

SAFETY



We make this Chapter 1 because it's Job 1.

Please keep the following points in mind:

- **Safety is a group effort:** We recommend that you don't go out alone (depending on circumstances) and make sure somebody knows where you're going and when you expect to be back. Emphasize safety with your entire group, and watch out for each other.
- **Precautionary principle:** If you are in doubt as to your ability to safely collect a sample, don't do it! Be aware of your physical limitations and those of the rest of your team, and the difficulty of collecting samples at certain locations under certain conditions.
- **Cell phones:** We can provide you with an emergency 911 cell phone on request, but they're not always reliable out in the woods.
 - If possible, get a cell phone with GPS capability (required on all cell phones beginning in 2005; on older phones, you may need to set GPS to 911).
 - If you have a cell phone, give your number to SK staff.
 - Before each outing, make sure your cell phone is fully charged and that you've updated your roaming capability (see your manual).
 - Exchange cell phone numbers with your fellow team members and re-confirm them each time you go out. Keep your cell phone on during the entire outing.
 - Upon reaching the site, determine the nearest location cell phone service can be accessed before beginning work. (If not at the site itself, try the top of the bank or ridge, a nearby clearing, or the place where you parked.) Record this information for the SK staff, who will enter it into the site-description information. Check this each time you go out.
 - Team leaders should predetermine emergency services cell phone GPS capability for the site where the team will be located; site descriptions in your forms folders will include latitude, longitude, and horizontal datum—the essentials required by emergency services.
 - Walkie Talkies are also available for cases where volunteers separate from one another.
- **Orientation:** If you don't know the area, take a good map with you.
- **Traffic:** Be careful when pulling off the road and leaving your car. If you are working near a road, wear orange vests (which we can supply) or other bright clothing.
- **Medical conditions:** Let your staff and team know if you have any special medical conditions, such as heart problems, diabetes, asthma, or extreme allergies. If your emergency contact number is other than your home phone, let your teammates know. **BRING ANY NEEDED MEDICATIONS WITH YOU INTO THE FIELD, AND LET THE REST OF YOUR TEAM KNOW WHERE YOU KEEP THEM.**
- **Warm-up:** Stretch before stream walking, especially quadriceps, calves and hamstrings. If you're limber, you'll find it easier to move when faced with sudden loss of footing.
- **Awareness:** Keep your eyes moving, scanning the stream in front of you when walking and looking around you when monitoring. (Note that jacket hoods block peripheral vision and ball-cap bills block hazards overhead.) Be conscious of your body placement as you rest or write—you want to be able to see around. Make a habit of looking for tracks.
- **Walking:** Boots with felt bottoms or corkers are the safest. Many boots do not offer much support, so if you have weak ankles, wrap them for stability. Walking sticks have numerous uses: third leg, water depth/substrate tester, brush whacker, balancing aid, and weapon. Polarized glasses will help you see the creek bottom.
- **Carrying equipment:** The equipment bags are bulky and heavy; if your access trail is long or arduous, you may want to repack stuff into frame backpacks (ask at the office).

SAFETY

- **Fatigue:** Note your energy level and those of your teammates. Know when to quit.
- **High water:** Avoid walking in streams when water depth is above mid thigh, especially in faster flows. In higher flow situations, plan your stream crossings at an angle, allowing the water to “carry” you to your destination. If the creek is raging and you can’t wade across, don’t go in! You can do many of the field procedures from the bank, and the rest can wait until the next session.
- **Log Jams:** All log jams, no matter how small, have the potential to cause injury—avoid them if possible. If you have to walk on them, choose the most stable and safe parts. Beware of bare logs or alders, which are slippery and may be rotten. Make sure your footing is on a stable log before resting all your weight on it. Attempt to have an escape plan if a particular log shifts. Avoid pulling yourself up via attached branches.
- **Bad water:** Our creeks are not all pristine, and even those which seem so might surprise you! Avoid hand-mouth contact; use gloves and hand-sanitizer provided in your kit.
- **Hazardous materials:** The most dangerous materials we use are alcohol and glass cleaner (which you should have heard about during volunteer orientation), but you may find other hazardous materials at your sites—broken glass, needles, human/animal wastes, etc.
- **Weather gear:** Be prepared for rain, wind, and cold. For cold, bring a thermos or a St. Bernard, plus extra layers of clothing, rain gear, and a warm hat (remember – you lose 75% of your body heat through your head). For heat, bring a hat, sunblock, and plenty to drink. For brush and biting insects, long pants/sleeves and rubber garden gloves are good.
- **Brush:** Some parts of the stream may be very brushy or worse. Help each other to avoid getting tangled or pricked, and work around what you have to. Also beware of some of the more dangerous plants, such as poison hemlock and giant hogweed—you’ll learn about these during Noxious Weed training.
- **Rain:** If it begins to rain heavily, thunder, lightning, or hail, get out of the stream and into your car. If it seems to be a passing storm, try waiting it out and then returning to the stream. Note on your field form the time you left and returned, and about how much rain fell. Keep an eye on water levels if it has been raining anywhere in the watershed.
- **Dogs:** Use your best judgment if a menacing dog comes your way. Running is not the best reaction. Talk to the dog calmly and call for the owner.
- **Bees:** Bees may nest along stream banks, in the ground, and in hives in the trees. Watch for nests or “sentinel” bees. If you see bees, avoid them and notify your teammates. Our first aid kit includes the antihistamine diphenhydramine (Benadryl) in liquid form, which might help alleviate a severe allergic reaction. We also include “sting-erase” sticks which alleviate both stings and nettles. However, consider asking your physician for a prescription for Epi-pens that you can bring into the backcountry with you, to treat yourself or anyone else who might have an anaphylactic reaction to a bee-sting. This is a rare event, but it can be fatal when it happens.
- **Mushrooms:** Yes, mushrooms—stay away from these! Some of them can even poison a person through the skin!
- **First Aid/CPR:** There is a First Aid kit in each field kit with a variety of supplies that we demonstrate during training; you can take it home sometime to familiarize yourself with it. We urge you to get trained in First Aid/CPR. Every even-numbered year, Streamkeepers offers a free First Aid/CPR training which is somewhat adapted to our special conditions. But other organizations offer these courses on a regular basis. (As a County volunteer, you also qualify to take Clallam County’s employee First Aid/CPR courses for free.) Also, we recommend that you purchase a top-quality Laerdahl CPR mask and bring it wherever you go, in case you need to perform CPR. We stock a mask in the field kit, but it’s not as good as a Laerdahl.

