



Every year **World Zoonoses day** is organised on **6th July**, which commemorates the work of French biologist Louis Pasteur who successfully administered the first vaccine against rabies, a zoonotic disease.

Zoonotic Diseases

Compiled by :

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- Zoonotic diseases are diseases or infections that are transferrable between animals and **humans**.
- Zoonotic diseases are called **Zoonosis** (**Zoonoses** is plural word)
- ***Zoonosis term is coined by Rudolf Virchow***
- **As per host** @ Zoonoses is classified as
 1. Anthrapozoonoses : Diseases transmitted from **Animals to man**
 2. Zooanthroponoses : Diseases transmitted from **Man to Animals**
 3. Amphixenoses : Transmitted in **either direction** ie Man to Animals & from Animals to man
- **As per mode of transmission** :
 - a. **Direct zoonoses**
 - b. **Cyclo zoonoses**
 - c. **Meta zoonoses**
 - d. **Sapro zoonoses**

Zoonotic diseases from Sheep / Goats

- Viral
 - a. Rabies
 - b. C.ecthyma (Sore mouth)
 - c. Vesicular stomatitis

- Bacterial
 - a. Anthrax
 - b. Brucellosis
 - c. Leptospirosis
 - d. Listeriosis
 - e. Salmonellosis
 - f. CLA
 - g. E.coli
 - h. Chlamydiosis
 - i. Campylobacteriosis (Vibriosis)

- ✓ Rickettsia : Q fever (Coxiellosis)
- ✓ Fungal : Mycosis, Ringworm (Dermatophytosis)
- ✓ Protozoal : Cryptosporidiasis
- ✓ Helminthic : Echinococcosis
- ✓ Arthropods : Scabies (Sarcoptic mange)
Myiasis



How can they be spread ?

- **Contact** : with infected animals or infected material
- **Consumption** : of contaminated **Meat, Milk** or **water**
- **Inhalation** : of infected air
- **Bite / Scratches** : Not of significance

Diseases transmitted by contact

1. By **indirect contact** with areas where Sheep/Goat live or other objects that have been contaminated with infected material
2. By **direct or Cutaneous contact** with Blood, Urine, Saliva, mucus and other body fluids

The following diseases are transmitted by **contact** (**Direct & Indirect**)

- ✓ Rabies
- ✓ C.ecthyma
- ✓ Vesicular stomatitis
- ✓ Anthrax
- ✓ Brucellosis
- ✓ Leptospirosis
- ✓ Campylobacteriosis
- ✓ Cryptosporidium
- ✓ Listeriosis (Cutaneous form)
- ✓ Salmonellosis
- ✓ Q-Fever
- ✓ Caseous lymphadenitis (CLA)
- ✓ Scabies
- ✓ Ringworm

Diseases transmitted by eating mutton /Chevon

Diseases are transmitted by eating **raw or semi cooked or improperly cooked** mutton /Chevon

- Anthrax
- Sarcocystosis
- Toxoplasmosis
- Para TB (Johnes disease)
- Salmonellosis
- Listeriosis
- Campylobacteriosis

Diseases transmitted by drinking Sheep/Goat milk

Diseases are transmitted by consuming **unpasteurised milk** & Milk products made with unpasteurised milk

- Brucellosis
- Listeriosis
- Salmonellosis
- Q-fever
- Campylobacteriosis
- Para TB (Johnes disease)

Diseases transmitted by inhalation

- ✚ Anthrax
- ✚ Q-fever

People at risk

All those who is in contact with Animals has some risk of getting zoonotic diseases

1. S/G rearers / Shepherds
2. **Field Veterinarians**
3. Butchers
4. Skin traders
5. Wool sorters
6. **Non-Vegetarians** (who eat Mutton & Chevon)
7. Those who consumes Goat milk & Milk by products
8. Those live and work around Sheep & Goat (Shearers, family members of shepherds etc)

High Risk people

- < 5 years old
- > 60 years
- People with weak immune system
- Pregnant women

Simple steps to minimise risk

- More than 60% of all human pathogens are zoonotic.
- Zoonotic diseases can have **short term** or **serious long-term** health implications
- **With due care,** risk of contracting Zoonotic diseases can be minimised. Here are few steps
 1. Keep S/G healthy
 2. Vaccinate S/G for known zoonotic diseases, such as Anthrax & Brucellosis
 3. Get vaccinated against **Rabies**
 4. Wear Personal Protective Equipment (PPE) wherever possible and cover any wounds with water tight dressings.
 5. To protect against mosquitoes and other biting insects that can transmit diseases: cover-up with a loose-fitting long sleeved shirt and long pants when outside and apply **mosquito repellent** to exposed skin.
 6. Disinfect or wash hands regularly – especially before eating or preparing NV food.
 7. Ensure to understand the signs of common zoonotic diseases, and what to do if have contracted one.
 8. Practice good sanitation & Hygiene
 9. Not to eat raw or semi-cooked meat of Sheep/Goat
 10. Not to drink unpasteurised milk of Sheep/Goat

Steps to break chain of zoonotic Transmission

- ♦ Raising **awareness** of zoonotic diseases among public
- ♦ **Strengthening** monitoring and regulation practices associated with zoonotic diseases, including food systems
- ♦ **Improving** biosecurity and control
- ♦ **Identifying key drivers** of emerging diseases in Animal Husbandry
- ♦ **Encouraging** proven management and zoonotic disease control measures
- ♦ Operationalizing the **One Health** approach in land-use and sustainable development planning, implementation, and monitoring, among other fields.