

Consider supplementing the ten essentials with:

- ◆ Water treatment device
- ◆ Repair kit, including duct tape and a basic sewing kit
- ◆ Insect repellent (or clothing designed for this purpose)
- ◆ Signaling devices, such as a whistle, cell phone, two-way radio, unbreakable signal mirror or flare
- ◆ Plastic tarp and rope for field expedient shelter
- ◆ Batteries for GPS

Not every outing will require the use of an essential item. However, carrying these basics makes sure that one is prepared for unexpected emergencies in the outdoors. In most circumstances, the ten essentials will transform a potentially life-threatening experience into a mere discomfort.

Have Fun

This booklet talks about the possible dangers and emergencies you may encounter outdoors. However, by taking a few precautions and being aware of your surroundings, then you can be free to have a lot of fun outdoors. Enjoy!



LIVE
to **Hike**
Another DAY



Outdoor Skills Series
Staying Safe

Consider supplementing the ten essentials with:

- ◆ Water treatment device
- ◆ Repair kit, including duct tape and a basic sewing kit
- ◆ Insect repellent (or clothing designed for this purpose)
- ◆ Signaling devices, such as a whistle, cell phone, two-way radio, unbreakable signal mirror or flare
- ◆ Plastic tarp and rope for field expedient shelter
- ◆ Batteries for GPS

Not every outing will require the use of an essential item. However, carrying these basics makes sure that one is prepared for unexpected emergencies in the outdoors. In most circumstances, the ten essentials will transform a potentially life-threatening experience into a mere discomfort.

Have Fun

This booklet talks about the possible dangers and emergencies you may encounter outdoors. However, by taking a few precautions and being aware of your surroundings, then you can be free to have a lot of fun outdoors. Enjoy!



LIVE
to **Hike**
Another DAY



Outdoor Skills Series
Staying Safe

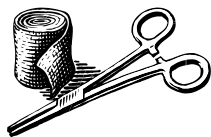
Emergency Procedures

Things to think about...

- ◆ Where are you?
- ◆ Where is the closest hospital?
- ◆ How will you contact help if someone is injured or ill?
- ◆ Who will communicate with authorities or parents and how will they do it?
- ◆ What are exit routes out of the area in the event of a flood or fire?
- ◆ What is the procedure if someone gets lost?

Safety Tips

- ◆ Use the buddy system
- ◆ Always tell someone where you're going
- ◆ Know your boundaries
- ◆ Stop for water breaks
- ◆ Listen
- ◆ Go only as fast as the slowest one in your group
- ◆ Stay on the trail
- ◆ Don't depend on your phone
- ◆ Carry a whistle
- ◆ Avoid strangers
- ◆ If you get separated,
STAY WHERE YOU ARE



2

Staying Safe

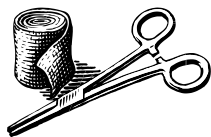
Emergency Procedures

Things to think about...

- ◆ Where are you?
- ◆ Where is the closest hospital?
- ◆ How will you contact help if someone is injured or ill?
- ◆ Who will communicate with authorities or parents and how will they do it?
- ◆ What are exit routes out of the area in the event of a flood or fire?
- ◆ What is the procedure if someone gets lost?

Safety Tips

- ◆ Use the buddy system
- ◆ Always tell someone where you're going
- ◆ Know your boundaries
- ◆ Stop for water breaks
- ◆ Listen
- ◆ Go only as fast as the slowest one in your group
- ◆ Stay on the trail
- ◆ Don't depend on your phone
- ◆ Carry a whistle
- ◆ Avoid strangers
- ◆ If you get separated,
STAY WHERE YOU ARE



2

Staying Safe

tractors, fishing rods, bicycles, camping equipment, or any metal objects

- Stay away from rivers, lakes, or other bodies of water.
 - Do not lie flat on the ground.
 - If you're on a lake, go to the nearest shore at once, and take cover.
- ◆ **Hail**
- Take cover.

Ten Essentials

The *Ten Essentials* comprise the basic equipment that many consider must-haves for the backcountry. These items are recommended as the very minimum materials necessary to increase the likelihood of survival when in the field.

According to the standard textbook *Mountaineering: The Freedom of the Hills* (Mountaineers Press), the ten essentials are:

1. Map
2. Compass (optionally supplemented with a GPS receiver)
3. Sunglasses and sunscreen
4. Extra food and water
5. Extra clothes
6. Headlamp/flashlight
7. First aid kit
8. Fire starter
9. Matches
10. Knife

Staying Safe

11

tractors, fishing rods, bicycles, camping equipment, or any metal objects

- Stay away from rivers, lakes, or other bodies of water.
 - Do not lie flat on the ground.
 - If you're on a lake, go to the nearest shore at once, and take cover.
- ◆ **Hail**
- Take cover.

Ten Essentials

The *Ten Essentials* comprise the basic equipment that many consider must-haves for the backcountry. These items are recommended as the very minimum materials necessary to increase the likelihood of survival when in the field.

According to the standard textbook *Mountaineering: The Freedom of the Hills* (Mountaineers Press), the ten essentials are:

1. Map
2. Compass (optionally supplemented with a GPS receiver)
3. Sunglasses and sunscreen
4. Extra food and water
5. Extra clothes
6. Headlamp/flashlight
7. First aid kit
8. Fire starter
9. Matches
10. Knife

Staying Safe

11

- Be alert to signs, sounds, or other indications of bear.
- If a bear makes contact with you, play dead. Lie face down, curl up with your knees against your chest and arms and hands laced around your neck, and don't move. Leave your pack on your back for protection.

Severe Weather

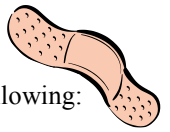
◆ Rain

- Rain coats, rain pants, and other bulky clothing may impede motion.
- Visibility may be restricted, especially for people wearing glasses.
- Footing can turn precarious as the ground becomes slippery.
- Being in the rain for a long period of time may lead to hypothermia

◆ Thunderstorms

- Attempt to get to a building or a car wherever possible or if this is not possible, get to an open space and squat on the ground as low as possible.
- If you are in a wooded area find a location protected by a low clump of trees.
- NEVER stand under a single tree in the open.
- Avoid tall structures such as towers, tall trees, fences, telephone lines, or power lines.
- Stay away from natural lightning rods such as golf clubs,

First Aid Kit



Should be in waterproof container and include the following:

- ◆ Adhesive bandages – for small cuts
- ◆ Bandage compress – for helping to control bleeding for larger injuries
- ◆ Burn cream – applied to first-degree burns only
- ◆ Burn dressing – dry, sterile dressing applied to 2nd degree or 3rd degree burns
- ◆ CPR mask – prevents disease transmission when performing CPR. The mask fits over the victim's mouth and air is transferred from the rescuer to the victim.
- ◆ Cold pack – applied to reduce swelling of injuries such as sprains or bruises
- ◆ Gauze compress – helps control bleeding through direct pressure.
- ◆ Latex gloves – prevents contact with any body substances such as blood or saliva
- ◆ Iodine wipes – used to sterilize a cut or scrape
- ◆ Triangular bandage – used in splinting or to hold a dressing in place.
- ◆ Wire splint – used to splint an injury.
- ◆ Major trauma dressing – helps control major bleeding or as a cover for a severe open injury.
- ◆ Splinter remover – removes splinters

- Be alert to signs, sounds, or other indications of bear.
- If a bear makes contact with you, play dead. Lie face down, curl up with your knees against your chest and arms and hands laced around your neck, and don't move. Leave your pack on your back for protection.

Severe Weather

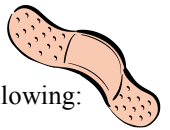
◆ Rain

- Rain coats, rain pants, and other bulky clothing may impede motion.
- Visibility may be restricted, especially for people wearing glasses.
- Footing can turn precarious as the ground becomes slippery.
- Being in the rain for a long period of time may lead to hypothermia

◆ Thunderstorms

- Attempt to get to a building or a car wherever possible or if this is not possible, get to an open space and squat on the ground as low as possible.
- If you are in a wooded area find a location protected by a low clump of trees.
- NEVER stand under a single tree in the open.
- Avoid tall structures such as towers, tall trees, fences, telephone lines, or power lines.
- Stay away from natural lightning rods such as golf clubs,

First Aid Kit



Should be in waterproof container and include the following:

- ◆ Adhesive bandages – for small cuts
- ◆ Bandage compress – for helping to control bleeding for larger injuries
- ◆ Burn cream – applied to first-degree burns only
- ◆ Burn dressing – dry, sterile dressing applied to 2nd degree or 3rd degree burns
- ◆ CPR mask – prevents disease transmission when performing CPR. The mask fits over the victim's mouth and air is transferred from the rescuer to the victim.
- ◆ Cold pack – applied to reduce swelling of injuries such as sprains or bruises
- ◆ Gauze compress – helps control bleeding through direct pressure.
- ◆ Latex gloves – prevents contact with any body substances such as blood or saliva
- ◆ Iodine wipes – used to sterilize a cut or scrape
- ◆ Triangular bandage – used in splinting or to hold a dressing in place.
- ◆ Wire splint – used to splint an injury.
- ◆ Major trauma dressing – helps control major bleeding or as a cover for a severe open injury.
- ◆ Splinter remover – removes splinters

Drinking Water

- ◆ Bring plenty of water with you, more than you think you'll need.
- ◆ If you run out of water, find a water source that is relatively clean and free from agricultural or chemical waste.
- ◆ If possible, choose a source that is still and clear.
- ◆ Avoid using water sources where animal activity or human impact is obvious.
- ◆ Avoid streams carrying runoff from farms, forestry operations, and factories.
- ◆ Find clean white snow or ice in the winter.

Purifying Water

- ◆ Mechanical treatment
 - Follow the directions that come with the water filter (each brand is different) and have additional filters on hand to replace any that might clog or that you can't clean.
- ◆ Boiling water
 - Bring water to a rolling boil for ten minutes.
 - At higher elevations (over 3,000 feet) boiling time should be extended to 13 minutes.
- ◆ Chemical treatment
 - It is extremely important to follow the directions when using iodine or chlorine to make sure you are adding enough to the water or not too much.

Drinking Water

- ◆ Bring plenty of water with you, more than you think you'll need.
- ◆ If you run out of water, find a water source that is relatively clean and free from agricultural or chemical waste.
- ◆ If possible, choose a source that is still and clear.
- ◆ Avoid using water sources where animal activity or human impact is obvious.
- ◆ Avoid streams carrying runoff from farms, forestry operations, and factories.
- ◆ Find clean white snow or ice in the winter.

Purifying Water

- ◆ Mechanical treatment
 - Follow the directions that come with the water filter (each brand is different) and have additional filters on hand to replace any that might clog or that you can't clean.
- ◆ Boiling water
 - Bring water to a rolling boil for ten minutes.
 - At higher elevations (over 3,000 feet) boiling time should be extended to 13 minutes.
- ◆ Chemical treatment
 - It is extremely important to follow the directions when using iodine or chlorine to make sure you are adding enough to the water or not too much.

Encountering a Wild Animal

- ◆ Be alert at all times.
- ◆ Make as much noise as possible when walking down trails.
- ◆ Never intentionally approach any wild animal.
- ◆ Do not hike after dark if you can help it.
- ◆ If you encounter a wild animal **DO NOT RUN!** Back slowly away.
- ◆ Store food properly.
- ◆ View animals at a distance.
- ◆ Be considerate. Give them plenty of room and use caution. Any animal can be unpredictable.

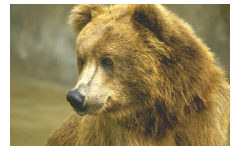
◆ Mountain Lions

- Wave arms; make as much noise as possible.
- **DO NOT BEND or CROUCH DOWN**
- Maintain eye contact
- If attacked, **FIGHT BACK!**



◆ Bears

- Try to stay upwind
- Do not corner a bear (or any other animal)
- Treat all adult bears as if there are cubs nearby. **NEVER** get between a mother and her cub.



Encountering a Wild Animal

- ◆ Be alert at all times.
- ◆ Make as much noise as possible when walking down trails.
- ◆ Never intentionally approach any wild animal.
- ◆ Do not hike after dark if you can help it.
- ◆ If you encounter a wild animal **DO NOT RUN!** Back slowly away.
- ◆ Store food properly.
- ◆ View animals at a distance.
- ◆ Be considerate. Give them plenty of room and use caution. Any animal can be unpredictable.

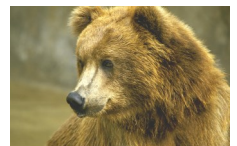
◆ Mountain Lions

- Wave arms; make as much noise as possible.
- **DO NOT BEND or CROUCH DOWN**
- Maintain eye contact
- If attacked, **FIGHT BACK!**



◆ Bears

- Try to stay upwind
- Do not corner a bear (or any other animal)
- Treat all adult bears as if there are cubs nearby. **NEVER** get between a mother and her cub.



- ◇ Signs and symptoms usually occur within 12 to 48 hours
- ◇ Reaction includes severe itching, redness of the skin, and blistering
- ◇ Wash with detergent soap
- Stinging Nettle
 - ◇ Covered with small, invisible stinging hairs. Causes an intense burning pain when brushed against. Reaction may be seen in small, white, itchy bumps after contact
 - ◇ Clean affected area with cool or cold water. Use anti-itch cremes such as cortisone or calamine lotion.

- Add tablets to the water and wait 10 to 15 minutes for them to dissolve before using.
- For cold water, the wait time should be between 30 to 60 minutes.
- Do not use, add to, or drink water until after the wait period.

Effects of Heat and Cold

Cold-Related Illnesses: Hypothermia

- ◆ What it is: A life-threatening condition when the body cannot produce heat as fast as it is being lost and the body's temperature falls below 95 degrees.
- ◆ Where it can occur: Outdoors, indoors, day or night, warm or cold temperatures.
- ◆ Signs and symptoms: Shivering, disorientation or change in mental status, loss of consciousness and potentially death.
- ◆ Prevention: Dress appropriately; get out of the cold and into a warmer environment when you start to feel cold.
- ◆ What to do: Treat the condition immediately. Get them to a warm building, shelter or tent. If no shelter is immediately available, use a warm fire, blankets, or sleeping bags to help warm the victim. Remove any wet clothing and put on dry clothing.
- ◆ For mild cases, where the victim is coherent and their mental status is unaltered, give them hot liquids to drink or an energy

- ◇ Signs and symptoms usually occur within 12 to 48 hours
- ◇ Reaction includes severe itching, redness of the skin, and blistering
- ◇ Wash with detergent soap
- Stinging Nettle
 - ◇ Covered with small, invisible stinging hairs. Causes an intense burning pain when brushed against. Reaction may be seen in small, white, itchy bumps after contact
 - ◇ Clean affected area with cool or cold water. Use anti-itch cremes such as cortisone or calamine lotion.

- Add tablets to the water and wait 10 to 15 minutes for them to dissolve before using.
- For cold water, the wait time should be between 30 to 60 minutes.
- Do not use, add to, or drink water until after the wait period.

Effects of Heat and Cold

Cold-Related Illnesses: Hypothermia

- ◆ What it is: A life-threatening condition when the body cannot produce heat as fast as it is being lost and the body's temperature falls below 95 degrees.
- ◆ Where it can occur: Outdoors, indoors, day or night, warm or cold temperatures.
- ◆ Signs and symptoms: Shivering, disorientation or change in mental status, loss of consciousness and potentially death.
- ◆ Prevention: Dress appropriately; get out of the cold and into a warmer environment when you start to feel cold.
- ◆ What to do: Treat the condition immediately. Get them to a warm building, shelter or tent. If no shelter is immediately available, use a warm fire, blankets, or sleeping bags to help warm the victim. Remove any wet clothing and put on dry clothing.
- ◆ For mild cases, where the victim is coherent and their mental status is unaltered, give them hot liquids to drink or an energy

bar to help increase their core temperature.

- ◆ For more severe cases, have them lie down on their side. Call EMS or get them to medical attention as soon as possible.

Heat-Related Illnesses:

Heat cramps, heat stroke, heat exhaustion

- ◆ Heat cramps – Signs and symptoms: sudden painful muscular spasms
- ◆ Heat exhaustion – Signs and symptoms: heavy perspiration characterized by normal or slightly above normal body temperatures
- ◆ Heat stroke – Signs and symptoms - hot, dry skin, no sweating, unresponsive or altered mental status

Heat stroke is the most serious heat-related illness, but all three should receive immediate attention.

Prevention

- ◆ Dress appropriately for weather.
- ◆ Take plenty of breaks to have water.
- ◆ Rest in the shade.
- ◆ Stop when you are tired.

What To Do

- ◆ Cool the body down as rapidly as possible.
- ◆ Stop the cooling as soon as the mental status improves.
- ◆ Get victim to medical attention as soon as possible.

bar to help increase their core temperature.

- ◆ For more severe cases, have them lie down on their side. Call EMS or get them to medical attention as soon as possible.

Heat-Related Illnesses:

Heat cramps, heat stroke, heat exhaustion

- ◆ Heat cramps – Signs and symptoms: sudden painful muscular spasms
- ◆ Heat exhaustion – Signs and symptoms: heavy perspiration characterized by normal or slightly above normal body temperatures
- ◆ Heat stroke – Signs and symptoms - hot, dry skin, no sweating, unresponsive or altered mental status

Heat stroke is the most serious heat-related illness, but all three should receive immediate attention.

Prevention

- ◆ Dress appropriately for weather.
- ◆ Take plenty of breaks to have water.
- ◆ Rest in the shade.
- ◆ Stop when you are tired.

What To Do

- ◆ Cool the body down as rapidly as possible.
- ◆ Stop the cooling as soon as the mental status improves.
- ◆ Get victim to medical attention as soon as possible.

Harmful Animals, Plants, and Insects

◆ Snakes

- May or may not be poisonous
- Be familiar with the location you are going to and possible poisonous snakes that may be in the area

◆ Spiders

- Black Widow
 - ◇ Most venomous spider in North America
 - ◇ Easily recognizable by its black body and the red hour-glass on its abdomen
 - ◇ Seek immediate medical attention if bitten by a black widow
- Brown Recluse
 - ◇ Cousin of the black widow
 - ◇ Venomous bite but not as serious as the black widow
 - ◇ Has a trademark fiddle shape on the top-side of its body

◆ Ticks

- Always check yourself - especially neckline and tops of socks
- Wear light-colored clothing so you can see them
- Have an adult remove as soon as possible
- Concern about Lyme Disease

◆ Plants

- Poison Oak

Harmful Animals, Plants, and Insects

◆ Snakes

- May or may not be poisonous
- Be familiar with the location you are going to and possible poisonous snakes that may be in the area

◆ Spiders

- Black Widow
 - ◇ Most venomous spider in North America
 - ◇ Easily recognizable by its black body and the red hour-glass on its abdomen
 - ◇ Seek immediate medical attention if bitten by a black widow
- Brown Recluse
 - ◇ Cousin of the black widow
 - ◇ Venomous bite but not as serious as the black widow
 - ◇ Has a trademark fiddle shape on the top-side of its body

◆ Ticks

- Always check yourself - especially neckline and tops of socks
- Wear light-colored clothing so you can see them
- Have an adult remove as soon as possible
- Concern about Lyme Disease

◆ Plants

- Poison Oak