

Exercise -
Internal Chemical Spill

Introduction

Time: Early September

It is a sunny and warm 80 degree morning. The forecasted temperature for the day is 90 degrees and the wind is blowing slightly from the south.

Inject Set One

9:00 a.m. – Just after the beginning of the school day a 15-year-old female student reports to school nurse with shortness of breath with audible wheeze, symptoms consistent with an asthma attack. The school nurse is familiar with the student and her medical history, which includes asthma, and begins to assist the student with her prescribed medications as she has done multiple times in the past for the student.

9:10 a.m. – Two more students present to the school nurse with skin irritation and difficulty breathing. The school nurse is not familiar with these two students and has no past medical history on file indicating breathing problems or any other chronic medical conditions.

9:15 a.m. – Three more students are met by the school principal as they are attempting to go to the school nurse's office for assistance. All three students are reporting the same symptoms as the other students.

1. How do you obtain situational awareness of what might be causing these health problems for the students?
2. Do you call 911?
3. What do you tell the 911 operator/dispatcher?
4. Are staff and students notified at this time?
5. What are they told?
6. What other actions might you take at this time?

Inject Set Two

Chemical Spill/Mixture: Students are asked if they can locate where they began having symptoms. The students all report that they were gathering in a

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hallway outside of a janitorial storage closet near the gymnasium before a physical education class. All students report being hit with a strong odor of bleach prior to the onset of symptoms. Two students stated that they saw a light yellow colored liquid “running” out of the janitorial storage room.

7. What actions do you take at this time?
8. What safety precautions will you take at this time to limit further exposure of staff and students?
9. Who meets with the fire department personnel upon arrival? What information do you think they will need?

Inject Set Three

The fire department Hazmat Team informs you that you are dealing with Chloramine Gas. The gas is produced when Bleach and Ammonia are mixed together, even small amounts. The mixture forms a pungent odor similar to a bleach smell and a clear to yellow liquid. It is both an irritant and toxic. Contact with any amount of product could serve as a trigger for anyone with chronic respiratory issues and create respiratory issues (with or without chronic issues) for anyone who comes into contact with the gas.

Spill Information: Unknown circumstances created a spill of two chemicals in the janitorial storage area that flowed out of the room. Custodial employees have been instructed to seal all chemical containers when they aren't in use, but do not always “have time” to do so. Three gallons of Bleach and one gallon of Ammonia were spilled and mixed together.

10. Do you evacuate the building at this time? Who makes this decision? Who might be consulted?
11. How do you provide for the needs of students impacted by the chemical spill? What actions do you take at this time?
12. After the incident, what precautions do you put into place to assure this situation is avoided in the future?
13. If you evacuate, would students be taken off-site? Would you activate your reunification plan?
14. How will parents be notified of this event?