

KEY WORDS AND PHRASES FOR Ability to Produce Type III Toxins

A or active component that enzymatically inactivates some host cell intracellular target or signaling pathway to interfere with a host cell function

B or binding component that binds the exotoxin to a receptor molecule on the surface of the host cell membrane and determines the type of host cell to which the toxin is able to affect

Blocks the release of acetylcholine at nerve synapses inhibiting muscle contraction

Blocks the release of inhibitors of contraction keeping the involved muscles in a state of contraction

Causes loss of fluids, diarrhea, and severe dehydration

Clostridium perfringens, *Bacillus cereus*

Enterotoxins

Flaccid paralysis

Increased respiratory secretions and mucous production that contributes to coughing; increased sensitivity to histamine

Interferes with host cell protein synthesis

Removes the ADP-ribosyl group from the coenzyme NAD and covalently attach it to some host cell protein (ADP- ribosylation)

Spastic paralysis

Stops host cell protein synthesis; ulceration of the colon; hemolytic uremic syndrome (HUS)