

Safety Manual for Volunteers

This safety manual is dedicated to all volunteers who have served and continue to serve in the ministry of the Appalachia Service Project, Inc.

ASP cares for its volunteers, the "lifeblood" of the ministry of service to Central Appalachian people with emergency housing repair needs. The ASP staff believes that through heightened awareness and safety practices, accidents to volunteers can be eliminated.

If additional safety issues need to be addressed, please contact the ASP Volunteer Department.

First and Foremost:

- a) **Adult group leaders are responsible for the safety and conduct of their youth volunteers at all times while your group participates with ASP. This means while at the center, at the work site, and in the community. The ASP staff does not have responsibility for the supervision of volunteers at the center, at the work site, or in the community.**
- b) **Implement a buddy system so that no volunteer is left in the position of being left alone at any time, while at the worksite, in, or around the center.**
- c) **Adult volunteers: Never leave your youth workers unattended at the work site.**
- d) If you are unsure of your ability to perform a task, say so! Never attempt a job that you are unable to do or for which you do not have the proper skills.
- e) If the family you are serving has small children, know where they are at all times. If you can't keep up with them, have work crew members take turns playing with the children. The other crew members can then work safely and the children will be occupied and safe.

Decking/Flooring/Steps (Safety when replacing)

- a) Do not step on rotten boards of flooring, or boards that may be loose on one end.
- b) Old boards to be discarded should either have nails removed or discard the wood properly. Do not leave old boards with nails sticking out lying around the worksite. Discard nails into a container to be removed from the worksite.
- c) Warn co-workers when you work with a crowbar.
- d) Look for termites or carpenter ants as you remove old boards. Carry appropriate insecticide in your vehicle's first-aid kit or tool chest.

Electrical

- a) Ask your family what outlets you can use for electrical power tools. (Some families have electrical “issues” – so this could be hazardous.)
- b) Report loose, bare, frayed, and hanging wires to the ASP staff.
- c) Check with the ASP staff before beginning any electrical work.
- d) Attempt electrical repairs and improvements only 1) if you are a licensed electrician, or 2) have extensive experience in working with electricity AND you have permission of the staff who are aware of the electrical codes in your county.
- e) Below are electrical hazards that are potentially very dangerous. Report to the staff.
 - Exposed fuse box; one without a cover.
 - Exposed receptacles hanging out of box without a face plate.
 - Exposed range receptacle without a cover.
 - Frayed wiring with copper showing or damaged insulation.
 - Fuse holder without fuse and a penny in the place where the fuse should be.
 - A blue flame or fire around electrical equipment.
 - Refrigerator that blows fuse when it kicks on.
 - Extensive use of extension cords as branch feeder circuits (to lights, receptacles, etc).
 - Anything that is reported to give an electrical shock.

Glass

- a) Handle glass slowly and carefully.
- b) Always use gloves when carrying glass.
- c) Carry glass only out to your side, never over your head or against your body.
- d) When replacing or framing windows, hammer cautiously so you do not break the glass.
- e) Make sure no one is working under you when you are working on a window.
- f) Wear eye goggles at all times when working with glass.

Hand tools

- a) Keep your work site uncluttered. Remember your family’s safety as well as your own!!!
- b) Never run with tools in hand or attached to your belt.
- c) Be careful when using tools with sharp edges or points. Be sure all body parts are out of the way should you slip.
- d) Handle tools in a safe manner; be sure you know how to use them correctly.
- e) Wooden tool handles should be free of splinters/cracks and fit tightly in the tool.
- f) Keep your hand tools free of grass and dirt.
- g) Never use damaged tools.

- h) When using hand tools, never hold your work with your hands.
- i) When using a vise, make sure it is firmly attached and supported.
- j) Keep your cutting tools sharpened.

Heavy Materials and Equipment

- a) Never try to lift an object that is too heavy. Get a buddy or two to help lift and move.
- b) When picking up heavy objects, squat from the knees and lift, keeping your back straight.
- c) Take your time for loading/unloading. Be aware of others when carrying overly large or long objects.
- d) When you transport supplies, close all doors on vans and tailgates on pickups. If lumber must hang out, check with staff. Appalachian terrain is hilly; this could affect the way lumber or tin is secured in vehicles. Doors can be partially closed and tied with a rope when carrying long lumber. When using pickups, keep the tailgate up and allow long lumber to hang over upright tailgate. Nail a red flag to materials that extend beyond the length of vehicle. Drive appropriately with great care.

Ladders

- a) Place ladders only on firm, flat surfaces.
- b) Place extension ladder so that the distance from its feet to the surface it leans on (house, barn, wall, etc.) is only one-quarter the length of the ladder. Never extend an extension ladder so that the hooks that join the two parts are connected to the last rung. This causes the ladder to have too much flexibility.
- c) Check your ladder for flaws and damage; make sure hardware is secure.
- d) Always wear shoes when climbing a ladder; make sure they are free from dirt and mud. Climb with both hands holding the side rails.
- e) Always have a partner hold the ladder securely against the object it is leaning against. This will insure additional stability.
- f) As you stand on a ladder, keep your hips between the rails. Never reach more than an arm's length in any direction.
- g) Do not stand or sit on the shelf of a stepladder or climb its back section.
- h) Always face the rungs as you climb or descend.
- i) Never climb beyond the second from the top rung (step) on a stepladder.
- j) When using an aluminum ladder, be sure not to touch electrical wires or poorly grounded power tools.
- k) When finished, take ladder down and put it out of the reach of children.

Medical/First Aid

Carry a well-supplied **FIRST AID KIT** (and your medical forms) in your vehicle at all times. Check with your nurse about items to be included. Suggested items are:

- Peroxide
- Aspirin/pain relievers
- Gauze/tape
- Sunscreen
- Bee sting kit
- Bandages
- First-aid/hydrocortisone cream
- Calamine/caladryl lotion

First-hand knowledge of first-aid by members of the group is recommended.

- a) Encourage your volunteers to get tetanus boosters, if they are not current. This is not a requirement – just a suggestion. Check with your doctor!
- b) Be sure that each work crew has received from the staff the directions to the nearest clinic/hospital in the event of medical emergency.
- c) Be aware of special medical needs in your group. If a volunteer has a special need, all in the work crew must know what to do in an emergency.

Miscellaneous for the Worksite

- a) Keep your worksite clear and free of debris. Keep scrap materials in one area; keep your tools in a specified area. Inspect the worksite at the end of each day, making sure that all debris is discarded and that all tools are collected.
- b) Keep a current fire extinguisher in your vehicle. Teach everyone how to use it.
- c) If you are doing a job where sparks, dust, or debris will fly, wear safety goggles and a hardhat.
- d) Use your tools only for their intended use. Concentrate on what you are doing. It only takes a second to have an accident with a tool.
- e) If a family requests that you stop an activity, please respect their wishes.
- f) **NO HORSEPLAY at the worksite or at the center.** ASP has limited resources and we all need to practice good stewardship. Accidents can easily happen when people are fooling around. Remember that the safety of everyone (staff, volunteers, families) must be in the forefront of everyone's mind and practice when at the worksite and at the center.
- g) Wait for ASP staff for additional supplies or else travel for supplies as a group. **Remember that each work crew must always have access to a vehicle.** In an emergency always have at least one operating vehicle at the work site.
- h) If your project is attic insulation, it is best to structure your work to be done during the coolest part of the day. Watch out for allergic reactions to insulation. If you are insulating underneath a house, cover the ground with heavy plastic.
- i) Always wear lots of sunscreen on exposed parts of your body and wear a shirt at all times.

Power Tools (Electrical)

- a) Adults 18 years and older are permitted to check out power tools. For liability reasons, we ask that only volunteers 18 years and older use such tools. If volunteers under age 18 do use power tools, they must be used under the direct supervision of the adult group leader. Be sure that all volunteers that you plan to operate electrical power tools have been trained prior to your trip.
- b) Before plugging in the cord, make sure the tool is clean and in working order and that all blades, drill bits, moving parts, etc. are properly inserted and that tightening screws or bolts are snug. Make sure that all safety features are in working order and in the proper positions.
- c) Be sure hand-held power tools have a constant pressure switch that will shut the power off when that pressure is released.
- d) Use power tools in an area free from explosive or flammable materials.
NO SMOKING at the work site.
- e) Keep the work site clean; you will lessen a potential fire hazard as well as be safer.
- f) If using an extension cord, make sure it is heavy duty.
- g) Do not plug a heavy-duty tool into a circuit used by another appliance. Do not replace a fuse with higher amperage to carry a heavier load. **This is a serious fire hazard.** Tools drawing 8 to 10 amps can be operated on a household circuit if **NO** other major appliances are on the same circuit. Tools using lower amps may be plugged into a household circuit not overloaded with several small appliances in operation. (**Note:** This is especially important in houses that have old and improper wiring.)
- h) Inspect heavy-duty cords for breaks or cracks in the insulation. Do not use a cord in bad condition. Never use adapters that allow for several items to be plugged in at the same time. These are dangerous fire hazards and will blow fuses.
- i) Unless the cord of a power tool is doubly insulated, it should be plugged into a 3-hole grounded outlet. Don't use an adapter plug to connect a 3-prong plug into a 2-hole outlet.
- j) Make sure your cord is on dry ground at all times.
- k) Do not carry a power tool by the cord and never jerk the cord to remove it from the outlet.
- l) **Replace** (not repair) a damaged cord immediately.
- m) If your power tool overheats, shut it off and allow it to cool completely before using.
- n) Look for "UL" symbol on power tools, showing it meets safety standards and was inspected under power in the factory and the directions for safe operating are enclosed with the tool.
- o) **Always** unplug power tools when not using; even if you think it's safe. Keep the safety of children in the front of your mind. **NEVER LEAVE A POWER TOOL UNSUPERVISED.**
- p) If you have trouble with a power tool and must inspect it or clean it, shut it off and unplug it.
- q) **Never** allow anyone to work a power tool unless he or she is properly trained.
- r) Clean your tools well; make certain that tools are in good working order for the next time.

- s) When cutting with a saw, make sure you cut on a firm flat surface and that you are not balancing the piece being cut, but that a proper brace (i.e., saw horse) is used.
- t) If a power saw stalls, back it slightly out of the cut. Keep your finger on the trigger. When proper speed is resumed, advance saw. When you finish, make sure the tool has stopped before setting it down.
- u) Always keep the saw's cord behind you - away from the blade – when you cut.
- v) Keep your hands and body parts away from blades, etc. Never put your hand in front of the saw in the direction of the cut. Cut away from yourself, and concentrate on the task at hand.
- w) Make sure your clothing is away from the tool (open jacket, unbuttoned shirt sleeve, etc.)
- x) Never allow your saw to contact with stone, metal or concrete.
- y) Keep bystanders far away from your work area.
- z) Always wear protective eye goggles when using power tools. Be sure to include eye goggles and work gloves in your tool kits. If you wear correctives, be sure that your goggles fit over them. Consider keeping ear plugs in your tool kits for those power tools that “screech.”

Preparation for Work Tasks

Prior to ASP, each group should try to spend several hours with a skilled carpenter to learn how to use **EVERY KIND OF TOOL THAT YOU MIGHT USE WHILE AT ASP!** While you won't know assignment specifics until your second contact call, consider learning how to use:

Hammer	Pliers	Screwdriver	Utility knife
Chisel	Caulking gun	Crowbar	Sandpaper
Plane	Chalk line	Paint brushes	*Power sander
Level	Hand saw	Wrench	
Ladder	*Power saw	*Electric drill	

***Only if willing to take full responsibility for specific safety hazards associated with these tools**

During your construction session with a skilled carpenter; learn the proper use and respect for each tool. This session should be instructive and hands-on learning.

As you pack, make sure each tool is clean and in good working order and that you have any replacement parts that are needed as well as any special cleaners and lubricants.

Roofing

- a) Before stepping on a roof, visually inspect the rafters for strength. This can be done by looking at the ends of the rafters at the overhangs and in the attics.
- b) No more than 3 or 4 people on a roof at one time, and they should be spread out – not in one area.

- c) **At all times have materials ready to cover exposed roof in the event of rain.** Failing to do this can cause injuries due to “rushing” and significant damage to the ASP family’s interior.
- d) Roofing is very hot work! Plan to do whatever roofing is needed during the cooler part of the day or in the morning. Be sure to drink plenty of water to replace lost fluids. Drink, drink, drink!!! Also rotate workers and take frequent breaks in the shade.
- e) Keep the roof cleared of debris and watch out for loose shingles, moss, and wet leaves.
- f) On high pitched roofs, use ropes or roof jacks for support. On very steep roofs, build a form of scaffolding. Nailing a board to the roof for a foot support is a way for firmer footing. Let the staff know if you are not comfortable working on a particular roof because of height, pitch or weak rafters.
- g) Wear tennis shoes (especially on tin roofs) when roofing. This will give you better traction and will keep you from tearing the asphalt roofing material.
- h) Walk at an angle on a roof with a steep pitch, never straight up or down
- i) Be cautious when nearing the edge of a roof and avoid stepping on eaves, as they will give with your weight.
- j) Make sure that extension ladders rest firmly against the roof with the ladder extended well above the roof so that you do not step off the top rung onto the roof.
- k) Use work gloves for handling the tin for roofs. Tin is sharp and gets very hot to the touch. Again, plan your roofing for the cooler part of the day.
- l) Try not to drop things from the roof. If you must, loudly warn those below of what’s coming, when and where. Try to rope off the area with yellow caution tape when you plan to drop debris from the roof. Keep roof debris in manageable piles for easier dump pickups.
- m) Wear a carpenter’s apron with tools and supplies that you will need while on the roof. This will minimize trips up and down the ladder.
- n) If you are afraid of heights, find a land job. Let someone else roof.
- o) Never get on a roof when: 1) it is raining, 2) the roof is wet, or 3) a storm is imminent.
- p) If you accidentally drop something from the roof, don’t run after it.
- q) Unless you are on the ground, don’t step back to admire your work.
- r) When working on a tin roof, “walk on the nails.” There are wooden rafters at those places to support your weight.
- s) Have one driver on the ground at all times.
- t) When repairing or walking on a trailer roof, use OSB or plywood to evenly distribute weight.

Safe Clothing

- a) Shoes: Wear hard-soled shoes or work boots for ground work; and tennis shoes for roofing. Appropriate shoes **must** be worn at all times at the worksite. Steel-toed shoes/boots are a must when lifting heavy items.
- b) Shirts: 100% cotton tends to be the coolest fabric. Body moisture absorbed by a cotton shirt will help keep the body temperature lower and keep you feeling cooler. Avoid shirts that are polyester; they tend to make a person hotter than the air. Long sleeves are a must when working with insulation. Shirts with sleeves must be worn at all times; they provide protection from both debilitating sunburn as well as from debris and insects. (Halter, spaghetti-strap, or tank tops, sports bras worn as an outer garment, sleeveless shirts, hospital scrubs, Spandex clothing, bike pants, or shirts and hats expressing alcohol/beer slogans and obscenities are not acceptable anywhere, at any time.)

- c) Long pants ***must be worn at the worksite***. Sweat pants and hospital scrubs are not allowed.
- d) Other articles of “clothing” that can protect you are work gloves. These will help to prevent blisters. Hardhats, eye protection (goggles, safety glasses), and ear protection are important, too. Volunteers working with insulation need face masks.

SNAKES/SPIDERS, ETC.

Snakes, ticks, spiders, rodents, etc. are a reality in Appalachia. When looking around a woodpile or in a dark, damp area, use extreme caution. When lifting boards or debris, first kick the object to be moved. When picking up the object, keep it between you and the ground. Stacked wood and building materials which have been sitting on the ground for a while are hiding places for black widow spiders. Avoid them.

If you are bitten, seek medical attention immediately. Copperheads and rattlers also will enjoy the refuge of stacked supplies. Again, use caution. Ticks are common – so check your hair and warm parts of your body. Watch out for bees and wasps. If you require special medication for stings, please keep some in your vehicle. Alert your crew what they should do if you are stung. In the areas that ASP serves there are two kinds of poisonous snakes: copperheads and eastern timber rattlesnakes. Most snakes in Central Appalachia are non-poisonous. If you are bitten by a snake, wash the wound with soap and water. Do not suck the wound. Be sure to pour peroxide liberally into the wound. If you are not sure that the snake was non-poisonous, seek medical attention immediately.

NOTE: While the garter snake (common to Central Appalachia) is nonpoisonous, some people will have a severe reaction to its bite. Medical treatment for this allergic reaction is required.