turn left at DHMC East Entrance, and turn right to stay on DHMC East Entrance.

**Figure S1.C.11**. Option 2 route from Saint-Gaudens NHS to Dartmouth Hitchcock Medical Center.

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

## Saratoga National Historical Park

Directions to nearest hospital start at the **Saratoga National Historical Park entrance on NY-32** (A)**,** and end at **Saratoga Hospital** (B). Destination is 11.6 miles and about **24 minutes** away.

**Phone Number:** (518) 587-3222
**Location:**.211 Church Street, Saratoga Springs, NY 12866

**Directions:**

1. Turn right onto NY-32 N and go 0.8 mi.

2. Turn left onto Co Rd 71 and go 1.5 mi.

3. Turn right onto Sweer Rd. and go 1.4 mi.

4. Continue on Nielson Road for 0.9 mi.

5. Turn right onto Chapman Hill Rd and go 0.5 mi.

6. Continue onto Fitch Rd.

7. Turn right onyo New York 9P N and continue 2.2 mi.

8. Turn right onto Gilbert Rd. and go 1.3 mi.

9. Turn left onto Lake Ave. and go 2.1 mi.

10 Continue onto Church Street. After 0.6 mi, destination will be on the right.

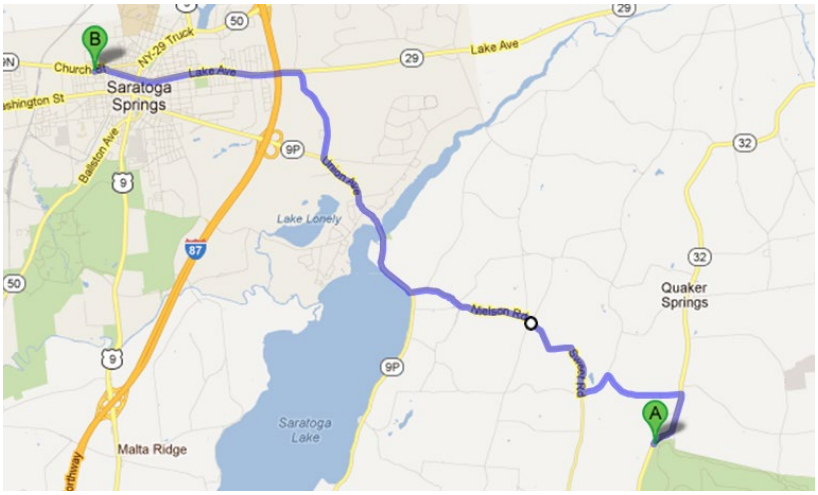



**Figure S1.C.12**. Route from Saratoga NHP entrance on NY-32 to Saratoga Hospital.

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

### Weir Farm National Historic Site

Directions to nearest hospital start at **Weir Farm National Historic Site** on Nod Hill Road (A), and end at **Danbury Hospital** (B). Destination is 12.2 miles and about **22 minutes** away.

**Phone Number:** (203) 739-7000
**Location:** 24 Hospital Avenue, Danbury, CT 06810.

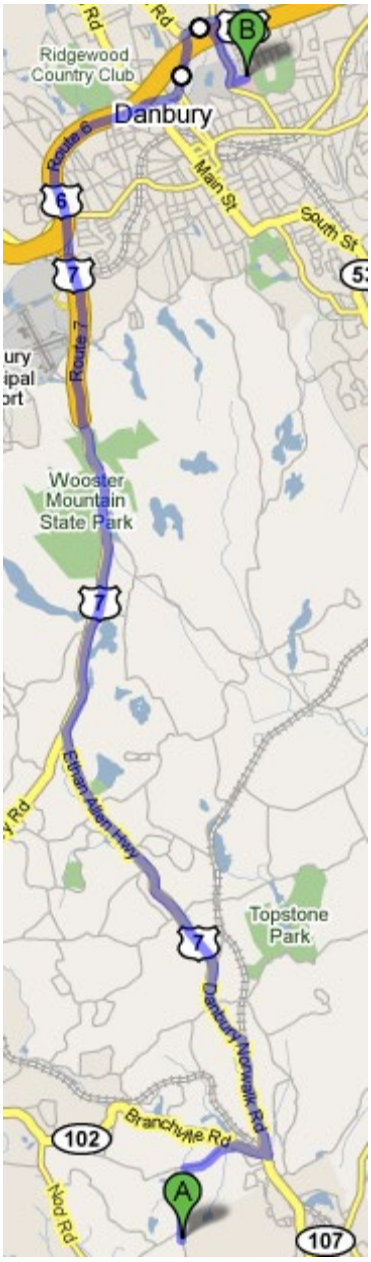



**Figure S1.C.13.** Route from Weir Farm NHS to Danbury Hospital.

**Directions:**

1. Exit park North onto Nod Hill Road. Head North on Nod Hill Road toward Pelham Ln. Continue for 0.7 miles.

2. Turn right at Old Branchville Rd, and continue 0.5 miles

3. Turn right at Branchville Rd/CT-102, and continue 0.3 miles.

4. Turn left at Danbury Norwalk Rd/US-7 Continue to follow US-7 for 8.6 miles

5. Take the exit onto 1-84 E/ US-7 N toward New Milford/Waterbury and continue for 1.7 miles.

6. Take exit 5 toward CT-37/Bethel/CT-39/CT-53. Go 0.2 miles.

7. Merge onto Downs St. and go 0.7 miles.

8. Continue on CT-37/North St. / Rte-37 for 0.7 miles

9. Turn right at Hayestown Avenue and go 0.3 miles.

10. Turn right at Tamarack Avenue and go 0.6 miles.

11. Turn left at Hospital Avenue.

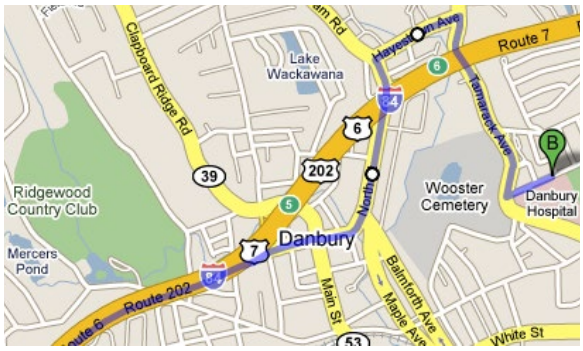



**Figure S1.C.14.** End point at Danbury Hospital

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

## Mid-atlantic Network
## Appomattox Court House National Historical Park

*Lynchburg General Hospital*
1901 Tate Springs Rd, Lynchburg, VA 24501-1167 – (434) 200-3000
**25.3 mi** – about **38 mins**

**Figure S1.C.15**. Route from Appomattox Court House NHP to Lynchburg General Hospital.

| | | |
|---|---|---|
| | 1. Head **south** on **Appomattox Courthouse NHP** toward **VA-24**<br>About 1 min | go 0.3 mi<br>total 0.3 mi |
| 24 | 2. Turn **right** at **VA-24**<br>About 3 mins | go 1.6 mi<br>total 1.9 mi |
| 460 | 3. Turn **right** to merge onto **US-460 W/VA-24 W** toward **Lynchburg**<br>Continue to follow US-460 W<br>About 22 mins | go 18.2 mi<br>total 20.1 mi |
| | 4. Take the **Campbell Ave/US-460 Bus/US-501 Bus** exit toward **US-501/S Boston** | go 0.2 mi<br>total 20.3 mi |
| 460 | 5. Keep **right** at the fork, follow signs for **Campbell Ave** and merge onto **Campbell Ave/ US-460/US-501**<br>Continue to follow US-460/US-501<br>About 4 mins | go 2.3 mi<br>total 22.6 mi |
| | 6. Continue on **Kemper St** | go 0.1 mi<br>total 22.8 mi |
| ↰ | 7. Turn **left** at **Fort Ave** | go 0.2 mi<br>total 22.9 mi |
| 501 | 8. Turn **right** at **Campbell Ave/US-501**<br>Continue to follow US-501<br>About 3 mins | go 0.9 mi<br>total 23.9 mi |
| ↱ | 9. Turn **right** at **Atherholt Rd**<br>About 1 min | go 0.3 mi<br>total 24.2 mi |
| ↱ | 10. Turn **right** at **Tate Springs Rd** | go 0.1 mi<br>total 24.3 mi |
| | 11. Continue on **Hillsdale Rd**<br>About 1 min | go 0.5 mi<br>total 24.7 mi |
| ↶ | 12. Make a **U-turn**<br>About 1 min | go 0.5 mi<br>total 25.2 mi |
| ↗ | 13. Slight **right** at **Tate Springs Rd** | go 361 ft<br>total 25.3 mi |

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

## Booker T. Washington National Monument

Carilion Franklin Memorial Hospital
180 Floyd Ave, Rocky Mount, VA 24151-1389 – (540) 483-5277
**15.5 mi** – about **27 mins**

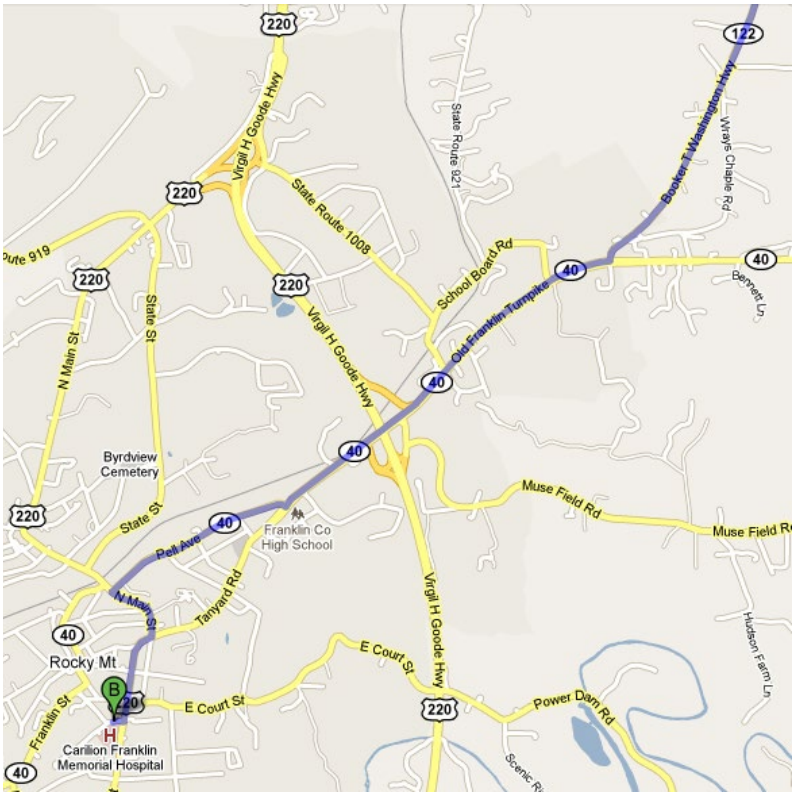



**Figure S1.C.16**. End of Route from Booker T. Washington NM to Carilion Franklin Memorial Hospital.

| | | |
|---|---|---|
| | 1. Head **north** on **Booker T Wash National Monument** toward **Booker T Washington Hwy/VA-122** | go 0.3 mi<br>total 0.3 mi |
| 122 | 2. Turn **left** at **Booker T Washington Hwy/VA-122**<br>About 20 mins | go 12.5 mi<br>total 12.7 mi |
| 40 | 3. Turn **right** at **Old Franklin Turnpike/VA-40**<br>Continue to follow VA-40<br>About 3 mins | go 1.4 mi<br>total 14.2 mi |
| 40 | 4. Slight **right** at **Pell Ave/VA-40**<br>About 1 min | go 0.7 mi<br>total 14.9 mi |
| 220 | 5. Turn **left** at **N Main St/US-220**<br>About 1 min | go 0.2 mi<br>total 15.1 mi |
| 220 | 6. Turn **right** at **S Main St/US-220**<br>About 1 min | go 0.3 mi<br>total 15.4 mi |
| ↱ | 7. Turn **right** at **Floyd Ave**<br>Destination will be on the left | go 177 ft<br>total 15.5 mi |

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

## Colonial National Historical Park

Mary Immaculate Hospital
2 Bernardine Dr., Newport News, VA 23602 – (757) 886-6000
**8.8 mi** – about **16 mins**

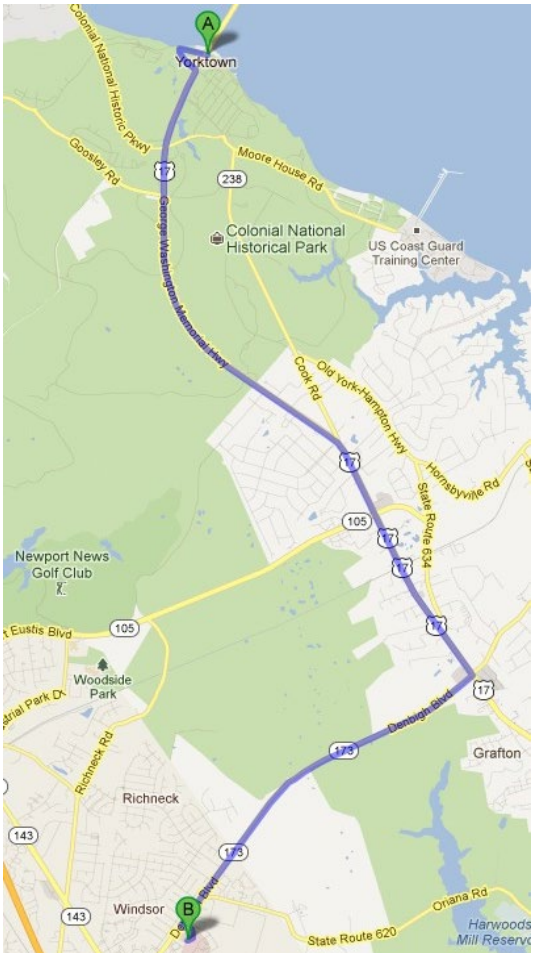



**Figure S1.C.17.** Route to Mary Immaculate Hospital from Colonial National Historical Park.

| | | |
|---|---|---|
| | 1. Head **west** on **State Route 1020/Water St** toward **Mathews St** | go 0.2 mi<br>total 0.2 mi |
| | 2. Take the 1st left onto **Mathews St** | go 0.2 mi<br>total 0.4 mi |
| 17B | 3. Slight right onto **U.S. 17B S/George Washington Memorial Hwy**<br>About 8 mins | go 5.3 mi<br>total 5.7 mi |
| 173 | 4. Turn right onto **VA-173 W/Denbigh Blvd**<br>About 5 mins | go 2.9 mi<br>total 8.6 mi |
| | 5. Turn left onto **Ridgewood Pkwy**<br>About 1 min | go 404 ft<br>total 8.6 mi |
| | 6. Take the 1st right onto **Bernardine Dr**<br>Destination will be on the left | go 0.1 mi<br>total 8.8 mi |

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

## Chancellorsville Unit—Fredericksburg & Spotsylvania National Military Park

**Life threatening emergencies:**

*Mary Washington Hospital*

1001 Sam Perry Blvd, Fredericksburg, VA 22401 – (540) 741-1100

10.6 mi – about 17 mins

**Figure S1.C.18**. Route from Chancellorsville Unit to Mary Washington Hospital.

| | | |
|---|---|---|
| 3 | 1. Head **east** on **Plank Rd/VA-3** toward **National Military Park**<br>About 14 mins | go 9.1 mi<br>total 9.1 mi |
| 1 | 2. Take the ramp onto **Jefferson Davis Hwy/US-1/US-17**<br>About 2 mins | go 1.3 mi<br>total 10.3 mi |
| ↰ | 3. Turn **left** at **Mary Washington Blvd**<br>About 1 min | go 0.2 mi<br>total 10.6 mi |
| | 4. Continue on **Sam Perry Blvd**<br>Destination will be on the right | go 20 ft<br>total 10.6 mi |

**For minor/non-life threatening injuries:**

*NextCare Urgent Care*

Ste 105, 5825 Plank Rd, Fredericksburg, VA 22407-5207 – (888) 563-8021

4.2 mi – about 7 mins

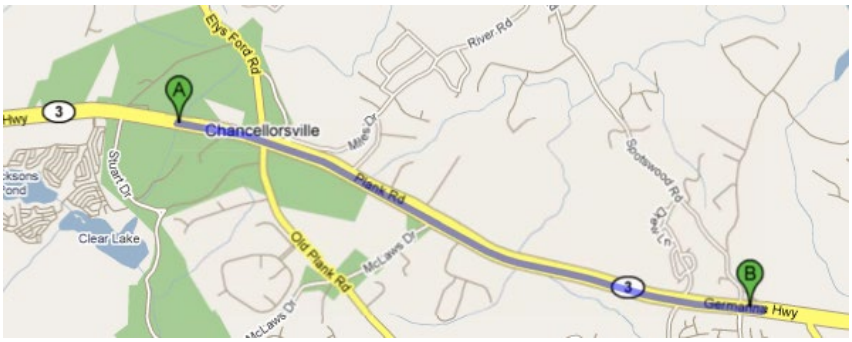



**Figure S1.C.19**. Route from Chancellorsville Unit to NextCare Urgent Care.

| | | |
|---|---|---|
| 3 | 1. Head **east** on **Plank Rd/VA-3** toward **National Military Park**<br>About 6 mins | go 4.1 mi<br>total 4.1 mi |
| 3 | 2. Make a **U-turn**<br>About 1 min | go 0.1 mi<br>total 4.2 mi |

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

**Fredericksburg Unit—Fredericksburg & Spotsylvania National Military Park**

Mary Washington Hospital
1001 Sam Perry Blvd, Fredericksburg, VA 22401 – (540) 741-1100
**3.8 mi** – about **10 mins**

1. Head **northeast** on **Lee Dr** toward **Lloyd Ln**
   About 4 mins
2. Sharp **right** at **Lafayette Blvd/US-1**
   About 1 min
3. Slight **left** to stay on **Lafayette Blvd/US-1**
4. Turn **left** at **Blue and Gray Pkwy/VA-3**
   About 3 mins
5. Take the ramp onto **Jefferson Davis Hwy/US-1/US-17**
   About 2 mins
6. Turn **left** at **Mary Washington Blvd**
   About 1 min
7. Continue on **Sam Perry Blvd**
   Destination will be on the right

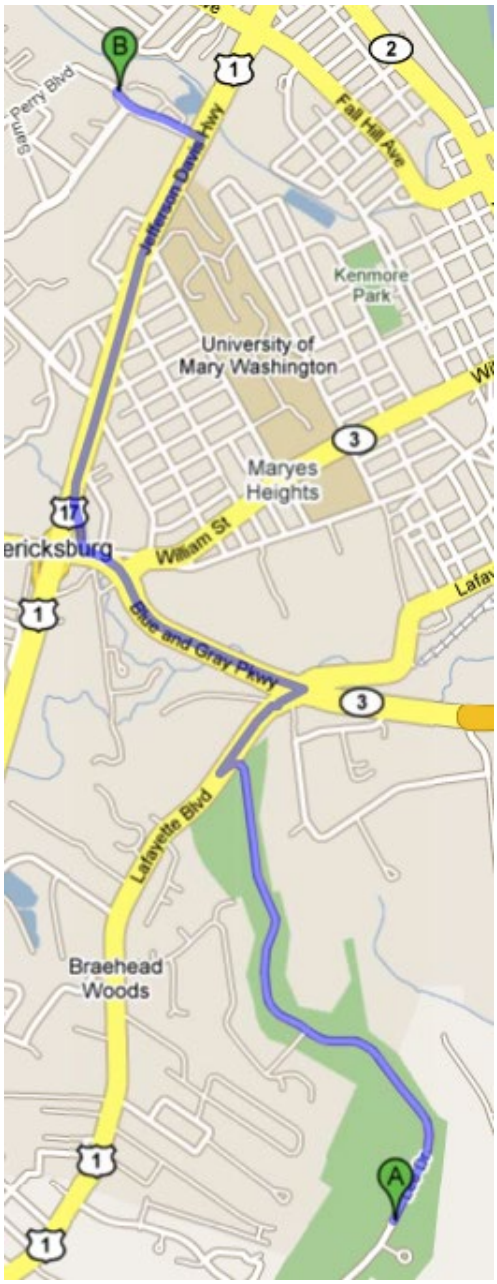



**Figure S1.C.20**. Route from Chancellorsville Unit to Mary Washington Hospital.

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

## Spotsylvania Unit—Fredericksburg & Spotsylvania National Military Park

**For life-threatening emergencies:**

*Mary Washington Hospital*

1001 Sam Perry Blvd, Fredericksburg, VA 22401 – (540) 741-1100

12.4 mi – about 23 mins

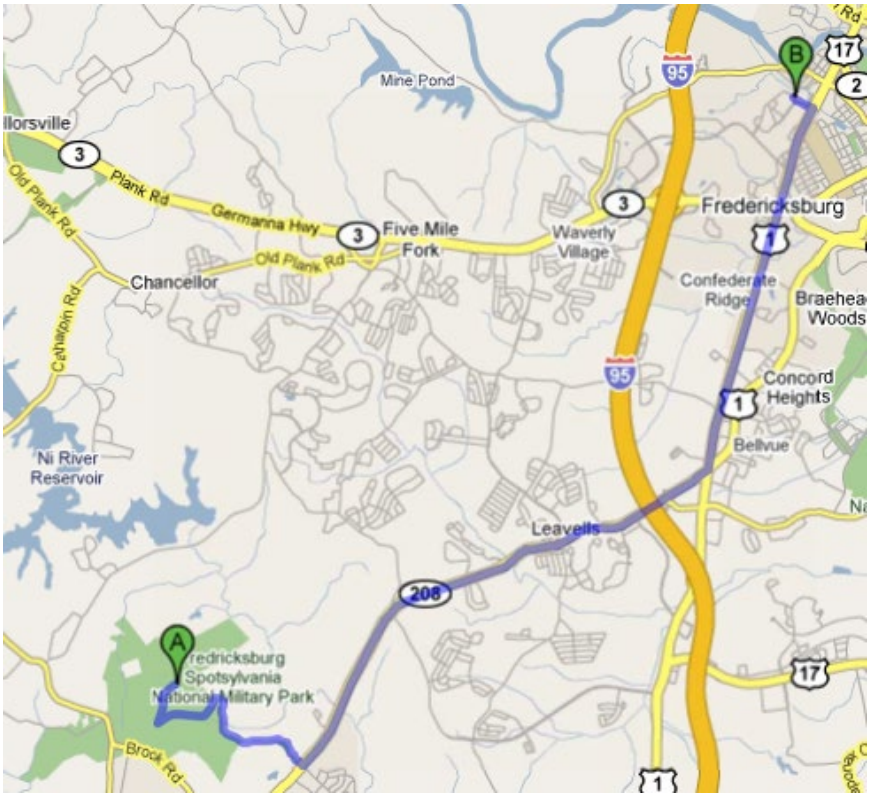



**Figure S1.C.21**. Route from Spotsylvania Unit to Mary Washington Hospital.

| | | |
|---|---|---|
| | 1. Head **southwest** on **Anderson Dr** toward **Gordon Dr**<br>About 1 min | go 0.5 mi<br>total 0.5 mi |
| ↰ | 2. Sharp **left** at **Gordon Dr**<br>About 2 mins | go 0.7 mi<br>total 1.2 mi |
| ↱ | 3. Turn **right** at **Grant Dr E**<br>About 4 mins | go 1.4 mi<br>total 2.6 mi |
| 208 | 4. Turn **left** at **Courthouse Rd/VA-208**<br>About 9 mins | go 5.6 mi<br>total 8.2 mi |
| 1 | 5. Slight **left** at **Jefferson Davis Hwy/US-1/US-17**<br>About 6 mins | go 4.0 mi<br>total 12.2 mi |
| ↰ | 6. Turn **left** at **Mary Washington Blvd**<br>About 1 min | go 0.2 mi<br>total 12.4 mi |
| | 7. Continue on **Sam Perry Blvd**<br>Destination will be on the right | go 20 ft<br>total 12.4 mi |

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

**Spotsylvania Unit—Fredericksburg & Spotsylvania National Military Park**

**For minor/non-life threatening emergencies:**
*Prime Care Urgent & Family Care*
9763 Courthouse Rd, Spotsylvania, VA 22553 – (540) 710-2751
4.2 mi – about 10 mins

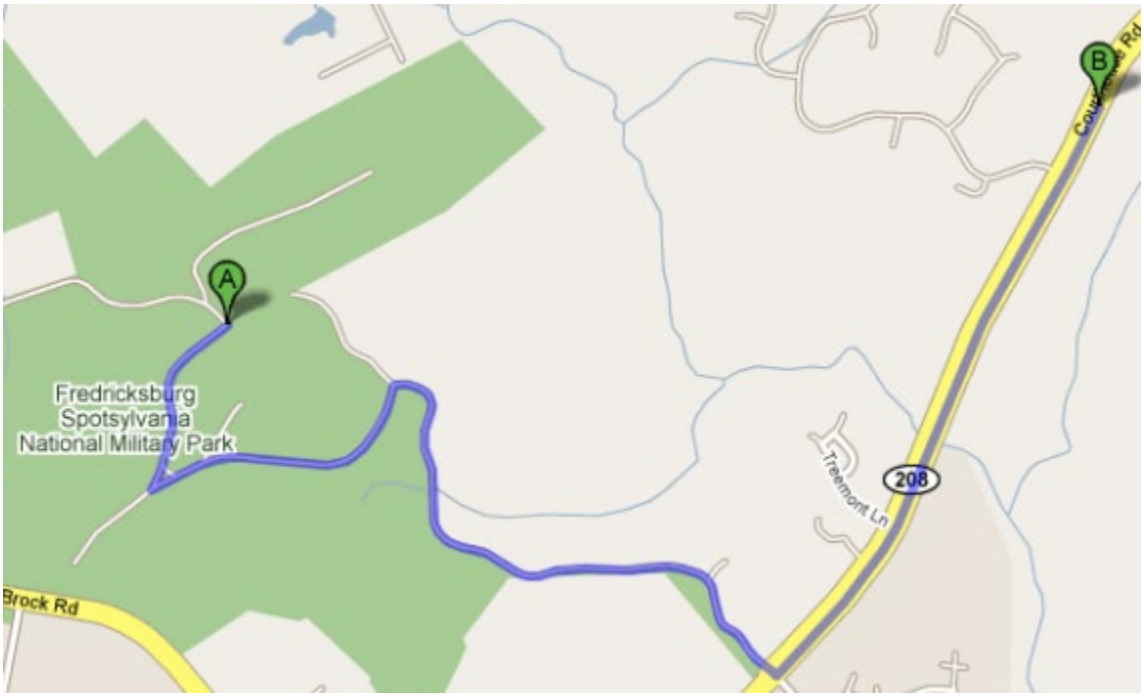



**Figure S1.C.22**. Route from Spotsylvania Unit to Prime Care Urgent & Family Care.

| | | |
|---|---|---|
| | 1. Head **southwest** on **Anderson Dr** toward **Gordon Dr**<br>About 1 min | go 0.5 mi<br>total 0.5 mi |
| ↰ | 2. Sharp **left** at **Gordon Dr**<br>About 2 mins | go 0.7 mi<br>total 1.2 mi |
| ↱ | 3. Turn **right** at **Grant Dr E**<br>About 4 mins | go 1.4 mi<br>total 2.6 mi |
| 208 | 4. Turn **left** at **Courthouse Rd/VA-208**<br>About 4 mins | go 1.6 mi<br>total 4.2 mi |

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

**Wilderness Unit—Fredericksburg & Spotsylvania National Military Park**

**For life-threatening emergencies:**
*Mary Washington Hospital*
1001 Sam Perry Blvd, Fredericksburg, VA 22401 – (540) 741-1100
16.2 mi – about 31 mins

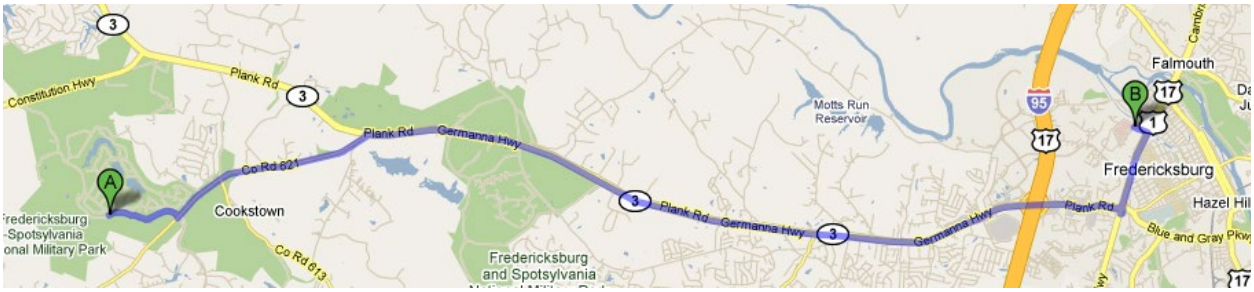



**Figure S1.C.23**. Route from Wilderness Unit to Mary Washington Hospital.

| | | |
|---|---|---|
| | 1. Head **east** on **Hill Ewell Dr** toward **Quarter Charge Dr**<br>About 3 mins | go 1.2 mi<br>total 1.2 mi |
| ↰ | 2. Turn **left** at **Orange Plank Rd**<br>About 8 mins | go 2.9 mi<br>total 4.1 mi |
| 3 | 3. Turn **right** at **Plank Rd/VA-3**<br>About 17 mins | go 10.6 mi<br>total 14.7 mi |
| 1 | 4. Take the ramp onto **Jefferson Davis Hwy/US-1/US-17**<br>About 2 mins | go 1.3 mi<br>total 15.9 mi |
| ↰ | 5. Turn **left** at **Mary Washington Blvd**<br>About 1 min | go 0.2 mi<br>total 16.2 mi |
| | 6. Continue on **Sam Perry Blvd**<br>Destination will be on the right | go 20 ft<br>total 16.2 mi |

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

**Wilderness Unit—Fredericksburg & Spotsylvania National Military Park**

**For minor/non-life threatening emergencies**:
*Rapidan Medical Center*
4444 Germanna Hwy # 310, Locust Grove, VA 22508-2039 – (540) 972-6222
7.5 mi – about 15 mins

1. Head **west** on **Hill Ewell Dr** toward **Grant Ct**
   About 5 mins
2. Turn **right** at **Constitution Hwy/VA-20**
   About 3 mins
3. Turn **left** at **Germanna Hwy/VA-3**
   About 4 mins
4. Make a **U-turn**
   About 2 mins

**Figure S1.C.24**. Route from Wilderness Unit to Rapidan Medical Center.

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

**Gettysburg National Military Park/Eisenhower National Historic Site**

Gettysburg Hospital
147 Gettys St, Gettysburg, PA 17325-2536 – (717) 334-2121

**Due to the location of Gettysburg Hospital, directions will vary widely depending on location on the park. Refer to maps below. A20 shows most of Gettysburg NMP and A21 shows a close up of Gettysburg town center.**

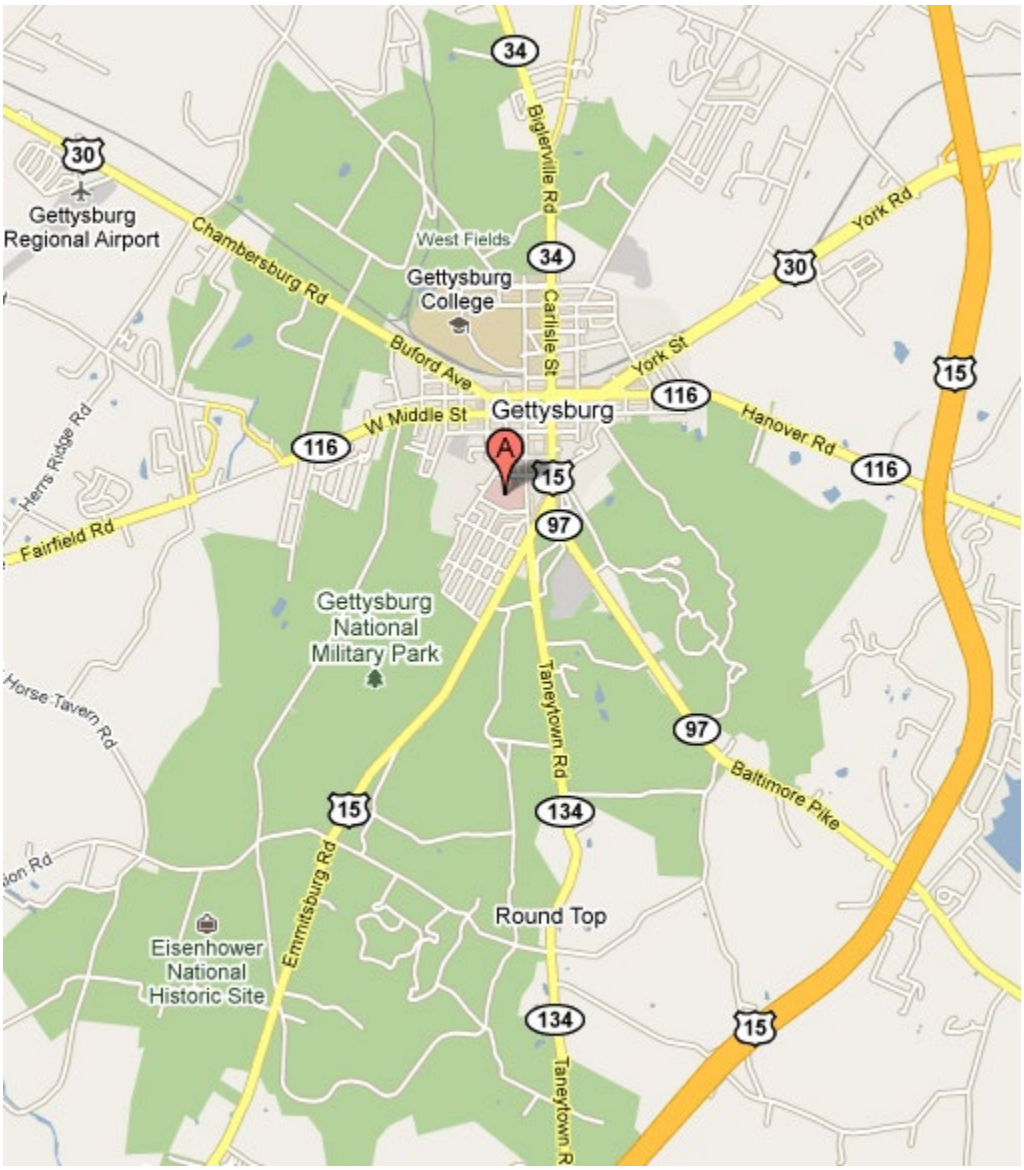



**Figure S1.C.25**. Map of Gettysburg NMP and Eisenhower NHP with Gettysburg Hospital marked at center.

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

**Gettysburg National Military Park/Eisenhower National Historic Site (continued)**

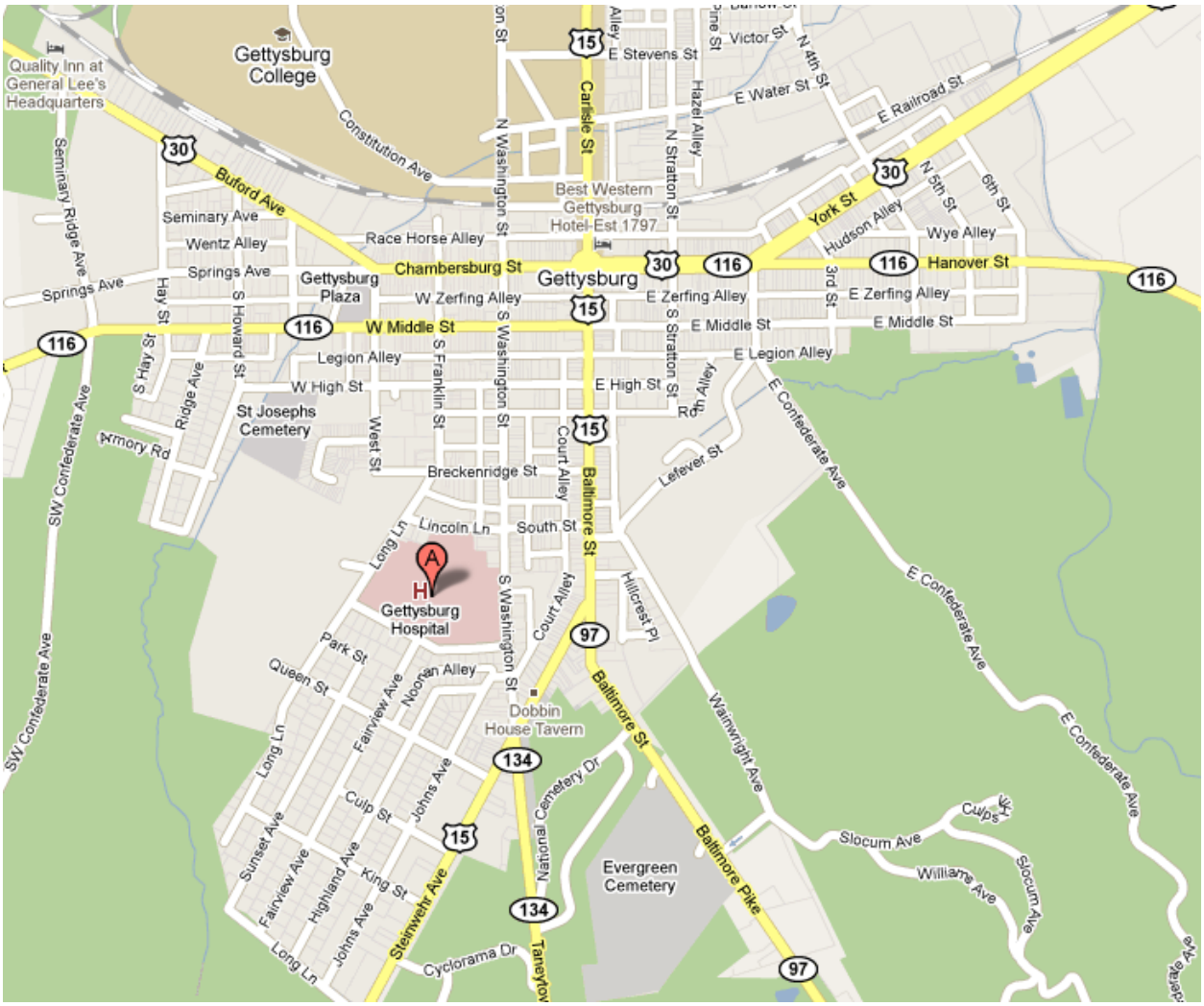



**Figure S1.C.26**. Map of Gettysburg downtown with Gettysburg Hospital marked near center.

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

## George Washington Birthplace National Monument

### Riverside Tappahannock Hospital

618 Hospital Rd, Tappahannock, VA 22560-5000 – (804) 443-3311

**34.1 mi** – about **55 mins**

1. Head **southwest** on **Popes Creek Dr/VA-204**
2. At the traffic circle, take the **2nd** exit and stay on **Popes Creek Dr/VA-204**
3. Turn **left** at **Kings Hwy/VA-3**
   Continue to follow VA-3
   About 35 mins
4. Turn **right** at **Main St**
   About 2 mins
5. Turn **right** at **Richmond Rd/US-360**
   Continue to follow US-360
   About 9 mins
6. Turn **left** at **S Church Ln/US-17/US-360**
   Continue to follow US-17/US-360
   About 4 mins
7. Slight **right** at **Richmond Hwy/US-360**
8. Turn **right** at **Hospital Rd/VA-708**
   About 1 min

**Figure S1.C.27**. Route from George Washington NM to Riverside Tappahannock Hospital.

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

**Hopewell Furnace National Historic Site**

Pottstown Memorial Medical Center
1600 East High Street, Pottstown, PA 19464 - (610) 327-7000
**15.9 mi** – about **25 mins**

**Figure S1.C.28**. Route from Hopewell Furnace NHS to Pottstown Memorial Medical Center.

| | | |
|---|---|---|
| 345 | 1. Head **north** on **PA-345 N/Shed Rd** toward **Mark Bird Ln**<br>Continue to follow PA-345 N | go 3.4 mi<br>total 3.4 mi |
| ↱ | 2. Turn **right** at **Crusher Rd**<br>About 3 mins | go 1.4 mi<br>total 4.8 mi |
| | 3. Continue onto **Shed Rd** | go 0.5 mi |
| 724 | 4. Slight **right** at **Main St E/PA-724 E**<br>About 4 mins | go 2.5 mi<br>total 7.8 mi |
| ↰ | 5. Turn **left** at **River Rd** | go 407 ft<br>total 7.9 mi |
| | 6. Continue onto **River Bridge Rd** | go 0.4 mi |
| 422 | 7. Turn **right** at **Benjamin Franklin Hwy/US-422 E**<br>About 6 mins | go 6.1 mi<br>total 14.4 mi |
| ↗ | 8. Take the exit toward **Armand Hammer Blvd**<br>About 1 min | go 0.4 mi<br>total 14.8 mi |
| ↰ | 9. Turn **left** at **Industrial Hwy**<br>About 1 min | go 0.3 mi<br>total 15.1 mi |
| ↱ | 10. Turn **right** at **Moser Rd**<br>About 1 min | go 0.7 mi<br>total 15.8 mi |
| ↗ | 11. Slight **right** at **E High St**<br>Destination will be on the right | go 0.2 mi<br>total 15.9 mi |

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

## Petersburg National Battlefield

*Southside Regional Medical Center*
801 S Adams Street, Petersburg, VA 23803 – (804) 862-5000
**3.8 mi** – about **9 mins**

**Figure S1.C.29**. Route from Petersburg NB to Southside Regional Medical Center.

| | | |
|---|---|---|
| 36 | 1. Head **southwest** on **Oaklawn Blvd/VA-36**<br>Continue to follow VA-36<br>About 4 mins | go 2.3 mi<br>total 2.3 mi |
| 460 | 2. Continue on **US-301/US-460/E Washington St**<br>Continue to follow US-460/E Washington St<br>About 3 mins | go 0.7 mi<br>total 2.9 mi |
| 301 | 3. Turn **left** at **S Sycamore St/US-301**<br>About 2 mins | go 0.7 mi<br>total 3.6 mi |
| ↰ | 4. Turn **left** at **Apollo St** | go 344 ft<br>total 3.7 mi |
| ↱ | 5. Turn **right** at **S Adams St**<br>Destination will be on the left | go 276 ft<br>total 3.8 mi |

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

**Chickahominy Bluff Battlefield Unit—Richmond National Battlefield Park**

*Bon Secours Memorial Regional Medical Center*
8260 Atlee Rd, Mechanicsville, VA 23116 – (804) 764-6000
**3.8 mi** – about **9 mins**

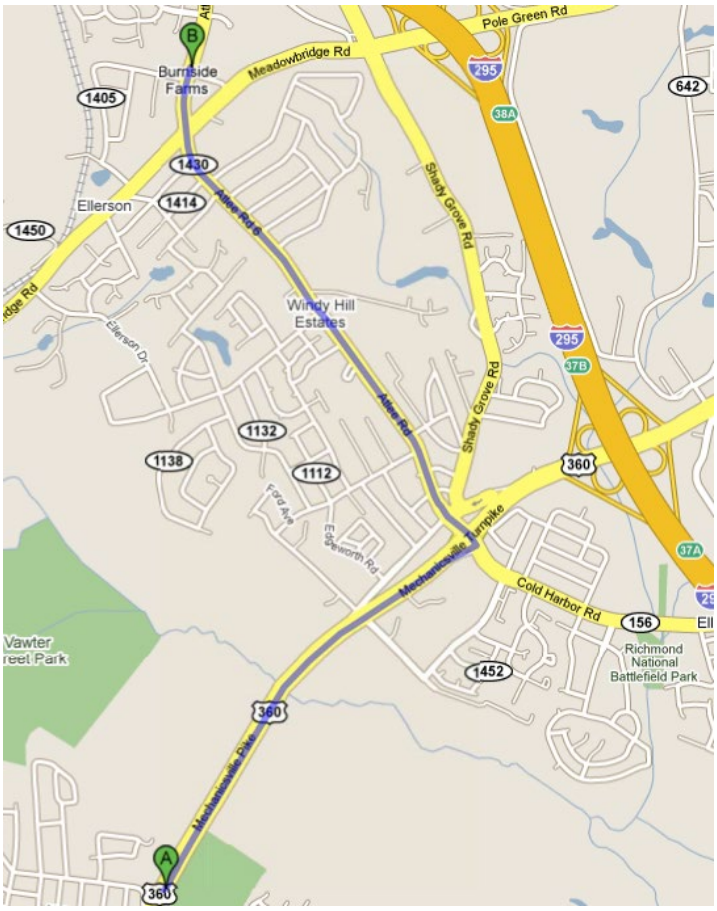



**Figure S1.C.30**. Route from Chichahominy Battelfield Unit—Richmond NBP *to Bon Secours Memorial Regional Medical Center.*

360 1. Head **northeast** on **Mechanicsville Pike/Mechanicsville Turnpike/US-360** toward **Mechanicsville Turnpike/US-360**
Continue to follow Mechanicsville Turnpike/US-360
About 3 mins

2. Take the exit toward **Cold Harbor Rd/VA-156**

156 3. Turn **left** at **Cold Harbor Rd/VA-156**
About 1 min

4. Continue on **Atlee Rd**
About 6 mins

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

**Turkey Hill Unit—Richmond National Battlefield Park**

*Bon Secours Memorial Regional Medical Center*
8260 Atlee Rd, Mechanicsville, VA 23116 – (804) 764-6000
**10.4 mi** – about **13 mins**

**Figure S1.C.31**. Route from Turkey Hill Unit—Richmond NBP to Bon Secours Memorial Regional Medical Center.

| | | |
|---|---|---|
| | 1. Head **southeast** on **Turkey Hill Trail** toward **Cold Harbor Rd/VA-156**<br>About 1 min | go 0.3 mi<br>total 0.3 mi |
| 156 | 2. Turn **right** at **Cold Harbor Rd/VA-156**<br>Continue to follow VA-156<br>About 2 mins | go 0.8 mi<br>total 1.1 mi |
| 295 | 3. Take the ramp onto **I-295 N**<br>About 8 mins | go 7.6 mi<br>total 8.7 mi |
| ↗ | 4. Take exit **38B** to merge onto **Meadowbridge Rd/Pole Green Rd** toward **VA-627**<br>Continue to follow Meadowbridge Rd<br>About 3 mins | go 1.5 mi<br>total 10.2 mi |
| ↱ | 5. Turn **right** at **Atlee Rd**<br>About 1 min | go 0.2 mi<br>total 10.4 mi |

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

## Cold Harbor Unit—Richmond National Battlefield Park

*Bon Secours Memorial Regional Medical Center*

8260 Atlee Rd, Mechanicsville, VA 23116 – (804) 764-6000

**9.3 mi** – about **14 mins**

**Figure S1.C.32**. Route from Cold Harbor Unit—Richmond NBP to Bon Secours Memorial Regional Medical Center.

| | | |
|---|---|---|
| | 1. Head **east** on **Anderson Wright Dr** toward **Cold Harbor Rd/VA-156** | go 0.3 mi<br>total 0.3 mi |
| 156 | 2. Turn **right** at **Cold Harbor Rd/VA-156**<br>About 2 mins | go 0.7 mi<br>total 0.9 mi |
| 156 | 3. Turn **right** to stay on **Cold Harbor Rd/VA-156**<br>About 3 mins | go 1.6 mi<br>total 2.6 mi |
| ↰ | 4. Turn **left** at **Creighton Rd**<br>About 2 mins | go 0.8 mi<br>total 3.3 mi |
| 295 | 5. Merge onto **I-295 N** via the ramp to **Charlottesville**<br>About 4 mins | go 4.2 mi<br>total 7.6 mi |
| ↱ | 6. Take exit **38B** to merge onto **Meadowbridge Rd/Pole Green Rd** toward **VA-627**<br>Continue to follow Meadowbridge Rd<br>About 3 mins | go 1.5 mi<br>total 9.0 mi |
| ↱ | 7. Turn **right** at **Atlee Rd**<br>About 1 min | go 0.2 mi<br>total 9.3 mi |

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

## Fort Harrison Unit—Richmond National Battlefield Park

*Memorial Regional Hospital*
701 E Grace St, Richmond, VA 23219 – (804) 775-4174
**9.4 mi** – about **21 mins**

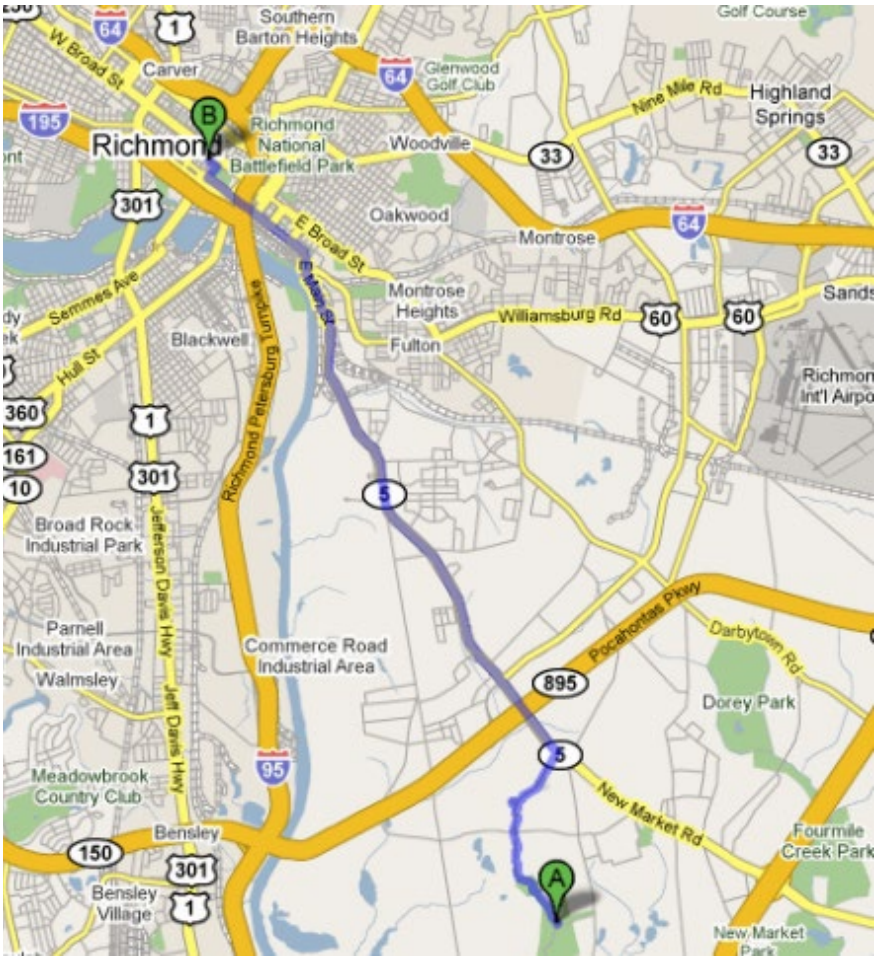



**Figure S1.C.33**. Route from Fort Harrison Unit—Richmond NBP to Memorial Regional Hospital.

| | | |
|---|---|---|
| | 1. Head **north** on **Battlefield Park Rd** toward **Mill Rd**<br>About 5 mins | go 2.2 mi<br>total 2.2 mi |
| 5 | 2. Turn **left** at **New Market Rd/VA-5**<br>Continue to follow VA-5<br>About 10 mins | go 5.7 mi<br>total 7.8 mi |
| ↰ | 3. Turn **left** at **E Main St/VA-5**<br>Continue to follow E Main St<br>About 5 mins | go 1.3 mi<br>total 9.2 mi |
| ↱ | 4. Turn **right** at **N 9th St** | go 0.1 mi<br>total 9.3 mi |
| ↰ | 5. Turn **left** at **E Grace St** | go 0.1 mi<br>total 9.4 mi |

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

## Malvern Hill Unit—Richmond National Battlefield Park

*Memorial Regional Hospital*
701 E Grace St, Richmond, VA 23219 – (804) 775-4174
**15.9 mi** – about **28 mins**

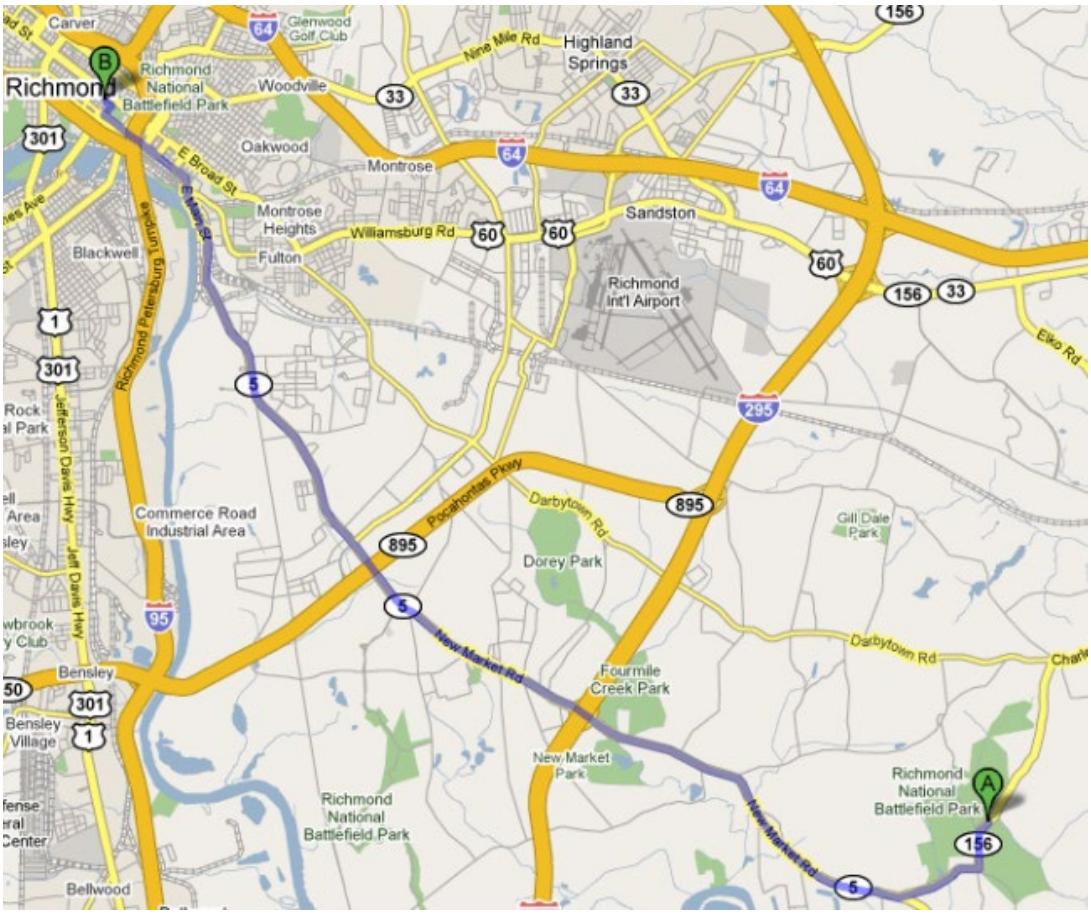



**Figure S1.C.34**. Route from Malvern Hill Unit—Richmond NBP to Memorial Regional Hospital.

| | | |
|---|---|---|
| 156 | 1. Head **southwest** on **VA-156/Willis Church Rd** toward **Carters Mill Rd**<br>About 1 min | go 0.6 mi<br>total 0.6 mi |
| 156 | 2. Turn **right** to stay on **VA-156/Willis Church Rd**<br>About 2 mins | go 1.0 mi<br>total 1.6 mi |
| 5 | 3. Slight **right** at **New Market Rd/VA-5**<br>Continue to follow VA-5<br>About 19 mins | go 12.7 mi<br>total 14.3 mi |
| ↰ | 4. Turn **left** at **E Main St/VA-5**<br>Continue to follow E Main St<br>About 5 mins | go 1.3 mi<br>total 15.6 mi |
| ↱ | 5. Turn **right** at **N 9th St** | go 0.1 mi<br>total 15.8 mi |
| ↰ | 6. Turn **left** at **E Grace St** | go 0.1 mi<br>total 15.9 mi |

## Rural Point Unit—Richmond National Battlefield Park

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

*Bon Secours Memorial Regional Medical Center*
8260 Atlee Rd, Mechanicsville, VA 23116 – (804) 764-6000
**4.7 mi** – about **12 mins**

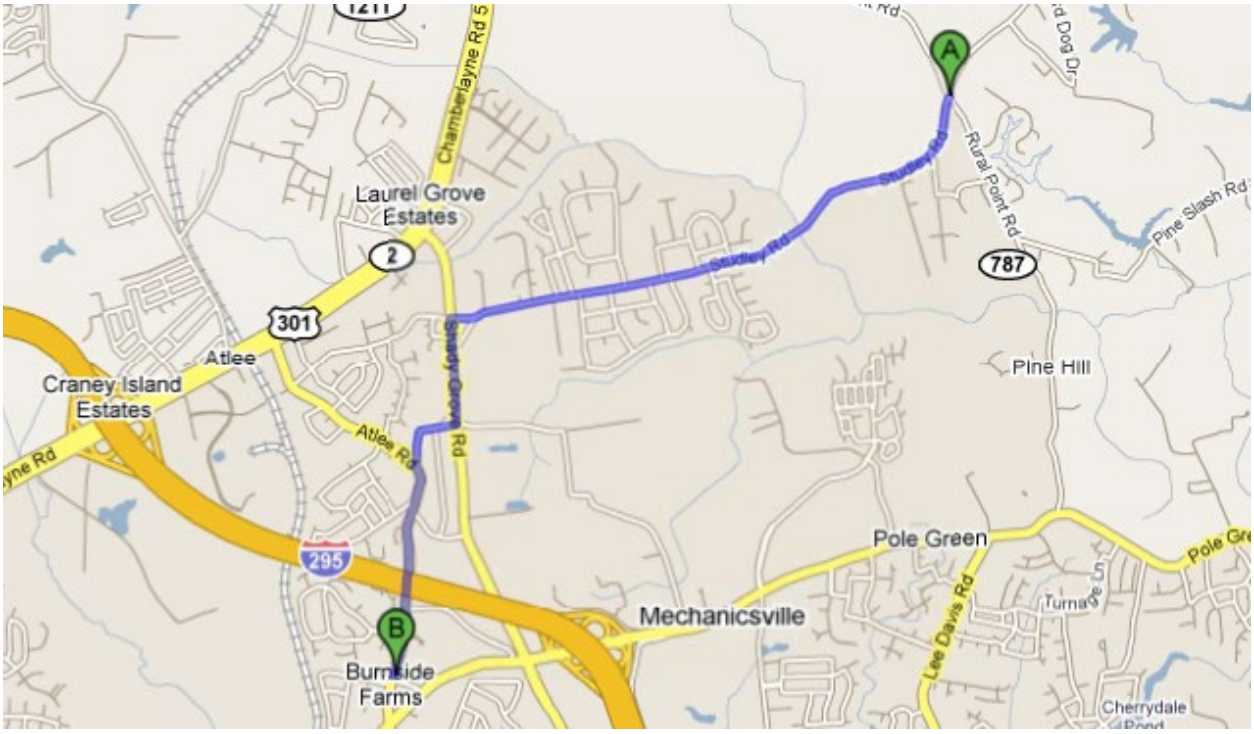



**Figure S1.C.35**. Route from Rural Point Unit—Richmond NBP to Bon Secours Memorial Regional Medical Center.

| | | |
|---|---|---|
| | 1. Head **south** on **Studley Rd** toward **Sentry Station Rd**<br>About 7 mins | go 2.8 mi<br>total 2.8 mi |
| ↰ | 2. Turn **left** at **Shady Grove Rd**<br>About 2 mins | go 0.5 mi<br>total 3.3 mi |
| ↱ | 3. Turn **right** at **Mann Dr**<br>About 1 min | go 0.3 mi<br>total 3.6 mi |
| ↰ | 4. Turn **left** at **Atlee Rd**<br>About 3 mins | go 1.0 mi<br>total 4.7 mi |

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

## Sagamore Hill National Historic Site

*Syosset Hospital*

221 Jericho Turnpike, Syosset, NY 11791– (516) 496-6500

**6.3 mi** – about **15 mins**

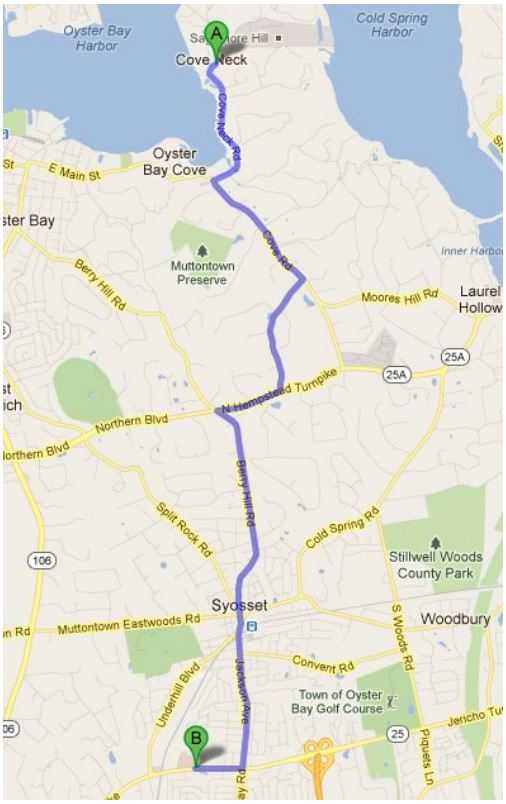



**Figure S1.C.36**. Route from Sagamore Hill NHS to Syosset Hospital.

| | | |
|---|---|---|
| | 1. Head **southwest** on **Sagamore Hill Rd** toward **Cove Neck Rd** | go 161 ft<br>total 161 ft |
| | 2. Continue straight onto **Cove Neck Rd**<br>About 2 mins | go 1.0 mi<br>total 1.0 mi |
| ↰ | 3. Turn left onto **Cove Rd**<br>About 2 mins | go 1.0 mi<br>total 2.0 mi |
| ↱ | 4. Turn right onto **Yellow Cote Rd**<br>About 2 mins | go 0.9 mi<br>total 2.9 mi |
| ↱ | 5. Turn right onto **N Hempstead Turnpike**<br>About 1 min | go 0.5 mi<br>total 3.3 mi |
| ↰ | 6. Sharp left onto **Berry Hill Rd**<br>About 4 mins | go 1.6 mi<br>total 4.9 mi |
| | 7. Continue onto **Jackson Ave**<br>About 3 mins | go 1.1 mi<br>total 6.0 mi |
| ↱ | 8. Turn right onto **Jericho Turnpike**<br>Destination will be on the right<br>About 1 min | go 0.3 mi<br>total 6.3 mi |

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

### Thomas Stone National Historic Site

*Civista Medical Center*

701 Charles St, La Plata, MD 20646-5930 – (301) 609-4000

**4.9 mi** – about **12 mins**

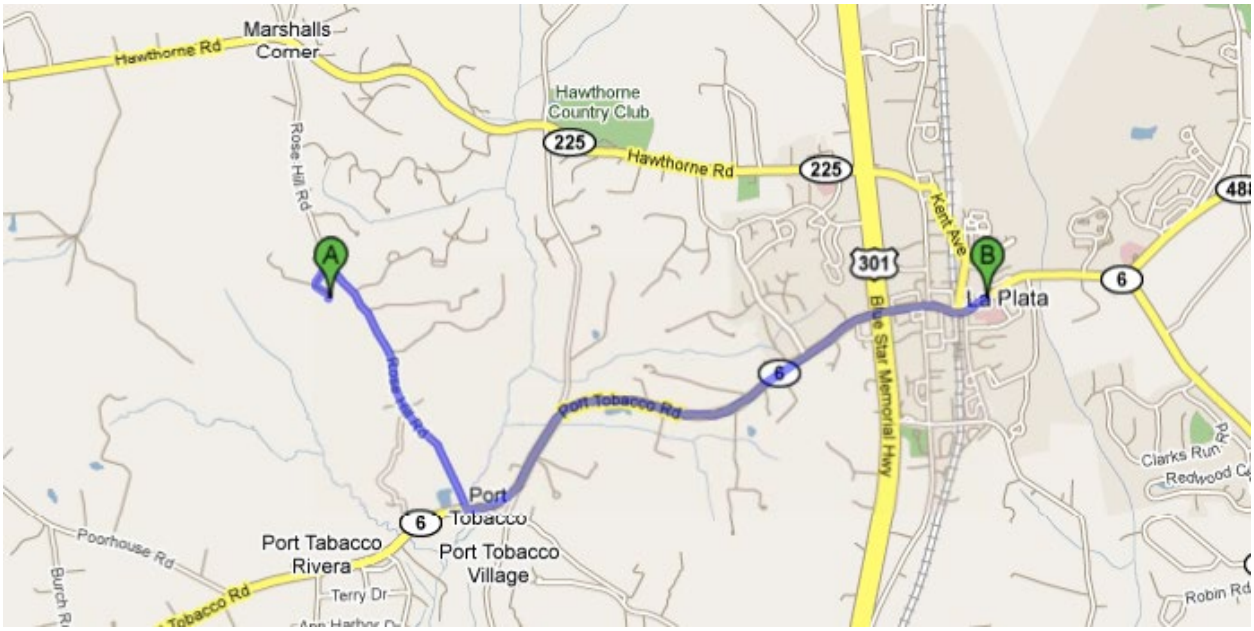



**Figure S1.C.37**. Route from Thomas Stone NHS to Civista MedicalCenter.

| | | |
|---|---|---|
| | 1. Head **north** on **Thomas Stone National Hist Site** | go 0.1 mi<br>total 0.1 mi |
| ↱ | 2. Turn **right** to stay on **Thomas Stone National Hist Site** | go 0.1 mi<br>total 0.2 mi |
| ↱ | 3. Turn **right** at **Rose Hill Rd**<br>About 4 mins | go 1.5 mi<br>total 1.7 mi |
| 6 | 4. Turn **left** at **MD-6/Port Tobacco Rd**<br>Continue to follow MD-6<br>Destination will be on the right | go 3.1 mi<br>total 4.9 mi |

**Appendix S1.C.** Directions to nearest hospital from each park (continued).

### Valley Forge National Historical Park

*Phoenixville Hospital*

140 Nutt Rd, Phoenixville, PA 19460-3900 – (610) 983-1000

**4.6 mi** – about **10 mins**

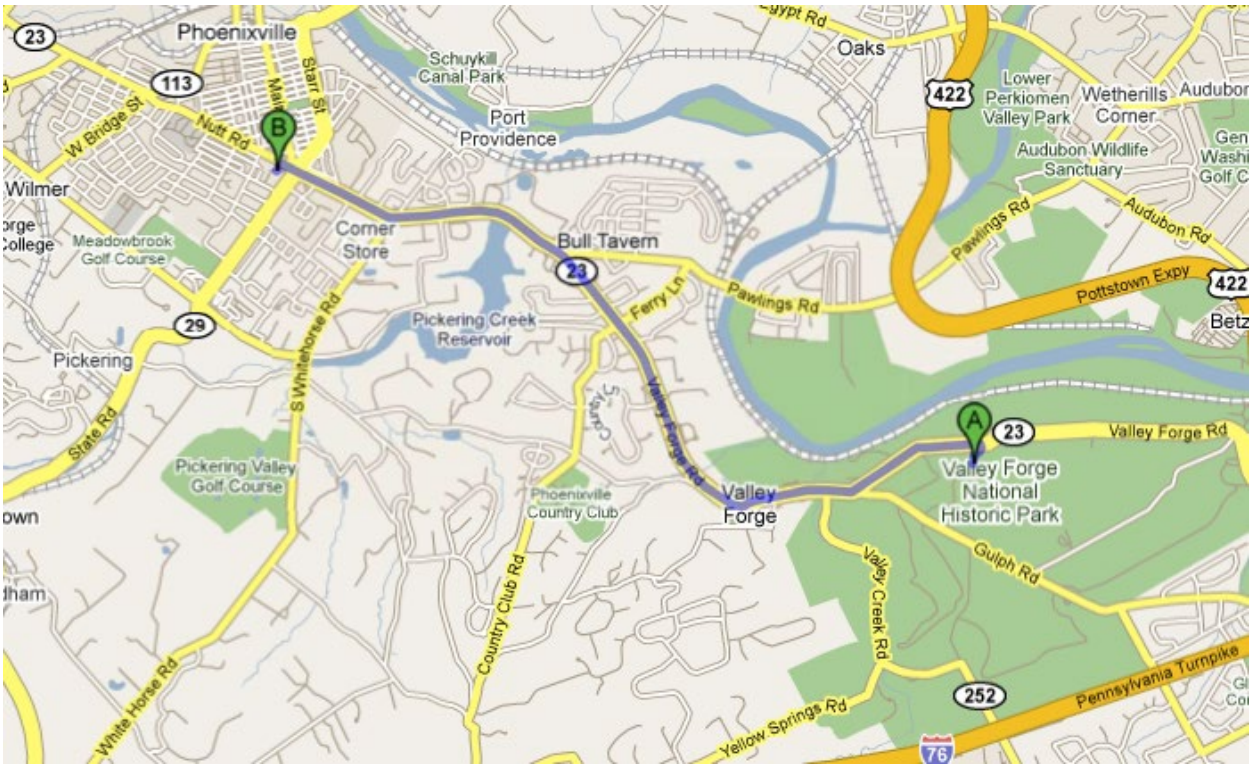



**Figure S1.C.38**. Route from Valley Forge NHP to Civista MedicalCenter.

| | | |
|---|---|---|
| | 1. Head **north** on **N Inner Line Dr** toward **N PA-23/Valley Forge Rd** | go 0.1 mi<br>total 0.1 mi |
| 23 | 2. Turn **left** at **N PA-23/Valley Forge Rd**<br>Continue to follow N PA-23<br>About 10 mins | go 4.5 mi<br>total 4.6 mi |
| ↰ | 3. Turn **left**<br>Destination will be on the left | go 240 ft<br>total 4.6 mi |

# Appendix S1.D. Emergency contacts/procedures for each park.

This Appendix lists the information for the first person to be contacted in the event of an emergency for each park. This information is to be used in emergency situations only, and should not to be distributed to the public. **The preferred contact is listed in bold.** In the event of a poisoning (including snake bite), call poison control center at 1-800-222-1222.

## Northeast Temperate Network

| Park | Contact | Phone | Radio | Notes |
|---|---|---|---|---|
| ACAD | **Dispatch** | **207-288-8791** | **"Dispatch"** | Dispatch is able to coordinate emergency responses (i.e. Search and Rescue, Ambulance, Police, etc.) faster than by dialing 911. Calling Dispatch by radio is the most reliable means, as cell coverage is poor throughout most of the park. |
| MABI | **911 Emergency Services** | **911** | - | For emergencies, call 911, which will alert state emergency services. You can also call Woodstock Town Dispatch, but the state service is better at responding to emergencies. Note that cell phone service is poor on the west side of the park |
| | Woodstock Town Dispatch | 802-457-2337 | | |
| | MABI Park (802) 457-3368 | - | - | Also notify the park: If this is a time when the park visitor center is open, call the park visitor center at extension 22 on the radio or cell phone. If no one answers call anyone by name on duty. If the visitor center is not open but you know someone is at the carriage barn, call (802) 457-3368 and dial 0. |
| | Visitor's Center | Ext. 222 | "22" | |
| | Carriage Barn | 802-457-3368 | - | |
| MIMA | **Emergency Services** | **911** | N/A | For medical emergencies call 911. To reach Protection Rangers call "400 Protection" on the radio. For staff without radios, call the Ranger on Duty number, 508-254-7491 which will go to the cell phone of the Ranger who's on duty at the time of the call. In the event of a poisoning (including snake bite), call the poison control center at 1-800-222-1222. |
| | Ranger on Duty | 508-254-7491 | "400 Protection" | |
| MORR | **Ranger Station** | 973-543-7958 | **Any 800 unit** | The first call should be to park law enforcement either by radio (first choice) or cell phone). Cell phone coverage is spotty in some areas of the park. If unable to reach the ranger station, contact the Morris County Communications Center. Provide your location and they will contact the park to dispatch a ranger. |
| | Morris County Communications Center | 911 or 973-285-2900 | | |

**Appendix S1.D.** Emergency contacts/ procedures for each park (continued).

| Park | Contact | Phone | Radio | Notes |
|---|---|---|---|---|
| ROVA | **911 Dispatch Center**<br>Cathy Newhard (Chief Ranger) | **911**<br>845-229-9380 or 845-489-0183 | N/A<br>219 | In an emergency call 911. Follow up with report to Chief Ranger Cathy Newhard at 845- 229-9380, or 845-489-0183. If unable to reach Chief Ranger Cathy Newhard, try contacting Ranger on Duty on the radio by calling "Duty Ranger". |
| SAGA | **Police/Fire/Ambulance** | **911** | - | There are no emergency services based in the park. Cell phone service may be limited in parts of the park. |
| SARA | **Emergency Services**<br>Chris Martin<br>Linda White | **911**<br>518-670-2950<br>518-441-9017 | - | The primary emergency contact is 911. Cell phone service is reliable in most of the park. As soon as practical after contacting 911, or if you have a radio and cannot reach 911 by phone, contact the park law enforcement rangers. Greg Wozniak is the Chief Ranger. Numbers provided for each ranger are cell numbers, and ranger cell phones are carried at all times when on duty. |
| WEFA | **Emergency Services**<br>Ridgefield Police<br>Ridgefield Ambulance and Fire<br>Wilton Police<br>Wilton Fire<br>Visitor Center<br>Greg Waters<br>Kevin Monthie<br>Linda Cook | **911**<br>203-438-6531<br>203-431-2724<br>203- 834-6260<br>203- 834-6274<br>203-834-1896 x0<br>203-648-2800<br>203-648-2796<br>203-834-1896 x23 | - | The primary emergency contact is 911, but emergency numbers for the two nearest towns are also provided (the park is on the border of the towns). Cell phone service is reliable in most of the park. Because the WEFA radio frequency only covers the 24 ha core of the park, cell phones should be the main source of communication. If unable to reach 911, call the visitor center phone number. As soon as practical after emergency services have been contacted, or as a last line of contact if unable to reach 911 or the visitor center, call Greg, Kevin, or Linda (park superintendent). Only one of the three needs to be contacted; they will inform each other. |

**Appendix S1.D.** Emergency contacts/ procedures for each park (continued).

## Mid-Atlantic Network

| Park | Contact | Phone | Radio | Notes |
|---|---|---|---|---|
| **In all cases, 911 should be your choice unless specified in Notes** | | | | |
| *APCO* | *Brian Eick, NRM* | *434-352-8987 x. 28* | | |
| *BOWA* | *Timbo Sims, NRM* | *540- 721-2094* | | |
| *COLO* | *Dorothy Geyer, NRM* | *757-898-2433* | | |
| *FRSP* | *Chief Rangers Office* | *540-899-2698* | | |
| | *Gregg Kneipp, NRM* | *540-760-7938* | | |
| *GETT* | *Sara Koenig, NRM* | *717-338-4483 or 928-266-2197* | *"Ranger on Patrol"* | *If no radio available, call should be to 911.* |
| *GEWA /THST* | *Rijk Morawe, NRM* | *804-224-1732 x 237* | | |
| *HOFU* | *Kate Jensen, NRM* | *610-582-8773 x 228 or 215-692-3340* | *"241" or "Kate Jensen"* | *First Kate Jensen, then visitor's center. Finally call 911.* |
| | *Visitor Center Front Desk* | *610-582-8773 x 232* | | |
| *PETE* | *Tim Blumenschine, NRM* | *804-721-7527* | *"Any 200 Unit Emergency Traffic"* | *Radio or Tim Blumenschine.* |
| *RICH* | *Chief Ranger – Tim Mauch* | *804-640-7908* | | *Contacts should be called in the order shown.* |
| | *Protection Ranger – Leslie Winston* | *804-640-7912* | | |
| | *Protection Ranger – Ben Olivencia* | *804-640-7915* | | |
| | *Protection Ranger – Barry Krieg* | *804-640-7917* | | |
| | *Kristen Allen, NRM* | *804-795-5019* | | |
| *SAHI* | *Scott Gurney, NRM* | *516-922-4788* | | |
| *VAFO* | *Ranger on Duty* | *610-275-1222* | | *For non-emergency call the general ranger number* |
| | Amy Ruhe, NR Office | 610-783-1036 | | |

# Appendix S1.E. Workers compensation procedures for each park, Version 1.1.

**Workers compensation procedures**
January 7, 2010

Human Resources contacts for workers compensation are Cecelia Neugebauer (410-962-4290), the NER regional contact; and Carol D. Moore (202-619-7297), the contact for NER/NCR combined. A useful resource on Worker's Compensation is the NPS 2007 Supervisor's Guide to Worker's Compensation.

EXTREMELY IMPORTANT: Make sure that the employee gets prompt medical treatment, if medical attention is needed. If the injury is life-threatening, the employee should be taken to an emergency room immediately; the paperwork can wait. For non-life-threatening injuries, it is OK to issue a CA-16 and CA-17 before the on-line information is entered.

IMPORTANT: Makes sure the employee sees a doctor, not a nurse, nurse practitioner, or physician's assistant. The Worker's Compensation Program tends to deny payment when a doctor is not seen, according to Frank Alvarez (7/11/2008).

*Initial Reporting:*

If the injured person is a volunteer, Cecelia Neugebauer will likely need to set up a profile for them in SMIS. A volunteer who is a foreign national (and does not have a social security number) will need to be processed on paper; Frank will need to help with this as well.

If an employee has an accident or other workers compensation incident (e.g., bitten by a deer tick), the first step is for them to report the incident. THIS MUST BE DONE WITHIN 48 HOURS, AND MUST BE DONE FOR EACH INCIDENT. Note that if there is a recent claim in the system for this employee, he or she may not be able to start a new report. Contact Cecelia Neugebauer for assistance.

1. Go to https://www.smis.doi.gov, and click on Accident Reporting.
2. Click on "File a Worker's Compensation Claim (CA1/CA2)".
3. Log in using your last name and the last four of your Social Security Number
4. Enter your e-mail address if needed, then click "Verify E-mail and Request a Claim ID". This can be any e-mail address that you have regular access to.
5. Check your e-mail to get your claim ID, then enter the claim ID in the box on the web site.
6. Verify or input all information requested on the next page. Tick bites would be an injury/traumatic injury rather than an occupational disease or illness.

7. On the next page, enter the details that are asked for, including date, location, and cause and nature of injury.

Fill out the employee certification. I have not been able to get solid guidance on this, but apparently checking "Continuation of Regular Pay (COP)" will allow employees to claim doctor's visits and other lost time due to the incident as regular pay (i.e., not use sick or annual leave). This box should probably be checked. Make sure to read all the statements, and click the check box that you have read the statements. Then click "Complete your claim submission".

Make sure to send a note to your supervisor. Don't forget to *include the claim number* generated by the system. He or she will need to enter information into the same system about your report, and will also need to issue the CA-16 form that you will need to bring to any doctor's appointment.

Once the employee fills out the CA-1 or CA-2, the supervisor needs to go into SMIS (Safety Management Information System) to fill out the supervisor portion of the form. The supervisor should receive an automated message from the SMIS system.

1. Go to https://www.smis.doi.gov, and click on Accident Reporting.
2. Click on "Perform All Supervisor Safety Activities", and click "Proceed".
3. Log in using your last name and the last four of your Social Security Number
4. Enter your e-mail address if needed, then click "Submit/Verify your E-mail Address". This can be any e-mail address that you have regular access to.
5. Choose "Complete the supervisor section of a CA-1 or CA-2" and click "Perform".
6. Enter the Claim Identifier provided by the employee, and click "Submit".
7. Fill in the Supervisor's Report and Certification, and click "Submit". Each box has hyper-linked help if you have any questions about what is needed.
8. Fill in the additional information requested about the supervisor's investigation into the accident, and click "Submit".
9. Next, print and sign the CA-1, and also have the employee sign the CA-1. Keep the form on file in the employee's local personnel file.
10. Print the OSHA Form 301, and save this with the CA-1

Fill out form CA-16. The CA-16 MUST be issued within seven days of the incident. DO NOT post this form on any web site; it should not be accessible to employees (it was described as a "blank check" by Carol Moore).

1. Fill in blocks 2 through 14. Box 1 can be filled in by the employee.
2. NOT CLEAR on whether tick bites require OWCP approval (box 7).

3. Cecelia Neugebauer will fill in box 12 at a later date.

Fill out form CA-17. This form is available at http://www.dol.gov/libraryforms/go-us-dol-form.asp?FormNumber=367. It is the supervisor's statement about the injury, and information about the employee's job.

1. Fill out all information on Side A.

2. On page 2, supply the agency address (e.g., network mailing address). Cecelia Neugebauer will supply the OWCP address at a later date.

Give the CA-16 and CA-17 to the employee. The employee will need the doctor to fill in the back of form CA-16 (boxes 15 – 39), side B and address on page 2 of form CA-17, and return the form to the employee. Things to keep in mind:

1. Employees need to ask the doctor's office whether they accept federal Worker's Compensation BEFORE they go for their appointment.

2. Employees should be provided with the information at http://www.dol.gov/esa/owcp/dfec/regs/compliance/infoinjuredwrkers.htm.

3. Employees should provide the information at http://www.dol.gov/esa/owcp/dfec/regs/compliance/infomedprov.htm to the doctor. Among other things, the doctor must be aware that they are responsible for signing up in an online system (ACS) in order to be paid for the Worker's Compensation case.

4. If possible, a typed medical summary (from the doctor's office) should be attached to the medical form; at the very least, employee should ensure that doctor's responses on the CA-16 are legible.

When the employees return forms CA-16 and CA-17 to you:

Everything needs to go to Cecelia Neugebauer. Keep copies and send her the originals at the address below.

Cecelia R. Neugebauer
National Park Service/Northeast Region
Central Servicing Human Resources Office
2400 E. Fort Avenue
Baltimore, MD 21230-5393
(410) 962-4290 x111 (voice)
(410) 962-2182 (fax)

*Other important information:*

Use this link to find forms used by OWCP:
http://www.dol.gov/owcp/dfec/regs/compliance/forms.htm

Employees can use this link for tracking the progress of their claim:

http://owcp.dol.acs-inc.com/portal/main.do

Jim Comiskey compiled information about billing from a series of interactions with Frank Alvarez (previous OWCP contact). The document covers information on billing for the employee, and information on billing for doctors, hospitals, and pharmacies.

Alternative Work Assignment (AWA):

If the doctor says that the employee cannot return to regular work, then it is important to set up an Alternative Work Assignment for the employee.

- Use the AWA template to describe the alternative work assignment. The Supervisor's Guide has a filled-out example.
- Use the AWA physician letter template to create a letter to the employee's doctor.
- Use the AWA employee letter template to create a letter to the employee.
- Send the above documents to the employee, along with a copy of their PD. Copy Cecelia Neugebauer on the e-mail.
- The employee should return to the doctor with the AWA, physician letter, PD, and CA-17, and discuss the alternative work assignment with the doctor. The doctor will need to sign off on the AWA or make suggestions.
- Once you receive the doctor's input, discuss the AWA with Cecelia Neugebauer to ensure that the AWA is within the doctor's restrictions before the employee returns to work.

*Time sheets:*

Make sure that the employee's time sheet is filled out correctly to reflect any lost time due to the injury; this is required under FECA, the Federal Employees Compensation Act.

1. Time lost on the day of injury due to a traumatic injury is coded as Administrative Leave (060).
2. Lost time ("Continuation of Pay" or COP) after the day of injury includes time spent going to doctor's appointments, physical therapy, or time the employee is not able to work due to the injury.
3. Record the amount of hours lost due to the injury on the employee's time sheet using the appropriate code. NOTE: Frank Alvarez (7/11/2008) recommended claiming the full day that has any time lost as COP. Even if the employee only spends 1 hour at a doctor's appointment, he thought that the full day should be coded COP. This advice seems to run

counter to the pay code information that Carol Daye supplied: "Code the T&A Record with the actual number of hours absent."

4. If the employee is unable to work for a period that includes lieu days, use the codes for Unpaid COP on each lieu day.
5. Continuation of Pay codes:
    a. 160 – FECA/COP Paid (1st Occurrence)
    b. 164 – FECA/COP Paid (2nd Occurrence)
    c. 166 – FECA/COP Paid (3rd Occurrence)
    d. 168 – FECA/COP Paid (4th Occurrence)
    e. Other codes are available for 5th through 11th occurrences; starting at 16L
    f. My assumption is that an "occurrence" is any time related to a specific accident or injury. So if an employee has a tick bite and then sprains an ankle, you'd use the "first occurrence" codes for the tick bite and the "second occurrence" codes for the sprain.
6. Unpaid Continuation of Pay codes:
    a. 161 – FECA/COP Unpaid (1st Occurrence)
    b. 165 – FECA/COP Unpaid (2nd Occurrence)
    c. 167 – FECA/COP Unpaid (3rd Occurrence)
    d. 169 – FECA/COP Unpaid (4th Occurrence)
    e. Other codes are available for 5th through 11th occurrences; starting at 16M
7. There are separate codes for "Light Duty" work, but the NPS 2007 Supervisor's Guide says to use code Regular Hours (010) for "Light Duty" or an AWA.

**Revision Log**

*June 26, 2009* – Added a paragraph about handling injured volunteers.

*January 7, 2010* – Added section "Other important information".

*January 31, 2012* – Changed NPS OWCP contact to Cecelia Neugebauer.

# Appendix S1.F. Procedures and guidance for proper use of park radios.

### Overview

The following information applies to radios owned and programmed specifically for NETN.

Each radio has three zones that are indicated by A, B, and C on the top of the radio (Figure 1, feature 12). Zone (A) is programmed with radio communication frequencies for all parks <u>except</u> ROVA and is programmed with NOAA weather report frequencies. Zone B and C do not have programmed radio frequencies. Crews should check with the resource managers when they arrive in each park to determine the type of use allowed for each park (i.e., for emergency use only, or daily communication).

Channels 1-4, and 8-14 are programmed with park-specific frequencies. Channel 16 is programmed to broadcast NOAA weather report. Channels can be changed by dialing the knob on top of the radio to the correct channel (Figure 1, feature 15). Use the label on the radio to determine which channel to use for each park. Channels with DIR are for direct radio-to-radio communication, and require radios to be relatively close (less than a mile, and depending on terrain). Channels with RPT use the park's repeater radio towers to broadcast the signal over a longer distance. This requires radios to be within range of the repeaters, but also means the entire park will hear the conversation.

Channel 15 (Zone A) is the "NETN direct talk" frequency. This frequency is unique to NETN radios and is to be used for direct radio-to-radio communication without interfering with any park-based frequencies. As the name implies, this is radio-to-radio communication and is therefore limited by the distance between radios and terrain.

### Radio procedures during normal operating conditions

Proper radio communications are paramount to efficient use of radio system resources. Standard procedures promote effective communications. This document has been developed following information on various online procedural documents although your unique environment may require further modification.

Before you press the Push to Talk (PTT) button (Figure 1, feature 5), gather your thoughts about what you are going to say. Many people with radios have a tendency to talk and/or repeat too much. Say what you need to say without unnecessary repeats. Keep in mind the others who may be on the same frequencies you are using. Those frequencies are unavailable to others until they are released, so you should strive to get your message through clearly the first time.

In general, there are five parts to Calling/Communications. The more serious or complex the situation, the more important these procedures become. The information contained herein MUST be practiced until it is second nature. Practicing proper day-to-day radio procedures will make radio procedures automatic and reduces confusion. Another way of saying this is that the secret to working quickly and efficiently is to use common approved radio communication procedures and guidelines, especially in priority/emergency situations.

**Appendix S1.F.** Procedures and guidance for proper use of park radios (continued).

**1st…**Give the radio call sign of the station you are calling. This alerts that station that they are being called and that they should listen to determine who is calling.

**2nd…**Say "THIS IS". The called station knows your tactical call follows. This is extremely important in cases where there is a lot of confusion or poor signal conditions.

**3rd…**Give your radio call sign. Generally, it's advisable not to use personal names since it may be confusing especially with common names. Call signs are usually dictated by the site radio system managers. They are usually based on departmental and individual assignments. Remember that call signs only make sense if the other parties know who is using the specific call signs. In temporary situations such as temporary work at a remote location you can sometimes use a descriptive call sign such as "NETN Forest Crew". In ACAD, your call sign is 318 and your last name. Make sure you verify call signs with the personnel or station you will be communicating with during the day.

**4th…**Give your message and speak clearly. Don't speak too fast especially if the message needs to be written down. Pause after logical phrases. Do not use the word "break" when you pause. It is confusing, wastes time and has other connotations. Merely release the PTT button and pause. If the other station has questions, they should key up and make their request known. This also permits other stations to break in if they have emergency traffic.

**5th…**You can end your conversation with "CLEAR" however it isn't required.

It is sometimes permissible to omit the radio call sign designator of the station you are calling, BUT only after communications have been established and no confusion will occur. Don't waste time, by using superfluous tactical call sign.

The term "THIS IS" is used to separate the FROM and TO call signs. If, and only if, confusion will not result, omitting the "THIS IS" phrase is permissible.

If you are the calling station and you omit your own radio call sign, you can create confusion. In certain situations, such as quick replies between operators, it can be accomplished without confusion. You must NOT use this simplification where messages can be interpreted incorrectly.

Elimination of the words "OVER" and "OUT" is possible where it doesn't introduce problems. Unkeying after your message implies "OVER". To comply with FCC regulations, you must give your radio call sign when you first start to talk and when you finish your communication. Giving your radio call sign can imply an "OUT" ending. Should giving your call sign cause any confusion, do not hesitate to add the word "CLEAR".

### Radio procedures during an emergency

1. Identify yourself at the beginning of each transmission especially where confusion may result if omitted.

2. Identification is a requirement of the FCC. According to the FCC, radio users must give their call sign when they first start to talk and when they finish their communication.

**Appendix S1.F.** Procedures and guidance for proper use of park radios (continued).

3. Listen before transmitting. Be sure you are not on the air with someone else.

4. Know what you are going to say before you push the mike button; in other words, engage your brain before you put your mouth in gear.

5. Hold the transmit button down for at least a second before beginning your message to insure that the first part of your message is not cut off.

6. TALK ACROSS THE FACE OF YOUR MICROPHONE. This technique makes the communications more understandable. In other words, hold the face of the microphone almost at a right angle to your face.

7. Speak slowly, distinctly, clearly, and do not let your voice trail off at the end of words or sentences. Give each and every word equal force. For some this takes a lot of practice and conscious effort but do it.

8. Never acknowledge calls or instructions unless you understand the call or instructions perfectly. If you do not understand, recontact and "say again" the missed traffic.

9. When you have understood the message, acknowledge the receipt with the words "copy", "received" or "acknowledged." The word "copy" is preferred.

10. The word "break" is never used UNLESS there is an emergency. Give your call sign to gain access to a net.

11. Always acknowledge calls and instructions. Nothing is more disruptive to the smooth flow of communications than dead silence in response to a message. If you cannot copy or respond to the call immediately, then tell the caller to "repeat" or "stand by." Otherwise, acknowledge each call immediately.

12. Under stress, many operators have a tendency to talk too fast. ACCURACY FIRST, SPEED SECOND.

13. At times, radio conditions are poor and words must be overly exaggerated to be understandable. In general, speak very slowly and distinctly to carry through static and weak signals.

14. If you are relaying a message for another person, be sure you repeat the message exactly, word for word as it is given to you. If it makes no sense to you, get an explanation before you put it on the air. If necessary, refer the message back to the originator for clarification.

15. There is no place for Ham radio "Q" signals or signals from any other radio service during official and emergency communications. They are too easily misunderstood, rarely save time, and often result in errors. Use signals from the Local Government Public-Safety Radio Service or "plain English" only.

**Appendix S1.F.** Procedures and guidance for proper use of park radios (continued).

16. Do not act as a relay station unless Dispatch, or another radio station, asks for a relay – and you can fulfill the requirement with your station.

17. When transmitting numbers (house numbers, street & telephone numbers, etc.), always transmit number sequences as a series of individual numbers. Never say numbers in combinations.

18. If a proper name needs to be transmitted, try to spell it out using the recognized radio phonetic alphabet. Do not use cute or self-invented phonetics. There is no place for them in official and emergency communications. Avoid using the phrase "common spelling" to reduce confusion.

19. ONLY TRANSMIT FACTS. If your message is a question, deduction, educated guess, or hearsay, identify it as such. Do not clutter up the air with non-essential information. Be careful what you say on the air. There are many ears listening. Many facts will be taken out of context even when carefully identified.

20. If you do not understand the whole message given to you or if you missed a word out of the transmission, reply with "Say again." Do not say "please repeat" because it sounds too much like the word "received" when conditions are poor.

21. Chewing gum, eating, and other activities with items in the mouth tend to clutter up the clarity of your speech. Don't do this.

22. Avoid angry comments on the air at all costs. Obscene statements are not necessary and are out of place in all communications.

23. Sound alert. Nothing destroys confidence as much as a bored or weary sounding radio operator. If you are tired, get a relief operator.

24. During an incident, communication suffers enough confusion without wisecracks and jokes. When providing emergency communications you must remember that it is serious business and should be treated as such at all times.

25. Stay off the air unless you are sure you can be of assistance. It does no good to offer advice, assistance, comments or other input unless you can truly provide clarification. It is better to remain silent and be thought a fool than to open your mouth and remove all doubt!

26. Always know your location. If you are mobile or portable and moving around, always keep a sharp lookout for landmarks. You must be able, if called upon, to accurately describe your location at any time.

27. When you are on the fringes of communications, look for a receiving "hot spot" site and use it. Don't walk around talking while in a communications fringe area. Repeaters have much more power than your handheld. Even if you have a good signal from a repeater, it does not mean you are good going into the repeater.

**Appendix S1.F.** Procedures and guidance for proper use of park radios (continued).

28. Park dispatchers are often very busy with work that is not on the air. If you call Dispatch and do not get a reply, be patient and call again in a minute or two. If you have an emergency, say you have "Emergency traffic" after you identify yourself.

In conclusion, these few rules and suggestions are intended to help you become a better radio operator. Analyze your present operating methods and try to polish each element so your participation in radio communications is professional and worthwhile.

# Appendix S1.G. Personal Locator Beacon Management

Personal Locator Beacons are emergency devices that directly alert search and rescue services. They should only be used as a last resort and in situations where immediate assistance is required. Field crews will be trained with and provided the FastFind PLB owner's manual, which provides easy-to-follow illustrated instructions on how to deploy the PLB in the event of an emergency. The owner's manual can also be downloaded from the following website:
http://lib.store.yahoo.net/lib/landfallnav/FASTFINDmanual.pdf#_ga=1.124929742.590391232.1481749960

This Appendix covers the periodic management that is required to maintain the PLBs.

## Model Information

McMurdo FastFind 210 GPS
website: http://www.mcmurdomarine.com/personal-locator-beacons

When activated, McMurdo FastFind 210 GPS transmits to your unique emergency identifier to the Cospas Sarsat satellite system, which will then pinpoint your location and alert local Search and Rescue teams. The unit will transmit continuously for 24 hours and is waterproof up to 10m. It will not float or transmit underwater.

## Testing

The McMurdo FastFind PLB has a battery and GPS test routine. It is important to ensure that each unit is working correctly, but units should not be too frequently tested to avoid draining the battery. Each unit is limited to 12 battery tests and 2 GPS tests per year. Therefore, test each unit once before the field season and only retest if necessary. For test routine, see owner's manual.

## Registration

Each unit must be reregistered with the NOAA Satellite and Information Service every two years. Visit beaconregistration.noaa.gov to update emergency contact information or renew a registration. New registration stickers will be sent to the registered owner. You can recover login-in information for a PLB with the UIN and the owner name and phone number.

User Name: Forestcrew
Password: Forestcrew2016! (as of Jan. 2016)
Owner: Kate M Miller

| PLB Unit Information (Spring 2016) | | | | | | |
|---|---|---|---|---|---|---|
| **Name** | **UIN** | **Assigned to** | **Owner** | **Owner Phone** | **Primary Contact** | **PC Phone** |
| MIDN | 2DCE65F056FFBFF | Forest Crew | Kate M Miller | 207-288-8736 | Adam Kozlowski | 801-389-6070 |
| NETN 1 | 2DCE65F1AAFFBFF | Forest Crew | Kate M Miller | 207-288-8736 | Adam Kozlowski | 801-389-6070 |
| NETN 2 | 2DCE65F170FFBFF | Wetlands | Kate M Miller | 207-288-8736 | Adam Kozlowski | 801-389-6070 |
| NETN 3 | 2DCE6CAD4CFFBFF | Land Birds | Kate M Miller | 207-288-8736 | Kate Miller | 207-288-8736 |

| Emergency Contact Information for Forest Crew PLBs (Spring 2016) | | | | |
|---|---|---|---|---|
| **Role** | **Contact** | **Work Number** | **Cell Number** | **Other** |
| Owner | Kate M Miller | 207-288-8736 | 207-801-8368 | 207-610-4225 |
| Primary Contact | Adam Kozlowski | 801-457-3368 ext. 240 | 801-389-6070 | |
| Secondary Contact | Mark Johnson | 540-693-3200 ext. 6060 | 610-764-0068 | |

### Battery Life

The PLB unit batteries last for 5 years. The expiry date is listed on the back of the PLB. If the batteries are set to expire before or during the field season, the unit must be serviced before the field season. In 2016, the units were serviced for $120/unit by the Hamilton Marine in Searsport, ME.

| **PLB Management Timeline** | | |
|---|---|---|
| **Task** | **Interval** | **Expires/Revisit** |
| Confirm/Update emergency contact information | Annually | Before field season |
| Test battery life and GPS function | Annually | Once before field season |
| Renew PLB registration | Biennially | December 2018 |
| Replace Batteries | Every five years | January 2022 |

# Appendix S1.H. Instructions for responding to an automobile accident in an NPS-owned vehicle.

1. Stop immediately and turn on emergency flashers.
2. Take steps to prevent another accident at the scene.
3. Call 911 or ambulance if necessary.
4. Notify police, NPS law enforcement and your supervisor.
5. In the event of death, actual or potential serious injury, or significant property damage (damage greater than $2,500), the employee involved must immediately notify the DOI Torts Practice Branch at DOITORTS@sol.doi.gov in addition to their supervisor.
6. In reporting an accident, employee should state the facts to the best of her/her knowledge. **Conclusions as to fault or responsibility should not be stated.** The employee should report the accident only to authorized representatives of the Government, the employee's insurance company, and police officers investigating the accident. The employee shall also file any report required by law.
7. Get name and address of witness (preferably two witnesses). Ask witness to complete Standard Form (SF) 94, Statement of Witness, contained in vehicle glove compartment.
8. State/provide your name, address, place of employment, name of your supervisor, and upon request show your driver's license and vehicle registration information.
9. Complete Standard Form (SF) 91, Motor Vehicle Accident Report at the scene. If conditions prevent this, make notes of the following:
    a. Registration information for other vehicle(s) (owner's name, owner's address, tag number, VIN, and vehicle description)
    b. Information on other drivers (name, address, operator's permit, and expiration date)
    c. Name and address of each person involved and extent of injury, in any.
    d. Name and address of company insuring other vehicle(s) and insurance policy number
    e. General information such as location, time, measurements, weather, damage, etc.
10. Encourage police to provide a Police Report and, if available, submit a copy with SF 91.
11. If you have a camera, take pictures of the accident scene and any damage to the vehicles involved. Submit along with SF 91.

**Appendix S1.H.** Instructions for responding to an automobile accident in an NPS-owned vehicle (continued).

12. If vehicle is unsafe to operate, arrange for a towing services and pay for these services on vehicle charge/gas card.

13. Submit all reports and data to your supervisor within one working day.

14. If federal employee is injured, workers compensation process needs to be initiated within 48 hours of incident. Supervisor will assist with this process. It is important for injured employee to receive prompt medical treatment. Make sure the employee sees a doctor, not a nurse, nurse practitioner, or physician's assistant.

15. Supervisor will submit copies of all reports and data to the the DOI Torts Practice Branch at DOITORTS@sol.doi.gov as soon as possible but no later than 10 calendar days after the accident.

### Accident/collision reports should be filed for:

1. All motor vehicle accidents involving federally owned or leased vehicles and employee-owned or rented vehicles while being used on official business, regardless of the amount of damage.

2. All public/visitor accidents will be reported on a SF-91 when a government-owned vehicle is involved, government property is damaged, fatality occurs, medical treatment is required and/or a reasonable possibility of a tort claim is expected.

3. Thefts and Vandalism should be reported to Park Law Enforcement Officials rather than reported on SF-91.

4. Reporting Multiple Vehicle Accidents – when a privately owned vehicle damages Government property, two reports (SF-91) are required: one report for the Government property and one for the private operator.

# Appendix S1.I. Northeast Region accident/incident reporting process.

### Northeast Region
### TORT Claims – Accident/Incident Reporting Process

Regional office employees travel on official government business and may be injured and/or involved in a motor vehicle accident while in travel status. Use this checklist to ensure all required report information is gathered and proper notifications have been made immediately following an injury and/or accident that may result in a possible **tort** claim against the Government in accordance with Departmental Manual, Part 451, *Claims*.

**REPORTING GUIDELINES**

1. Employees will immediately report any incident or accident involving a private person or private property which may give rise to a tort claim against the Government.

2. In the event of death, actual or potential serious injury, or significant property damage (damage greater than $2,500), the employee involved must immediately notify the DOI Torts Practice Branch at DOITORTS@sol.doi.gov.

3. Employee supervisor will immediately follow up with the regional TCO to ensure the employee report was received and determine if additional information is needed.

4. Damage to a government motor vehicle (GMV), as defined by Reference Manual 50B, Occupational Safety and Health Program as any vehicle owned, leased, rented or otherwise acquired for official purposes, or to private property resulting from GMV operation will be reported immediately as described above.

5. Standard Form (SF) 91, Motor Vehicle Accident Report, and SF 94, Statement of Witness, as necessary must be completed for all motor vehicle accident cases and promptly submitted to the regional TCO. These forms should be printed and kept with you while on official government travel when operating a GMV. Copies of all accident reports will be furnished to the employee's regional TCO as soon as possible but no later than 10 calendar days after the accident.

6. In reporting an accident, employee should state the facts to the best of his/her knowledge. Conclusions as to fault or responsibility should not be stated. The employee should report the accident only to authorized representatives of the Government, the employee's insurance company, and police officers investigating the accident. The employee shall also file any report required by law.

7. If an employee involved in an accident carries liability insurance which may cover the employee or the Government, the employee shall report the accident to the insurance company and shall also furnish the regional TCO a copy of the insurance policy together with applicable endorsements and amendments.

**Appendix S1.I.** Northeast Region accident/incident reporting process (continued).

## DEFINITIONS

**Government Motor Vehicle**: Any vehicle owned, leased, rented or otherwise acquired for official purposes.

**Incident**: An event involving National Park Service employees or other personnel directly supervised by the NPS, that results in a near-hit, injury, illness, fatality, damage to government property, or damage to other property being used for government business.

**Minor Incident/Accident:** An event involving National Park Service employees, or other personnel directly supervised by the NPS, that results in:

1. Injury or illness requiring only first-aid treatment (per OSHA definition) and is not otherwise a recordable injury/ illness; and/or

2. Property damage of less than $2,500.

**NPS Employee:** All NPS employees, or other Federal, State, or local agency employees under NPS supervision/jurisdiction, and/or contractors and volunteers directly supervised by NPS or under NPS jurisdiction.

**Significant Property Damage/Operating Loss Incident:** Incidents that result in property damage or operating loss from $2,500 up to, but less than $250,000.

**Serious Accident:** An incident involving National Park Service employees, or other Federal, State, or local agency employees under NPS supervision/jurisdiction, and/or contractors and volunteers directly supervised by NPS (e.g. volunteers, SCA, emergency workers, etc.), that results in:

1. One or more work-related fatalities, or imminently fatal injuries or illnesses;

2. Hospitalization of three or more employees from a single occurrence;

3. Property damage under Departmental/NPS control, and/or operating loss of $250,000 or more; and/or consequences that the NPS Designated Agency Safety and Health Official (DASHO) or the Regional Designated Safety and Health Official (RDSHO) judges to warrant investigation under the serious accident investigation procedures.

**DOI Torts Practice Branch:** The Torts Practice Branch handles all tort claims and associated litigation and employee claims. Upon receipt of a new tort claim, Tort Claims Officers should review the claim, collect all relevant documents, and provide a written recommendation of whether the claim should be granted in full or in part or denied, providing a basis for their recommendation. These claims and relevant documents should be scanned and forwarded to the new torts email address: DOITORTS@sol.doi.gov. The Torts Practice Branch is a completely virtual Branch, thus, all documents, including the SF95, supporting documentation, and the Tort Claims Officer's written recommendations, should be scanned and sent to the doitorts email address. Once the Torts Practice Branch receives the tort claim, the Branch will assign the matter

**Appendix S1.I.** Northeast Region accident/incident reporting process (continued).

to one of the 8 attorneys and paralegals working for the Branch and will copy the Tort Claims Officer so that he/she is aware of the attorney/paralegal assigned. We will then ask the Tort Claims Officer to send an acknowledgment letter to the claimant and provide a copy of the acknowledgement letter to the assigned attorney/paralegal. The tort claims officer will be your direct contact during the pendency of your claim. The attorney/paralegal will review the claim and will be in touch with the tort claims officer as needed.

# Appendix S1.J. SF-91 Motor Vehicle Accident Report

| MOTOR VEHICLE ACCIDENT (CRASH) REPORT | *Please read the Privacy Act Statement on Page 4* | INSTRUCTIONS: Sections I through IX are filled out by the vehicle operator. Section X, items 73 thru 83c are filled out by the operator's supervisor. Section XI thru XIII are filled out by a crash investigator for bodily injury, fatality, and/or damage exceeding $500. |
|---|---|---|

**SECTION I - FEDERAL VEHICLE DATA**

| 1. DRIVER'S NAME *(Last, First, Middle)* | 2. DRIVER'S LICENSE NUMBER/STATE/LIMITATIONS | 3. DATE OF CRASH |
|---|---|---|
| 4a. DEPARTMENT/FEDERAL AGENCY PERMANENT OFFICE ADDRESS | 4b. TELEPHONE NUMBER | 4c. E-MAIL ADDRESS |

| 5. TAG OR IDENTIFICATION NUMBER | 6. ESTIMATED REPAIR COST $ | 7. YEAR OF VEHICLE | 8. MAKE | 9. MODEL | 10. SEAT BELTS USED? ☐ YES ☐ NO |
|---|---|---|---|---|---|

11. DESCRIBE VEHICLE DAMAGE

**SECTION II - OTHER VEHICLE DATA** ***(Use Section VIII if additional space is needed)***

| 12. DRIVER'S NAME *(Last, First, Middle)* | 13. SOCIAL SECURITY NUMBER/ TAX IDENTIFICATION NUMBER | 14. DRIVER'S LICENSE NUMBER/STATE/LIMITATIONS |
|---|---|---|

| 15a. DRIVER'S WORK ADDRESS | 15b. TELEPHONE NUMBER |
|---|---|
| 16a. DRIVER'S HOME ADDRESS | 16b. HOME TELEPHONE NUMBER |
| 17. DESCRIPTION OF VEHICLE DAMAGE | 18. ESTIMATED REPAIR COST $ |

| 19. YEAR OF VEHICLE | 20. MAKE OF VEHICLE | 21. MODEL OF VEHICLE | 22. TAG NUMBER AND STATE |
|---|---|---|---|

| 23a. DRIVER'S INSURANCE COMPANY NAME AND ADDRESS | 23b. POLICY NUMBER |
|---|---|
| | 23c. TELEPHONE NUMBER |
| 24. VEHICLE IS ☐ CO-OWNED ☐ RENTAL ☐ LEASED ☐ PRIVATELY OWNED | 25a. OWNER'S NAME(S) *(Last, First, Middle)* / 25b. TELEPHONE NUMBER |

26. OWNER'S ADDRESS(ES)

**SECTION III - FATALITY OR INJURED** ***(Use Section VIII if additional space is needed)***

**A**

| 27. NAME *(Last, First, Middle)* | 28. SEX | 29. DATE OF BIRTH |
|---|---|---|
| 30. ADDRESS | | |

| 31. MARK "X" IN TWO APPROPRIATE BOXES ☐ FATALITY ☐ INJURED ☐ DRIVER ☐ HELPER ☐ PASSENGER ☐ PEDESTRIAN | 32. IN WHICH VEHICLE ☐ FED ☐ OTHER (2) | 33. LOCATION IN VEHICLE | 34. FIRST AID GIVEN BY |
|---|---|---|---|
| 35. TRANSPORTED BY | 36. TRANSPORTED TO | | |

**B**

| 37. NAME *(Last, First, Middle)* | 38. SEX | 39. DATE OF BIRTH |
|---|---|---|
| 40. ADDRESS | | |

| 41. MARK "X" IN TWO APPROPRIATE BOXES ☐ FATALITY ☐ INJURED ☐ DRIVER ☐ HELPER ☐ PASSENGER ☐ PEDESTRIAN | 42. IN WHICH VEHICLE ☐ FED ☐ OTHER (2) | 43. LOCATION IN VEHICLE | 44. FIRST AID GIVEN BY |
|---|---|---|---|
| 45. TRANSPORTED BY | 46. TRANSPORTED TO | | |

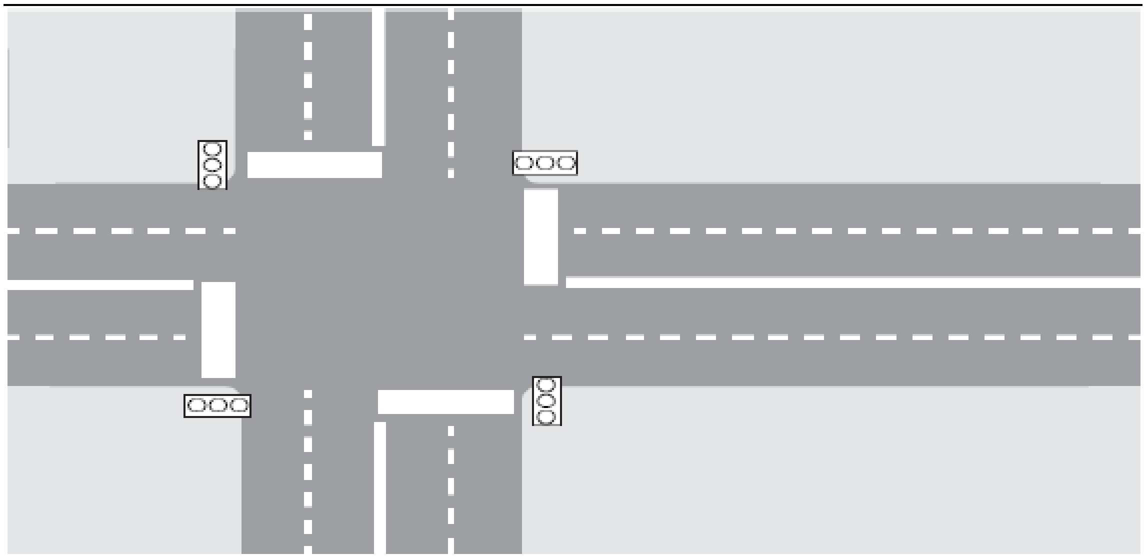
| 47. PEDESTRIAN | a. NAME OF STREET OR HIGHWAY | b. DIRECTION OF PEDESTRIAN *(Southwest (SW) corner to Northwest (NW) corner, etc.)* FROM | TO |
|---|---|---|---|
| | c. DESCRIBE WHAT PEDESTRIAN WAS DOING AT TIME OF CRASH *(crossing intersection with signal, against signal, diagonally; in roadway playing, walking, hitchhiking, etc.)* | | |

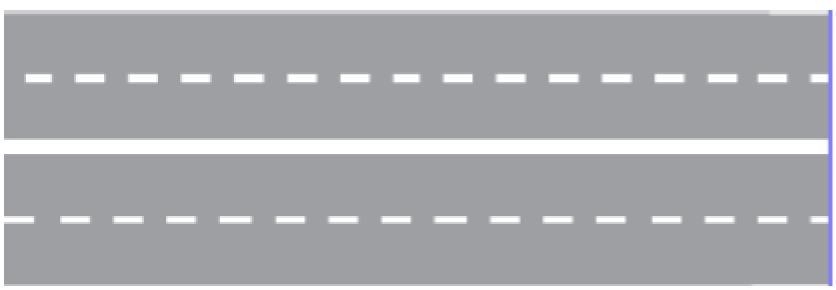
*Previous editions are NOT usable* National Stock Number 7540-00-634-4041 **STANDARD FORM 91 (REV. 9/2020)** Prescribed by GSA - FMR (41 CFR) 102-34.290

**SECTION IV - CRASH TIME AND LOCATION** ***(Use Section VII if additional space is needed)***

| | |
|---|---|
| 48. DATE OF CRASH | 49. PLACE OF CRASH *(Street address, city, state, ZIP Code; Nearest landmark; Distance nearest intersection; Kind of locality (industrial, business, residential, open country, etc.); Road description).* |
| 50. TIME OF CRASH<br>☐ AM<br>☐ PM | |

51. INDICATE ON THE DIAGRAMS BELOW WHAT HAPPENED

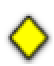




1. Number the vehicles involved as follows:

Government Vehicle (GOV) #1 - Private Vehicle (POV) #2 - Additional Vehicles GOV or POV as #3, etc. and show direction of travel by arrow.
*(Example: ---->* **1** **2** *<----)*

2. Use solid line to show path before crash ———————— **2**
Broken line after crash - - - - - - - - - - - - **2**

3. Show pedestrian by -----------------------> 

4. Show railroad by -|-|-|-|-|-|-|-|-|-|-|-|-|-|-|-|-|-|-|-|-|

5. Give names or numbers of streets or highways

6. Indicate north by arrow in this compass

**STANDARD FORM 91** (REV. 9/2020) **PAGE 2**

**Appendix S1.J.** SF-91 Motor Vehicle Accident Report (continued).

52. POINT OF IMPACT *(Check one for each vehicle)*

| FED | 2 | AREA | FED | 2 | AREA | FED | 2 | AREA | FED | 2 | AREA | FED | 2 | AREA | FED | 2 | AREA |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | a. Front | | | b. Right Front | | | c. Left Front | | | d. Rear | | | e. Right Rear | | | f. Left Rear |
| | | g. Right Side | | | h. Left Side | | | | | | | | | | | | |

53. DESCRIBE WHAT HAPPENED *(Refer to vehicles as "Fed", "2", "3", etc. Please include information on posted speed limit, approximate speed of vehicles, road conditions, weather conditions, driver visibility, condition of crash vehicles, traffic controls (warning light, stop signal, etc.), condition of light (daylight, dusk, night, dawn, artificial light, etc.), and driver actions (making a U-turn, passing, stopped in traffic, etc.).*

**SECTION V - WITNESS/PASSENGER** ***(Witness must fill out Standard Form 94 - Statement of Witness) (Continue in Section VIII.)***

| | | | |
|---|---|---|---|
| A | 54. NAME *(Last, First, Middle)* | 55. TELEPHONE NUMBER | 56. HOME TELEPHONE NUMBER |
| | 57. WORK ADDRESS | 58. HOME ADDRESS | |
| B | 59. NAME *(Last, First, Middle)* | 60. TELEPHONE NUMBER | 61. HOME TELEPHONE NUMBER |
| | 62. WORK ADDRESS | 63. HOME ADDRESS | |

**SECTION VI - PROPERTY DAMAGE** ***(Use Section VIII if additional space is needed.)***

| | | |
|---|---|---|
| 64a. NAME OF OWNER *(Last, First, Middle)* | 64b. TELEPHONE NUMBER | 64c. HOME TELEPHONE NUMBER |
| 64d. WORK ADDRESS | 64e. HOME ADDRESS | |
| 65a. NAME OF INSURANCE COMPANY | 65b. TELEPHONE NUMBER | 65c. POLICY NUMBER |
| 66. ITEM DAMAGED | 67. LOCATION OF DAMAGED ITEM | 68. ESTIMATED COST |

**SECTION VII - POLICE INFORMATION**

| | | |
|---|---|---|
| 69a. NAME OF POLICE OFFICER | 69b. BADGE NUMBER | 69c. TELEPHONE NUMBER |
| 70. PRECINCT OR HEADQUARTERS | 71a. PERSON CHARGED WITH CRASH | 71b. VIOLATION(S) |

**STANDARD FORM 91** (REV. 9/2020) **PAGE 3**

**Appendix S1.J.** SF-91 Motor Vehicle Accident Report (continued).

**Appendix S1.J.** SF-91 Motor Vehicle Accident Report (continued).

**SECTION VIII - EXTRA DETAILS**

SPACE FOR DETAILED ANSWERS. INDICATE SECTION AND ITEM NUMBER FOR EACH ANSWER. IF MORE SPACE IS NEEDED, CONTINUE ON ADDITIONAL SHEETS OF PAPER.

**PRIVACY ACT STATEMENT**

The information on this form is subject to the Privacy Act of 1974 - United States Code set forth at 5 U.S.C. § 552a. Authority to collect the information is set forth at 40 U.S.C. § 491 and 31 U.S.C. § 7701. The information is required by Federal Government agencies to administer motor vehicle programs, including maintaining records on crashes involving privately owned and Federal fleet vehicles, and collecting crash claims resulting from crashes. Federal employees, and employees under contract, will use the information only in the performance of their official duties. Routine uses of the collected information may include disclosures to: appropriate Federal, State, or local agencies or contractors when relevant to civil, criminal, or regulatory investigations or prosecutions; the Office of Personnel Management and the Government Accountability Office for program evaluation purposes; a Member of Congress or staff in response to a request for assistance by the individual of record; another Federal agency, including the Department of the Treasury and the Department of Justice, or a court under judicial proceedings; agency Inspectors General in conducting audits; private insurance and the collection agencies *(including agencies under contract to Treasury to collect debt)*, and to other agency finance offices for Federal management and debt collection. Furnishing the requested information is mandatory, including the Social Security Number or Taxpayer's Identification Number (TIN) for use as a unique identifier to ensure accurate identification for individuals or firms in the system.

**SECTION IX - FEDERAL DRIVER CERTIFICATION**

I certify that the information on this form *(Sections I thru VII)* is correct to the best of my knowledge and belief.

| 72a. NAME AND TITLE OF DRIVER | 72b. DRIVER'S SIGNATURE | 72c. DATE |
|---|---|---|
| | | |

**SECTION X - DETAILS OF TRIP DURING WHICH CRASH OCCURRED**

| 73. ORIGIN | 74. DESTINATION |
|---|---|
| | |

75. EXACT PURPOSE OF TRIP

| | DATE | TIME *(Include AM or PM)* | | DATE | TIME *(Include AM or PM)* |
|---|---|---|---|---|---|
| 76. TRIP BEGAN | | | 77. CRASH OCCURRED | | |

| 78. AUTHORITY FOR THE TRIP WAS GIVEN TO THE OPERATOR | 79. WAS THERE ANY DEVIATION FROM DIRECT ROUTE? |
|---|---|
| ☐ ORALLY ☐ IN WRITING *(Explain)* | ☐ NO ☐ YES *(Explain)* |
| 80. WAS THE TRIP MADE WITHIN ESTABLISHED WORKING HOURS? | 81. DID THE OPERATOR, WHILE EN ROUTE, ENGAGE IN ANY ACTIVITY OTHER THAN THAT FOR WHICH THE TRIP WAS AUTHORIZED? |
| ☐ YES ☐ NO *(Explain)* | ☐ NO ☐ YES *(Explain)* |

| 82. COMPLETED BY DRIVER'S SUPERVISOR | a. DID THIS CRASH OCCUR WITHIN THE EMPLOYEE'S SCOPE OF DUTY? | |
|---|---|---|
| | ☐ YES ☐ NO | b. COMMENTS |

| 83a. NAME AND TITLE OF SUPERVISOR | 83b. SUPERVISOR'S SIGNATURE | 83c. DATE | 83d. TELEPHONE NUMBER |
|---|---|---|---|
| | | | |

**STANDARD FORM 91** (REV. 9/2020) **PAGE 4**

**Appendix S1.J.** SF-91 Motor Vehicle Accident Report (continued).

**SECTION XI - CRASH INVESTIGATION DATA**

84. DID THE INVESTIGATION DISCLOSE CONFLICTING INFORMATION? ☐ NO ☐ YES *(If checked, explain below.)*

85. PERSONS INTERVIEWED

| NAME | DATE | NAME | DATE |
|---|---|---|---|
| a. | | c. | |
| b. | | d. | |

86. ADDITIONAL COMMENTS *(Indicate section and item number of each comment)*

**SECTION XII - ATTACHMENTS**

87. LIST ALL ATTACHMENTS TO THIS REPORT

**SECTION XIII - COMMENTS/APPROVALS**

88. REVIEWING OFFICIAL'S COMMENTS

| 89. CRASH INVESTIGATOR | | 90. CRASH REVIEWING OFFICIAL | |
|---|---|---|---|
| a. SIGNATURE | b. DATE | a. SIGNATURE | b. DATE |
| c. NAME *(First, Middle, Last)* | | c. NAME *(First, Middle, Last)* | |
| d. TITLE | | d. TITLE | |
| e. OFFICE | | e. OFFICE | |
| f. TELEPHONE NUMBER | EXTENSION | f. TELEPHONE NUMBER | EXTENSION |
| g. E-MAIL ADDRESS | | g. E-MAIL ADDRESS | |

**STANDARD FORM 91** (REV. 9/2020) **PAGE 5**

# Appendix S1.K. SF-94 Statement of Witness.

| **STATEMENT OF WITNESS**<br>*(Attach additional sheets if necessary)* | *Please read the Privacy Act Statement on Page 3* | **OMB Control Number: 3090-0118**<br>**Expiration Date: 11/30/2023** |
|---|---|---|

Paperwork Reduction Act Statement - This information collection meets the requirements of 44 U.S.C. § 3507, as amended by section 2 of the Paperwork Reduction Act of 1995. You do not need to answer these questions unless we display a valid Office of Management and Budget (OMB) control number. The OMB control number for this collection is 3090-0118. We estimate that it will take 20 minutes to read the instructions, gather the facts, and answer the questions. Send only comments relating to our time estimate, including suggestions for reducing this burden, or any other aspects of this collection of information to: U.S. General Services Administration, Regulatory Secretariat Division (M1V1CB), 1800 F Street, NW, Washington, DC 20405.

1. WITNESS INFORMATION

a. NAME OF WITNESS:

b. HOME ADDRESS *(Include ZIP Code)*

c. E-MAIL ADDRESS

| d. WORK TELEPHONE NUMBER | e. CELLULAR TELEPHONE NUMBER | f. HOME TELEPHONE NUMBER |
|---|---|---|
| | | |

2. ACCIDENT INFORMATION

| a. DID YOU WITNESS THE ACCIDENT? | b. DATE OF ACCIDENT: | c. TIME OF ACCIDENT: ☐ a.m. ☐ p.m. | d. TIME YOU ARRIVED AT SCENE? ☐ a.m. ☐ p.m. |
|---|---|---|---|
| | | | |

3. WHERE DID THE ACCIDENT OCCUR? *(Give Street Location, City, and State)*

4. TELL IN YOUR OWN WAY HOW THE ACCIDENT HAPPENED.

5. WAS ANYONE INJURED, AND IF SO, EXTENT OF INJURY IF KNOWN?

6. DESCRIBE THE APPARENT DAMAGE TO PRIVATE PROPERTY.

7. DESCRIBE THE APPARENT DAMAGE TO GOVERNMENT PROPERTY.

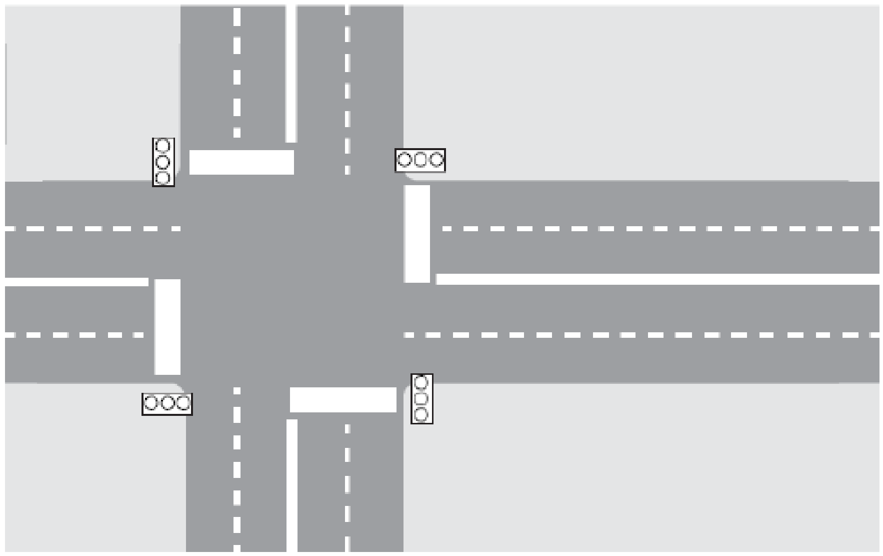
8. DESCRIBE ROAD AND CONDITIONS THAT INFLUENCED THE ACCIDENT *(e.g. weather, terrain, debris, road work, time of day).*

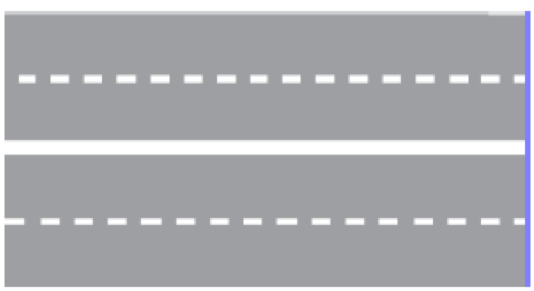
9. DID YOU NOTICE ANYTHING UNUSUAL PRIOR TO OR DURING THE ACCIDENT?
*IF YES, PLEASE DESCRIBE WHAT YOU NOTICED AND WHY YOU THINK IT WAS PERTINENT TO THIS ACCIDENT.*

**STANDARD FORM 94 (REV. 11/2020)**
Prescribed by GSA - FMR (41 CFR) 102-34

**Appendix S1.K.** SF-91 Statement of Witness (continued).

10. INDICATE ON THE DIAGRAMS BELOW WHAT HAPPENED.





1. Number the vehicles involved as follows:

Government Vehicle (GOV) #1 - Private Vehicle (POV) #2 - Additional Vehicles GOV or POV as #3, etc. and show direction of travel by arrow.
*(Example:* —> **1** **2** <—*)*

2. Use solid line to show path before accident ———— **2**
   Broken line after accident - - - - - - - - - **2**

3. Show pedestrian by ————————> ◆

4. Show railroad by -|-|-|-|-|-|-|-|-|-|-|-|-|-|-|-|-|-|-|-|-|

5. Give names or numbers of streets or highways

6. Indicate north by arrow in this compass

**STANDARD FORM 94** (REV. 11/2020) **PAGE 2**

**Appendix S1.K.** SF-91 Statement of Witness (continued).

NOTES: Include other pertinent information such as: How many drivers/vehicles were involved? Describe the vehicles. How many passengers per vehicle(s)? Were Police, Fire and/or Rescue on the scene? Was a Police Report completed? Were Police, Fire and/or Rescue present before or after you arrived on the scene? Describe the accident *(provide your detailed account)*.

**PRIVACY ACT STATEMENT**

The information on this form is subject to the Privacy Act of 1974 - United States Code set forth at 5 U.S.C. § 552a. Authority to collect the information is set forth at 40 U.S.C. § 491 and 31 U.S.C. § 7701. The information is required by Federal Government agencies to administer motor vehicle programs, including maintaining records on accidents involving privately owned and Federal fleet vehicles, and collecting accident claims resulting from accidents. Federal employees, and employees under contract, will use the information only in the performance of their official duties. Routine uses of the collected information may include disclosures to: appropriate Federal, State, or local agencies or contractors when relevant to civil, criminal, or regulatory investigations or prosecutions; the Office of Personnel Management and the Government Accountability Office for program evaluation purposes; a Member of Congress or staff in response to a request for assistance by the individual of record; another Federal agency, including the Department of the Treasury and the Department of Justice, or a court under judicial proceedings; agency Inspectors General in conducting audits; private insurance and the collection agencies *(including agencies under contract to Treasury to collect debt)*, and to other agency finance offices for federal management and debt collection.

12. WITNESS NAME:

| 13. WITNESS SIGNATURE: | DATE: | TIME: |
|---|---|---|
| | | |

**STANDARD FORM 94** (REV. 11/2020) **PAGE 3**

**Appendix S1.K.** SF-91 Statement of Witness (continued).

## Revision History

Version numbers will be incremented by a whole number (e.g., Version 1.30 to 2.00) when a change is made that significantly affects requirements or procedures. Version numbers will be incremented by decimals (e.g., Version 1.06 to Version 1.07) when there are minor modifications that do not affect requirements or procedures included in the protocol. Add rows as needed for each change or set of changes tied to an updated version number.

## Revision History Log

| Version # | Date | Revised by | Changes | Justification |
|---|---|---|---|---|
| 1.00 | January 2009 | Kate Miller | Initial version. | |
| 1.01 | March 2009 | Kate Miller | Added more information about poisonous snakes and MIDN and NETN.<br>Added Appendices I-IV. | |
| 1.02 | April 2009 | Kate Miller<br>Brian Mitchell | Clarified that supervisor must be notified immediately after an incident.<br>Changed hospital for MABI and added Dartmouth Hitchcock Medical Center as an option for SAGA.<br>Added WEFA emergency contact information.<br>Minor editorial changes. | |
| 1.03 | May 2009 | Sarah Lupis Kozlowski | Minor editorial changes, formatting. | Conform to NPS standards. |
| 1.04 | December 2009 | Kate Miller<br>Andrew Vincello<br>Jim Comiskey<br>Brian Mitchell | MIDN emergency contact info and directions to hospitals were added. Updated workers compensation Appendix.<br>Minor editorial changes | |
| 1.05 | October 2010 | Kate Miller<br>Jesse Wheeler | Added risks associated with using permethrin and deet.<br>Added more information on poisonous snakes, and how to respond to a bite.<br>Added information on GSA roadside assistance | |
| 1.06 | January 2012 | Kate Miller | Added more information on ticks and Lyme Disease, based on ERMN SOP.<br>Added procedures for using park radios, based on ERMN SOP.<br>Added Appendix F and H to provide more information on vehicle accident reporting procedures, based on ERMN SOP.<br>Added forest monitoring JHA as Appendix A<br>Added directions for using park radios in emergency and non-emergency situations<br>Defined daily check in procedures<br>Added Green Amber Red risk assessment<br>Added user guide for SPOT Messenger | |
| 1.07 | January 2013 | Kate Miller | Changed DOS communication rules to allow the forest crew leader to assume DOS responsibilities when safely out of the field.<br>Updated nearest hospital for MIMA. Updated VAFO contact info. | |
| 1.08 | January 2016 | Camilla | Removed SPOT Messenger Appendix. Updated | |

**Appendix S1.K.** SF-91 Statement of Witness (continued).

| Version # | Date | Revised by | Changes | Justification |
|---|---|---|---|---|
| | | Seirup | DOS and Emergency Contact Information. | |
| 1.0.9 | May 2021 | Kate Miller | Updated Tort Claim guidance with DOI contact and updated SF-91 and SF-94 | |