

Chemical Heat Packs:

Chemical heat packs have been around for decades. They have made it possible for people with cold sensitive hands to enjoy winter hiking. A few tips and notes about them.

- When buying hand or toe warmers make sure they are pliable. If they feel stiff they have probably gone bad. Store them in a cool location not in direct sunlight.
- Check the expiration date which should be visible somewhere along the edge of the packaging. A major outdoor recreation store had them on sale but the expiration date was a few months later.
- Activate them at least 30 minutes before you plan to use them. Since they are usually most needed at the beginning of a hike activate them in the car before reaching the trailhead.
- Avoid storing or leaving them in your car overnight. A cold hand warmer will take a much longer time to warm up
- In an evaluation, Hothands hand warmers were found to last the longest. Their hand warmer temperature averages 135° F, toe warmer 97° F.

Smartphones

Most smartphones are intended to be used when the ambient temperature is between 32° to 95° F (0° to 35° C). The biggest weakness of a smartphone in winter is the battery. Operating your phone outside this temperature range may cause it to shut down and not restart until it is warmed. Here are some tips regarding use of a smartphone on a winter hiking trip:

- Keep your phone close to your body and not in an outside pouch attached to your pack.
- Avoid putting hand warmers directly on your phone. The sudden high increase in heat may do more harm than good. Overheating a battery is just as bad as letting it get too cold. However, a toe warmer with its average 97° F may help if it is insulated from the phone.
- Put the phone in airplane and low battery mode to conserve power. This will not affect use of the camera or apps that use the GPS.
- Samsung's website says extreme heat and cold can damage your battery. Don't leave your phone in the glove compartment of your car on very hot or cold days.
- If your phone does get very cold, allow it to warm up before turning it on.
- **WARNING:** charging a cold phone battery can cause a chemical reaction that could damage the battery and your phone.