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# Frequency of Infectious Diseases in domestic carnivores hospitalized in the Isolation Unit of the Teaching Hospital of the Veterinary Medicine Faculty, University of Lisbon

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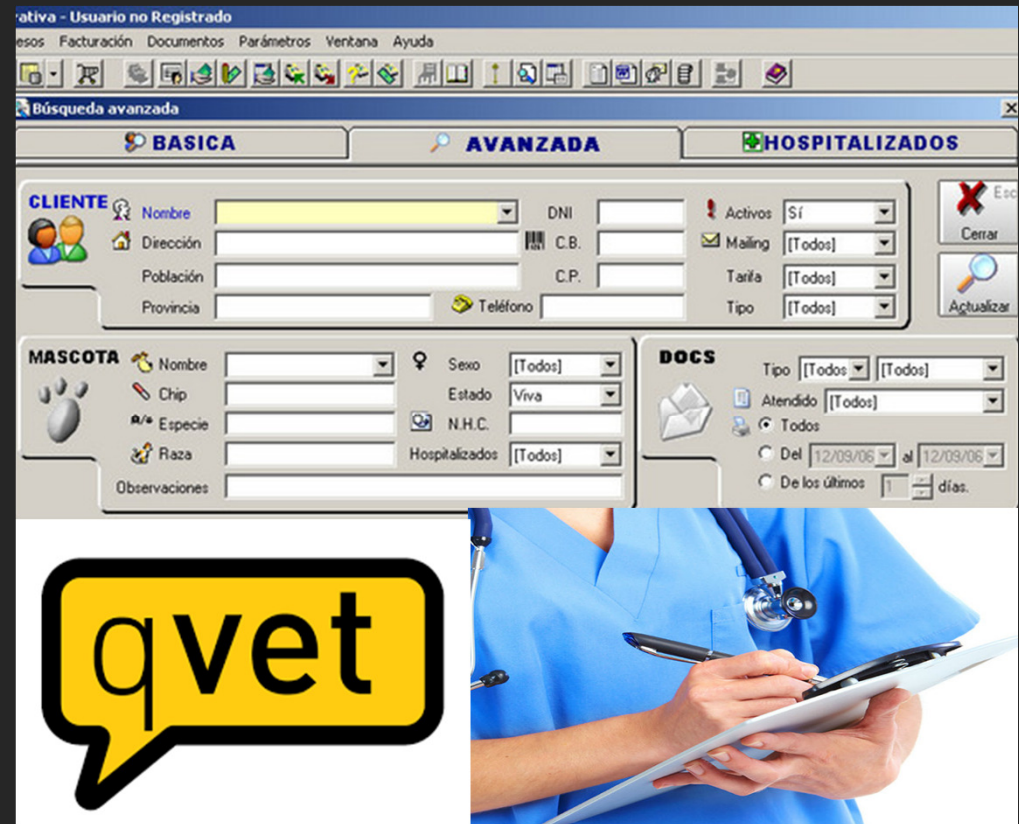
# Infectious Diseases Isolation Unit (IDIU)

- Operating since October 2013.
- Negative pressure.
- HEPA filters.
- Video surveillance system.
- Personal protective equipment.
- SOP.
- Targeting animals suspected or with confirmed infectious disease.



# Material and methods:

- Descriptive epidemiological study.
- Target population:
  - All cats and dogs with confirmed ID;
  - All cats and dogs awaiting ID diagnosis;
  - All cats and dogs with ID as a concomitant condition.
- Period of study:
  - October 2013 to January 2016.
- Data sources:
  - *qv*et patient clinical history;
  - Clinical data recorded on VTH clinical forms.





# Target population characteristics:

- **Size:**

- 113 cats (49,3%);
- 116 dogs (50,7%);
- Total = 229.

- **Gender:**

- Cats – 68 males (60,2%); 45 females (39,8%);
- Dogs – 64 males (55,2%); 52 females (44,8%).

- **Age:**

- $4.0 \pm 4.2$  years in cats;
- $1.0 \pm 3.7$  years in dogs.

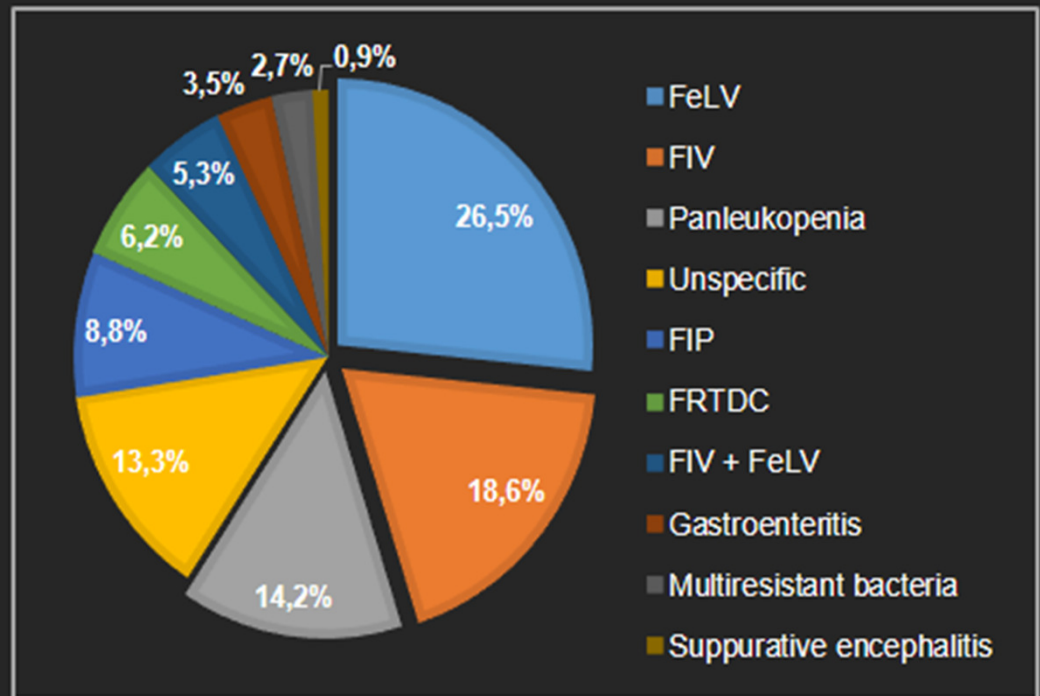
- **Clinical outcome:**

- Cats – 69% were discharged, 20.4% were euthanized, 10.6% died.
- Dogs – 69,8% were discharged, 17.2% died, 12.9% were euthanized.



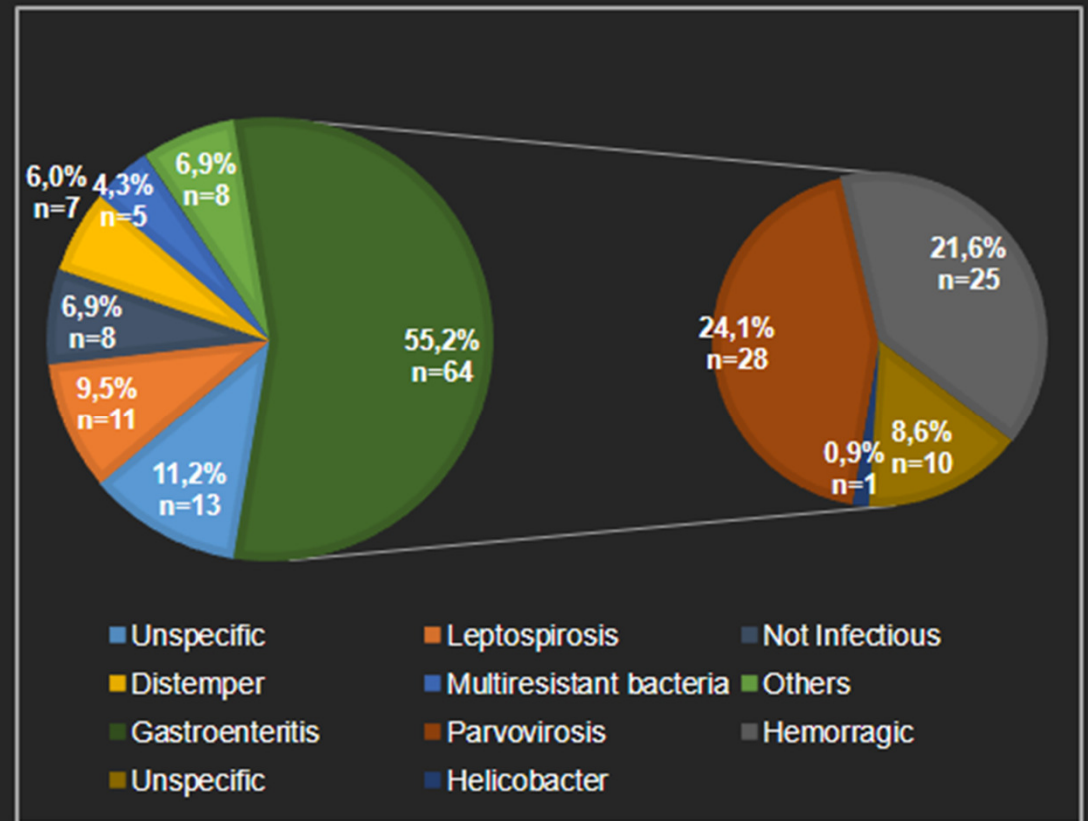
# Cat's results:

- Main diagnosis in cats (n=113):
  - **FeLV n=30 (26.5%)**
  - FIV n=21 (18.6%)
  - Panleukopenia n=16 (14.2%)
  - FIP n=10 (8.8%)
  - Feline Upper Respiratory Disease Complex n=7 (6.2%)



# Dog's results:

- Main diagnosis in dogs (n=116):
  - Gastroenteritis n=64 (55.2%)
    - **Canine parvovirus n=28 (24,1%)**
  - Leptospirosis n=11 (9.5%)
  - Canine distemper n=7 (6.0%)



# Risk factors (cats):



- **FIV**: Increases 3× the probability of a clinical episode of a concomitant disease, such as FeLV (n=6), *Mycoplasma haemofelis* (n=1), stomatitis associated feline calicivirus (n=1) and diabetes mellitus (n=1).
- **Panleukopenia**: < 1 year old (13× times increase on the probability of panleukopenia infection) and not vaccinated or if primovaccination is not complete (7× times increase on the probability of panleukopenia infection).
- **FIP**: < 1 year old (4× times increase on the probability of FIPV infection).



# Protective factors (cats):

- **FeLV**: Female.
- **FIP**: domestic mixed breed; outdoor lifestyle.





# Risk factors (dogs):

- **Gastroenteritis**: < 1 year age (9× times increase on the probability of gastroenteritis)
  - Parvovirus: Mixed breed increases 3× the probability of parvovirus infection and **no vaccination increases 29x times the probability of parvovirus infection**
- **Distemper** : < 1 year age (2× times increase on the probability of distemper)



# Protective factors (dogs):

- **Gastroenteritis**: breed is a protective factor

# Survival rates

Infectious Disease	Survival rate (%)
<b>FIV</b>	<b>71.4</b>
<b>FeLV</b>	<b>66.7</b>
<b>FIP</b>	<b>60.0</b>
<b>Feline panleukopenia</b>	<b>43.8</b>
<b>FRTDC</b>	<b>100</b>
<b>Canine parvovirosis</b>	<b>82.1</b>
<b>Canine leptospirosis</b>	<b>75</b>
<b>Canine distemper</b>	<b>57.1 – 42.9 *</b>



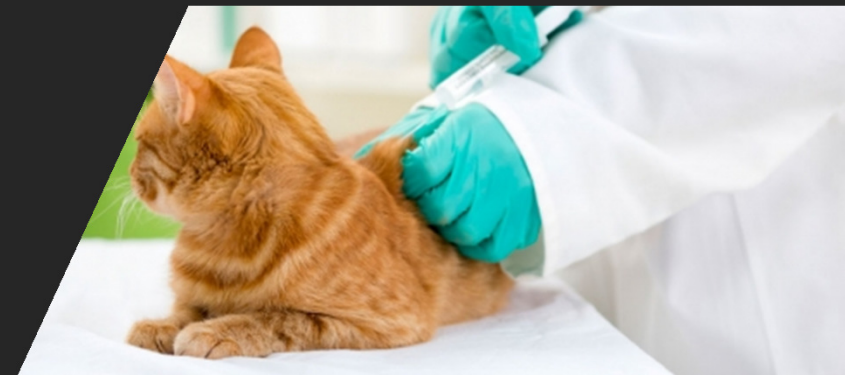
# Major difficulties:

- Missing data and lack of accuracy of clinicien reports.
- Cost of definitive diagnosis *versus* client socioeconomic status.



# Suggestions for improvement policy:

1. Triage in admission at the VTH.
2. “Must enter” field on the VTH database to compel data collection and storing for relevant information such as vaccination status.
3. Incubators for young cats
4. Hemodialysis for leptospirosis patients with renal failure
5. Thermometer probe cover





Thank you

