

## **GENERAL MEDICAL INFORMATION**

**Each trek group is required to have a minimum of one doctor, registered nurse, or EMT for every hundred participants.** The designated medical expert must be with the trekkers at all times. Each ward or stake is responsible for the safety of their entire trek participants at all times. The Medical Staff must be prepared with all the necessary emergency medical equipment, medicine, shelter, transportation, release forms, and communication they will need to cover the needs of their group. They should provide training for the Ma's and Pa's on prevention methods. Design activities with safety in mind. Please train all trek participants so they can encourage, strengthen and remind each other regarding safety issues. Few things will be more detrimental to a successful trek than sickness or injury.

### **Obedience**

Obedience to rules of inspired priesthood leaders, trek leaders, Ma's and Pa's, and other personnel is essential for trek safety.

### **Physical Challenges**

There are many youth who have a variety of physical or mental challenges such as Diabetes, blindness, Down's syndrome, obesity, depression, etc. that might discourage them from attending trek. They often require special food, medication, help, sleeping arrangements, or equipment to allow them to be a part of the experience. They may not be able to walk very far with the handcarts but other arrangements can be made. Try to include everyone. Leaders (including the medical staff) should counsel with the individuals and their parents about going and how they could be a part of the trek. These individuals can have a great experience and add an incredible spirit to the trek. Their safe involvement should always remain the first priority.

### **Proper clothing**

Pioneer style clothing is good for more than one reason--it helps set the mood and provides protection. First make sure that the trek clothing is appropriate for the weather conditions that your group might face. Generally, groups are encouraged to wear cotton fabrics; light-weight, long sleeved shirts and blouses, mid-calf to boot-length skirts for the girls, with bloomers underneath for modesty, and for the boys, long pants; comfortable, loose fitting, and not denims. Shoes should be well broken in walking shoes. It is suggested that trekkers wear 2 pairs of socks at a time, (1 thin, 1 heavier); this can help to reduce the likelihood of blisters. Large brimmed hats and sunbonnets help protect from sun and insects.

### **Weather**

It can change rapidly so jackets or coats and rain-wear should be kept handy. If trekkers are planning to be in water on occasion, they should have water shoes or a change of shoes and socks so walking in wet shoes and socks can be avoided. Also, wet pants can

cause chafing if considerable walking is done after getting wet. Chafing is more frequent in hot temperatures. Remember, the weather may be either hot or cold or, more likely, a combination. Plan for change!

### **Chemical Barriers**

Sunscreen and insect repellent are a must. For protection from insects, including disease-carrying ticks, use permethrin products to spray clothing, shoes, hats, etc., according to product instructions BEFORE packing for the trek. Use high percentage DEET products to spray on skin as directed while on the trek. Sunscreen should be applied prior to sun exposure and repeated as directed during the day. Cover ALL exposed parts of the body. Chafing in underarm and 'diaper' areas can be a problem, and may be prevented by keeping those areas dry with good air circulation. Products such as baby powder, Gold Bond powder, Zeasorb, etc., may be helpful.

### **Endurance**

Trek participants (youth and leaders) should be able to walk the distances which will be traveled on the trek (unless they have a limiting disability). This usually requires some conditioning/training prior to the trek. You need to make advance preparation and plans for anyone in your group who needs special assistance.

### **Diet**

The trek experience is physically challenging. Trekkers need nutritious, well-balanced meals and snacks to maintain strength. Fasting during Trek is not recommended.

### **Water, Water, Water**

Every handcart should have 10 gallons of water. Trekkers should stop every 20-25 minutes to drink water on the trail. Avoid carbonated and highly sweetened drinks. Adequate water should be provided to the trekkers at points along the trail and in camping areas.

### **Communication**

Medical personnel should have two way radios, cell phones, and a GPS system if possible. They will need to keep in contact with the medical vehicle, the Trail Boss and Company Captains. Medical Staff should wear something that makes them easy to identify, for example, they could wear a red cross on their hat or a red band on their arm.

Parents and leaders at home should have a way to contact the leaders on trek if there is an emergency.

### **Transportation**

During a trek, there must be medical personnel walking with the youth, while an out-of-sight medical vehicle follows behind. If someone is injured or cannot continue, the medical staff contacts the vehicles to pick up the individual. (Medical vehicles are not allowed to follow trekkers at Martin's Cove or Sixth Crossing. They may be called in case of an emergency).

### **Medical Facilities/Life Flight and Ambulance Service**

The medical support and group leaders should know the route to the nearest hospital and carry the numbers for the local sheriff and Life Flight for their area.

Lift Flight helicopter service and ambulance service may be available, but depending upon locality, either may be very expensive. To avoid unnecessary liability for payment for these services, only authorized medical personnel should call for these services upon request of the group's Trek Leader or medical advisor.

### **General Safety**

Leave the wildlife alone! Trekkers should NOT hike alone or wander off from their group; a buddy system should be developed. Leaders should know where the youth are at all times. Every person should have a working flashlight. If someone is bitten by a snake, contact the Trek Medical Expert immediately.

### **Medical Information/ Release**

Medical staff should receive a medical release form from every participant including the Ma's/ Pa's and support staff. Essential information should include allergies, current medications, medical conditions, date of last tetanus booster and any special needs. ALL MINORS should have a consent paper for medical treatment signed by their parent or legal guardian. The medical support and leaders should familiarize themselves with the different medical issues they might face along the trail and be prepared. The Ma's and Pa's should be notified of the medical issues they face within their trek family.

## **EMERGENCY ACTION PLANS**

Trek groups are responsible for their own medical and support staff. Each group should have their own emergency action plan for injuries such as dehydration/hyperthermia, asthma, blisters, cuts, sprains, insect/snake bites, allergic reactions, foreign body / irritation to eye, broken bones, vomiting/diarrhea, lost participants, fire, severe storms, and all other life threatening injuries. The main focus of these emergency action plans should be centered on prevention, communication, and proper action.

### **Sample Emergency Action Plan**

#### **Prevention**

- Understand chain of command.
- Train leaders to look for the signs and symptoms of possible injuries
- Ensure that everyone has the needed equipment
- During the orientation at the trekking site review possible health hazards with the group
- Trail Boss, Medical Staff, and Ma's and Pa's, should always be watching for possible problems
- Maintain communication with radios and cell phones.
- Assess each situation

### **Procedure if trekker is injured**

- Stop trekking
- Ma or Pa contact their Company Captain who will radio the Medical Support Staff
- Company Captain will also inform the Trail Boss of the situation
- Ma and Pa will temporarily treat the injured trekker and the rest of their family until the Medical Staff arrive.
- Medical Support will evaluate the condition of the sick trekker and give treatment.
- Medical Staff will communicate with the Trail Boss, Company Captain, and Ma and Pa of the trekker's condition.
- If the situation involves evacuation, the Medical Staff will contact the proper medical facilities and inform the participant's parents, bishop, and the appropriate stake leaders.

### **FIRST AID INFORMATION**

**Each group should evaluate their own situation and rely on their own Trek Medical Experts and medical staff for opinions, diagnosis, and treatment of any illnesses or injuries incurred while trekking.** The following are samples and suggestions for dealing with medical issues on trek, and are not to be taken as legally binding. The Trek Medical Experts should be consulted and their advice followed in all medical incidents incurred while trekking.

#### **First Aid Kits**

##### *Sample Basic Kit*

Each Ma and Pa should have with them a basic first aid kit. The following items are put into a zip lock bag: antiseptic wipes, mole skin, band aids, Neosporin, hand wipes, scissors, baby powder, feminine products, sun screen, tweezers etc.

##### *Sample Major Kit*

Medical personnel should have their own extensive first aid kit which could include extra of the items listed above, along with disinfectant, epinephrine kit, Tylenol, Advil, Benadryl, Hydrocortisone cream, butterfly bandages, ace bandages, sterile gauze 3x3, 4x4 pads, tape, knee brace, wrist splint, triangle bandages, burn ointment, thermometer, penlight, steri-strips, non-adherent dressings, blood pressure cuff, IV, second skin, ice pack, eye wash pack, latex gloves, Aloe Vera Gel, Pepto Bismol, electrolyte tabs, safety pins, basins (soaking, emesis), coke, crackers, and other supplies or medications your medical personnel desire to have available.

#### **Medical Concerns**

Seven medical issues generally faced on trek:

1. Dehydration/Heat exhaustion which can cause (nausea and vomiting)

2. Hypothermia
3. Blisters!!!!
4. Sprains (knees and ankles)
5. Cuts from knives
6. Asthma and allergy attacks
7. Sunburns and Chafing

### **Dehydration/Heat Exhaustion**

1. Did you know that if you're thirsty, you're already partially dehydrated?
2. Drink to prevent thirst, not to quench it.

It is important to have plenty of **Water** and **Gatorade or equivalent powder** for the trekkers. Most groups carry 10 gallons of water on the carts with them. The Trail Boss will need to stop the group at least every 20-25 minutes for a water break. When it is really hot, the groups refill their water jugs two to three times during the day. Spray bottles help keep the youth cooled off. The Ma's and Pa's should have powdered Gatorade that they add to the water at least twice during the day. Remember to drink even when you are not pulling handcarts.

#### *Symptoms*

- Pale face and the whole body may feel cool and clammy
- Shallow breathing
- Nausea and vomiting
- Dilated pupils, headache and dizziness
- Weak pulse
- Heavy perspiration
- Unconsciousness

#### *Treatment*

- Place the person on their back and raise their feet
- Provide shade for the person
- Loosen clothing or remove some of the patient's clothes, shoes and socks
- Give patient water and if you have Gatorade or equivalent powder, dilute it with water (half and half): encourage patient to drink all possible.
- Fan and put cool, wet cloths to back of neck, face, armpits lower legs
- Give sips of water
- Put into medical vehicle

The Medical support staff needs to be capable of providing treatment for moderate to severe dehydration, if required. Prevention of dehydration by ensuring adequate fluid intake is critical, but may not always be adequate without careful monitoring. Heat exhaustion can quickly progress to heat stroke without adequate medical care and supervision.

**Heat Stroke** (caused by exposure to the sun; it is a life threatening emergency)

### *Symptoms*

- Red, very hot face. Skin is often dry but if a person has been exercising hard, they may be sweating.
- Very small pupils
- Slow, noisy breathing
- Rapid, strong pulse
- Possible unconsciousness

### *Treatment*

- Place person on his back with head and shoulders raised
- Get them into a cool medical vehicle.
- Undress the person down to the underwear
- Cover the person---especially the head with dripping wet towels, shirts, or cloths.

### **Hypothermia** (the body loses more heat than it can generate)

This can happen to anyone who is not dressed warmly enough in cold weather. Wind, rain, and exhaustion increase the risk. The temperature does not have to be freezing.

### *Symptoms*

- Feels chilly, tired, and irritable
- Begins to shiver and then shivering becomes violent
- Cannot think clearly, stumbles and falls.

### *Treatment*

- Prevention! Be prepared, eat plenty of food and drink lots of fluids.
- Take off wet clothes
- Get into a sleeping bag.
- If in an advanced stage, the rescuer must also strip down to underwear and get into the sleeping bag so that body contact can warm the victim slowly.

### **Sprains and Strains**

#### *Treatment*

- Apply cold to reduce swelling and pain
- Elevate injured part, and use compression (Ace wrap).
- Then 72 hours later, apply heat to increase metabolism.
- Rest the injured part.

### **Blisters**

#### *Prevention*

- A pair of thin inner socks (nylon knee high) under thicker hiking socks will help decrease friction on the skin.

- Wear shoes that are broken in!
- If you feel a hot spot forming on your foot, stop right away and treat it before it becomes a blister.
- Wash it with soap and water.
- Cut a piece of moleskin in the shape of a doughnut and place it on your foot with the hole over the blister.

#### *Treatment*

- If you think a blister will break, sterilize a pin in the flame of a match.
- Prick the blister near its edge and press out the liquid.
- Protect the wound from pressure with a doughnut bandage and keep it clean with a sterile bandage.

### **Bleeding**

#### *Treatment*

- Elevate injured limb above body level
- Apply direct pressure
- Cover with a pad. If the cloth becomes soaked, DO NOT REMOVE IT. Put another pad on top of the first one, and get medical help.

### **Thunderstorms/Lightning**

Thunderstorms can often surprise trek groups. Stake/ward leaders should have an emergency plan prepared.

The Trail Boss, Company Captains, and Medical Staff should know the flash-to-bang system of measuring lightning distance. Because light travels much faster than sound, the time between a lightning bolt and thunderclap will tell how far away the lightning is. Each 5-second count equals 1 mile. Before the count reaches 15 seconds or less (3 miles or closer) take precautions. Sometimes you may feel an electric charge, the hair on your head or body standing on end, or your skin tingling; if so, a lightning strike may be imminent.

Lightning typically strikes the tallest object in the area and is attracted to metal objects.

Ma's and Pa's should move their families, with their rain ponchos on, away from their handcarts towards the lowest spot in the area.

Everyone should spread out at least 15 feet apart to minimize the chance of everyone getting hit.

Everyone should be taught (before the trek starts) the crouch position they should get into if lightning is a threat. Trekkers should crouch down on the balls of their feet and bend forward so that their head is low but no other part of their body touches the ground. Keep your feet together to minimize body contact with the ground, which minimizes the risk of being hit.

If someone is struck, get the Medical staff immediately to treat and transport.