

Scenario No. 2: “Vaccine Gone Awry Emergency Response”

The potential of handling situations that seem like Science Fiction is more likely today than ever before. In this particular scenario, we manufacture a different reality that could occur. Although this exercise has never occurred in nature, the principles of this week’s teachings still apply. Students still will have to apply their knowledge of emergency response and preparedness and the interactions and coordination between various organizations.

The Scenario:

It is December 15th and one of the nation’s largest research facilities, which coordinate efforts to tackle the annual influenza virus, just discovered that a vaccine released in September had mutated into a deadly injection. Half of the doses of the synthetic vaccine have been found to mutate when contacted with the body’s T-cells within 30 days of injection, causing severe acute issues that start off with vomiting, diarrhea, high fever, and headache. Within 3-5 days after these initial symptoms, the mutated vaccine then attacks the nervous system, causing paralysis and/or death. Paralysis was seen in 256,987 cases spread over several states between days 3 and 5 of initial symptoms; Death was seen in 54,267 cases on either day 5 or 6 after initial symptoms. Not all who were paralyzed died, but remain in a paralyzed and/or comatose state.

The discovery was made after thousands of reports were made to the CDC of this mystery disease, which (through epidemiology) was then traced to the mutated vaccine batch. This particular facility manufactured and distributed the vaccine to states within the northeast and mid-west regions of the nation. Basically, the vaccine was distributed to 21 states: Maine, Connecticut, Massachusetts, New Hampshire, Rhode Island, Vermont, New Jersey, New York, Pennsylvania, Ohio, Michigan, Indiana, Illinois, Wisconsin, Minnesota, Iowa, Missouri, Nebraska, Kansas, North Dakota and South Dakota.

Case Details:

- Distribution to 21 states
- Only the second half of the vaccine batch was contaminated, but the vials were mixed when packaged, therefore, there is no means of knowing which vials contain the infected vaccine.
- Initial illnesses discovered in 9 states: Maine, New Hampshire, Ohio, Kansas, Minnesota, North Dakota, South Dakota, Indiana, Iowa (45.9 million people in these 9 states)
- As of December 15 – Total sicknesses reported = 2,435,627 million people across 5 states (Ohio, Maine, Minnesota, Iowa and Indiana (5% of the total population of the 9 states total)

HCA 415: Community and Public Health
Online

- As of December 15 - Paralysis patients = 256,987 cases (1% of the total population of those 9 states; 11% of those who were reported sick within the aforementioned 5 states)
- As of December 15 – Deaths from those paralysis patients = 54,267 cases (21% of those who succumbed to paralysis)
- The vaccine was not available to the public until October but had been given out from October 1 through December 15, at the time they discovered the mutation.
- As of December 15, 75% of the vaccine was given to individuals in the population; the remaining 25% is on its way back to the CDC for analysis and eventual destruction
- There is no counteractive drug available yet, but the CDC is diligently working on it. They will have more details when the remaining vaccines arrive the next day (Dec. 16)
- Bioterrorism was not yet ruled out in this case

Your Review: What do you tell your public? Factor out the issues and follow protocol to formulate your response to the discussion question and public service announcement.