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Las Vegas Ricin Incident: A Case Study

Introduction

In 2008, in Las Vegas, Nevada, a man was hospitalized with suspected exposure to ricin, a deadly poisonous material naturally occurring in castor beans.¹ Two vials of the poison, along with the beans from which it can be obtained, were found in his hotel room which was located near the Las Vegas Strip. No other people were harmed in this incident but it was unclear what the man's motives were as police found weapons and a book on anarchy in the hotel room where the ricin was found.

Facts of the Case

Roger Von Bergendorff was the only person affected during this incident and his exposure did not prove to be fatal. In February of 2008, he registered for a room at an Extended Stay America hotel located in close proximity to the Las Vegas Strip.² After he was hospitalized for breathing troubles, his room was searched by the police and two vials of ricin, the beans, and two unregistered firearms. The Federal Bureau of Investigation was involved in order to determine if there was a larger risk to the public at that time. After Bergendorff recovered, he was taken into custody and later on pleaded guilty to two felony charges.

Epidemiological Aspects of the Event

Members of the Centers for Disease Control and Prevention traveled to Las Vegas from Atlanta in order to investigate whether or not ricin was involved in the incident. It was challenging to determine if ricin was the cause of his respiratory symptoms since the body metabolizes the toxin. According to the CDC officials, a close examination of his medical chart was required in order to determine if ricin was the cause of his symptoms and whether any additional testing was required.³ Detailed information on additional testing in this specific case is not available, however, CDC professionals were able to surmise that he was exposed to ricin based on the context of the episode. In other cases, ricin poisoning is commonly detected via increased liver function test results, increase renal function test results, hematuria, as well as metabolic acidosis.⁴ There is no specific test for the detection of ricin within bodily fluids but certain test results as described above can indicate ricin poisoning. In some cases, environmental testing for ricin, if performed rapidly, can be helpful in determining if ricin poisoning has occurred.

Management of the Event

The episode was limited to the single suspect, and fortunately posed no immediate danger to the public. Still, the incident was rapidly investigated by local police and the FBI considering how deadly the toxin ricin is and how it may be used as a bioterrorism agent. The police were notified of the potential threat early on thanks to Bergendorff's cousin who found the ricin in the room. They found the poison and then thoroughly investigated the cousin as well in order to rule out his involvement in the episode. Bergendorff fell ill with respiratory symptoms due to exposure to the ricin before he had the chance to harm other people or to use the other weapons found in his hotel room. He was provided with effective hospital care and made a full recovery; the medical management of the case was effective. Gaps in preparedness were documented in the available literature on this case.

Communications of the Event

The event was reported in mass media outlets such as the New York Times, NBC News, and NPR. Public communications were mostly initiated by police and the FBI since it was more a matter of a criminal investigation, this incident did not pose a grave threat to the general public. The communication of the case were well managed because once the threat to the public was determined to be low, there was no need for public health agencies to continue to report on the situation.

Summary

Fortunately, in this case, the ricin did not expose anyone other than the perpetrator of this potentially serious public health threat. This case underscored the risk that relatively available agents, such as castor beans, can be used to manufacture bioterrorist agents. There are individuals who wish to harm others via biological attacks. Agencies, such as the CDC and the FBI are critically important in the response to threats of this nature. As we similarly saw in the 2001 anthrax mail attacks, our ability to rapidly respond to these types of potential public health disasters is dependent on the readiness of responding agencies- and their ability and willingness to effectively cooperate with each other. While biological attacks are rare, they have the potential to inflict mass casualties, therefore it is crucial that we are prepared to identify and respond to these types of incidents.

References

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