FACULTY OF VETERINARY SCIENCE

UNIVERSITY OF ZARAGOZA

BIOSECURITY MANUAL

Necropsy Room

Faculty of Veterinary Science
University of Zaragoza

Revision 3 | 08/10/2026

0. Identification of the activity

Courses	Type of activity
28423 General Veterinary Pathology 28429 Integrated Teaching in Ruminants 28430 Integrated Teaching in Poultry and Rabbits 28431 Integrated Teaching in Companion Animals 28433 Integrated Teaching in Equids 28434 Integrated Teaching in Swine 28437 Wildlife 28441 Clinical Practicum in Small Animals, Exotic Animals and Equids 28442 Clinical Practicum in Food-Producing Species	The Necropsy Room is used to perform necropsies on animals of any species for teaching, diagnostic and research purposes at undergraduate, postgraduate and doctoral levels, as well as for other training activities. This document sets out the general and specific occupational prevention and safety rules applicable whenever the Necropsy Room is used for any of the above activities.

1. Identification of the applicable facilities

Necropsy Room. Teaching Building, lower ground floor.

2. Hazard identification

2.1 Identification of biological hazards

In accordance with Royal Decree 664/1997 on the protection of workers against risks related to exposure to biological agents at work, practical activities carried out by the Veterinary Pathology Diagnostic Service require a minimum biosecurity level of 2 in the Necropsy Room. This biosecurity level reflects the real possibility of handling animal carcasses or organs capable of transmitting zoonotic biological agents, including Group 3 agents listed in Annex II of Royal Decree 664/1997, such as:

Bacillus anthracis	Multidrug-resistant bacteria
Bordetella bronchiseptica	Brucella abortus
Brucella canis	Brucella melitensis
Brucella suis	Campylobacter jejuni
Chlamydia psittaci	Coxiella burnetii (Q fever)
Cryptosporidium spp.	Dipylidium caninum
Echinococcus spp.	Escherichia coli (verotoxigenic strains)
Francisella tularensis (tularemia)	Giardia spp.
Leptospira spp.	Listeria monocytogenes
Mycobacterium bovis	Salmonella typhi
Leishmania spp.	Microsporum spp. and Trichophyton spp. (dermatophytosis)
Pasteurella multocida (pasteurellosis)	Fleas, ticks and mites
Rickettsia rickettsii (Rocky Mountain spotted fever)	Salmonella spp.
Sporothrix spp.	Methicillin-resistant Staphylococcus aureus (MRSA pyoderma)
Vancomycin-resistant Enterococcus spp.	Toxocara spp.
Toxoplasma gondii	

2.2 Identification of physical hazards

Physical hazards in the Necropsy Room. Accidents associated with the use of the facilities include:

Falls and trips	Risk of falls and/or trips due to slipping on the Necropsy Room floor, which remains wet during activities, or when entering and leaving the refrigerated rooms.
Low temperatures	Risk of exposure to low temperatures when using the refrigerated room (4 °C).
Fire and acoustic trauma	Risk of fire. Risk of acoustic trauma due to the periodic operation of refrigeration motors, opening of skulls during necropsy, etc.
Injuries and instruments	Risk of injuries (cuts, scratches, punctures) or trauma caused by instruments used in necropsy procedures: scalpels, knives, needles, glass, scissors, band saws, hammers, etc.
Musculoskeletal injuries	Risk of musculoskeletal injuries or crushing caused by the fall of large animals (horses, cattle, pigs, etc.) while using the hoist, or by inappropriate handling of tools, carcasses, containers and furniture.

There is also a risk of road traffic accidents involving support staff (PTGAS) assigned to collect carcasses and/or organs from farms and slaughterhouses, or during the transport of organic remains from the Necropsy Room.

2.3 Chemical hazards in the Necropsy Room

- Risk of burns from strong acids and bases, as well as cleaning and disinfection products used in the facilities.
- Exposure to chemical reagents with irritant and/or carcinogenic effects used for fixation (formalin, ethanol, etc.).

3. Access, clothing and personal protection

3.1 Access restrictions and dress code

Only authorised personnel may enter the Necropsy Room to carry out teaching, research or diagnostic/service activities.

- Entry to the Necropsy Room without gloves and appropriate clothing and footwear is prohibited.
- Teaching/research staff and support staff assigned to Veterinary Pathology must have suitable clothing for teaching, research and service activities: work coveralls, long-sleeved laboratory coat with elasticated cuffs, reinforced-toe rubber boots, rubber clogs, apron, face shield or goggles, cut-resistant gloves, reinforced rubber gloves, etc.

Necropsy procedures: Entry and exit

ENTRY	EXIT
1. CHANGING ROOM: Students must wear: • Disposable coverall • Disposable gloves • Safety goggles • Cut-resistant glove (usually for the left hand) • Clog-style shoe (e.g., Crocs) 2. INTERMEDIAL CHANGING AREA: • Rubber boots with reinforced toe caps • Disposable boot covers	1. NECROPSY ROOM: Clean the apron with soap and water. Leave the clean apron in the designated area. Dispose of boot covers and gloves. 2. INTERMEDIAL CHANGING AREA: Switch to Croc-style clogs and discard the jumpsuit. 3. CHANGING ROOM: Change into street clothes.

Attendance for diagnostic observation only

ENTRY	EXIT
1. CHANGING ROOM: Students must wear: • Disposable gown • Safety goggles • Clog-style shoe (Crocs-style) 2. INTERMEDIAL CHANGING AREA: • Rubber boots with reinforced toe caps • Disposable boot covers	1. NECROPSY ROOM: Dispose of boot covers and gloves. 2. CHANGING ROOM: Switch to Croc-style clogs and discard the jumpsuit.

4. Accident response procedure

Action to be taken in the event of an occupational accident (Occupational Risk Prevention Unit - UPRL prevention campaign).

VERY MINOR INJURY (no medical attention required)	MINOR INJURY (medical attention, NO sick leave)	SIGNIFICANT INJURY (medical attention WITH sick leave)
		Assess the injuries and act cautiously. Ask for help if necessary. Provide initial first aid using the materials available in the first-aid kit and by personnel trained in first aid. Arrange transfer of the injured person to the healthcare centre of the relevant Mutual Insurance Society for Occupational Accidents and Diseases, and accompany the injured person to hospital. Request an ambulance if necessary through the Zaragoza Access Control Office (ext. 1112). Notify the Head of the Service and the Faculty Administrator. Send the sick-leave certificate to the Payroll and Social Security Section. Inform the UPRL.
Go to the first-aid kit located in the staff changing room and treat the injury using the available materials. Notify the Head of the Service and the Faculty Administrator. Inform the UPRL.	Provide initial first aid using the materials available in the first-aid kit and by trained personnel. Arrange transfer of the injured worker or student to the appropriate occupational accident mutual insurance healthcare centre. Notify the Head of the Service and the Faculty Administrator. Inform the UPRL.	

5. Procedure when a notifiable disease is detected or suspected

NOTIFIABLE DISEASES (EDO). ARAGON. PROCEDURE FOR URGENT NOTIFICATION OF NOTIFIABLE DISEASES.

A) During normal working hours	B) Outside normal working hours
Contact the relevant Provincial Subdirectorate of Public Health (Epidemiological Surveillance Section) by telephone: Huesca — 974 29 32 28 Teruel — 978 64 11 61 Zaragoza — 976 71 53 50	Contact the Aragon Emergency and Urgent Care Centre by telephone (112) and state that an urgently notifiable disease must be reported to the PUBLIC HEALTH ALERT RESPONSE SYSTEM. Further information: https://www.aragon.es/-/enfermedades-de-declaracion-obligatoria-edo-y-otros-procesos#anchor1 Information from the Government of Aragon on the coordination, supervision and implementation of animal disease prevention, control and eradication plans: https://www.aragon.es/temas/medio-rural-agricultura-ganaderia/ganaderia/sanidad-seguridad-animal

If a contagious infectious or zoonotic disease is suspected, the following procedure must be followed:

- Immobilise the carcass.
- Immediately notify the Government of Aragon of the suspected notifiable disease.
- Dispose of all disposable material used that day.
- Disinfect all non-disposable equipment and the boots used by the teaching staff involved.
- Trace all persons who were present in the Necropsy Room on the day the disease was suspected.
- Follow the response protocol established by Public Health according to the disease detected.

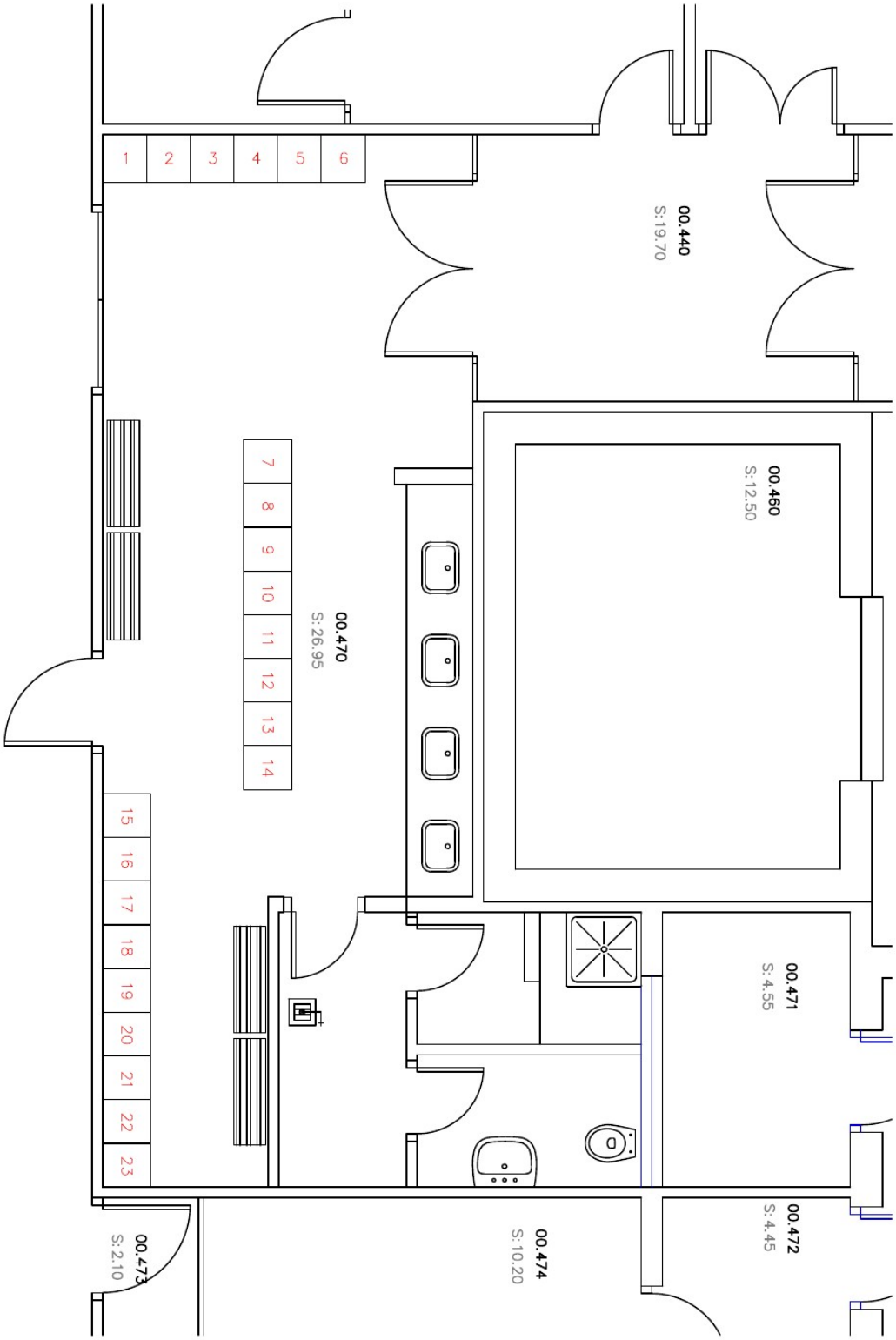
Relevant links:

https://www.aragon.es/-/enfermedades-de-declaracion-obligatoria-edo-y-otros-procesos#anchor1

https://www.aragon.es/temas/medio-rural-agricultura-ganaderia/ganaderia/sanidad-seguridad-animal

Necropsy Room floor plan

The following floor plan is reproduced from the original Spanish Biosecurity Manual.


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00.440
S:19.70
00.460
S:12.50
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00.470
S:26.95
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21
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00.471
S:4.55
00.472
S:4.45
00.473
S:2.10
00.474
S:10.20

6. References

- Annex 1 to Decree 29/1995 of 21 February, Government of Aragon, on healthcare waste management in the Autonomous Community of Aragon.
- National Institute for Safety and Health at Work (INSST): www.insst.es
- Teaching programmes for the Veterinary Degree courses: https://estudios.unizar.es/estudio/ver?id=130
- Royal Decree 664/1997 of 12 May (Ministry of the Presidency, BOE 25.5.1997) on the protection of workers against risks related to exposure to biological agents at work. https://www.boe.es/buscar/pdf/1997/BOE-A-1997-11144-consolidado.pdf
- Royal Decree 952/1997 of 20 June, amending the Regulations implementing Law 20/1986 of 14 May on Toxic and Hazardous Waste, approved by Royal Decree 833/1988 of 20 July. https://www.boe.es/boe/dias/1997/07/05/pdfs/A20871-20880.pdf
- Royal Decree 773/1997 of 30 May on minimum health and safety provisions concerning the use of personal protective equipment by workers. https://www.boe.es/eli/es/rd/1997/05/30/773/dof/spa/pdf
- Occupational Risk Prevention Unit, University of Zaragoza. http://uprl.unizar.es/seguridad.html
- Specific biosecurity protocols of the Faculty of Veterinary Medicine, USB (as cited in the source document).

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