Standard Operating Procedures at the Veteriary Hospital of the University of Murcia (HVUM)

PETS

1.INTRODUCTION

Biosecurity SOP (Standard Operating Procedures) for pet clinic

Biosecurity is of huge importance in the small animal clinic, as many animals of different origins can be found together in this small structure. Consequently, strict rules must be applied to avoid diseased animals contaminating other patients.

1.1.- Classification of cases

Class 1: Infectious disease not presenting any real risk of transmission.

Class 2: Wear globes!!!

FeLV

FIV

PIF (Peritonitis infecciosa felina)

Chronic Coryza

Aspergillosis

Leukopenia

Severe Immunosuppression

Sepsis

Class 3: Leptospirosis

Multi-resistant bacteria

Clase 4: Parvovirus

Panleukopenia Acute Coryza Distemper

1.2.- Reception of suspect cases

To avoid contaminating other animals

Animals should not be taken into the waiting room if:

They present:

- Dogs/cats: acute and severe vomiting and/or diarrhoea
- Gatos: sneezing and/or significant nasal discharge
- Are suspected or referred for:
 - Distemper
 - Parvovirus
 - Panleukopenia
 - Coryza
 - Leptospirosis
 - Azotemia/uremia/acute anuria
 - Acute renal failure

What should be done?

- Request that the animal be left in the car or in its cage.
- Put the animal with its owners directly into a consultation room,
 on the table.
- Immediately contact the responsible vet.
- Avoid as far as possible any contact without precautions -> it is never superfluous to put gloves on!

2. CLASSES 1 AND 2

Introduction

In general in the clinic, Class 1 and Class 2 animals form the majority of our clientele. The rules to follow for these patients are therefore the general rules to be followed in a small animal clinic.

Correct implementation of these rules will reduce to a minimum the risk of multiresistant germs in consultation rooms, in the operating block and in the hospital rooms.

In addition, these rules minimise the risk of vets or para-veterinarians transmitting pathogens between animals.

2.1.-BEFORE the procedure:

2.1.1.- Access: See the map

2.1.2.- Dress and equipment:



HOSPITAL CLINICO VETERINARIO: ÁREA PEQUEÑOS ANIMALES

(Veterinary Hospital Teaching: Small Animal)



OBLIGACIONES/ PROHIBICIONES
ESTUDIANTES,
PERSONAL VETERINARIO Y PAS
(Obligations/ Forbiddances for students, staff and auxiliary personal)













2.1.3- Preparation for the procedures:

a) For people:

- Put any personal items in a locker
- Put on your badge and appropriate dress
- Wash your hands

Procedure for washing hands with soap:

- Wet hands and forearms with hot water.
- Add at least 3-5ml of soap
- Work up a lather and rub both sides of each hand (10-30 seconds)
 including the forearms, under rings and nails.
- Rinse with hot water until all soap residue has gone.
- Do not turn off the tap with your bare hands, use a paper towel.
- Dry your hands with a paper towel
- Sanitizing procedure: Start with the fingers and finish with the hands and wrists

b) For animals:

For consultations, there is no preparation procedure to follow for animals. However, wearing gloves is compulsory if you need to touch a wound or change bandages around wounds.

If during the consultation it becomes apparent that the patient may be a Class 3 or Class 4 patient, take the following steps:

- Go to specific room (Medicine Interne ausiliary room)
- Look for a box dedicated to treating a Class 3 animal
- Put up a notice
- To be cleaned disinfected Class 3 / cleaned Class 4

c) For the equipment

In each room, check that there are cleaning and disinfection products for equipment, as well as soap and disinfectant for hands. If you see that something is missing, you must restock it.

Before placing an animal on the examination table, it is essential to check that the table has been cleaned and disinfected.

2.2. - DURING the procedure

2.2.1. Behaviour:



HOSPITAL CLINICO VETERINARIO: ÁREA PEQUEÑOS ANIMALES

(Veterinary Hospital Teaching: Small Animals)













When should you wash your hands?

Soap dispensers and disinfectant are available in the clinic.

With soap: If they are dirty

Sanitization:

- In between examinations
- Before/after:
 - Meals
 - Going to the toilet
 - **Treatments**

Clothes must always be clean and must be changed if necessary

2.2.2. Movements:

a) Movements of people:

The hospital uses a color coding scheme (see the map):

 YELLOW LINES: access authorized respecting the rules concerning dress and behavior which are described in the various biosecurity regulations.

You must also pay attention to the presence of temporary yellow lines in the hospital, which indicate that a class 3 or 4 animal is housed in the cage.

- **RED LINES**: access strictly forbidden to anyone without prior authorization.

b) Movements of animals:

It is forbidden to take a patient into a consultation room if the tables and equipment used have not been cleaned and disinfected.

When an animal urinates, vomits or defecates, you are personally responsible of calling to the Hospital Reception (Ext. 4724) which must call for cleaning and disinfecting the area in question.

Students who are responsible for cases follow them personally when additional examinations are conducted (radiography, scans...) and are personally responsible for the results within the pet clinic. They must ensure the animal is transported in line with the biosecurity recommendations of other clinical areas.

c) Movements of equipment:

All material required can be found in each room.

Above all, you shouldn't take equipment from a neighboring consultation room. If something is missing, replenish it.

- 2.2.3.- In the event of an accident:

Depending on the seriousness and the emergency of the situation:

- a) In slight cases call any member of the staff.
- b) In more serious situations, call 112 or security of the Campus ext. 4205.

2.3. AFTER the procedure

- 2.3.1. Waste management:

All types of waste must be disposed of in scrupulous accordance with the recommendations set by the University of Murcia (Annexed I).

- 2.3.2. Exit procedures:

a) Exit of cadavers:

All cadavers must be identified by the responsible vet to avoid errors. In addition, it must be specified whether the cadaver (duly isolated in a sealed bag), is to be used for necropsy, collective or individual incineration.

b) Cleaning of equipment:

Proceed to the cleaning and disinfection of the material used in consultation, as well as tables and floor. The sterilization of the material has to be carried out by autoclaving in the premises designated for this purpose and under the supervision of the corresponding auxiliary personnel.

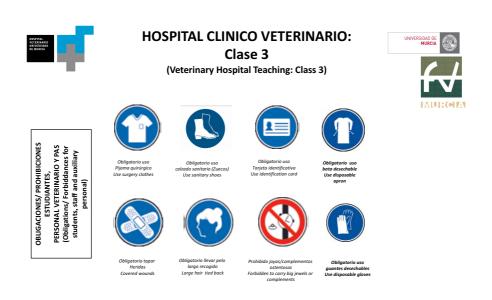
c) Exit procedure for people:

It is strictly forbidden to leave the premises of the Hospital with the dress code. It is mandatory to keep such clothing in optimum hygiene conditions. Wash hands as described above before leaving the Hospital.

3.- CLASS 3

3.1. BEFORE the procedure

- 3.1.1. Access: See the map
- 3.1.2. Dress and equipment:



It is forbidden to use your own equipment.

- 3.1.3. Preparation for the procedures:
- a) **For people**: It is mandatory the use of disposable gowns and gloves.

b) For animals:

- Place disposable cloths on the consultation table.
- Animals should always be on the table.
- If the animal is to be hospitalized, it must be identified with the corresponding collar.
- c) **For the equipment**: Used the boxes prepared for Class 3 patients.

3.2. DURING the procedure

- 3.2.1 Behaviour:

- Follow the same guidelines mentioned in section 1 and 2
- Use disposable gowns and gloves before any contact with the animal
- It is forbidden to use your own material. Use only the equipment contained in box Class

- 3.2.2. Movements:

a) Of people:

- Follow the guidelines given for Classes 1 and 2
- After each contact with a Class 3 animal, change your disposable gown, wash, disinfect the used material and place it in its corresponding box. Then, wash and desinfect your hands.

b) Of animals:

- It is not allowed to put an animal in a consultation that has not been previously cleaned and disinfected, including tables and utensils.
- When an animal urinates, vomits or defecates, you are personally responsible of calling to the Hospital Reception (Ext. 4724) which must call for cleaning and disinfecting the area in question.
- Students who are responsible for cases follow them personally when additional examinations are conducted (radiography, scans...) and are personally responsible for the results within the pet clinic. They must ensure the animal is transported in line with the biosecurity recommendations of other clinical areas.

c) For the equipment:

- Used the boxes prepared for Class 3 patients.

- 3.3.3. In case of accident: Act as indicated for Classes 1 and 2.

3.3. AFTER the procedure

a) Waste management:

All types of waste must be disposed of in scrupulous accordance with the recommendations set by the University of Murcia (Annexed I).

b) Exit procedures:

Exit of cadavers:

Follow the guidelines mentioned for Classes 1 and 2.

Equipment:

o Follow the guidelines mentioned for Classes 1 and 2.

 Mark the consultation as Class 3 until it is cleaned and disinfected properly.

People:

- Follow the guidelines mentioned for Classes 1 and 2.
- Remove the disposable gown when leaving the examination / hospitalization room.
- Dispose of the disposable gloves in the containers indicated for this purpose.
- Wash and disinfect your hands carefully.

4. CLASS 4

Class 4 animals are either suspected of suffering from an infectious disease and highly contagious for other patients, or are suspected of suffering from a zoonotic disease which is easily transmissible to humans (including the vet).

Biosecurity regulations thus aim to minimize the risk of transmission. It is therefore primordially important to implement them as soon as it is suspected, and not only once it has been confirmed, that the patient is suffering from a specific infectious disease!

4.1. BEFORE the procedure

- 4.1.1. Access:

Class 4 animals MUST NOT enter to the Hospital waiting room. At the Hospital entrance, it will be reported that suspect animal's owners should consult in the Reception what procedure they must carry. The animals Class 4 must be transferred to the consultation of Contagious Infections area inside their cages or on stretchers intended for this purpose, without the presence of the owners. The owners can wait in Contagious Infections area reception (see map).

- 4.1.2. Dress code and equipment:



4.1.3. Preparation for the procedures:

a) For people:

- Access to the isolation room is through the clinic and hence staff preparation procedures for Class 1 and Class 2 cases are followed.
- Take off your consulting equipment and change your shoes. All material necessary for treatment is provided inside. Consultation material must therefore be left: Leave your stethoscope, thermometer, scissors, etc.
- To get in the Infectious consultation:
 - o Put your feet with your overshoes on.
 - Close the door.
 - Put on your disposable gown, cap, gloves and mask.

Open the second door with your elbow.

b) For animals:

An animal suspected of being Class 4 must immediately go to the isolation room in order to minimize contacts with the rest of the clinic (animals, staff and equipment).

c) For the equipment:

Equipment required for treatment is provided and ready to use in the isolation room. Class 4 animals have the same material available in the isolation room as other animals in the rest of the hospitalization unit. You must not therefore go and find material in the rest of the hospital and bring it into the isolation room. There is a single box for each animal.

4.2. DURING the procedure

- 4.2.1 Behaviour:

- Follow the same guidelines given for Classes 1 and 2.
- Students MUST NOT touch nor examine Class 4 animals without the agreement of a responsible veterinary.

- 4.2.2. Movements:

a) Of animals:

- Only transport animals upon the request of the clinician responsible and always **on the trolley** or **in a cage**.
- Identify animals as Class 4.

b) Of the equipment:

- A box is associated with each animal present in the isolation room.
- All material which can be used for this animal can be found in the box in the isolation room.
- 4.2.3. In case of an accident: Act as indicated for Classes 1 and
 2.

4.3. AFTER the procedure.

a) Waste management:

All types of waste must be disposed of in scrupulous accordance with the recommendations set by the University of Murcia (Annexed I)

b) Exit procedures:

• Exit of cadavers:

o Follow the guidelines mentioned for Classes 1 and 2.

Equipment:

- Follow the guidelines mentioned for Classes 1, 2 and 3.

People:

- In the isolation room

- BEFORE leaving the premises, do not forget to complete the healthcare sheet.
- o Dispose of all waste in the appropriate bin.
- Remove your gloves AFTER having cleaned and disinfected everything that has been used.
- A wash-hand basin is provided as well as handwash products (soap, disinfectant and paper), follow the standard handwashing protocol. Use paper to turn off the tap and close the bin.

Open the door with your elbow

- Out of the isolation room

- Close the door.
- Remove the single use equipment for top to bottom: first cap, then the mask, gown and finally the overshoes.
- Throw away the disposable equipment and hang the gown in a hook if it's clean.
- Open the door to the corridor with your elbow and then close it.
- o Pick up your personal items.
- o Wash and disinfect your hands once again.

EQUINE

1. INTRODUCTION

Equine Biosecurity SOP

As in any hospital, biosecurity has taken on great importance in the equine clinic, due to the risk of welcoming potentially contagious animals. Strict rules must be applied to avoid ill animals contaminating other patients and besides preventing them from contracting nosocomial infections.

Four animal risk categories have been defined, mainly in terms of the risk of contagion. In addition, specific measures apply to the surgical block.

2. CLASS 1 AND 2

Animals in Class 1 and 2 are animals presenting non-infectious diseases, or an infectious disease which has no or little risk of transmission. The biosecurity rules applicable to these animals are general and must be respected throughout the clinic.

2.1. BEFORE the procedure:

- Access: By acconditioned doors for people and horses (see the map).
- Dress and Equipment: Specific staff work clothing.



HOSPITAL CLÍNICO VETERINARIO:

ÁREA ÉQUIDOS Veterinary Hospital teaching: Equine

















ESPACIO PATRIMONIAL: Planta Baja 02.ED081.B1.0

2.2. DURING the procedure:

Movements of people, animals and equipment:

The clinic uses a color coding scheme:

- YELLOW LINES: Access permitted under certain conditions.
- RED LINES: Access forbidden without authorization.
- Equipment: No particular precautions need to be taken.

In case of Accident. Depending on the seriousness and the emergency of the situation:

- In slight cases call any member of the staff
- In more serious situations, call 112 or security of the Campus (Ext. 4205).

2.3. AFTER the procedure:

- Waste management:

All potentially contaminated waste or waste which has been contaminated by blood or faecal material, and sharps must be disposed of in the yellow dustbins or boxes (needles) provided for this purpose and available in each unit. Non-contaminated waste and non-sharp material must be disposed of in the other dustbins, also available in all units.

All types of waste must be disposed of in scrupulous accordance with the recommendations set by the University of Murcia (Annexed 1)

- Exit procedures:

Staff will inform how to exit and how to proceed with horses.

3. CLASS 3

Animals presenting an infectious disease with a medium risk of transmission (e.g. fever, acute diarrhea, etc.).

The units housing this type of cases are identified and are subject to stricter biosecurity rules than for Class 1 and 2.

3.1. BEFORE the procedure:

- Access to the clinic: See the map
- Dress and Equipment: Available protective clothing and equipment is provided for each animal located in each isolation box (disposable apron, gloves, masks, etc.). The same material will be used until the horse is discharged.
- Preparation procedure: Door must remain permanently close. The clinician must wear protective clothes and walk through the foot bath before contacting with the animal.

3.2. DURING the procedure:

3.21. Movements

- Of people:

Clinicians should undress the apron and the remainder specific clothes and wash their hands when move to another case or leave the unit.

- Of Animals:

It is forbidden to take animals out of the unit without the permission of one of the clinic assistants.

- Of Equipment:

Each box in the isolation unit is provided with medical material and cannot be used for other cases.

In case of Accident. Depending on the seriousness and the emergency of the situation:

- In slight cases call any member of the staff
- In more serious situations, call 112 or security of the Campus (Ext. 4205).

3.3. AFTER the procedure

Waste management:

- Waste is disposed of in the same way as in the rest of the clinic.
- All types of waste must be disposed of in scrupulous accordance with the recommendations set by the University of Murcia (Annexed 1)

- Exit procedures:

- Animals and cadavers: Staff will inform how to remove horses from the clinic or deal with the cadavers.
 - Equipment:
 - All medical material and maintenance equipment will be properly disinfected.
 - Empty, clean and disinfect the boxes
 - Remove and throw away the protective clothes used for each animal. Walk through the foot bath before leaving the Class 3 Unit.

4. FOALS

Foals are more sensitive to infections; therefore, hospitalized foals, whatever the reason for their hospitalization, require specific precautions to be taken to protect them from pathogens of other hospital patients and nosocomial infections.

4.1. BEFORE the procedure:

- Access: Two neonatal care units are arranged at the clinic. See the map.
- Dress and Equipment:
 - Available protective clothing is allocated in each unit reserved for foals (disposable apron, gloves, masks, etc...). The same material will be used until the foal is discharged.
- Preparation procedure: Sign on the door at the entrance to the units/boxes how to proceed before contacting the foal.

4.2. DURING the procedure:

- Movements

- Of people: Clinicians should undress the apron and the remainder specific clothes and wash their hands when move to another case or leave the unit.
- Of animals: It is forbidden to take animals out of the unit without the permission of one of the clinic assistants.
- Of equipment: Each box at the unit is provided with medical material and cannot be used for other cases.

In case of Accident. Depending on the seriousness and the emergency of the situation:

- o In slight cases call any member of the staff
- In more serious situations, call 112 or security of the Campus (Ext. 4205)

4.3 AFTER the procedure:

- Waste management:
 - Waste is disposed of in the same way as in the rest of the clinic.
- All types of waste must be disposed of in scrupulous accordance with the recommendations set by the University of Murcia (Annexed 1)
- Exit procedures:
- Animals and cadavers: Staff will inform how to remove animals from the clinic or deal with the cadavers.
 - Equipment:
 - All medical material and maintenance equipment will be properly disinfected
 - Empty, clean and disinfect the boxes.
 - Remove and throw away the protective clothes used for each animal. Walk through the foot bath before leaving the unit.

5. SURGERY

Surgery measures adopted in the Small Animal Area are also implemented throughout the Equine Surgery Unit.

Biosecurity SOP for the Imaging Unit

1.- INTRODUCTION

Animals admitted to the imaging unit essentially come from the small and large animal services of our Veterinary Hospital and from clinics from the region of Murcia and nearby regions as Albacete, Alicante and Almeria (Classes of risk 1 to 3).

Every patient should already be registered with the secretaries of the respective areas beforehand. It is imperative to provide a request form correctly filled to register the animal in the imaging unit. This request form will be provided to the imaging unit staff.

2.- CLASS 1 AND 2:

2.1. Introduction

Animals from classes 1 and 2 are animals presenting a non-infectious disease, or an infectious disease which has no or little risk of transmission. These animals are considered as "noninfectious" in the imaging unit.

Movements of people and animals within the imaging unit should be minimized.

2.2. BEFORE the procedure

- Access:

The imaging unit is composed by radioloy (011- X-Ray room; 012- film reading room), ultrasonography (036- ultrasound room) and Computed tomography (018 CT room) (see map)

- Dress and equipment:



HOSPITAL CLINICO VETERINARIO: SALA RAYOS X PEQUEÑOS ANIMALES Veterinary Hospital Teaching X Ray Small Animal Room



OBLIGACIONES ESTUDIANTES,
PERSONAL VETERINARIO Y PAS
Obligations for staff, students and auxiliary
personal







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HOSPITAL CLINICO VETERINARIO: SALA RAYOS X ÉQUIDOS Veterinary Hospital Teaching X Ray Equine Room



OBLIGACIONES ESTUDIANTES,
PERSONAL VETERINARIO Y PAS
Obligations for staff, students and auxiliary
personal







The image staff uses the same dress as the rest of the Hospital staff.

Their own equipment consists in a personal dosimeter.

Provided on site:

- Radioprotection equipment: Thyroid guard, lead apron and lead gloves (Photo 1).

Specific precautions: Pregnant women: it is absolutely compulsory for students who are pregnant to report this before to enter the X-Ray room.

- Preparation procedures:
- 1. For people.

For any examination performed in the imaging unit:

- People accompanying an animal from other areas of the hospital should keep the equipment belonging to the clinic where the animal came from.

For x-ray and angiography only:

- In the examination rooms:
 - All staff and students should wear the thyroid guard, lead apron and lead gloves during the procedures.
- Radioprotection equipment is available on the coat stands in each x-ray and angiography room.

2. For animals:

The clinician in charge of the patient should fill an examination request for any of the imaging modality (x-ray, ultrasound, computed tomography).

In the waiting room for companion animals, the animals should be accompanied by the owners until it is called for the procedure, or it can be kept in a kennel and the owners pick it up later in the day.

For large animals, they should wait outside the building in the area designated for them.

For ultrasound examination, ideally, animal should be brought with the area to be examined already shaved.

2.3. DURING the procedure:

- Behaviour:

- It is compulsory to wear a lead apron in the x-ray and angiography rooms.
- Pet owners are not allowed in the x-ray, CT and angiography rooms.



HOSPITAL CLINICO VETERINARIO: ÁREA PEQUEÑOS ANIMALES

(Veterinary Hospital Teaching: Small Animals)



















- Movements

- Of People:

The Hospital uses a color coding scheme (see map):

- YELLOW LINES: Access authorized respecting the rules concerning dress and behavior with are described in the biosecurity regulations. You must to pay attention to the presence of temporary yellow lines in the hospital, which indicate that a class 3 or 4 animal is housed in the house.
- RED LINES: access strictly forbidden to anyone without prior authorization.
 - Of Equipment: Equipment remains in place in the examination rooms.
- In the event of an accident:

Depending of the seriousness and the emergency of the situation:

- In slight cases call any member of the staff
- In more serious situations, call 112 or security of the Campus /Ext. 4205)

2.4. AFTER the procedure:

Waste management:

All types of waste must to be disposed of in scrupulous accordance with the recommendations set by the University of Murcia (Annexed 1)

For what management of waste is concerned, each examination room is equipped with appropriate trash cans. Only contaminated waste goes into the yellow bins.

For large animals, faeces are disposed of in a specific trash can.

Other waste (e.g.: paper used to remove the ultrasound gel form the animal) are disposed of in the trash cans for household waste.

Exit procedures:

- For animals:

After examination, the animal should be returned to its room of origin.

- For cadavers:

If an animal dies during examination, the cadaver will be evacuated through the doors accessing the imaging unit according to the animal.

- For equipment:

After each examination:

The x-ray, angiography, CT and ultrasound tables should be cleaned with soap.

Ultrasound probes should be cleaned with water and dried with paper.

- For people:

In the examination room:

Take off radioprotection equipment and hang it back on the coat stand

3.- CLASS 3

Class 3 animals will come to the imaging unit after making an appointment, and preferentially at the end of the day (except emergencies).

Class 4 animals are generally examined in the isolation unit of the clinic of origin (except parvovirus cases for companion animals).

The behavior, preparation procedures and exit procedures are the same as in Class 3 and 4 unit pets of the Hospital.