



Alfred Wegener Institute

Helmholtz Centre for Polar and Marine Research

Annual safety briefing 2017/18

General behaviour – basic instruction

- Smoking is absolutely prohibited in the buildings of the AWI.
- No use of alcohol and drugs.
- Cars and other company vehicles may only be driven with a valid driver's license.
- Maintain order and cleanliness in all areas.
- Before starting work and prior to the procurement of equipment, risk assessments should be carried out.
- A risk assessment is also to be carried out for people under 18, pregnant women and, if applicable, severely disabled people.
- Familiarise yourself with the location and function of emergency shut-off devices (gas, water, electricity).

General safety instructions



Mandatory signs must be followed.

									
Safety glasses	Largely impermeable eye protection	Safety shoes	Ear muffs	Protective clothing	Protective gloves	Use handrails	Respiratory protection	Use mask	Life vest


Prohibition signs prohibit states or actions.

						
Smoking prohibited	No open flames; fire, open ignition sources prohibited	No entry for people with pacemakers or implanted defibrillators	Stowing or storing prohibited	Food and beverages prohibited	Access prohibited for unauthorised persons	Switching forbidden

General safety instructions



Emergency exit and escape route markings indicate the existing facilities.

					
Fire extinguisher	Fire hose	Fire fighting equipment	Fire detector	Fire escape ladder	Fire alarm phone







					
Doctor	First aid	Automated external defibrillator	Safety shower	Eye wash unit	Stretcher

General safety instructions



Emergency exit and escape route markings indicate the existing facilities.

Note the locations of the facilities. Rescue equipment must be kept free of obstructions!

					
Assembly point	Emergency exit door	Escape route	Directions	Emergency exit with access to fire ladder	Emergency exit

General safety instructions



Escape routes must be kept free at all times.

Not like this!








Note the location of the emergency exits, assembly points and the course of the escape routes.



General safety instructions

Warning signs point out dangers.

							
General warning signs	Warning: explosive atmosphere	Warning: gas bottles	Warning: toxic materials	Warning: oxidising materials	Warning: optical radiation	Warning: corrosive materials	Warning: inflammable materials

						
Warning: electrical voltage	Warning: low temperatures/frost hazard	Warning: magnetic field	Warning: non-ionising radiation	Warning: biohazard	Warning: laser beams	Warning: radioactive materials or ionising radiation

Hazardous individual workspaces

For dangerous work, especially outside normal working hours, a second person must be present or there must be a technical measure (e.g. personal emergency alarm system) in place. It must be ensured that first aid can be carried out within no more than 15 minutes.

Hazardous substances symbols



Explosive	Flammable	Oxidising	Gases under pressure	Corrosive	Acute toxicity	Acute toxicity	Health hazard	Environmentally hazardous

Not to be confused with the dangerous goods symbols, for example

Class 2 Gases	Class 3 Flammable liquids	Class 6 Toxic substances	Class 8 Corrosive substances	Class 9 Miscellaneous dangerous substances and items

The handling of hazardous substances is regulated in more detail in the operating guidelines.

Plants and machines



- Work with equipment and machinery only after instruction.
- Report defects or hazardous conditions to the supervisor immediately.
- Label defects and avoid further use.
- Do not use damaged tools.
- Always use appropriate tools – such as safety steps (elephant feet) and ladders as well as stable transport trolleys.



Electrical devices

- Always perform a visual inspection on electrical equipment to check for external damage before use.
- Repairs are to be made only by qualified electricians.
- Multiple sockets must not be connected in series.
- In the event that the inspection period according to DGUV V3 is exceeded, the device must be immediately registered for inspection. It may no longer be used until tested.
- Cable installations must be protected against damage.
- When extension cords and multiple sockets are used in wet areas, they must be waterproof.



Designated pathways/vehicle routes



- The requirements also apply to visitors and external companies.
- Leaking fluids must be removed immediately to prevent slipping accidents.
- Cables and other lines must be laid so that they cannot lead to tripping accidents.



Protective and emergency equipment

- Emergency facilities and their signs may not be adjusted nor repositioned.
- Traffic and escape routes must be kept clear.
- Fire and smoke doors must be kept closed.
- If an alarm system in a workplace cannot be heard/seen, inform the Occupational Safety team and the Technology & Environment department.
- Report faults in emergency equipment (e.g. missing seal on the first-aid kit) to the Occupational Safety team and faulty technical facilities to Building Services (Technology & Environment).

Behaviour in the event of accidents, fires and damage

1. Keep calm
2. Report
3. Emergency measures
4. Follow-up measures
 - For details see alarm plan
 - Always treat injuries properly and report them.
 - In cases of doubt, consult a doctor.
 - Enter all injuries in the accident book.
 - Accidents at work are to be presented to an accident insurance doctor.
 - All accidents – even near-accidents – are to be reported to the supervisor, then Human Resources and Occupational Safety.

Behaviour in the event of fire

- Report fire to the fire brigade and rescue people; then, if practicable, fight the fire.
- Call the fire brigade and do not hang up until the control centre has finished talking.
- Gather employees at the assembly point and do a roll call.
- Any missing staff must be reported upon arrival of the fire department.
- Fire brigade/ambulance services must be informed of all relevant details.
- Every fire must be reported to superiors.
- Putting out fires is the responsibility of the fire brigade!

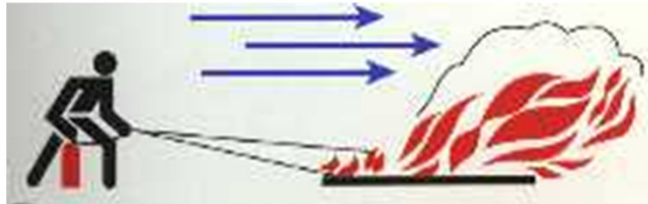


Fire classification of fire extinguishers

- Using the wrong extinguishing agent can accelerate the spread of fire dramatically. Example: spraying a fat fire with water. Therefore, please note for which type of fire the extinguishers are suitable.

Fire class	Symbol	Incendiary material	Appearance	Example
A		Solid, non-melting materials	Embers and flames	Wood, paper, textiles, coal, non-melting plastics
B		Liquids, melting solids	Flames	Solvents, oils, waxes, melting plastics
C		Gases	Flames	Propane, butane, acetylene, natural gas, methane, hydrogen
D		Metals	Embers	Sodium, magnesium, aluminium
F		Cooking fats and oils in frying and baking equipment	Flames	Cooking fat Cooking oil

Proper extinguishing



Fight the fire with the wind



Use several fire extinguishers at the same time



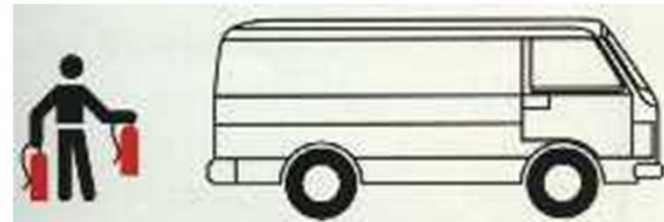
Fight large-scale fires from the front and the bottom



Watch out for a risk of reignition at the fire site



Fight dripping or flowing fires from above

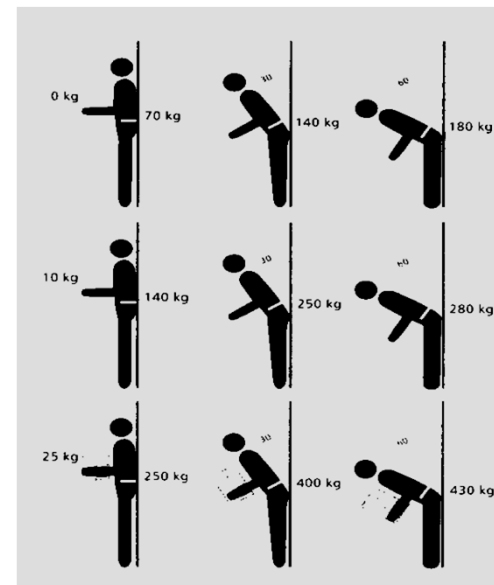
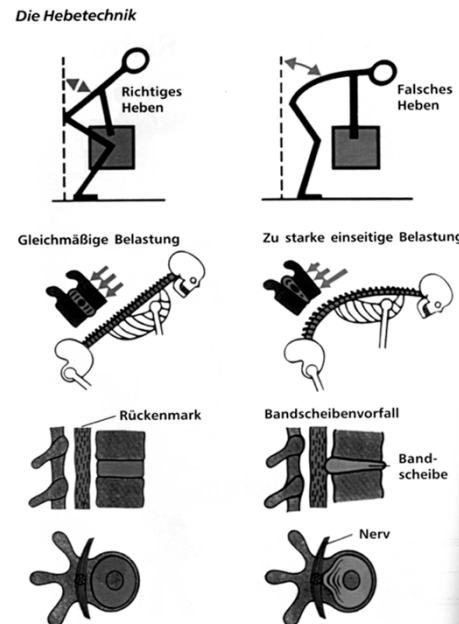


Refill used fire extinguishers

If you yourself catch fire, try not to move around, because this can cause the fire to spread. Put the fire out with a fire extinguisher! Caution with carbon dioxide extinguishers: do not aim at the face, there is a risk of frostbite and suffocation.

Lifting and carrying

Lifting excessively heavy loads can cause vertebral fractures and herniated discs. Incorrect lifting techniques can strain the intervertebral discs asymmetrically: a load of 25 kg and a bent body position acts on the spine like a load of nearly half a ton!



Lifting

- Never lift a load in a jerky movement
- Before lifting, clear the area of anything that may impede your movement
- Avoiding arching your back
- Do not twist your spine
- Carry the load with your body

Carrying

- Use transportation devices
- Keep an upright posture
- Carry the load close to your body
- Do not carry the load on your side
- Spread loads or use more than one person

Personal protective equipment and maternity leave



Personal protective equipment

- Always wear appropriate personal protective equipment.
- When working in other departments, find out what you need in advance.
- In the warehouse, safety shoes must be worn; in laboratories, wear a coat, safety goggles and closed shoes.

Maternity leave

- Inform the supervisor about a pregnancy (and the expected delivery date) by submitting a medical certificate.
- The risk assessment for expectant mothers can then be observed accordingly and updated if necessary.
- Statutory reporting obligation to the Office for Occupational Safety by the AWI.



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