



Occupational Health and Zoonoses

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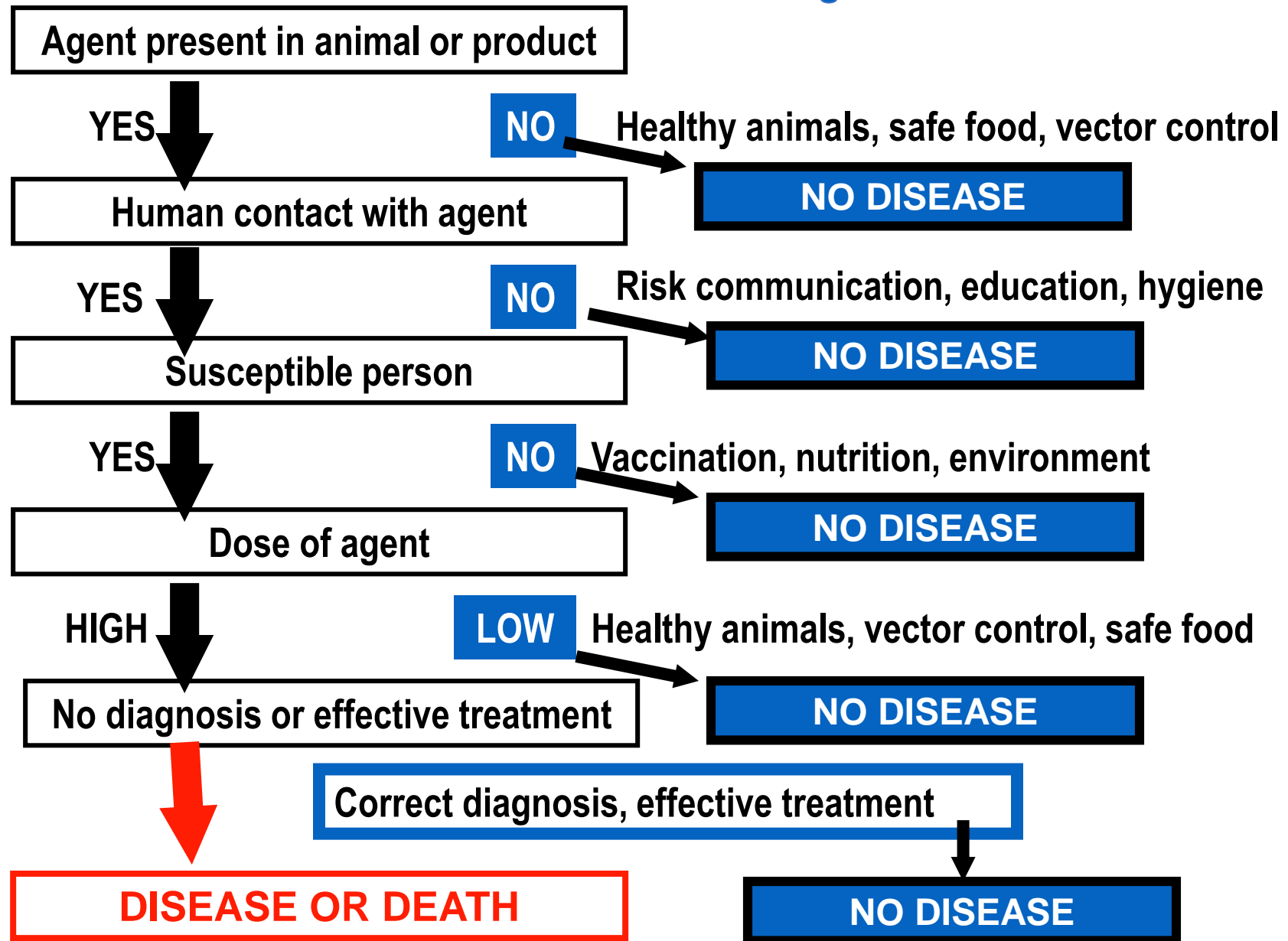


Occupational Health and Safety

- Occupational Health and Safety Act, No.85 of 1993, specifically stipulates that:
- *“It is the duty of the employer to provide and maintain a work environment that is **safe and without any risk to the health of the workers.***
- *Inform as far as reasonably practicable, and cause every employee to be conversant with the **hazards (rather than risks)** to his **health and safety** attributed to any work he performs, any article or substance he produces, handles, processes, stores or transports and any plant or machinery he is required to use, as well as with the necessary **precautionary measures to avoid, eliminate or mitigate the risk.**”*

Risk pathways in occupational health

- **Identify** occupational hazards and **calculate the risk associated with each hazard**,
- Determine the **health implications** of the **identified hazards** for the employees,
- Assess the **control measures in place** and to challenge them against the **legislative requirements**, and
- Make **recommendations to the management** about necessary **interventions** that should be implemented in order **to minimize** or **eliminate** the above-mentioned **hazards**.
- **Zoonoses** are **biological hazards**



High risk occupations

- Veterinarian, Animal Health Technician
- Beef, sheep, goat , pig farmers and workers
- Fish, crocodile farmers and workers
- Wildlife hunters, farmers , handlers, cleaners
- Laboratory scientist , technician, worker
- Meat inspectors, abattoir workers, slaughtermen
- Dairy workers on farms and factories
- Workers in the food industry, including supermarkets



Bacterial

- **Anthrax***
- Borreliosis
- Lyme Disease
- Southern Tick Rash
- Relapsing fever
- Bordetella
- **Brucellosis*****
- **Campylobacter***
- Clostridial diseases
- E coli (O157)
- **Erisipeloid***
- Glanders
- Leprosy
- **Leptospirosis***
- **Listeriosis ****
- Meloidiosis
- **Mycobacteriosis ***
- **Pasteurellosis***
- **Plague***
- **Psittacosis ***
- Rat bite fever
- **Salmonellosis***
- **Streptococcus***
- **Staphylococcus***
- Tularaemia
- Vibriosis
- Yersiniosis

Rickettsial

- Cat scratch fever
- **Q Fever***
- Tick Bite fever



Protozoan

- **Toxoplasmosis***
- **African Trypanosomiasis***
- **Pneumocystis carinii***
- **Cryptosporidium***
- Giardia

WHERE TO FIND MORE INFO

<https://www.cdc.gov/onehealth/basics/zoonotic-diseases.html>

<https://www.fao.org/in-action/asl2050/resources/documents/zoonotic-diseases/en/>

<https://www.unep.org/resources/report/preventing-future-zoonotic-disease-outbreaks-protecting-environment-animals-and>

Which presents the highest risk? Why?



ANSWER: Poor Hygiene: Rats, Fleas & Plague..

A **hazard** is anything that could cause harm. **Risk** is a combination of two things – the chance (**likelihood**) that the hazard will cause harm and **how serious** that harm could be

Xenopsylla cheopis

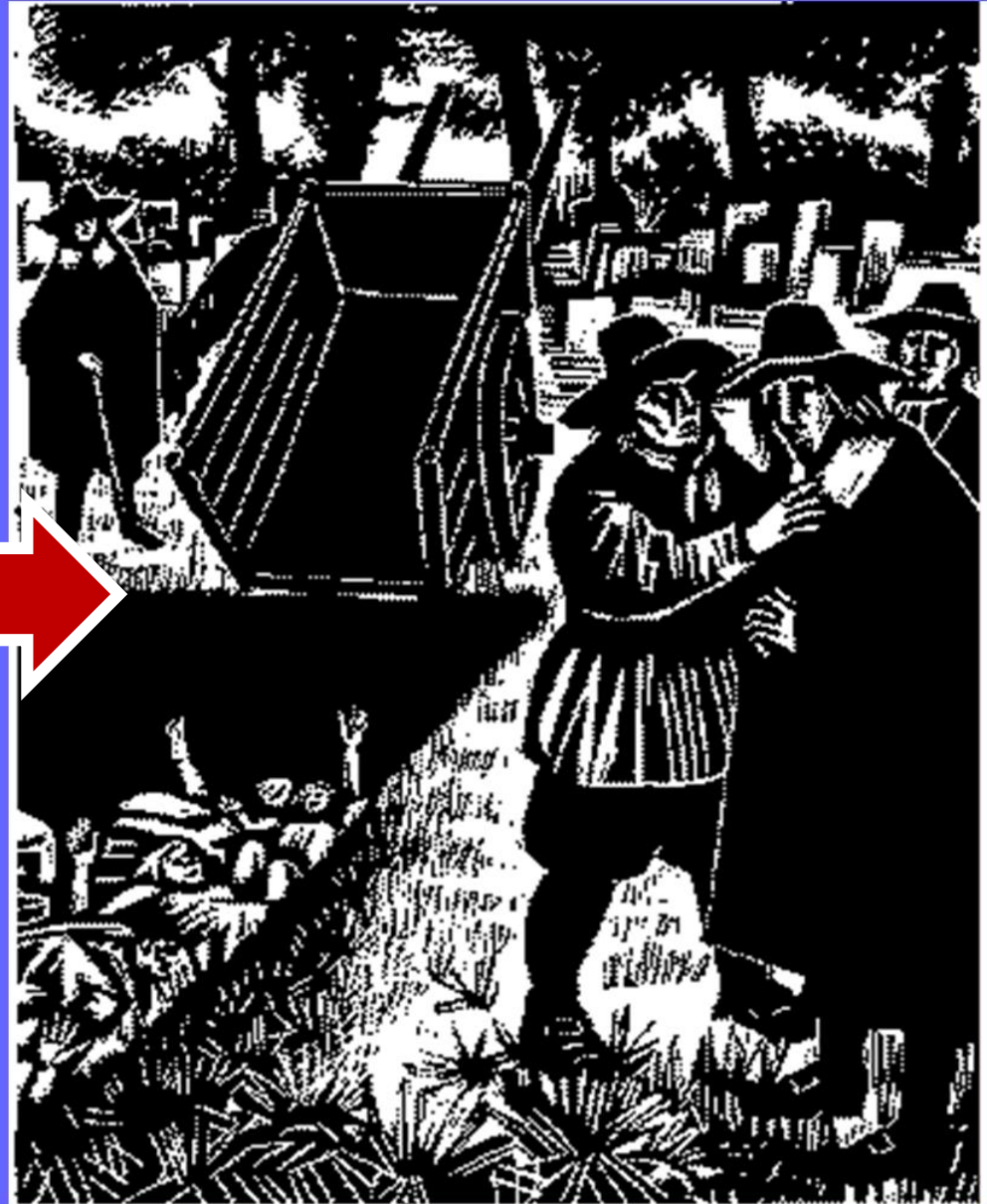


Plague



History: Three major outbreaks:

- **Justinian AD 540**
 - About 100 million died
- **Black death 1346**
 - Between 1/4-1/3 of Europe died
- **Hong Kong - SA in 1894**
 - Anglo-Boer war
 - Ended about 1912
 - Sporadic until 1950's



Multiple Choice questions

1. Which of these occupations is at a high risk for zoonoses?
 - a) Hunters
 - b) Veterinarians
 - c) Livestock farmers
 - d) Abattoir workers
 - e) All of the above

2. In the workplace, zoonoses are:
 - a) Biological hazards
 - b) Physical hazards
 - c) Chemical hazards
 - d) All of the above
 - e) None of the above