

Epidemiology of Fungi

Week 7

- Fungi can be found everywhere on earth
- Most of them are soil saprophyte and no transmission is observed between humans or animals (except Candida and some dermatophytes)
- Beside these fungal epidemics can be observed. However these epidemics would happen due to the intensive environmental exposure.
- Initiation of a fungal infection depends on the inoculum (the number fungal agent) volume and host immunity.

- Because of this a veterinarian's decision must be settled according to the patient's general condition, laboratory results and clinical parameters.
- The decision mustn't be given by chance. Because systemic fungal infections' treatment is performed with randomly toxic therapeutics which are used in variable schedules.
- The severity of disease depends on the host immunity.

Fungal Immunity

- Chronic fungal infections leads to granulomatous reactions in host
- Rather than humoral immunity the cellular immunity develops in fungal infections
- Antibodies could not protect the host in fungal infections except ringworms
- In hosts hypersensitivity reactions could occur and this will lead to skin redness in humans
- Mycoses are classified as deep (systemic) and superficial mycoses. However, some pathogenic fungi like *Candida albicans* and *Aspergillus fumigatus* could lead to both systemic and superficial infections