

MANUAL ON PRACTICAL RECOMMENDATIONS FOR EMERGENCIES

FIRE

If you discover the fire:





- Stay calm.
- Notify the emergency group by calling **extension 3333** or by activating the alarm, regardless of the size of the fire and without waiting to see whether you can put it out.

Report:

- 1. Where the fire or smoke is.
- 2. The quantity of smoke or fire.
- 3. If there are victims or people at the risk of being caught by the fire.
- Disconnect any electrical line, system or device that is burning only if you can do so without running a risk.
- Evacuate the affected area in orderly fashion towards the "safety zone" located in the central garden.

Alarms in general:

- ➤ How you should act:
- Pay attention to the alarm, whistles and/or warnings.
- Stay calm
- Stop work immediately and prepare to evacuate the building.
- Close windows, leave your office and close the door. Remember to bring any visitors that you may have with you at that time.

EVACUATION

The basic principle of evacuation is to vacate a zone affected by a fire or earthquake in order to minimize the possibility of harm to individuals. This is more important than fighting the fire or saving things.

- ➤ How you should act:
- Leave your location and move towards safety zone located in the central garden when you hear the alarm or siren.
- Stay calm during the evacuation and move in orderly fashion, always on the right side of the hall or corridor through which you are passing. Remember that the left side will be occupied by firemen or rescue squads arriving to control the fire or earthquake damage.
- Generally, follow the instructions of Monitors or the Emergency Chief and do not take any initiatives on your own.
- Bring any visitors you may have with you at that time.
- Do not return.

Emergency Manual version 2006

- If there is smoke, crawl at the floor level.
- Move solely towards the "safety zone." Do not stay near the affected site nor jeopardize your physical well-being.
- Gather together in the safety zone with people from the sector where you usually work in order to take a head count.

USE OF FIRE EXTINGUISHERS

Fire extinguishers must be used, to the extent possible, by trained people.

USE OF FIRE EXTINGUISHERS IN FIRES



- 1. Activate the fire alarm.
- 2. Use extinguishers apt "solely for the beginning of a fire," and only if you know how.
- 3. Do not activate the fire extinguisher until you have reached the fire location.
- 4. Remove the safety lock.
- 5. Test the extinguisher before approaching the fire, shoot a short spurt to confirm that the extinguisher is working correctly.
- 6. If it is an open location, approach the fire in the direction of the wind. The escape route must be behind you, whether you are inside or outside.
- 7. Point the extinguisher at the base of the fire, spraying continuously in a fan-like motion. Open the valve at a prudent distance and if you can, move towards the fire until it is fully extinguished.

TYPES OF FIRE

Fires may be put out depending upon the combustible that caused them. This is why they have had to be classified according to certain characteristics, which we do below:



Type A: are fires that are caused by paper, cardboard, wood, plastic, etc. They can be put out with water.



Type B: are fires that are caused by combustible liquids, oil, gasoline, kerosene, alcohol, ether, paints, waxes, solvents, etc.



Type C: are fires caused by electrical short circuits in devices, engines or electrical equipment in general. Dry chemical powder extinguishers (ABC) or carbonic gas extinguishers (CO_2) must be used.

Emergency Manual version 2006



Type D: is a fire caused by combustible metals such as aluminum, zinc or titanium, and "non-metal" elements such as magnesium, sodium, potassium, etc. This type of fire requires a specific type of extinguisher because it burns at very high temperatures (above 3300°C).

☐ General preventive measures:

- Take note mentally of existing escape routes, the location of alarm systems and extinguishers throughout the building.
- Escape routes must always be clear.
- Know how to use extinguishers correctly.
- Do not take any action that involves a danger of fire. If possible, stop or report any action by other people that signifies a danger of fire.
- Keep the work place clean and orderly.
- Move calmly and carefully towards the safety zone during evacuation. Do not take any unnecessary risks and follow instructions.
- Avoid accidents, do not run.
- At the end of the work day, confirm that everything is in order, that electrical machines and devices have been turned off and that the windows have been closed.
- Fire extinguishers must not be removed from their location.
- Never cover safety signs. They must be visible at all times.
- Report any incident involving people or materials that have suffered damage or that may cause damage to your Area Monitor or the Emergency Chief when they may be a reason for an accident.

MISTAKES THAT CAN COST YOU YOUR LIFE

- Not participating in evacuation drills.
- Delaying in sounding an alarm.
- Not knowing escape routes.
- Just waiting for the incident to end.
- Trying to extinguish a fire that is out of control.
- Going to the wrong locations.
- Going back.
- Running through smoke instead of crawling.
- Underestimating the danger.

THE OFFICES OF ESO VITACURA ARE NON-SMOKING AREAS

- Smoke solely in open locations and put lighted cigarettes or butts in ashtrays. Do not throw them in trash cans or garbage cans.
- Common areas, such as the cafeteria, hallways, library, conference rooms and lavatories, are non-smoking areas.

SEISMIC MOVEMENT

Seismic movement is defined as "the abrupt movement of the Earth" caused by the release of energy accumulated over a long period of time. The difference between seismic movement and an earthquake is the magnitude of the movement and its duration.

Seismic movements are sudden and unforeseeable movements but their intensity and duration are relatively minor. On the other hand, earthquakes are strong earth movements of prolonged duration that generally cause significant damage to property and persons.

IN THE CASE OF A SEISMIC MOVEMENT



Given the difficulty in forecasting seismic activity, we should concentrate on trying to lessen personal damage that generally results from unwise action rather than the seismic movement itself.

➤ How you should act:

- Stay calm
- Stop work immediately.
- Protect your body by getting under a table or desk and if it is moving because of the quake, you should move together with the furniture. If this is not possible, protect your head with your arms while maintaining a vision of what is happening around you.
- Prepare to evacuate the building following the instructions of the Monitors or Emergency Chief.
- Coordinate the evacuation of the affected area in orderly fashion towards the "safety zone" located in the central garden of ESO-Vitacura.
- Disconnect electrical devices and leave your office. Close the door. Remember to bring with you any visitors you may have at that time.
- Do not return
- Gather together in the safety zone with people from the sector where you usually work in order to take a head count.

> General recommendations:

- Immediately stop work and concentrate on what is happening around you.
- Stay calm. Do not run. Walk compliantly and, if necessary, try to calm those around you.
- Watch and evaluate what is happening around you to determine what steps to take in the following order: protection / observation / evacuation.
- If the movement is intense or prolonged, put yourself in the closest safest location, ideally under resistant tables or chairs.
- Do not leave your shelter while the movement is under way. Avoid using stairs because you may lose your balance.

Emergency Manual version 2006

- Leave only when you feel that the quake has stopped or the Monitors or Emergency Chief indicate.
- Never light matches or another type of flame that may cause a fire because of gases or fuels leaking due to the quake.
- Do not return to your work place. Wait for instructions from the Monitors or Emergency Chief.

• Least Risky Shelters:

- 1. Under desks or tables. Avoid the risk of falling elements such as binders, adornments, lamps, etc.
- 2. Beside structural pillars.
- 3. Office corners away from windows.
- 4. Under the door frames.

• Riskiest Zones:

- 1. Close to large windows, glass windows, mirrors, under lamps and other glass fixtures.
- 2. Close to book shelves, shelves in general and other furnishings that may move and fall easily.
- 3. Stairs and balconies.
- 4. Cornices, chimneys or electrical wires.

> If you are driving:

- Stop the vehicle in the safest location possible, preferably in an open area, and not under wires or other objects that may fall on the automobile.
- It is recommendable to remain inside until the movement has stopped. Be on the watch at all times for any new potential danger.

SERIOUS ACCIDENTS

- ➤ How you should act:
- Stay calm at all times.
- Report the accident immediately to extension 3333 or the Emergency Chief.
- Stay beside the wounded. Cover him. Give him support and collaboration. Talk to him enough to keep him awake.
- Keep the accident victim in a safe horizontal position. Do NOT move him (her) if you suspect there is a cervical injury.
- Apply the necessary first aid only if you are trained to do so. If not, request help.
- Make sure that the victim's respiratory tracts are free of foreign objects.
- If the victim is conscious, remember everything he says.
- If the victim shows signs of a fracture, you must immobilize the affected area before moving him. In general, do not force the victim to rise or move.
- Avoid the obstruction of the respiratory tracts (objects and vomiting). If necessary, turn the victim on his side to avoid suffocation.
- Do not administer medication.
- Do not offer victims anything to drink.
- In the case of electrical burns, first cut off the electrical supply if you are trained to do so. If you cannot, isolate the victim (away from the energy source) by means of a wooden stick or piece of wood.

□ Reducing the risk of accident is easy if you follow simple preventive measures:

- Closing drawers and cabinets immediately after using them. Avoid blows, tripping and possible falls. Keep your work area orderly and organized at all times.
- Do not stack machines, boxes, binders or paper on armoires, shelves or filing cabinets.
- Do not leave papers on the floor.
- Do not move loads that obstruct your view. If the load is heavy, request help.
- Do not go up or down stairs while reading nor turn around to talk.
- Do not run in stairwells or through halls.
- Do not carry hot beverages (tea, coffee) from the cafeteria to your work location.

ASSAULT

- ➤ How you should act:
- Stay calm and serene.
- Do not resist. Cooperate with the criminals instead.
- Retain as much information on the criminals as possible, such as: color and length of hair, height, appearance (fat, thin, tall, short), shape of the face, type of mouth, nose, scars, skin spots, moles or other obvious details, the color of skin, clothing, approximate age, etc.
- Endeavor to remember in detail what occurred in order to recount it to investigators when pertinent.
- Avoid exchanging impressions with other people. This usually involuntarily distorts the events.
- Do not make any statements nor provide information to persons outside of the organization.

Only the ESO Administrator, the Representative and the Public Relations Officer are authorized to release information on the situation to international, government and regulatory agencies, the press, radio and TV, etc. Therefore, all employees shall refrain from disclosing any information, howsoever minimal.

□ Preventive Measures:

- Stay alert to unknown persons and/or suspicious movements.
- Keep objects of value and classified documents under lock and key.
- Maintain at all times a "mental picture" of the objects of great value that are in your custody.
- Do not leave packages or other elements visible inside your automobile.

ATTACKS

- ➤ How you should act:
- Stay calm.
- If you see any suspicious package or device or receive a call indicating that an explosive device
 has been placed, give prompt notice to Administration and/or the Emergency Chief to receive
 instructions.
- Do not move or touch any elements you are unfamiliar with and/or of unknown origin and stay away from them. Warn other people who may be approaching carefully and tactfully.
- Follow the instructions of the Monitors or the Emergency Chief.

Emergency Manual version 2006

- Evacuate the area if necessary. Remember to bring any visitors with you to the safety zone (SZ).
- The Emergency Chief or Administration will handle calls to the pertinent agencies to receive specialized aid in these cases.
- If there is an imminent danger of explosion, back away from windows and glass and enclose yourself on the opposite side from where you expect the explosion.
- Use tables or furniture as a protective barrier.

POWER OUTAGES

- ➤ How you should act:
- Stay calm.
- Emergency lights will turn on instantly once the power goes out.
- Electricity will be restored 10 seconds later when the emergency generator automatically begins operation.
- Do not try to look for fuse boxes to fix the failure yourself.
- Notify one of the following extensions if the power outage continues in your sector: 3280 / 3162 / 3149 / 3155.

CAVE-INS / FLOODING

- ➤ How you should act:
- Disconnect electrical devices only if there is no danger in doing so.
- Report the emergency to **extension 3333**.
- If you can, put objects at a height, such as documents, equipment, etc., that may suffer water damage. Follow the instructions of the Monitors or Emergency Chief.
- If necessary, evacuate to the "safety zone" (central garden).
- Do not return to your work place without authorization from the Emergency Chief.

ESO-Vitacura Emergency Manual version 2006

LONG AIRCRAFT RIDES

JET-LAG (Change in Time Zone):

A change in time zone occurs when you travel to the east or west crossing more than four (4) time zones. The body loses its time orientation and the person may be unable to sleep at night, is sleepy during the day and wants to eat at times that are totally inappropriate for the location where he is visiting.

➤ How you should act:

- It is recommendable to adopt the times of the destination a few days in advance.
- If it is daytime when you arrive and you are very sleepy, try to take a short nap (one-half an hour), just enough to finish the day and be able to resume the normal sleep/awake cycle.
- Once you reach your destination, if you must sleep before your biological clock says you should, try to take a non-strenuous walk and wait for a time close to the time of sleep in your actual city or location. Then eat a light dinner and relax by taking a hot bath.
- Avoid alcohol and coffee, which may complicate the hours you should use to sleep.
- If necessary, contact your physician so that you can take medication to adapt your sleep to local time as fast as you can.

TRAVELER'S SYNDROME

Traveling for a prolonged period of time (more than 4 hours) can cause vascular problems, specially in people at risk because of the little body movement and generally narrow seating, either on planes, trains, buses or in cars.

It is precisely during long trips where the passenger's knees are bent for a long period of time, making it difficult for blood to reach the heart. This situation may cause a vascular obstruction technically called "deep venous thrombosis" (DVT), which is caused by blood clots formed in the lower limbs.

Although infrequent, a blood clot may come loose and move towards the lungs when a person who is sitting gets up to walk, producing an embolism. The gravity of this phenomenon, commonly called the "traveler's syndrome," may vary, depending on the size of the obstructed blood vessels. This is also a risk to people who spend a long time in bed because of a disease or surgery.

SYMPTOMS

- * Traveler's syndrome may appear in the form of swelling, pain, or reddening of the area affected by the blood clot.
- * One of the veins in the shin or thigh may feel hard to the touch, as if it were a cord.
- * It is usually associated with fever and pain when walking.

ESO-Vitacura Emergency Manual version 2006

GROUPS AT RISK

- People with varicose veins in their lower limbs.
- People with a history of deep venous thrombosis.
- Patients with cancer, specially malignant tumors.
- Pregnant women.
- Mothers of children who are less than one month old.
- People who take estrogen, birth control pills or are undergoing prostate cancer treatment.
- People with chronic edema of their limbs.
- People who have undergone outpatient surgery and travel within 48 to 72 hours.

If you believe you are at risk, consult your doctor before traveling.

□ Preventive Measures:

- Drink water before and during the trip to avoid a predisposition to dehydration because of the atmosphere in the cabin, where there is little humidity.
- Exercise your legs and body by taking a few walks (It is recommendable for people who are at risk to try to get aisle, instead of window, seats in order to be free to move more).
- Do not reduce the space for your legs by putting baggage between your legs.
- Wear loose, comfortable clothing for travel. Tight clothing hinders circulation and favors the formation of thrombi.
- Do not sleep in a forced bent position.
- If you present symptoms during the trip, give prompt notice to be taken as soon as possible to a care center.

ESO-Vitacura Emergency Manual version 2006

ALTITUDE SICKNESS

This is a disease caused by a poor adaptation of our body to a rapid ascent to great heights because of the reduction in the quantity of oxygen present in the air. It is also known as mountain sickness or altitude anoxia.

The probability and severity of this condition is in direct proportion to the level of ascent. The higher you go the greater you are at risk of suffering from this sickness.

Generally, the first symptoms occur between 6 and 10 hours after you have reached an altitude of approximately 2,500 meters. Nonetheless, in some cases, the symptoms may appear 60 minutes after reaching even lower altitudes.

If you suspect that you suffer from this illness, it is recommendable that you be assessed by a doctor to discard potential future mishaps.

SYMPTOMS

- * Nausea
- Loss of appetite
- * Vomiting
- * Tiredness
- * Headache
- * Dizziness
- * Muscular fatigue and difficulty in breathing (shortness of breath)
- Difficulty in sleeping
- * A fast pulse
- * Feeling cold
- * Oliguresis (inability to urinate).

This disease generally recedes only by resting from 2 to 4 days, but it does not always evolve benignly. It may worsen abruptly and become complicated by pulmonary and/or cerebral edema.

The best way to combat this condition is by descending the sick person as quickly and safely as possible.

It is highly convenient to treat acute mountain sickness or altitude anoxia as a sign of a possible edema (cerebral or pulmonary). This will help reduce, immediately, any complications that may even lead to a patient's death.

□ Preventive Measures:

- Gradual ascent (avoid unscheduled rapid ascents).
- Rest. It is recommendable for you to sleep well the night before.
- Recognize the early symptoms.
- Hydrate yourself well. Check that your urine is clear. Oliguresis (no urine) is a poor sign, specially if it is accompanied by symptoms of an intolerance of altitude.
- Eat small amounts of food. Eat things that are easily digestible, such as carbohydrates, soups, glucose, etc.
- Acclimate yourself by moving slowly. Do not jump or move your head abruptly.
- Do not drink alcohol.

Emergency Manual version 2006

- Breathe in small doses of oxygen during the ascent.
- If the symptoms do not abate or if they increase, descend rapidly from your location.

GROUPS AT RISK

- 1. People susceptible to anemia.
- 2. People with cardiac and pulmonary problems.
- 3. Smokers

EDEMAS

The word "edema" refers to the infiltration of liquid into tissue.

<u>CEREBRAL EDEMA:</u> It is characterized by fatigue or extreme weakness and abrupt vomiting. The headache is unbearable and does not go away with analgesics. There is difficulty in remaining standing, dizziness and changes in behavior. A coma onsets rapidly. Sometimes there is no headache, simply a significant tiredness and loss of balance.

SYMPTOMS

- * They generally occur after three days of mountain sickness.
- * Fatigue or extreme weakness.
- * Unbearable headache that does not go away with analgesics.
- * Exhaustion doing usual or minimum exercise. Abrupt vomiting.
- * Difficulty standing (loss of equilibrium).
- * Changes in behavior
- * The symptoms must be detected and reported to receive appropriate care. Failure to receive timely care leads to exhaustion and a "sweet death" (without the victim realizing it).

<u>PULMONARY EDEMA:</u> This appears between 12 and 72 hours after reaching an altitude, characterized by a sensation of suffocation and noisy breathing (bubbling). The lips and ears turn purple (cyanosis) and there may be foaming at the mouth that is sometimes pink. If often occurs at night after a day of intense strain.

SYMPTOMS:

- * It appears with a classic feeling of suffocation.
- * Pain in the thorax and a headache.
- * A dry cough
- * Nausea
- * In some cases fever above 38°C
- * The skin may turn bluish
- * The person may appear to be conscious and in control, but there may be a certain degree of indifference to surroundings and occurrences.

In both cases, one must descend immediately.

EMERGENCY TELEPHONE NUMBERS	
ESO EMERGENCY OFFICE	3333
ACHS POLYCLINIC	8704640 – 8704600
AGUAS CORDILLERA (WATER UTILITY)	2900600 - 7312400
ACHS AMBULANCE SERVICE	600 600 1234
CLINICA ALEMANA AMBULANCE SERVICE	2101010
GOVERNMENT AMBULANCE SERVICE	131
FIREHOUSE	132
POLICE	133
CHILECTRA EMERGENCY OFFICE	6971500
CHILECTRA (ELECTRIC UTILITY)	6393106
CLINICA ALEMANA (HOSPITAL)	2101111 – 2129700
POLICE INFORMATION	139
POLICE INVESTIGATIVE OFFICE	134
METROGAS (GAS UTILITY)	3378000
SWAT (SPECIAL WEAPONS AND TACTICS TEAM)	5576171

If the emergency occurs outside of office hours or the Safety Supervisors, Chiefs or Coordinator are not in the compound, guards (ext. 3155) should immediately activate the internal emergency and reporting plans according to the appropriate list.