



Medical Volunteer Resource Document

This information is provided by SportMed BC based on BC Games organizational structures and requirements for medical coverage.

Table of Contents

Table of Contents.....	2
Role of SportMedBC.....	4
Act as a medical advisor available to:.....	4
General Information.....	5
Philosophy of Treatment.....	5
General Philosophies.....	5
Safe Hygiene Practices, Infectious Diseases and Hepatitis B.....	6
Medical Intervention Regulations.....	6
Protocol for Handling Injured Athletes.....	6
Confidentiality of Information.....	7
Physician Intervention.....	7
Sport-Specific Protocols.....	7
Medical Records.....	7
Liability.....	Error! Bookmark not defined.
Disaster Plan.....	8
Identifying Medical Facilities.....	9
Medical Clinic.....	9
Location.....	9
Physical Installation.....	9
Suggested Medical Clinic layout:.....	9
Medical Areas at the Sport Venues.....	10
Parking.....	10
On the Playing Field/Surface.....	10
Establishing Medical Personnel Requirements.....	11
On-Site at Sport Venues.....	11
High Risk Sports:.....	11
Moderate Risk Sports:.....	12
Low Risk Sports:.....	12
Athletes with a Disability:.....	12
Typical Injuries and Scope of Utilization.....	12
Practice Times.....	12
Other Games Events.....	12
Adverse Weather Conditions:.....	13
In The Medical Clinic.....	13
Medical Check-In.....	14
Medical Volunteers.....	14
Accreditation.....	14
Medical Personnel from Outside of the Community.....	14
General Job Descriptions:.....	14
Staff Physician.....	14
Staff Therapists.....	15
Nurse.....	15
Sports First-Aiders.....	15
Sports First-Aiders – con't.....	Error! Bookmark not defined.
Medical Clinic Staff.....	16
Volunteer Training.....	16
Pre-Games Educational Symposium.....	16
Orientation and Set-Up.....	17
Equipment and Supplies.....	17
Supplies and Equipment.....	17
Equipment.....	18

Supplies	18
Venue First-Aid/Therapist Kit.....	19
Kit Contents:.....	19
Side Pocket	Error! Bookmark not defined.
Main Compartment.....	Error! Bookmark not defined.
Supplies	Error! Bookmark not defined.
Miscellaneous	Error! Bookmark not defined.
First Aid Kit for Participant Accommodation Sites	Error! Bookmark not defined.
Kit Contents:.....	Error! Bookmark not defined.
Physician's Checklist.....	20
General Supplies:.....	Error! Bookmark not defined.
Wound Care	20
Suturing.....	20
Parenteral Medications Graval	21
Eye/Ears, Nose & Throat.....	Error! Bookmark not defined.
Examination	21
Emergency Supplies:.....	21
Medications	21
Intravenous	21
Airway	21
Ice:	21
Distribution and Re-Stocking of Supplies.....	22
The Role of Professional Sport Medicine Associations	23
CASM - Canadian Academy of Sport Medicine	23
CATA - Canadian Athletic Therapists Association	23
SPC - Sport Physiotherapy Canada	23
The Role of Other Associations.....	23
St. John Ambulance	23
British Columbia Ambulance Service.....	23
Ski Patrol.....	23
Royal Life Saving Society	23
Sport Specific Medical Information.....	Error! Bookmark not defined.
BC Summer Games	Error! Bookmark not defined.
BC Winter Games	Error! Bookmark not defined.

Role of SportMedBC

Over the past several years, SportMedBC has provided technical medical assistance and advice to the BC Games Society and, in particular, to the Host Society's medical services directorate. SportMedBC will:

Act as a medical advisor available to:

- Meet with the Host Society Medical Services Directorate and assist during the preparation phases, providing specific consultations as required.
- Provide the names of qualified physicians and therapists who are willing to volunteer their services and travel to the host community to assist during the Games.
- Supplement available personnel, if requested. This will involve providing names of local members of CASM (physicians), SPC (physiotherapists) and CATA (athletic therapists), etc.
- Provide the BC Games Society with an "Experts Panel" which would be prepared to advise the Society on specific issues of concern relating to the provision of medical services that may from time to time arise.
- Assist in the integration of the local Sports First Aiders into the volunteer medical team.

Contact:

SportMedBC

1325 Keith Road

North Vancouver BC V7J 1J3

(604) 903-3880

Toll Free 1-888-755-3375

info@sportmedbc.com

www.sportmedbc.com

General Information

Philosophy of Treatment

The first half-hour of treatment for a sport injury is usually the most crucial time. Bear in mind that your immediate treatment includes:

- Immediate assessment of the injury and recognition of the potential for complication.
- Prevention of the injury getting worse and prevention of further injury.
- Initiation of primary care.

Games Medical Personnel:

- Should never treat or deal with problems or injuries outside of the area of your expected level of expertise.
- Always respect an athlete's request for another opinion.
- Remember that physiotherapists and athletic therapists often have expertise and skills in the care and prevention of sports injuries which physicians and nurses do not. Their opinion as to what they can do to help an athlete should be sought frequently.
- Remember that each member of the medical team brings complimentary skills and expertise. Each member's specific skills should be recognized and respected. The athlete should be provided treatment by the member(s) who can best serve the injury at hand.

General Philosophies

The following principles should apply to all volunteers:

- Be familiar with the sport-specific rules pertaining to the emergency on field/court treatment of injuries. In some sports, you may not rush out to treat an injured athlete without the authorization of an official or umpire. Also, be familiar with the rules pertaining to playing with an injury or the use of braces or any support for an injured body part (see "*Sport-Specific Injuries and Treatment Protocols*").
- At all times be courteous and respectful to coaching staff, officials, and athletes.
- Be familiar with the established chain of command.
- Be present 30 minutes before an event or practice is due to start and be prepared to stay 30-60 minutes afterwards.
- Medical personnel should conduct themselves in a professional manner at all times especially when treating an injured athlete during the course of an event. Medical personnel should attempt to be as brief as possible when dealing with an injury, removing the injured athlete as soon as it is safely possible. Medical personnel are there to facilitate the event not to disrupt it with medical treatment.
- Dental emergencies must be treated as such. There should be a local dentist on-call at all times.
- Any request to see a specialist should go through the attending physician and referral should be at his/her discretion.

Safe Hygiene Practices, Infectious Diseases and Hepatitis B

When providing first aid the possibility exists of coming into contact with various infectious diseases including HIV and Hepatitis B. All medical volunteers, coaches, and officials should be aware of the precautions that should be taken when treating injured athletes.

*The risk of transmission during exposure to open wounds or to mucous when an individual has a blood born disease is low. Very few reported cases of blood contact on inflamed areas of skin of health care workers have caused the transmission of the HIV virus. The risk of transmission would principally involve the combative sports with direct body contact and other sports where bleeding may be expected to occur. Although the risk of contracting any of these diseases from an injured athlete is very low, **all** athletes should be treated as potentially infectious.*

In light of this information, the following precautions should be taken when treating injuries:

- Gloves should be routinely used to prevent skin-to-skin exposure when in contact with blood or any other body fluids. They should also be worn for handling items or surfaces soiled with blood or bodily fluids. Gloves should be changed after each contact with an athlete. Hands should be washed immediately after gloves are removed.
- If a skin lesion is observed, the individual's participation should be interrupted until the bleeding has been stopped. The wound should be immediately cleansed with a suitable antiseptic and securely covered with an impervious dressing (i.e. no blood visible on the outside of the dressing).
- Officials and referees should be made aware of the two previous points. The protocol for dealing with such injuries should be clarified between the medical personnel and officials prior to the commencement of competition.
- Surfaces contaminated with blood or body fluids should be cleaned with soap and water and should be sanitized with solutions made from a 1:10 dilution of household bleach prepared fresh within 24 hours.
- Using face shields/barriers should minimize the need for direct contact for artificial respiration.
- If medical personnel have open wounds or weeping lesions on their skin, they should refrain from all direct athlete care until the conditions resolves.
- The medical history of an athlete with any type of open wound should be carefully reviewed and it should be ensured that all routine vaccinations (including tetanus & MMR) are up to date.

Medical Intervention Regulations

Protocol for Handling Injured Athletes

1. The physiotherapist, athletic therapist, or first aider will usually be the first responder to an athlete injured during a competition.
2. The first responder must follow the sport specific rule(s) for treating an injured athlete. This often entails not entering the playing surface unless called by the referee (unless a serious injury is in need of prompt attention).
3. When possible, further evaluation should continue once the athlete has been removed from the playing surface.
4. The decision as to whether or not the athlete is able to return to the competition will be made by the most senior medical person on-site. If the athlete wishes to return to competition against medical advice, he/she should sign a waiver.
5. If there is no physician present, consultation may be made by contacting the physician at the Medical Clinic.
6. Documentation must be made on the correct injury report form.
7. If the athlete is not able to resume competition, the coach, after an athlete gives consent, should be informed.
8. If the athlete must be sent for further treatment, the Medical Clinic should be contacted by telephone to allow them to adequately prepare and to arrange for transportation, as necessary.

9. The athlete's medical history form should be sent with them if they are going to the Medical Clinic or to the hospital.
10. If the first responder suspects a serious injury, an ambulance should be immediately called. Also, the Medical Clinic should be informed as soon as possible. The Medical Clinic should contact the hospital regarding transfer of the patient by ambulance. The Medical Clinic Chair, or his/her appointee, should attend to the athlete while they are at the hospital to ensure that their needs are taken care of. This will include informing coaches and family contacts while allowing the hospital staff to provide medical treatment.

Confidentiality of Information

It is essential that confidentiality, in keeping with good medical practice, prevail. No information should be given out concerning an athlete without the athlete's consent. No medical volunteer should give information to the media, coaches or other athletes/teammates about any athlete. Any request for medical information by the family should be directed to the Medical Services Director. Additionally, medical records must be accurately recorded, securely stored, and respected as to their confidentiality.

Physician Intervention

Physicians treat medical illness. Therapists and others will, if alone, refer such medical illnesses to a physician or to the Medical Clinic as soon as it is possible or necessary. It is recommended that the following conditions are seen by a physician at all times:

- All unconscious and paralyzed patients (includes concussion with or without loss of consciousness).
- All injured athletes with respiratory difficulties.
- All athletes with neck injuries, this includes athletes complaining of a sore neck after a fall or dive or who participate in any contact sport.
- All dislocations.
- All eye and dental injuries.
- Following sports first-aid (i.e. rest, ice, compression, elevation) all new injuries should be seen by a physician with appropriate referral to a therapist and/or further investigation, for example, X-rays.
- Any athlete who has a knee effusion should be seen by a physician and referred, if necessary, to the appropriate consultant.

Sport-Specific Protocols

Sport-specific protocols governing medical intervention during competition are provided in "Sport-Specific Injuries and Treatment Protocols" at the end of the manual.

Medical Records

An injury reporting system has been developed to standardize the information collected on each athlete and to allow more accurate statistics to be compiled.

The BC Games Society provides a standardized injury report form for reproduction. All injuries and treatments rendered at each venue must be recorded. The form should follow the patient from the time they are treated at a venue until they reach the Medical Clinic. Once treatment is finished, the form should be returned to the Medical Clinic for data entry/filing.

Past experience has shown that a control/reception area in the Medical Clinic and a specific person (i.e. Medical Office Assistant) should be assigned to receive medical and venue reports and to generally control the documentation and reception area. This helps to increase the effectiveness of injury reporting throughout the Games.

Liability

It must be clearly understood by all medical personnel that their time at the Games is of a volunteer nature. Any treatment rendered to the athletes during the Games may not be charged to the athlete's medical plan, to the BC Games Society, the Host Society, or the Municipality. Any athletes requiring attention at the hospital will be admitted through the usual channels. Any costs incurred through the Provincial Ambulance Service will be paid by the Host Society Medical Services Directorate.

The BC Games has a \$10,000,000 general liability policy which includes coverage for volunteers while performing their duties during the Games. In order for coverage to apply, all medical personnel must be registered as a Games volunteer. The policy provides bodily injury coverage for incidental medical malpractice as long as the individual is a volunteer and not a paid professional. The volunteer medical professional should only practice within the limits of their professional license and their own independent medical malpractice insurance should cover them for their actions and decisions. As such, if a claim were made against a volunteer medical professional, their own medical malpractice coverage would be primary, and if necessary, the BC Games liability policy would provide excess coverage.

The Good Samaritan Act provides protection to individuals who render emergency medical services at the immediate scene of an accident or emergency. The Act, however, is not intended to apply when a person rendering medical/paramedical service is employed specifically to fulfill that duty (regardless of whether or not they are receiving payment). Application of this Act is case specific and requires legal interpretation.

Medical paramedical volunteers working at the Games should:

- Be licensed to treat athletes in the province of BC. Students and those not licensed to practice must work under the direction of a qualified, licensed individual.
- Treat only accredited athletes, coaches, officials, and volunteers within the medical arrangements for the Games and during the Games only.
- Be covered by his/her own provincial health insurance.

Disaster Plan

It is recognized that, should a disaster or multiple-casualty incident (MCI) occur during the Games, many people would be working in an environment that they are not used to and that they will be exposed to stresses that are unfamiliar to them. With an established disaster plan, the number of decisions these people need to make while under stress will be reduced which should decrease the number of incorrect decisions made. Everyone is expected to contribute, but nobody should be put in a position that is above his/her level of training or experience.

Most communities have put together extensive disaster plans. It is advised that the disaster plan of the Host Society is reviewed and implemented should a disaster occur.

Identifying Medical Facilities

The Medical Services Directorate should examine the site(s) of the Games to determine the nature of the facilities available.

Medical Clinic

Location

It is important that the Medical Clinic be central to all sport venues and accommodation sites. It should be easily accessible by Games transportation with parking facilities for both emergency vehicles and medical personnel.

It is recommended that the Medical Clinic location be one that allows sufficient space for the proper functioning of an autonomous unit. The ideal location would be separate from the local hospital (it should be used for emergency referrals only). If this is not possible, the Medical Clinic should be set up in an area where it can function properly without impeding the normal operations of the hospital.

Physical Installation

When examining a potential location for the Medical Clinic there are several important factors to consider. The proposed location must have:

- adequate lighting for examination and treatment of patients
- a water supply (hot & cold)
- an adequate number of electric outlets (preferably separate circuits). If insufficient outlets are available, they should be installed on a temporary basis and supplementary lighting can be added for the duration of the Games.
- a washroom facility located in or very near the facility
- telephone services capability

NOTE: *The entire Medical Clinic must be accessible by wheelchair and stretcher with parking facilities and an ambulance entrance nearby. The Medical Clinic must also be accessible for the movement of large equipment items such as ice freezers, refrigerators, and supply crates into it.*

Suggested Medical Clinic layout:

- A reception area should be located at the entrance to the Medical Clinic. This may be similar to a nurse's station and will act to control all medical traffic in the Medical Clinic regardless of need.
- The medical examining and treatment area should have a minimum of 6 beds that can be cordoned off by curtains when necessary.
- The physiotherapy area should contain a minimum of 6 treatment tables with 3 that are adjustable in height.
- Communication between various members of the medical team (physicians, therapists, nurses, etc.) can be facilitated by ensuring that the physical layout of the medical examination and reception areas allows for ready access from one to the other.
- A separate room should be obtained for the storage of supplies and venue medical kits. It should be large enough to facilitate the packing, restocking and unpacking of the venue first aid kits and easily accessible from the treatment rooms.
- A separate cabinet, equipped with a lock and key should be made accessible to store all drugs, oral, parenteral and topical.
- Provision should be made for X-rays, a local pharmacy to provide prescription items, a good supply of ice and a laundry service for towels.

Medical Areas at the Sport Venues

- The size of the medical area necessary at the various venue sites will be determined by the type of injuries that can be expected and by the protocol for that particular sport.
- All venues should only be equipped for immediate first-aid care and taping. They should be located in small first-aid rooms within the stadiums, sports halls or in an enclosed area (e.g. tent) in close proximity to the competition site. Athletes requiring medical attention and/or physiotherapy should be transported to the central Medical Clinic.
- It is important that an immediate water source be available to medical personnel at each venue.
- Also, at each venue, there should be access to a telephone for communication with the central Medical Clinic and for emergency situations.
- Proper signs must identify the location. These spaces must be designated during the Sport Venue Tour coordinated by the Sport Directorate.
- All medical personnel should have competition/practice schedules for all events taking place at their venue.

Parking

At each venue, parking spaces for emergency vehicles should be designated as close as possible to the medical area. This should be clearly marked and well patrolled to make sure that there is always access to these spaces. At venue sites where more than one high-risk sport is taking place, more than one spot should be allocated. This will need to be coordinated with the Security Directorate (Traffic Control Chair).

On the Playing Field/Surface

In some sports, usually the high/moderate risk ones, the therapist and/or physician will stand on the immediate sideline. Discuss the best location with the Sport Chair and umpire(s) and/or referee(s). In addition to having a venue first aid kit on hand, other equipment should include a chair, ice, splints and, depending upon the sport, a cervical collar.

Establishing Medical Personnel Requirements

Every effort should be made to place less experienced volunteers with individuals who have experience. This will ensure that the highest degree of care is received by the athletes and that the inexperienced volunteers have an opportunity to gain valuable experience.

When scheduling specific therapists, physicians, and nurses to venues, regular breaks should be implemented throughout a shift. It is recommended that the shifts be 4-6 hours in length, unless otherwise specified by the practitioner.

All professional medical personnel should be licensed to practice in their respective provinces.

On-Site at Sport Venues

After assessing the risk and utilization level of each sport, the Medical Services Directorate should decide on the number and type of medical personnel required. The duty roster may include Physicians, Physiotherapists, Athletic Therapists, Nurses, Ambulance Attendants, and First Aiders.

The requirements for and the scheduling of personnel at the venue sites should be determined by:

- the nature of the sport
- the number of participants
- the number of venues being used
- the types of injuries to be anticipated (refer to “*Sport-Specific Injuries and Treatment Protocols*”)

To ensure continuity and familiarity, the medical personnel assigned to each sport venue should have sport-specific expertise and fulfill their assignment until the end of the Games.

A venue-specific schedule should be posted at the Medical Clinic and placed in the medical kit for that venue to identify who is on duty, what position he/she holds, and his/her contact number(s).

*The following guidelines are recommended as **minimum** requirements. Each situation will be different due to the number of venues, and the number of events scheduled at one time in a given location.*

*Refer to the “*Sport-Specific Injuries and Treatment Protocols*” document to determine the risk level of a sport.*

High Risk Sports:

*The suggested **minimum** medical personnel requirements per “High Risk Sport” venue:*

- 1 sport physician on-site
- 1 sport physiotherapist/athletic therapist on-site
- 1 nurse on-site
- 1 ambulance on-site

A medical doctor should be on-site at all high-risk venues during the competitions. A therapist(s) with extensive sport experience is also invaluable. Additional physiotherapists, athletic therapists, and First Aid personnel are to be determined by the number of athletes at that location and the degree of utilization of that sport.

Additional coverage may also be provided by the local Ski Patrol in the winter and the Royal Life Saving Society for water sports.

Note: *There is no substitute for Ski Patrol members and water rescue experts. Their services should be actively sought.*

Moderate Risk Sports:

*Suggested **minimum** medical personnel requirements per “Moderate Risk Sport” venue:*

- 1 physician on call
- 1 therapist on-site
- 1 ambulance on-call

Additional physiotherapists, athletic therapists, and First Aid personnel who have sport experience and good taping skills are to be determined by the number of athletes at the location and the degree of utilization of the sport.

Low Risk Sports:

The number of First-Aid personnel required will depend on the number of participants, the number of venues and the degree of utilization of the sport. The Royal Life Saving Society may be available to provide additional coverage at the water sport venues.

Athletes with a Disability:

Participants with disabilities are subject to the same risk and utilization categories as outlined in the “Sport-Specific Injuries and Treatment Protocols” document. Special considerations may apply depending on the nature of the participants’ disabilities.

Athletes with disabilities are, where possible, fully integrated into the BC Summer and BC Winter Games.

To ensure the best possible situations are created for the athletes, the medical facilities should be toured to ensure accessibility and that adequate shelter is provided at outdoor venues.

It is advisable to recruit medical volunteers with knowledge and experience working with individuals with disabilities.

Typical Injuries and Scope of Utilization

In addition to predicting the utilization of medical services, it is beneficial to consider the typical injuries that could be encountered. Typical injuries are listed in the “Sport-Specific Injuries and Treatment Protocols” document. This information was compiled as a result of an extensive review of relevant studies reported in the sport medicine literature.

Practice Times

Medical coverage is required for practices times as well. You will receive practice schedules from each Sport Chair. Confirm with each Sport Chair whether the practice times include on-field practice, are a Medical Clinic, etc. so that an assessment of the type of coverage can be made.

Other Games Events

Every event or venue at the Games should be provided with some type of medical personnel (i.e. at least one First-Aid Attendant should be present at all venues).

Special events such as the Opening and Closing Ceremonies and the Participant Dance also require an established emergency action plan/disaster plan. It is suggested that one Physician be on-site in addition to nursing staff and First-Aid personnel.

Adverse Weather Conditions:

The potential for extremes of weather or drastic changes in weather may make for special concerns with open-water events such as sailing or skiing and other winter sports. Therefore, additional experienced personnel should be available in the case of dangerous weather conditions.

Extremely hot or cold weather conditions may increase the number of medical personnel required at venues. All participants in events taking place in hot summer or cold winter conditions are vulnerable to heat or cold related injuries.

Individuals with spinal cord injuries are particularly vulnerable to extreme environmental conditions. Due to the lack of sensation at the level of injury and below, spinal cord injured athletes are at risk to receive burns or frostbite.

It is recommended that medical personnel be aware of the weather and possible adverse conditions that may predispose unprepared athletes to the above mentioned conditions. Medical volunteers experienced in dealing with environmental injuries should be scheduled at venues most exposed to the elements.

Athletes at the BC Games can be young and may be very inexperienced (some sports have athletes as young as 11 year old athletes). Dehydration, sunstroke, etc. may become significant factors, especially with these young athletes.

In The Medical Clinic

The Medical Clinic operates beginning at 10:00 am on Thursday and ceasing at 3:00 p.m. on Sunday. The Medical Clinic operates until midnight each night of the Games and the Medical Clinic phone is call forwarded to a member of the Medical Directorate overnight. The clinic will open each morning by the first scheduled breakfast time on each day of the Games. The Medical Clinic serves as a central treatment area for athletes, coaches and volunteer staff.

Physicians, nurses, physiotherapists, athletic therapists, medical office assistants, receptionists, and aids/volunteers as available should staff the Medical Clinic.

Staffing of the Medical Clinic depends on the time of day. Based on past experience, suggested shifts and minimal personnel requirements are:

0700-1100 Hrs	2 Nurses, 1 Physician, 2 Therapists, 1 Medical Office Assistant/Receptionist
1100-1500 Hrs	(as above)
1500-1900 Hrs	3 Nurses, 2 Physicians, 4 Therapists, 2 Medical Office Assistants/Receptionists
1900-0000 Hrs	(same as above)
0000-0700 Hrs	2 Nurses, 1 Physician on Call.

- There should be a *minimum* of 2 nurses (1 with critical care experience) on duty at all times.
- There should be a minimum of one physician on duty from 0700-2400 and one on call from 2400-0700. (A general practitioner with sports experience is most valuable).
- A minimum of 2 courtesy cars with drivers should be on duty from 0700-2400 and 1 on call from 0000-0700 Hrs.
- Other specialists such as Dentists, Podiatrists, Radiologists, Chiropractors, and Orthopedic Surgeons should be available on an "on-call" basis.
- A Veterinarian must be on call for BC Summer Games

Medical Check-In

A check-in system should be set up for medical personnel. They should each receive a personal Games itinerary by mail prior to arriving on-site. Their registration package should include:

- Emergency protocol and contact numbers (if not already distributed)
- Games accreditation
- Identification (vest, hat, or whatever is being used to identify medical volunteers at the venues)
- Transportation/Communication

Games telephones will be placed at the Medical Clinic and at each of the venues. In order to allow physicians at the Medical Clinic to intervene in triage, a phone or extension connecting them to the Medical Clinic reception area should be located in the treatment area.

There may be dedicated vehicles for the use of the Medical Services Directorate to assist with the transport athletes with minor injuries from sport venue and the Medical Clinic, if not access will be through the Courtesy Car dispatch system managed by the Transportation Directorate. All medical volunteers must be made aware of the method of accessing this service.

Medical Volunteers

Accreditation

It is important that all members of the medical team be given accreditation to the Games. The accreditation badge should clearly indicate that they are medical personnel.

At the venues, it is important that there is some means of clearly identifying the medical personnel. A hat, hi-vis vest, or other item in addition to the accreditation badges best provides this distinction.

Medical Personnel from Outside of the Community

If you do not have sufficient medical personnel in your community, you may need to bring medical personnel in to provide the required coverage for your Games. If required, the following should be expensed through the Medical Services budget:

- Transportation to and from the Host Community
- Games accreditation, accommodation, ground transportation, and meals as provided by Host Society to all out-of-town officials. This usually consists of dormitory-style sleeping arrangements, cafeteria-style breakfasts and suppers, and box lunches at competition sites.

General Job Descriptions:

Staff Physician

- Assist the Medical Clinic Chair in the selection and collection of medical supplies and drugs.
- Provide medical diagnoses and treatments to athletes in the Medical Clinic and, as assigned, at the sport venues.
- Attend the pre-Games educational seminar.
- Utilize the Games Injury Reporting Protocols.
- Recommend treatment programs to be followed by the athletes upon returning home from competition. Also, where possible, recommend personnel in the athlete's home area that they might contact for follow-up treatment.
- Establish and maintain personal and professional rapport with the other medical personnel.
- Report any problems that detract from allowing the best possible care of the Games participants to the Medical Services Director.

Staff Therapists

- Provide athlete assessments and treatment as indicated within the Medical Clinic or at the venues.
- Keep accurate records of all treatments, both in the Medical Clinic and at the venues.
- Assist in maintaining all equipment and supplies.
- Report any problems that detract from allowing the best possible care of the Games participants to the Medical Services Director.
- Recommend treatment programs that can be followed the injured person upon returning home and/or liaise with home practitioners.
- Work cooperatively with all other medical team members.
- At the venues, provide primary first aid on the field or playing surfaces. May also be called upon to provide preventive taping and/or massage.
- At the venues, assist with, and in some cases, supervise the evacuation of an injured participant to the Medical Clinic, when necessary.

Nurse

- Act as a “triage” person in the Medical Clinic making sure the most urgent problems are dealt with first.
- Assist with various medical/surgical procedures while providing support and information to the injured participant.
- As requested by the physician, give injections, take blood samples, remove sutures, perform simple laboratory tests, change dressings and perform simple diagnostic examinations.
- Maintain an accurate and up to date inventory of the field clinic for the medical team. Keep the inventory in order and, in conjunction with the Medical Services Director and Physiotherapy Chair, ensure that all necessary items are packed and returned.
- Organize and keep a record of the various drugs/medications used in the Medical Clinic.
- Control the reception area and documentation flow in the Medical Clinic.
- Act as facilitator and liaison between the physicians, therapists, and athletes.

Sports First-Aiders

- To take direction from the in-charge therapist and physician at the assigned venue site or Medical Clinic.
- Could assist in the clinical operations by taking and recording information.
- Could assist the in-charge therapist, when qualified, with taping and wrapping.
- Provide on-site first-aid management as required.

Typical responsibilities, including equipment and supplies, may be as follows:

Pre-Competition

- Therapy and medical kits/ice are stocked and carried by the individual therapist who arrives at least 30 minutes prior to the start of each event.
- At the time of arrival, double-check the equipment to ensure everything is in place. Each kit should contain a list of what supplies should be found in it.
- Should any equipment be found missing or used through the run of the day, the volunteer responsible for using that equipment contacts the central Medical Clinic so that extra supplies may be delivered to that site as soon as possible.
- Each volunteer should familiarize themselves with the location of the nearest telephone, as well as mentally review the emergency protocols provided for them on paper.
- The medical volunteer(s) should make themselves known to the Sport Chair, the managers/coaches of the athletes competing, and the officials. If a volunteer does not show, the Sport Chair or Venue Management Chair should report this to the Venue Medical Chair, so that a replacement volunteer can be assigned to the venue if necessary.

- Prior to the beginning of the day's events the protocol for handling participant injuries should be reviewed by the Sport Chair or Venue Management Chair and with the officials and other volunteer medical personnel. (Also, medical volunteers should ensure that any injuries or questions concerning the athletes are looked after prior to the game starting.)

During Competition

- Medical volunteers are expected to be on-site and available to deal with athletes throughout the time they have been assigned to the venue. If a replacement is needed, unless during an emergency, the volunteer should remain on-site until his or her replacement arrives.
- Each volunteer is responsible for the equipment supplied to him/her at that site. If the supplies are running out, that person should contact the central Medical Clinic so that replacement supplies may be delivered.

Post Competition

- Each medical volunteer should be prepared to remain at the venue for approximately 30 minutes following the end of a competition. This will allow time to deal with any injuries or questions concerning the athletes. The medical volunteers should check with the teams to ensure that no further medical services are required.
- The equipment kits and first aid rooms should be checked and a list of what supplies need to be restocked prior to the next day should be prepared. First aid kits are returned to the Medical Clinic at the end of each day for re-stocking.

Medical Clinic Staff

Night shift staff can ensure that all trainer and medical kits required for the next day are re-stocked.

Volunteer Training

Pre-Games Educational Symposium

A pre-Games educational symposium can be coordinated for all medical volunteers. The Medical Services Director, the Physiotherapy Chair, and the Venue Medical Chair should plan organize a seminar or clinic to review emergency protocols, first-aid procedures policies, and to update and refresh practical skills. Usually the best time to organize this seminar is 2-4 weeks prior to the Games.

SportMedBC has developed a workshop curriculum that addresses the specific needs of the medical volunteers. Instructors who have had extensive Games experience teach these workshops which include theory, demonstration, and practical sessions. Pre-booking of these courses (3-4 months notice) is necessary.

Topics covered in this 2-day course include:

- General Injury Prevention Concerns
- Injury Protocols and Referral Patterns
- Emergency Protocols and Procedures
- Assessment and On-Site Management of Life Threatening Conditions
- Sport-Specific Common Injuries and Treatments
- Basic Principles and Techniques of Taping.

Fees are charged for both the educational symposium and any requested consultation meetings. Payment for these services, including travel to the Host Society, is the responsibility of the Medical Services Directorate. Specific details should be obtained from BC Games staff.

Orientation and Set-Up

Often there is a shortage of time for preparation, since the medical facilities for the BC Games are usually set-up immediately prior to the athletes arriving. It is important, however, that all members of the medical team are oriented to the venues, emergency protocols, equipment dispersal, the kits they will be using, etc. This should be done in three ways:

1. Specific meetings with each section involved.
2. Follow-up and reinforce the orientation. A manual should be provided to each member of the medical team. It should indicate overall protocols, floor plans and location of the central Medical Clinic, rules and regulations for transport, and complete schedules for all sporting events. The manual should also include a schedule of what medical personnel are to be in attendance at the events, Medical Clinic schedule, emergency protocol for each venue, mapping of the area and any other pertinent information that will assist them in carrying out their duties. It is particularly important that communication channels be clearly laid out so that volunteers know how to contact the Medical Clinic, how to call for emergency transportation, and where to report problems (either with equipment or lack of supplies).
3. The following contact numbers should be included:
 - Medical Clinic
 - Hospital Emergency Department
 - BC Games staff
 - Host Community Games Office
 - Security
 - Medical Services Director and Chairs

Equipment and Supplies

Early in the planning of any Games, the types of injuries to be expected should be reviewed. Once the review is complete, the equipment and supplies for the Games can then reflect anticipated requirements. Personnel selected for the medical team should have some input into the supplies and equipment needed for the events they are covering.

The Medical Services Directorate should review the list of supplies that should be available from the Games office and, using the guidelines outlined in this chapter, make a list of extra supplies that will need to be secured elsewhere. The major area for equipment supply will be the central Medical Clinic. SportMedBC has an inventory of medical bags available for loan as well as a list of suppliers. The required equipment should be booked six months prior to the Games to ensure delivery.

Supplies and Equipment

The BC Games Society provides a field clinic of medical equipment and supplies contained in several crates. These supplies are sent directly from the previous Games to the Medical Services Directorate of the next Games. The actual inventory of supplies may vary, and a complete inventory list should be obtained from the previous Medical Services Directorate at the time the crates are forwarded. It is the responsibility of the new Medical Services Directorate to store the supplies as part of the overall Games Inventory until the Games takes place.

Equipment

Previous Games reports have identified the following equipment as useful for the establishment of a Medical Clinic and venue medical service. The local hospitals or medical supply companies may loan equipment.

- Ambu-respirator
 - Endotracheal Tubes
 - Crutches
 - ECO and Defibrillator
 - Laryngoscope
 - Ottoscope
 - Electrotherapy modalities (TENS, Ultrasound, Laser, Interferential)
 - Whirlpools or other Hydrotherapy devices
 - Splinting Materials (i.e. Aircast, post-operative knee braces, patellar stabilization devices, etc.)
 - Wheelchairs
 - Floating spine board for aquatic venues (confirm one is available)
 - Therapy Treatment Tables (3)
 - Therapy Mobilization Beds (3)
 - Mats to cover treatment tables (6)
 - Coolers / Ice Chests for venues
 - Freezer (small)
 - Refrigerator
 - Ice machine
 - Heaters (for the Medical Clinic in case of cold weather)
 - Fans (in case of warm weather)
 - Weight Scales
 - Towels and Linens
 - Cupboards
 - Shelf space
 - Room dividers for examination areas
 - Cabinet with lock (for drugs)
 - Chairs for reception
 - Desks
 - Filing cabinet
 - Stove or hot plate to heat water
 - Photocopier
 - Change Catheter Equipment
 - Charts and writing pens

Supplies

It is advised that personnel selected for the medical teams have input into the supplies and equipment needed for the events they are covering.

NOTE: All supplies must be distributed between the central Medical Clinic, the sport venue kits, and the accommodation first-aid kits.

Venue First-Aid/Therapist Kit

A laminated label and an "Emergency Protocol Sheet" should be attached to the exterior of each kit. An example of this sheet is available in Appendix 7.

Quantities of supplies will depend on the number of participants, available storage space and budget. Additional supplies should be added to the kit according to venue (high risk/utilization sports) and the qualifications of the personnel at the venue sites. At the end of the day, ensure a list is made of items that need replacing. In addition to the kit, each venue should have an ice chest, a running water supply or water jug, and a pair of adjustable crutches.

The following are suggested items for inclusion in the medical kits:

Sport Venue Kits

<u>Item</u>	<u>Quantity</u>		
Airways (3,5,7)	1 set	Tensor Bandage (6")	4
Pocket Mask	1	Adhesive Tape (1.5")	10 rolls
Latex Gloves (have non-latex available)	5 pairs	Adhesive Remover	1 can
Bandage Scissors	1	Tape Adherent (Tuf Skin)	1 can
Tweezers	1	Tongue Depressors	12
Pen, Pencil, and Paper	1 each	Pro Wrap	3-4 rolls
Clipboard & Injury Report Forms		Orthopedic Felt	Assorted
Plastic Bags (for ice)	Lots	Foam Sponge	Assorted
Band-Aids (knuckle, fingertip, strips)	Assorted	Moleskin	1 sheet
Cling Gauze 2", 3", 4"		Heel and Lace Pads	30 pairs
Gauze Sponges (sterile) 2x2's, 4x4's		Alcohol Swabs	12
Gauze Sponges (non-sterile) 2x2's, 4x4's		PhisoHex	1 bottle
Telfa Pads 2x6's, 2x3's		Q-Tips	15
Flexible Adhesive Dressing	1 package	Savlon Soap	1 bottle
Safety Pins	10	Needles (22G & 25G)	2-3 each
Second Skin	1 Jar	Sharps Container	
Steri-Strips	4 packages	Polysporin (Bacitracin)	1 tube
Tensor Bandage (4")	2	Tinactin	1 tube
Kleenex	1 package	Skin Lube (Vaseline)	1 tube
ASA (325mg)	12 tablets	Saline Solution 10 or 20ml	
Towel	1-2	Gauze Eye Pads	5
Garbage Bags	2	Hard Eye Patch	2
Splints (Metal, SAM, Quick)	Assorted	Contact Lens Container	1
Space Blanket (Emergency)	2	Pen Lights	1
Sunscreen (SPF 30)	1 bottle	Thermometer (oral/rectal)	1
Disposable Razors	2	Thermometer Sheaths	10

NOTE: No oral medication should be administered without a physician's order. It is recommended that analgesics (such as Tylenol or Aspirin) NOT be handed out at the venues.

Accommodation Site Kits

<u>Item</u>	<u>Quantity</u>		
**Cough Syrup	2-3 bottles	Q-Tips	10
Antihistamines (i.e. Benadryl, Chlortripolon)	1 package	Disposable Razors	2
Antibiotic Cream/Ointment	1 tube	Band-aids (Assorted)	1 package
Antacid	1 bottle	Gauze (4x4)	20
Gravol (50mg)	1 bottle	Vaseline	1 tube
ASA (325mg)	1 bottle	Throat Lozenges	1 package
Dispensing Cups	12	Contact Lens Solution	2 bottles
Thermometer	1	Contact Lens Case	1
Thermometer Sheaths	1 package	Feminine Hygiene Products	Assorted

NOTE: No oral medication should be administered without a physician's order. The Games Medical Clinic should be contacted should an athlete require medication.

Physician's Checklist

Medications **MUST** be locked in a secure location. A physician should distribute all medications. Accurate recording of distribution is essential. This documentation should include the name of athlete/patient, date, reason and physician's signature. The following list of supplies is recommended for the Medical Clinic physician's use:

<u>General Supplies:</u>	<u>Wound Care</u>	<u>Suturing</u>
Oral Medications <ul style="list-style-type: none"> • Laxatives • Gravol • *292's • Tylenol #3 • Chlortripolon • Duricef 500 • Septra • Kaopectate • Cloxacillin • Erythromycin • Antacid Tablets • Tylenol Plain • Entrophen • NSAID's • Amoxil • Halcion • Lomotil • Flycox 	<ul style="list-style-type: none"> • Savlon Soap • Bridine • Sterile Gauze (2x2's, 4x4's) • Cling Gauze • Elastoplast Anchors • Band-Aids (Assorted) • Tape (i.e. micropore) • Athletic Tape (1.5") • Elastoplast Tape • Tensors (4", 6") • Slings (Triangular Bandages) • Saline Solution • Opsite • Sofra-tulle • Q-tips • Tongue Depressors • Paramedic Scissors • Sterile Gloves 	<ul style="list-style-type: none"> • 1% Xylocaine • 1% Xylocaine w/ epinephrine • Ethilon 4-0, 5-0, 6-0 • Plain Gut 5-0 • Needles P-3, FS-2, 19, 22, 25, 27 • Syringes 2cc, 5cc, 20cc • Sterile Gloves • Suture Kits • Scalpels #11, #15 • Small Penrose Drain • Alcohol Swabs • Addson Forceps • Suture Scissors • Needle Drivers • Metzenbaum Scissors • Steri-Strips • Sterile Drapes • Hemostat • Nasal Pack • Sliver Forceps

<p><u>Parenteral Medications Graval</u></p> <ul style="list-style-type: none"> • Valium • Atropine • Benadryl • Tetanus Toxoid • **Demerol • **Morphine • **Adrenaline <p>**Banned Substances</p>	<p>Topical Medications</p> <ul style="list-style-type: none"> • Steroid Creams • Combination Cream • Garamycin Cream • Polysporin • Antifungal Cream • Moisturizing Cream 	<p><u>Eye/Ears, Nose & Throat</u></p> <ul style="list-style-type: none"> • Eye Patches • Q-Tips • 22 ga needles • Flouroscein Stain • Opthaine • Garamycin ggts/ung • Sofracort Eye/Ear • Depo-medrol • Nasulamyd
<p><u>Examination</u></p> <ul style="list-style-type: none"> • Ophthalmoscope • Oscope • Reflex Hammer • Visual Acuity Card • Tuning Fork • Laryngeal Mirror • Glucometer • BP Cuff • Stethoscope • Thermometer (Rectal/Oral) 	<p><u>Emergency Supplies: Medications</u></p> <ul style="list-style-type: none"> • Atropine • Valium • 50% Dextrose • Na Bicarb 8.4% • Isuprel • Ventolin • **Adrenaline • **Demerol • **Morphine <p>** Banned Substances</p>	<p><u>Intravenous</u></p> <ul style="list-style-type: none"> • Normal Saline • Ringer's Lactate • 5% Dextrose/Water • Angiocath 14, 16, 18, 20, 22 • Scalp Vein 19, 22, 25 • Blood Collection • Tourniquet • Sterile Gauze (2x2) • Alcohol Swabs
<p><u>Airway</u></p> <ul style="list-style-type: none"> • Argyle Suction Catheter • 60cc Syringe • Laerdal Ambu Bag • Laerdal Child/Adult Masks • McGill Forceps • Crycothyroid Stab with #11 Blade • Endotracheal Tubes • Airways (Pediatric, Adult) • Laryngoscope with Pediatric/Child blades • Spare Batteries • Cervical Collar 		

Ice:

A continuous supply of ice and bags for the ice must be ensured throughout the Games. A van/driver should be designated to drop ice off at the venues at regular intervals. In past Games, local hospitals and local businesses have been sources for ice. These businesses may also be able to loan out ice coolers and chests.

Distribution and Re-Stocking of Supplies

It is important that a method for the distribution and re-stocking of kits be established. Also a check-in/out system should be utilized in order to keep track of all bags and other supplies. It is recommended that the re-stocking take place each evening at the central Medical Clinic with the staff in charge at that time completing the task. The physiotherapist/trainer on duty could then pick up the bag the next day or it could be delivered to the site by van. One person should be in charge of kits (distribution and re-stocking) throughout the Games.

The Role of Professional Sport Medicine Associations

CASM - Canadian Academy of Sport Medicine

CASM is the national organization of physicians committed to excellence in the practice of medicine, including health promotion and disease prevention, as it applies to all aspects of physical activity. Members may be valuable additions to the medical volunteer staff at the games. SportMedBC' online directory (www.sportmedbc.com) lists CASM Diploma holders.

CATA - Canadian Athletic Therapists Association

CATA provides leadership and direction in the athletic therapy profession in Canada. The association is dedicated to the promotion, development, and delivery of programs for the prevention, care, and rehabilitation of sports injuries. A Certified Athletic Therapist is devoted to rehabilitating an active individual from the inception of the injury to the return to sport. SportMedBC's online directory (www.sportmedbc.com) lists certified athletic therapists.

SPC - Sport Physiotherapy Canada

SPC is a Division of the Canadian Physiotherapy Association, whose primary goal is to provide quality therapy, rehabilitation, and counseling services to athletes and recreational participants, before, during and after injury. SportMedBC's online directory (www.sportmedbc.com) lists sport physiotherapists.

The Role of Other Associations

St. John Ambulance

This organization can be of assistance, particularly in providing on-site first-aid. Local detachments should be contacted initially. If there are no local contacts available, the Public Duty Officer at the Provincial Office in Vancouver should be contacted.

British Columbia Ambulance Service

The BC Games Society will provide you with the local contact for the BC Ambulance Service. You will need to touch base with the local contact to provide details of the Games. It is the call of the BCAS as to any additional service that is provided for your area for the Games-time. Service may be provided on a contracted hourly rate basis or, in some cases, on a volunteer basis.

Ski Patrol

Most ski hills will have their own ski patrol on duty during competitions. Members of this emergency team are trained to handle life-threatening injuries on the hill. Their presence during ski competitions is advised.

Royal Life Saving Society

The Royal Life Saving Society may be available to assist in providing life guarding coverage at water sport venues. Contact your local representative or the Provincial Office for details.