Class 6.3: Infectious Substances

Information Table for Anthrax

1. Disease : Anthrax (malignant pustule, wool sorter's disease)

(Common Names)

2. Etiologic Agents : Bacillus anthracis

3. Health Effects

(Human and Animal)

3.1. Human : Persistent skin infection, usually on hands or arms

Pulmonary formless common but much more severe

With fairly high rare fatality rate

Gastrointestinal form is least common

3.2. Animal : Usually overwhelming bacteremia and septicemia

with

rapid death in cattle, sheep and goats

Less acute in horse, pigs and dogs

4.1. Animal hosts : Zooanthroponosis

4.2. Specific animals infected: Cattle, sheep, goats, pig, dog

5. Mechanisms of Transmission

5.1. Reservoir : Soil

Water (stagnant ponds near incubator areas)

5.2. Direct zoonosis

Sapro zoonosis

5.3. Specific mechanisms: Direct contact with infected animals or their

carcasses

or body parts or animal fertilizers or feeds

infected

Inhalation of spores from hair or hide of animals

Consumption of improperly cooked meat of infected animals

6. Epidemiology

6.1. Populations at Risk : Sheep and goat producers, cattle producers

Veterinarians and other animal health workers

Hair and hide processors

Abattoir workers

6.2. Geographic distribution: Worldwide in endemic foci

May be transported to distant locations with hair and

hide from infected animals

7. Prevention or control: -Vaccination of animals in endemic areas

-Personal protection when handling potentially

infected animals or tissues

-Deep burial and covering with lime of infected

animal carcasses

-Vaccination of human at high risk.