Read and observe signs in your workplace!

They help you to avoid accidents at work
They help you in your daily life
Safety signs warn you of certain hazards, obligations and prohibitions

**Warning** of hazards or dangers.

**Obligation** to behave in a certain way.

**Prohibition** to behave in a way that could put you in danger or cause a hazard.

**Emergency** relating to:

**Evacuation** routes and emergency exits.

**Fire protection equipment and alarms.**
Signs provide information, but too many signs can be confusing.

Signs do not replace technical and organisational measures to prevent occupational hazards and they should be used when it has not been possible to totally eliminate all risks.

The following situations, among others, require signs:

- When there are no technical or organisational prevention measures for collective protection, when the measures are insufficient, or to complement any measure that does not totally eliminate the risk.
- Entrances to workplaces (laboratories, workshop, etc.) in which the activity that is carried out requires the use of personal protective equipment.
- Workplaces in which employees must have special authorisation to enter, due to the nature of the activity that is undertaken.
- Signs to indicate fire protection equipment, emergency exits, evacuation routes and alarms, so that they can be located and used quickly and easily, if necessary.
Safety signs

Signs that warn of a risk or hazard

Warning sudden drop
In areas in which there are different levels, and an employee could fall from one to another.

Electrical hazard
Electrical junction boxes. Equipment in which there is a risk of electrical contact.

Cut and puncture hazard
For equipment, machines or installations in which some parts can cut or cause puncture wounds. Hand protection must be worn.

Beware of moving machinery
For equipment, machines or installations in which moving parts are accessible.

General danger
Sign to warn of any hazard. It must be accompanied by text indicating the type of hazard.

For example:
To warn that chemical products are stored in a place, this pictogram will be used with the following text underneath: “Storage of Chemical Products”.

Prohibition signs

Mandatory signs

Safety colour: Yellow

Shape: Triangle

Radiation warning signs

Warning signs

Safety and hygiene regulations
Safety signs

1. Signs
2. Warning signs
3. Mandatory signs
4. Prohibition signs
5. Radiation warning signs

### Signs that warn of a risk or hazard

- **Caution: overhead load**
  
  In areas where there is equipment that lifts loads, such as gantry cranes, blocks and tackles and cranes, in which the suspended load could fall.

- **Hazard: forklift trucks**
  
  In areas where forklift trucks, pallet jacks and other load-moving equipment circulate.

- **Ultraviolet radiation**
  
  For soldering equipment or other equipment that emits ultraviolet radiation. Eye and skin protection is mandatory.

- **Confined space**
  
  In confined spaces, i.e. areas with limited openings and poor ventilation, where the atmosphere may be hazardous due to the accumulation of toxic contaminants or inflammable material, or the lack of oxygen. You need special permission to enter and work in these spaces.

- **Danger explosive atmosphere**
  
  In areas in which there is a risk of an explosive atmosphere forming. A special work permit is required to enter and work in these areas.

- **Fragile surface**
  
  In areas where there are surfaces that can only support limited weight. A harness may be mandatory to prevent falls.
1 Laser radiation
   In areas in which equipment that generates laser radiation is used. Eye protection may be required.

2 Optical radiation
   In areas in which equipment is used that emits optical radiation. Eye protection may be required.

3 Non-ionising radiation
   In areas in which equipment is used that emits non-ionising radiation.

4 Biological hazard
   In areas or equipment in which the activity involves biological agents. The instructions included in biosafety guidelines must be followed.

5 Strong magnetic field
   In areas in which equipment generates strong magnetic fields. People with pacemakers should take precautions.

6 High-pressure fluids
   In equipment and installation that contains fluids under pressure, to indicate that splashing is possible. Eye, face, hand and body protection may be required.

7 Low temperature
   In areas in which employees may be exposed to low temperatures, such as cooling chambers and cryogenic installations.

8 High temperature
   In areas in which employees may be exposed to high temperatures, such as environmental chambers.

### Signs that warn of a risk or hazard

- **Radiation warning signs**
  - Laser radiation
  - Optical radiation
  - Non-ionising radiation

- **Mandatory signs**
  - Biological hazard
  - Strong magnetic field
  - High-pressure fluids

- **Prohibition signs**
  - Low temperature
  - High temperature

- **Warning signs**
  - In these two cases, protection of the body, hands and feet may be required.
If you work with chemical products, remember these signs!

1. **Flammable materials**: Substances or mixtures that may combust.
2. **Oxidizing agents**: Substances or mixtures that react exothermically when they come into contact with other agents, particularly if they are flammable.
3. **Radioactive materials**: Radioisotopes or radionuclides. Facilities in which radioactive materials are handled.
4. **Corrosive materials**: Substances or mixtures that can have a destructive effect when they come into contact with living tissues.
5. **Harmful substances or irritants**: In work areas and rooms or cupboards used to store harmful substances or irritants.
6. **Explosive materials**: Substances or mixtures that can explode if affected by a flame, an impact or friction.

It is important to put signs on:
- Work areas
- Stores of chemical products and safety cabinets.
<table>
<thead>
<tr>
<th>Signs indicating something you must do</th>
<th>Shape: Circle</th>
<th>Safety colour: Blue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand protection must be worn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indicates that you must wear gloves when you are in an area or when using equipment to avoid contact with chemical products, cuts, burns, damage caused by heat or cold, or electrical contact.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foot protection must be worn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indicates that you must wear protective footwear when you are in an area or when using equipment to reduce the effects of impacts, cuts or crushing.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eye protection must be worn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indicates that you must wear safety goggles when you are in an area or when using equipment, for example when you work with lasers or handle chemical products or machinery that may cause flying debris.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ear protection must be worn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indicates that you must wear ear defenders or ear plugs in an area or when using equipment to reduce exposure to noise in certain mechanical, physical and textile laboratories.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Face protectors must be worn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indicates that you must wear a face shield in an area or when using equipment to protect against splashes of chemical products, flying particles, radiation in soldering work, etc.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Safety signs

1. **Signs**
2. **Warning signs**
3. **Mandatory signs**
4. **Prohibition signs**
5. **Radiation warning signs**

**Signs indicating something you must do**

- **Respiratory protective equipment must be worn**
  Indicates that you must wear respirators in an area or when using equipment, due to the presence of toxic chemicals, dust, fibres, etc.

- **Safety helmet must be worn**
  Indicates that you must wear a safety helmet in an area or when using equipment to reduce the effect of impacts to your head, particularly in building works or in areas in which loads are moved.

- **Protective clothing must be worn**
  Indicates that you must wear protective clothing or leather aprons in an area or when using equipment to avoid contact with chemical products, burns from heat or cold, etc.

- **Safety harness must be worn**
  Indicates that to access and work on a roof, scaffolding or raised platform you must be attached to an anchor point, lifeline or any other device that prevents you from falling, and you must wear a safety harness fitted with the required elements to attach you.

- **Pedestrians must use this route**
  Indicates the route established for pedestrians, especially in areas in which forklift trucks and other vehicles move.
<table>
<thead>
<tr>
<th>Safety signs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Prohibit behaviour that could put you in danger</strong></td>
</tr>
<tr>
<td><strong>Shape:</strong> Circle</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No entry to unauthorised personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicates that for safety reasons access to a certain area is strictly limited to authorised personnel.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Do not touch</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicates that for safety reasons you must not touch a machine, work equipment, a surface, a test, etc.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No pacemakers beyond this point</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicates that people with pacemakers cannot access an area in which there is a strong magnetic field that could affect pacemaker operation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Do not operate the valve</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicates that for safety reasons a certain valve cannot be opened, closed or moved: it must remain in the predefined position.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Do not operate without authorisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicates that for safety reasons, a machine or piece of equipment, instrument panel, lever, switch etc. cannot be operated. Used to indicate that a piece of equipment has been tagged out.</td>
</tr>
</tbody>
</table>
1. **No smoking or naked flames**
   Indicates that for safety reasons it is absolutely forbidden to smoke, light a naked flame or carry out tasks that use heat.Used particularly in work areas and stores where flammable products are kept.

2. **No forklift trucks**
   Indicates that no forklift trucks can be used in an area.

3. **No pedestrian access**
   Indicates that the route is not suitable for pedestrians due to the risk of collision with vehicles and forklift trucks or impacts from the movement of loads.

4. **Do not use this lift for people**
   Indicates that lifting equipment is not designed for people. Particularly common in goods lifts.

5. **Warning signs**
   This sign could be accompanied by a panel that indicates the maximum nominal load.
Safety signs

If you work in radiation facilities, remember these signs!

Classification of areas according to exposure risk and taking into account the probability and magnitude of potential exposure

**Supervised area**
Area under suitable supervision relating to protection against ionising radiation.

**Controlled area**
Area under special regulations relating to protection against ionising radiation and/or special protection against contamination.

**High radiation area**
Area in which there is a risk of receiving a dose higher than the annual dose limits.

**Very high radiation area**
Area in which there is a risk of receiving in a short period of time a dose higher than the annual dose limits.

**No entry**
Area in which there is a risk of receiving in a single exposure a dose higher than the annual limits.

**In all areas:**
Access restricted to authorised personnel
If you work in radiation facilities, remember these signs!

**Risk of external exposure**

**Tri-foil with radial dots**

Due to the nature of the source of radiation and the type of practice, there can be no direct contact with the radioactive material and personnel are only exposed to radiation emitted by the source. X-ray generators, particle accelerators and the use and handling of encapsulated sources of radiation.

**Risk of contamination**

**Tri-foil on a background of dots**

When there is the possibility of contact with radioactive material and the radiation it emits, but there is no external contamination, there is no significant risk of external irradiation. Contamination may be external or cutaneous, or internal when radionuclides penetrate the organism by any path (inhalation, ingestion, cutaneous, etc.).

**Risk of contamination and external irradiation**

**Tri-foil with radial points on a background of dots**

A combination of the two situations above.
Risk of external irradiation

**Tri-foil with radial dots**

Due to the nature of the source of radiation and the type of practice, there can be no direct contact with the radioactive material and personnel are only exposed to radiation emitted by the source. X-ray generators, particle accelerators and the use and handling of encapsulated sources of radiation.

Risk of contamination

**Tri-foil on a background of dots**

When there is the possibility of contact with radioactive material and the radiation it emits, but there is no external contamination, there is no significant risk of external irradiation. Contamination may be external or cutaneous, or internal when radionuclides penetrate the organism by any path (inhalation, ingestion, cutaneous, etc.).

Risk of contamination and external irradiation

**Tri-foil with radial dots on a background of dots**

A combination of the two situations above.

If you work regularly IN CONTROLLED AREAS

In which there is a risk of external exposure, you must use an individual dosimeter.
Remember the following recommendations!

Make sure that safety signs are always visible and in good condition. Do not cover them or change their position.

Be aware of safety signs when you work in external companies. Find out what safety regulations you must follow to access the workplace.

Be cautious if there is a sign that you do not understand. Ask what it means before you act.

To find out about emergency signs
See IE 002 at: http://www.upc.edu/prevencio/ca/emergencies/ie