## **Safety Precautions**

WV Save Our Streams does not require signatures on, or provide any type of liability or **hold-harmless waiver** forms for volunteer monitors. The primary objectives of the program are to provide education; training and resources volunteers need to complete a stream monitoring survey. During an independent study, the safety at the site is the responsibility of the volunteer monitoring group. If the volunteer group fills the need for such forms, they should seek the advice of a trusted legal advisor. However, the program strongly recommends that volunteers develop specific safety preparedness plans and attend safety and outdoor first-aid training on an annual basis. At least one of the persons present during the survey should have up-to-date safety and first-aid training.

- Develop a safety plan: Find out the location and telephone number of the nearest telephone and write it down. Locate the nearest medical center and write down directions on how to get between the center and your site(s) so that you can direct emergency personnel. Have each member of the sampling team complete a medical form that includes emergency contacts, insurance information, and pertinent health information such as allergies, diabetes, epilepsy etc.
- 2. **Never drink the water in a stream**: Assume it is unsafe to drink, and bring your own water from home. After monitoring, wash your hands with antibacterial soap.
- 3. **Always monitor with partner(s)**: Use a minimum of two persons; teams of four or more people are best; always let someone else know where you are, when you intend to return and what to do if you don't return at the appropriate time.
- 4. **Have first aid kits handy**: Know any important medical conditions of team members (e.g., heart conditions or allergic reactions to bee stings). It is best if at least one team member has first-aid and CPR certification.
- 5. **Listen to weather reports**: Never go sampling if severe weather is predicted or if a storm occurs while at the site.
- 6. **Never wade high water**: Do not monitor if the stream is very swift or at flood stage; adult volunteers should not enter swift-flowing water above waist-deep, unless absolutely necessary, and young volunteers should not enter swift-flowing water just above knee-deep.
- 7. **Park in a safe location**: If you drive, be sure your car doesn't pose a hazard to other drivers and that you don't block traffic.
- 8. **Put your wallet and keys in a safe place**: Use a watertight bag you keep in a pouch strapped to your waist. Without proper precautions, wallet and keys might end up downstream.
- 9. **Never cross private property without the permission of the landowner**: Better yet, sample only at public access points such as bridge or road crossings or public parks. Take along a card identifying you as a volunteer monitor.
- 10. **Confirm your location**: Prior to visiting your site(s) check maps, and make sure all volunteers are aware using site descriptions and specific directions.
- 11. **Know what to do if you get bitten or stung**: Watch for irate dogs, wildlife (particularly snakes), and insects such as ticks, hornets, and wasps.
- 12. Watch for vegetation in your area that can cause rashes and irritation: Learn to identify (in all seasons) poison ivy, poison oak, sumac and other plants that may cause irritation; be aware of briers and thorny plants as well.
- 13. **Do not monitor if the stream is posted as unsafe:** Do not monitor if the water appears to be severely polluted. No matter what the water conditions are; always remove wet shoes and clothes as soon as possible after leaving the stream; use anti-bacterial soap and shower soon after the stream survey is completed.
- 14. Do not walk on unstable stream banks: Disturbing these banks can accelerate erosion and might prove dangerous if a bank collapses. Disturb streamside vegetation as little as possible.
- 15. **Be very careful when walking in the stream itself**: Rocky-bottom streams can be very slippery and can contain deep pools; muddy-bottom streams might also prove treacherous in areas where mud, silt, or sand has accumulated. If you must cross the stream, use a walking stick to steady yourself and to probe for deep water or muck. Your partner(s) should wait on dry land ready to assist you if you fall. Do not attempt to cross a stream that is swift.

16. **Come prepared for outside work**: Wear clothes such as a hat, loose fitting clothes (especially during warmer weather), closed toed shoes such as sneakers, boots or waders. Felt glued to the bottom of the shoe will improve your traction for walking in the stream. The outside conditions should determine your overall manner of dress. You should also have plenty of drinking water, sunscreen and insect repellent.

A standard well-equipped **First Aid Kit** should suffice for most of your medical situations. At a minimum your kit should contain the following items:

- 1. Telephone numbers of emergency personnel such as the police and ambulance (Know the location of the nearest medical facility and the nearest cell-phone signal.)
- 2. Several different size Band-Aids for minor cuts.
- 3. Antibacterial and/or alcohol wipes.
- 4. First-aid crème or ointments.
- 5. Triangular bandages and several gauze-pads 3-4 inches square for deeper cuts.
- 6. Acetaminophen for minor pain relief.
- 7. A needle and tweezers for removing splinters.
- 8. Small scissors or a single-edge razor blade for cutting tape to size.
- 9. A two-inch roll of gauze for large cuts (tunicates).
- 10. A large compress bandage to hold dressings in place.
- 11. A three-inch wide elastic bandage for sprains and to aid in applying pressure when necessary to slow bleeding.
- 12. If participants are allergic to bee stings, include a doctor prescribed antihistamine; make sure all volunteers have their necessary allergy medications prescribed for their specific condition.
- 13. Always have emergency telephone numbers, contact person(s) and medical information for all participants in case of emergency.

## When using chemicals:

- Know your equipment, sampling instructions, and procedures before going out into the field. Prepare labels and clean equipment before you get started.
- Keep all equipment and chemicals away from small children. Many of the chemicals used in monitoring are poisonous. Tape the phone number of the local poison control center to your sampling kit.
- Avoid contact between chemical reagents and skin, eye, nose, and mouth. Never use your fingers to stopper a sample bottle (e.g., when you are shaking a solution). Wear safety goggles when performing any chemical test or handling preservatives.
- Know chemical cleanup and disposal procedures. Wipe up all spills when they occur. Return all unused chemicals to your program coordinator for safe disposal. Close all containers tightly after use. Do not switch caps.
- Know how to use and store chemicals. Do not expose chemicals or equipment to temperature extremes or long term direct sunshine

Click-here to learn more about chemical disposal