

Prepared For The Backcountry!

Instructor Manual

This Backcountry Preparedness Training Program Will Expose Participants to the following:

- The importance of proper planning and preparation.
- Making decisions based on factual information about weather, terrain and group dynamics.
- Assessment of appropriate methods for confronting wilderness challenges.
- Key concepts of avalanche awareness, ATV/snowmobile, communication, basic survival, water crossing, wilderness medical..
- Introduction to survival and rescue equipment and their proper uses.
- Our impact on the environment and the importance of wildlife and environmental respect. 'Leaving no trace.'
- Proper steps to follow in an emergency. What to do if you become the subject of a search and rescue mission.



Made possible by the Alaska Dept. of Public Safety- State Troopers

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Special recognition for support of this program goes to the Alaska Department of Public Safety, Division Alaska State Troopers.

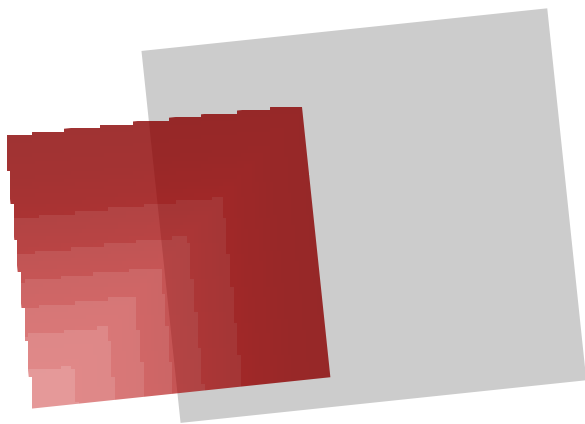
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D. McGhan photo



ENJOYING ALASKA'S BACKCOUNTRY SAFELY

Debra McGhan, U Rock Enterprises—Consulting

ALASKA offers outdoor recreation enthusiasts a vast playground for winter and summer exploration. But its important to remember that this state can also quickly turn deadly for the unprepared.

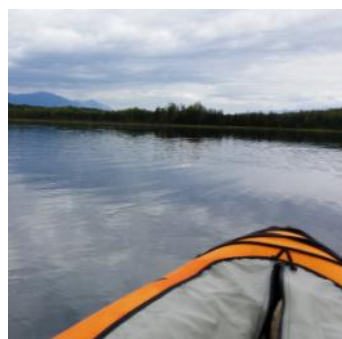
As DPS instructors for the Prepared for the Backcountry program, our goal is to share experience, wisdom and knowledge to help others learn from those

who have come before. Through this program we will share personal lessons, both good and the not-so good ones we learned from or found valuable.

This manual is designed to reinforce those lessons.

It is important to have a well thought out plan before you set out for your adventures.

It is your personal responsibility to be prepared, leave a trip plan with friends or family and ensure you have the proper gear, supplies and skills in the event of an emergency.



TOPICS COVERED

Trip Plan	8
Survival Basics	9
Avalanche Awareness	10
ATV/ Snowmobile	11
Communication	11
Wilderness First Aid	12
Water	13
Wildlife	14
Search & Rescue	15
Forms	16-19

“Our Mission: To support and promote safe recreation and travel by snowmachines, all-terrain vehicles (ATV,) recreational off road vehicles (ROV) or human powered through educational programs. Our non-profit organizations are dedicated to working together with communities to reduce unintentional injuries and deaths.”

TABLE OF CONTENTS

Program objectives.....	5
Course Syllabus-----	
• Trip Plan - Basic Survival - Leadership-----	6
• Basic components of survival – Fire, Shelter, Water, Food, clothing	7
• Avalanche Awareness-----	8
• ATV/Snowmachine/Boat Safety-----	9
• Communication including PLB / ELT / SPOT / In-Reach, Signaling device-	9
• Wilderness First Aid-----	10
• Water Safety-----	11
• Mega Fauna (Wildlife avoidance)-----	12
• What to do if you become the subject of a Search and Rescue mission-----	13
Sample documents and forms-----	14-15
Sponsorship Recognition-----	16

Outdoor Life Magazine - April 2011

Snapshots

SURVIVAL

TOP 10

Survival Myths

Not all advice you hear about wilderness survival is true—here, the fiction and the facts **BY RICH JOHNSON**

1 Determine direction by looking for moss on the north side of trees. The truth is that moss will grow on every side of a tree if conditions of moisture and temperature are just right.

2 Follow a river—it's the best way to find civilization. Some waterways run for hundreds of miles without bumping into civilization. Sometimes following a waterway is difficult and dangerous.

3 The best way to purify water is by boiling it. Boiling kills organic contaminants but doesn't eliminate non-organic pollutants, such as heavy metals.

4 The most important priorities are shelter, fire, water and food. These four vital survival factors might be



superseded by a higher priority, like an injury requiring immediate treatment.

5 Dry out wet clothing by wearing it while sitting by the fire. Wet clothing sucks the warmth out of your body, so get out of those wet things and

cover up with something dry. Then dry your clothing by the fire.

6 Travel swiftly to get out of the survival situation as quickly as possible. Suffering an injury might be the very thing that leads to your death. Travel cautiously to avoid injury.

7 Take off your boots before crossing a stream so they don't pull you down. The greater risk is that of injuring your feet while crossing water. Keep boots on to protect your feet.

8 If you "play dead," a grizzly bear will leave you alone. Not always. A grizzly is unpredictable and might maul you even though you are doing your best imitation of a corpse.

9 It's safe to eat whatever the animals eat. No! Some birds can safely eat poison ivy berries. Some rodents eat mushrooms that are toxic to humans.

10 Counteract frostbite by rubbing the affected area with snow. In fact, this myth is exactly what *not* to do. Rubbing frozen flesh with snow will only increase the damage from frostbite.

BACKCOUNTRY TRAVEL SAFETY PROGRAM OBJECTIVES

Prepared For The Backcountry

Trip Plan

Plan, Prepare, Practice

Avalanche Awareness

ATV/Snowmachine/Boat Safety

Communication including PLB /ELT /SPOT /In-Reach..

Wilderness Medical – Hypothermia

Basic components of survival – Fire, Shelter, Water, Food, clothing

Water crossing

Wildlife avoidance

What to do if you become the subject of a search and rescue mission



Section 1: Trip Planning

- *Activity 'Make a Trip Plan' - Provide printed copies of the Alaska State Trooper Trip plan*
 - *With four-feet of fresh snow now covering a three-foot base of snow, four friends have decided to ride their snowmobiles in the Craigie Creek area on the west side of Hatcher Pass. Write a trip plan for them.*

SAMPLE TRIP PLAN DETAILS

Departing: Friday, December 31st at 10 a.m.

Returning: Saturday, January 1st by 4 p.m.

Traveling on snowmachines. Two SkiDoo's, One Arctic Cat, one Yamaha

Four people in the group. Three males, one female

Equipped with camping gear, extra fuel, mechanical tools, beacons, shovels, probes

Carrying an In-Reach Communication device

Wearing blue, red and black snowmachine suits.

In an emergency please contact George Dad or Stacey Friend at 907-911-0000.

If we are not back by 7 p.m. January 1st please send help!

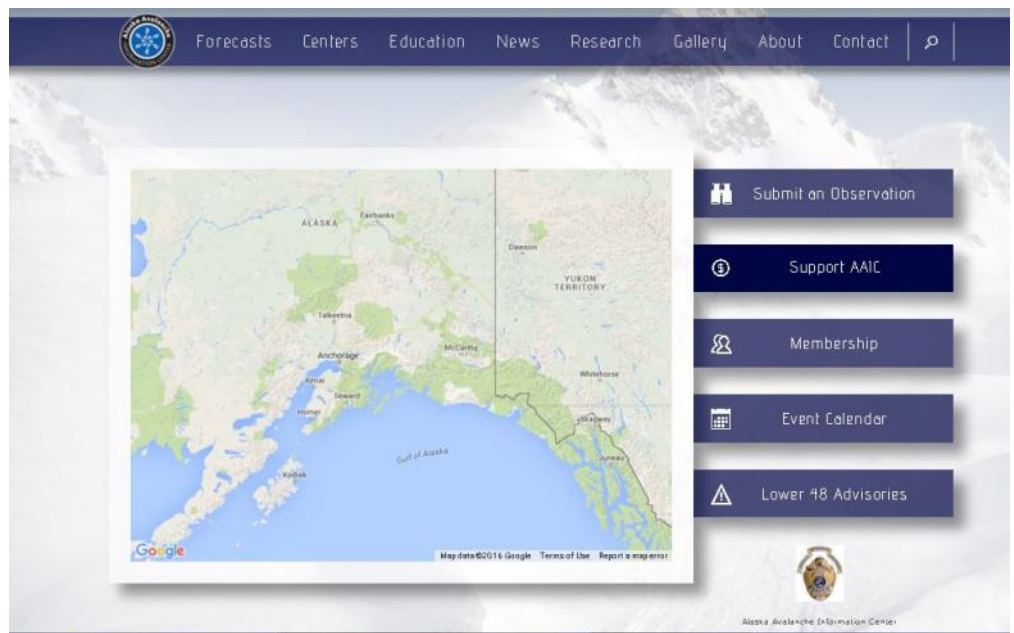
- *Weather factors - Snow Stability*
- *Activity - 'Gather a current weather and snow forecast '*
 - *This can be done as a large group activity or with small groups or partners using cell phones*



Alaska Weather Information Line



In Anchorage, call: 266-5145
In Fairbanks, call: 458-3745
In Juneau, call: 790-6850
Anywhere else in Alaska: 1-800-472-0391
Outside of Alaska: 1-907-266-5145
May 7, 2009



Take time to check local snow stability and weather forecasts before you head out for adventure.

Section 2: Basic Survival Skills and Leadership

KNOW BEFORE YOU GO!

- Skill level of your group
- Fitness level of your group
- Who has first aid training?
- Who is the leader?
- Has each member of your group filed a trip plan?
- Do you know when and how to say, “Stop. Enough?”

WILDERNESS LEADERSHIP SKILLS

AVOID THE SURVIVAL SITUATION

Prepare beforehand

Know your limitations and how to live in the wild

Carry a bivouac (bivy) kit of emergency gear at all times and know how to use it: extra clothes, extra food, metal cup, matches, knife, plastic tarp/garbage bags/space blanket, cord, flashlight, whistle, map and compass.

ATTITUDE

Survival is about self-reliance

Your greatest problems will be mental → RELAX → THINK

Assess the situation: location, weather, darkness, dangers

Your best tool for survival is your brain

Learn to enjoy the moment

SHELTER AND CLOTHING

Primary objective: **STAY WARM & DRY**

Carry adequate clothing and shelter

Shelter is clothing further from your body

Do not overheat or sweat in the shelter or snow cave, ventilate the shelter

Choose an adequate site: **SAFE & COMFORTABLE**

Shelter is limited only by your imagination

Seek maximum protection with minimum heat loss

WATER

Secondary objective: **STAY WELL- HYDRATED**

Carry water, know sources of water, know how to purify water

FOOD

Know that you can survive weeks without it

Carry high energy, glucose rich food & know wild food sources in your area

FIRE

You can live years without it

Carry matches and know how to build a fire; its warmth is mentally uplifting

**PRACTICE – THERE IS NO SUBSTITUTE FOR EXPERIENCE! BE ABLE TO BE FOUND
MAKE YOURSELF BIG**

Section 3 - Avalanche Awareness

Understand the following:

Avalanche factors

- Unstable Snow
- Terrain
- Weather
- Poor Decisions

When and why there are times you should not go into the mountains

- Most avalanches occur during and immediately after storms...
- New snow adds weight (stress) to the snowpack
- New snow takes time to bond to the layer underneath
- Wind transports snow (adds weight)
- Changes in temperature can weaken the snowpack
- Rain events add weight to the snowpack

Recognizing terrain traps

- Gullies
- Cliffs
- Benches
- Rocks
- Trees
- Crevasse / bergschrund
- Open water
- Places where snow can pile up
- Burials are deep

The Get's

- Get the Gear
- Get the Training
- Get the Forecast
- Get the Picture
- Get out of Harms way

Other resources: <http://kbyg.org/>



Companion Rescue Practice: Set up stations for searching, probing, strategic shoveling and first aid treatment of victims.

Section 4 - ATV / Snowmobile

When traveling by Snowmobile or ATV, beyond the common sense survival practices, there are many things you students must consider such as:

- Ability to trigger layers further down in the snowpack
- Heavier weight = more stress on the snowpack
- Faster, able to cover more ground
- Travel deeper into the backcountry and higher in the mountains

As a backcountry safety instructor, If you are not a rider, we encourage you to partner up and work with a rider to present material. Basic survival skills apply to all outdoor activities and modes of travel.

Section 5 - Communication



Being able to contact someone to send assistance in an emergency could be the difference between life and death. Your job as an instructor is the learn about and be able to explain the different forms of communication and how they work.

Section 6: Wilderness First Aid



The importance of knowing basic first aid cannot be stressed enough for the back country traveler. This course is not intended to teach wilderness medicine but should encourage students to understand the importance of knowing first aid and seeking appropriate training for their chosen activities and skill level. What you as the instructor can do is include activities in your lesson plan that will give your students the opportunity to practice basic skills like recognizing and treating cold weather injuries (hypothermia burrito wrap, or soft tissue wounds, that could be potentially life threatening without action.

Activity - Recognize the symptoms and treat a victim suffering from hypothermia. Describe the symptoms; Mumbling, stumbling, grumbling and shivering uncontrollably. Select one person to serve as the victim. Coach them to display the symptoms of a severely hypothermic victim who has been caught and recovered from a snow slide.

CONCEPTS:

Injuries can happen at any time and in any place
Knowing basic first aid could be critical for survival
Hypothermia can be deadly if left untreated

MATERIALS/ GETTING READY:

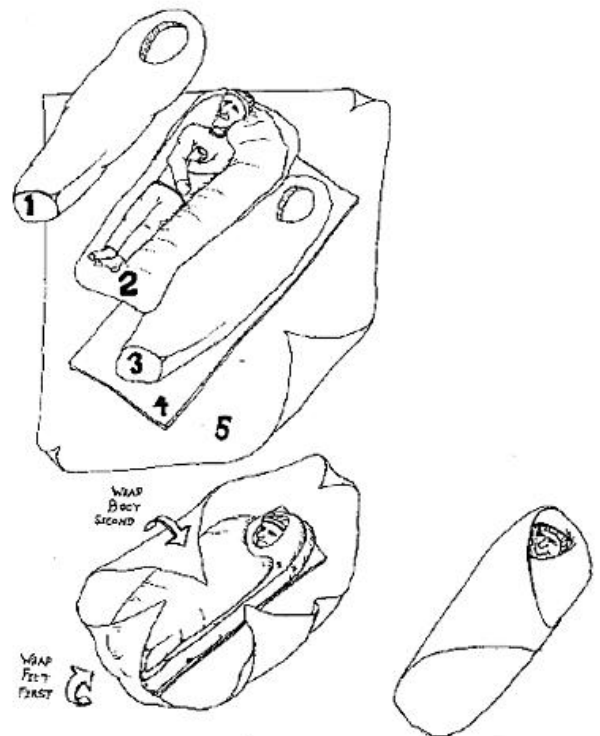
Tarps, foam pad, sleeping bags, hats, hand warmers

DOING THE ACTIVITY:

- Review rules for the activity and the importance of following directions
- Participants will work in teams with each member serving as a victim or working on the rescue team.

Have the hypothermic victim crumple to the ground and the rescue team must respond by:

- Treating the victim gently
- Lying out a tarp and foam pad
- Helping the victim into a sleeping or bivy bag
- Placing a hat on the victims head and putting hand warmers under their arms
- Folding the tarp like a burrito around the patient
- Ask the victim if they feel warmer inside the burrito wrap



Section 7: Water Safety

- *Understand basic, practical skills for recreating safely on or around water, including when it's frozen*
- *Know the purpose and importance of wearing a personal flotation device*
- *Understand the importance of selecting a PFD that fits properly*
- *Avoid problems by keeping boat decks clear and not distracting the driver*
- *Know what steps should be taken in an emergency*
- *Understand basic water safety and what to do in a rescue*



CONCEPTS:

Water covers three quarters of the planet

Water sports are fun and an integral part of living and playing in Alaska

Learning to recreate safely on and around water is critical to survival

MATERIALS/ GETTING READY:

Life jackets, throw bags, throw rings, towels, bucket, ice, key, rocks, coins, treasure box

Camera to document activity

BACKGROUND INFORMATION:

Alaska has over 33,000 miles of coastline (more than the entire "lower 48" states put together), over 3,000 rivers, and more than three million lakes. Unfortunately, we also have one of the highest non-commercial boating fatality rates in the nation. In Alaska drowning is the second leading cause of accidental death.

Accident statistics reveal that three out of four boating fatalities were the result of capsizing or falling overboard into cold water, where the boater was not wearing a life jacket.

Water in Alaska is COLD! Wearing a PFD when on or around water can save your life even if you know how to swim! Just make sure it fits properly.

Practice safe boating habits by always keeping the deck clear of gear or hazards you might trip over.

- Learn to read a compass and know your location. If you get in trouble, you're not likely to get rescued unless you can tell someone where you are.

More information on water safety available at:

<http://dnr.alaska.gov/parks/boating/>



Section 8: Respecting Alaska's Wildlife

- **Understand the importance of Wildlife and the reasons for human avoidance**
- **Understand methods for avoidance**

Animals have basic instincts that motivate them to protect their territory, food source and their families. It is not their nature to seek out and kill people but if you threaten any of their basic needs, they will kill to survive. When we humans enter the wilderness, we become part of the food chain. In Alaska, our backyard is the wilderness and it is important to understand and respect that territory.

Animals are critical to our survival. If you ever have the chance to see an animal in the wild, consider yourself fortunate. Never chase or harass a wild animal. They can turn on you in an instant. Sample video of what you should NOT do when confronting a moose on the trail. This link is an example of why you don't want to harass a moose.

<https://www.facebook.com/ilovealaskafans/videos/932927573394482/>



Moose in Alaska are a common site. This one was seen strolling through an Anchorage neighborhood.

It pays to be alert and keep your distance to avoid getting stomped.

Your chances of seeing a bear in the wild are actually very slim. If you don't want an unexpected encounter, it's wise to make noise when traveling through dense brush and keep alert.



Section 9: What to do if you become the subject of a Search and Rescue Mission

Knowing what to do in an emergency situation will help prevent panic. Your job as an instructor is to ensure your students know the basics

- Be prepared to help yourself. Alaska has large search areas and limited resources to find you
- Don't panic! This is the number one enemy in an emergency
- Make a plan
- Someone needs to take charge and serve as the leader
- Once the group agrees, then the leader must be respected and followed to avoid conflicts
- Know where you are. Learn navigation skills so you can provide location coordinates
- Did you leave a trip plan? Do you have communication?
- Bright clothing works well for being spotted
- Carry a signaling device to make it easy to be found
- Make a signal fire if possible
- If it's safe, stay where you are
- Make yourself BIG and easy to see



No matter how prepared an outdoor enthusiast may be, accidents can happen and adrenaline is sure to set in. When this takes place, it's all too easy to succumb to fear which can result in bad decision making and wasted energy. While no one knows how they will react until they are put in one of these situations, it is important to always take a moment to relax, and then think through the problem logically.

Knowledge is power when it comes to surviving any type of emergency. Try to remain calm and level-headed when faced with the unexpected.



Date: _____

Event Location: _____

Thank you for participating in this Backcountry Safety Training. We appreciate your feedback to help ensure our courses are effective and meet the needs of our students. Please take a few minutes to share your thoughts of this program and you'll be entered to win an avalanche transceiver from Black Diamond

(1 = did not and 5= exceeded expectations)

Did this program meet your expectations? ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Did the instructors provide clear, easy to understand information? ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

What did you like best? _____

Highlights from this program _____

Suggestions for improvement? _____

Other comments? _____

How did you hear about this training opportunity? _____

How likely are you to recommend this program to others? ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

Would you like the opportunity to participate in future training programs? ☐ YES ☐ NO

Name: _____ Email: _____

Phone: _____

Please return this form to an instructor or email to info@AlaskaSnow.org





LIVE TO RIDE ANOTHER DAY

Post-Evaluation for Schools

Thank you for participating in the Live to Ride Another Day backcountry safety program. Did you know that in Alaska you don't have to go far to be in the backcountry. It's probably right outside your door. We invite you to complete this quiz to test your knowledge and be entered to win a prize from Black Diamond. Please fill in the blanks or circle answers below and return to an official AAIC representative or your teacher.

1. Name three early warning signs of hypothermia
 1. _____
 2. _____
 3. _____

2. Before heading out for your adventure you should do the following:
 - a. Call your friends to find out their plans for the day
 - b. Tell someone you trust where you are going and when you will return, (file a trip plan)
 - c. Pack a suitcase
 - d. Call the Alaska State Troopers and tell them your plans for the day

3. When recreating in mountain terrain, what is most important to always
 - a. An avalanche airbag
 - b. A helmet
 - c. A backcountry pass
 - d. An avalanche transceiver, shovel and probe

4. Fire has many useful purposes in an emergency. What necessary ingredients do you need to start and sustain a fire?

5. If you become the subject of a search and rescue mission you should do the following:
 - a. Stay put and wait for help to arrive
 - b. Send someone in your party to get help
 - c. Get to a safe place if possible, make a signal fire or other signal to alert rescuers
 - d. Call your mom

Name: _____

Grade: _____

School: _____

Please mail forms electronically to info@alaskasnow.org or postal mail - P.O. Box 911, Valdez, AK 99686
 Deadline 5/31/2016

This program is made possible by The Alaska Department of Public Safety Division of State Troopers





**Alaska Safe Riders (ASR)
Alaska Avalanche Information Center
(AAIC)**



*Prepared to Ride
Backcountry Safety Training*

**RELEASE OF LIABILITY, WAIVER OF CLAIMS,
ASSUMPTION OF RISKS AND INDEMINITY AGREEMENT**

PARTICIPANTS NAME _____

Alaska Safe Riders (ASR) and Alaska Avalanche Information Center (AAIC) presents *Prepared To Ride* safety training Program. This Backcountry Travel safety program is made possible with support from The Alaska Department of Public Safety Division of Alaska State Troopers.

UNDERSTANDING AND CONSENT FOR PARTICIPATION

Name _____ hereby agrees to participate in this special outdoor training program presented by ASR and AAIC. I, the undersigned, understand that all outdoor activities involve some inherent risk. I understand that every effort will be made to avoid incident. I further understand this program is being provided as a public courtesy and documented for grant purposes.

I understand that each individual will be responsible for any injury he/she may sustain during this activity. Signing this contract signifies understanding that this document constitutes a release, which shall protect ASR, AAIC, partnering agencies, State of Alaska, our sponsors and all employees, volunteers and associates thereof. I further consent to emergency treatment by a physician in the event of an injury or illness while participating in this event. I hereby waive any liability to ASR, AAIC and the State of Alaska, sponsors and all employees, volunteers and associates thereof for any complication arising out of such treatment.

I understand that I may appear in videos and photos to be used for grant reports, funding requests, marketing and/or training materials.

☐ I agree and hereby provide my permission ☐ No Thanks! Please do not use my image/photo

PARTICIPANT/PARENTS SIGNATURE _____

PHONE: _____ CELL: _____

ADDRESS: _____

EMAIL: _____

DATE: _____ AGE: _____

Medical concerns? _____

Allergies? _____ Medications? _____

OTHER EMERGENCY CONTACT: NAME _____ PHONE _____

ASR / AAIC - Incident /Accident Report Form

Date of incident: _____ Time: _____ AM/PM Location: _____

Name of injured/involved person: _____

Address: _____ City: _____ State _____ Zip _____

Phone Number(s): _____

Date of birth: _____ Male _____ Female _____

Who was injured person?(circle one) Instructor / Volunteer / Contractor / Student

Type of injury: _____

Details of incident: _____

Specific part of body affected: _____

Injury requires physician/hospital visit? ☐ Yes ☐ No

Name of physician/hospital: _____

Address: _____

Phone number: _____

Signature of injured party or parent/guardian _____

*Refusal of Medical Care:

☐ No medical attention was desired and/or required

Signature of onsite representative _____

Representative Organization: ☐ ASR ☐ AAIC Date _____ Time _____

Note: Occupational accidents that result in the death or overnight hospitalization of one or more individuals must be reported to AKOSHA within 8 hours. Immediately report accidents to:

- 1-800-770-4940 or (907)269-4940 (8 am to 5 pm M-F; AK time)
- 1-800-321-6742 (After 5 pm or on weekends and holiday)

Injured individual (or a representative if the individual is unable to call) is instructed to submit this form to an ASR or AAIC official and call 800-553-8041 to submit notice within 24 hours.

SUPPORT PROVIDED BY



Additional Avalanche Resources:

<http://avtraining.org/be-avalanche-aware/>

<https://backcountryaccess.com/learn-avalanche-safety/>

