1. **What“type’ of Hazardous Material/WMD agent might this scenario represent?**
   * Biological agent (bacteria) (Cashman, 2008).
2. **Epidemiological surveillance has identified a common “vector.” What might that be?**
   * The common vector could be confusing with a number of viral, bacteria, and fungal infections. According to the CDC (2015), anthrax can be found from natural soil, plants, or water that can affect domestic and wild animals globally.
3. **What the agent might be implicated based on the clinical picture?**
   * Bacteria nerve agent called Anthrax. The case study narrows down to the water that was contaminated in the main water line district. The first case was coming from the amusement park. Afterward, other cases then occurred from nursing homes, and children and infirm residents in the same are. Therefore, the root cause was the main water line was contaminated after it has been filtered from the treatment center before entering the town.
4. **How could this syndrome be altered?**
   * Anthrax can infect people when its spores enter a person’s body, which then activates toxins to cause severe illness. From the case study, it seems people got infected through ingestion and inhalation. Here are the symptoms for the 2 routes of entry:
     + Inhalation
       - Fever and chills
       - Chest Discomfort
       - Shortness of breath
       - Confusion or dizziness
       - Cough
       - Nausea, vomiting, or stomach pains
       - Headache
       - Sweats (often drenching)
       - Extreme tiredness
       - Body aches
     + Ingestion
       - Fever and chills
       - Swelling of neck or neck glands
       - Sore throat
       - Painful swallowing
       - Hoarseness
       - Nausea and vomiting, especially bloody vomiting
       - Diarrhea or bloody diarrhea
       - Headache
       - Flushing (red face) and red eyes
       - Stomach pain
       - Fainting
       - Swelling of the abdomen (stomach)

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1. **What would the EOC do to facilitate the response phase?**
   * The fire department should arrive on the scene first and direct them to activate EOC with the following procedures down below:
     + Isolate and secure
     + Deny entry
     + Establish control zones
     + Initiate notifications (state/federal/assisting agencies/specialized agencies, law enforcement, and hospitals)
     + Request additional resources
     + Use necessary defensive measures (time/distance/shielding, proper protective equipment, minimize the number of responders exposed to danger, etc.)
     + Initiate Public Safety Measures (rescue, evacuate, protect in place)
     + Establish water supply, control and isolate patients in a safe area
     + Coordinate activities with law enforcement
     + Establish triage to treat victims
     + Establish gross mass decontamination operations
     + As the incident progress, initiate the Unified Command System
     + Establish command post to include Law enforcement, public health, EMS, emergency management, and public works.
     + Establish and maintain chain of custody for evidence protection

        (Cashman, 2008, p. 123)

1. **Research and review the "Whole Community" Planning principles.  Extend your research into week 9 describing the purpose and goal of this planning method.  List 3 considerations that you would now include in your preparation for response (think globally as an expanding event).**
   * The whole community approach is to have an overall understanding for residents, emergency management practitioners, organizational and community leaders and government officials to assess the needs to have a strong community. The goal for a whole community approach is:
     + Shared understanding of community needs and capabilities
     + Greater empowerment and integration of resources from across the community
     + Stronger social infrastructure
     + Establishment of relationships that facilitate more effective prevention, protection, mitigation, response, and recovery activities
     + Increased individual and collective preparedness
     + Greater resiliency at both the community and national levels

    (FEMA, 2011, p. 3)

* + From the Whole Community Principles, there are 3 considerations that I would include for preparation in response to this case study:
    - Recognize the community capabilities and needs
    - Understand community complexity
    - Foster relationships with community leaders

            (FEMA, 2011)

Cashman, R. J. ( 2008). Emergency response handbook for chemical and biological agents and weapons (2nd ed.). CRC Press Taylor

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