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Salad Bar Salmonella Case Study

Intentional food contamination is a constant concern, but the probability is low. One of the worst cases of intentional food poisoning in the United States was the 1984 Salmonella incident. The case falls under bioterrorism because the microorganism was created in a lab on cult leader Bhagavan Shree Rajneesh's ranch in Oregon. The strain created was Salmonella Typhi-murium, and the Rajneeshee cult spread it in multiple locations, intentionally causing an outbreak in a civilian population to rig a local election.

Since the 1984 incident, many measures have been in place that promote food safety. Technology checks food packaging. Law enforcement investigates suspicious activity in restaurants or in the food industry. Most restaurants have surveillance systems, making it harder for anyone to tamper with food. Restaurants must also abide by regulations and guidelines regarding food handling, preparation, and storage. For example, food inspectors check to ensure restaurants are keeping facilities clean, storage is appropriate for specific food items based on temperature, no pests are present, food is adequately prepared, and restaurants have the appropriate equipment to serve food.

Restaurant staff are trained to handle food and report if they see anything out of the norm. People also report incidents if they experience food poisoning symptoms. This can lead to clusters in a population not buying a certain product so there is follow-up on what could be causing an outbreak. Surveillance, public awareness, and vigilance are the main components that reduce the likelihood of the Salmonella incident repeating.

While the 1984 incident was initially considered a foodborne outbreak and food handlers were blamed, it would have played out differently if this case was initially suspected of bioterrorism. Law enforcement would have responded differently when it came to emergency response as would public health officials. The Oregon Department of Health would activate public health emergency response operations and would work with law enforcement to respond to bioterrorism. There would be an exchange of information between the two entities to identify the familiar sources along with contact tracing.

As a public health professional, what I would be most concerned with is where these strains were being made and if other microorganisms or toxins were being released due to the multiple waves of outbreak. Another significant concern would be public safety. Since there was a trend of people getting sick at restaurants, shut down restaurants to assess would be imperative. Lastly, I would inquire about the eight cases that created the biphasic epidemic curve from three years prior to see if there were similarities in terms of findings.

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