OBJECTIVE
To develop a bibliographical review summarizing the most important elements of the epidemiology of Clostridium difficile.

INTRODUCTION
C. difficile is an obligate anaerobic, gram positive and spore-forming bacterium, that is a common inhabitant of the gut in several mammal species. This microorganism contains toxigenic strains which are considered the cause of C. difficile infection (CDI) in humans and animals.

CDI IN PI GS

NEONATAL PIGLETS

Asymptomatics (>50%)

Symptomatics

Diarrhea (A)

Mesocolon edema (B)

"volcanic lesions " (C)

A

B

C

Figure 3. 1. Watery-pasty diarrhea in piglets. 2. Mesocolon edema. 3. Neutrophils infiltrating the lamina propria, with focal ulcers in the mucosa associated with necrotic cellular debris ("volcanic lesion "; arrow).

CDI IN HUMANS

CLINICAL SIGNS

Diarrhea

Non-diarrhea

Pseudomembranous colitis (90%) (fig. 4)

Colitis (10%)

Paralytic ileus (3%)

Toxic megacolon

TRANSMISSION

< Year 2000

2000 – Today

Nosocomial cases

Community-acquired

Spore reservoir:

HOSPITAL ENVIRONMENT

Direct contact

Indirect contact

CONSUMPTION OF CONTAMINATED MEAT

ANIMAL

Eating low-cooked or ready-to-eat meat

Consumer characteristics to develop CDI:

- Intestinal microbiota
- Immune status
- Hospitalization
- In treatment

REFERENCES