Botulism Scenario

Part 1

Yesterday morning, November 18th, local hospital infection control officials reported 5 cases of suspected botulism in otherwise healthy elementary school students who are residents of your county. The case-patients went to a local hospital with cranial nerve palsies and progressive descending flaccid paralysis resulting in respiratory failure. Last night physicians suspected foodborne botulism, notified MDCH, and collected clinical specimens for testing. The state health department provided immediate clinical consultation and dispatched botulinum antitoxin, which was administered to each of the patients early this morning. After receiving antitoxin, the patients had no progression of neurologic symptoms, but they remain hospitalized and on ventilators.

A preliminary investigation conducted by local health officials, MDCH and MDA determined that all 5 cases had consumed unpastuerized apple cider during a field trip to a local cider mill on Saturday, November 17th. A notice went out over the health alert network (HAN) for health care providers to be on the lookout for additional cases while case finding could be conducted. The mill voluntarily ceased operations today and initiated appropriate procedures. It was determined that during the field trip approximately 100 children consumed the cider on the same day. Symptoms of botulism are likely to appear 12-36 hours after exposure to a contaminated food product, but may take several days. The investigation was expanded to identify all persons who consumed cider produced by the mill during the past 10 days.
Botulism Scenario

Part 2

Meanwhile, officials in a neighboring county were also notified yesterday that several patients had been hospitalized with respiratory failure and descending paralysis. Botulinum toxin type A was identified in the serum of 13 patients. The patients required treatment with antitoxin, which prevents binding of circulating botulinum toxin to nerve endings. Local health department environmental health officials collected open, ½ gallon bottles of apple cider from the homes of 9 of the patients. Each bottle of cider was from the same cider mill.
Botulism Scenario

Part 3

Through the process of the investigation, state health officials are now reporting that a total of 53 people from three counties have been diagnosed with foodborne botulism that is associated with exposure to the cider mill. All 53 persons required antitoxin and supportive medical care. Collaborations between departments of public health, agriculture, education, and the media resulted in the rapid identification of cases. No deaths resulted.