



In-Station Training

TM 25-43 Multiple Seizures



Author

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Purpose

Medical incidents with multiple symptomatic patients can result from a wide range of causes including carbon monoxide exposure or exposure to other hazardous substances (typically gases or vapors) with causes that may be accidental or intentional.

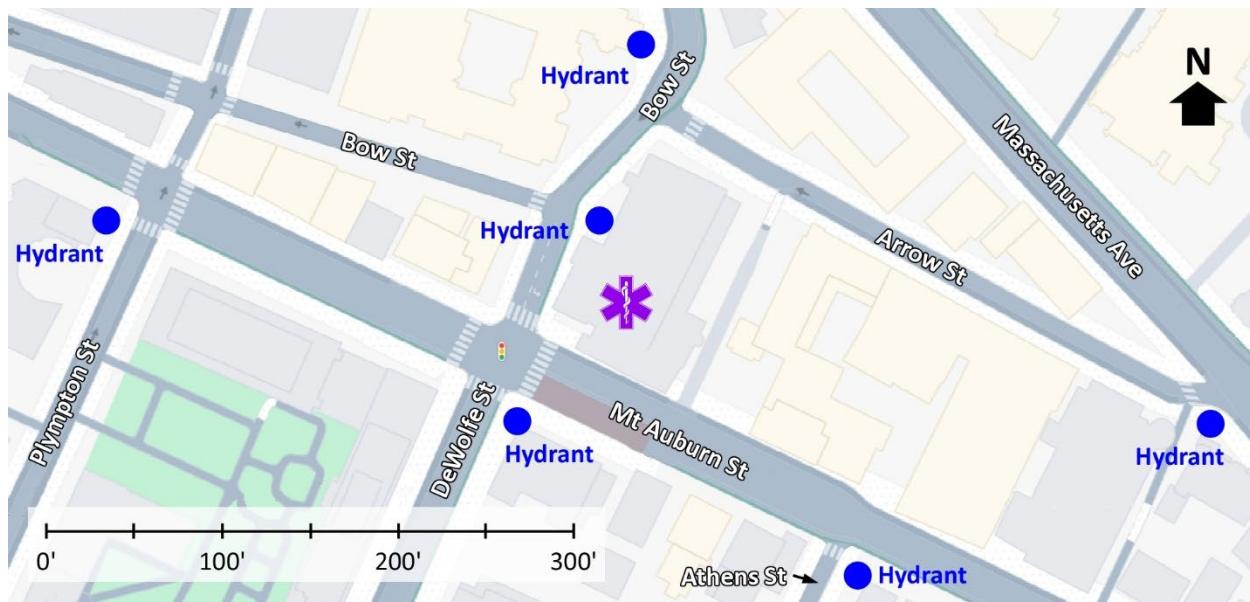
Learning Outcomes

Firefighters and officers perform an effective size-up, select an appropriate strategy, and implement tactics based on the strategic decision-making model.

Conducting the Drill

This incident involved a medical response to St. Paul's Parish, 29 Mt Auburn Street in Cambridge, Massachusetts on Tuesday, July 22, 2025, at 19:40 (Clement & Kazakiewich, 2025; McKenna, 2025; Farrar, 2025; & Broadcastify, 2025a, 2025b, & 2025c). Review the map and photos (Figures 1-8) to gain an understanding of the building and area involved.

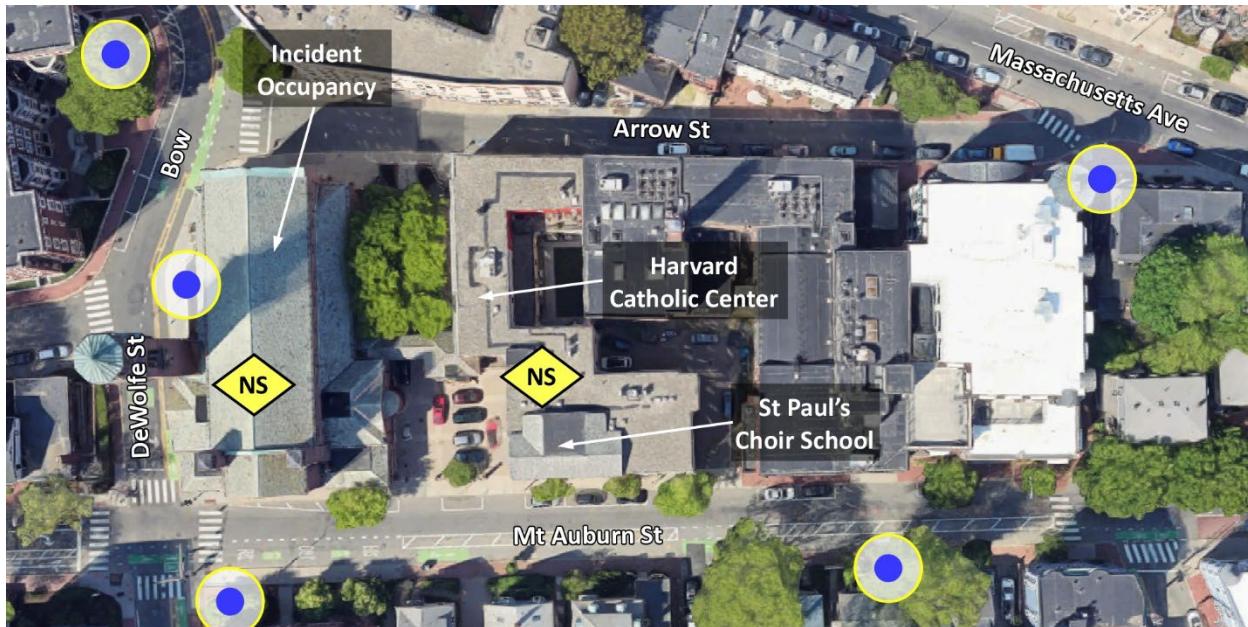
Figure 1. Map of the Incident Area



Note: Adapted from Google. (2025a). [Map, 29 Mt Auburn Street, Cambridge, MA]. Map data ©2025 Google. <https://bit.ly/3L6vqot>.

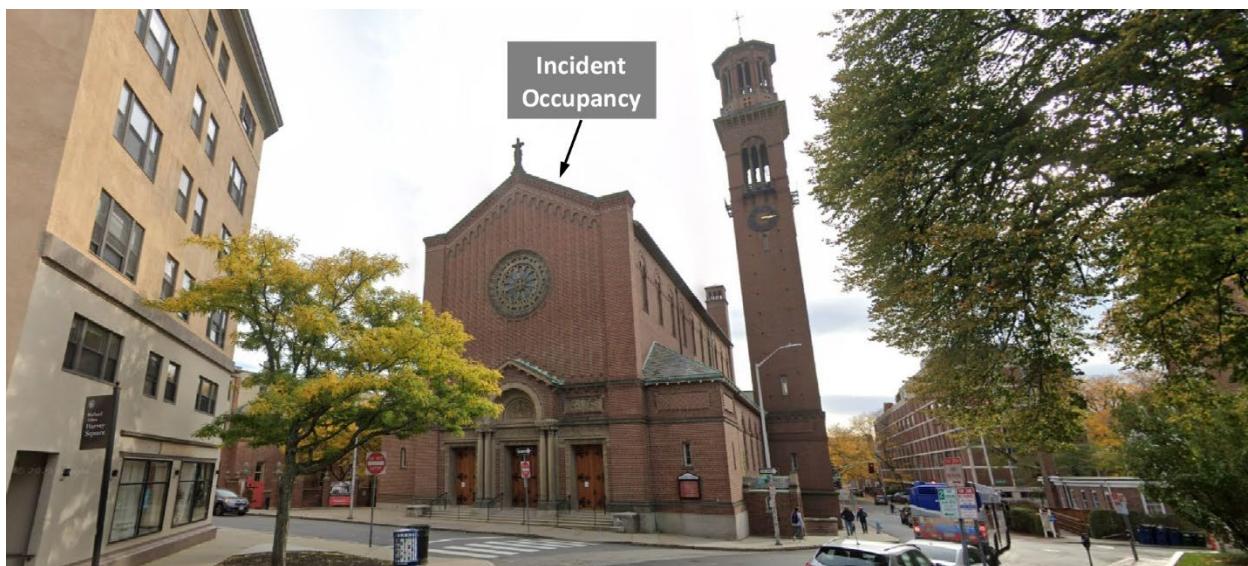
The closest hydrants are on DeWolfe Street and additional hydrants are on Mount Auburn Street and Arrow Street as illustrated in Figures 1 and 2. While St Paul's is addressed off Mount Auburn Street the main entrance is on Arrow Street (designated as Side Alpha in this 10-Minute Training).

Figure 2. Aerial/Preplan View



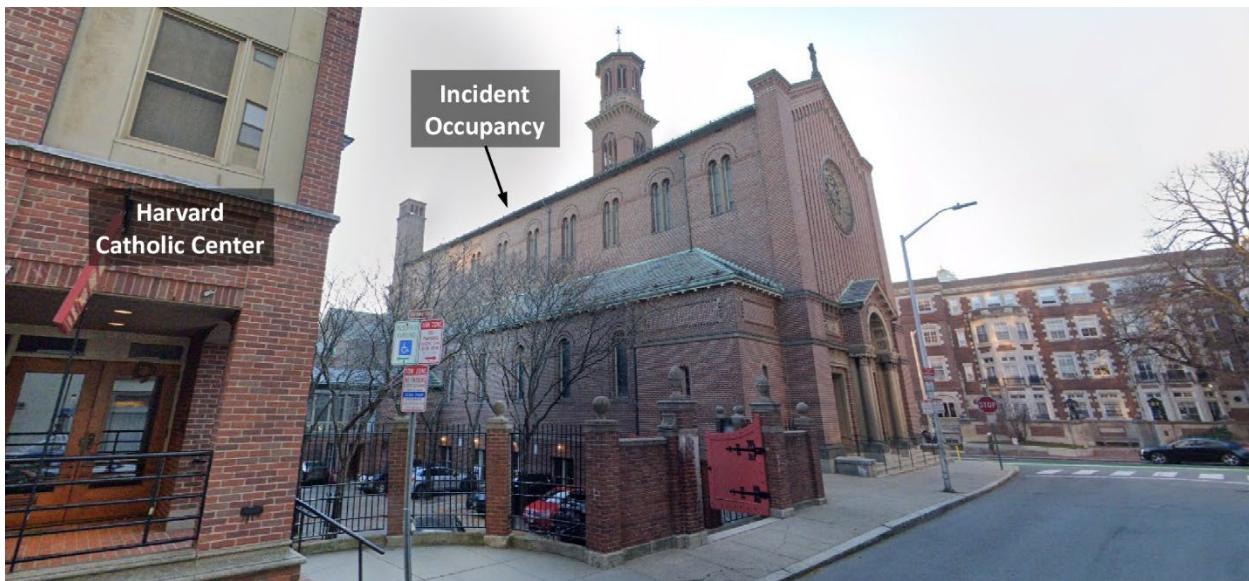
Note: Adapted from Google. (2025b). [Aerial view 29 Mt Auburn Street, Cambridge, MA]. Imagery © Google, Imagery © Airbus Maxar Technologies, Map Data © 2025. <https://bit.ly/3W1lvBW>.

Figure 3. Alpha/Delta Corner



Note: Adapted from Google. (2020a). [Street view 29 Mt Auburn Street, Cambridge, MA]. ©2025 Google. <https://bit.ly/3WDIAMc>.

Figure 4. Alpha/Bravo Corner



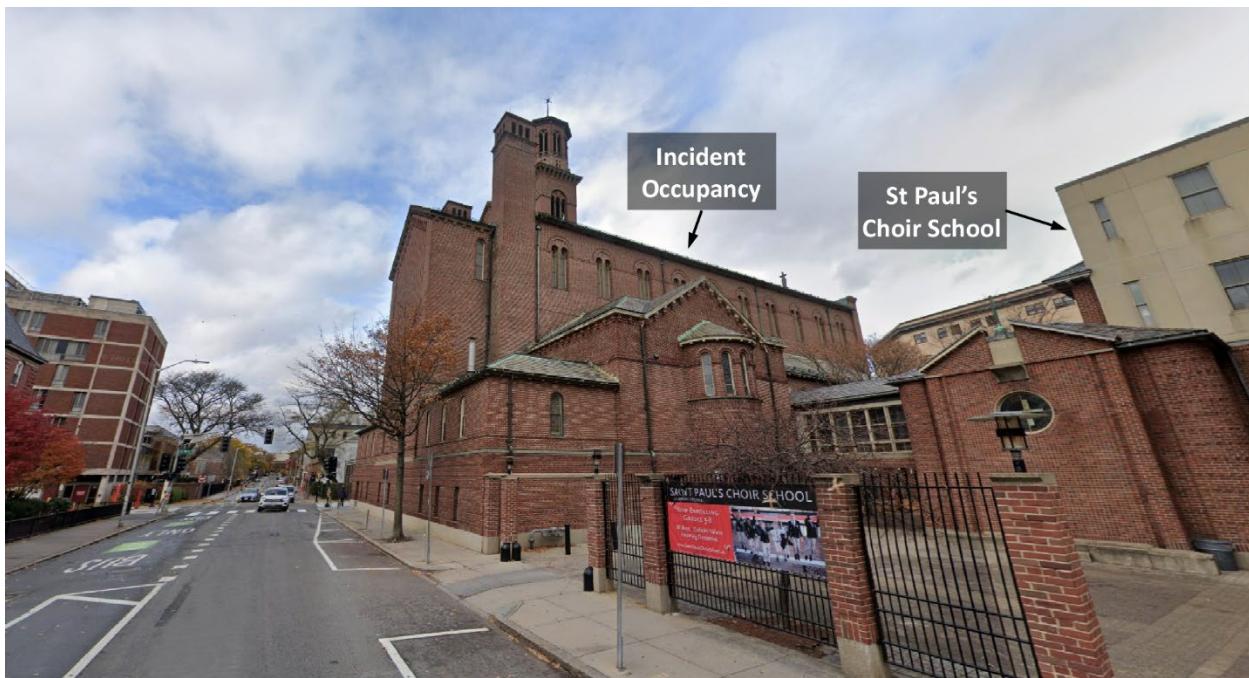
Note: Adapted from Google. (2020b). [Street view 29 Mt Auburn Street, Cambridge, MA]. ©2025 Google <https://bit.ly/3WFxRRr>.

Figure 5. Side Charlie



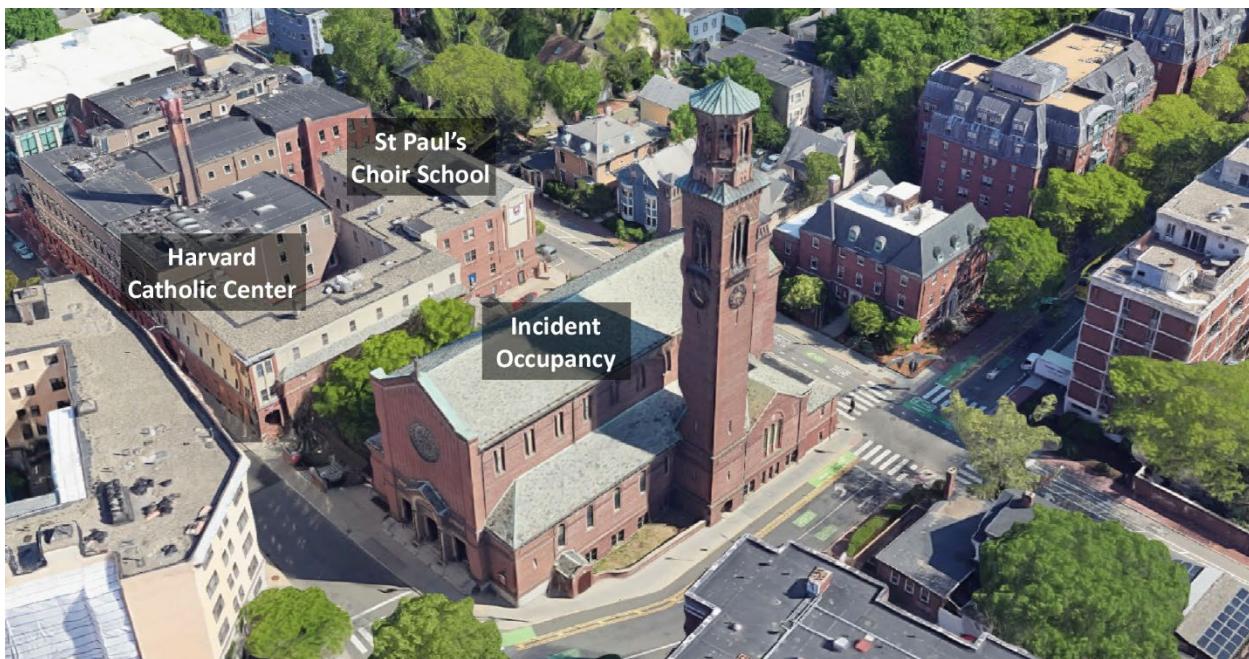
Note: Adapted from Google. (2020c). [Street view 29 Mt Auburn Street, Cambridge, MA]. ©2025 Google <https://bit.ly/4nYduLi>.

Figure 6. Bravo/Charlie Corner



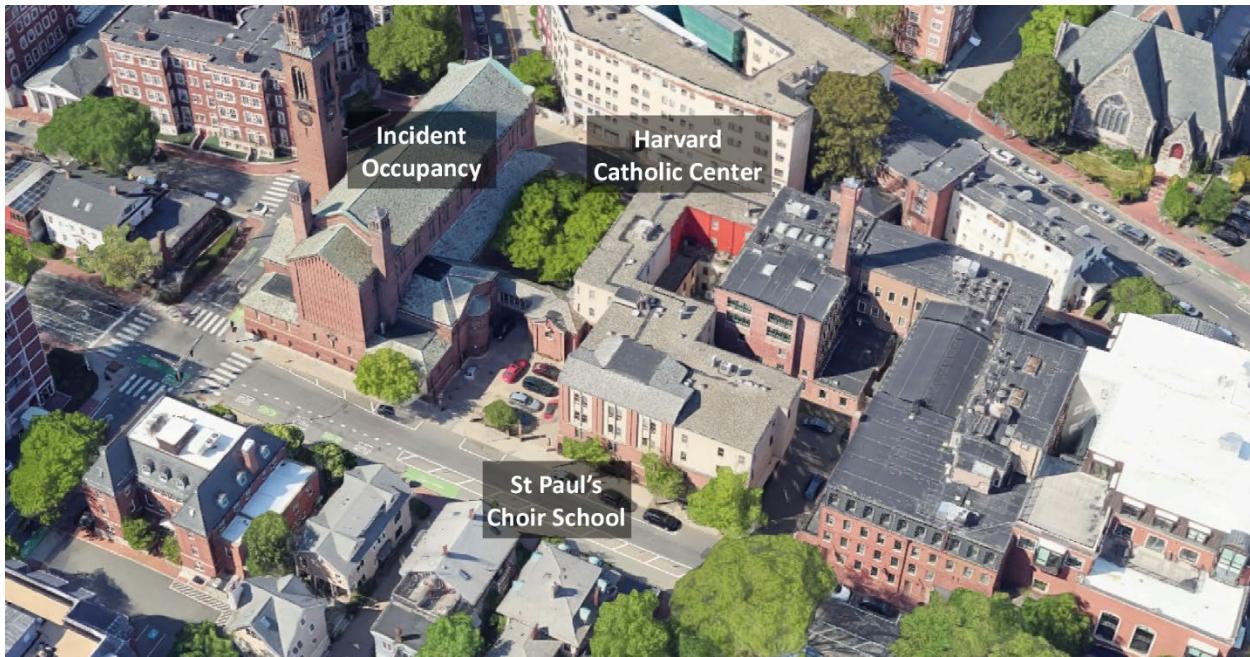
Note: Adapted from Google. (2020d). [Street view 29 Mt Auburn Street, Cambridge, MA]. Map data ©2025 Google <https://bit.ly/4h6phER>.

Figure 7. Alpha/Delta 3D Aerial



Note: Adapted from Google. (2025c). [3d Aerial view 29 Mt Auburn Street, Cambridge, MA]. Imagery © Google, Imagery © Airbus Maxar Technologies, Map Data © 2025. <https://bit.ly/48t4t8s>.

Figure 8. Bravo/Charlie 3D



Note: Adapted from Google. (2025d). [3d Aerial view 29 Mt Auburn Street, Cambridge, MA]. Imagery © Google, Imagery © Airbus Maxar Technologies, Map Data © 2025. <https://bit.ly/3KLXTA3>.

The temperature is currently 67° F with wind from the east southeast at 7 mph (Weather Underground, 2025). **You are the company officer of an engine company.** It is Tuesday, July 22nd, and you are dispatched along with a medic unit to St. Paul's Parish, 29 Mt Auburn Street at 19:40 for a pediatric seizure. The engine has four-person staffing¹.



Time starts now! Answer the first eight questions within the next 10 minutes. Decide and put your answers in the form of communication you would have with your crew, other companies, and the first arriving command officer. Save discussion for after answering the first eight questions.

1. What critical factors would you consider when dispatched and during response? What conversations would you have with your crew during response?

¹ If your deployment is different, use your own resource assignment and staffing with the resources typical for your agency.

You hear an advanced life support ambulance go en route. While responding dispatch advises that you are responding for a 14 year old female who is seizing.

You will approach the incident location from the southeast on Arrow Street and will arrive first. The medic unit will arrive shortly after you.

Examine Figure 9 illustrating simulated conditions on arrival.

Figure 9. Conditions on Arrival



Note: ChatGPT 5 generated image based on Google. (2020b). [Street view 29 Mt Auburn Street, Cambridge, MA]. ©2025 Google. <https://bit.ly/3WFxRRr>.

2. State your initial radio report (IRR) exactly as you would transmit it to dispatch.

3. What specific actions would you take (as the company officer) immediately upon arrival and exiting the apparatus and what task orders would you give your crew?

On exiting the apparatus, you determine that the patient on the sidewalk is no longer seizing. A bystander reports that the children were part of a French youth choir and that there are several other children seizing inside entrance to the church.

4. Would you change the action you are taking or modify the assignments given to your crew? If so, what task orders would you provide?
5. State your follow up report exactly as you would transmit it to dispatch.
6. Medic 1 arrives at the intersection of DeWolfe Street and Arrow Street. State the tactical assignment you would give them exactly as you would transmit it.

You determine that there is a large crowd inside the church and that the number of pediatric pre-teen to early teenage patients exhibiting seizure like symptoms increased to a total of five (all of which except for the single patient on the sidewalk are inside the church). All the patients reported smelling an unusual odor during their performance but were unable to describe exactly what it smelled like. The remaining questions are based on upgrading the resource assignment to include an additional engine company, ladder company, two additional medic units, and a command officer.

7. Ladder 1 arrives and reports that they are Level 1 on Massachusetts Avenue and Arrow Street. State the tactical assignment you would give them exactly as you would transmit it.
8. Engine 2 arrives and reports that they are Level 1 on Mount Auburn Street at DeWolfe Street. State the tactical assignment you would give them exactly as you would transmit it.
9. Medic 2 arrives and reports that they are Level 1 at Massachusetts Avenue and Bow Street. State the tactical assignment you would give them exactly as you would transmit it.

10. Based on anticipated effectiveness of your tactical operations, state your conditions, actions, and needs (CAN) report that you would provide to the first arriving command officer as part of command transfer to IC #2.



Reflect on your strategic decision-making and responses to questions one through ten before answering the next six questions. Think about what cues, patterns, or anomalies (differences from conditions that you would anticipate) inform your answers.

11. What was the problem?

12. What was getting in the way of achieving your tactical priorities?

13. Was there anything in this incident that could have hurt or killed you (right now)?

14. Was it reasonable to believe that the Main Fire Occupancy was occupied?

15. Was there searchable space?

16. If you believed it was reasonable that the building was occupied and there was searchable space, what could you do about it?

In the actual incident, the number of patients increased over the course of the incident to eight patients ranging in age from 11 to 13. All patients were transported to area hospitals. IC #1 requested an increased resource determination including three additional medic units, an engine, truck, heavy rescue, and chief. IC #2 requested a hazardous materials team response.

17. How did you manage apparatus positioning to facilitate access and egress of medic units transporting patients to the hospital?

18. All occupants of the church were evacuated from the church. Was this consistent with your incident action plan? If you did, how did you accomplish this task and manage the evacuees?

19. Companies operating at this incident performed atmospheric monitoring which was inconclusive in identifying any specific airborne contaminant. Did your incident action plan include use of self-contained breathing apparatus inside the church and atmospheric monitoring? Why or why not?

Additional Learning: If you carry atmospheric monitoring equipment on your apparatus, take a few minutes to review its basic functions and operations with the members of your crew. In many cases, engine and ladder companies carry “four gas monitors” which measure the concentration of oxygen, the percentage of the lower explosive limit (LEL), and concentration of carbon monoxide and hydrogen sulfide. You may also have a “six gas monitor” which adds two additional sensors, often hydrogen cyanide and a photoionization detection (PID) sensor for organic vapors. It is essential to understand and maintain competence in their use.

Get out and do a tactical walk around at a large assembly occupancy such as a church and discuss how you would approach an odor investigation and subsequent ventilation of the occupancy.

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