Mapping out healthcare incident timeframe

Shannon Cogar

11 Blue Men Worksheet

1. Draw a timeline marking the time each of the 11 blue men presented symptoms. Explain the point of mapping out the incident timeframe (i. e. why would epidemiologists need this information and how would it be used)

The first man, found on the sidewalk at 8 a. m. in the morning with symptoms believed to be carbon monoxide poisoning. The second man, admitted at 10: 25 that morning, but the man that was found at 6: 45 the evening of that day started presenting symptoms at 10: 00 that morning should have been the second man, but he will listed as number 3. The fourth, fifth, and sixth men were admitted at 45 minutes later, at 11: 20 that morning with the seventh and eighth men were admitted directly following them. At 11: 35 a. m., the ninth and the tenth men were admitted and later in evening the eleventh and final man was admitted to the hospital. The origin of the incident allows the epidemiologist to be able to investigate the place to see what was in the vicinity and what could have been the cause of the problem. The source of the incident can usually give all of the answers exclusive of having to work hard.

2. Describe the key symptoms and incubation period for the illness affecting the eleven blue men.

Symptoms seem to have taken around 30 minutes or less for the incubation period. Each of the men admitted and examined by the physician had the

symptoms of a bluish color and were near death. These men were in shock, had cyanosis, were dazed and had abdominal cramps.

3. Describe each step of an outbreak investigation as it pertains to this particular event, indicating all of the key points in the investigation (include how it started, why epidemiologists got involved, where did the investigation take the epidemiologists, who was interviewed, what/who were the potential culprits identified during the investigation)

According to the CDC, the steps of an outbreak investigation follows as: preparing for field work, establish the existence of an outbreak, verify the diagnosis, construct a working case definition, find cases systematically and record information, perform descriptive epidemiology, develop hypotheses, evaluate hypotheses epidemiologically, revaluate hypotheses if necessary, compare with lab and environmental studies, implement control and prevention methods, initiate surveillance, and then communicate findings (2016). The investigation began as the first man that came in with symptoms which were described as carbon monoxide poisoning. A number of men came in from the identical area with the identical symptoms, but those men were lacking symptoms of carbon monoxide poisoning. Epidemiologist were brought in because the symptoms were rare and could not be figured out as to what was causing them. It was established they all ate at the same café so the health department was brought in to help. They started comparing symptoms as to what the cause could be, taking blood samples, and asking questions. The epidemiologist then went to the source, the café, to see what could have conceivably caused this illness n the men. They performed

testing after discovering the men ate to get final results. The café employees and the men themselves were suspects.

4. Identify three questions that Dr. Greenberg and Dr. Pellitteri asked the patients. Explain why these three questions were relevant.

1. Where the patients had breakfast?
2. When did the patients start exhibiting symptoms?
3. Are the patients on dope?

The questions are appropriate because they help construct a timeline and make connections between the men. Distinguishing the facts that they all had the same thing for breakfast, and then arrived with comparable symptoms can help the rule out other possibilities. Questioning the men as to if they take drugs is important due to the fact different drugs can cause certain symptoms particularly if a possible overdose is ensuing.

5. Identify three questions that the epidemiologists asked the Eclipse Cafeteria employees. Explain why these three questions were relevant.

1. The cook was asked how much oatmeal was being made and what was used in it?
2. They asked the proprietor what the other “ salt like” substance was that was directly next to the salt?
3. Asked them if they knew about the possible gas leak?

Questions such as these are relevant because each of the men had ate oatmeal. Distinguishing the ingredients should help verify that there may or may not have been anything harmful ingredients in the oatmeal. The salt like substance was crucial since the cook said that salt is an ingredient used in

the oatmeal and that particular substance looked exactly like salt and could have made it into the oatmeal.

The gas question was important because a leak could be something the café was aware of and chose to ignore

6. Identify the final culprit and how it was discovered.

After exploring the restaurant and testing the other container to find out that it contained sodium nitrite, along with the employee admitting that he may have mistakenly filled the salt shakers the sodium nitrate, the cause was determined and ruled to be the final result. Careful inspection of the kitchen, asking the precise questions and knowledge of the symptoms nitrite poisoning confirmation determined the cause of the sickness.

7. Explain why were these specific men more affected than other people who ate in the cafeteria?

These 11 men were involved because 17 salt shakers in the restaurant, were determined to have contained 37% of nitrite. Even though the can of salt in the kitchen contained some grains of sodium nitrite, it was not enough to poison them. It was then figured out that some of the men salted their oatmeal with shakers that contained enough sodium nitrite to poison them. The over use of salt and the sodium nitrite was the final diagnosis of the 11 me who had fallen ill.

References

CDC. (2016). Center for Disease Control and Prevention: *Lesson 6: Investigating an Outbreak.* http://www. cdc.

gov/ophss/csels/dsepd/ss1978/lesson6/section2. html. Accessed October 17, 2016.