

Epsilon toxin of *Clostridium perfringens*

What is Epsilon toxin of *Clostridium perfringens*?

The epsilon toxin is one of several toxins produced by *Clostridium perfringens*, an anaerobic bacterium. Epsilon toxin causes potassium and fluid leakage from cells

Signs and Symptoms

Incubation period can range from 6-24 hours, usually occurring within 10-12 hours after exposure. Symptoms of exposure include:

- Diarrhea
- Nausea
- Severe abdominal cramps
- Bloating (1-2 days)

Transmission (How it spreads)

Through contaminated food or water

Airborne via aerosol

Inoculation into an open wound

Diagnosis & Treatment

The bacterium can be isolated from wound and stool cultures

Toxin can be detected using ELISA

Penicillin is used to treat *C. perfringens* infection, and the toxin is treated using supportive measures

Potential use in Bioterrorism

Epsilon toxin is a potential bioterrorism weapon. If there is a case, and there has been no known exposure or the case is not employed in an occupation that is prone to exposure, then consider bioterrorism.

If you have symptoms, call your healthcare provider

Report cases to the Riley County Health Department by calling the Disease Investigation
Line: 785-317-0474