

Motion Picture Safety Primer

Production



second edition

Actsafes Motion Picture Safety Primers

This book is one in a series of three Motion Picture Safety Primers. The complete series includes:

- General Health & Safety
- Production
- Equipment, Vehicles and Locations

Feedback Request

We're always looking to improve the quality of our outreach and publications. If you have suggestions for improving this publication, we'd love to hear from you.

Feel free to contact us at 604.733.4682 or by email at info@actsafe.ca.

Note: The material in this publication is intended as educational information only. This publication does not replace the Occupational Health & Safety Regulation administered by WorkSafeBC. Employers and workers should always refer to the Regulation for specific requirements that apply to their activities.

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Introduction

The film and television industry is unlike any other—it presents a myriad of unique health and safety challenges that call for specialized knowledge and work practices.

This primer describes safety guidelines and requirements for the various departments and specialized activities that may occur during a production. The information may be useful to employers (production companies) and workers (cast and crew).

Occupational Health and Safety Regulation

This primer includes references to the Regulation, which describe legal requirements for health and safety in British Columbia. Visit WorkSafeBC.com for an online, searchable version of the Regulation and excerpts from the Workers Compensation Act.

Construction

Before work begins, the construction coordinator and crew members should identify potential hazards and control risks. Safety talks should be held before each shift starts or anytime a new product, machine or worker is being introduced to the work at hand.

- Use signs or barriers to keep people out of construction areas.
- Make sure work areas are well lit.
- Keep work areas clean and free of spills and debris.
- Clean up wood chips, dust, and other combustible materials.
- Cover or barricade floor openings.
- Wear personal protective equipment (PPE) as required (workers and visitors).
- Don't wear loose clothing, rings, or jewellery.
- Never enter an excavation deeper than 1.2m (4ft.) unless it is sloped and shored as required by the Regulation.
- Use equipment only if you are trained.
- Make sure machines are safely guarded.
- Keep cutting tools sharp.
- Check work materials for nails, bolts, and other flaws before running them through table saws, planers, sanders, or routers.
- Follow lockout procedures before repairing or maintaining equipment.
- Put away tools at the end of the workday.

Power tools

- Inspect tools before each use. Make sure electrical cords are in good condition.
- Wear safety glasses, a face shield, and other required PPE.
- Before plugging a tool in (or inserting a battery), turn the power switch off.
- Before performing maintenance on a tool or changing a blade or bit, unplug the tool (or remove the battery).
- Use ground fault circuit interrupters (GFCIs) outdoors or in damp settings, or use an Assured Grounding Program.
- You may also need to use insulating platforms, rubber gloves, or rubber mats.

Compressed air

- Don't exceed the recommended maximum working pressure.
- Check hoses periodically to make sure they are in good condition.
- Keep quick connect–disconnect couplings clean and in good working order.
- Keep hose couplings tight.
- Grip air hoses firmly when making connections.
- Don't use compressed air to clean your clothing or skin.

Welding and burning

- Wear required PPE such as flame-resistant clothing, leather gauntlet gloves and apron, and a welder's face shield.
- Don't weld, cut, or braze near painting areas or flammable materials.
- Identify and control potential fire hazards.

- Always keep a fire extinguisher available.
- Make sure there is sufficient ventilation for welding. Fixed workstations must have local exhaust ventilation.
- If local exhaust ventilation is not possible, wear a respirator.
- Remove coatings that could emit harmful contaminants such as lead or chromium.

For more information:

- Actsafe form: *Equipment Safety Inspection Checklist*
- OHS Regulation: Sections 20.78–20.95 - Evacuations
- *GFCIs and Assured Grounding Program* (WorkSafeBC bulletin)
- *Lockout* (WorkSafeBC publication)
- *Pain is Optional: MSI For Carpenters* (Actsafepublication)

Painting

Keep people away from painting areas, especially when you are using flammable liquids or toxic materials.

Safety talks should be held before each shift starts or anytime a new product, machine or worker is being introduced to the work at hand.

- Post “Wet Paint” signs.
- If possible, block off the area until paint is dry and the area has been ventilated.
- Don’t allow people into the area if harmful vapours are present.
- Schedule painting so other crews are not exposed to harmful vapours.
- Ensure proper ventilation in painting areas.

Hazardous materials

- Keep material safety data sheets (MSDSs) on site for all hazardous materials.
- Review safe handling requirements with workers who will work with or around the hazardous materials.
- Wear gloves when working with solvents.
- Store paints and solvents in storage cabinets designed for flammables.
- Keep containers closed when not in use.
- Follow written safe work procedures for cleaning up spills.
- Make sure emergency eyewash facilities are available.

Note: Use less-hazardous materials whenever possible. For example, use water-based paints instead of oil-based paints; and use hand cleaner, baby oil, or mineral oil instead of solvents to clean your hands or clothing.

Spray painting

- Use a well-ventilated spraying area or a booth with local exhaust ventilation.
- Wear an approved respirator with an appropriate protection factor.
- Consider a high velocity/low pressure (HVLP) system to limit overspraying.
- Make sure ventilation systems meet the requirements of the Electrical Safety Act.
- Turn off lamps used for set lighting.
- Ensure that ventilation systems include electrical and mechanical systems to control potential ignition sources.
- Don't allow smoking in painting areas.

For more information:

- OHS Regulation Table 8-1: Respirator protection factors
- Actsafe Paint Safety Guidelines # 1-7

Ladders

General guidelines

- Use ladders that meet CSA or ANSI standards.
- Don't use metal ladders near electrical wires or equipment.
- Inspect ladders before use—make sure they are free of any slippery substances.
- Remove ladders from service if they have loose or broken rungs, split side rails, or any other defects.

Straight or extension ladders

- Use the 4 to 1 rule: For every 4m (12ft.) the ladder rises, place the bottom of the ladder 1m (3ft.) away from the wall.
- Set the ladder on a firm, level base. Don't use other materials to gain extra height.
- Set the ladder against a solid wall or support. The ladder should extend at least 1m (3ft.) above any landing.
- Tie, block, or otherwise secure the ladder.

Working on ladders

- Face the ladder while climbing and maintain your centre of gravity.
- Grip both rails firmly while climbing, and maintain three-point contact at all times (two feet and one hand or one foot and two hands).
- Don't lean over the side of the ladder, over reach, or "walk" the ladder.
- Don't stand or sit on the top two rungs, unless the ladder was designed for this.

- Don't overload the ladder. Only one person at a time should use a ladder.
- Don't use ladders outdoors in high winds.

For more information:

- *Actsafes Ladder Safety Guide* Poster
- *Actsafes Stepladder Safety Guide* Poster
- *Working At Heights* (Actsafes Publication)

Scaffolds

A qualified worker, usually the construction coordinator or key grip, must supervise erection and dismantling of scaffolds.

- Follow the manufacturer's instructions and WorkSafeBC requirements.
- Erect scaffolds on solid footings.
- Use screw jacks to level scaffolds—don't use apple boxes, wedges, or 246s.
- Secure and rigidly brace the poles, legs, and uprights.
- If a scaffold is draped or covered in any way, install bracing according to the instructions of a professional engineer.
- If lighting throws off the scaffold's weight balance, use counterweights or bracing.
- If a scaffold is higher than three times its minimum base dimension, secure it to the structure or use guylines.
- Don't erect scaffolds near power lines or other high-voltage electrical conductors.
- Don't mix and match components.
- Keep assembly drawings on site.
- Install any required guardrails or toeboards.

Working on scaffolds

- Inspect scaffolds daily before using them and after any modification.
- Replace damaged components.
- Don't exceed the manufacturer's load specifications.
- If guardrails cannot be installed, use fall protection equipment.

- Use a ladder, stairway, or other safe means to access scaffold landings. Don't climb outside between landings.
- Don't remain on a rolling scaffold while others are moving it if the scaffold is higher than twice its minimum base dimension.
- Don't remain on a rolling scaffold if you are moving it and the platform is higher than 1½ times the scaffold's minimum base dimension.
- Don't work on a draped scaffold in windy conditions unless a professional engineer has determined that it is safe to do so in those conditions at that particular site.

For more information:

- OHS Regulation Part 13: Ladders, Scaffolds and Temporary Work Platforms
- *How to Erect Access Frame Scaffolding* (WorkSafeBC poster)
- *Working At Heights* (Actsafes Publication)

Fall protection equipment

Workers must use a fall protection system when working at heights of 3m (10ft.) or more, or when a fall from a lesser height carries an unusual risk of injury.

If workers are at heights of 7.5m (25ft.) or more and are not protected by permanent guardrails, the production requires a written fall protection plan, which must also include a rescue plan, should a fall occur.

Supervisors must ensure that workers are trained in fall protection systems and that they understand procedures. Keep training records. Whenever possible, choose fall protection in the following order.

1. Fall restraint systems

- Guardrails are preferred for preventing falls.
- Safety belts or harnesses attached to securely anchored lanyards keep workers away from edges.

2. Fall arrest systems

- Safety harnesses attached to securely anchored lanyards limit falls.
- Don't use safety belts in fall arrest systems.

3. Safety nets and control zones

- Use safety nets only if fall restraint or fall arrest is not possible.
- You may also need to set up a control zone and a safety monitoring system.

Equipment standards

- Fall protection equipment must meet the requirements of the Regulation.
- Climbing gear may need to be certified by a professional engineer.
- Before each work shift, a qualified person must inspect all fall protection devices.
- Crew members must also inspect their fall protection equipment before each use.
- Keep inspection records, and remove defective parts from service immediately.
- If a device arrests a fall, remove it from service and have it inspected and re-certified by the manufacturer or a professional engineer.
- Keep fall protection devices free from dirt, grease, chemicals, and UV rays.
- Store fall protection equipment separately from sharp tools and other equipment.

For more information:

- OHS Regulation Part 11: Fall Protection
- Actsafe *Fall Protection Guide* Poster

Lifting

Sprains and strains are the most common injury in motion picture production.

- Avoid lifting heavy or awkward objects. Instead, use dollies, carts, or forklifts.
- Lift smaller loads by planning and adjusting weight distribution ahead of time.
- Get help from others if you need it.
- Use safe lifting technique.

Safe lifting technique

1. Get a good grip—Use your hands, not just your fingers. Wear gloves, if necessary.
2. Position your feet shoulder-width apart for a stable base. Place one foot next to the load and one behind it.
3. Tighten your stomach muscles to tuck in your pelvis and help your back stay balanced.
4. Bend at your knees, not at your waist. Lift using the strong muscles in your legs.
5. Hug the load as close to your body as possible.
6. Lift smoothly without jerking.
7. Keep your back upright and avoid twisting. Instead, pivot with your feet.

For more information:

- *Actsafes Guide to Preventing Low Back Pain* poster
- *Pain is Optional: MSI for Carpenters* comic book (Actsafes).

Lighting and electrical safety

General lighting guidelines

- Use fall protection equipment when setting up overhead lighting above 3m/10ft.
- Support fixtures so they will not fall. Use safety wire or chain to suspend fixtures. Use approved safety devices as backup protection (ie. Safety cable).
- Weight lighting stands with sandbags so they will not tip over.
- Cover arc-type lamps such as HMIs in wet weather to prevent rain from entering the unit and ballast.
- When using open-faced lighting units, provide protection from flying glass in case the bulb explodes.
- Ensure bonding (grounding) for scaffolds or other metal grids used to support lighting.
- Before using grounded equipment, test for continuity between the plug's ground pin and the metal parts of the equipment (ie. check for bonding).
- Protect workers against skin and eye damage. HMIs emit greater amounts of UV light than tungsten lamps.
- Before relamping or repairing a light, turn it off and disconnect it from the power source.

Electrical guidelines

Gaffers, best boys, and generator operators are responsible for the supervision of electrical safety. Consult them before using any electrical system, including on-set practicals.

Qualifications

- All electrical work, whether in the studio or on location, must be performed under a valid electrical permit and under the supervision of a person with a valid Field Safety Representative (FSR) certificate relevant to the work being performed.
- The FSR must be present as the work is being done, guiding and assisting the work being performed.
- The ratios for supervision of Restricted Class work (ie. an FE) are specified in the Electrical Safety Regulation as one FSR is permitted to supervise no more than two qualified individuals. The required supervision ratios must be maintained at all times.

General guidelines

- All electrical equipment must be of an approved type. Consult your FSR or permit holder to check your electrical equipment for the required approvals.
- Before using electrical equipment, check it for signs of excess wear, frayed cords, or exposed current-carrying parts.
- Remove defective equipment or power cords from service. Replace or repair them.
- Lock out and de-energize electrical equipment before working on it.
- Report electrical hazards to the FSRs, such as gaffers, best boys, or generator operators immediately.
- Where required, use ground fault circuit interrupters (GFCIs).

- Protect cables from damage and do not tie cords in knots. In high traffic areas, protect cables and reduce tripping hazards by using mats or cable troughs.
- Check for overhead power lines before using cranes, scaffolds, or other elevated equipment. Stay outside the limits of approach specified in WorkSafeBC Regulations.

Generators

- Only qualified and certified operators should operate and maintain generators.
- Follow the manufacturer's instructions.
- Use generators in open spaces for good ventilation—not near building air intakes.
- Make sure generators are grounded and bonded in compliance with the Electrical Safety Regulations and the Canadian Electrical Code.
- Start and stop generators under no-load conditions.
- Supervise power systems and generators at all times while they are running and energized.

For more information:

- *Lockout* (WorkSafeBC publication)
- *Actsafes Safety Bulletin #23: Lighting Systems and Other Electrical Equipment*
- Electrical Safety Regulation
- Safety Standards General Regulation
- Safety Standards Act
- Canadian Electrical Code 22.1-09 Part 1

Pyrotechnics

Only trained and certified workers can plan, rig, and detonate pyrotechnic special effects. The special effects coordinator has final say on all safety matters related to pyrotechnics, and must remain on set during preparation, placement, testing, and firing of pyrotechnics.

- Before using pyrotechnic special effects, get all the required licenses and permits.
- Use, handle, store, and transport pyrotechnic materials in accordance with federal, provincial, and municipal laws.
- Before using pyrotechnics, determine potential hazards and assess risks.

Avoid these common mistakes

- Triggering the effect prematurely.
- Using more material than necessary.
- Not having fire extinguishers of a suitable type and capacity available.
- Assigning duties to inadequately trained or inexperienced workers.
- Entering danger areas before the special effects coordinator has inspected them and the all-clear signal has sounded.

Call sheets and safety talks

- Include safety information related to pyrotechnic special effects on call sheets. Specify restricted or no-access areas as well as viewing locations, if available.
- Safety talk: Perform a dry run before filming. Hold another talk if there are changes.

Secure the danger area

- Set up a danger area around the effect.
- Allow only authorized cast and crew into the danger area.
- Keep minors off the set completely.
- Post warning signs around the area.
- If necessary, post security guards.
- Wear PPE such as safety glasses and hearing protection in or near the danger area.

Prepare for emergencies

- Have emergency workers and fire extinguishers standing by.
- Inspect emergency equipment.
- Make sure crew members are trained to use emergency equipment.

Eliminate possible ignition sources

- Smoking and open-flame ignition sources are prohibited within 15m (50ft.) of pyrotechnic areas.
- Post “No Smoking” signs wherever pyrotechnic materials are used, stored, or handled.
- Turn off radio transmitters, including cell phones. Consider prohibiting all radios and cell phones near pyrotechnics.

Use open flames safely

- Notify the local fire department.
- Use approved gas lines that meet building and fire codes.
- Assign a responsible crew member to handle, place, and control open flames.
- Ensure that anyone working with open flames is trained in firefighting techniques.

Use open flames safely (cont.)

- Explain emergency procedures (including escape routes) to cast and crew.
- Keep flammable materials away from open flames.
- Apply a fire-retardant material to greenery and other combustible materials.
- Keep fire extinguishers ready and make sure you know how to use them.
- Keep fire exits clear.

Inspect the blast site for unexploded charges

- Once the pyrotechnician is confident that all devices have detonated, he or she must assess the blast site to make sure there are no unexploded charges.
- If there is a possible misfire, the pyrotechnician must wait at least 10 minutes before assessing the blast site.
- No one else should enter the danger area until the pyrotechnician declares it is safe.

For more information:

- *Actsafe Safety Bulletin #16: Pyrotechnic Special Effects*
- OHS Regulation Part 21: Blasting Operations
- Contact the Explosives Regulatory Division of Natural Resources Canada regarding pyrotechnic special effects certification

Smoke and fog

Dry ice is the safest way to generate fog, except in enclosed spaces where carbon dioxide can accumulate to dangerous levels. The choice of substance depends on where it will be used, and how long exposures may be.

- Follow the manufacturer's guidelines. Don't alter the mix or heat substances above the specified temperatures.
- Keep MSDSs on site for substances used to create smoke or fog.
- Use the minimum chemical concentration for the minimum time necessary to achieve the desired fog or smoke effect.
- Don't exceed exposure limits or reduce the oxygen concentration in the air below the normal level.
- If necessary, an occupational hygienist should test for exposure limits and oxygen concentration.
- Post notices at set entrances stating that smoke or fog is being used.
- Keep non-essential cast and crew off set.
- Children, the elderly, and people with allergies, asthma, or other respiratory problems should avoid smoke and fog.
- Evacuate nearby areas where stray smoke or fog could accumulate.
- Make sure cryogenic gases do not pool in lower areas such as orchestra pits.
- Periodically ventilate interior sets to exhaust the smoke or fog.
- The production company must provide NIOSH-approved respirators to workers at risk of exposure.

Not recommended substances

- Known human carcinogens, including any particulates of combustion.
- Fumed and hydrolyzed chlorides.
- Ethylene glycol, diethylene glycol, and triethylene glycol.
- Industrial mineral oils.
- Aliphatic or aromatic hydrocarbons, including petroleum distillates.
- Hexachloroethane heated above its combustion point and cyclohexylamine.

Allowable substances

- Propylene glycol, butylene glycol, and polyethylene glycol.
- Glycerin products.
- Cryogenic gases such as carbon dioxide or liquid nitrogen.

Call sheets and safety talks

- Call sheets: Specify the products, when and how they will be used, and who is responsible for local exhaust ventilation and respirators.
- Safety talk: Explain how smoke or fog will be used, potential hazards, and safety precautions.

For more information:

- OHS Regulation Part 5: Chemical Agents and Biological Agents
- *Actsafes Safety Bulletin #10: Artificially Created Smokes, Fogs & Lighting Effects*
- *Actsafes Safety Bulletin #10a: Air Quality*

Polyurethane and polyester resins

Some props are built using polyurethane or polyester resins, both of which contain isocyanates. Repeated exposure to isocyanates can cause severe respiratory asthma.

- If your production uses polyurethane or polyester resins, develop written safe work procedures for using them.
- Wear approved air-supplying respirators when using these resins.
- Wear protective clothing, gloves, and face protection—some isocyanates can be absorbed through the skin.
- Make sure nearby unprotected workers are not exposed.
- Use local exhaust ventilation, or schedule the building of props or models when other workers are not around.

For more information:

- *Actsafes Safety Bulletin #10a: Air Quality*

Mechanical devices and articulated sets

The production company must ensure that mechanical devices or articulated sets are:

- Capable of safely performing the functions for which they are used.
- Operated according to manufacturer's instructions, safe work practices, and the requirements of the Regulation.
- Properly inspected, tested, and maintained.

If a production company requires a mechanical device or articulated set to be created, the production company is considered the supplier of that device or set.

- Suppliers must provide directions for the safe use of devices or sets. Directions can be developed in consultation with a qualified person such as a professional engineer.
- Suppliers must ensure that devices or sets are safe when used as specified.

For more information:

- OHS Regulation Part 4: General Conditions, sections 4.30 - 4.12

Firearms

Firearms handler responsibilities

- Take charge of firearms and ammunition, and keep an inventory of them.
- Know the requirements for handling, transporting, and storing firearms, ammunition, and black powder.
- Comply with local, provincial, and federal regulations.
- Be familiar with the specific firearms being used and their safety requirements.
- Know how to load, unload, dismantle, clean, and reassemble the firearms.
- Check firearms before and after each use.
- Clean all firearms daily after use.
- Load and unload all firearms. If this is not practical, supervise designated, trained assistants.
- Use blank ammunition only. Use the lightest load necessary for the scene.
- Allow any actor who will be standing near the line of fire to watch the loading.
- Train actors and stunt performers in the safe use of firearms.
- Take firearms away from actors and stunt performers between takes, if possible.

Use firearms safely

- Treat all firearms as if they are loaded.
- Never point firearms at anyone, including yourself, even during a scene.
- Don't hand firearms to others barrel first.
- Leave the safety engaged until immediately before using the firearm.

Use firearms safely (cont.)

- Don't place your finger on the trigger until you are ready to shoot.
- Know where your intended target is. Don't fire toward another person.
- Don't discharge a firearm that has dirt, sand, or anything else blocking the barrel.
- Immediately report misfires or jams to the firearms handler. Remove the firearm from service until it is repaired.
- Wear eye and hearing protection when necessary.
- Place lexan shields between crew members and firearms.
- Use shields or other appropriate PPE for camera operators near point-blank shots.

Call sheets and safety talks

- Call sheets: Specify when weapons are scheduled to be fired. Attach firearms safety guidelines.
- Safety talk: Explain which firearms and blank ammunition will be used, potential hazards, and safety precautions.

For more information:

- *Actsafe Safety Bulletin #1: Safety with Firearms*

Airplanes and helicopters

General guidelines

- Conduct a risk assessment.
- Maintain single-channel, dedicated two-way communication between the ground and the aircraft.
- Keep non-essential cast and crew at least 150m (500ft.) away from the aircraft.
- Don't smoke within 30m (100ft.) of the helicopter, plane, or support truck.
- Anchor the aircraft.
- Secure lights with sandbags.
- Be mindful of rotors or propellers.
- Protect workers and equipment from flying debris.
- Make sure the pilot is in the pilot's seat and in control of the aircraft at all times.
- Camera operators in aircraft must wear seat belts and safety harnesses.
- Secure cameras separately from the camera operator.
- Use a locked-off camera if there are concerns about flying low and banking.

Responsibilities and documentation

- The pilot is the final authority on all flight operations.
- Both the pilot and the stunt coordinator are responsible for aborting unsafe stunts.
- Changes in stunts require authorization from the pilot and the stunt coordinator.
- Pilots should have the required Transport Canada registration documentation and operating certificates.

Responsibilities and documentation (cont.)

- Pilots should be experienced in film or television work.
- Pilots must get the necessary waivers and certificates before any flight involving an unusual activity (for example, a stunt).
- Keep all waivers and certificates on site.
- All flights must meet Transport Canada regulations. Contact Transport Canada in writing at least two weeks before using aircraft.

Call sheets and safety talks

- Call sheets: Note scheduled use of aircraft. Attach safety guidelines and risk assessments.
- Safety talk: Discuss the filming sequence, hazards, and safety precautions.

Approach helicopters carefully

- Make eye contact with the pilot before approaching. Proceed only after the pilot has acknowledged your presence and waved you forward.
- Approach and leave the helicopter from the front, walking in a crouch.
- Don't walk around the helicopter tail.
- Don't walk downhill toward or uphill away from the helicopter.
- Carry all objects horizontally below waist level so the rotor will not hit them.

Clear landing and takeoff areas

- Clear non-essential workers from the area during takeoff and landing.
- Use safe camera placements.
- Keep areas free of debris.

- Wear eye protection when working near helicopters that are landing or taking off.
- Don't wear a hat or loose clothing.

For more information:

- Actsafe Safety Bulletin #11: Fixed-Wing Aircraft*

Skydiving

Skydivers working in film and television production must have a current certificate issued by a nationally or internationally recognized certification organization such as the Canadian Sport Parachuting Association.

Call sheets and safety talks

- Call sheets: Note scheduled skydives. Attach safety guidelines.
- Safety talk: Perform a dry run with cast, crew, and pilots. Explain the filming sequence, potential hazards, and safety precautions.

For more information:

- Contact Transport Canada and the Canadian Sport Parachuting Association for information on certification requirements.
- *Actsafe Safety Bulletin #14: Parachuting and Skydiving*

Underwater diving

Employers must submit a *Notice of Project* for diving activity, or notify WorkSafeBC by phone, at least 24 hours before commencing a diving operation (see WorkSafeBC Regulation, Section 24.9 to see when and what is required)

In most cases, anyone using diving equipment while filming or being filmed underwater must be certified as an occupational diver.

In some circumstances, WorkSafeBC may issue a variance allowing a principal performer to film an underwater close-up. In some situations at shallow depths, the performer may be allowed to film without a variance

Certified occupational diver requirements

- Meet CSA Standard Z275.4-97 Competency Standard for Diving Operations, or another standard acceptable to WorkSafeBC
- Be competent with all the equipment they will use during the production
- Have current medical certification from a physician knowledgeable and competent in diving medicine (contact WorkSafeBC for a list of such physicians)

Divers and divers' tenders certification requirements

- Cardiopulmonary resuscitation (CPR)
- Oxygen management
- Dive-accident management

Uncertified principal performers

An uncertified principal performer will be allowed to work underwater if all of the following conditions are met:

- A certified occupational diver assesses the performer's ability and considers the performer competent to film underwater.
- A certified occupational diver accompanies the performer at all times while the performer is underwater.
- If the performer has a valid recreational diver's certificate, he or she goes no deeper than 4.5m (15ft.).
- If the performer does not have a valid recreational diver's certificate, he or she must go no deeper than 2m (7ft.).
- The performer is only in the water for the time needed to perform the shot.

The dive supervisor must check the principal performer's health and fitness each day before the performer dives. Performers should not dive if they are suffering from a respiratory infection, cold, or flu.

For more information:

- OHS Regulation Part 24: Diving, Fishing and Other Marine Operations
- *Actsafe Safety Bulletin #7: Scuba Equipment Recommendations*
- *Actsafe Safety Bulletin #7a: Addendum for SCUBA Equipment*
- Contact WorkSafeBC or Actsafe.

What is Actsafe?

Actsafe is dedicated to the promotion of health and safety in British Columbia's motion picture and performing arts industries. Our role is to provide arts workers and employers with the necessary support to ensure everyone goes home safely at the end of the day.

Actsafe is governed by the industries it represents. We operate through two standing committees that represent the motion picture and performing arts communities. Membership on these committees includes both employer and worker representatives.

Our mandate includes providing subsidized training and free industry-related communication, education, services and advice.

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