

# Health& Safety Manual

# Emergency Numbers

Emergency Coordination

Occupational Safety Specialist

# 3720-3011

Main Entrance Security

## Health Center

Contents

Occupational Physician

Institutional Ethics Manager

### Occupational Health and Safety e-mail address isg@ku.edu.tr

Occupational Health and Safety web page http://isg.ku.edu.tr/tr/home

Waste Management e-mail address atik@ku.edu.tr

Health Center web page http://hc.ku.edu.tr

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#### Koç University Health & Safety Manual

has been prepared with the aim to inform our staff and students about occupational health and safety efforts being implemented in our university, draw attention to potential risks and provide information on practical applications.

This manual includes the precautionary measures to be taken in the event of emergencies and basic principles that should be followed in order to control the emergency and bring the situation back to normal as soon as possible. Furthermore, it provides information as to the actions that should be taken at the time of the emergency and thereafter.

We are sharing this manual prepared for maximizing the health and safety of our entire staff and students with the hope that it will be useful.

### Administrative Organisation of Occupational Health and Safety

Koç University Occupational Health and Safety Committee is organized for the purposes of performing, supervising and developing occupational health and safety activities within our university.

#### The Committee is comprised of

- Employer's representative
- Occupational physician
- Occupational safety specialist
- Employee representatives
- Human Resources officer

As a university, with the intent to participate all our employees to this organization, an e-mail address for occupational health and safety is provided to enable them to share their suggestions and comments. Our employees may send their notices to **isg@ku.edu.tr**. These notices shall be evaluated by the Occupational Health and Safety Team in the order of receipt and the owner of the notice shall be informed of the situation.

#### Occupational Health and Safety Practices

- The occupational health and safety training shall be conducted triennially.
- Employees' periodical health examinations shall be conducted triennially.
- Emergency exercise drills shall be conducted annually at a minimum.
- Occupational accidents and near-miss incidents shall be investigated and necessary immediate actions shall be taken in order to prevent its reoccurrence.
- Site inspections shall be conducted in a daily, weekly and monthly basis.
- Hygiene inspections shall be conducted in a monthly basis.

# Occupational Safety at **Koç University**

#### Offices

Laboratories

### **Traffic on Campus**

**General Precautions** 

Precautions in Foggy Weather

Precautions in Snowy Weather

### Waste Management

List of Waste Types Generated at our

University

Safety Signs



# Offices

In order to maintain the cleanness and order of our offices, we should act in accordance with a program. For this, we should first eliminate the reasons and conditions creating disorder, establish a specific order and sustain it through daily monitoring and checks.

- In particular, we should place frequently used items in close proximity when organizing our desks.
- We should not use electrical equipment with worn out or damaged cables and make a request to the relevant unit for replacement.
- Care should be taken for refraining from using extension cables within the workspace, or otherwise place them so as to prevent trips and falls.
- We should never use a chair in cases where you need to collect an item placed on top of a cabinet or at a high level.

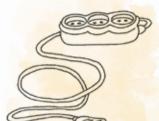
### Safety at Office



Inform the relevant unit for replacement of equipment with worn out or damaged cables.

Never use a chair in case you need to collect an item placed at a high level.





Do not use extension cables unless strictly necessary.

In the event of extension cable usage, place electric cables so as to avoid trips and falls.

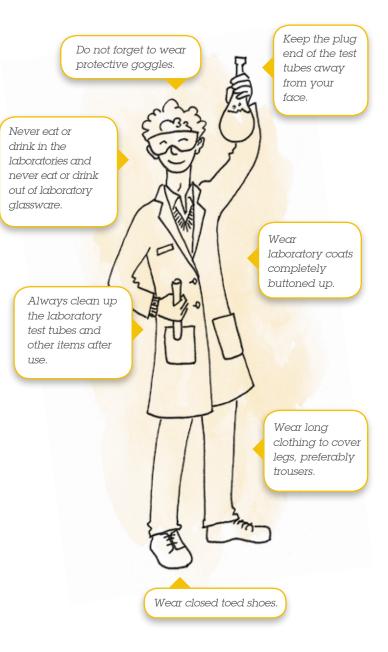




# Laboratories

- You should record a safety information form for all chemicals utilized in laboratories.
- When working with chemicals, you should use the personal protective equipment specified in the Material Safety Information Form.
- You should not work in laboratories alone, unauthorized and in the absence of the responsible person.
- You should not touch any testing apparatus, chemicals and other equipment in laboratories without the permission of the responsible person.
- You should wash your hands with soap before touching your face in laboratories.
- You should not drain acids and bases without neutralization. Neutralization should be carried out in a fume hood.
- You should report all accidents and spills to the supervisor.
- You should use waste bins for wastes sorted according to their categories.

### Safety in Laboratories





# **Traffic on Campus**

#### **General Matters**

- Speed limit on campus is 40 Kph.
- It is not allowed to park in front of fire fighting equipment, at or around the ambulance garage, in front of the entrances of buildings, on walking paths and pavements.

#### Precautions in Foggy Weather

- Turn on your fog lights and drive with headlights on low beam. One of the mistakes done when driving in fog is to use the high beam headlights. The light from high beam will be reflected back off the fog and impair visibility more.
- Do not use hazard lights whilst driving. Another mistake by drivers whilst driving in fog is using hazard lights to be visible. Hazard lights should be used only in case of danger when the vehicle is stationary.



- Follow the roadside markings, not road lines. Faded road lines may misdirect you and cause danger.
- Open your car windows no matter how cold it is. This way you can hear the warnings of other drivers. It will also prevent your interior windows from steaming.
- Fog also restricts the visibility of pedestrians. Therefore, drive slowly, especially on inner-city roads, stop at junctions at all times and drive on only if there is no one coming. It is recommended that pedestrians wear reflective clothing that can be seen easily from a distance.

#### **Precautions in Snowy Weather**

- Clean off the ice on your car windows and make sure you have clear vision of the mirrors. Also, make sure your lights are clear of any ice and snow.
- Use winter tyres for safer driving under heavy snow and frost.
- O Refrain from sudden braking and manoeuvres.
- Follow the roadside markings, not road lines. Faded road lines may misdirect you and cause danger.





## Waste Management

Minimization, source separate collection, interim storage of domestic, medical, hazardous and non-hazardous wastes. establishment of waste transfer centers if and when necessary, waste transportation, recycling and disposal of wastes, running of recycling and disposal facilities, closure, postclosure maintenance, monitoring and control processes at our university are implemented by the Facilities Management. You can communicate all your requirements regarding waste management to the Facilities Management through track-it system, atik@ku.edu.tr e-maill address and/or by dialling 2222.

#### List of Waste Types Generated at our University

- Contaminated waste 0
- 0 Contaminated packaging
- Laboratory chemicals 0
- Waste oils 0
- Fluorescents 0
- Waste batteries 0
- Electrical and electronic wastes 0
- Medical wastes 0
- 0 Recycle wastes
- Domestic wastes 0

Waste bins have been procured and placed on various places at the university for all waste categories generated at the university.







Waste oils

Fluorescents

Contaminated waste







Medical waste

Sharps waste







Hazardous waste storage

Hazardous waste storage







# Safety Signs

These are signs that provide information about occupational health and safety, caution against threats or give instructions through signboards, coloured, audio and/or luminous signals indicating a special purpose, activity or situation. You can find the warning signs used inside the campus below.



Emergency direction signs



Danger of electrical hazard



Speed limit 40 Kph



No parking





Danger of falling ice and snow

Disabled parking only





No smoking

Slippery surface





Eye protection must be used

Gloves must be worn







# Employee Health at **Koç University**

### Occupational Disease

Diseases That May Be Contracted by the University Staff

### **Musculoskeletal Disorders**

Symptoms

Diseases Caused by Working Long Periods in Standing Position

### Eye Diseases

Working with Display Screen Equipment

Tips for Eye Health

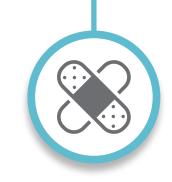
### Dysphonia and Vocal Cords Dysfunctions

Causes of Dysphonia

Tips for Vocal Health

Precautions When Working with Computers

Precautions When Using Smartphones



# **Occupational Disease**

Occupational disease covers states of temporary or permanent illness, physical or mental disability suffered by the insured as a result of a recurrent factor due to the nature of his/her work or management of affairs.

## Diseases That May Be Contracted By the University Staff

Diseases that may be contracted by our staff are listed below based on the degree of frequency:

- Musculoskeletal disorders
- Eye diseases
- Dysphonia and Vocal Cords Dysfunctions

#### **Musculoskeletal Disorders**

Occupational musculoskeletal disorders have become frequent as a result of longer hours spent by staff at their desks (lack of movement).

# The most frequent occupational musculoskeletal disorders are:

- Loss of cervical lordosis (Stiff neck syndrome)
- Nerve compression at wrist (Carpal tunnel syndrome)
- Tendonitis in thumb and wrist
- Tendonitis in shoulder and elbow
- Herniated disc
- Cervical disc hernia

#### Symptoms

Back and Neck: Acute pain, stiffness.Shoulders: Pain, stiffness, loss of motion.Arms and Legs: Acute pain, numbness, incapability.Joints: Pain, swelling, stiffness, redness.

# Diseases Caused by Working Long Periods in Standing Position

Working long periods in standing position carries with it the risk of upper and lower back disorders. Spinal disorders, a subdivision of musculoskeletal diseases, pose a risk for staff falling under this category. Preventative methods training given to staff and exercises shall provide protection against such diseases. This type of occupational diseases may be prevented by way of periodic medical checks and ergonomic exercises.

### Eye Diseases

Human eyes make around 30 thousand movements between the monitor, keyboard and documents in the course of an 8-hour work in front of a screen.

This causes drying of the eye fluid, which leads to complaints such as burning and watering of the eyes.

### Working with Display Screen Equipment



- Monitor features
- User's position
- Lighting of the environment
- Light reflections on the screen
- Eyeglass/contact lens use as a result of visual impairment

Employee Health at Koç University

### Tips for Eye Health

- Monitor viewing distance should be approximately 46-76 cm.
- The vertical screen angle should be adjusted in order to eliminate reflections.
- Eye strain may result from dry eyes and looking at the screen for prolonged periods of time. You should blink often while working.
- You should take regular breaks to rest eye in prolonged working with screen and the visual angle should be adjusted to prevent eye strain.
- The 20/20/20 rule should be applied to rest eye muscles.

#### The 20/20/20 Rule

Every 20 minutes, take a rest for 20 seconds to look at 20 feet away.

### Dysphonia and Vocal Cords Dysfunctions

- Vocal cords are the most important elements of speaking. If misapplied or misused, various vocal cord problems may emerge.
- When we use our voice intensively, the most frequent problem we may face is dysphonia.

### Causes of Dysphonia

#### Acute

- Mis/overusing the vocal cords
- Laryngitis
- Smoking

#### Chronic

- Benign vocal cord nodules, cysts or polyps
- Vocal cord paresis
- Post-nasal drainage (resulting from an allergy or infection)
- Acid reflux
- Throat tumours, lung diseases
- Irritation around vocal cords
- Psychological conditions
- Diseases such as diabetics or neurological conditions also affecting vocal cords as well as other parts of the body

### Tips for Vocal Health

- Drink warm water (8-10 glasses per day).
- Avoid smoke.
- Manage your stress, keep it under control.
- Humidify your working environment air.
- Avoid beverages containing caffeine such as coffee and coke as well as tea that can dry your vocal cords.

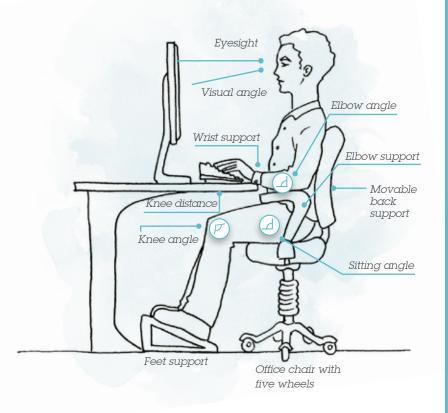




# Precautions When Working with Computers

- 24
- Ergonomic use of work tools and equipment may largely prevent the musculoskeletal disorders.
- When working with computers, your sitting position should be as shown.
- The top of the monitor should be slightly below eye level.
- The screen should be about arm's length away, slightly below eye level (the font size may be enlarged to adjust the distance).
- Rest your eyes at least every 30 minutes, do not forget to blink and your eyeglasses should be anti-reflective.

- If you use display screen equipment for eight hours a day, to give your eyes a break in every 20 minutes and look at something 20 feet away for 20 seconds would be an essential exercise for eye health (The 20/20/20 Rule).
- An equal level of room and monitor brightness during usage of display screen equipment eliminates the risk of contracting eye diseases.
- Sit straight, extend your arms on your eye level. If your fingertips touch the top of your monitor, then your monitor is placed correctly.
- Try to keep your wrist straight when using the mouse. Otherwise, you may contract carpal tunnel syndrome.



### Computer and Chair Exercises







conds 8-10 seconds each direction



3-5 seconds 3 times





10-12 seconds each direction



10 seconds





8-10 seconds each arm

8-10 seconds each direction



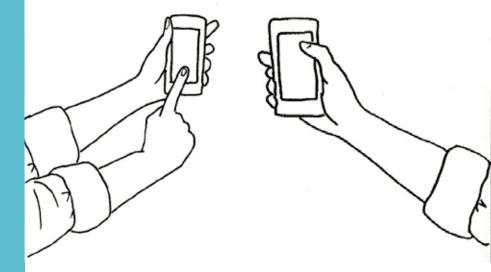
10-15 seconds





# Precautions When Using Smartphones

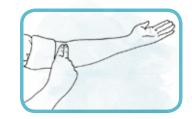
Smartphones make our lives easier. But their extensive use causes pain and permanent damage in our hands and arms. Simple exercises may prevent the adverse effects of using touch screens and constant repetition of finger movements.



Recommendations on How to Alleviate Discomfort From Smartphone Use



You may apply cold or hot compress to the hand and arm in the area of pain.



You may apply gentle massage to the hand and arm in the area of pain.







With stretching exercises for a few seconds, you may give strength to the area of pain.

#### Caution!

Do not use mobile phones while driving.





With stretching exercises of fingers for a few seconds, you may relieve and strength the more used muscles.

# Emergencies at **Koç University**

Occupational Accident Fire Earthquake Assembly Areas



# Occupational Accident

Occupational accidents are incidents that occur under one of the below circumstances and cause physical or mental damage in the insured immediately or after the incident.

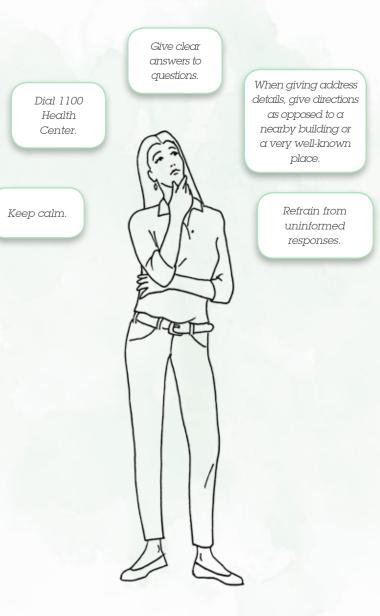
The incidents occured;

- During the time the staff spends at the work place,
- O Due to the work activity run by the employer,
- During the times when the staff is not engaged with his/her actual work because he/she has been assigned and sent to another place by his/her employer,
- During the times allocated to the staff, taking breastfeeding leave, to breastfeed her baby,
- During transportation of the staff by a vehicle provided by the employer to and from the workplace,

are considered as occupational accidents.



### Actions to Be Taken In Case of an Accident





# Fire

#### Actions to be Taken In Case of a Fire Immediately dial 1122 and provide information, clearly and calmly, as to:

- The address of the fire
- Burning equipment
- Location of the fire at the building
- Whether there are any person(s) trapped by the fire.

#### Thereafter,

- Press the closest fire alarm button without panic.
- Walk away from the scene of the fire quickly without running.
- If exposed to intensive smoke or heat, walk on your knees if necessary to avoid being effected by the heat and smoke.
- If the fire is in a size that you can respond to, use the extinguishers placed in the nearest fire cabinet, without putting yourself in danger.

#### If your clothes catch on fire,

- Do not panic.
- If possible, take your burning clothes off.
- If you cannot take your clothes off, quickly apply the STOP-DROP-ROLL Rule.

#### STOP-DROP-ROLL Rule

If you realize that your clothes are on fire, shout for help. **STOP:** If you run, the oxygen in the air will cause flames to increase. **DROP:** If you remain standing, flames will quickly rise up. **ROLL:** Roll until flames extinguish.

#### If the fire is in a floor below you;

- NEVER go out to unprotected corridors and landings as the escape route may be covered in smoke and extremely hot.
- Leave the building immediately, if there is a safe escape route.

#### If you are unable to do these;

- Prevent inflow of smoke to your area by sealing off door and window frames using wet cloth or packaging tape.
- Remove inflammable equipment away from your vicinity.

#### If the fire is in the floor above you;

- Check whether the stairwell is filled with smoke.
- If there is no smoke, leave the building carefully and quickly.
- Use emergency exit doors.
- Do not use the elevators at all costs.
- Gather in the pre-determined assembly area. (See Page 40-41)

## If the fire is on your floor but in a different room, before entering the room;

- Check if there is any smoke coming out from under the door and door frame.
- Using the back of your hand, check whether or not the surface of the door got heated (if there is fire inside the closed room, opening the door may cause an explosion).
- Close all the doors in the flat to prevent the fire from spreading and go outside if you can.
- If you cannot go outside, go to the room in the furthest corner in the opposite direction of the fire and show yourself to fire fighters in front of the window.



### How to Use a Fire Extinguisher

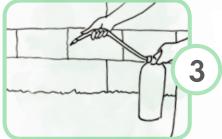
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Break the seal of the fire extinguisher.

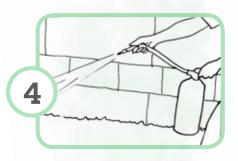
Pull the safety pin from the handle.





Aim the extinguisher nozzle or hose at the base of the fire.

Squeeze and release the lever regularly.



WRONG

#### CORRECT





Have the wind on your back.





Aim the extinguisher at the base of the fire.



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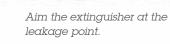
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Extinguish first the front, then the back.









# Earthquake

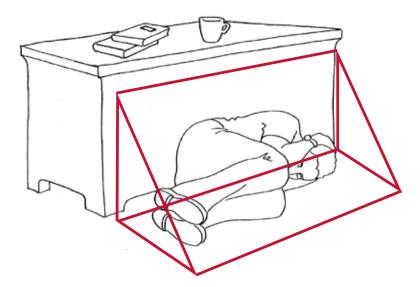
#### Actions to Be Taken In Case of an Earthquake:

- Keep calm and do not move.
- After the initial quake quickly walk out (not by running) of the building.
- Create a triangle of life. Position yourself near the equipment which will protect you at the time of an earthquake.
- Stay away from doors and windows. Windows on high soors are not used as exit routes.
- Do not jump out of the window at all costs.
- Do not use the elevators.



#### If you are in the elevator during the earthquake,

- Press floor buttons and step out of the elevator as soon as the elevator doors open.
- Keep in mind that the elevator will not respond to any calls after it stops on the ground or basement floor.
- Leave the building using the stairs located by the emergency exit doors.
- All card-accessed doors automatically become unlocked in earthquakes.
- Gather in the pre-determined assembly area. (See Page 40-41)





Faculties: Parking lots, football field

#### **Dormitories:**

Student Center:

**Sports Center:** 

**Residences:** Around the Tower

Around the fire safety road no. 3.

Koç Square, in front of Henry Ford building

**Presidency Building and Library:** Koç Square, in front of Presidency building

Parking lot of S. Dormitory, in front of Henry Ford building, Parking lot of Health Center

# **Assembly Areas**

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The red indicated areas are assembly areas.

# First Aid at **Koç University**

First Aid for Fainting First Aid for Burns First Aid for Cuts First Aid for Bee Stings





# First Aid for Fainting

- Lay down the patient on a comfortable surface.
- O Do not move him/her too much.

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- Assess in terms of A-B-C.
  - A (Airway): Airway clearness
  - B (Breathing): Breathing (Look-Listen-Feel)
  - C (Circulation): Circulation
- Maintain body temperature.
- Make a bleeding and fracture assessment.
- Request medical help.



# First Aid for Burns

### First Aid for Burns Caused By Heat

- Lay down the patient on a comfortable surface.
- If the person is still in flames, prevent him/her from panicking, prevent him/her from running.
- Cover the victim with a wet blanket or something similar or roll him/her to stop the flames.
- Assess the clearness of the victim's airway and his/her breathing (A-B).
- If the burn is not too spread, keep the burnt area under cold and unpressurized running water for at least 20 minutes.
- Considering the probability of swelling, take off watches, rings, bracelets etc.
- Take off clothes surrounding the burnt area (if the clothing is stuck on the burnt area, then take it off by cutting around it).
- Carefully clear the burnt area with soapy water.
- O Do not break blisters.
- Do not apply bandage to burnt areas (such as hand, foot) together.
- Cover the burn with a clean and moist cloth. Do not apply any substance on the burn.
- > Put a blanket or something similar over the injured.
- If the burnt body area is wide and the healthcare center is far, provided that the patient is not vomiting, he/she is conscious, give the patient or the injured a mixture of 1 liter of water, 1 teaspoon of carbonate and 1 teaspoon of salt in order to remedy liquid loss.
- Request medical help.

### First Aid for Chemical Burns

- Eliminate any contact with chemicals by removing the clothing on the burnt area.
- Keep the burnt area under unpressurized running water for at least 20-25 minutes.
- Put a blanket or something similar over the injured.
- Request medical help.

### First Aid for Electrical Burns

- Keep calm as much as possible.
- Cut the electrical current without touching the patient or the injured.
- If cutting the current is not possible, stop the contact between the injured and the electrical source using a non-conducting object (wood, plastic).
- Assess the airway clearness and breathing of the patient or the injured.
- O Do not move the injured.
- Cover the damaged part of the body.
- Request medical help even if the patient or the injured is conscious and states that he/she feels fine.



# First Aid for Cuts

- DO NOT EVER REMOVE or attempt to remove sharp or pointy objects stuck in the chest, stomach and eyes. In such cases, take the injured person to the nearest healthcare center as soon as possible.
- If the cut area got dirty, rinse it with soapy water with the help of a clean cloth.
- If there are foreign objects on the surface of the wound visible from the outside (stone, sand, glass etc.) remove them without touching the cut wound. Do not poke around or inside the wound thinking there may be invisible objects. Do not remove objects punctured in the flesh.
- Do not apply hydrogen peroxide and tincture of iodine directly to the cut. However, you can apply tincture of iodine around the cut, without touching the cut.
- Do not place any absorbent material, such as cotton or sponge, over the cut.
- If the cut bleeds in a leaking form, raise it so that the bleeding area is higher than the heart level. Place a clean cloth over it and apply pressure. If the bleeding stops, tie it as is, without tightening too much.
- If the bleeding does not stop despite the pressure applied over it, apply a tourniquet.
- Request medical help.

# First Aid for Bee Stings

- Rinse the stung area.
- If visible over the skin, remove the stinger.
- Apply cold (water). Do not use ammoniac etc.
- If the sting is in the mouth and makes breathing difficult, then ensure that the patient sucks on an ice cube.
- Request medical help in case of stings in the mouth and for those who have an allergy.

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