

Stream Safety Guidelines

Hawaiian streams are beautiful but can also be very dangerous. Stream rocks are slippery and covered with algae, making them treacherous. To maintain your balance it is important when walking in the stream that you maintain a low center of gravity by bending over slightly and having your hands out of your pockets when (not if) you fall in the stream. Carefully place your feet on rocks that are stable and not tippy, and make sure you have a firm foothold before moving your foot to the next spot. Most importantly, do not be in a hurry and just make sure to gain a firm foothold when walking on the slippery, algae covered rocks.

Flash floods occur regularly on Hawaiian streams, and can even happen in sunny and clear weather conditions around you because it is raining heavily upstream. A wall of water can suddenly come down the stream, and several people die from flooding streams each year in Hawaii. You can avoid flash floods by always being alert. If you hear the low roar of thunder, get out of the stream immediately, and climb as high up the bank and as far away from the stream as you can. This thunder sound is the sound of a wall of water rushing downstream. Also, muddy water and tree branches and sticks floating in the water all of a sudden is a sign that a flash flood is about to occur. If you see or hear any of this signs, get out of the stream as a precaution that can save your life.

Unfortunately, the stream also contains certain diseases that can make you very sick, and yes, can even kill you if not treated promptly. Of all the people that go into Hawaiian streams, not many people actually get *Leptospirosis*, but you can catch it just from walking or swimming in a stream. *Leptospirosis* is a bacteria that is spread by rats and pigs, and is very common in all Waipi'o Streams. If you start to feel any flu-like symptoms within 2-14 days after being in the stream, go to a doctor immediately! Your life is very much in danger, so this is serious! Go see a doctor right away if you have a fever, achy bones, vomiting, chills, or diarrhea. The good news is that if treated right away with simple medicines you will fully recover, but the bad news is that if you wait more than a day or two you will become extremely sick, and can die.

Participants in the Waipi'o Valley Stream Restoration Study should adhere to the following guidelines to ensure stream safety:

1. Suitable shoes to wear during field study are tabis with felt sole, reef walkers with felt sole, specialized stream boots (available from mail order) or sneakers. Slippers, sandals or bare feet are not suitable.
2. Do not move quickly when in the stream. Keep a low center of gravity by bending over slightly and working to keep your balance. Place your feet carefully in firm footholds.
3. Be alert and listen for signs of flash floods. If you hear the low roar of thunder (water rushing downstream), get out of the stream immediately and climb as high up the bank as you can. If you see a sudden increase of debris or muddy water in the stream, get out of the stream quickly.
4. Do not drink the stream water. If you experience flu-like symptoms within 2-14 days after being in the stream, go to the doctor immediately and report that you were in a stream; you will get likely get treated with antibiotics.
5. Do not roughhouse or engage in physical play at the stream. Do not swing on vines or jump into the water.