



Universität Hamburg
DER FORSCHUNG | DER LEHRE | DER BILDUNG

General safety training

Institut für Experimentalphysik
Universität Hamburg

Training content

Required

- **General safety**
Emergency cases, fire safety, hazardous substances, etc.
- **Sexual harassment/discrimination**

Optional

- **Work in laboratories/hazardous substances**
- **Radiation safety**
- **Laser radiation safety**

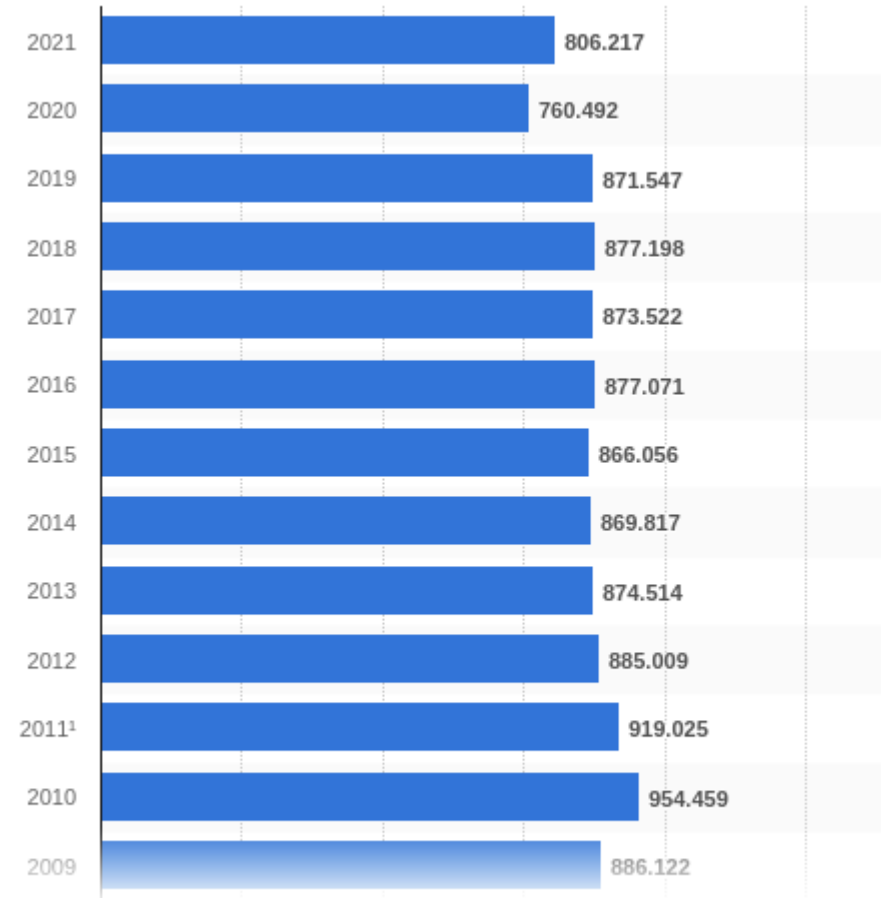
Work accidents in Germany

Number work accidents reported in
Germany from 2009 to 2022
(de.statista.com, 11.11.2022)

Most of the accidents do not happen due to
technical failures or organisational deficits but
due to “human failures“

→ ignorance of safety rules

→ Every person actively contributes by her/his action!



Goals of the training

- **Fulfill legal requirements:** Employers have to conduct safety trainings and supply information about potential dangers at work (to maintain insurance cover/UK Nord)
- **Safe behaviour at work:**
 - Avoiding of accidents
 - Protection of health

General and **work place related** instructions

- both instructions have to be **before** starting to work and have to be documented!
- The documentation is carried out in the individual groups (important: name, date, kind of training → certificates)
- With this procedure responsibility is also transferred to each individual person!

Occupational safety: organisation

Responsible for occupational safety: work group leader

Supporting function: safety delegates of the groups

Additional delegates for special topics, e.g. radiation protection, laser safety

Specialists from the [Occupational Safety and Environmental Protection Unit](#)

Sources for information

website of the institute:

safety code/fire protection/links (e.g. Occupational Safety and Environmental Protection Unit)

Occupational health and safety management system for the university (**AGUM**) - German only :-(

<https://uni-hamburg.agu-hochschulen.de/startseite>

Occupational safety

Risk assessments

- for all (dangerous) work, every working place
- in written form, annual updates
- including operation instructions
- basis for work place related training (original kept locally!)

Operation instructions

- provide rules for handling work equipment
- information about special risks, e.g. for machines/general things (in blue) or chemicals (in orange)

→ these documents should be read and understood!

→ questions need to be discussed before starting to work (supervisor, safety delegates)

COVID-19/infection control and protection

- current regulations are written down in the hygiene plan of the university
<https://www.uni-hamburg.de/en/newsroom/intern/2020/0131-corona-faq/en-hygieneplan-uhh-aenderungen-kenntlich.pdf>
- all restrictions have been cut
- still, the usage of FFP2 masks inside buildings is recommended
- „work-at-home“ and electronical communication possible if agreed on with supervisor.



Emergency cases - Fire safety

In an emergency case/rescue plan

At the campus Bahrenfeld:

Call SAVE/DESY: 2500 / mobiles or from outside: 040-8998-2500

→ Do NOT call external fire men/ambulance/police!

Where...	did the accident/incident happen?
What...	happened exactly? Short description of the situation!
How many...	injured/involved people?
What...	kind of injuries?
WAIT!	In case of any questions!

At your working place - are you aware of ...

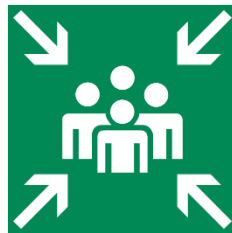
Escape ways



Locations of first-aid equipment



Common meeting points



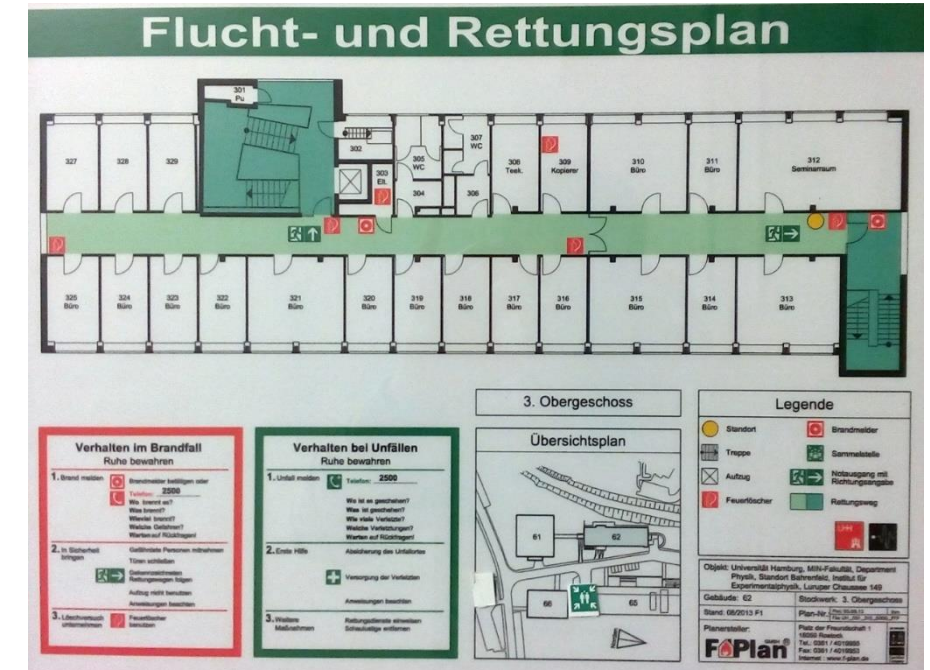
Locations of fire extinguishers



Emergency numbers



First-aiders?



You need be able to orient yourself also in the case of smoke and reduced sight!

Common meeting points

In case of an alarm you **immediately** have to leave the building and go to the **meeting points!**

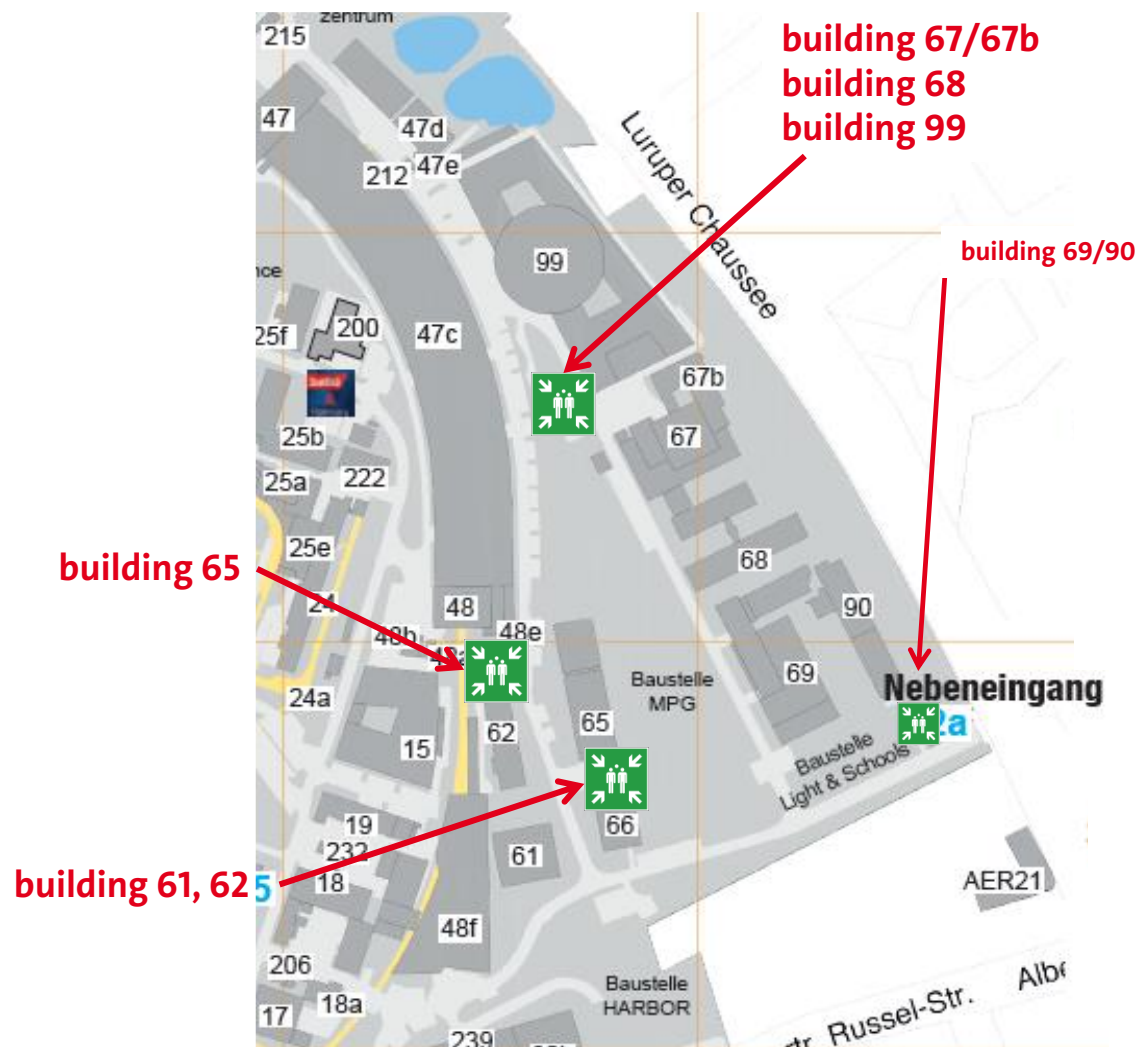
This also applies in case of a **power failure**



Evacuation assistants report building cleared



Check if all colleagues are there and inform rescue people if necessary



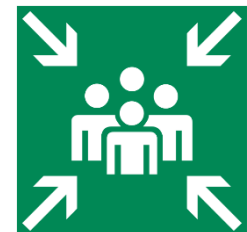
In case of a fire

- Ignite an alarm by calling **2500** or break the glass of a fire alarm box with your elbow and press the button
- Stay calm, close windows and doors
- If possible, switch of machines/experiments
- Leave the dangerous area **immediately** and use the marked escape routes!
- Do **NOT** use the elevator
- Help injured or disabled person leaving the building



Using a mobile

+49 40 8998 2500



→ proceed to **meeting point**

In case of a fire

- **Only** try to extinguish a fire if this is possible **without** bringing yourself into danger! Do not enter areas under smoke!
- If using CO₂-extinguishers: Leave the room immediately afterwards!

If you are not able to leave the building:

- Go to a room with windows
- Move close to the floor if smoky areas have to be crossed
- Keep doors closed
- Try to give signals from the window that people get aware of you
- Training to become a fire protection delegate are offered regularly by the university!



Fire safety/fire prevention



⇒ If needed talk to your local safety delegate or have a look into the Fire Safety Regulations

- No smoking and open fire allowed in any building
- Corridors/stairways are escape routes in case of an emergency



KEEP CLEAR of cartons & packaging/tables, chairs, etc.
NEVER block fire protection doors!
NEVER block safety equipment (fire extinguisher etc.)

→ evacuation assistants/building responsables

- Emergency exits must not be locked and always kept clear!
- Electrical devices for preparation of hot water:
 - To be used only in appropriate rooms (kitchens)
 - VdE testing (electrical safety) necessary!
 - Usage of fire resistant support mandatory!

In case of an accident

**First-aid course on
campus in English available!
Check university web-site!**

needed

Mandatory if:

1. Person unconscious
2. Life-threatening injuries
3. Electrical accident

- Rescue injured persons from the hazard area and place them in recovery position (if unconscious)
- Take care of life-threatening injuries/
involve second person
- **Call** Where?
2500 How many injured?
 Kind of injury *
- Continue supply of injured person
- Briefing for SAVE if possible
- SAVE takes over first-aid and guides external rescue forces
- Minor injuries: First Aid Kits
Verbandsbuchauszug (first-aid book):
only digital from now on #
(Proof for accident at work)
Spare parts for First Aid Kits: Mr. Illing/Mr.
Wieland 2207/2143
- Information concerning first-aid (only German):

#<https://uni-hamburg.agu-hochschulen.de/index.php?id=453>

Accidents:

- Accident at or on the way to work: If a medical treatment is required, a visit at a so called **“Durchgangsarzt”** (transit doctor; approved by health insurance) or a hospital is mandatory.

MVZ Elbe West

Rugenbarg 20
22549 Hamburg
040/866215580

Zentrum für Orthopädie Hamburg

Waitzstrasse 4
22607 Hamburg
040/89 90 08 - 0

AK Altona

u.a. Augenklinik (ophthalmic clinic)
Paul-Ehrlich-Str. 1
22763 Hamburg
040/18 18-81 0

Names and addresses of other **„Durchgangsarzte“**:

Appendix 2 of the job safety code or at <https://diva-online.dguv.de/diva-online/>

- Report any accident - in particular if medical assistance is needed – immediately to your supervisor/boss (report may be needed for insurance (UK Nord)) and your administration.
- Forms: <https://uni-hamburg.agu-hochschulen.de/index.php?id=256>



General safety rules

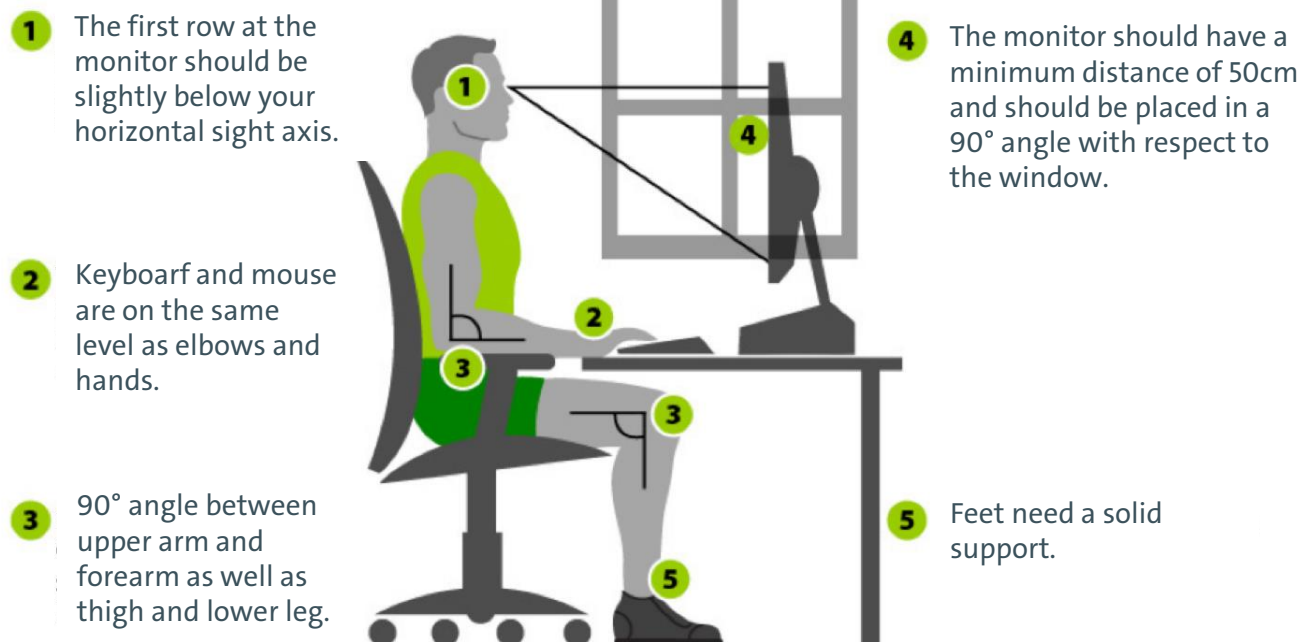
Work equipment

General safety rules: office work

- take care of an ergonomical position:
 - frequent changes between sitting and standing
 - implement “movement” breaks, ~5min/h
 - working at computers:
 - avoid reflexions from lights/windows
 - line of sight in parallel to windows
- do NOT use swivel chairs as steps
- set up printers and copy machines in separate rooms
- regular ventilation of offices
- the university offers a set of occupational health examinations
- in the event of pregnancy/breastfeeding, this should be reported to the HR department

→ employer can take the necessary measures in accordance with the Maternity Protection Act (§10 MuSchG)

Ergonomics at the working place



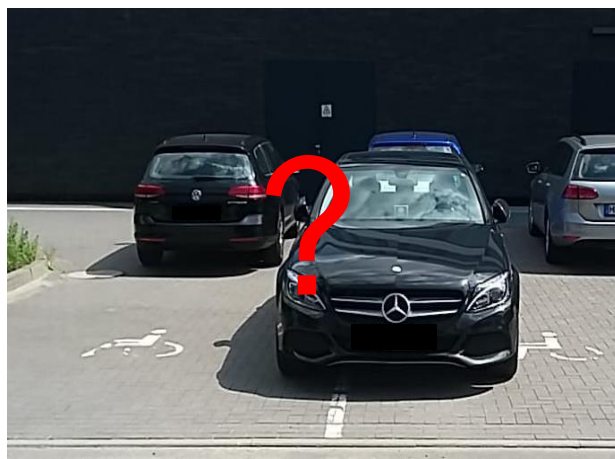
“Ergonomie am Arbeitsplatz”
von Marcel Kollmar & Partynia, Wikimedia Commons,
lizenziert unter CC BY-SA 3.0 DE.
URL: https://commons.wikimedia.org/wiki/File:Ergonomie_Bildschirm.png, abgerufen: 01.12.2020

General safety rules: behavior on the campus



- maximum speed is 30 km/h – independent on used vehicle
- Always adapt to weather conditions!

Feuerwehruzufahrt



Parking **only** in designated areas!
Always keep clear emergency access roads and escape routes!



General safety rules



Warning:
dangerous
Voltage



(Any similarity to actual events or persons/cars, living or dead, is purely coincidental.)

- Respect danger and warning signs as well as access restrictions!
→ Crosscheck with responsible person if work has to be carried out in area with **access restrictions**!
- Respect restrictions (**blockades**) even if this leads to detours!
- Never carry out dangerous experimental or technical work alone!
- Always work calm and thoughtfully
→ Keep working space clean and tidy

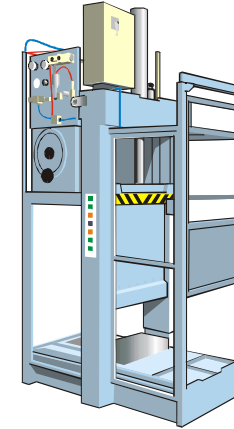
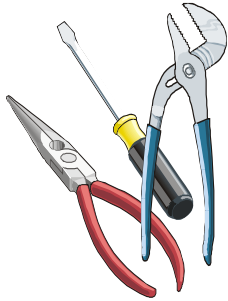
General safety rules



→ working space clean and tidy?

Work equipment

Work equipment: tools, devices, machines or machinery



→ Follow **manuals & warning notices**,
also **operation instructions**

→ Keep an eye on regular checks required, e.g. for ladders, forklifts



Rules for safe operation:

- No alcohol/smoking at work
- Every user has to be instructed **BEFORE** using any device/machine
- Visual inspection **BEFORE** usage!
- **NEVER** operate devices with open housings,
do **NOT** bypass, shortcut or even remove safety mechanisms
- Use your Personal Protective Equipment
(to be supplied by employer):
 - safety boots, gloves
 - safety glasses
 - ear protection



25% of the accidents
at work happen due to
manipulated safety
mechanisms!



Electrical devices

- Visual inspection regularly! Do NOT use damaged devices!
Clearly label them and arrange for repair or disposal.
 - movable electrical devices regularly have to inspected by trained personnel,
inspecting periods may vary (i.e. offices every 2nd year)
- Use extensions safely:
Avoid risk of stumbling by use of cable ducts
- Multiplugs MUST not ...
 - ... be used as extensions!
 - ... be stacked one after the other!



Disposal

- The institute provides suited disposal containers for almost all material, devices and no longer used equipment that need to be disposed!
- Questions how-to?
 - Safety delegates, waste and disposal staff!
- Responsibility of each person :
 - Use disposal containers correctly!
- Electronic waste: Zyklotronhalle
batteries/Li-batteries: Oliver Becker (62/315)
- Metal scrap: mechanical Werkstatt



CFEL – some peculiarities



- CFEL is equipped with a sprinkler system that is activated by light barriers. Therefore never start any
 - balloons, paper planes or other flying devices in the foyer
- In case of an alarm use the marked escape ways but NOT the open staircases.
- Main entrance in&out: revolving door
 - Over night (19-8 o'clock) revolving door is deactivated, use door left from revolving door with transponder
- Don't wear any lab clothing (coats, gloves) in the central area and office floors!
- Smoking not allowed as usual, also not in the inner courtyards!
- First-Aid room on first floor: O1.119

Ionizing radiation

Sources of stray radiation,
x-ray sources



Radioactive elements,
activated parts



In general: NO ADMITTANCE!



Ionizing radiation

Prohibited and controlled



Interlockdoors and -installations

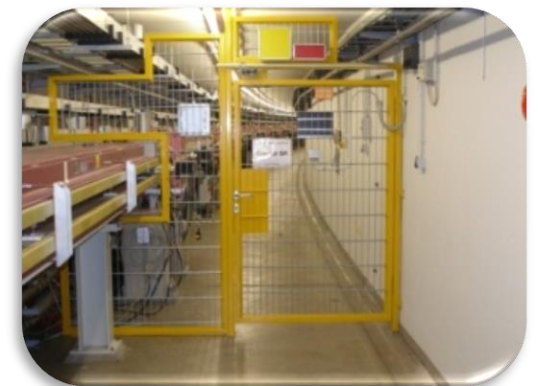


Working in DESY premises having radiation safety areas requires a radiation safety lecture by DESY!

Ionising radiation

Shieldings/ protective barriers:

- **Never remove!**
- **Any change is only allowed after consultation and approval of the responsible radiation safety officer!**



Questions? Comments?

Safety delegates of working groups & supervisors

Special safety delegates for particular duties :

Radiation safety delegate (Martin Tluczykont)

Laser safety delegate (Mark Prandolini)

Hazardous substances delegate (NN)

Fire protection (NN)

Organisation of job safety (Marek Wieland)

Proof for general safety training for
DESY/Dachs-card required?
Send email after succesful
training to
sicherheit_iexp@physnet.uni-hamburg.de

Or: **sicherheit_iexp@physnet.uni-hamburg.de**