



**bmsc** BAMFIELD MARINE  
SCIENCES CENTRE

# BMSC Staff

## General Safety Manual

Bamfield Marine Sciences Centre  
Bamfield, BC, VOR 1B0

v. February 2024

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## BMSC Contact List

All local numbers can be reached from an outside line by first dialing: 9

First Aid Attendant (OFA L2)	Siobhan Gray Andrew Miller	Cell 250 720 1433/VHF 09 0830-1630 Mon-Fri
Director	Dr. Sean Rogers	403 473 3498
Caretaker/Security		250 206 5778
Associate Director, Research Radiation Safety Officer (RSO)	Tao Eastham	255
Research Coordinator Alt Radiation Safety Officer (RSO)	Luke Andersson	259
Head of Animal Care	Kelley Bartlett	275
Associate Director, Education	JM Ledet	216
University Program Coordinator	Keith Johnstone	219
Field Trip Program Coordinators	Kelly Clement Owen Newson	226 226
Head of Foreshore/1st Skipper	Dave Porter	224
2nd Skipper	Phil Lavoie	266
Diving Safety Officer (DSO)	Siobhan Gray	222
Head of Guest Services	Marie Cummings	213 Cell: 250 880 5227
Head of Maintenance	Shawn Isinger	272
Head Electrician	Frank L'Heureux	248 Text: 250 947 9119
Head Cook	Pat Woods JP Giasson	239 239
Finance Manager	Christine Mather	215
Main Office, administrative assistant	Kynat bhinder	221

## Emergencies

### Staff Responsibilities

As BMSC staff, you are responsible to know the location of:

- on-site emergency equipment
- emergency exits
- evacuation routes
- rally points
- first aid supplies.

See the BMSC Disaster Plan to review the chain of command and disaster response duties of staff. BMSC will provide training about best practices during different disaster scenarios.

Off-site/in the field: Follow protocols listed under Field Emergency – Standard Operating Protocol found in this document. Adjust the protocol depending on your location and situation.

### Teachers-in-Charge

Working with the group leaders/teachers-in-charge, BMSC staff need to be able to account for all clients on site during an emergency.

## Medical Emergency

In the case of a serious medical incident or illness (whether onsite or offsite):

### 1 - Call 911

911 will activate the volunteer Emergency First Responder (EFR) team.

2 - If needed, contact the Bamfield Health Centre 250 728 3312  
(reg. hours Mon-Friday 0900-1700).

Note: After-hours, call Nurse-on-call 24hrs 250 730 1682

The Bamfield Health Centre is located at 353 Bamfield Road  
Nurses are able to stabilize patients requiring serious medical attention.

When accompanying a student to the Health Center:  
Phone the Bamfield Health Centre to let them know you are coming;

**There is no phone located outside the clinic and cell reception at the Health Centre is poor.**

### 3 - For Marine Emergency situations:

Hail the Canadian Coast Guard on Marine Radio VHF Channel 16

The Joint Rescue Coordination Centre can be contacted directly at  
1- 800 567 5111.

## Non-emergency medical situations

Call the BMSC First Aid cell phone, or VHF radio "First Aid" on Channel 09 (the answering first aid attendant will prompt you to switch to a VHF channel 10 for confidentiality). These options are only available Monday to Friday, between 8:30 am and 4:30 pm. If an incident occurs outside of the First Aid attendant's working hours, refer to the above "Who to call" emergency protocols.

### Special Considerations: Brady's or Pachena

If contacting 911 or the Coast Guard using Marine VHF radio on channel 16, be sure to know and be able to describe your location and access. I.e.: 1km down Brady beach, which is in West Bamfield, a water access only peninsula from East Bamfield.

Contacting BMSC staff and your check-in contact help in organizing transportation or assistance.

For Pachena, the village of Anacla monitors VHF 68 and may be able to relay messages to BMSC if your radio signal is weak.

Boat (sail plans) and/or Terrestrial Trip Plans must be filled out for work related field trips. See Appendices 3 and 4.

Boat Trips fall under BMSC's Marine Safety Plan/Boat Policy. See Appendix 4.

### Consulting the Bamfield Health Centre (BHC)

Don't hesitate to call the Bamfield Health Centre for any medical situation at any time of day or night. Be sure to let clients know about this resource of trained health care professionals in the community. If there are medical issues, the teachers-in-charge should be encouraged to discuss these with the nurse on call. It is not uncommon for parents to talk with our BHC prior to their child's arrival to discuss health concerns and evacuation procedures.

911 is available to assist in transporting a patient to the BHC.

### If you need to attend the BHC:

Call the nurse to let them know you are coming.

A teacher/chaperone must accompany you with a student, and must ensure the student has their health care card and I.D.

### Additional After-hours non-emergency options:

You can speak with a BC Health Service navigator by calling 811, who can also connect you with a:

- Registered nurse any time, every day of the year
- Registered dietitian from 9am to 5pm Pacific Time, Monday to Friday
- Qualified exercise professional from 9am to 5pm Pacific Time, Mon to Fri
- Pharmacist from 5pm to 9am Pacific Time every day of the year.

## *Standard Operating Procedures*

### Major Medical Emergencies

Do not move a seriously injured person.

Call 911 (or have someone call 911 and report back to you) and be ready to provide name, phone number, specifics about location, number of injured and nature of injury).

Contact BMSC First aid Attendant 250 720 1433

Perform First Aid ABC's within your training, and monitor vital signs until someone more qualified comes to relieve you.

Communicate the emergency to BMSC staff

### Minor Medical Emergency

Make the injured person comfortable.

Contact the BMSC First aid Attendant 250 720 1433

Continue to stay with the injured person, keeping them comfortable and monitoring their vitals until help arrives

### Mental Health Services/crisis

In case of a mental health crisis:

Call the Vancouver Island Crisis Centre of BC toll free at 1-888-494-3888 (free, confidential, and available 24 hours a day).

The Crisis Centre of BC ([www.crisiscentre.bc.ca/get-help](http://www.crisiscentre.bc.ca/get-help)) offers:

Online chat from noon to 1:00 am at [www.crisiscentrechat.ca](http://www.crisiscentrechat.ca) for adults or [www.youthinbc.com](http://www.youthinbc.com) for youth

A text and chat line available from 6pm-10pm at 1-250-800-3806

There are no Mental Health Services physically located within Bamfield.

### Pre-existing Medical conditions, allergies and food intolerances

#### EpiPen locations:

Individuals with food allergies or intolerances must notify BMSC staff or instructors prior to or upon arrival.

Epi Pens: If an Epi-pen carrying client is participating in our field programs, a second Epi-pen will be provided via a Field Safety backpack that is to accompany them on all field trips. These packs are provided by either University programs or Field Trip Programs respectively.



See Appendix 1. for Campus map -EpiPen locations

**Main Building**

First aid kit outside main office 24 hr access

**Rix Building**

First aid room in ground level of the Rix Centre 24 hr access

Alt. OFA L2 First Aid Response bag in Rix Research office

**Foreshore:**

Foreshore dive shed 24 hr access

OFA L2 First aid response bag in DSO's office (foreshore)

Barkley Star

M.V. Alta

**Whale Lab**

Interior office

**Kitchen**

Kitchen first aid kit

### Health Concerns

**Pregnancy:** Pregnant students, teachers and staff should take necessary precautions in consultation with their medical health providers.

### First Aid and Reporting

In case of emergency refer to "Medical Emergency" section previously covered.

Primary response to first aid situations at the BMSC is undertaken by the Occupational Level 2 First Aid Attendant. In non-emergency situations the First Aid Attendant (OFAA) should be contacted/consulted. In the absence of the primary OFAA, call 911

Emergency Procedures are posted near every phone and first aid kit on site.

ALL First aid incidents are confidential within the organization.

## BMSC clients

Call Occupational First Aid (OFAA) Level 2 Attendant cell phone to attend to all incidents, minor or emergency that occur during work hours 0830-1630 Mon-Friday.

250 720 1433 or call "BMSC First Aid" via VHF 09 and request to switch to channel 10 for confidentiality.

All injuries to staff must be recorded and reported:

BMSC First aid record – may be filled out by Level 1 or 2 OFAA

BMSC First Aid Record Follow up - performed by Level 2 OFAA only

## WorkSafe BC

For any incident involving a BMSC Employee a Work Safe BC (Form 6) – is to be completed by the employee and submitted to their manager whom will submit it to their employer.

To download 'Form 6' from [worksafebc.com](http://www.worksafebc.com) :

Go to <http://www.worksafebc.com> and look for forms and resources link at top of page. Then click 'Form 6- [Application for Compensation and Report of Injury or Occupational Disease \(Form 6\)](#) to employer' and download PDF.

Additionally where work hours are missed due to injury, Form 7- 'Employers Report of Injury' must be filed within 72hrs by the employer

BMSC incident investigation form. - Filled out by Diving Safety Officer/Director designate.

Will be signed by employee/Union representative and employer representative.

Will be kept on file by Diving Safety Officer/First aid attendant.

Results and recommendations will be shared with the patient's Department head for action items in the prevention of future incidents.

Recommendations will be shared with the BMSC Joint Safety committee and BMSC Director. The names of individuals however, will not be shared and will be kept confidential by the Diving Safety Officer and attending level 2 and level 1 OFAA.

## Location and Use of Safety/First Aid Equipment

Learn where to locate the following pieces of equipment on campus - Consult with program coordinator or Diving Safety Officer ahead of time to help in locating:

- Fire extinguishers
- First Aid kits, EpiPen stations, First Aid Room
- Emergency showers
- Eye-wash stations
- Chemical and fuel spill kits

## Accident/ Incident investigation

To prevent workplace accidents and injuries, the BMSC routinely conducts investigations into accidents to identify corrective measures, and response that can be implemented to support prevention and a safe working environment.

Incident Investigations are arranged by the BMSC Joint Health and Safety Committee (JHSC)

A BMSC Incident Investigation Form is to be completed during the investigation, signed by both the Employer and Employee Representatives, and kept on file. A copy of this report will be forwarded to WorkSafe BC by the BMSC Employer.

All incidents and accidents will be reviewed respecting confidentiality at the next JHSC meeting and any global issues can be discussed. For some injuries, WorkSafe BC may also wish to conduct an on-site visit. These visits are coordinated by the Director and/or the Chair of the JHSC and may be arranged in conjunction with the Incident Investigation. Where applicable internal accident/incident investigations should also be carried out for non-employees (BMSC users).

## Police Emergency

Any incidents that require the assistance of the police should be reported immediately to 911. \*Note that there are no police or RCMP located within the town of Bamfield.

\*All incidents requiring 911 calls must be reported to BMSC.

When dialing internally on a BMSC phone, dial 9 for an outside line

RCMP Port Alberni :	911
Non-Emergency	250 723 2424

## Building Evacuation

(Fire, gas leak, tsunami, or following an earthquake)

In the event of a major emergency, it is important to evacuate buildings and converge at the Emergency Assembly/Meeting area A (the traffic circle), for a head count. If this assembly area is not safe or at risk of danger, then Assembly/Meeting area B is located next to visitors parking at the tennis courts. See Appendix 2 for 'Campus map –Hazard locations'

Evacuation routes and exit signs can be found in every building.

Department Heads are responsible for the areas where most of their department may be found and act as the Fire Wardens. Department Heads should also appoint a Fire Warden Deputy/Alternate to act in case(s) of their absence. Responsibilities include making sure that all of their staff and associates are briefed with emergency procedures, maintaining fire routes and escape plans, and overseeing the evacuation of their areas in the event of a fire or other life threatening emergency. Below is the list of buildings and areas each Department Head is responsible for, (When the Department Head is away, an alternate staff member must be appointed to fill in for their safety duties):

Director/DD/OM or Designate

- First level of the Main Building (including the Library)

Diving Safety Officer/Foreshore

- Boat Shed
- Dive Shed

Housekeeping/UP

- Seaside dorms
- Buchanan Lodge
- All cabins (8)

Head of Maintenance

- Workshop
- All known active worksites
- Qualified trained Maintenance staff to conduct Rapid Building Surveys

Kitchen Head

- Cafeteria, cafeteria building lecture hall and fire-side lounge
- Rix Centre kitchen

#### Field Trip Program Coordinator

- Whale Lab
- COTC building (if in use by Field Trip Program)
- Rix Centre classrooms (if in use Field Trip Program)

#### Associate Director of Research

- Aquaria level of the Main Building (if in use by research)
- Cable Tank (if in use by research)
- Eco-Phys Building
- COTC (if in use for research)
- Rix Centre research level
- Fluid Dynamics Lab (if in use by research)

#### University Program Coordinator

- Teaching levels of the Main building
- Aquarium level of the main building
- COTC (if being used by University Programs)
- Rix Centre classrooms (if in use by University Programs)
- Cabins (if being used by UP)

Familiarize yourself with the Building Emergency Plan, check the Evacuation Floor Plans (located in main hallways of each building on campus) for your building, and note your closest fire exit and immediate hazards. Consider alternate evacuation routes in case your exit is not accessible.

## Fire Emergencies

When dialing from a BMSC phone, dial 9 for an outside line

Fire: Call 911 Dispatch / Bamfield Volunteer Fire Dept.

### **If you discover a fire:**

- Activate the nearest fire alarm pull station. (Consult Emergency Evacuation Floor Plans)
- Call 911 or send designate to call 911 and report back to you. (BMSC alarms are not monitored by fire or security systems)
- Be ready to state your location and nature of fire.
- If the fire is very small, use a fire extinguisher appropriate to the fire.
- Do not endanger yourself.
- If safe to do so turn off/ remove all sources of heat, gas or open flames, close any window or doors.
- Evacuate the building, if possible closing doors behind you. Do not lock the doors.
- If you activated the alarm alert BMSC staff

### **If you hear a fire alarm:**

- If possible secure equipment, close windows and doors. Do not lock doors.
- Follow the evacuation route established in the building you are located in.
- Assist individuals with mobility disabilities to the designated Assembly/Meeting Area: the traffic circle outside the main building (A) or tennis courts (B)
- Do a head count of your group.
- Provide information about the fire, disabled individuals and any injured or trapped individuals to the Fire Department.
- Meet at your designated Emergency Assembly/Meeting Area. The emergency assembly area is the traffic circle outside the main building, if this area is compromised, then the tennis court is to be used.
- Do not re-enter the building until permission is given by the Fire Department.

### **If you cannot evacuate:**

- Close the doors between you and the fire.
- Call 911
- Hang clothing or a cloth from a window to alert emergency response personnel of your location.

- Keep exit routes and fire safety equipment unobstructed at all times
- Report any fire hazards to BMSC staff.

### **Portable Fire Extinguisher Operation:**

A fire extinguisher is designed to put out a small fire. If you have any doubts as to whether or not you should try to extinguish a fire, leave the area, ensure the fire alarm system is activated and call the Fire Department (911).

The Fire Extinguisher class designation indicates the type of fire the extinguisher is intended to extinguish. BMSC buildings have Class ABC extinguishers intended to extinguish fires of Class A, B and/or C.

- Class A: Ordinary combustibles such as paper, wood, cloth and plastic
- Class B: Flammable liquids such as gasoline, paints and solvents
- Class C: Electrical fires which involve energized electrical wiring, circuit breakers and appliances

Extinguishers must be recharged after any use. When an extinguisher is used contact BMSC staff, so that it can be recharged and put back into service.

Directions for use:

1. Pull safety pin from handle.
2. Aim (nozzle, cone, horn) at the base of the fire.
3. Squeeze the trigger handle.
4. Sweep from side to side (watch for re-flash of fire).

## Provincial Emergency Program- Emergencies and Disasters

To be prepared for a wide spread emergency or disaster, BMSC employees should review the building specific procedures in which they will be working in.

BMSC clients are encouraged to familiarize and take measures to understand the risks associated with field research and education in this area. BMSC encourages clients to develop a hazard assessment and control program, including a communication plan, in association with their trip to BMSC.

Below you will find some specific and general guidelines to follow in the event of an emergency. The general emergency plan in most situations closely follows the above guidelines for fire emergencies. Earthquakes and tsunamis are covered as well, but other events such as floods, storms, landslides, avalanche, disease outbreak, wildlife incidents and missing persons, should all follow the same standard emergency response.

Many BMSC employees are entrusted with a “duty of care” or a responsibility of others. This includes department heads for their staff, Field Trip Educators for visiting groups, course instructors and TAs for students, and PIs for research groups. Each of the above-mentioned overseers should familiarize themselves with the safety procedures laid out in this manual, as well as the Provincial Emergency Program Bamfield Community Emergency and Disaster Plan.

The Bamfield Community Emergency and Disaster Plan can be requested for review from the DSO or the Bamfield Community Plan Coordinator

The Provincial Emergency Plan maintains a toll-free message line with emergency preparedness information, at 1-888-811-6233. See Appendix 5.

The community's Provincial Emergency Plan has three command centres set up in Bamfield that will become active in the event of a community wide emergency.

The command centres for Bamfield are:

The BVFD Fire Hall (East side)

The BVFD Fire Hall (West side)

The House of Huu-ay-aht (Anacla/Pachena Bay).

These areas will be communication posts and rallying points for the Village of Bamfield and Anacla. If a widespread emergency occurs, these are the areas that all people on and off campus should move to.

## Earthquake Evacuation Procedures



**Before:**

Assess your work area for non-structural objects that may cause injury (i.e. microscopes, bookshelves, monitors, etc.).

Move large heavy items to lower shelves (less than 4' off the ground) and ensure that shelving is secured to walls and floor. Consider using lips or doors on laboratory shelving.

Consider securing valuable equipment and computers to allow for a rapid recovery. Information on securing devices can be obtained from the Managing Director.

Encourage members of your Department/Unit to consider earthquake preparedness issues for their family and home.

**During:**

Move away from windows and heavy objects.

Duck, cover and hold. Crouch low to the ground; protect head with your arms; seek cover under and hold onto heavy furniture stay there for at least one minute after the shaking stops -Watch for moving objects.

If you are in an interior hallway, stay there and crouch against the wall -Watch for swinging doors.

**After:**

After the shaking stops, count to one hundred (This will take approximately one minute) If an aftershock occurs count to one hundred again, after the shaking has ceased, look for evidence of damage (broken glass/dislodged ceiling tiles/cracks in the wall) look for a safe egress, evacuate the building as safely as possible.

Try to assist disabled or injured individuals. Head for Assembly/Meeting Area A - traffic circle. If the Traffic Circle is in jeopardy Assembly/Meeting Area B is the tennis courts. Keep away from power lines and buildings to avoid falling debris.

Report any missing or injured persons (in writing if possible) to: Incident Commander/Emergency Personnel/ BMSC First Aid Attendant/Director at assembly area. Determine the status of your Department's personnel, assist students and visitors, and report injuries to the First Aid Attendant/Incident Commander.

Report damage to buildings and utilities to Head of Maintenance and Incident commander.

Do not re-enter any building until Rapid Building Surveys have been conducted and the building has been given the "All Clear" by qualified personnel

Do not use phone lines. Sudden heavy use can cause phone lines to crash.

BMSC joins the Bamfield Community Emergency Program (BCEP) at its reception centre (the Bamfield Community school) to establish safe holding, continued care and to inform provincial programs of our status.

## Tsunami Procedures

Tsunamis are caused by earthquakes or landslides that create large waves in the water that can travel thousands of kilometers. The west coast of Vancouver Island is susceptible to such events, thus BMSC staff/clients need to have a good understanding of what to do in this emergency.

### **Before:**

Be aware of the tsunami emergency procedures.

Locate the designated Assembly/Rally points. Higher ground is defined as 20 meters above sea level. Assembly/Meeting Area 'A' is the Traffic Circle in front of the Main building. If that site is jeopardized or deemed unsafe Assembly/Meeting Area 'B' is to be used. Assembly/Meeting Area B is located at the Tennis court next to visitors parking.

### **During:**

Tsunami Siren-

When you hear the Bamfield emergency siren sounding continuously (it may sound for approximately one hour) but do not feel the ground shake, leave the building or area you are in, warn people within your vicinity, and head for the traffic circle. If the Traffic circle is in jeopardy go to Assembly/Meeting Area B, the tennis courts.

Note: if you hear an intermittent emergency siren, sounding for less than 5 minutes –this is indicating a fire to the BVFD or a 'Fire practice' for the BVFD members, and is not a tsunami siren. The BVFD test the fire alarm every Wednesday at 6:30pm.

Do not head towards low ground or delay assembling to do so, you may be putting yourself in danger.

If you are on the waterfront and see a quick drop in the water level, resist the urge to go and take a look and instead immediately gather all those with you, and head for higher ground (20 meters above sea level), such as the traffic circle or the hill at Brady Beach.

If you are responsible for others in the lab or groups, make sure that all the students or clients go to higher ground and maintain a head count.

Assist any persons that may need assistance in moving to higher ground quickly.

If the ground shakes:

Drop, cover and hold on.

Locate a safe path and get to open higher ground (20 meters above sea level) quickly. BMSC has a tidal gauge centre that is part of a Pacific wide Tsunami

Warning System, it monitors tidal fluctuations and if a rapid change in tide height is detected, a tsunami warning is extended to the entire Pacific Basin.

BMSC and the village of Bamfield have an Emergency Response Program.

The signal for a tsunami is a continuous siren (sounding for up to an hour). This siren will be set off in the case of a warning and signifies to get to high ground as soon as possible.

High ground is considered to be  $\geq 20$  m above sea level. Gather at designated assembly/meeting areas.

A significant local earthquake could mean an imminent Tsunami.

For tsunami watch, warning and information bulletins, go to the National Weather Service website (<http://tsunami.gov/>).

**After:**

Account for all those in your area to see if there are any missing persons.

Do not enter buildings.

Watch for debris, including flooring, and falling objects and walls.

Call out from the exterior and listen for responses from any persons still in buildings or trapped.

Assist the First Aid Attendant to help those who may be wounded.

If there are missing people, the Joint Rescue Coordination Centre should be contacted prior to a search to locate any people.

Avoid using phone lines. Sudden heavy use can cause phone lines to crash.

BMSC as a group will walk to the Bamfield Community Emergency Program (BCEP) at its reception centre (the Bamfield Community school) to establish safe holding, continued care and to inform provincial programs of our status.

## Workplace Hazardous Materials Information System (WHMIS)

WHMIS is an information system which requires that all employees must understand WHMIS and can apply WHMIS information. Workers exposed to hazardous materials may be at risk for many serious health problems. Some hazardous materials can also cause fires, explosions and environmental damage.

WHMIS provides health and safety information about workplace hazardous materials. Employers (Department Heads and those with a duty of care) must use this information as well as information specific to their workplace to educate and train workers to work safely with and near hazardous materials.

At the BMSC, all employees handling or working near hazardous materials must successfully complete WHMIS training and certification.

WHMIS has developed a classification system of six hazard classes to group chemicals with similar properties or hazards. Each class has a specific symbol to help people identify the hazard quickly.

WHMIS labels: WHMIS labels on controlled products alert workers to the identity of the product, hazards and precautionary measures.

Materials Safety Data Sheets (MSDS): Technical bulletins provide detailed hazard and precautionary information.

WHMIS education and training programs: The employer provides education and training for workers so they can work safely with and near controlled products. Workers need to know how WHMIS works, the hazards of controlled products in their workplace, and the safe procedures they must follow.

WHMIS Training should be retaken/updated every 5 yrs.

Many Principle Investigators will have done WHMIS at their home university and are expected to follow the same guidelines while on site.

The Professor or TA supervising student use of Chemicals must be WHMIS certified and directly supervise all chemical use. BMSC can supply you with this certification through the Uvic on line link. Please see The University Program Coordinator for access

### Material Safety Data Sheets (MSDS)

Material Safety Data Sheets and records for chemicals on site at BMSC are kept in the Associate Director of Research's office. Before working with chemicals in the lab, it is the responsibility of the user to be familiar with the risks posed by each chemical and the proper way to safely use it in the lab. The MSDS can also be accessed online at: <http://ccinfoweb.ccohs.ca/msds/search.html>

Records of chemicals at the BMSC may be requested by staff and clients at any time.

### Transportation of Dangerous Goods (TDG)

"Transportation" in TDG refers to road, rail, sea, or air. "Dangerous Goods" refers to many products. A number of steps need to be taken in order to transport

“Dangerous Goods” in compliance with TDG legislation. There are large fines imposed for non-compliance to TDG legislation. Shipment of “Dangerous Goods” (which requires classification, packaging, labeling, and manifesting) can be facilitated for a cost by the Research Unit with sufficient time prior to shipment (ideally one week). Any inquiries regarding packages involving radioactive materials should also be directed to the RSO/Associate Director of Research .

When dialing from BMSC, dial 9 for an outside line

Dangerous Goods Emergencies	613 966 6666 (emergencies)
Canutec (24hours)	613 992 4642 (info)

## Hazardous Materials Incident Response

If the spill can be safely managed by you and your department:

Get assistance and notify your supervisor.

Never rush or work alone.

Clearly assess the situation before starting clean up and use proper personal protective equipment (PPE)

Use departmental spill clean-up equipment and PPE as per MSDS specific to the Hazardous material. Response kits can be found in the yellow spill kit response cupboard located outside of Chemical labs. Collect the wastes in a suitable container and request disposal from the Associate Director of Research.

For major incidents involving hazardous materials that cannot be controlled by department personnel:

Evacuate the area and close the door.

If the release cannot be contained in the room, evacuate the building and stay up-wind. From a safe location call 911 and notify BMSC staff

Identify yourself to emergency response personnel.

When dialing from a BMSC phone, dial 9 for an outside line

Emergency:	911 Dispatch/ BV Fire Dept.
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## Spill Clean Up

A spill cleanup kit is required in all areas that utilize chemical, biological or radioactive materials. The spill kit is laboratory specific, based upon the materials

present in the laboratory or area, and must be maintained. Laboratory personnel must follow the proper emergency response plan for spills, including proper notification to the Associate Director of Research/ Radiation Safety Officer (RSO) at ext. 255 and the Diving Safety Officer (DSO) ext. 222. The Associate Director of Research will arrange for help with the spill clean-up. The Diving Safety Officer can also provide advice on the proper clean-up techniques and PPE. A successful spill cleanup is one in which no one gets exposed or injured during the clean-up. **DON'T RUSH, DON'T WORK ALONE, AND DO NOT CLEAN UP A SPILL UNTIL YOU ARE FAMILIAR WITH THE PROPERTIES OF THE CHEMICAL** \*as per the MSDS (Material Safety Data Sheet).

### Spill Kit Supplies

- Signs/Tape to secure spill area
- (i.e. yellow caution tape, "Caution: Spill – Please keep out")
- Brush and scoop for mixing and cleanup
- Plastic bags for cleanup (heavy-duty)
- Paper towels or absorbent pads
- Tongs to pick up glass/sharps
- Leak & puncture-proof containers for removal of contaminated glass/sharps
- Know the location of nearest eyewash station and emergency shower
- Absorbent materials: such as X-sorb\*or GREEN STUFF\* absorbents, or a 1:1 mixture of clumping cat litter and dry sand. **DO NOT USE ON Hydrofluoric Acid (HF) SPILLS** see information on HF (hydrofluoric acid will deteriorate absorbents)
- For acid spills: neutralizers such as sodium bicarbonate, or a 1:1 mixture of sand and soda ash (Sodium Carbonate), or Neutrasorb\*
- For caustic spills: Citric Acid powder (Sodium citrate)
- For biohazardous materials: suitable disinfectant, detergent, autoclave bags & tags
- For radioactive spills: appropriate detergent/soap
- Appropriate Emergency Response Plan(s) for Chemical, Biohazardous or Radioactive Spills

### Spill Kit Personal Protective Equipment (PPE)

- Eye protection - Face shield and / or goggles
- Lab coat

- Nitrile or other gloves resistant to the material spilled
- Protective covers for your shoes - rubber foot covers or boots
- Rubber or neoprene apron (optional)

\*Special circumstances may require an appropriate respirator with organic vapor/acid gas cartridge (NIOSH approved). Individual respirator fitting is required. Contact Diving Safety Officer for assistance.

### Spill Kit Location

The spill kit should be located in an area of the laboratory where it can be easily accessed and where a spill is least likely to occur. Large Yellow Spill kit cabinets are located in proximity of all chemical labs. Please familiarize yourself to those locations prior to any Chemical use/work.

## Hazardous and non-hazardous waste disposal

### Spills

Do not attempt any clean up without consulting the specified MSDS and conferring with BMSC RSO and or DSO.

#### Minor spills of solution/chemical

Put on gloves, lay down paper towels and locate BMSC staff

#### Major spills of acid/base/toxin

Put on gloves and lay down appropriate absorbent material from spill kit cabinets ( both Hazmats and barriers are available) and locate the BMSC staff.

### Radioactive Material

All spills of radioactive material on individuals or on lab coats must be reported to the Radiation Safety officer (Associate Director of Research)

### Biohazardous material

Biohazardous materials are not permitted for use at the BMSC.

## Chemical and Hazardous Waste Disposal

At BMSC, chemical and hazardous waste disposals are very different. We are far away from waste disposal facilities, so this means that these wastes are often properly stored for periods of time before being transported to a waste disposal facility. Therefore, it is very important that we dispose of wastes into the proper containers and that these containers are clearly labeled. In each fume hood, there are carefully labeled containers for different types of waste. Once waste materials have been put into waste containers inform the Associate Director of Research. If you are unsure of where to dispose of a certain chemical, please contact the Associate Director of Research (x 255).

## Poison Control

In the event of exposure to a poisonous substance, immediately call 911 to transport the patient to the Bamfield Health Centre and contact the BMSC First Aid Attendant (see Emergency Phone Number sheets posted throughout the campus). Poison Control should also be contacted regardless of the situation as they can provide first aid advice to help in the treatment of the patient.

Provincial Poison Control Centre: 1 800 567 5111

When a poisonous substance exposure event has, the containers should be kept for possible treatment procedures. All chemical substances on station are to have a current MSDS sheet available to also help in the treatment of any first aid matters (see: <http://ccinfoweb.ccohs.ca/msds/search.html>.)

### **When dialing from a BMSC phone, dial 9 for an outside line**

Emergency: 911  
Provincial Poison Control Centre: 1 800 567 8911



## General Laboratory Safety Regulations

Eating, drinking and smoking is prohibited in all laboratories.

Food and drink are not permitted in labs

Laboratory coats and appropriate eye protection (PPE) must be worn in laboratories when working with chemicals. Appropriate personal clothing must be worn, and shoes must be worn that provide full coverage of the feet.

Splashing hazardous materials onto exposed skin or into the eyes can be a commonly encountered occurrence. Skin exposed by inappropriate clothing; for example, shorts and skirts, has to be protected with appropriate laboratory attire; for example, an apron or gown that covers your exposed skin. Appropriate eye protection, such as splash goggles, face-shields, or UV blocking glasses must be available and worn if a risk of injury to eyes exists.

Procedures, which involve the liberation of volatile, flammable, or toxic materials, must be performed in a fume hood.

Long hair must be tied back when working with hazardous chemicals and open flames.

Laboratory coats and gloves shall be removed before leaving the laboratory.

Hands must be washed before leaving the laboratory

### Introduction to Laboratory Personal Protective Equipment (PPE)

Lab coats: Depending on the course, students may be required to bring their own lab coats to BMSC. There are some extra lab coats on hooks nears the Associate Director of Research's office.

Safety goggles: BMSC will provide safety goggles for any procedures that require them. There is a least one set of goggles located in each fume hood. Goggles must be worn during every use of chemicals at fume hoods.

Gloves: Some labs require the use of gloves. Ask students ahead of time if there are any latex allergies. BMSC can supply Nitrile (latex free gloves).

Proper clothing and footwear: Closed Toed Shoes must be worn at all times in labs. If there is a lab that requires lab coats and personal protective equipment (PPE) then students are required to dress appropriately for the lab.

## Glass and Sharps Disposal

In each lab, there are large buckets labeled “GLASS DISPOSAL”. Please ensure that you and your students put glassware in the labeled buckets and that the buckets lid is secured. If the glass is contaminated with biohazardous material, dispose of and instruct students to dispose of glass in the special biohazard/sharps containers. Contact Associate Director of Research for further information.

Sharps should ALWAYS be disposed of in proper biohazard marked sharps disposal containers. If your labs sharps container is missing or full please notify the Associate Director of Research or Diving Safety Officer and they will supply you with one.

## The BMSC Work Site

All BMSC employees and users are advised to wear sturdy footwear around the site (where appropriate employees must wear protective footwear, such as steel toe boots). When moving around the site at night it is the responsibility of BMSC staff and clients to use a flash light and carry a whistle. If working near a body of water a PFD must be worn.

## General Field Work

The BMSC has an active field work program. Prior to any field work, a field project proposal must be submitted and approved by Diving, Boats, Research and University Programs as applicable. Each member of the BMSC Community contemplating undertaking field work need to take the following factors into consideration while creating a Field Safety Plan including respective sail and Terrestrial Trips Plans. See Appendix 3.

- The state of health and fitness of all participants
- The risks associated with the work performed
- The minimization and mitigation of those risks
- The procedures for responding to accidents, injuries, property and environmental damage
- The availability of first aid care, supplies, and access to emergency medical treatment
- The environmental impact of the work performed
- The provision of training for all participants in field work regarding the risks associated with such work and the applicable safety measures
- The minimum and maximum numbers required in order to be safe at the field site
- Communications with BMSC and Emergency Services during the time in the field
- The appropriate vehicle/vessel required
- Following all BMSC Marine Safety Plan/Boat Policy regulations, including always making sure that a check-in person is used and informed of any changes in the sail plan.

## Field work/Trips

In heavy wave-exposed environments, it is necessary to wear a PFD at all times. Examples of locations include the intertidal at Cape Beale and on Seppings Island. In protected environments where sand meets shallow water, the decision to wear a PFD is at the discretion of the Instructor, TA and Program Coordinator. In all other circumstances a PFD must be worn and zipped up at all times. Field work conducted at night requires that a PFD must be worn and fully zipped up at all times, without exception. Appropriate lights must be taken and used. Headcounts of the number of students/persons are conducted routinely and classmates are encouraged to use the buddy system. If you going to be back from the field trip after 4:30pm, it is your responsibility to ensure that you have a check-in person (as written on your Sail Plan/Terrestrial Trip Plan).

## Potentially hazardous locations in the field

If you are entering a potentially hazardous location, stop to assess the risks realistically. Do not proceed if the risk is unacceptable or if you feel uncomfortable; do not be pushed into a risky situation by the need to make that field work/trip happen. Review agreed safety measures as per project proposal/fieldwork emergency plan and make everyone aware of the risks, how to minimize risk, and remind them of what to do in an emergency. All boat users are trained in Marine VHF radio operation, so if something happens to you (instructor and TA), then they will have to take over and call the Coast Guard or BMSC (depending on the emergency) and ask for assistance.

## Beach Safety

- Radios are to be on and kept on VHF Channel 09 with volume up.
- Always carry a safety backpack (turn on the red blinking light at night and carry a flashlight/headlamp)
- Make sure everyone is aware of the risks, how to minimize risks, and what to do in case of an emergency (whistle blast to get their attention; point out evacuation routes in the case of a rogue wave, tsunami or earthquake)
- Reinforce proper attire and footwear for the beach
- PFD's are always on and zipped up properly.
- Install a buddy system
- Head counts on arrival and before leaving the beach
- Rogue waves
- Set boundaries for the group and explain off limit areas (e.g. climbing of sea stacks is hazardous and is not permitted)
- Make ongoing risk assessments of the area and environment, and adjust activities according to the groups' physical ability.
- Use your whistle to rally the group in the event of an emergency

## Hiking safety

The same safety protocols and safety equipment that are used for beach trips are applicable here, with a few additions.

- Bring extra moleskin and remind persons/students to apply this at the earliest signs of blisters forming.
- While on the hike, have one leader at the beginning and one leader at the end of the group.
- Both of the leaders should keep their radios on Channel 09 in case one needs to get in contact with the other.
- Take lots of drink/rest/blister treatment breaks.

- Be aware of the abilities of all members of the hiking party and adjust accordingly. Tip: identify a slow hiker and tell them they are an excellent pace-setter. Allow them to walk at the front of the group in order to keep everyone together.
- Stay out of the forest during wind storms due to increased hazard of falling tree limbs.

### Special cases for heightened safety

West Coast Trail, especially Pachena Point hikes

Brady's Blowhole (rock scrambling required and a good low tide)

Brady's sea cave (must be <1.0 m tide and calm seas, rock scrambling required)

High winds

### Terrestrial Field/Trip Plans

Sometimes users may want to hike out to Pachena Lighthouse, Keeha Beach, or during a trip to Pachena, hike a little ways down the West Coast Trail, these activities require a Terrestrial Trip Plan. See Appendix 3.

Clients should be aware that some locations can be a strenuous hike for many users who are not used this level of physical activity or have knee/ankle problems. In addition, the rain forest is slippery! Even in the summer, some of the planks, logs and boardwalks are slick!

Ensure you have adequate supplies (water bottles, blister supplies, tensor bandages, medical tape, and bear spray etc.).

If you are hiking down the West Coast Trail, please sign in at the trailhead. Students should also sign in when on pleasure hikes down the West Coast Trail. Have a leader at the start and end of the group of people throughout the hike. Clients can sign out a radio/satellite phone/InReach device as appropriate (with fully-charged batteries) and first aid kit from BMSC University program department. An orientation of device protocols and operation is mandatory prior to use.

## Cougars and Bears

We are in cougar and bear country. Bear bangers and air horns are available and will be provided via your Department (Field Trip Programs, University Programs, Research) The best advice you can give is to travel in groups of two or more and make noise; keep talking as you travel. Carry whistles and flashlights (afterhours) when traveling between dorms and cabins etc. Bears recognize the human voice and will avoid you in most instances. Both animals are characteristically shy of adult-sized humans and would rather turn tail than attack. The most important thing to do in any encounter is to stay calm talk in a low voice and back away slowly. Report any animal sightings via email to the BMSC DSO ([diving@bamfieldmsc.com](mailto:diving@bamfieldmsc.com)). The DSO will call the conservation officer reporting services. Alternatively, you can call the reporting line yourself and let the DSO know you have done so for record keeping and safety purposes.

BC Conservation Officer Services: 1 877 952 7277

### Black bears

- Stay calm and keep the animal in view; avoid direct eye contact.
- Bears may interpret direct eye contact as a sign of aggression.
- Do not move toward a bear. Back away slowly as a group (don't run) and leave the area.
- Give the bear an escape path, they usually try to run away from you.
- Jump up and down, wave your arms and yell in low tones
- Try to look as large as possible
- Always fight back. Never play dead – it makes you easier prey
- Black bears can climb trees, so stay on the ground

### Cougars

- Stay calm and keep the cougar in view.
- Pick up small children immediately.
- Back away slowly, ensuring that the animal has a clear avenue of escape.
- Make yourself look as large as possible. Never run or turn your back on a cougar.
- If the cat shows intense interest or follows you:
- Respond aggressively. Convince the cougar you are a threat, not prey.
- Maintain eye contact with the cat, show your teeth and make loud noises.
- Arm yourself with rocks or sticks as weapons, but crouch down as little as possible when picking things up off the ground.
- Keep the animal in front of you at all times.
- If the cougar attacks, fight back. Use anything you can as a weapon.
- Focus your attack on the cougar's face and eyes.

Please read the available WildSafe BC brochures regarding bear and cougar safety.

Any wildlife encounter should be reported to the BMSC Dive & Safety Officer and other staff members immediately.

After hours, you can call the reporting line yourself and let the DSO know you have done so.

BC Conservation Officer Services: 1 877 952 7277

If the animal was sighted on campus, notifications will be posted for two weeks following a carnivore sighting on campus.

### Rogue Waves

Rogue waves are a possibility and can result in injuries or even death. Rogue waves are formed out on the open ocean and are caused by a collection of waves from different storm systems. These accumulated waves are larger than the surrounding waves. These are seen on shore as large surges that can catch people working in the intertidal area off guard. Never turn your back on the water at an exposed site. Observe the conditions and wave sets prior to beginning work. Have someone be a wave watcher with a buoyant heaving line at the ready. If someone sees a rogue wave coming, they are to yell to warn others, and everyone needs to cease their activity and head to high ground. If there is no time to run, hold on to whatever you can (try to lay flat with a tight grip like a chiton to reduce your drag exposed to the passing wave) but try to get out of the inundation zone. If someone is hit by a wave, the severity of the situation will dictate the response. Always discuss safety plan immediately, before entering these areas.

Whenever working in wave exposed areas or on rocky shorelines the following precautions are to be taken:

- Never work alone
- Always wear a PFD
- Keep your eyes on the surge and have a lookout to spot large waves for you
- Have an accessible throw-buoy or throw-line on hand and ready to deploy

#### **In the event that someone does get swept away by a rogue wave:**

- Have someone keep their eyes on the person and continually point to them to maintain their location.
- Call the Coast Guard on channel 16 using a VHF radio or \*16 on a cell phone to inform them that someone has fallen into the water.

- Using a buoyant heaving line, throw one end to them to assist them back to shore. Do not endanger yourself.
- Do NOT jump in after them as it is very difficult to make a water rescue in cold, surging waters.
- If you are with others, make sure that everyone stays back and are not in danger of falling.
- Once back on land the person may require treatment for hypothermia and other possible injuries. Be sure to have back up on the way from the Coast Guard and call BMSC on channel 09 to inform them of the incident.

## Field Trip Safety

The Field Trip/Course Instructor is responsible for the safety of the group on all field trips. The adult chaperones (teachers or parents) with a group are responsible for student behaviour. If an individual will not comply with our safety protocols, discuss the problems with the group teachers and the Program Coordinator. Instructors have the authority to cut an activity short or remove someone from an activity if they refuse to follow our safety policies.

### Before you leave the dock:

- Be familiar with the BMSC Marine Safety Plan/Boat Policy
- Check the marine weather using a VHF radio (channel WX08) or Environment Canada website for West Coast Vancouver Island South. Be aware of approaching weather fronts.
- Have your VHF radio turned on and accessible at all times. Ensure your radio has full battery
- Fill out a sail plan

Bring a field safety backpack and wear it at all times while on the beach or in the forest. Let the group know you carry a safety pack with a First Aid kit in case they get hurt. See “Field Trip safety back pack checklist”, below.

Ensure that any students/chaperones/persons that are Epi-pen carriers or carry a life-saving or required medication, have it with them. In addition, take an “epi-pen” labelled backpack. Ensure the epi-pen is in the pack and within its expiry date and that protocol is being followed. You do not need to bring the epi-pen pack with you on the Alta or Barkley Star as these vessels already have one on board, but you will need the epi-pen pack on the skiffs during Oceanography.



### Field Trip safety pack check list:

- First aid kit
- Emergency phone numbers laminated guide
- VHF radio (Turned on to 09 or 16 emergency)
- Some dry clothes and/or an emergency blanket
- A throw line
- Whistle
- Blinking red light for night trips
- Headlamp/Flashlight for night trips
- Water

### Action plans for earthquake/tsunami emergencies while in the field

In the event of a wide spread emergency such as an earthquake or a tsunami, you should follow the field protocol depending on where you are at the time and adjust accordingly.

#### Field Protocol:

- Get to safety as soon as you believe there to be a large-scale threat.
- Move to higher ground in the event of an earthquake or tsunami warning signal.
- Get a head count to ensure all members of department are present.
- Establish communication with a central command at BMSC or set up a radio relay to get information.
- Tend to first aid if required.
- Establish order and shelter while waiting for further instruction.

#### Rally Points:

##### BMSC:

- Assembly/Meeting Area A-traffic circle or if threatened (unsafe):
- Assembly/Meeting Area B-tennis court

##### Community Rally/Assembly points:

- East side: Fire hall
- West side: Fire hall
- Anacapa/Pachena Beach: House of Huu-ay-aht (may not be accessible i.e. flooding)

Note: Pachena Bay Campground office has landline and VHF Radio communications during their operation season.

### Field Emergency (Offsite) - Standard Operating Procedures

Get yourself/your group to safety as soon as you believe there is a large-scale threat. Move to higher ground (20m above sea level) in the event of an earthquake, a quick drop in water level, or if you hear the tsunami warning siren (a continuous siren resembling the sound of a police siren that sounds for up to minutes). At Brady's Beach, head for the hill above the beach. Proceed to the assembly area at the west side fire hall. At Pachena beach, move away from the West Coast Trail and Anacla to higher ground (this will be difficult as you will have to get across Pachena River). The assembly area is the House of Huu-ay-aht. On a skiff, get to land and head for higher ground and an assembly area. The best area to get to is BMSC. However, if you are down Grappler Inlet and it is unsafe to proceed to BMSC, use any dock that will lead to higher ground (boat launch preferably) and assemble at the Eastside Fire Hall.

Engage the other leaders/teachers to get a head count and ensure all members are present. Keep students calm and find shelter while establishing communication with BMSC and waiting for further instruction. Provide first aid as needed. If you find yourself separated from BMSC, you must send word any way you can. Establish communication with BMSC as soon as possible using VHF radio/ InReach or cell phone; emergency numbers are in your safety backpack. If BMSC does not reply: Radio or phone the Coast Guard/Joint Rescue Communications Centre or other contacts in the community. If no success locally [community services may be overloaded], contact Port Alberni RCMP [911] and request assistance in communicating your position and situation. Wait for instructions and consultation for a plan of action.

### Boats (Copes, Raider and Skiffs)

**Marine Safety Plan/Boat Policy:** BMSC operates under a Marine Safety Plan/Boat Policy (which acts as a statutory boating safety document). All BMSC employees and users are required to be familiar with and adhere to the BMSC Marine Safety Plan/Boat Policy. All users are to wear a fully zipped up PFD at all times on BMSC docks, piers and boats. See Appendix 4.

**Boat check-out:** BMSC requires that all boat operators receive a Boat Check-out and orientation to boating safety at BMSC. This includes practical boating competency, sail plan procedures, emergency VHF radio use, and emergency/safety equipment and procedures. Arrange for a boat check-out with Foreshore staff.

Pleasure Craft Operators Card (PCOC) and Small Vessel Operators Proficiency (SVOP) certification: All boat operators must possess a current certification appropriate to the vessel driven; SVOP, PCOC or equivalent acceptable certification (acceptable to MTC/CCG) and a current Marine First Aid Certificate or equivalent in person 16hr course recognized by a province or territory. It is the operator's responsibility to obtain certification prior to arriving at BMSC.

### MV Alta and Barkley Star

For safety information on the Alta and Barkley Star, BMSC employees and users should consult with the BMSC Marine Safety Plan/Boat Policy, relevant safety manuals and the 1<sup>st</sup> and 2<sup>nd</sup> skipper.

### Fueling Station

All fueling done on site is to be done only by those who are trained and approved to use the equipment. This is usually the two skippers and foreshore staff.

If you discover a spill:

Cover the fuel with a 'hazmat' (absorbent mats found in spill response kit at the fueling station and in marked cabinet inside boat shed)

Do not place in a dumpster, contact Foreshore Staff, the Diving Safety Officer or the Associate Director of Research to get directions on proper disposal.

Contact a maintenance worker and the Diving Safety Officer to let them know what happened and to assist in the clean-up.

### Diving and Snorkeling

For diving and snorkeling information BMSC employees and users must consult with the Scientific Diving Safety Officer in advance. Any snorkeling and diving done with BMSC equipment or from the BMSC needs to be discussed and approved by the Diving Safety Officer and diving control board. See BMSC Diving Safety Manual available on BMSC website. There is no recreational diving and snorkeling out of the BMSC. All BMSC Scientific Diving is held to the Canadian Association of Underwater Science (CAUS) standards.

### Building Safety

BMSC has numerous buildings that staff and visitors use on a regular basis. Each building will have unique facilities and emergency plans, there are some general safety items that all users should be aware of. Actively look for

evacuation floor plans located in the main hall on each floor of all the buildings in which they work. Below is a list of safety items that all members of BMSC should be familiar with. If there are problems with any item listed here or otherwise the Diving Safety Officer and the Head of Maintenance should be contacted.

- Evacuation paths and doorways should be free of obstacles and clutter
- Fire escape doors should not be locked
- Doors marked “Fire doors” are to be kept closed.
- Shelves should not store heavy items above four feet.
- Shelving units should be secured to floors and walls
- Broken glass and sharps should be kept in a provided Sharps container and properly disposed of
- If any ceiling panels are not fitted in, the room should not be worked in until they are replaced
- Any electrical wiring that is loose and unconnected should be reported immediately
- Stairways are to be kept clear at all times

## Electrical Safety (Including all digging)

The BMSC has a “Lock out Policy” and BMSC Lock-out Procedures relating to electrical safety. These are available from the Head Electrician. Before digging or drilling anywhere on the BMSC property you are required to contact the BMSC Electrician to determine the location of underground wires and to initial protocols.

Head Electrician

ext. 248

## Site Safety Orientation

WorkSafe BC stipulates that employers must provide the new or transferred employees with an induction. At the BMSC, this orientation is the responsibility of the Department Head or Supervisor and includes but is not limited to:

- Familiarization with safety and health procedures;
- Location of first aid facilities and first aid reporting;
- Emergency procedures;
- Procedures on reporting of incidents/accidents;
- Review of existing job specific hazards and any known problems;
- Hazard reporting procedures; and
- Supervisors’ expectations.

## Client safety orientations

The following tour is given to University Programs students, TA's and Instructors (Instructors and TAs must attend) at the beginning of each of the three summer program blocks (every three weeks) and the Fall Program by the Diving Safety Officer and UP dept. The same tour is given to PIs and graduate students conducting research on site by the Associate Director of Research – if any questions arise please contact the Diving Safety Officer for clarification. This tour includes:

- Main Building
- Foreshore
- COTC Building
- Eco-physiology Building
- Laboratory locations
- Boats Shop
- Dive Shed
- Maintenance Shop
- Floor plans and lodging information
- Dining hall information
- Location of safety equipment (Fire extinguishers, eye wash stations, First Aid room, AED, first aid kits, Spill kits, lab coats/PPE)
- Epi Pen protocol and site map
- Chemical spill response procedures
- Animal Care procedures
- Safety on campus, in laboratories, and appropriate behaviour
- Emergency contacts and Afterhours procedures
- Boat and dock safety
- Off limit areas
- Accident reporting
- Wildlife safety in regards to bears and cougars

#### University student and teaching staff orientation

- Tour of Foreshore, & foreshore etiquette  
How to find foreshore staff: Diving, Diving Assistant, Skipper 1, Skipper 2
- Emergency plan:
- Sirens: Tsunami siren, community fire and fire practice siren
- Rally points A (traffic circle) and B (tennis courts)
- Head counts: Profs/ TAs assign numbers to students.  
Handy in emergency scenarios.
- Fire: Pull alarm – call 911 – alarms not linked to a dispatch service– throw ladders on upper floors – help disabled - close doors as you leave – meet at rally point – then head count.
- Lab safety: Food, drink, close-toed shoes, pants, hair tied back.
- Fueling station: No fueling

- What to do with empty gas cans (put on pallet)
- If you find a spill – Has Matts in yellow spill kit bin
- Weekend fuel: Notify need during standard working hours
- Checkout Station:
- Red Sign + foreshore staff on/off duty
- Chart
- Tides
- Sail Plans: Times you can go out, check-in person
- Fill out meticulously; include detail. Only thing to refer to should you need to be assisted/rescued on water.
- Docks: no fishing, no swimming
- No trespassing on Alta or Barkley - strict penalties.
- No alcohol on foreshore/docks: not tolerated, boat privileges revoked immediately & permanently
- Rowboats: Sail plan sign-out on clipboard not chalk board
- Where to dock, what colored dock rails mean (yellow, white, red, etc.)
- Do not wear back pack in boats
- Appropriate foot wear
- Have a day pack stocked with “just in cases” recommended
- Pre-Trip Checklist:
- Check weather via Marine Environment Canada –West Coast Vancouver Island South-Website and VHF-WX08
- BMSC working channel VHF 09
- Sail Plan
- Lifejackets
- Phone and VHF numbers
- Look through safety bucket
- Chart
- Boat boundaries
- After hours permission – outside boundary permission
- What to do if... (Bad weather, emergency)
- How to use a VHF radio for emergency – battery – radio check at site-when to call for help:  
CCG VHF 16: PAN PAN, MAYDAY,
- Basic rules of the road covered in boat check outs
- Reminder to have PCOC/SVOP Cards at all times when operating boats.
- How to tie up (clove hitch & two half hitches)
- Where to tie up (ex: rowboats, use white marks painted on dock rails)
- If you run into issues, please let us know – write boat problems on chalkboard with your name or report directly to one of the Skippers as soon as something comes up.
- First Aid:
- OFA L2 Attendant Siobhan Gray (cell 250 720 1433, VHF 09, x222)

- and Chuck Spooner (cell 250 720 1433)
- Record/report injuries
- Bamfield Volunteer First Responder team via 911
- Location of first aid kits, & location of first aid room
- Epi pens – protocol, second dose only
- Do not diagnose, call 911/ Bamfield Health Clinic immediately
- -24 hr Epi pen locations
- Notify the Diving Safety Officer (Siobhan Gray) immediately, with any medical concerns or EpiPen needs, if you haven't done so already
- Wildlife safety in regards to bears and cougars

## Glossary

### **Emergency contacts**

When dialing from BMSC, dial 9 for an outside line.

Volunteer Emergency First Responders: 911

Ambulance: 911

Fire: 911

Police/RCMP 911

Bamfield Health Centre (0900-1700 Monday - Friday): 250 728 3312

Afterhours Nurse on Call: 250 730 6812

Missing persons on land: 911

Missing persons on the water

Joint Rescue Co-ordination Centre: 1 800 567 5111 / From a cell #727

Coast Guard Radio: VHF Marine Radio Ch. 16  
(Prince Rupert Dispatch) From a Cell \*16

Provincial Emergency Program (24hrs) 1 800 663 3456

Dangerous Goods Emergencies 613 966 6666 (emergencies)

Canutec (24hours) 613 992 4642 (info)

BC Conservation Officer Services: 1 877 952 7277



## Appendix

1. BMSC campus map- EpiPen locations
2. BMSC campus map- Hazard locations
3. BMSC Terrestrial Trip Plan
  - 3.1.1. BMSC Terrestrial Trip Plan-within paved roads
4. BMSC Marine Safety Plan/Boat Policy
  - 4.1.1. BMSC boat use quick reference
5. ACRD-BCEP Bamfield Community Emergency Plan

## BMSC Employee Commitment

Once the employee has read and understood the BMSC General Safety Manual, and their area-specific safety manual/SOPs (i.e. Research, FTP, Kitchen, etc.), they are to sign and give this document to their BMSC department head for further signatures. The department head will then pass it on to either the Director, Deputy Director or Operations Manager for signature. This Document will be kept in your employee file.

The undersigned BMSC employee has completed the following safety tasks, and signed below as true statements:

I have read and understand the BMSC General Safety Manual.

I have read and understand my area-specific Safety manual/User Agreement (i.e.: Research, UP, FTP, Kitchen etc.)

I have had a safety orientation with my department head and or BMSC Diving Safety Officer.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Once signed, please give to your Department head /Supervisor.

Department Head: \_\_\_\_\_

Dept.: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Once signed, please give to BMSC Director/Managing Director

BMSC Director/Managing Director:

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Once signed, please give to Administration to be filed in your employee file.