



**Lecture title: Working with potentially infected animals, General considerations**

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*Summary: Working with potentially  
infected animals,*

*General considerations.*

1. Definition of zoonosis.
2. How do germs spread between animals and people?
3. Animal-related occupational injuries and illnesses.
4. Examples of animals and related zoonotic diseases.

**Definition of zoonosis**

- Infectious diseases capable of being transmitted from animals to humans.

**2. How do germs spread between animals and people?**

1. Direct contact.
2. Indirect contact.
3. Vector-borne.
4. Foodborne.



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### **1- Direct contact**

**Coming into contact with the saliva, blood, urine, mucous, feces, or other body fluids of an infected animal. Examples include touching animals, and bites or scratches.**

### **Risks of Work with Research Animals**

### **2- Indirect contact**

**Coming into contact with areas where animals live or objects that have been contaminated with germs.**

**e.g. include pet habitats, plants, and soil, as well as pet food and water dishes.**

### **3- Vector-borne**

**Being bitten by a tick, or an insect like a mosquito or a flea.**

### **4- Foodborne**

**Eating or drinking something unsafe (such as unpasteurized milk, undercooked meat or eggs, or raw fruits and vegetables that are contaminated with feces from an infected animal).**

### **3. Animal-related occupational injuries and illnesses**



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- **34% Occurred during the feeding, handling, or restraining of an animal**
  - **24% Occurred during the performance of a medical intervention**
  - **26% Involved work with, or in proximity to, a cage**
  - **15% Due to punctures, or lacerations**
  - **1% New reports of work-related allergies**

#### **4. Examples of animals and related zoonotic diseases**

##### **A- Dogs and Cats – Rabies Virus**

**Dogs and cats represent the greatest risk**

**– Acquire animals documented free of disease**

##### **B- Rodents**

- **Rat , Leptospirosis**

##### **B- Sheep and goats**

**Brucellosis (Malta fever).**

- **Aerosols from urine, feces, birth products**

#### **Other Infections**

- **Viral:**
  - Avian influenza**
  - Corona virus, recently!**
- **Bacterial:**
  - Salmonella**

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## **– Shigella**

### **Tetanus**

- **Caused by exotoxin of Clostridium tetani.**
- **Reservoir is intestines of most animals.**