



Emergency
ManagementBC

SEARCH AND RESCUE SAFETY PROGRAM GUIDE

Emergency Management BC
Ministry of Justice
September 2012

Adopted by CVGSAR March 2013

Contents

Acknowledgements	4
Definitions	5
Commonly Used Acronyms	6
SECTION 1 – PURPOSE, SCOPE AND GENERAL REQUIREMENTS	7
Program Components	7
Safety Program Guide Revisions	8
SECTION 2 – SAFETY PROGRAM COMPONENTS	9
Component 1 – Key Responsibilities	9
Emergency Management BC (EMBC)	9
British Columbia Search and Rescue Association (BCSARA)	10
Requesting Agencies	10
SAR Groups	11
SAR Leaders	12
SAR Volunteers	13
Convergent Volunteers	13
Component 2 – Risk Assessments	14
Component 3 – Written Procedures	16
Component 4 – Education and Training	17
Component 5 – Accident/Incident Reporting and Investigation	18
Component 6 – Medical Response/First Aid	22
Component 7 – Inspections	23
Component 8 – Records	26
Component 9 – Society Business Meetings	27
Component 10 – Safety Program Review	28

Component 11 – Other Program Components	29
11.1 Strain Injury Prevention	29
11.2 Exposure to Hazardous Materials or Bio-hazardous Substances	31
11.3 Prevention of Violence to Volunteers	32
11.4 Heat and Cold Stress	33
11.5 Personal Protective Equipment	34
11.6 Dangerous Atmospheres/Confined Space	34
SECTION 3 – Worker Care	35
SECTION 4 – Appendices	36
Appendix A – Safety Program Quick Assessment	37
Appendix B – Risk Assessments	38
Appendix C – Risk Assessment Worksheet	47
Appendix D – SAR Safety Practice	48
Appendix E – Written Procedures	49
Appendix F – Volunteer Orientation Checklist	50
Appendix G – Sample Accident/Incident Investigation Form	51
Appendix H – Incident Investigation Guide	53
Appendix I – SAR Inspection and Vehicle Checklists	57
Appendix J – Records to be Maintained	64
Appendix K – Heat and Cold Stress	65
Appendix L – Worker Care	72

Acknowledgements

Thank you very much to the following individuals for their contributions to the knowledge contained within this manual.

Development Team:

Rod Mann, (Project Advisor), (RDM Consulting)

Jim McAllister, BCSARA Director at Large

Brian Lamond, North Peace Search and Rescue

Perry Beckham, Squamish Search and Rescue

Jeff Haack, Search and Rescue Specialist, (Nov 2004-Dec 2011), EMBC

Andrew Morrison, Regional Manager, EMBC

Cyndie Jones, A/Search and Rescue Specialist (2008-2009), EMBC

Ralph Mohrmann, Senior Regional Manager, EMBC

Ian Cunnings, A/Search and Rescue Specialist (2012), EMBC

Maurie Hurst, Regional Manager, EMBC

Alex Michaels, BCSARA Director, Fort St. James Search and Rescue Society

Bob McLeod, past-BCSARA Director, Kitimat Search and Rescue

The community of over 2500 volunteer SAR practitioners, who tirelessly respond to over one thousand incidents annually

British Columbia Search and Rescue Association

Definitions

Convergent Volunteer - an individual that offers their service and/or expertise for no remuneration during a recognized PSL activity and is signed in to the task but is not already registered as an EMBC PSL volunteer.

“Hazard” - a situation with a potential for harm to persons, property, or the environment” means a thing or condition that may expose a person to a risk of injury or occupational disease.¹

“Incident” - includes an accident or other occurrence that resulted in or had the potential for causing an injury or occupational disease.

“SAR Group” - means an organization or group recognized by Emergency Management BC (EMBC) and BC Search and Rescue Association (BCSARA), which performs a search and rescue function on ground and inland waters in the province of B.C. The SAR Group BC (It may or may not be a registered society in the Province of BC).

“SAR Leader” - means any person with responsibility of direction and control over SAR volunteers and other persons while preparing for or responding to SAR incidents. This term includes, but is not limited to; Training Officers, Team Leaders (Ground Search, Rope Rescue or Swift water), SAR Manager, SAR Commander and SAR Incident Section Chiefs.

“Volunteer” - for the purpose of this guide the term means an individual, including a SAR Leader, registered by the Emergency Management BC for the purpose of preparing for (i.e. training or exercising) and responding to a search and rescue activity. The term will also be used interchangeably with SAR volunteer in this guide.

¹ Source document for definition is the CSA Z731 of Canada

Commonly Used Acronyms

ASE	Air Service Emergency
APRS	Automatic Positioning Reporting System
ARA	Air Rescue Association
BCAS	British Columbia Ambulance Service
BCSARA	British Columbia Search and Rescue Association
BCSARIS	British Columbia Search and Rescue Information System
CAA	Canadian Avalanche Association
CASARA	Civil Air Search and Rescue Association
CISM	Critical Incident Stress Management
DND	Department of National Defense
ECC	Emergency Coordination Centre
EMBC	Emergency Management British Columbia
ESS	Emergency Social Services
GSAR	Ground Search and Rescue
GSTL	Ground Search Team Leader
IRT	Initial Response Team
LUSAR	Light Urban Search and Rescue
JRCC	Joint Rescue Coordination Centre
MIT	Members in Training
MOU	Memorandum of Understanding
OAR	Organized Avalanche Response
OH&S	Occupational Health and Safety
ONA	Operational Needs Analysis
PEP	Provincial Emergency Program (now EMBC)
PDF	Personal Flotation Device
PPE	Personal Protective Equipment
PREOC	Provincial Regional Emergency Operations Centre
RR	Rope Rescue
SAR	Search and Rescue
SAREX	Search and Rescue Exercise
SARM	Search and Rescue Management
SOG	Standard Operating Guidelines
SRT	Swiftwater Rescue Technician

SECTION 1 – PURPOSE, SCOPE AND GENERAL REQUIREMENTS

The purpose of the Provincial Search and Rescue Safety Program is to support the safety of all Emergency Management BC (EMBC) Search and Rescue (SAR) volunteers and contribute to the safety of other persons on scene.

This Safety Program guide has been developed to help SAR Groups meet the requirements of EMBC Public Safety Lifeline (PSL) Volunteer Safety Policy which is available at the EMBC website.

This guide content is intended for SAR leaders and for those with overall responsibility for ensuring safety of SAR personnel during all SAR operations, including training.

The Safety Program Guide content supports the safety of SAR volunteers while participating in EMBC authorized activities involving training, preparing for, and responding to an emergency or a disaster.

Program Components

The Program components of the safety program guide provide guidance in implementing and maintaining health and safety during SAR training and incident operations.

The components provide the framework to enable SAR leaders and volunteers to make safety decisions in the field. which does not replace the additional responsibility to use relevant knowledge, experience common sense during SAR training and operations.. Additional how-to instructions are found in search and rescue response plans, operational guidelines, operations manuals, training manuals, and/or job task descriptions.

Safety Program Guide Revisions

The guide will be reviewed and updated annually by the Joint OSH Committee or on a case-by-case basis to reflect changing operating requirements and implementation of verified lessons learned from past experiences. Guide content reflects the current thinking within the province, within Canada and based on sound safety management and the input/experience of SAR volunteers.

The safety program guide components provide a basic framework from which to implement minimum safety program requirements and make safety decisions. SAR Groups should review their own operational guidelines and ensure their safety program activities are consistent with this guide. The primary goal is volunteer safety. If a course of action to achieve safety deviated from the SAR Groups Operational Guidelines (OG), consider recommending a revision of the SAR Group OG or this other guide content through the Joint OSH Committee, ohs@bcsara.com.

The Province may also update this guide for a variety of reasons including:

- Change in law (decisions precedent).
- Change in standards and technology.
- Identified problems.
- Change in mandate, mission, tasking.
- Agency changes.

How to Use this Guide

The contents in this Guide provide a starting point to assist SAR leaders in establishing safe operational procedures and training programs and developing safe work practices for their volunteers. This Guide can be customized to meet the needs of any local SAR operations.

While the Safety Program Guide may meet all your needs, we suggest reviewing Guide content as follows:

Step 1 – Review the Safety Program Quick Assessment Checklist in **Appendix A**.

Does existing SAR safety program and procedures align with the suggested safety program content in this guide?

Step 2 – If yes, no further work is required.

Step 3 – If no, update/add missing content to your safety program/ procedures using the suggested Component content and checklists and other tools in the appendices.

SECTION 2 – SAFETY PROGRAM COMPONENTS

The following components are common to all SAR Group safety programs, based on the working environment(s) and operating requirements typically encountered.

Component 1 – Key Responsibilities

All SAR Groups are responsible for familiarizing themselves with the Provincial Search and Rescue Safety Program Guide, Provincial Operating Guidelines and respective organization operational guidelines. Each SAR Group, where necessary, is encouraged to seek clarification of the safety program guide from their respective EMBC Regional Manager and assist in ongoing SAR safety program development and review through the Joint OSH Committee or, BCSARA Regional Director.

SAR Groups are responsible for understanding each component, how they relate to each other, and how they fit into the SAR training, exercising and search operations framework.

Emergency Management BC (EMBC)

The agency, representing the Province of BC, responsible for providing support for Public Safety Lifeline Volunteers (PSLV), local authorities, and agencies involved in emergency management and response.

EMBC will support all reasonable and practical steps to ensure the safety of volunteers by:

- Providing injury, disability, and accidental death coverage for SAR Volunteers, including Workers Compensation within Work Safe B.C under agreement with the Government of Canada.
- Facilitating the processing of claims for Workers Compensation by SAR Volunteers, and tracking reported injuries for designing prevention programs.
- Providing reimbursement of expenses, and repair or replacement of lost or damaged equipment, related to search operations.
- Developing, implementing and maintaining policies and programs for the prevention of work related injuries and disease to SAR volunteers.
- Providing support and guidance to SAR Groups on the implementation and effective management of safety programs and practices, including training and development.
- Providing tools to assist SAR Groups and volunteers in maintaining required records of training, exercising, and response.

British Columbia Search and Rescue Association (BCSARA)

The organization responsible for representing SAR Groups and volunteers, including providing advice to the provincial government.

BCSARA will support all reasonable and practical steps to ensure the safety of volunteers by:

- Assisting in the development and provision of health and safety programs for volunteer Ground Search and Rescue Groups and their volunteers.
- Gathering input from the SAR and Rescue volunteer community regarding health and safety policies and guidelines, providing advice to the Province based on such input.
- Participating in Provincial and Federal level initiatives to increase support for SAR Groups and volunteers in health and safety.
- Providing additional accidental death and disability insurance coverage.

Requesting Agencies

Agencies that have the primary mandate for specific incidents and are approved to request the assistance of SAR volunteers.

Requesting agencies will support all reasonable and practical steps to ensure the safety of volunteers by:

- Providing information on suspected hazards related to incident when requesting volunteer SAR assistance.
- Participating in resolving safety related issues related to incidents that fall within their responsibility.
- Assisting in the implementation and support of the Provincial SAR Volunteer Health and Safety Program as a minimum.
- Assuming responsibility authority for volunteer safety under their emergency management structure when utilizing SAR volunteers in non-SAR related tasks, e.g. evacuation operations, sandbagging, flood monitoring, etc.

SAR Groups

Organizations that are recognized by EMBC and BCSARA, whose members perform a search and rescue function on ground and inland waters in the province of B.C.

SAR Groups will take all reasonable and practical steps to ensure the safety of their volunteers by:

- Participating in the development of, implementing, and maintaining the safety policy, program, practices and procedures appropriate to training and any other activities involving preparing for and responding to an active task disaster or an emergency.
- Ensuring records are maintained of training completed by individual volunteers, participation in exercises and, roles volunteers fill during SAR responses.
- Providing volunteers access to information on safety policies, training, and programs.
- Ensuring that volunteers have the relevant training and skills to perform their assigned activities safely.
- Ensuring safety is a standing item on the SAR Group's meeting agendas, with discussions and follow-up actions recorded.
- Ensuring regular inspection of group meeting, training, and storage facilities and vehicles, and correcting unsafe conditions.
- Providing EMBC access, upon request, to safety records, including training, exercising, response, and safety meeting /minutes.

SAR Leaders

Any person with responsibility for direction and control over SAR volunteers and other persons while preparing for, or responding to, SAR incidents. This term includes, but is not limited to; Training Officers, Team Leaders (Ground Search, Rope Rescue or Swiftwater), SAR Manager, SAR Commander and SAR Incident Section Chiefs.

SAR Leaders will take all reasonable and practical steps to ensure the safety of volunteers by:

- Implementing safe practices & ensuring all volunteers attend required safety training courses.
- Assigning volunteers to activities that are consistent with their knowledge, skills, and ability.
- Removing any volunteer from activities if the SAR Leader has concerns as to the volunteer's ability to perform their duties safely.
- Ensuring appropriate emergency medical response services are provided or available to volunteers.
- Ensuring risk assessments are conducted and proper steps are taken to control identified risks.
- Reporting and investigating incidents and near misses (including those that had the potential to cause serious injury) and accidents.
- Instructing and coaching volunteers to follow safe work procedures.
- Ensuring only authorized, trained volunteers operate equipment.
- Ensuring necessary personal protective equipment (PPE) is used, inspected, and maintained properly.
- Ensuring the safe handling, storage, and disposal of hazardous materials.
- Ensuring contaminated equipment is adequately decontaminated or disposed of.
- Cooperating with other agencies and first responder groups in dealing with safety issues.

SAR Volunteers

An individual, including a SAR Leader, registered by the EMBC for the purpose of preparing for (i.e. training or exercising) and responding to a search and rescue activity. The term will also be used interchangeably with volunteer in this guide.

SAR volunteers must take reasonable care to protect their safety and the safety of others by:

- Participating in training and orientation activities required to safely undertake assigned activities.
- Providing records of completed training and certification to the SAR leaders and SAR Leaders, and/or EMBC staff upon request.
- Following safe practices and procedures when training, exercising, and responding.
- Using all safety materials, equipment, devices and clothing intended to protect the volunteer.
- Advising their SAR Leader if they believe that their assigned activities cannot be safely performed.
- Immediately reporting all incidents of unsafe situations, hazards, accidents, and injury to a SAR Leader.
- Cooperating with SAR Leaders, agency representatives and fellow volunteers on matters related to safety.
- Not engaging in any improper activity or behavior that might create or constitute a hazard to them or to any other person.
- Ensuring alcohol, drugs, or other causes do not impair their ability to respond.

Convergent Volunteers

An individual that offers their service and/or expertise for no remuneration during a recognized PSL activity and is signed in to the task but is not already registered as an EMBC PSL volunteer.

Convergent volunteers must adhere to the same safety based roles and responsibilities listed for established of SAR Volunteers.

Component 2 – Risk Assessments

Risk assessment is the way to determine what needs to be done to prevent injury or disease once hazards have been identified. Risk assessment begins with a careful examination of worksites and anticipated hazards so procedures and practices can be implemented to eliminate or reduce risks and prevent harm to the SAR volunteers.

Each SAR Group will ensure appropriate risk assessments are conducted as required.

Who should conduct and/or be involved in a Risk Assessment?

The Risk Assessment should be conducted by persons who are:

- Experienced in the activities being assessed.
- Qualified and trained to undertake the risk assessment.

Conducting a Risk Assessment

For SAR activities, the need for conducting risk assessments arises in two main ways:

1. A general program risk assessment-conducted as a desktop review of hazards and risks associated with anticipated operations.
2. An 'on scene' risk assessment-is conducted when the SAR Group arrives on scene of an exercise, training or operational task.

General risk assessment

While there are many different approaches to conducting risk assessments, there are key steps that are common to all.

Appendix B describes a suggested approach that works for many different types of workplaces. Additional sources of risk assessment may also be available from other emergency response organizations with similar roles to your team?

On-scene Risk Assessments

Prior to and upon arrival on-scene, it is important to perform a situation evaluation that includes a risk assessment. This assessment will include the following:

- Initial information received from the tasking/requesting agency, including:
 - Number of subjects involved.
 - Type of assistance requested (rope rescue, swift-water, search, etc.).

- Additional information to be gathered by the SAR Leader:
 - Weather, avalanche, and/or flood conditions.
 - Access and egress conditions for historic response areas.
 - Assembly or muster location for team to respond to.
 - Any special transportation requirements (rotary or fixed wing aircraft, boats, ATVs, snowmobiles, etc.).

- At scene situation assessment including:
 - Confirm/amend initial information.
 - Identify and interacting with Incident Commander (if on scene), or with other emergency responders at scene.
 - Access to task area.
 - Staging areas (safe places to work/gather).
 - Special environmental concerns (weather, terrain, avalanche, wild animals, time of day, etc.)
 - Personal Protection Equipment (and PPE) requirements.

Component 3 – Written Procedures

Program Components

Component 3 – Written Procedures (Operational Guidelines)

SAR Leaders will ensure there are appropriate written procedures for volunteers to safely carry out assigned tasks. These include the proper operation of machinery and equipment or any process or operation that could create a hazard to the volunteer if proper procedures are not followed.

Provincial Operational Guidelines (OGs) are provided where hazards are common to all areas, additional Operational Guidelines can be developed regionally and by SAR Groups to address specific hazards.

Site or incident-specific written procedures should:

- Describe the steps required to carry out assigned activities safely.
- Prescribe the protective measures to safely guard against hazards.

Written work procedures should be developed with input from experienced volunteers and/or subject matter experts who have experience and training in the related subject. Written work procedures should be reviewed regularly and, whenever a changed or new task/assignment occurs.

Written procedures should be reviewed with volunteers, related to the tasks they will be performing. Task-specific procedures should also be reviewed by the volunteer after an extended period of volunteer inactivity and before the volunteer is re-assigned to active duty.

Appendix D – SAR Safety Practice Checklist.

Appendix E – Written Procedures; identifies typical SAR tasks for which written procedures should be in place.

Component 4 – Education and Training

To prevent accidents, injuries and resulting compensation claims, it is vital to provide SAR volunteers with appropriate education and training. SAR Leaders will ensure that all new volunteers receive orientation on safety policies and safe work procedures/practices.

A suggested orientation checklist for new SAR volunteers is available as in **Appendix F**.

Ongoing training and exercises should include periodic checks on proficiency and evaluation of the volunteer's skill/knowledge.

In addition, specific training will be provided to ensure each volunteer knows and understands safe work procedures/practices for their worksite and their assigned duties.

It is each SAR Leader's responsibility to ensure that volunteers are able to demonstrate that she/he can work safely, including the operation of machinery or equipment.

SAR Leaders must ensure that new volunteers and all volunteers who are being assigned tasks for the first time have been adequately trained.

Each volunteer should be aware of potential hazards and be able to demonstrate they are able to perform the work assigned to them in a safe and proper manner.

Education and training for volunteers should include these activities:

- Orientation/induction.
- Verification of pre-existing training and qualifications.
- On the job training.
- Exercises.
- Proficiency and skill/knowledge evaluation and follow up.
- Hazard recognition.
- Worker Care information and awareness.

Component 5 – Accident/Incident Reporting and Investigation

SAR Leaders need to ensure all hazards and incidents (including injuries sustained on an approved training task) are reported quickly and investigated. This is important for a number of reasons:

- Operationally, and for volunteer and public safety, to ensure any immediate unsafe conditions are corrected.
- Quick response ensures that any injured volunteers receive first aid or further medical treatment follow-up.
- Worksafe BC requirement.

Investigations:

- Identify the underlying / contributing causes of the accident/incident.
- Identify actions to correct unsafe work conditions to prevent recurrence.
- With effective response and follow up, offer opportunities to improve future operational effectiveness.

Hazard – A hazard is the potential for harm or injury/occupational disease.

Incident – An accident or other occurrence that resulted in or had the potential for causing an injury or occupational disease.

What must be reported?

Whenever any SAR volunteer observes something that may pose potential injury to the volunteer, they must report it as soon as possible to a SAR Leader. The SAR Leader or other designated person receiving the report must investigate the reported hazard and must ensure that any necessary corrective action is taken immediately.

'First aid only' injuries (not involving any further medical treatment or time loss) need not be reported separately to EMBC but should be recorded by the First Aid attendant in a First Aid record book and noted in the task report to EMBC.

Serious Injury or Death

A **serious injury or death** of a volunteer must be reported immediately to WorkSafeBC immediately, (604-276-3301 in the Lower Mainland or toll-free 1-888-621-7233) and to the police force having jurisdiction. The EMBC Emergency Coordination Centre (ECC) (1-800-663-3456) must also be informed immediately and the appropriate Regional Duty Manager and staff will provide support.

A serious injury is any injury that can reasonably be expected at the time of the incident to endanger life or cause permanent disability.

Notifications sent to WorkSafeBC should contain:

- The date, time, and location of the accident or dangerous occurrence.
- A description of what happened.
- The name of SAR Leader or Incident SAR Commander at the site.
- The name, telephone, and fax number of the person to be contacted for more information.

Other injuries/incidents

The following situations must be reported directly to EMBC promptly (same shift as occurrence), so that EMBC can report the injury as required to WorkSafeBC within 72 hours of the incident occurring (including injuries sustained on an approved training task).

Regional Duty Manager through the ECC at 1-800-663-3456.

- A volunteer loses consciousness following the injury.
- A volunteer is transported or directed by a first aid attendant or other authorized person(s) to a hospital or other place of medical treatment, or it is recommended by such persons to go to such place.
- The injury is one that obviously requires medical treatment.
- A volunteer has received medical treatment (beyond the site first aid) for the injury.
- A volunteer is unable or claims to be unable due to the injury to return to his or her assigned function on any working day subsequent to the day of injury.
- The injury or accident resulted or is claimed to have resulted in the breakage of an artificial limb, eyeglasses, dentures, or a hearing aid.
- The volunteer or WorkSafeBC has requested that an employer's report be sent.

What must be investigated?

The SAR Leader must ensure an investigation is done following any report of injury or near miss incidents or accidents involving SAR volunteers. If the injury is minor (but medical assistance beyond first aid was required), the investigation will entail a SAR Leader or other designated person interviewing the injured responder and witnesses that were present when the incident occurred. Immediate preventive action will be taken if the potential for further injury exists. An incident investigation and resulting report must be in writing.

Available Forms:

Appendix G – Accident/Incident Investigation Report Form is an example of a report suitable for most incident investigations.

Appendix H provides a suggested Accident Investigation Guide to conducting an investigation. If a **serious injury or death** of a volunteer has occurred, or if a near miss could have resulted in a serious injury or death, a more formal investigation is required. If the incident occurs during response, the investigation is to be conducted with the agency of jurisdiction (with the overall responsibility for the response) and an EMBC representative. There may also be requirements under other legislation requiring involvement of safety boards, police, coroner, or other agencies and WorkSafeBC.

SAR Groups must maintain records on all job related accidents (including near misses), injuries, illnesses, or deaths. Records should contain the nature, frequency, and severity of any incident as well as any suspected exposure to toxic products or contagious diseases.

The SAR group must maintain a record of all written investigation reports must be maintained by the SAR Group and a copy sent to the EMBC regional office.

See also: [EMBC Policy 5.13 – Workers’ Compensation Board Claims](#)

Component 6 – Medical Response/First Aid

Each SAR Group needs to ensure that appropriate medical response/first aid services are available at the site for each authorized EMBC task. In most cases, the first aid services and casualty transportation arrangements established for the SAR incident will also be applicable in the event of a SAR volunteer injury.

Each volunteer needs to be advised about how to obtain receive first aid treatment at the incident site.

Treatment and transportation of any injured volunteer is the primary objective of any response to an injury.

The SAR group must keep a record of first aid provided to a volunteer must be kept by the SAR Group. Typically, this is the first aid report/record completed by the designated first aid attendant. Note: First Aid records are confidential and must be kept in a secure location manner by the SAR Group. First Aid records are not to be disclosed except where required by an investigation or by WorkSafeBC or another authorized regulatory body.

Any SAR volunteer who is injured is required to report the injury immediately to the SAR Leader. If not the volunteer, the person providing first aid attendant must report the injury to the SAR Leader.

Component 7 – Inspections

Inspections will ensure that facilities or sites where training, storage, and SAR work take place will minimize volunteer exposure to unsafe conditions. Inspections allow for the identification of those unsafe conditions so they can be eliminated or controlled before an incident occurs. Inspections/assessments must be conducted by trained and qualified persons.

Inspections will depend on the nature of the situation/task, but may include some or all of the following:

- The building or other structure being used by SAR Group and their volunteers.
- Immediate surroundings where volunteers may work or pass through.
- SAR tools and equipment.
- Work methods and practices.
- Incident command posts and SAR equipment/vehicles.

Facility/Location

SAR Leaders should conduct informal inspections as they tour the work site, or are giving work instructions to volunteers. They should also be conducted by volunteers when they enter a worksite for the first time (proper orientation will be done and documented to all new SAR volunteers assigned tasks in the facility).

Inspections of training or operational areas used by the SAR team while on training or operational tasks will be done as part of the risk assessment review identified in Components 1 and 2 above.

Tool and Equipment Inspections

This should include inspection of all equipment and tools/appliances that the SAR Group owns or controls.

Inspections of tools and equipment will be conducted at intervals according to manufacturer's recommendations. The designated operator of the equipment will normally perform this unless otherwise arranged by the SAR Leader.

Post use Inspections

- After each use, the SAR Leader will assign SAR volunteers to inspect all vehicles and tools/appliances that were used as part of the training or operational task and return to response ready condition. At this time, the SAR volunteer will complete a post-use inspection report for the particular vehicle or tool/appliance that was inspected.
- The post use report will be submitted to the SAR Leader and they will ensure that all deficiencies or issues are dealt with using the Hazard Rating System outlined below.

Following an inspection, if the vehicle or tool/appliance is not in an operable or safe condition, it will be tagged out until proper repairs are completed and signed off by a qualified person.

- Once the inspection is complete, all deficiencies have been completed, and the vehicle, tool/appliance is again ready for operation, the completed inspection report will be posted and stored in a pre-determined location in the facility.
- Inspections will also be undertaken on any vehicle, tool/appliance that is not used for an extended time (this will have to be determined by the SAR Group based on history of the specific item).

Pre use Inspections

- It is the responsibility of every SAR volunteer to do a pre inspection prior to operating equipment, tools, or appliances. If this is not practical due to the nature of work assignments and/or SAR team activation, the volunteer will ensure no tagged out equipment is used.

See **Appendix I** for Sample Facility and Vehicle Pre Use Inspections Checklists.

Copies of completed inspection reports and checklists will be forwarded to the SAR Leader to ensure that any required follow-up has been completed.

Any hazard or unsafe condition found during inspections will be rectified as soon as is possible. If an unsafe condition cannot be immediately rectified, the work area will be flagged/closed or work process will be stopped until volunteer safety can be assured.

The SAR group should keep records of inspections should be kept by the SAR Group for a period of one year. Only qualified and properly instructed persons are permitted to correct a condition that constitutes an immediate threat to volunteers and every possible effort is made to control the hazard while this is being done.

The A, B, C hazard-rating method or equivalent should be used to rate items observed during a safety inspection. The reason for this system is to highlight the degree of severity of those hazards, which will assist the organization to prioritize corrective action.

Hazard Rating System:

“A” = CRITICAL

- Serious problems or one with a high probability of occurring. (*Activity to be discontinued until hazard is corrected*).

“B” = URGENT

- Less serious problems or one with a moderate probability of occurring. (*As a rule, the period for correction should never exceed 2 weeks*).

“C” = IMPORTANT

- Smaller problems, with a low probability of occurring. (*As a rule, the period for correction should not exceed 4 weeks*).

Component 8 – Records

SAR Groups must recognize the importance of maintaining complete and accurate safety records, including training and exercise records. These records document compliance with the Provincial SAR Safety Policy and Program Guidelines/SOGs and OG's and will be useful in identifying trends, unusual conditions, and problem areas.

Records will be used as a source of reference for revising OG's, inspections, investigations, and training. They may be referred to during program evaluations to monitor effectiveness and compliance with the Public Safety Lifeline Volunteer Safety Policy or this safety program.

Safety records will be made available to EMBC upon request.

Records to be maintained include:

- Training records.
- Exercise records.
- Incident records.
- Inspection Reports
- Vehicle/Equipment Maintenance records.
- First Aid records.

Additional information on records is provided in **Appendix J**

Component 9 – Society Business Meetings

The topic of Safety will appear on the agenda of all SAR meetings. This will include regular group meetings, regional meetings, training exercises, and all operational task pre meetings.

Meeting attendees will review any recent incidents, safety trends, and upcoming issues that may have an impact on the SAR Group safety program to determine the necessary courses of action. This includes but is not limited to:

- Reviews of accident/injury trends.
- Results of inspection reports, investigations and related follow-up action reports.
- First aid reports (summary only-no release of confidential medical information).
- Education, exercising, and training reports.
- Any information that is task or incident specific that could have an influence on the safety of SAR volunteers.
- Future operational changes that may affect safety.

Each SAR Leader is responsible to ensure recommendations are followed through for their SAR Group area of responsibility.

Items of broad concern or impact to SAR volunteers are to be brought forward to EMBC with recommendations for corrective action should they be required.

Component 10 – Safety Program Review

Reviewing the effectiveness of the safety program is an ongoing process. There are a number of opportunities to do this during SAR operations:

- **Operational briefings prior to an incident or** debriefings-after each incident. Although often these are informal they and should include any safety issues that arose during the incident.
- **Management** operational meetings (Monthly/bimonthly or other intervals)- identify/discuss emerging safety issues. (Refer to Component 9 above).

The SAR Group should ensure safety program content and effectiveness is reviewed regularly, and at least annually.

Benefits of conducting a review:

- Encourages and provides for development of an effective and up to date SAR Group safety program;
- Provides a format to measure performance against an established plan or standards.
- Reveals program deficiencies and identifies actions to correct those deficiencies.
- Provides a basis for recognition of SAR Group safety program and volunteer achievements and focuses on positive efforts not just remedial action.

Information for a program review can be obtained from a number of different sources:

- Documents: copies of relevant policies, procedures, training and exercise records, reporting and monitoring information, investigations and inspection reports, previous recommendations, etc.
- Discussions/interviews with SAR volunteers.
- Observations by the persons involved in the review.
- Information obtained from EMBC, other SAR Groups or jurisdictions regarding safety activities, common problems, and solutions.

Component 11 – Other Program Components

11.1 Strain Injury Prevention

Increasingly, work-related injuries are due to lifting, over-reaching or putting unaccustomed demands on the body. The demands, if high enough, can put a strain in the body, causing musculoskeletal injuries (MSI). Or, more simply, strain injuries.

SAR Groups should take steps to identify the potential sources or risk factors for strain injuries and identify ways to prevent or minimize them. An effective strain injury prevention program will include:

- Understanding strain injury hazards, causes and symptoms in relation to road rescue operations.
- Know how to identify and assess the risks associated with SAR operations and how to take preventative measures.
- Providing SAR personnel with training on safe work practices to prevent or minimize strain injuries from occurring, including recognition of the symptoms of MSI.

In SAR, effective strain injury prevention is often dependent on use of the proper equipment for the job, following safe work methods (through training and exercising) and having safe work practices (clear work procedures). Prevention is also about minimizing the effects of work environments (heat and cold) and, ensuring good physical conditioning.

SAR Groups should consider the following, both to understand and prevent strain injuries, and also other associated hazards related to search and rescue activities:

1. Demanding work in emergency circumstances.
 - The risk of work accidents in search and rescue activity has been found to be mainly due to terrain and search conditions and the use of specialized rescue equipment, dangerous and restricted work situations, extreme heat or cold stress and quickly changing ambient temperatures.

Solutions:

- Good working skills and techniques, in addition to better-than-average physical and mental work capacity will protect volunteers from accidents. Skilled performance can be repeated easily and safely even in changing and exceptional conditions.
- The right equipment for the job to reduce physical demands and possible harm.

2. Physical work capacity and health

- Despite improvements in working skills, knowledge, methods and equipment, SAR volunteer competence and safety depend largely on their physical capacity to meet the demands of the job.

Solutions:

- Conditioning standards.
- Health awareness education (including back awareness).
- Training and exercises.

Additional Information:

WorkSafeBC has a helpful publication [Understanding the Risks of Musculoskeletal Injury \(MSI\)](#).

11.2 Exposure to Hazardous Materials or Bio-hazardous Substances

The SAR volunteer needs to be aware of the risks and hazards that exist as a result of the presence of hazardous material and biohazard substance that they may encounter during SAR activities. Through education and training, combined with proper SOGs around protection and cleanup, the potential risk to volunteers will be significantly reduced. All SAR volunteers must be aware that self-protection is the first priority and it must be maintained before they can initiate any assistance during any SAR activity.

Responding to SAR incidents might also include the potential exposure to various materials that, if exposed to may pose a threat to SAR volunteers, subjects and other responders. An effective program for managing Hazardous Materials/Bio hazardous Substances may include:

- Understanding Workplace Hazardous Material Incident System (WHMIS) requirements.
- Recognition of potential hazardous materials in the workplace.
 - A risk assessment should be undertaken, based on past incident records/debriefings, experience of other SAR Groups or other first responders.
- Evaluation of any existing hazards, and procedures to identify any hazardous material/substances at the workplace or incident site.
- The methods used to isolate and shield SAR volunteers from potential hazardous exposure in order to conduct operations safely and effectively.
 - Procedures for working with other first responders (Fire, Police, etc.).
- Procedures and equipment used to protect SAR volunteers from effects of hazardous materials/bio hazardous materials/substances.
 - Procedures for the use and the limitations of PPE (e.g.: Universal precautions).
 - Procedures for prevention of exposure to bio-hazardous materials, including blood-borne pathogens (e.g.: universal precautions).
 - Procedures for obtaining medical care in the event of an exposure.
 - Procedures for decontamination.

11.3 Prevention of Violence to Volunteers

The primary role of the SAR volunteer is to provide assistance to individuals or groups in times of need during search and rescue operations. The normal reaction to the assistance provided during this operation is mostly thanks and gratitude for these services. In a small number of events, the SAR volunteer may experience a different reaction from those they are attempting to help or from the family and loved ones.

Prevention measures may include:

- How to deal with angry or upset persons.
- Measures to seek support or assistance, including contacting police.

11.4 Heat and Cold Stress

SAR volunteers often operate in varying work environments, during all seasons and types of weather. It is important to identify situations that may pose a risk to responders during extremes of heat or cold. Heat extremes may be related to weather conditions or to proximity to heat sources such as a fire. Risk of cold stress will usually be typically related to weather conditions.

Heat-related illness prevention

In outdoor environments, volunteers must rely on measures such as shielding (tent or other shelter to provide shade) or and/or appropriate clothing when the ambient temperature is high.

The loss of fluids is a major contributor to heat illnesses, but thirst is not a reliable indicator of the body's need for fluids. A person can lose as many as 1.6 quarts of fluid per hour through sweating, so it is important to make sure responders drink plenty of liquids before, during, and after working in warm/hot environments. A general guide is drinking 8 ounces of fluids for every 20 to 30 minutes of work being performed. Taking frequent breaks is also an important way to minimize risks from heat stress.

Cold-related illness prevention

Exposure to cold can cause the body's internal temperature to drop to a dangerously low level. This is called hypothermia. Exposure to temperatures below freezing can cause frostbite of the hands, feet, and face. Hypothermia can also occur at temperatures above freezing. Cold, wet, windy conditions make for prime hypothermia weather.

Wet clothing draws heat very quickly away from the body. Whenever volunteers are away from shelter (tent, building or vehicle) they should carry/wear waterproof, windproof outer clothing. Taking frequent breaks is also an important way to minimize risks from both heat and cold stress.

Recognize Signs and Symptoms

Volunteers need to be trained to recognize the signs and symptoms of both heat and cold stress.

Appendix K – Heat and Cold Stress describes some key symptoms, treatments, and prevention measures.

Additional Information:

WorkSafeBC has two helpful publications, [“Hypothermia: Surviving the Cold”](#) and [“Preventing Heat Stress at Work”](#).

11.5 Personal Protective Equipment

SAR members who respond to any incident or practice without appropriate personal protective equipment will be limited to duties that they have suitable protective gear for, or will not be allowed to take part in the incident or practice, as determined by the SAR Leader.

11.6 Dangerous Atmospheres/Confined Space

Confined Space Rescue is not an activity supported by EMBC.

SAR volunteers will not enter any location or space defined such as a confined space, where it may be dangerous to breathe the air. Should any concerns over air quality exist or there is a need to enter a confined space, volunteers are to request the assistance of trained personnel to ascertain the safety and to respond with appropriate equipment and training.

Cave rescue is however supported by EMBC through a memorandum of understanding with the BC Speleological Federation and the BC Cave Rescue Group. SAR activities in these areas fall under the responsibility of BC Cave Rescue. SAR program volunteers and agency representatives may participate in below ground activities at the supervision and direction of BC Cave Rescue.

Examples of areas of potential confined space hazard that SAR volunteers could encounter are:

- Buildings that house pumping or testing equipment.
- Root cellars or wells.
- Vessels or tanks.
- Areas or buildings with indications of chemical storage.

SECTION 3 – Worker Care

It is important to inform, educate, and support SAR volunteers in order to maximize their effectiveness as SAR members while minimizing the risk of physical and emotional fatigue. The BCSARA has developed a comprehensive Critical Incident Stress Management (CISM) program to support the SAR Groups and volunteers deal with the emotional stress that goes along with a very stressful situation when services are provided.

Appendix L contains helpful guidelines to support SAR Groups.

SECTION 4 – Appendices

Appendix A – Safety Program Quick Assessment	37
Appendix B – Risk Assessments	38
Appendix C – Risk Assessment Worksheet	47
Appendix D – SAR Safety Practice	48
Appendix E – Written Procedures	49
Appendix F – Volunteer Orientation Checklist	50
Appendix G – Sample Accident/Incident Investigation Form	51
Appendix H – Incident Investigation Guide	53
Appendix I – SAR Inspection and Vehicle Checklists	57
Appendix J – Records to be Maintained	64
Appendix K – Heat and Cold Stress	65
Appendix L – Worker Care	72

Appendix A – Safety Program Quick Assessment

Safety Program Guide Component	Assessment of Existing Safety Program			
	Component Content Complete	Requires Minor Edits/Additions	Needs Substantial Review/Edits	Not in Place – Needs to be Added
Responsibilities Established and Communicated				
Risk Assessments Completed				
Safe Work Practices in Place				
Safety Education and Training Content in Place and Training is Undertaken where Required				
Incident Reporting and Investigation Procedures in Place				
First Aid/Medical Response Services for Volunteers in Place				
Regular Inspections Undertaken				
Safety Records Maintained				
Safety on Agenda of Team Meetings				
Safety Program Reviewed				
Other Components in Place based on Need (e.g. Strain Injury Prevention, etc.)				
Assessment Completed by:				
Date:				

Appendix B – Risk Assessments

5 STEPS TO EFFECTIVE RISK ASSESSMENTS

Introduction

This Guide provides a simple, 5-step method to identify, assess and eliminate or reduce the risks associated with workplace hazards. The Guide offers a practical and easy to follow risk assessment process. Effective risk assessment is about knowing your workplace, involving volunteers, and taking action to deal with hazards that are identified. In most cases, hazards can be eliminated or reduced in simple, cost effective ways. Where problems are more complex, the 5-Step Program offers a way to prioritize, plan and implement solutions that make sense for your workplace.

What are the 5 Steps?

- 1 Collect Information.
- 2 Determine Who May be Harmed and How.
- 3 Assess the Risks.
- 4 Eliminate or Reduce Risks.
- 5 Document and Monitor your Risk Assessment Program.

Step 1

Collecting Information

First, you need to determine how SAR volunteers could be harmed. Here are some tips to help you identify possible hazards:

- **Walk around** your workplace and look at what could reasonably be expected to cause harm.
- **Ask volunteers** what they think. They may have noticed things that are not immediately obvious to you.
- **Check manufacturers' instructions** or data sheets for chemicals and equipment as they can be very helpful in spelling out the hazards and putting them in their true perspective.
- Review your **incident and first aid records** – these often help to identify the less obvious hazards.
- **Talk to others.** What has been the experience of other SAR Groups in the Province- they may have experienced situations that you have not faced, YET!

What information should be collected?

To assess risks at the workplace you need to know:

- Where the workplace and/or the jobs performed are located (this is especially important for those involved in search and rescue roles-since incident sites could be anywhere, at any time).
- What work equipment, materials, and processes are used?
- What tasks are performed (e.g., in what way and for how long they are performed).
- What hazards have already been identified, and what their sources are.
- What the potential consequences of existing hazards are.
- What protective measures are in place now?
- What accidents, occupational diseases have been reported.
- Are there any specific legal requirements in regulations?

Where can I obtain this information?

You can get this information from the following sources:

- Technical data of the equipment, materials, or substances used at the workplace.
- Technical procedures and work manuals.
- Results of measurements of hazardous substances at the workplace.
- Records of inspections, accidents, and occupational diseases.
- Specifications of the properties of chemical substances.
- Legal regulations and technical standards.
- Scientific and technical literature.

Information can also be obtained by:

- Observing the work environment.
- Observing the tasks performed during responses and during exercises/training.
- Interviewing volunteers.
- Observing external factors (e.g., tasks performed by third parties, weather conditions).

Make sure you consider specific hazards/risks that may be unique to SAR operations, including:

- Aircraft operations.
- Blood-borne pathogens and hazardous materials.
- Cold and heat stress.
- Noise.
- Strain injuries.
- Rescue or evacuation of SAR volunteers.
- Violence to SAR volunteers.
- Environmental hazards.

Step 2

Determine Who May be Harmed and How

For each hazard, you need to be clear about who might be harmed; it will help you identify the best way of managing the risk. Identify each unique job/role and how volunteers in that role might be harmed (i.e. what type of injury or disease might occur?).

Often, a checklist is the best way to collect and analyze this information. See Appendix 1 for a general risk assessment checklist.

Step 3

Assessing Risks

How can I assess the risk associated with a hazard?

For each identified hazard on your checklist(s), determine if the risk is **low, medium, or high**, taking into account the probability (likelihood) of injury and the severity of the harm. Use the simple table below to make your decision on the risk.

		Severity		
		Slight Harm	Moderate Harm	High Harm
Probability	Highly improbable (low)	<i>Very Low Risk-no action necessary</i>	<i>Very Low risk-monitor</i>	<i>High risk-undertake efforts to reduce the risk</i>
	Probable (medium)	<i>Very Low Risk-no action necessary</i>	<i>Medium risk-review and implement prevention actions-within established time frame</i>	<i>Very High risk-unacceptable-Stop work until risk minimized or eliminated</i>
	Very Probably (high)	<i>Low Risk-monitor. Look at ways to control-simple prevention steps</i>	<i>High risk-eliminate/minimize risk immediately</i>	<i>Very High risk-unacceptable-Stop work until risk reduced or eliminated</i>

Probability

- Highly improbable: should not occur the entire time the volunteer is performing this job.
- Probable: may occur only a few times while the volunteer is performing this job.
- Highly probable: may occur repeatedly while doing this job.

Severity

- Low severity: accidents and illnesses not causing prolonged injury (such as small nicks, eye irritations, headaches, etc.).
- Medium severity: accidents and illnesses causing moderate, but prolonged or periodically recurring injury/illness (such as wounds, simple fractures, second-degree burns on a limited body surface, dermal allergy, etc.).
- High severity: accidents and illnesses causing grave and permanent injury and/or death (e.g., amputations, loss of sight, complex fractures leading to disability, cancer, trauma, second- or third-degree burns on a large body surface, etc.).

How do I determine if the risk is acceptable or unacceptable?

Use your best judgment (and that of peers, specialists, etc.), but in general:

- A high risk is unacceptable.
- A medium risk may be acceptable, but steps should be taken to lower the risk.
- A low risk is generally acceptable.

The higher the risk, the higher the priority to eliminate or minimize the risk.

Note as well – If legal requirements are not complied with, a risk is not acceptable!

If risk is high and assessed as unacceptable, actions to reduce it need to be taken at once.

If the risk is medium and assessed as acceptable, it is recommended you take actions to reduce the risk further according to a plan.

If the risk is low and assessed as acceptable, it is necessary to ensure that it will remain at the same level.

So first, look at what you are already doing; think about what controls you have in place, and consider how work is organized. Then compare this with good practice and see what you should be doing to bring yourself up to standard. In asking yourself this, consider:

- Can I eliminate the hazard?
- If not, how can I control the risks so that harm is unlikely?

When controlling risks, apply the principles below, if possible in the following order:

- 1. Eliminate or Substitute** – get rid of the substance, or change the work location or process, the tools and equipment, or, whatever is exposing the workers to risk. Substitute safe, or at the very least, less hazardous – alternatives. So, before the job even starts, make it safe.
- 2. Engineering Controls** – Sometimes the work itself cannot be changed but it may be possible to take steps to improve the work environment. For example, using ropes for hand-lines to assist in embankment rescue, headlamps to assist with night operations
- 3. Administrative Controls** – organize work to reduce exposure to the hazard, develop written safe work procedures, and provide appropriate education and training (e.g. written procedures and education/training for manual lifting an injured person to reduce volunteers exposure to musculoskeletal injuries)

- 4. Personal Protective Equipment (PPE)** – If the above controls cannot eliminate or reduce the hazard then issue personal protective equipment (e.g. gloves, etc), eye and ear protection, etc). PPE is not a substitute for elimination/substitution, engineering or administrative controls-always try these options first. PPE in combination with another control may also be a good risk reduction option. If the required PPE is not available then the volunteer cannot be assigned the task until it is.

In all cases, provide first response facilities (e.g. washing facilities for removal of contamination).

Remember: Risk assessments should always be carried out with the SAR volunteers' active involvement. When deciding on the acceptability of risk, bear in mind their input, and take into account the health and any other special circumstances of the volunteers for whom the assessment is conducted.

Step 4

Eliminate or Reduce Risks

What can I do to eliminate or reduce risks from hazards?

You should do everything reasonably practicable to protect volunteers from harm. You can work this out for yourself, but the easiest way is to compare what you are doing with good practice. There are many sources of good practice – **for example provincial or national Emergency Response organizations.**

A Plan of Action

Use the **Risk Assessment Work Sheet** (Appendix 1) to record your risk assessment, and identify and plan risk reduction activities.

Putting the results of your risk assessment into practice will make a difference when looking after volunteers and SAR operations. Writing down the results of your risk assessment, and sharing them with all team members, encourages you to do this. When writing down your results, keep it simple.

A prevention plan need not be perfect, but it must be suitable and sufficient for your work operations. You should be able to show that:

- A proper assessment was made.
- You identified who might be affected.
- You dealt with all the significant hazards, taking into account the number of people who could be involved.
- The precautions are reasonable, and the remaining risk is low.
- You involved volunteers in the development of the plan.

If, like many organizations, you find that there are quite a lot of improvements that you could make, big and small, do not try to do everything at once. Make a plan of action to deal with the most important things first.

A good plan of action often includes a mixture of different things such as:

- A few inexpensive or easy improvements that can be done quickly, perhaps as a temporary solution until more reliable controls are in place.
- Long-term solutions to those risks most likely to cause accidents or occupational disease.

- Long-term solutions to those risks with the worst potential consequences.
- Arrangements for training volunteers on the main risks that remain and how they are to be controlled.
- The control measures stay in place.
- Clear responsibilities – who will lead on what action, and by when.

Remember, prioritize, and tackle the most important things first. As you complete each action, tick it off your plan.

Step 5

Documenting and Monitoring

Regularly monitor your risk assessment plans and actions to ensure they are on track and on time.

Few workplaces stay the same. Eventually, you will bring in new equipment and procedures or face new situations that could lead to new hazards. It makes sense, therefore, to review what you are doing on an ongoing basis. Every year or so, formally review where you are, to make sure you are still improving, or at least not sliding back. Look at your risk assessment again. Have there been any changes? Are there improvements you still need to make? Have volunteers spotted a problem? Have other groups experienced a situation and how did they deal with it? Have you learnt anything from accidents or near misses?

During the year, if there is a significant change, do not wait. Check your risk assessment and prevention actions plan and, where necessary, amend it. If possible, it is best to think about the risk assessment when you are planning any workplace changes – that way you leave yourself more flexibility.

Keep a record of all risk assessments, completed information collections, and hazard identification checklist and action plans.

If planned actions and/or periods require adjustment, make sure the reasons for the adjustment is documented, plan amendments are discussed with affected volunteers, and amended action plans are implemented.

Appendix C – Risk Assessment Worksheet

SAR Group Name: _____ Workplace Location: _____ Date: _____ Assessment Completed by: _____				
No.	Hazard	Existing Preventive Measure, if any	Risk Assessment (probability/severity)	Action Planned to Reduce Risk

Appendix D – SAR Safety Practice

- All SAR volunteers are responsible for their own safety and the safety of personnel working with them.
- All SAR volunteers are responsible for continuously identifying unsafe conditions/actions and are required to report such conditions.
- If it looks Unsafe, feels unsafe, DO NOT DO IT! Communicate it Up, Down, and Across. You have the right to refuse unsafe work.
- Any SAR Volunteer is expected to say NO to unsafe practices or conditions -

Stop, Talk, and Decide

- SAR Leaders are responsible for accepting, and appropriately acting upon, all safety-related information to make the incident site safer.
- Communication of safety-related information within each SAR is critical – and is Two-Way.
- SAR Leaders must continually keep all personnel working for them well informed of changing conditions and safety matters.
- SAR Leaders WILL NOT allow unsafe practices.
- Safety assessment is CONTINUOUS and must be part of **all** ongoing decision-making.

Appendix E – Written Procedures

General

- (a) Procedures to conduct a size-up of existing and potential conditions.
- (b) Procedures for the identification of the resources necessary to conduct safe and effective operations.
- (c) Procedures for implementing the search operation.
- (d) Procedures for implementing site control and scene management.
- (e) Recognition of general hazards associated with different types of technical rescue incidents (Ground, Rope, Swiftwater, etc).
- (f) Procedures for the initiation of traffic control.

Operations

- (a) Procedures to identify probable victim locations and survivability.
- (b) Procedures for making the rescue area safe.
- (c) Procedures for use of all specialized rescue equipment immediately available and in use by the organization, including:
 - Personal Protective Equipment (PPE).
 - Specialized access equipment.
- (d) Procedures for the protection of a victim during technical rescue operations.
- (e) Procedures for the packaging of a victim prior to evacuation.
- (f) Procedures for accessing victims in remote locations.
- (g) Procedures for performing evacuation of subjects in all weather and times of day.
- (h) Procedures for the mitigation and management of general and specific hazards (i.e., avalanche and swiftwater) associated with technical rescue incidents.
- (i) Procedures for the procurement and utilization of the resources necessary to access subjects during search and/or rescue operations.
- (j) Procedures for maintaining control of traffic at the scene of SAR incidents in traffic areas.

Appendix F – Volunteer Orientation Checklist

(Example)

Use this checklist when training new volunteers on the SAR safety program.

Orientation Topics Covered?	Yes	No
Health and safety responsibilities	<input type="checkbox"/>	<input type="checkbox"/>
Health and safety program	<input type="checkbox"/>	<input type="checkbox"/>
First aid qualifications required	<input type="checkbox"/>	<input type="checkbox"/>
How to get first aid	<input type="checkbox"/>	<input type="checkbox"/>
How to report unsafe conditions	<input type="checkbox"/>	<input type="checkbox"/>
Right to refuse unsafe work	<input type="checkbox"/>	<input type="checkbox"/>
Use of personal protective equipment	<input type="checkbox"/>	<input type="checkbox"/>
Isolated worker communication policies and procedures	<input type="checkbox"/>	<input type="checkbox"/>
Pre-trip planning requirements	<input type="checkbox"/>	<input type="checkbox"/>
Post-trip and incident reporting requirements	<input type="checkbox"/>	<input type="checkbox"/>
Emergency response protocols	<input type="checkbox"/>	<input type="checkbox"/>
Instructional progression requirements	<input type="checkbox"/>	<input type="checkbox"/>
Record keeping (trip plans, incident reports, first aid treatment...)	<input type="checkbox"/>	<input type="checkbox"/>
Written work procedures (list them in an attachment)	<input type="checkbox"/>	<input type="checkbox"/>
Other topics covered (list them in an attachment)	<input type="checkbox"/>	<input type="checkbox"/>

Appendix G – Sample Accident/Incident Investigation Form

ACCIDENT/INCIDENT INVESTIGATION REPORT

SAR Unit		Location		Telephone #		Date of Report	
Last Name of Injured (or ill) SAR member			First Name:			File No.	
Years of Member Service	Time on Present Job	Role			Hours Worked in Previous 24 Hr Period		
Accident Location				Date of Accident/Incident		Time	
Accident Category (check)	<input type="checkbox"/> Injury or Illness	<input type="checkbox"/> Equipment Malfunction	<input type="checkbox"/> Motor Vehicle	<input type="checkbox"/> Property Damage	<input type="checkbox"/> Fire	<input type="checkbox"/> Other (specify)	
Severity of Injury or Illness (check)	<input type="checkbox"/> No Injury or First Aid Only		<input type="checkbox"/> Medical Treatment		<input type="checkbox"/> Time Loss		<input type="checkbox"/> Fatal
Nature of Injury or Illness (e.g.: lower back pain, swollen ankle, cut to right arm, etc.)							
Description of Accident or SAR Members Account Injury/Illness (use separate sheet if necessary)							
Were Written Safe Work Procedures Established and Available? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> n/a			Were they Adequate? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> n/a		Were these Safe Work Procedures used in Training? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> n/a		
Basic Cause (and Contributory Factors) -- EXPLAIN FULLY UNSAFE CONDITIONS							

Corrective Measures Taken and/or Recommended		
Corrective Action Referred To: _____ Date To Be Completed By: _____		
Additional Comments or Observations. Where applicable give details of makes & models of machines, equipment, tools, structures, etc., involved in this accident. (Use separate sheet if necessary)		
Name(s) & position(s) of person (s) who investigated accident (list separately if required):		
_____	_____	_____
Print Name	Phone	Position
_____	_____	_____
Print Name	Phone	Position
_____	_____	_____
Print Name	Phone	Position
_____	_____	_____
Print Name	Phone	Position
_____	_____	_____
Date		
Name(s) of Witness(s) - include phone number. List separately if required.		

Any incident involving injury/fatality must be reported to EMBC

Original Retained by SAR Group and Copy To:

1. EMBC Regional Manager
2. _____
3. _____

Appendix H – Incident Investigation Guide

Main objectives of an Investigation

To determine:

1. What was the cause of the incident?
2. What factors contributed to the incident?
3. What needs be done to prevent a reoccurrence (or minimize the likelihood of one)?

While the steps taken in the investigation are often common, much will depend on the nature and seriousness of the accident or incident. A relatively minor accident or near miss can be investigated and concluded very quickly. Information required for completing the Incident Investigation Report (Appendix H) can guide the investigators.

Other incidents may be more serious and may require a more detailed investigation. Additional investigative and technical expertise may be required. But, the basic steps in the investigation will be similar to those described below.

Investigations normally include these steps:

- Secure the scene and report the accident or dangerous incident to the SAR Leader and or Incident Commander.
- Study the scene.
- Interview witnesses.
- Investigate the physical evidence.
- Review the facts/findings and prepare a report and recommendations.

Main Steps in an Investigation

The following main procedures may be simplified in the case of a minor accident/incident, but the principles remain the same.

1. Secure the scene and report the accident or dangerous occurrence

Things that the SAR Leader or Incident Commander should do include:

- Assess and stabilize the situation.
- Make sure the area is safe for emergency crews and investigators.
- Dealing with the injured.
- Make certain the scene is secured and that evidence is protected until an investigation starts.
- Ensure the names of witnesses are obtained.

If the accident involves a serious injury, the report should also include the name of each injured volunteer and the observed injuries to each.

Determine who will be involved in investigating the accident/incident. Added expertise may be required, now, or in the course of the investigation.

2. Study the scene

The assigned investigator needs to:

- Look at everything involved in the accident or dangerous occurrence. Carefully go over the site and note the damage.
- Record the location of the accident/incident. Note the lighting, visibility, time of day and weather conditions. Take photographs, measurements, and drawings of the scene.
- Label and log each diagram, drawing and photo.
- Find out who was involved and prepare a list of witnesses.
- Consider who can provide expert advice on technical issues, if required.
- Prepare a list of questions to ask.

3. Interview witnesses

Accurate interview records will be needed to reconstruct what happened and why. If the RCMP, police or WorkSafeBC officers have already interviewed witnesses, further statements may not be needed.

- Everyone who can provide information should be contacted.
- Interview witnesses separately and in private when possible, while memories are still fresh. Consider their emotional state, particularly if someone has been killed or seriously injured.
- Use open-ended questions and let the witnesses explain events in their own words. Avoid interrupting during their statements. Ask clarifying questions later if necessary.
- Use photographs and drawings to help witnesses remember.

If possible, have each witness visit the scene and show you what he or she saw. Witnesses will have seen events from different perspectives and their statements can often disagree.

At the end of every interview:

- Ask each witness to review his or her statement.
- Clear up anything you do not understand.
- Get the phone number and address of each witness.
- Thank each witness for his or her cooperation.

4. Investigate the physical evidence

- Study the damage done to tools, equipment, products, etc.
- Try to find out what the physical evidence indicates happened and why.
- Look at the details of the work environment. Consider visibility, noise, temperature, humidity, and exposure to hazardous substances.
- Compare what happened with the requirements of applicable standards and written safe work procedures. If requirements were not met, find out why.
- Review training records.

5. Investigate the physical evidence

- Determine the underlying cause(s).
- Identify any unsafe conditions, acts, or procedures that contributed to the incident.
- Recommend corrective actions.

The SAR Group must keep a written copy of the Incident Investigation Report must be kept by the SAR Group and a copy sent to the EMBC Regional Manager.

Appendix I – SAR Inspection and Vehicle Checklists

To customize your local inspection checklist, delete or add as required.

Building:	Inspector(s):
Room Number (s):	Date Inspected:
Department/Unit:	SAR Leader:

Inspection Headings

1. Administrative	8. Storage	15. Noise
2. Personal Safety	9. Electrical Safety	16. Personal Protective Equipment
3. First Aid	10. Office Workstations	17. Hazardous Waste Disposal
4. Floors/Walkways/Aisles	11. General Emergency Preparedness	
5. Stairs	12. Hazardous Material Emergency Preparedness and Equipment.	
6. Walls	13. Hazardous Material Handling and Storage	
7. Lighting	14. Tools and Equipment	

If your response is no indicate the hazard rating

A=Critical, B=Urgent, C=Important

Section	Yes	No
1. Administrative		
Have all volunteers received safety orientation and are they aware of the safety committee members for their area?		
Are volunteers aware of procedures for accident reporting and investigations?		
Are incident report forms available and used for each incident?		
Are safety inspections done, deficiencies addressed, and records reported and maintained?		
Other?		
2. Personal Safety		
Are entry and egress routes well lit?		
Do volunteers know to report personal safety concerns?		
Other?		
3. First Aid		
Do volunteers know how to summon first aid?		
Do volunteers know where to access first aid?		
Is the emergency telephone number on all phones?		
Other?		
4. Floors/Walkways/Aisles		
Are aisles and doorways clear of materials or equipment?		
Are carpets or tiles in good condition, free of loose or lifting carpeting or tile?		
Are floors clean, dry and free of oil or grease		
5. Stairs		
Are stair handrails in good condition?		
Are stairwells clear of materials and equipment?		
Are stairs provided with anti-slip threads?		

Section	Yes	No
Other?		
6. Walls		
Are signs and fixtures securely fastened to the wall?		
Other?		
7. Lighting		
Is task lighting provided in areas of low light or high glare?		
Are windows covered with blinds, drapes, or other means of controlling light?		
Other?		
8. Storage		
Are supplies and materials stored properly on shelves?		
Does your storage layout minimize lifting problems?		
Are trolleys or dollies available to move heavy items?		
Are racks and shelves properly installed and in good condition?		
Other?		
9. Electrical		
Are electrical cords in good repair?		
Is there clear access to electrical panels and switches?		
Are electrical cords secured?		
Are plugs, sockets, and switches in good condition?		
Are power bars used?		
If used, are extension cords heavy duty (min. 14 gauge) and servicing only one appliance or fixture?		
Is electrical equipment grounded?		
Are cord guards provided if cords are crossing an aisle or passageway?		

Section	Yes	No
Other?		
10. Office Workstations		
Are chairs in good condition?		
Are chairs properly adjusted and provide adequate back support?		
Proper castors? (carpet or urethane castors)		
Are computer workstations, including monitors, keyboards and mice properly setup to minimize strain injuries (ergonomics)		
Other?		
11. General Emergency Preparedness		
Do you have an emergency response plan for your area?		
Are volunteers aware of what number to call for emergencies, reporting conditions requiring servicing and recharging of fire extinguishers?		
Are volunteers aware of the locations of fire emergency plaques, and knowledgeable about the information on the plaques (egress routes, pull stations and extinguisher location, assembly points etc.)?		
Are pull stations clearly visible? Not obstructed?		
Are fire extinguishers inspected and are volunteers trained in their use?		
Have you identified and reported areas where the fire alarm is not audible?		
Is access and egress safe for workers, and visitors?		
Are emergency signs working?		
Is there adequate emergency lighting		
Will space heaters shut off automatically if tipped over?		
Other?		
12. Hazardous Material Emergency Response and Equipment		
Is appropriate hazard warning signage with emergency contact names posted on entry door?		
Are eyewashes available, accessible, and functional?		

Section	Yes	No
Is the eyewash fountain tested monthly?		
Are safety showers available, accessible, and functional?		
Are volunteers trained in proper spill clean-up procedures and incident reporting?		
Do volunteers have access to a spill kit at all times and does the kit contain appropriate spill cleanup materials?		
Other?		
13. Hazardous Materials Handling and Storage		
Are handcarts available for moving gas cylinders?		
Are volunteers trained in handling of hazardous materials (WHMIS)?		
Are all containers containing chemicals properly labeled (WHMIS)?		
Are current MSDS available for each hazardous material in the building?		
Is an inventory of all hazardous materials maintained?		
Is appropriate personal protective equipment worn when required?		
Are all gas cylinders properly supported and stored?		
Is storage of hazardous chemicals kept to minimum?		
Are large containers, containing hazardous chemicals stored on shelves below eye level?		
Are flammable materials stored in flammable storage cabinets?		
Other?		
14. Tools and Equipment		
Are lockout procedures in place and followed?		
Are guards and safety devices on equipment operational?		
Are tools grounded or double insulated?		
Is the load rating on the equipment sufficient for the work performed?		
Are operator and service manuals available for the equipment?		

Section	Yes	No
Are emergency stop buttons operational?		
Other?		
15. Noise		
Is hearing protection provided where sound levels exceed standard?		
Are Hazardous noise areas identified and marked?		
Other?		
16. Personal Protective Equipment (PPE)		
Is the appropriate PPE (safety glasses, gloves, respirators etc) available and used when required?		
Are volunteers trained in the safe use of PPE?		
Other?		
17. Hazardous Waste disposal		
Are appropriately designated waste containers for sharps, biohazards etc. used?		
Are volunteers trained in proper waste disposal procedures?		
Are waste containers clearly labeled with content?		
Other?		

DAILY VEHICLE PRE-TRIP INSPECTION REPORT

Driver _____ Date _____

Approaching the Vehicle:

- Exterior Vehicle Damage
- Leaks Underneath Vehicle
- Mirrors/Windshield Clean

Check Engine Compartment:

Cab:

- Check fuel level
- Horn
- Windshield Wipers
- Warning Lights and Buzzers
- Defroster/Heater
- Doors, Locks, Windows
- Seats and Floor
- Seat Belts
- Emergency Equipment (First Aid Kit, Fire Extinguisher, Reflective Triangles, etc)

Check Fluid Levels

- Oil
- Coolant
- Power Steering
- Transmission
- Brake Fluid
- Windshield Washer Fluid

Walk Around:

- Turn Signals
- Auxiliary and Clearance Lights
- Headlights
- Exhaust
- Wheels, Tires and Lug Nuts

Comments:

Appendix J – Records to be Maintained

Unless otherwise indicated, retain records until updated or the purpose of the record has been reasonably met. Retain training records as long as the responder is active.

Type of Records	Record Requirements
Risk assessments	A record of the risk assessment
Workplace Inspection Reports	Reports should be maintained for at least one year
Incident Investigation reports	Reports should be completed on all incidents and investigations. Retain for sufficient time to identify trends over time and make safety program improvements
Management meetings	A record of regular meetings where safety was an agenda item
First aid treatment records	A first aid record book or similar record should be maintained when a volunteer received medical treatment
Machine or equipment Inspection, testing and maintenance records	Records of use, manuals, standards, inspections, tests, etc required for the safe operation of equipment.
Inventory of hazardous substances - MSDS	An inventory should be maintained which identifies all hazardous substances at the workplace in quantities that may endanger volunteers in an emergency including controlled products covered by WHMIS legislation.
Volunteer's exposure to biohazardous material	A record must be kept of all volunteers who are exposed to biohazardous or potentially biohazardous material while on the job for the length of volunteer service plus 10 years. Records of volunteer education and training sessions on biohazardous materials should be kept for 3 years.
Heat & Cold stress assessments (when required)	As part of the Risk Assessment and/or Incident Investigation Report.
Confined space	As part of the Risk Assessment and/or Incident Investigation Report.
Competency of equipment operators	Records of instruction and endorsements/licenses of all operators
Training	Records of training undertaken by the SAR Group
Rescue equipment test, inspection record	Test and inspections conducted on rescue equipment
Evacuation and rescue, maintenance of equipment	Maintenance records should be available upon request to any volunteer SAR Leader or volunteer concerned with the safe operation of the equipment.

Appendix K – Heat and Cold Stress

Heat Stress (source: Ontario Ministry of Labour)

	Cause	Symptoms	Treatment	Prevention
Heat Rash	Hot humid environment; plugged sweat glands.	Red bumpy rash with severe itching.	Change into dry clothes and avoid hot environments. Rinse skin with cool water.	Wash regularly to keep skin clean and dry.
Sunburn	Too much exposure to the sun.	Red, painful, or blistering and peeling skin.	If the skin blisters, seek medical aid. Use skin lotions (avoid topical anesthetics) and work in the shade.	Work in the shade; cover skin with clothing; apply skin lotions with a sun protection factor of at least 15. People with fair skin should be especially cautious.
Heat Cramps	Heavy sweating drains a person's body of salt, which cannot be replaced just by drinking water.	Painful cramps in arms, legs, or stomach that occur suddenly at work or later at home. Heat cramps are serious because they can be a warning of other more dangerous heat-induced illnesses.	Move to a cool area; loosen clothing and drink cool salted water (1 tsp. salt per gallon of water) or commercial fluid replacement beverage. If the cramps are severe or do not go away, seek medical aid.	Reduce activity levels and/or heat exposure. Drink fluids regularly. Workers should check on each other to help spot the symptoms that often precede heat stroke.
Fainting	Fluid loss and inadequate water intake.	Sudden fainting after at least two hours of work; cool moist skin; weak pulse.	GET MEDICAL ATTENTION. Assess need for CPR. Move to a cool area; loosen clothing; make person lie down; and if the person is conscious, offer sips of cool water. Fainting may also be due to other illnesses.	Reduce activity levels and/or heat exposure. Drink fluids regularly. Workers should check on each other to help spot the symptoms that often precede heat stroke.

Heat Exhaustion	Fluid loss and inadequate salt and water intake causes a person's body cooling system to start to break down.	Heavy sweating; cool moist skin; body temperature over 38°C; weak pulse; normal or low blood pressure; person is tired and weak, and has nausea and vomiting; is very thirsty; or is panting or breathing rapidly; vision may be blurred.	GET MEDICAL AID. This condition can lead to heat stroke, which can kill. Move the person to a cool shaded area; loosen or remove excess clothing; provide cool water to drink; fan and spray with cool water.	Reduce activity levels and/or heat exposure. Drink fluids regularly. Workers should check on each other to help spot the symptoms that often precede heat stroke.
Heat Stroke	If a person's body has used up all its water and salt reserves, it will stop sweating. This can cause body temperature to rise. Heat stroke may develop suddenly or may follow from heat exhaustion.	High body temperature (over 41°C) and any one of the following: the person is weak, confused, upset, or acting strangely; has hot, dry, red skin; a fast pulse; headache or dizziness. In later stages, a person may pass out and have convulsions.	CALL AMBULANCE. This condition can kill a person quickly. Remove excess clothing; fan and spray the person with cool water; offer sips of cool water if the person is conscious.	Reduce activity levels and/or heat exposure. Drink fluids regularly. Workers should check on each other to help spot the symptoms that often precede heat stroke.

Cold Stress (source Princeton University, with modifications)

How cold is too cold?

When most people think of hypothermia, they think of frigid temperatures or blizzard-like conditions. Actually, hypothermia occurs most often in the spring and fall, rather than winter.

Four factors contribute to cold stress: cold temperatures, high or cold wind, dampness and cold water. A cold environment forces the body to work harder to maintain its temperature. Cold air, water, and snow all draw heat from the body. Wind chill is the combination of air temperature and wind speed. For example, when the air temperature is 4°C, and the wind speed is 55 km/h, your exposed skin receives conditions equivalent to the air temperature being -11° C.

While it is obvious that below freezing conditions combined with inadequate clothing could bring about cold stress, it is important to understand that it can also be brought about by temperatures in the 10-15° coupled with some rain and wind.

How your body reacts to cold conditions

When in a cold environment, most of your body's energy is used to keep your internal temperature warm. Over time, your body will begin to shift blood flow from your extremities (hands, feet, arms, and legs) and outer skin to the core (chest and abdomen). This allows exposed skin and the extremities to cool rapidly and increases the risk of frostbite and hypothermia. Combine this with cold water, and trench foot may be a problem.

Hypothermia

Hypothermia means "low heat" and is a potentially serious health condition. This occurs when body heat is lost from being in a cold environment faster than it can be replaced. When the body temperature drops below the normal 37° C (98.6° F) to around 35° C (95° F), the onset of symptoms normally begins. The person begins to shiver and stomp feet in order to generate heat. As the body temperature continues to fall, slurred speech, lack of coordination and memory loss develop and the person will stop shivering. Once the body temperature falls to around 29.4°C (85° F), the person may become unconscious, and at 25.5°C (78°), the person could die.

Who is at risk?

Anyone working in a cold environment may be at risk for cold stress. However, older people may be at more risk than younger adults, since older people are not able to generate heat as quickly.

Certain medications may prevent the body from generating heat normally. These include anti-depressants, sedatives, tranquilizers, and some heart medications.

Signs and symptoms:

- Mild hypothermia (98 - 90° F):
 - Shivering.
 - Lack of coordination, stumbling, fumbling hands.
 - Slurred speech.
 - Memory loss.
 - Pale, cold skin.

- Moderate hypothermia (90 - 86° F):
 - Shivering stops.
 - Unable to walk or stand.
 - Confused and irrational.

- Severe hypothermia (86 - 78° F):
 - Severe muscle stiffness.
 - Very sleepy or unconscious.
 - Ice cold skin.
 - Death.

What to do (Proper treatment depends on the severity of the hypothermia):

- Mild hypothermia:
 - Move to warm area.
 - Stay active.
 - Remove wet clothes and replace with dry clothes or blankets, cover the head.
 - Drink warm (not hot) sugary drink.

- Moderate hypothermia – All of the above, plus:
 - Call for an ambulance.
 - Cover all extremities completely.
 - Place very warm objects, such as hot packs or water bottles on the subject's head, neck, chest, and groin.

- Severe hypothermia:
 - Call for an ambulance.
 - Treat the subject very gently.
 - Do not attempt to re-warm – the subject should receive treatment in a hospital.

Frostbite

Frostbite occurs when the skin actually freezes and loses water. In severe cases, amputation of the frostbitten area may be required. While frostbite usually occurs when the temperatures are -1°C (30° F) or lower, wind chill factors can allow frostbite to occur in above freezing temperatures. Frostbite typically affects the extremities, particularly the feet and hands.

Signs and symptoms:

- Cold, tingling, stinging, or aching feeling in the frostbitten area, followed by numbness.
- Skin color turns red, then purple, then white or very pale skin, cold to the touch.
- Blisters in severe cases.

What to do:

- Call for First Aid/Medical Assistance.
- Do not rub the area.
- Wrap in soft cloth.
- If help is delayed, immerse in warm, not hot, water.

Preventing Cold Stress

Planning for work in cold weather is the most important defense. Wearing appropriate clothing and being aware of how your body is reacting to the cold are important to preventing cold stress. Avoiding alcohol, certain medications and smoking can also help to minimize the risk.

Protective Clothing

Wearing the right clothing is the most important way to avoid cold stress. The type of fabric also makes a difference. Cotton loses its insulation value when it becomes wet. Wool, on the other hand, retains its insulation even when wet. The following are recommendations for working in cold environments:

- Wear at least three layers of clothing:
 - An outer layer to break the wind and allow some ventilation (like Gore-Tex® or nylon).
 - A middle layer of down or wool to absorb sweat and provide insulation even when wet.
 - An inner layer of cotton or synthetic weaves to allow ventilation.
- Wear a hat. Up to 40% of body heat can be lost when the head is left exposed.
- Wear insulated boots or other footwear.
- Keep a change of dry clothing available in case work clothes become wet.
- Do not wear tight clothing. Loose clothing allows better ventilation.

Work Practices

- Drinking: Drink plenty of liquids, avoiding caffeine and alcohol. It is easy to become dehydrated in cold weather.
- Work Schedule: If possible, schedule heavy work during the warmer parts of the day. Take breaks out of the cold.
- Buddy System: Try to work in pairs to keep an eye on each other and watch for signs of cold stress.

Engineering Controls

Some engineering controls are available to reduce the risk of cold stress:

- Use radiant heaters to warm workers.
- Shield work areas from drafts or wind.
- Use insulating material on equipment handles when temperatures drop below zero° Celsius.

Training

Train volunteers and SAR Leaders to be able to detect early signs of cold stress.

SAR Leaders should watch for signs of cold stress and allow volunteers to interrupt their work if they are extremely uncomfortable. SAR Leaders should also ensure that work schedules allow appropriate rest periods and ensure liquids are available. They should use appropriate engineering controls, PPE and work practices to reduce the risk of cold stress.

Appendix L – Worker Care

Worker Care Guide

Responding to Stressful Events

Source: Public Health Agency of Canada

Self-Care for Caregivers

.....

Natural or human-caused disasters such as earthquakes, health emergencies, terrorist attacks, or acts of war can engage caregivers (physicians, psychologists, social workers, nurses, psychiatrists, teachers, counselors, and other health workers) in working long hours helping people of all ages to understand and manage the many reactions, feelings, and challenges triggered by these stressful circumstances.

The massive effort put forth by caregivers in response to the psychosocial effects of catastrophic events is a critical contribution to their community's recovery. However, caregivers sometimes need to be reminded that a sustained response can also lead to physical and emotional wear and tear. Without conscious attention to self-care, caregivers' effectiveness and ultimately their health will suffer.

Common Sources of Stress for Caregivers

.....

Here are common sources of stress that caregivers may be faced with:

- Trying to live up to their clients' high expectations and/or their own.
- Intensive caring for others at the expense of self-care.
- Inability to set appropriate boundaries.
- Pushing themselves too hard.
- Mental and physical demands.
- Heavy workloads.
- Long hours on the job.
- Time pressures.
- Limited resources.
- Competing priorities.
- Media requests.
- Political and organizational pressures.

Be on the Alert for Signs of Stress

Caregivers are usually alert to the stresses of people they help. They are not, however, always as alert to the stress and fatigue that can slowly surface in their own lives, and need to be reminded of normal stresses that may affect them.

Common Physical/Behavioral Reactions: fatigue, loss of appetite, difficulty falling asleep, restlessness, headaches, changes in sleeping, increased blood pressure, changes in eating habits, increased susceptibility to colds, flu, infection, change in libido, changes in smoking habits, changes in alcohol and drug consumption.

Common Emotional Reactions: feeling helpless, overwhelmed, inadequate, fragile, vulnerable, unable to cope or go on, increased mood swings, decreased motivation, feeling burned out, crying more frequently and easily, isolation, changes in communication patterns and other relationship dynamics, withdrawal.

Common Cognitive Reactions: confusion, difficulty making decisions, difficulty problem solving, memory blanks, having ambiguous feelings, questioning why this happened in a world that is supposed to be safe, difficulty concentrating or paying attention.

Caregivers are not immune to the above reactions and need to remind themselves that these are normal human responses to stressful circumstances. Although many of the underlying stresses cannot be prevented, you can increase your resistance by taking care of yourself and staying healthy. It is important to pace yourself and know your limits so you can continue to be available to your clients and your community.

Here are some stress-relieving activities:

- **Go for a 15-minute walk** during a lunch or coffee break. Take other opportunities to be physically active.
- **Eat sensibly.** Avoid excessive use of caffeine and alcohol. Drink plenty of water and juices.
- **Know and respect your limits.** If you feel exhausted and need time off, take it. Respect commitment for regularly scheduled time off.
- **Spend time with family and friends.** Talk to them. Listen to their stories. Listen to them if they become concerned with your health and well-being.
- As much as possible, continue to **participate in previous social and recreational activities.**
- **Get some rest.** If you have trouble sleeping, get up and do something relaxing or enjoyable.
- **Be on the lookout for any changes** in your habits, attitudes, and moods.

- **Share your own and clients' reactions** and issues with colleagues. Do not hesitate to ask others for advice.
- **Include yourself on the list of people you are taking care of.** Take some time to do something just for yourself every day. Taking care of yourself will put you in better shape to give care to others.
- **Be self-nurturing** and do not forget to laugh.

Delayed Stress Reactions

Experiences have shown that after tragic events, it may take several weeks to adjust to regular routines. This is normal. Following the tips on self-care given above will help you deal with delayed reactions.

Taking care of our families

.....

- Reassure family members who may be worried about their safety and about the future.
- Take time to talk about the events. Relax together. For example, go to a movie or Taking Care of Ourselves, Our Families and Our Communities for a meal. Remember, taking time out is not a cop-out.
- Everybody needs to be heard and understood.
- Visit with relatives and friends.

When to Seek Help

.....

The information offered in this brochure is a reference point to help you to understand some of the stress reactions you or other family members or friends may experience. If, at any time, you feel overwhelmed and unable to cope it is important to seek out additional assistance. Here are some circumstances that indicate that it is time to get help by speaking to a health professional such as a psychologist, family doctor, psychiatrist, social worker, or nurse:

- Cannot return to a normal routine.
- Feeling extremely helpless.
- Having thoughts of hurting yourself or others.
- Using alcohol and drugs excessively.

Resources that may be available in your community to call for help:

- Distress or crisis centers.
- Hospital in your community.
- Family service agency.
- Bereavement group.
- Leader of your faith community.
- Include family and friends you can call to talk things over.