## ATATURK UNIVERSITY FACULTY OF VETERINARY MEDICINE



**VETERINER FAKÜLTESI** Faculty of Veterinary Medicine

# STUDENT LABORATORY SAFETY GUIDELINE



#### PURPOSE

**Article 1-** (1) Atatürk University Faculty of Veterinary Medicine aims to ensure the safety of those in the Student Laboratories and the rules to be followed in the laboratories. It aims to ensure the safety of students against risks related to biological or chemical exposure, injuries that may occur while working in the laboratory, and to prevent environmental contamination and damages that may occur.

#### SCOPE

**Article 2-** (1) This guide covers the biosafety rules to be followed in Atatürk University Faculty of Veterinary Medicine Student Laboratories.

#### Rules to be followed in the use of laboratory instruments and equipment

a) Laboratory instruments and equipment may only be used by the relevant laboratory staff.

b) Students and postgraduate students cannot use the instruments alone, they use these instruments and equipment under the supervision of laboratory staff.

c) Students other than laboratory staff must read the instructions for use of these devices before using the tools and equipment.

d) Unauthorised experiments should not be carried out in the laboratory, and no device should be used that has not been trained or permitted to be used.

e) Each material, tool or device used must be cleaned in accordance with the method and put away.

f) No substances and materials should be taken out of the laboratory without the permission of the laboratory managers.

#### **Rules to Follow for Safe Working in the Laboratory**

a) The physical situation of the laboratory should be well defined and how to act in case of danger should be determined in advance.

b) The environment where work will be carried out should be checked for explosive, flammable, corrosive and biological materials and necessary precautions should be taken.

c) Laboratory goggles, gloves, protective aprons and face protection masks should be worn when working with hazardous materials and/or equipment.

d) A chemical in the laboratory should never be inhaled or tasted without reading the label on its bottle.

e) In case of spillage of any infectious material or chemical, wear protective gloves and use cotton towels etc. It should be wiped clean and thrown into the medical waste or solid chemical waste bin.

f) After direct contact with any substance, hands should be washed according to the "EI

Washing Instructions" and disinfected with hand antiseptic before leaving the laboratory.

g) It is forbidden to enter the laboratory without wearing an apron. Coats, jackets, bags, etc. It is forbidden to bring personal belongings into the laboratory and take them out of the dressing room.

h) In the laboratory, comfortable and flat shoes with closed fronts should be worn, and especially shoes with open toes and/or edges or heels should not be worn.

i) Long hair and dangling jewelry may cause danger in the laboratory environment; Long hair should be tied back and dangling jewelry should be removed.

j) The laboratory coat is removed when leaving the work environment. You should not go out with this apron.

k) Eating, drinking and using laboratory materials for this purpose are prohibited in the laboratory.

1) Hands and items used in the laboratory, such as paper and pencils, should not be applied to the face or mouth. If there is a wound or cut on the hand, it should be covered with waterproof tape.

m) A special notebook should be kept for studies in the laboratory. Studies and observations must be recorded.

n) Water, gas taps and electrical switches should not be tampered with and should be turned off when not in use.

o) No noise should be made considering that others are working in the laboratory.

p) You should not sit on laboratory tables.

q) No items other than necessary materials should be kept on the work table. Bag etc. items should not be placed.

#### **Precautions to be Taken Against Chemical Substances in the Laboratory Environment (Annex-1)**

a) "Atatürk University Faculty of Veterinary Medicine Waste Management Plan" is applied to all hazardous medical and chemical wastes.

b) Since all chemicals in the laboratory are dangerous, they should never be touched or smelled with bare hands.

c) The pipette used to pick up a chemical should not be dipped into a different chemical bottle.

d) Chemicals containing acid should be added slowly to the water. Water should never be added to acid.

e) Pus, etc., when drawing liquid with a pipette. devices should be used, chemicals should never be administered orally.

f) Chemicals should never be spilled into sinks or other places.

g) Chemical substances should never be taken out of the laboratory.

h) Acids such as sulfuric acid, nitric acid, hydrochloric acid and substances containing toxic gases such as ethidium bromide, hydrogen sulfide, hydrogen cyanide and chloride should not be used in a fume hood.

#### PRECAUTIONS TO BE TAKEN IN CASE OF CONTAMINATION

This article includes precautions to be taken in cases of chemical, infectious and biological contamination.

#### Precautions to be Taken in Case of Chemical Contamination

a) The bottle/container containing the chemical should be placed upright and its lid should be closed.

b) If there is a large amount of chemical spillage, the window should be opened, the room should be left and breathing of the spilled chemical vapor should be avoided.

c) In case of chemical substance splashing into the eye, the eye should be washed immediately with an eye shower, the eyelid should be forcibly opened and the eye should be washed with water or eye cleaning liquid for at least 15 minutes.

d) During washing, the eyelids should be opened with the fingers and the pupil should be moved in different directions to ensure that the water spreads everywhere.

e) Contact lenses, if any, should be removed immediately for the effectiveness of washing.

f) Both eyes should be covered with a sterile or clean dressing.

g) In case of chemical substance splashing on the skin, contaminated clothing should be removed immediately and placed in a leak-proof bag and tightly closed.

h) In case of swallowing a chemical substance, the mouth should be rinsed immediately.

i) Medical support should be sought in all cases.

#### Precautions to be Taken in Case of Infected Chemical Spill

a) Gloves are worn, spilled material is collected with a napkin (cotton, gauze) and thrown into the appropriate waste container (See "Atatürk University Faculty of Veterinary Medicine Waste Management Plan").

b) Broken glass should be thrown into the sharps medical waste container.

### Precautions to be Taken Against Contagious and Infected Materials in the Laboratory Environment

a) Blood and other body fluids taken from animals should be considered potentially infectious and treated accordingly.

b) If hands or other skin surfaces are contaminated with the animal's blood or other body fluids, they should be washed immediately with soap and water.

c) All sharps and sharps are thrown into the "sharps box" only. To prevent needle

sticking, the plastic covers of disposable needles should not be re-attached after use, the needles should not be removed from the syringe, and they should not be bent or bent.

#### Precautions to be taken in case of biological spillage

a) If the biological agent is liquid, it should not come into contact with the spilled liquid and the spill should be surrounded with paper towels to prevent further spread of the liquid.

b) Glass materials broken during the biological agent spill are carefully collected with forceps and placed in the sharps waste bucket.

#### THINGS TO BE DONE AGAINST ACCIDENTS AND INJURIES THAT MAY OCCUR IN THE LABORATORY

This article contains the rules that must be followed against accidents and injuries that may occur in Student Laboratories.

#### **Precautions Against Sharp-Piercing Injuries;**

a) If cutting tools must be used, necessary precautions must be taken. Syringe tips should not be removed by hand, bent or capped again.

b) Cutting tools should be disposed of in sharps waste containers that are resistant to punctures and leaks.

#### ANNEX 1. SYMBOLS AND SIGNS ON DANGEROUS GOODS LABELS AND PRECAUTIONS TO BE TAKEN

Toksik madde (T)	Bu sembol yutulması, solunması veya deri aracılığı ile nüfus etmesi halinde, akut veya kronik sağlığa zararlı, hatta ölümcül olabilen "zehirli (toksik)" maddeleri belirtir.
Çok toksik madde (T+)	Bu sembolü taşıyan maddelerin yukarıda bahsedilen "akut veya kronik zararlı etkileri çok daha endişe verici boyuttadır". Bu tür maddelerin insan vücudu ile temasına asla izin verilmemelidir.
Zararlı madde	Bu sembol yutulması, solunması veya deri aracılığı ile nüfus etmesi halinde "sağlığa akut veya kronik zararlı olabilen" zararlı maddeleri belirtir.
Tahriş edici madde	Bu sembol kısa süreli veya sürekli temas sonunda deri ve/veya solunum yollarında "tahriş edici etkiler gösterebilen" zararlı maddeleri belirtir.
Kolay alev alıcı madde (F)	Bu sembol parlama noktası 21 °C'nin altında olan, kolay alev alan sıvılar ile kolay tutuşan katı maddeleri belirtir.F
Çok kolay alev alıcı madde (F+)	F+ Bu sembol parlama noktası 0 °C'nin altında ve kaynama noktası 35 °C'nin altında olan ve "çok kolay alev alan sıvılar ile oda sıcaklığında ve atmosfer basıncında alev alan gazları (veya gaz karışımlarını)" belirtir.
Aşındırıcı madde (C)	Bu sembol aşındırıcı özellik taşıyan ve canlıların dokularına zarar verici kimyasalları belirtir.

#### STUDENT LABORATORY SAFETY RULES NOTIFICATION FORM

This form is approved by students who will work in Department Laboratories or participate in Application courses (laboratories).

Name:	
Surname:	
Student number:	

	YES	NO
I have read and understood the laboratory safety rules procedure.		
I know my responsibilities regarding laboratory safety.		
I know not to conduct any experiments without permission.		
I agree to follow all safety procedures shown to me by the laboratory manager.		
I know that I must inform the laboratory manager when I need to work outside of class hours.		
I know that you should never work without an apron in the laboratory, that long hair should be tied up and closed-toe shoes should be worn.		
I know not to taste or smell any chemicals.		
I know that all waste must be separated according to waste regulations.		
I understand that all damaged or broken equipment must be reported immediately to the laboratory manager.		
I know that I need to use the necessary protective equipment such as gowns, gloves, glasses and masks.		
I know that I should not bring food or drink into the laboratory and that there is no smoking.		
I know that if I do not comply with laboratory rules, I will receive a written warning and be removed from the laboratory.		
I was informed about what I should do in case of emergency.		
I know and accept that the laboratory is not responsible for any material or moral damage that may occur if I do not comply with the rules and that I will be compensated.		

DATE: .....

SIGNATURE: .....