Rafbók

Electrical Safety Handbook

Safety - Professionalism

The SART's safety handbook is free of charge at www.rafbok.is
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The book was based on the RARIK Safety Manual, Samorka Safety Manual and Límtré Vírnet Safety Manual.

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1. Introduction

In shaping the future vision of the electrical industry in 2013 priority projects, designed to ensure that work to reach the goals of the industry are done in a structured manner, were defined.

"Safety - professionalism, no more work accidents" was one of the tasks.

Systematic efforts shall be made to eliminate work accidents and to make employees and managers aware of the importance of safety.
Courses regarding health and safety issues should be organized and standardized forms to follow e.g. checklists, manuals and risk assessment should be created.

SART should have the initiative to implement the project in collaboration with RAFMENNT.
The course is scheduled at RAFMENNT and now the Safety Manual can be found on Rafbok.
The purpose of the Safety Manual is to have it´s content accessible at one place, for those who want to promote electrical security, both business, schools and individuals

Electrical contractors can now easily access good material if they want to make a Safety manual for their own company.
The book is an electronic book and can therefore be easily adapted, modified and updated.
All good tips are welcome.

On behalf of SART
Ásbjörn R. Jóhannesson

1. General Safety Rules

Amongst other things safety rules cover:

- Identifying possible dangers that may arise during each project and preventing them.
- Use of personal protective equipment and safety equipment.
- Conduct and behaviour at the workplace.
- Emergency responses.

Be familiar with the location and use of safety equipment and current safety rules at all times.

- Follow the current rules and guidelines. If in doubt, seek information.
- Report incidents, risk cases and situations that could cause personal accidents and damage to structures, equipment or surroundings.
- Assess and take measures against dangers that may arise during each project (risk analysis / risk assessment).
- Become familiar with the location of the security- and emergency equipment at the workplace and ensure that escape routes are unobstructed.
- Use appropriate personal protective equipment and safety equipment.
- Use reflective clothing / visibility clothing where needed.
- Use noise and hearing protection in loud places.
- The use of alcohol or intoxicants is entirely prohibited at work.
- Good co-operation during all projects, honesty, truthfulness and open-minded discussion concerning problems at the workplace contribute to a better working environment, greater well-being and lower risk of accidents.
- We don´t practice telling crude jokes or conducting ourselves in a manner that hurts or causes emotional stress.
- We do not tolerate bullying.

Don't take Risks - Your experience can save others.

Checklist: Dangers-risk:

1. ELECTRICITY • Conductivity • Explosion • Arc	**2. POWER** • Static power • Surplus energy
3. ILLUMINATION • Brightness	**4. CLOTHING** • Entanglement hazard • Burn-/Fire hazard
5. HAND-TOOLS • Incorrect tools • Bad condition • Ruined • Drive • Cutting	**6. HEAT** • Warm • Cold • Melted metal • Radiance • Fumes
7. MACHINERY • Mobile pieces • Clamp • Power • Pressing	**8. NOISE** • Machinery • Technical equipment • Bump sounds
9. FIRE / EXPLOSION • Gas • Flammable liquids • Flammable material • Combustible material • Combustible liquids	**10. STATE OF MIND** • Boredom • Irritation • Stress • Disappointment • Fatigue
11. PHYSICAL CONDITION • Impaired mobility • Fatigue / weakness • Pain • Disability	**12. DANGEROUS SUBSTANCES** • Use • Contact • Evaporation • Smoke

13. CONFINED SPACES • Fall • Air quality • Fire / explosion	**14. CONDITION OF WORKING ENVIRONMENT** • Slippery / uneven base • Chaos • A Small work spaces • Working at heights
15. ENVIRONMENT • Dumping • Waste • Gas / H_2S	**16. RADIATION** • UV radiation • Electric Arc
17. COOPERATION • Walking • Moving traffic • Parallel work of different nature • Work alone	**18. PRESSURE** • Hydraulic pressure • Air pressure • Vapor pressure
19. GRAVITY • Hanging loads • Working at height • Hole in the floor • Work near edges	**20.ERGONOMICS** • Effort • Posture • Monotonous movement • Vibration

2. Electricity

- All work on electricity / electrical equipment is subject to Electrical Safety Regulations.
- Don’t work with electricity / electrical equipment unless you are authorized for the job.
- Assess and take measures against dangers that could arise during each work situation (risk analysis / risk assessment).
- Use appropriate personal protective equipment, safety equipment, and utensils.
- Become familiar with the location of the safety- and emergency equipment at the workplace and ensure that escape routes are unobstructed.
- Become familiar with, and follow without exception, the current rules for working with electricity / electrical equipment.
- Everybody who works with electricity must carefully study the Electrical Safety rules that can be found for example in Memorandum no. 1/84.

Before starting work, become familiar with the 5 SAFETY RULES

- Disconnect from the mains.
- Secure against reconnection.
- Verify that the system is dead.
- Carry out earthing and short circuiting.
- Provide protection from adjacent live parts.

Tools and equipment safety

- Tools should be checked before use to ensure that they work properly.
- Damaged or defective tools must be removed and handed in for repair immediately.
- Motor saws, grinding wheels and other motorized tools must always have the appropriate covers in place.
- Always use extreme caution when handling tools and equipment.

Electric Tools

- All electric tools must be grounded except tools with approved dual isolation.
- If the electric tool is in poor condition, it must be taken out of service and repaired.
  Special care must be taken to make sure that the power cords are intact.
- Electric tools should not be used in wet conditions.
- Electric charging tools should be used whenever possible.

Fiber-Optics

- Assess and take measures against dangers that may arise during each work situation (risk analysis / risk assessment).
- Use appropriate personal protective equipment and safety equipment
- Ensure fiber-optic equipment is not connected with cables that are being measured. Mark cables that you are working with.
- Make sure you never look directly at the end of a fiber optic cable.
- Take adequate precautions when working with fiber-optics, keeping in mind that the extremely thin fiber strands can easily penetrate the skin and enter the bloodstream.
- Put fiber cuttings in a closed container and dispose of them as hazardous waste.
- Thoroughly vacuum-clean the workspace after working with fiber-optics.
- Ensure that the hoses and connections are made to withstand the pressure needed when working with air pressure.
- Ensure, as far as possible, that a broken hose does not flail.

- Never leave fiber optic ends open. Boxes should always be closed (splice-boxes, wall outlets) and carefully marked.
  Put casing over cable ends for protection if you need to leave an unconnected end for any reason.

Electric cabinets

- Work in and around electric cabinets should only be supervised by electricians.
- Assess and take measures against dangers that may arise during each work situation (risk analysis / risk assessment).
- Follow the access rules of the safety control system.
- Make sure that unauthorized persons do not enter electrical cabinets without supervision.
- Use appropriate personal protective equipment and safety equipment.
- Never be alone during repairs and construction. Exceptions are simple
- surveys and risk-free projects.
- Comply with the five safety rules!
- Ensure that the correct equipment has been disconnected.
- Exercise caution before connecting the equipment.
- Verify that the correct equipment has been connected.
- Take extra care when working at heights.
- Be careful when handling batteries.
- Update labels when changes occur.
- Never leave an open electric cabinet.

Before starting work, become familiar with

the 5 SAFETY RULES

- Disconnect from the mains.
- Secure against reconnection.
- Verify that the system is dead.
- Carry out earthing and short circuiting.
- Provide protection from adjacent live parts.

3. Response to electrical accidents

Is the victim in contact with energized conductors?
If so, you should by no means touch him with your bare hands.
Turn off the electric circuits that is in contact with the victim.

Immediately call the **Emergency Line 112**
for help and guidance

Fundamental principles

- **Ensure safety on the ground, disconnect electric circuits if necessary**
- **Call Emergency Line 112 for help**
- **Provide first aid**
- **Provide emotional support**
- **Use an Automated External Defibrillator (AED) if it is available**

If power outage has occurred and people are injured
re-installing electricity is prohibited
without consultation with rescuers.

Electrical burns

Electrical burns can be:

- Electrical (contact): Electric current passes through the body.
- Injury in the area where the current entered and left the body.
- Internal injuries may be serious, although skin damage appears minor.

Injuries caused by electrical current depend on:

- Type of direct (DC) or alternating (AC).
- Voltage level.
- Size of contact area.
- Duration of contact.

Arc burn (flash)

- Short circuiting can produce an arc which may cause skin burns, welders flash, eye injuries and cloths catching fire.
- Avoid the use of metal watches and jewellery when working with electricity.
- Electric current travelling through the body can interfere with heartbeat and cause cardiac arrest, burns, and other injuries.

Electric shock

- A mild electric shock can cause serious internal injury, even though visible skin burns may be minor.
- It is dangerous to come in contact with all voltages above 50V!
- When an electric shock occurs, the current enters the body at the point of contact and travels through the body using low resistance paths, through nerves, veins, bone marrow, tendons and muscles.

Reaction to Electric shock

- **Call local Emergency number 112.**
- Check breathing and pulse.
- Check neck and / or back injuries caused by fall.
- Preclude shock by lifting the feet 20-30 cm and prevent heat loss by covering the person with a blanket.
- Burns should be cooled down with cold water for at least 20 minutes then increase the temperature to 15-20°C.
- Dress the wound with clean bandage.

Always consult a doctor if you experience an electrical accident. Symptoms can occur later.

If one of the following factors applies, you should immediately take the injured person to a hospital for first aid.

- If one of the following factors applies, you should immediately take the injured person to a hospital for first aid.
- Has come in contact with high voltage
- Has been struck by a lightning
- Has come into contact with low voltage resulting in a current path through the body.
- Has lost consciousness or is lightheaded following an electrical accident.
- Has burn sores.
- Show signs of nerve damage (for example paralysis).

Immediately call the Emergency Line 112 for help and guidance.

Correct response to electrical accidents saves lives.

If you can feel a tickling sensation in your feet or the lower part of your body as you approach the scene of an electric accident, it is likely that electricity to the line has not been disconnected.

Immediately stop and turn back.

Low voltage accident: If you can´t power-off the electricity, you should isolate yourself. Use rubber gloves, shoes with a rubber sole or stand on a dry isolating material. Try to get the victim out of contact with the electricity for example with leverage.

High voltage accident: If you can´t power-off the electricity immediately, call the power station and wait for a message that a power-off or grounding has been performed.
Beware of discharge voltage after power-off.

Listen, look for and check signs of breathing and pulse.
If the person is breathing and has a pulse roll him into recovery position on his side.

If the patient shows no signs of a pulse **CPR** should be administered. CPR should be continued until it is possible to give the patient an electric shock.
Straight elbows, flat palm, centre of chest, **keep pace by counting one hundred and one, one hundred and two, …….**

If available, connect the patient to an **Automated External Defibrillator** (AED) as soon as possible, and apply electric shock if the AED detects ventricular fibrillation.

If electric shock therapy cannot be applied within 5-10 minutes the patient needs rescue breathing using **the mouth-to-mouth method**.

Low voltage burns:

- Find and cool down burned areas with suitably cold water until pain disappears.
- Use wet gauzes and cover the burns with them.
- Do not remove clothing that is stuck in wounds.
- Give pain medication.
- Is allowed to drink
- Get the patient to a medical facility for treatment as soon as possible, without creating danger for himself or others during the transfer.

High voltage burns:

- Often causes severe damage to organs and tissue.
- If the patient´s consciousness is good, give plenty of water or other liquids, up to ½ litre per hour. Adding table salt to the water, 1 tablespoon per litre, is allowed.
- Give painkillers.
- Cool down surface wounds.
- Preserve urine if conditions permit.
- Get the patient to a medical facility for treatment as soon as possible.

4. Work environment

Workplace

- Assess and take measures against dangers that may arise during each project (risk analysis / risk assessment).
- Use appropriate personal protective equipment and safety equipment.
- Become familiar with the location of the safety and emergency equipment at the workplace and ensure that escape routes are unobstructed.
- Only work with equipment, machinery and devices if you have the necessary knowledge.
- Before starting work, become familiar with the Safety Rules.
- Make sure you have adequate work lighting.
- Keep the working environment clean and tidy.
- Ensure good working conditions and reliable ventilation.

Conduct

IS everything in order in your workplace?

Rules and order:

- Everything has its place.
- Do not keep objects on the floors.
- Tidy everything up after use.
- Wipe up spills right away.
- Use trash cans and recycling containers.
- Accident and fire hazards can be caused by residual substances, so they should be kept at a minimal.

Good orderliness and tidiness are an important safety factor.

Good orderliness and cleaning:

- Has a positive effect on people's safety and well-being.
- Contributes to the reduction of mishaps and accidents.
- Encourages quality workmanship.
- Improves the image of the company.
- Increases the utilization of the workspace.
- Makes for a happier workplace.

„Cleaning up as you go" is good practice.
Thus, the workplace is always kept clean.

Obligations of the Employer

The employer must comply with act no. 46/1980 on Working environment, Health and Safety in Workplaces.

This includes:

- To ensure that employees receive the necessary training and education.
- Annual meetings with employees where company security issues are covered.
- To ensure that regular first-aid courses are held for all employees.
- To ensure that employees receive regular training in fire response procedure.
- Report incidents that might have threatened workplace safety. These registrations and proposals for improvements are to be delivered to the security manager.
- Appoint a safety representative for employees if he is not elected by them.
- The safety representative actively participates in safety inspections at the workplace.
- On a regular basis have the security guard and the safety representative evaluate the workplace based on facilities, safety and health issues.
- A workplace Safety Inspection Checklist should be used to document these inspections. The checklist must be stored with the director that it concerns.

Obligations of employees

To achieve good results regarding workplace facilities, health and safety all employees need to be aware and active participants.

- Each job is subject to safety rules, quality requirements and practices.
- Every employee must become familiar with these Rules and Criteria.
- If something is unclear regarding security issues, please bring it up with security guard or workplace safety representative.

The emergency response plan must be accessible to all employees.
Employees must become familiar with these plans so that they can be as useful as possible when emergency response is needed.

In addition, employees in particular need to become familiar with:

- How to respond to an accident.
- How to respond to fire.
- How to respond to pollution
- How to treat substances that are hazardous to health or environment.

If an employee becomes aware of a defect or deficiencies, which could lead to reduced security or impaired work conditions or health, and he himself cannot improve, he must immediately report it to a security guard, safety representative, security manager or a local manager.

Employees should always become familiar with the safety rules and safety manuals at each workplace and workstation.

Subcontractors

Work done by subcontractors is subject to licensing and risk assessment. Subcontractors must comply with current laws regarding health and safety issues.

The same safety rules apply to subcontractors and employees of the company for example regarding:

- Use of safety equipment and personal protective equipment.
- Location of work cabins.
- Setting up fall protection.
- Labelling and marking out work areas.
- Work methods.
- Conduct and cleanliness.
- Supervision and maintenance of equipment.
- Treatment and disposal of material.
- Reporting accidents to the Administration of Occupational Safety and Health.

Consultation and teamwork are the key to safety.

Subcontractors should become familiar with:

- How to respond to accidents and emergencies.
- Location of first aid equipment.
- Location and handling of fire extinguishers.
- Workplace evacuation plan.

Subcontractors must follow the company's rules for reporting mishaps and accidents.

Accident Response

1. **Ensure safety**
2. **Call 112**
3. **Immediately apply resuscitation if there is no response to stimuli and breathing is abnormal**
4. **Stop bleeding by applying direct pressure to the cut or wound**
5. **Provide emotional support**

Security guards and safety representatives

- A security guard is a company representative and is appointed by the company.
- The local manager usually acts as a security guard, if not he must appoint a security guard at his workplace.

- **A safety representative** represents the employees at the workplace. See regulation 920/2006 on planning and implementing occupational health and safety at the place of work.
- If employees do not elect a safety representative, the company may appoint an employee for the job.

Roles:
Both the security guard and the safety representative should prioritize the safety of the employees, among other things by:

- Performing safety assessments on a regular basis, bearing in mind that devices, materials and procedures do not threaten the safety or health of employees at the workplace.
- Supervising the use of personal protective equipment and other safety equipment.
- Ensuring that accidents and occupational diseases are recorded and that reports about these cases are sent to the security manager.
- Registering and taking immediate action if crisis situations arise at the workplace and notifying employees, the local manager and the Administration of Occupational Safety and Health.
- Knowing the rules and requirements for the implementation of a company Safety and Health program.
- Participating in the work of the company Safety Committee after being appointed to it.

Fall protection

Many serious accidents occur because of falls when working at heights or on the ground.

- Select a reliable, fully finished and secure fall protection to avoid a false sense of security.
- Follow the instructions regarding fall protection given by the local manager.

Ladders

Use of ladders is always precarious, and workers should take serious precautions when using them.
Following are some tips for ladder safety:

- When possible, it is preferable to use work platforms or work lifts when working at heights.
- Consider ladder stability while working. Make sure both stiles are tied at their upper and lower end or foot the ladder by using clogs at the lower end, so it does not slip.
- When using ladders, it is necessary to keep in mind, not to be carrying arms full of equipment.
- Care must be taken not to overreach to prevent danger of the ladder falling on its side.
- When installing the ladder, it must be at a correct angle, not too steep and not too low.
- In general, an acceptable ladder angle is 1:4

You should always work safely
and encourage others who work with you to do the same.

Driving

- Never drive unless you have the necessary certificate.
- Check the condition of the vehicle and make sure it suits the circumstances.
- A good rule is to reverse the car into a parking space.
- Be careful when reversing the car and ask for guidance if needed.
- Fasten cargo securely and use markings.
- Never leave the vehicle running unnecessarily.
- Use the appropriate warning lights.
- Keep the vehicle clean and tidy.
- Distribute cargo equally on trailers and don´t overload.
- It is forbidden to transport passengers in trailers and on an open bed of a vehicle.

Always drive carefully.

Personal Protective equipment

Correct choice and use of Personal Protective equipment are an important part of accident prevention.
However, personal protection can only protect against injury and illness if they are maintained and used correctly. Regulation no. 497/1994 discusses the use of personal protection equipment.

Examples of personal protective equipment:

Safety helmet	Sleeve protectors
Hearing protection	Safety shoes / boots
Earplugs	Knee pads
Safety goggles	Instep protection
For dust and small particles	Gaiters
For sparks	Ice cleats
Face masks	Protective vest
Respirator masks • with dust filter • with air supply	Heat resistant vest
	Protective clothing
	Reflective clothing /visibility clothing (EN471)
Gloves • substance resistant • heat resistant • puncture resistant • to protect against vibrations	Burn resistant clothing / fire proof clothing (EN531)
	Skin protection
	Welding protection shield
	Welding protection glasses
	Dust- and carbon filters

Personal protective equipment is mandatory where required.

ATTENTION:
Failure to follow safety rules
could result in decreased compensation for accidents.

Machinery Hazards

Working close to big cars and machinery such as forklifts, trucks and other large equipment, requires special care. Because of loud noises in the work area you cannot entirely rely on hearing the warning sound of a horn or an audible alarm given as a warning that there are machines moving close by, for example reverse signal alarm activated by backward movement.

When approaching machinery make sure that you have established contact with the operator and that he has given a signal that it´s safe to approach.
When machinery is reversing a safe distance should be kept until the operator has completed the move.

Fire Hazards

- Workplaces should always be kept clean and tidy.
- Where there is a fire hazard, appropriate precautions should be taken.
- Only treat flammable and combustible liquids in approved and clearly labelled containers.
- Oil rags must be placed in closed containers due to the risk of self-ignition.
- Only a minimum amount of flammable / combustible liquids (paint, etc.) should be kept in the original containers inside the building. Do not pour into other containers such as soda bottles.
- Before start burning or welding, the work area must be checked to ensure that sparks or molten metal does not come into contact with flammable or combustible materials.
- Electric welding, burning and heating in enclosed spaces requires a general mechanical or local ventilation to reduce smoke and fumes to an acceptable level.
- Authorized respirators for welding, cutting or heating metals must be used for metals containing toxins such as zinc, lead, cadmium or metals containing chrome.

A supervisor must be consulted before such work begins.

Ensure that appropriate fire protection equipment is available in the work area.

Confined Spaces

- More than one person should always be appointed if work is being performed on tanks, trenches or other waterfilled spaces, where there is a risk of pollution and / or oxygen deficiency.
- Never enter confined spaces, for example tanks, if contamination and / or oxygen-depleted air is suspected in the space.

Telecommunications

Telecommunications and telephones are important for business activity and employee safety.
Become familiar with which types of mobile devices are in your workplace and get instructions on how to use them.

Keep the following in mind when using telecommunication equipment:

- Call sign must be short and distinct.
- Use short, clear and concise messages.
- Repeat received instructions for important operations.

With "break and work", the above points are extremely important.

Winter travel

- Assess and take measures against the dangers that may arise during each project (risk analysis / risk assessment).
- For winter tours, familiarize yourself with the weather forecast and the condition of the roads.
- Give your travel schedule to somebody.
- Make sure the vehicles are correctly and properly equipped for the trip.
- Take along your safety equipment and your personal protective equipment.
- Become familiar with the telecommunications possibilities in your travel area.
- Avoid danger areas and exercise extreme caution.
- Take the utmost care when driving devices in slopes, in ravines, and in other difficult conditions.
- Use a helmet when driving a snowmobile and a bicycle.
- Avoid being alone during a difficult situation.

Hoisting, lifting machinery and lifting equipment

General rules for lifting equipment:

Regulations no.341/2003 is valid, with subsequent amendments and regulation no. 54/1995 on registration, inspection and supervision of lifts and lifting equipment for transporting people and goods. Regarding lifts that were in use (and are still running) before January 18, 1995, regulation no. 203/1972 on equipment, operations and supervision with subsequent changes is valid.
State Administration of Labour is the supervisory authority and makes regular inspections to make sure that the provisions of the regulations are followed.

- Use safety helmets and appropriate personal protective equipment.
- Never use a fork-lift, crane or lifting equipment unless you have the necessary certificate and / or skills.
- Follow the rules regarding maximum allowable load for lifting equipment and lifting accessories.
- Never drive faster than walking speed.
- Become familiar with the safety instructions about treatment of batteries and chargers for fork-lifts.
- Learn about the safety instructions concerning acid accidents.
- Make sure that the lifting equipment is stable.
- Never walk under a hanging load.
- Never leave a hanging load behind on a crane.
- Carefully inspect lifting and pulling equipment before use.
- Inspect the condition of slings, chains, locks and fastening points before use.
- Verify that all equipment is designed for the weight to be lifted.
- When hoisting, use the attachment points provided by the manufacturer. If there are no specific attachment points, care must be taken to ensure that the load is properly balanced and not damaged by lifting accessories during the lift.
- Keep unauthorized personnel away from the lifting area.

Hoisting people

- Hoisting people is strictly prohibited except using a man basket intended for that use and recognized by the Administration of Occupational Safety and Health, with a registration plate from them.
- For safety reasons, it is recommended that an employee using a man basket, should also use a harness.

Young workers

Special provisions apply to young people's working hours.

- Take note of risk assessment when planning work.
- Establish the beginner's skills / capabilities and assign tasks accordingly.
- Present / introduce the correct working methods.
- Inform and educate the employee on good practices, safety issues and emergency response.
- Keep an eye on the employee until he has acquired sufficient skills.
- Listen to and encourage the employee.
- Compliment when a task in done well.
- Set a good example.

Tips for young workers

When working, you should keep in mind the following:

- Use appropriate personal protective equipment and safety equipment.
- Follow the rules, labelling and guidelines of the company.
- Ask if you are not sure.
- Report broken equipment and dangerous circumstances.
- Tell somebody if you or your co-workers are feeling unwell physically or mentally.
- Bullying is not tolerated.
- Report mishaps and accidents to the foreman.
- Keep the workplace clean and tidy, put everything in it´s place after use.
- Handling fuel is hazardous, so be careful.
- Do not use machinery to transport people.
- Rules also govern free time in the workplace.

5. Health

By thinking about your lifestyle and attitudes, you can improve your mental and physical health. You will find Health Advice on Medical Director´s web side.
It is to each company´s advantage to promote health awareness at the workplace, considering that the employees have difficult jobs that often cause a lot of stress.

Physical Health:

- It is recommended that employees regularly go for a health check-up.
- You have the right to a health check-up if risk assessment indicates a danger of physical impairment at work.
- Have your work risk assessed if you are pregnant.
- It's a good rule to go for a fitness test if you're employed in difficult work.

Smoking:

- Direct and indirect smoking increases the likelihood of for example cancer, heart disease and respiratory diseases.
- Consider your colleagues and remember that everyone is entitled to smoke-free work environment.
- If you want to quit smoking, you will find useful information on reyklaus.is.

Alcohol and Drugs:

- Use of alcohol and drugs increases the danger of accidents.
- Psychological and social difficulties often accompany alcohol and drug abuse.
- Remember that using alcohol and using is strictly forbidden at the workplace.
- You will find educational material on alcohol and drugs, among other things. on the Medical Director´s website.

Mental and social health

Communication:

- Our conduct towards each other is important in ensuring safety and wellbeing.
- Compliment your co-workers when they deserve it.
- Keep in mind that all kinds of reckless behaviour and jokes are entirely inappropriate.
- Treat all employees with full respect.
- Sexual harassment or bullying is not tolerated.
- Crude jokes and conduct that causes emotional harm is unworthy of us.
- Stories about co-workers can hurt and cause insecurity.

Are you feeling unwell at work?

The main characteristics of stress-related distress are:

- Tiredness.
- Concentration difficulties.
- Mood swings.
- Communication difficulties.
- Depression.
- Anxiety.
- Sleeping disorders.
- You will find useful information on mental health on the Medical Director´s website.

What can we do?

A safe and healthy work environment and making the employees feel well at work is to each company´s advantage.
If you think the workload is too much, you experience harassment or discrimination, look for a confidant or someone else that you trust. The problem will be resolved in cooperation with you and in full confidentiality.

Exercise and diet

Exercise and a healthy diet improve well-being and increases your stamina at work and play.
Exercise and adequate physical exertion are necessary for everyone.

Keep in mind:

- Choose exercises that you like.
- Use the stairs, ignore the lift.
- Cycle or walk between places.
- Park the car a little further away.
- Exercise daily for at least 30 - 60 minutes.

Eat:

- Daily fruits and vegetables.
- Fish twice a week or more.
- Wholegrain bread and other cereals.
- Fat and sugar reduced milk products.
- Salt in moderation.
- Cod liver oil or other d-vitamin complements.
- Sugar, cakes, sweets, ice cream, alcohol and soft drinks in moderation.
- Drink plenty of water, several times a day.
- Evaluate your own diet and see where you stand.

On the website of the Medical Director of Health you will find advice on diet and nutrients.

The Body´s Musculoskeletal System

The most common work-related stress symptoms are pains in the back, neck and shoulders and involve:

- Work conditions.
- Unsuitable working positions or movements.
- Hard physical labour.
- Monotonous, repetitious movements.
- How work is organized.
- Emotional and social factors such as communication, information flow and stress.

What can we do?

- Adapt a good posture.
- Adjust your working conditions so that the height and area are suits you.
- Alternate between sitting and standing.
- Use a stool and suitable aids when possible.
- Change your posture frequently.
- Wear comfortable shoes and clothes.
- Take regular breaks.
- Exercise regularly.
- Use suitable aids.

Correct posture

Correct posture is important!

If you need to lift:

- Think about the weight of the object (<25 kg).
- Maintain a good space between the feet.
- Face the object directly and stand as close to it as possible.
- Bend the knees and hips and keep your back straight.
- Get a good grip with straight elbows and relax shoulders.
- Shift body weight from toes to heals.
- Slowly straighten your knees and hips.
- Avoid repetitious lifting.

If you need to carry:

- Distribute the weight equally between the right and left side of the body.
- Keep the load close to the body and keep your back straight.
- Switch hands regularly when the load is carried in one hand.
- Use aids when possible, for example wheelbarrows and trolleys.
- Make sure nothing restricts your view and that the path is clear.

Use the resources that you have, both technical and from co-workers, to lift and carry objects.

Office work

Desk and chair:

- Sit with a straight back.
- Frequently change your sitting position.
- Make sure both feet are planted on the floor or use a footrest when you are sitting at your desk.

Monitor and eye protection:

Position the monitor so that:

- Light from windows or lights does not shine directly into your eyes or is reflected off the screen.
- The top edge of the monitor is at eye height.
- The monitor is at least an arm's length away from body.
- The monitor is placed in front of the middle of the body.
- Have a regular eye check-up.

Mouse and keyboard:

- Position the mouse to the side the same height as the keyboard.
- Position the keyboard in front of the middle of the body.
- Use the left and right hands alternately for the mouse.
- Keep the elbows relaxed and close to your body.
- Have your wrist in neutral position.

Noise and hearing protection

Noise is any undesirable sound.

The consequences of noise at work may include:

- Hearing loss.
- Increased accident risk.
- Less communication.
- Greater risk of stress.
- Tiredness.

Noise-induced hearing loss cannot be cured. Minuscule cells in the inner ear are damaged. Damage to the hearing can therefore have very serious consequences.
Stress is one of the most common consequences of noise.
Even a little noise can be stressful.
These include:

- Frequent phone calls in the work environment.
- White noise from instruments and equipment.
- A loud-spoken colleague.

What can we do?

The issues can often be solved in a simple way.
The best solution is:

- To reduce / exclude noise at its origin.
- Review the work organization and the work environment.
- Make written rules of conduct.
- Use appropriate protection such as earmuffs or earplugs.
- Follow the company rules regarding the use of headphones.

6. Toxic and Hazardous Substances

- Where possible, **choose non-toxic** materials
- **Become** familiar with the safety instructions and danger symbols on the packaging before you use the substances.
- **Become** familiar with the location and use of coolers and eyewash stations.
- **Always** use appropriate personal protective equipment and safety equipment when handling and cleaning materials.
- **Do not use** toxic substances marked with a skull unless you have the necessary permission.
- **Always** store materials tightly closed in the original packaging.
- **Follow** instructions on mixing chemicals.
- **Ensure** adequate ventilation when handling chemicals.

What to do in case of chemical accidents?

- **Follow** the safety instructions.
- **In case** of eye or skin-contact, ***rinse thoroughly*** with plenty of water.
- ***Call 112***
- **If possible**, take the substance packaging to the doctor.

The nine Hazard Symbols

Prevent Accident!

A new regulation no. 866/2012 regarding the classification and labelling of substances and preparations has taken effect and is valid in parallel with the older regulation no. 236/1990 until June 1, 2015.
The new the rules are based on a Globally Harmonized System (GHS) being implemented worldwide. In this brochure you will find an introduction to the new warning signs and a description of the dangers they refer to. The symbols that expire on June 1, 2015 are also shown.

Five good tips

- Keep the substances and preparations in their original packaging.
- Follow the instructions on the label.
- Prevent substances and preparations from coming into contact with skin, eyes or lungs.
- Substances and preparations should be kept out of reach of children.
- Think about the environment before disposing of substances or preparations.

Explosive material

Explosive materials and explosive objects.

GHS 01
Hazard classes:

[2.1,2.8, 2.15]

Examples
Nitro-glycerine, ammunition, fireworks.

Precautions:

- Keep away from heat and open flame.
- No smoking near these products.
- The use of goggles is recommended.
- Become familiar with the rules of the respective country regarding storage and disposal.

Danger:

An explosion with a shock wave and fragments projection. May cause other materials to ignite.

Icons to be removed in stages
Explosive

Flammable materials

Flammable liquids and the vapors they produce, gas, aerosols and powders.

GHS 02

Hazard classes:

2.2, 2.3, 2.6, 2.7, 2.8, 2.9, 2.10, 2.11, 2.12, 2.15

Examples

Fuel for machinery, fuel for cooking, ethanol, nail polish remover, liquefied gas bottles and aerosol dispensers for liquid gas.

Precautions:

- Avoid heat and open flame.
- No smoking near these products.
- Keep container tightly closed and in a cool and well-ventilated place.
- The use of protective gloves and goggles is recommended if there is a risk of splashing into the eyes.

Danger:

These products are particularly flammable and can ignited if they come into contact with open flame, sparks and/or heat. Severe or acute burns can occur. Some products produce flammable gas when they come into contact with water or self-ignite in the air. Extinguish a possible fire with powder, foam, carbon dioxide, fire blanket or water sprinkler. Do not use direct water stream as it may cause the fire to spread.
Move the product from the hazardous area if it is possible without taking a risk.

Icons to be removed in stages
Irritant / Corrosive

Oxidizing Materials

Materials and preparations (Gas, liquids or solids) that can cause or promote other materials to burn.

GHS 03
Hazard classes:
2.4, 2.13, 2.14

Examples
Disinfectant tablets and fluids, bleaching agents, breathing oxygen.

Precautions:

- Avoid heat and open flame.
- No smoking near these products.
- Keep away from flammable products.
- The use of protective gloves and goggles is recommended if there is a risk of splashing into the eyes.

Danger:

Oxidizing substances do not burn themselves but can contribute to the development of a fire and amplify it. Extinguish a possible fire with powder, foam, carbon dioxide, fire blanket or water sprinkler. Do not use direct water stream as it may cause the fire to spread. Move the product from the hazardous area if it is possible without taking a risk.

Icons to be removed in stages
Oxidizing

Compressed Gas

Gas in pressurized containers (2 bar or more).

GHS 04
Hazard classes:

2.5

Examples
Containers with liquefied gas, acetylene, oxygen cylinders.

Precautions:

- Pressurized gas must be stored in a well-ventilated area, that is protected against sunlight.
- Make sure that all hoses and fittings are sealed.

Danger:

Attention: Pressurized gas can explode when heated.
The hazard category is shown on the label and can vary greatly depending on whether the gas is flammable, oxidizing, toxic or corrosive.
Gas cylinders can also contain refrigerated gas which can cause frostbite.

Corrosive materials

Substances or preparations that cause skin irritation, serious eye damage or corrode metals.

GHS 05

Hazard classes:

2.16, 3.2, 3.3

Examples

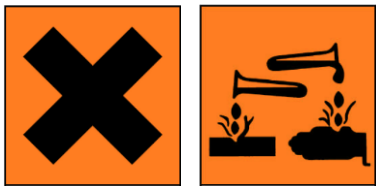
Acetic acid, hydrochloric acid, ammonia, drain/toilet bowl cleaner.

Precautions:

- Wear protective gloves and goggles and avoid inhalation.

Danger:

Inhalation of vapor / spray is corrosive to the airways. Inhalation may cause burning in the mouth and throat, along with sneezing, coughing, difficulty breathing and chest pains. If you swallow the substance it can cause burns in the mouth, throat, esophagus and stomach. This causes pains in the mouth, throat and stomach and causes difficulties in swallowing and vomiting blood.
The product has a skin-irritating effect and causes pain, redness, blisters and burns. If the substance gets into the eyes it can cause a severe burns, pain, tears and eyelid seizures.
Danger of serious eye damage and loss of vision.



Icons to be removed in stages
Irritating / Corrosive

Toxic Materials

Substances or preparations that cause acute toxicity by oral, dermal and / or inhalation routes. Substances with this warning label can be fatal.

GHS 06
Hazard classes:

[3.1]

Examples
Pesticides, biocides, methanol.

Precautions:

- These products are usually not found in ordinary households and most of them are subject to a special purchase license.
- Respiratory equipment, protective gloves, goggles and special work clothes might be needed.
- Toxins must be kept in a tightly closed container.
- Disposal of contents and containers must comply with regulations of the country in question.

Danger:

The products are toxic and may be fatal if swallowed, absorbed through the skin and / or inhaled.

Icons to be removed in stages
Acute Toxicity / Toxin – health hazard

Harmful to health

Substances or preparations that are irritating to skin and eyes, cause allergic skin reactions, irritate respiratory tract, cause drowsiness or dizziness.

GHS 07
Hazard classes:
3.1, 3.2, 3.3, 3.4, 3.8

Examples
Deposition Removal material, toilet cleaner, coolant antifreeze and some types of glue.

Precautions:

Depending on the risk, use protective gloves and protective glasses.
Avoid inhalation if there is a risk of irritation of the respiratory tract, sleepiness or dizziness.

Danger:

Some chemical products cause respiratory irritation if inhaled. Other products contain organic solvents that cause drowsiness and dizziness if inhaled. Vapours can cause headaches and intoxication. Swallowing can be dangerous or merely cause irritation to mucous membranes in the mouth and stomach. Some products may cause allergic response following skin contact while others may cause skin irritation and skin rash. If the product comes in contact with the eyes it may cause irritation.

Icons to be removed in stages
Irritant /Harmful to health

Health hazard

GHS 08

Hazard classes:
3.4, 3.5, 3.6, 3.7, 3.8, 3.9, 3.10

Substances or preparations that cause prolonged health effects like cancer, genetic damage and impaired fertility.
Includes substances that cause allergy if inhaled, toxicity in certain organs and poisoning if inhaled.

Examples
Turpentine, gasoline, cellulose diluent, lamp oil.

Precautions:

- Avoid inhalation.
- Wear protective gloves and goggles if there is a risk of splashing into the eyes.
- Disposal of contents and containers must comply with regulations of the country in question.

Danger:

May cause allergy symptoms and breathing difficulties. Vapours can cause headache and intoxication. Swallowing may cause discomfort and irritation to mucous membranes in the stomach. Some products may be fatal if consumed and thereby entering the airways where they can cause chemical pneumonia. Contact with some products can cause permanent damage to health (for example, cancer, impaired fertility).

Icons to be removed in stages
Toxic /Harmful to health

Environmental hazard

Substances or preparations hazardous to the environment.

GHS 09
Hazard classes:
4.1

Examples
Turpentine, gasoline, pesticides, biocides, paints, varnishes, some types of adhesive.

Precautions:

- Do not dispose into the environment.
- Do not empty into drainage system, unless this is intended.
- Disposal of contents and containers must comply with regulations of the country in question.

Danger:

These products are toxic to aquatic organisms and may have harmful long-term effects on the aquatic environment.

Icons to be removed in stages
Environmental hazard

Classification of Hazardous Substances:

NO	Hazard class	NO	Hazard class
2.1	Explosives	2.15	Organic peroxides
2.2	Flammable gases	2.16	Corrosive to metals
2.3	Flammable aerosols	3.1	Acute toxicity
2.4	Oxidising gases	3.2	Skin corrosion/irritation
2.5	Gases under pressure	3.3	Serious eye damage /eye irritation
2.6	Flammable liquids	3.4	Respiratory or skin sensitisation
2.7	Flammable solids	3.5	Germ cell mutagenicity
2.8	Self-reactive substances and mixtures	3.6	Carcinogenicity
2.9	Pyrophoric liquids	3.7	Reproductive toxicity
2.10	Pyrophoric solids	3.8	Specific target organ systemic toxicity - single exposure
2.11	Self-heating substances and mixtures	3.9	Specific target organ systemic toxicity - repeated exposure
2.12	Substances and mixtures which in contact with water emit flammable gases	3.10	Aspiration hazard
2.13	Oxidising liquids	4.1	Hazardous to the aquatic environment
2.14	Oxidising solids	5.1	Hazardous for the ozone layer

Disposal

- When disposing of waste and hazardous material, follow the current instructions and rules.
- Use the appropriate personal protective equipment put hazardous waste in the appropriate container, preferably tightly closed in the original packaging.
- Put precautionary labelled packing in hazardous waste containers if they contain left over material.
- Hazardous waste should be returned to hazardous waste collection facilities.
- Classify and record waste according to company rules and put in the appropriate container without causing a risk.

Safety and health signs at work

Safety and health signs must be present at the workplace.
Learn what they mean and obey them. Here are some examples of safety and health signs. The list is not exhaustive.

Mandatory signs prescribe reactions for example on the use of protective equipment.
Mandatory signs are circular, white icon on a blue background.

Examples of mandatory signs.

Prohibition signs prohibit behaviours likely to cause danger.
Prohibition signs are circular, black icon on a white background, red edges and diagonal cross through.

Examples of prohibition signs.

Warning signs warn of danger.

Warning signs are triangular, black icon on a yellow background with black edges.

Electrical hazard | Strong magnetic field | Danger corrosive substance | Danger

Examples of warning signs.

Emergency signs indicate the location of, or directions to emergency facilities and location of rescue equipment.

Emergency signs are a rectangular, with a white symbol on a green background.

Emergency signs indicate the location of the emergency exits.

Fire Safety Signs are rectangular, white symbol on a red background.

Fire hose | Fire Extinguisher | Emergency phone to fire department | Fire ladder

Examples of Fire Safety Signs.

7. Can you help when needed?

1 Ensure your own safety along with others

2 Assess the condition of the injured/ill, check for respons first of all, breathing and bleeding

3 Call for help **112**

4 Administer first aid

Resuscitation (CPR)

Check consciousness: If the person doesn't respond to stimuli call 112 immediately.

Check breathing: Open the airway and look for and listen to signs of normal breathing.
If the breathing is abnormal, perform chest compression and rescue breathing
Send someone present to fetch a defibrillator if available.

RESUSCITATION ADULT

COMPRESS	←	BREATH
30		2

RESUSCITATION CHILD

BREATH	→	COMPRESS	↔	BREATH
5		30		2

Chest compression and rescue breathing

Symptoms of cardiac arrest:
No response to stimuli and breathing abnormal. In the first few minutes after a cardiac arrest the person may gasp for air, do not confuse it with normal breathing.

- Press down firmly at the center of the chest 30 times with the rate of at least 100 pushes per minute.
- Push down at least 5 cm allowing the chest to come back up to its normal position after each push.
- Open the airway, pinch the nostrils shut and blow into the mouth making the chest rise slightly lasting about one second.
- Repeat the rescue breathing. Two rescue breaths take about 5 seconds.
- Continue compressing 30 times and giving 2 rescue breaths alternately until emergency personnel arrives.
- In case of children, give 5 rescue breaths before compressing, the same applies to all cases of drowning.

If you don´t feel able to give rescue breaths, please applying chest compressions only, they will also help.

Foreign body in the airway

Serious symptoms: **Difficulty talking and not able to breath or cough.**

First aid – adults and children

- Give 5 firm blows between the shoulder blades
- Wrap your arms around the persons waist slightly above the navel
- Press hard into the abdomen with 5 quick, upward thrusts
- Continue until the object comes out or professional assistance arrives
- If the person loses consciousness, start CPR

First aid – Infants less than 1 year old

- Place the infant in a prone position over the forearm and give 5 slaps between the shoulder blades
- Turn infant supine with head downwards, perform 5 chest thrusts using two fingers
- If the infant loses consciousness, start CPR

Accidents

Ensure safety at the scene of a traffic accident

- Warn oncoming traffic and stop traffic leading at the scene of the accident
- Place your safety triangle about 200 meters away from the accident
- Switch off the vehicle involved in the accident
- Put out fires if they have ignited.
- Secure the car if there is a risk of a rollover

Bleeding

Symptoms:

An open wound is bleeding heavily. A large amount of blood can be lost in a short time.

First Aid

- Make the person sit or lie down
- If the bleeding is severe, apply firm pressure directly to wound, using the cleanest compress you can find
- If blood soaks through, place another pad on top of the soaked one and continue applying direct pressure
- Do not remove large objects embedded deep in the wound
- Get medical attention immediately but call 112 if you are unable to stop the bleeding

Fractures

Symptoms: Inflammation of open wounds, pain, deformity or impaired mobility.

First Aid

- Help the individual get into a comfortable position
- Stop any bleeding
  - Support the limb to prevent unnecessary movement
- Cool the wounded area, 20 minutes at a time
- Get professional help immediately if you suspect broken bones

Burns

Symptoms: Superficial redness, swelling, pain, burn blisters or numbness.

First Aid

- Put out the fire
- Hold the burned area under lukewarm water until the pain subsides
- Cover the burn with non-adhesive bandage, don´t break blisters
- If the burn is larger than the area of a hand spread out, reaches all the way around a limb or covers the face or other sensitive body parts, get professional help immediately

Head trauma

Symptoms of a severe head injury:

Unconsciousness, drowsiness, memory loss, vomiting, headache or seizures.

First Aid

- Immediately **call 112** if the individual loses consciousness or has seizures
- While you are waiting for assistance, please support head and neck, assume neck injury
- Call a physician for advice, even if no serious symptoms appear
- Let the individual rest under observation for at least 6 hours
- It is not advisable to strain yourself immediately after a head injury

After a high fall, a serious car collision accident or a car rollover, call 112 and have individuals involved in the accident taken to a physician, irrelevant of whether or not an injury is observed

Anaphylaxis (severe allergic reaction)

Symptoms: Difficulty breathing, swollen lips, tongue or throat, skin rash, rapid heartbeat or impaired consciousness.

First Aid

- Immediately **call 112**
- Make the individual as comfortable as possible
- Assist in using adrenaline autoinjector if available and if the induvidual is unable to inject himself

Diabetes hypoglycaemia

Symptoms: Irrational behaviour, trembling, paleness, sweating, hunger or cramps.

First Aid

- Give the individual sugar (juice, soda, sugar cubes) if he is able to swallow
- **Call 112** if the situation does not improve, the individual cannot swallow or loses consciousness

Chest pain

Symptoms: Pain in the left side of the chest that often spreads to the arm and neck, sweat and nausea.

First Aid

- Call 112
- Try to ensure peace and quiet
- Make the individual as comfortable as possible
- Help the person take 300mg magnesium, if they're not allergic
- If the person stops breathing normally, start resuscitation with chest compressions and rescue breathing

Seizures

Symptoms: Sudden seizures and impaired consciousness

First Aid

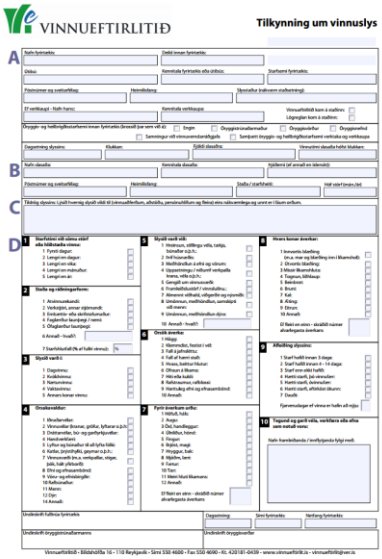
- Protect the person from injury, put something soft under the head.
- Make sure nothing is pressing on the throat or blocking the airway.
- Stay with the individual and talk to him until the seizure has stopped.
- Try to lay the persons on their side.
- Call 112 if the person is having their first seizure, the seizure doesn't stop within 2 minutes or if the person does not regain consciousness within 10-20 minutes after seizure has stopped

Registering accidents and mishaps

Employees shall ensure that all accidents and mishaps are reported.

- Keep evidence at the scene of the accident for research purposes.
  Report all accidents and mishaps to a safety representative and a supervisor.

Accidents and mishaps shall be reported in the following manner:


VINNUEFTIRLITIÐ
Tilkynning um vinnuslys

A form issued by the Administration of Occupational Safety and Health to report accidents at work.

- **Serious accidents** report to the Administration of Occupational Safety Health (Vinnueftirlit ríkisins) and the Social Insurance Administration (Sjúkratryggingar Íslands) within 24 hours.
- **Other accidents** report to the Administration of Occupational Safety and Health within 14 days
- Electrical accidents, hazardous conditions, dangerous incidents and mishaps should also be reported to The Iceland Construction Authority (Mannvirkjastofnun) using the MVS 3.230 form.
- Pollution accidents should be reported to The Environment Agency of Iceland (Umhverfisstofnun) or the health authorities in the respective community.

Accident Response

1. **Ensure safety**
2. **Call 112**
3. **Immediately apply resuscitation if there is no response to stimuli and breathing is abnormal**
4. **Stop bleeding by applying direct pressure to the cut or wound**
5. **Provide emotional support**

8. Emergency response

Evacuation plan / Escape routes

- Become familiar with overviews of escape routes / evacuation of your workplace.
- Ensure that escape routes are not obstructed.
- Take part in drills.
- Find out the position of the assembly area.
- Become familiar with the response plan.

Fire and fire protection

Become familiar with:

- The correct response to fires.
- Positions of extinguishers and fire hoses.
- The use of extinguishers and fire hoses.
- Positions of fire alarms.
- The sound of the fire alarm.
- Escape routes.

Fire alarms

Employees should respond to the fire alarm in accordance with the evacuation plan.

The basic response is:

- Let others know about the fire.
- Save others.
- Call **112.**
- Exit the building in accordance with the evacuation plan or extinguish the fire.
- Don’t use water on electrical equipment.
- Don´t compromise your safety or others.

Fire evacuation

- If there is smoke ahead then choose another route.
- Feel closed doors, if they are hot then choose another route.
- Close doors towards the fire, but don´t lock them.
- Choose the shortest clear way out.
- Never use an elevator in a fire.
- If you end up in smoke keep close to the floor, for example by crawling.
- Use a respirator if available.

If you can´t get out

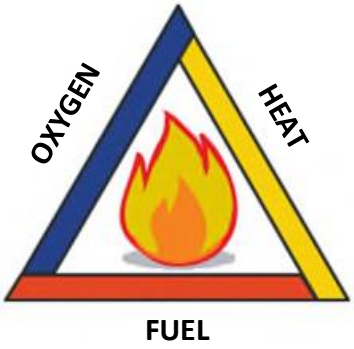
Close yourself in a room away from the fire, preferably with a window.
Let someone know:

- Call the emergency number ***112*.**
- Shout out of the window.
- With banging and shouting.

Keep calm and wait for rescue.

After getting out

- Go to the assembly area or safe zone, don´t obstruct access at escape routes.
- Let someone know and share important information.
- Provide information about people that could be in the building.
- Don´t go back in until the fire brigade permits entry.



Use of extinguishers

- Become familiar with the use of extinguishers.
- Don’t direct the extinguisher at liquid if the liquid is flammable.
- Begin extinguishing at the base of the fire, up wind, and drive the fire before you with equal sideways strokes.
- Only use the amount of extinguishing substance that you need to put out the fire, keep the rest in case the fire ignites again.
- If the extinguisher has been used, inform the safety manager who sees that the equipment is refilled as soon as possible. Information about extinguishers can be found at shs.is.

Response to danger

- Be watchful of unusual circumstances.
- Keep calm.
- Don’t put your life or health at risk.
- Document all information that could be useful.
- Notify your manager of the course of events and / or the emergency line ***112***.
- Direct the media to managers and / or the public relations officer.

Earthquakes

Safety measures:

- Become familiar with safety measures and response to earthquakes at the Civil Protection Department homepage: Almannavarnir.
- Position or fasten heavy items and equipment in a way that they do not produce danger.

If an earthquake is likely:

- Notify people.
- Go to a safe area.
- Listen to announcements and instructions on the radio and be on the look-out.

During an earthquake is likely:

- Leave the building or go to a doorway, to a corner of two load bearing walls, or under a table.
- Avoid items that could fall.
- If you are working at height hold tight until the earthquake passes.
- If you are working in a trench, leave it if possible. Otherwise you should stay in the middle of the trench, cover your head and keep the ground away from senses.

After an earthquake:

- Before re-entering a building, you should make sure there is no danger of collapse, leaks or broken glass or other debris.
- If the building must be evacuated, leave the building avoiding objects that could fall.
- Never use elevators until a qualified person has verified that they are safe to use.

Volcanic eruption

Volcanic eruptions usually give a warning but can begin without warning. Become familiar with instructions at the Civil Protection Department homepage Almannavarnir.

Danger can arise from:

- Lava flows.
- Falling ash.
- Toxic gasses.
- Lightening.
- Floods from eruptions under glaciers.

During a Volcanic eruption you should:

- Avoid ash falls and steam that obscure your vision.
- Avoid Stay low areas where toxic gas can accumulate.
- Choose the shortest way out of an ash fall by going across
- the wind direction.
- Use a helmet and dust mask or a wet cloth to cover the senses.

9. Various information

Safety equipment

- Safety belts
- Lifelines
- Fall protection line
- Retractable lifelines
- Relief step
- Safety frame
- Respirator masks
- Gas meters
- Life jackets
- Life buoys
- High voltage pliers/tester
- Avalanche whistle
- Rope gun
- Safety net
- Eye rinsing equipment
- Defibrillators
- Smoke diving equipment

The five safety rules

Disconnect from the mains

Secure against reconnection

Verify that the system is dead

Carry out earthing and short circuiting

Provide protection from adjacent live parts

Important links

Laws concerning work environment, health and safety in the workplace no. 46/1980 (Lög um aðbúnað, hollustuhætti og öryggi á vinnustöðum nr. 46/1980)

go to website alþingi.is

Regulations concerning health and safety at the workplace no. 920/2006

(Reglugerð um skipulag og framkvæmd vinnuverndarstarfs nr. 920/2006)

go to website reglugerd.is

Regulations about health and safety signs (Reglur um merkingu öryggis- og heilbrigðismerkja) go to website vinnueftirlit.is

Regulations about labelling work-areas, go to website vegagerdin.is (Reglur um merkingu vinnusvæða go to website vegagerdin.is)

Safety Control of Electrical Contractors Work procedure VLR 10, (Reglur um skoðun innri öryggisstjórnunar rafverktaka) go to website mannvirkjastofnun.is

Questions and answers regarding electrical go to website mannvirkjastofnun.is

Memorandum no. 1/84 Orðsending NR. 1/84 go to website rafbok.is

Cable colour codes go to website samorka.is

You will find advice on health, go to website landlaeknir.is

Safety and health of workers, go to website vinnueftirlit.is

Information about first aid, go to website raudikrossinn.is

Preventative measures and response, go to website almannavarnir.is

The Occupational Safety and Health Administration's work accident notification form can be found at Vinnueftirlit.is „**Tilkynning um vinnuslys**“ notification of an accident at work.

Form MVS 3.230 for notifications of electrical accidents can be found on the Civil Engineering Agency's "report of danger and emergency"

Instructions about the use of extinguishers: shs.is

Information about electrical energy system emergency collaboration NSR landsnet.is