Zoonotic Diseases (slide notes) UC Davis Goat Day 2015 Dr. Rosie Busch

### **Zoonotic Disease**

- Contagious diseases that spread between animals and humans.
  - direct contact with infected animals
  - consumption of contaminated food or water
  - inhalation
  - arthropod vectors (such as flies, ticks, and mosquitoes)
  - pests

### **Ouestions** to answer

- Who is at risk of getting a zoonotic disease?
- Which animals may carry zoonotic disease?
- How I can I reduce my chances of getting a zoonotic disease?
- What do I do if I think I may have contracted a zoonotic disease?

# People at Risk

- Contact with small ruminants
  - Farmers, researchers, veterinarians & abattoir workers
  - Consumers
- Immune status
  - Children, elderly & pregnant women
  - Immunocompromised individuals

# High Risk Animals

- Sick goats
- Adults and kids
- Travel history
- Periparturient does
  - Around the time of labor (up to 3 weeks after)
- Healthy goats
  - Carrier animals

# Sign of Sick Goats

- Skin lesions
  - Ringworm & Contagious Ecthyma (Soremouth)
- Diarrhea
- Campylobacteriosis, Cryptosporidiosis,
  E. coli & Salmonella
- Sepsis
- Anthrax & Tularemia
- Neurologic
  - Rabies & Listeriosis
- Mastitis

- Brucellosis
- Abortions
- Brucellosis, Chlamydiosis, Leptospirosis, Campylobacteriosis, Toxoplasmosis, Coxiellosis

## Spread of Disease

- Direct Contact
  - Rabies, Anthrax, Brucellosis, Contagious Ecthyma (Soremouth), Ringworm, Tularemia,
  - Chlamydiosis (contaminated tissues during labor)
  - Leptospirosis (contaminated water or urine)
- Fecal Oral Transmission
  - Campylobacteriosis, Cryptosporidiosis, E. coli, Listeriosis, Salmonella, Toxoplasmosis
  - Also, food-borne illness from meat or milk
- Inhalation
  - Coxiellosis (Q Fever)

## **Preventative Measures**

- Hand washing
  - Soap
  - Hand Sanitizers (70% Ethyl Alcohol)
- Protective gear
  - Coveralls and boots
  - Gloves
  - N95 masks
- Sanitation
  - Scrub with detergents
  - Disinfect with cleaners
- Compost manure
  - Minimum of 90 days before spreading
- Disposal
- Composting, deep burial, incineration, rendering, or transport to landfill

#### **Human Disease**

• Contact your doctor!

#### Resources

- USDA APHIS
- CDFA
- Your local veterinarian
- UC Davis Large Animal Clinic

(530) 752-0290

Compound	Chlorine Chloramine s	lodophors	Chlorhexidin e	Quaternary ammonium s	Phenois	Aldehyde	Oxidizing
Examples	Bleach	Betadine®	Nolvasan	Roccal-D	Lysol	Wavicide	Virkon
Gram + Bacteria	Good	Good	Fair	Good	Good	Good	Good
Gram – Bacteria	Good	Good	Fair	Fair	Good	Good	Good
TB like	Fair	Fair	Fair	Poor	Good to fair	Good	Good
Viruses	Fair	Fair	Good to fair	Fair	Fair	Good	Good
Fungi	Good	Good	Fair	Fair	Fair	Good	Good
Spores	Fair	Fair	Fair	Poor	Poor	Good	Good
Activity with organic material	Very poor	Fair to poor	Good	Fair	Very good	Good	Good
Residual activity	Poor	Yes	Yes	No	Yes	Yes	Yes
Common use	Clean equipment	Clean equipment	Equipment Premises Footbaths	Clean equipment	Equipment Premises Footbaths	Equipment Premises Footbaths	Equipment Premises Footbaths