Issues in Emergency Services: Big Questions to Ask the Chief

by Bruce Moeller

We all want effective and efficient services. Yet, depending on your pedigree in public management, you may not be sure of the current big questions in fire and emergency medical services (EMS). This article provides a checklist of significant topics in fire and EMS delivery that managers should be discussing with their fire and EMS chiefs.

Regardless of whether fire and EMS services are under that manager's authority, these issues speak to the ability of your community's emergency services to provide its residents with what they need. Although the list is not comprehensive, these questions focus on that issue of most concern to a local government manager: How well is my community protected?

First, let's put these emergency services in context. Of the 20,000-plus fire agencies identified in the databases of the U.S. Department of Homeland Security and U.S. Fire Administration, almost 50 percent are fully volunteer organizations with only a single station. These volunteer departments serve mostly rural areas of the nation and proportionally smaller populations.

Fully career or combination agencies protect more than 65 percent of the nation's population, and the majority of these also provide some level of EMS—either as a first responder to deliver immediate life-saving care or as both the provider of emergency medical care and transport to the hospital. The exact structure of emergency service delivery in your community is not important to this discussion. The key issue is how well these services meet the community's typical and potential needs.

QUESTION NO. 1: DO WE PROVIDE A REASONABLE RESPONSE TIME AND HOW ACCURATELY IS IT REPORTED?

This seemingly simple question is often the most difficult. The first problem is to define what is meant by response time. The second problem is the unrealistic expectation of rapid response that many communities have developed. Let's address each in turn.

Most recommendations for emergency response call for the calculation of both average and fractile time (percentage compliance with a target). The real problem is with the definition of response time. The National Fire Protection Association (NFPA) Standard 1710 calls for a response time of four minutes or less, 90 percent of the time. That term "response time," however, captures only the time from when the vehicle starts moving until it stops moving—often referred to as travel time.

Other recommendations for paramedic response time made by the U.S. Department of Health are nine minutes or less in 90 percent of calls from the time of dispatch, while the U.S. Department of Transportation has endorsed a more stringent standard of eight minutes or less, 90 percent of the time from receipt of the 9-1-1 call. Each of these definitions is from nationally recognized standards and is representative of the complexity involved when trying to compare apples-to-apples in a response time debate.

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If the second problem is unrealistic expectations, what is reality? Figure 1 shows data from a review of 18 large agencies that provide both fire and EMS services. This information encompasses a full year of emergency incidents and represents almost 750,000 responses. The results are typical. Most important is to understand how your fire-EMS chief is collecting and reporting response time.

Is the chief using all the components of response time as outlined in Figure 1, or only a few? One study of fire and EMS providers showed that the definition of response time used usually did not include all the components outlined in Figure 1, thereby providing an impression of response time much more favorable than the public would normally define it. Citizens needing help perceive response time from the moment they call 9-1-1 until somebody is at their side. By that citizen definition, the average response time is just over eight minutes, and to hit the mark 90 percent of the time would require the bar to be set at more than 15 minutes. If this surprises you, welcome to the reality of emergency response times.

Bottom line: there are various and conflicting recommendations for emergency response time, but they use different definitions, and they all have problems with a lack of good data to support any particular number. It is generally agreed that faster is better, but how fast remains elusive. Understand what response

Figure 1. Response Time Components.

Response time component begins	Response time component ends	Average[a]	Fractile[b]
9-1-1 rings in primary PSAP	Call transferred to secondary PSAP	0:17	0:20
Call received in secondary PSAP	Call entered into CAD and sent to dispatcher	0:46	1:40
Call received by dispatcher	Emergency crews notified	0:29	1:27
Emergency crews notified	Vehicle begins moving to emergency location	1:14	2:03
Vehicle begins moving to emergency location	Vehicle arrives at emergency location	3:33	6:05
Vehicle arrives at emergency location	Emergency crews at patient bedside	1:53	3:42
	Total time	**8:12**	**15:17**

[a]Time measured in minutes:seconds.

[b]Fractile times calculated for 90 percent compliance.

Notes: Data are based on approximately 750,000 responses from 18 large fire-EMS providers.

CAD = Computer-aided dispatch system.

Primary PSAP = Public safety answering point where call is first answered (usually law enforcement dispatch center).

Secondary PSAP = Public safety answering point where 9-1-1 call is transferred to for dispatch of emergency responder (usually fire-EMS dispatch center, if separate).

time means in your community and work on each component to make it better.

QUESTION NO. 2: ARE WE PREPARED FOR A LARGE-SCALE DISASTER?

What if the "big one" strikes your community? Can your emergency services be expected to handle the initial response? If your fire-EMS chief claims that the single agency can handle anything that happens, consider this a red flag. No one agency can handle all major events alone.

History has shown that even the largest cities, including New Orleans and New York, have required outside resources to handle their immediate needs after a disaster. History has also shown several key factors are important for successfully managing the initial stages of a disaster: a large number of first responders, communications, and use of an incident command system.

If your community is in an urban or suburban environment, the ability to take advantage of mutual-aid or automatic-aid agreements provides significant protection at minimal or no cost. This protection comes in the form of additional personnel and resources to deal with the initial stages of a disaster.

But let's first define our terms. Mutual aid refers to assistance from surrounding communities when your community's resources are overwhelmed. This often occurs after agencies arrive on the scene and assess the situation. For the largest disasters, many states are currently working with national groups to develop robust mutual-aid systems modeled after successful programs in Florida and Illinois. These programs have recently provided much needed assistance in the aftermath of recent hurricanes.

Automatic aid is more rapid. If a report of a building fire comes in, for example, automatic aid means the nearby agency would be dispatched at the same time as your community's resources. The advantage is more resources, on scene, more quickly.

Some communities resist automatic-aid agreements because of concerns that one party or the other will be subsidizing their partner. This can be addressed by having the agreement specify that responses provided by each party will be within a certain percentage or number from the other. Should things get out of balance, the geographic area or type of calls where automatic aid is used can be adjusted to make the relationship more equitable.

One of the major factors contributing to failure in a disaster is communications. If emergency responders can't talk to one another, operations will suffer. Where is your emergency operations center (EOC), and who is required to staff it? Are all significant responders represented? If law enforcement, fire, or EMS is provided by an entity separate from your community, is that entity still represented in the EOC?

If not, you have vulnerability. To believe you can simply call between separate EOCs or command centers assumes communications will remain intact, which is a dangerous assumption in many cases. Interoperability among communication systems needs to be addressed, and every participant in your community's emergency response plan should participate in periodic training exercises to assure communications will work.

Is everyone in the EOC and are commanders in the field trained in the National Incident Management System (NIMS)? The federal government requires those leading emergency response to be trained in the basics of emergency response. Have you and your staff undergone the training? Future federal funding may be jeopardized if this requirement is not met. Ask your fire-EMS chief the status of this training as well as throughout all local emergency responder agencies.

Bottom line: mutual aid and automatic aid provide more resources, more quickly. Communication among police, fire, EMS, all other local resources, and even regional and state assistance is critical in a major event. Technology can provide only part of the answer. NIMS training is required for future federal funding and is essential for proper coordination during an emergency.

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QUESTION NO. 3: ARE WE KEEPING OUR EMERGENCY RESPONDERS SAFE?

The loss of an emergency responder is traumatic for any community. Police, fire, and EMS responders are at great risk when serving the public. Safe fireground practices, including the use of incident command systems, recognizing the risks from heart attacks, and good traffic incident management procedures all help protect emergency responders—even when these same personnel may resist such efforts.

Are mandatory polices in place for use of self-contained breathing apparatus by fire personnel, both during fire suppression and afterward during overhaul? Are these enforced? Do fire personnel employ

a progressive rehabilitation policy, including checking their carbon monoxide levels on the fire scene (something now being pushed at the national level)?

Does the fire department use a standardized incident command system, including the use of rapid intervention teams to rescue fire personnel in danger? How about a safety officer to monitor fireground conditions and notify emergency responders of danger before they get into it?

Among fire personnel, heart attacks continue to be the number one cause of death. Are medical standards used when initially hiring emergency personnel? Is there any requirement for recurring medical exams? Are personnel provided immunizations for hepatitis and other infectious diseases? Does the agency provide wellness programs that provide for the safety of emergency responders but also help reduce both insurance premiums and sick leave?

Recent research shows that many fire personnel who die from cardiac arrest had an existing history of cardiovascular problems. What are your policies for emergency personnel who have suffered a prior heart problem?

All emergency responders are vulnerable when handling vehicle accidents that require them to operate on active roadways. Do they have proper procedures—and are they enforced—that provide protection when responding? Are safety vests worn when they work on a roadway? Are safe driving practices defined and followed (full stop before proceeding through a red light and mandatory use of seat belts, for example). Do supervisors check to make sure these practices are being followed? As a manager is driving around the community, are these practices in place?

Bottom line: keeping fire and EMS personnel safe is not just an essential and basic employer responsibility but also a good business practice. Having safety policies that are written but not enforced may make administrators feel good, but it does little to protect those who protect us.

BUDGET DISASTERS, TOO

For many communities, the cost of fire and police protection can easily exceed 50 percent of the general operating budget. Because these costs focus mostly on day-to-day basic operations, it is easy to push aside other issues that occur with relative infrequency.

Dollars for disaster response and new employee health and safety programs are hard to come by in tight fiscal times. Adding new resources to reduce response times comes with an extremely big price tag—another hard-to-do item when preparing the budget. This difficulty may lead to a decision to avoid engaging the fire or EMS chief in such a discussion.

Most local government managers don't have a public safety background, and these questions are not intended to make a manager a fire or EMS chief. Rather, this review provides some talking points as you engage your community's emergency managers. City and county managers have not only a fiscal responsibility but also an operational responsibility to assess whether key services in the community are provided in the best interest of citizens.

By engaging the fire-EMS chief in this discussion, managers can demonstrate their concern with the overall effectiveness of emergency services in the community. **PM**

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