

## **Safety briefing for GLORIA field workers, Calif/Nev. Field Team**

Our work involves quite a few hazards. But in spite of repeated hikes to the summits, many hours spent in field work, by dozens of workers, over many years, we haven't had (and never want) a single serious accident. There is only one way to accomplish that—to be safety conscious all of the time. There is no piece of data we can collect that is worth an injury, not even one.

We'll be exposed to strong sunlight, wind, cloud-shade, and very possibly rain or hail. Being prepared for the conditions includes:

1. Good footwear, and extra clothing to keep you warm and dry even in rain and wind.
2. Protection from intense sunlight: sunglasses (an extra pair too), hat, sunscreen
3. Enough water to stay well hydrated...at least a couple of liters for the day

Effective response to accidents. Imagine someone falls and splits open a knee to the bone, or gets a severe head injury...what could we do to help them, and how long would it take us to summon help? We need to be able to offer basic treatment for the wound, to place an emergency call within 10 minutes of an accident, and to care for the patient for hours. Early request is critical, and even at that it is likely that we'll wait 2 to 4 hours for help to arrive.

1. First aid kits, with key items, including a splint, at least available among the team members.
2. Communication between team members. We'll have small handi-talkies for several people.
3. Cell/satellite phone to reach an emergency dispatch center.

Avoid the hazards of rough terrain and high places.

1. Step carefully and don't get in a hurry either hiking or working. Loose or projecting rocks and our survey strings are all tripping hazards.
2. When working near a drop-off remain at least one step from the edge. An accidental misstep or a bump from coworker or wind can then be countered without stepping over the edge.
3. When negotiating a steep pitch keep 3 of your 4 hands/feet on the rock at all times.
4. Be careful not to dislodge rocks, and avoid working directly above someone on a steep slope. If a rock falls yell "rock" to those below.
5. Avoid lightning. Heed the forecast and watch for signs of developing storms. Always leave in time to be well off the summit by the time lightning is a threat. Wet rocks can be much more slippery than they were as you climbed up, and a real hazard if you are hurrying down.

Know your location on the mountain and how to get back to base in poor visibility.

1. Have the simple tools, a map and compass.
2. Have a good GPS and input the location of camp or vehicle. And GPS coordinates (lat/long & NAD 83 datum the best) are essential when requesting rescue response.

Nearest hospitals are in Mammoth, Bishop, and Gardnerville, for when prompt treatment is essential. Regional trauma centers are in Fresno and Reno. The medical responders will likely be deciding where to send the patient.

Some good information from Jeff & Jutta on rescue response:

Mammoth Hospital is overall a little better than Northern Inyo Hospital in Bishop, but anything altitude related should clearly go to Bishop from WMRC. The best, closest trauma center is in Fresno (Fresno Trauma Center). Some patients may end up at Renown Hospital in Reno, which is a good hospital. Depends on fuel, weather, daylight, etc.

Calls to 911 will go to CHP, to the Mono Co. Sheriff Office, from there to our SAR team. 911 call is good, and they will usually be able to get GPS coordinates from the calling location. Usually a significant loss of information along the calling chain, so, in addition, call the Sheriff Office (760-932-7549). You could also give me a call directly (cell: 760-937-6317). If you aren't sure whether or not to launch a search or rescue, please give me a call, and I may be able to help.

- In all cases better to call too early than too late. No one minds responding for a false call. Early start can help a lot; daylight is precious, injuries get worse, and lost people get much more lost. Search areas expand exponentially.
- Don't assume response will not happen until morning. SAR will usually respond at night, so always call.
- Assume that the dispatcher or SO contact knows nothing about our mountain geography.
- If giving GPS coordinates make sure to provide datum (NAD 27 or 83) as well as coordinates, whether lat-long or UTM.
- You may have to explain situation several times to different people: CHP, brief; SO, brief; SAR Ops leader (15 min); Base asst, several hours for a missing person.
- CC and Bar in Mono, will probably get Mono SAR, but could get Inyo SAR or both.
- SAR member usually largely in charge of an operation for Mono, but could be a deputy, at least nominally. Most of the SAR ops leaders, though volunteers, will have had 2 weeks of state search management training, a lot of team training, and over 400 missions.
- If acquiring info from other members of the party, be as thorough as possible, particularly for a missing person.
- Let SAR know how much cell phone battery you have. May need to conserve by turning off and receiving calls at a specified time.
- If at WMRC, it may be better to stay there to inform SAR by phone/radio rather than going out to look or help.
  
- No charge to victims for SAR (all volunteer) or most helos
- Symons ambulance and CareFlight (helo) will charge patient, not WMRC or GLORIA
  
- Response time is slow; Volunteers need time to pull away from jobs, family, etc.
- Helo units need to call in staff, do flight and maintenance checks
- Delay is frustrating for patients, helpers, and SAR. Count on 2-4 hrs. for help to arrive.

Helicopter resources (but will almost always have a ground response as well):

- CHP A-Star B3 fast arrival, limited at altitude in summer and wind, perhaps best crews, can hoist, but tend to land or one-skid/no-skid, smaller LZ
- Mather Air Nat Guard, Blackhawk, powerful, slow arrival, less experienced crews, hoist, medium size, bigger LZ. Night optics. Occasionally Chinook. Huge and powerful twin-rotor. Massive LZ needed.
- Fallon NAS, Seahawk, medium size, great crews, hoist, bigger LZ
- Careflight A-Star B3 possible, fast arrival, less mountain experience, night optics.
- Night helo response used to be extremely rare, but now it's 50-50 in terms of availability
- Provide coordinates to be used with a helicopter in lat/long (not UTM)

See <http://www.monosar.org/> for more info on the SAR team. The Operations page is probably the most useful and will give you an overview on what the team does (a bit of everything in the mountains).