

# Water Quality and Cattle Diseases

## Waterborne Pathogens

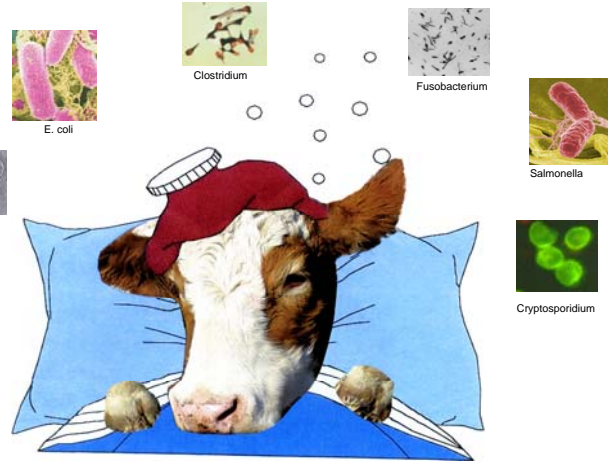
### •Bacteria

- Fusobacterium – “foot-rot”
- Clostridium- blackleg
- E. coli spc.- mastitis, scours
- Salmonella spc.- diarrhea
- Listeria – circling disease

### •Protists (Protozoa)

- Cryptosporidium – diarrhea

### •Viruses



Bacteria	Desired Range	Problem range
Total bacteria CFUs*/ 100ml	<200	>1,000,000
Total coliform CFUs*/ 100ml	<5,000	>5,000
Fecal coliform CFUs*/ 100ml	<1	>1 for young animals >10 for older animals
Fecal strep CFUs*/ 100ml	<1	>3 for young animals >30 for older animals

Fecal coliform bacteria are indicators of the possible presence of disease causing organisms. The higher the fecal coliform levels the more likely disease causing organisms are present.

\*CFUs = colony forming units    100 ml = about 1/2 cup

Water can serve as reservoirs for many different organisms and toxins. The organisms can survive for extended periods of time in surface waters and sediments. Surface water supplies to which livestock have ready access are always potential sources of disease causing organisms. Fencing cattle out of streams and farm ponds reduces opportunities for exposure.

