

WHAT EVERY PARAMEDIC SHOULD CONSIDER

INTRODUCTION

The call comes in as a "man down." While en route to the scene, you run through potential scenarios: overdose, diabetic, shooting, or simply another transient catching a nap on a park bench. It could be anything, which is what you love about being a paramedic: You never know what the next call might bring.

Emergency medical calls run the gamut, from life-and-death scenarios to the truly mundane. Which is why paramedics must be flexible and have the ability to problem-solve and improvise as the situation demands. And a major aspect of professional readiness depends on your equipment.

EMS equipment has come a long way. Cardiac monitors have become smaller and lighter; suction units are more portable; and the clunky tackle boxes of yore have been replaced by lightweight, transportable bags. Treatment options have also improved, with more specific guidelines, better medications, and more advanced diagnostics. Today, there is a vast assortment of tools within the paramedic's toolkit, and having those tools available and in hand can have a strong impact on patient outcomes.

But none of us wants to carry every piece of equipment on every call. We only have two hands, and in some situations, it may just be you and your partner responding. And who knows what you might find once you arrive on scene? You had better be ready.

One of the greatest advantages you will have when it comes to professional readiness is a first-in bag that is well planned, well stocked, and well organized. So let's discuss the many considerations that go into provisioning a top-notch first-in bag.



Determining What to Include in Your First-In Bag

You may not give it much thought, but the type of EMS system within which you work will dictate how you respond to emergency calls and influence the equipment you carry with you when you arrive. So let's take a look at how different systems and situations affect the provisioning of your first-in bag.

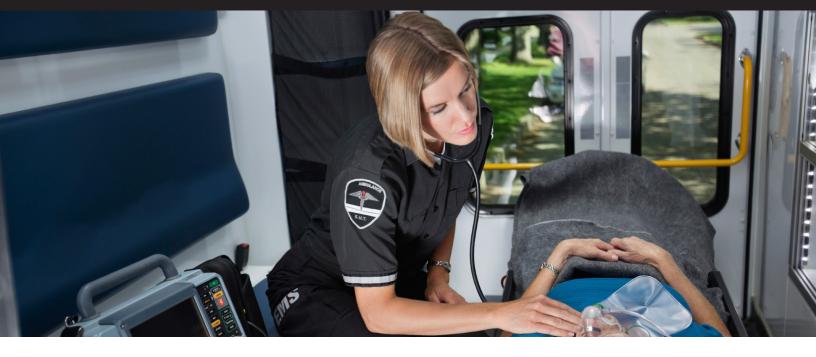
Dual Response (Fire/Ambulance):

EMS systems that utilize a dual response of fire department and ambulance personnel usually have the advantage of manpower. There are typically plenty of hands on scene to tote equipment, and in some cases, there may be duplication of equipment if the responders work for separate agencies. In these situations, the first-in bag may not need to be as inclusive, because extra manpower means the ability to carry more specialized bags (airway, ALS, trauma). But not all systems have this advantage.

Urban vs. Rural:

Personnel who work within large metropolitan areas are usually blessed with plenty of responders on scene. But working in a rural setting can mean your backup is miles out or non-existent. The equipment you have on hand is critical. Rural settings can also include calls in which access is difficult or even dangerous. It's hardly practical to lug equipment up a steep, rugged trail, so the first-in bag you carry had better be adequately provisioned.

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Level of Care:

Depending on your EMS system, the personnel responding with you may not be trained ALS responders. Volunteer systems might only include EMT personnel, which means that if you find yourself on scene in the throes of patient care, your backup may arrive empty-handed or with only BLS equipment. Sure, you can send them to retrieve equipment from your unit, but in some situations, every second counts, so your first-in bag had better be equipped to jump-start any type of treatment plan, from trauma to cardiac arrest.

Special Populations:

Most response areas are characterized by "typical" types of emergencies. Perhaps you cover a large number of nursing homes, where many of your patients will need IV access. An IV start kit in your first-in bag should come in handy. Perhaps your territory is riddled with crime and violence, where shootings and stabbings are the norm and traumatic injuries are common. Extra trauma dressings might be in order. Or perhaps you cover industrial farms where chemicals and pesticides are widespread. A bit of extra protection for you and your patient may be a smart addition to your first-in bag. It is wise to consider hazards specific to your territory and to plan accordingly.

Regulatory Consideration

What you include in your bag will depend on several factors related to your department and EMS system. The contents of your first-in bag must meet the approval and guidelines set by your department and be in accordance with local medical direction. Here are a few considerations:



Departmental: The equipment your department selects is guided by several factors. In many cases, these decisions are made by departmental administration or task forces that identify new technologies to incorporate into their units. Personnel may learn about new equipment through continuing education, by attending conferences, meeting with vendors, or simply seeing new technology utilized within the hospitals to which they transport patients. Any new equipment must be approved by medical direction (either county or departmental), and the final (and major) factor is usually the budget.



County: Equipment decisions must usually be approved by the county EMS office and medical director. In some cases, county EMS officials may take an active role in introducing new technologies and equipment through vendor visits and continuing education. Be sure to check with your county officials before making changes to your equipment and note that many protocols are now available online, which promotes the sharing of ideas and experience among departments.



State: Each state sets minimum standards for EMS equipment that must be included on all emergency vehicles within that state (ALS and BLS). State EMS officials meet on a regular basis to enact changes to these standards and will then disseminate that information to individual county agencies. The state may also enact special equipment additions, as was the case following the attacks on September 11, 2001, when antidote kits were recommended for the protection of first responders.



Level of Certification/Training: The equipment you carry is based on your level of training and certification and falls under the direction of your local and state EMS guidelines. Treatment protocols vary between agencies, counties, and states and are made in accordance with local medical direction. The equipment you carry should reflect the protocols under which you operate.



What Items to Include in Your Bag

Below is a list of possible items to include in your first-in bag. The list is in no way conclusive and will depend on the many factors discussed earlier. We encourage you to share information with other professionals in your field.

There's no need to reinvent the wheel, so collaborate with personnel from different departments and systems to see what works for them. There are also some great online discussion boards that enable you to see what others are using. The list below was culled primarily from the American College of Surgeons' guidelines for ambulance equipment recommendations (2009).



Patient Assessment Tools

- BP cuff
- Stethoscope
- □ Glucometer
- Penlight
- EMS field guide



Trauma Emergencies

- Assorted Dressings
- ☐ 4"x4" gauze
- ☐ 2"x2" gauze
- ☐ Band-aids (assorted sizes)
- Sterile multitrauma dressings, large and small
- ☐ Gauze rolls (assorted sizes)
- Occlusive dressings
- Triangular bandages with safety pins
- ☐ Sterile burn sheets (2)
- ☐ Adhesive tape (1", 2", 4")
- Arterial tourniquet
- ☐ Sterile saline
- □ Scissors
- Cold packs





Respiratory Emergencies

- ☐ Portable suction unit (small)
- ☐ Bag-valve mask
- Airways (oropharyngeal, assorted sizes)
- Magill forceps
- Laryngoscope



Cardiac Emergencies

- Baby ASA
- Nitroglycerin spray
- IV start kit
- ☐ IV fluid (LR and NS) with tubing
- Blood draw kit
- Syringes

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Pediatric Emergencies

- □ IO setup
- □ Bag-valve mask
- BP cuff

We encourage you to share information with other professionals



Personal Protection/ Infection Control

- ☐ Gloves
- Masks
- Safety glasses
- ☐ Sharps container
- ☐ Sterile gowns (2)
- Hand sanitizer
- Betadine pads
- Alcohol pads
- □ Biohazard bags

Optional Items

Below are a few items that you may consider adding to your bag, depending on your situation.



Medications

- ☐ First-round cardiac arrest drugs
- □ Oral glucose
- Glucagon
- ☐ Chemical antidote autoinjectors



Extra Airway Adjuncts/Tools

Combitube LMA



Immobilization Devices

- Cervical collars
- Cardboard splints
- ☐ Air splints



Specialized Tools/Equipment

- □ Ring cutter
- ☐ Topical hemostatic agent
- ☐ OB kit
- ☐ Infant bag-valve mask
- ☐ Hydrogen peroxide
- ☐ Q-tips
- Tweezers
- ☐ Bite sticks
- □ Rescue blanket
- Hot packs
- Thermometer
- Activated charcoal

Additional Considerations

Size of Bag:

The size of your first-in bag will no doubt limit what you can include in the bag. And choosing an appropriately sized bag will depend on external factors. If personnel are limited, you may want a larger bag that can incorporate more equipment in order to maximize the bag's usefulness.

Weight of Bag:

The bigger the bag, the more it weighs, so keep this in mind when you decide on the equipment to be included. The bag's weight can also influence the type of bag you choose, and thanks to improved technology (lightweight, weather-resistant materials), there is a plethora to choose from. A heavy bag can be carried more easily if it can be worn as a backpack, so keep that in mind when deciding on the style of bag.

Transportability:

If you cover rural, all-terrain areas, not only will the size of the first-in bag be a factor, but you should insure the bag can withstand weather and extreme temperatures as well. A backpack-style bag may better suit your needs if you know you may be hiking to reach your patients.



Equipment Maintenance:

Like any piece of equipment, your first-in bag must be maintained in order to be effective. So make sure your bag is kept up to date. If it contains a portable suction unit, check the batteries daily. If you carry first-line cardiac drugs, be sure they are up to date. Keep your bandages and dressings clean, dry, and ready to use. And always make sure your bag is fully stocked at the start of each shift.

Personal Comfort/Confidence:

A well-supplied bag means you will have the equipment you need, when you need it. And there's no better feeling than coming upon a serious patient and having the resources at hand to initiate appropriate patient care. Having a well-provisioned bag will improve your confidence when it comes to emergency response.

Conclusion

Your first-in bag is your first line of defense in patient care and can play a vital role in treatment. What you include in your bag will depend on the type of system within which you work, the population you serve, and the protocols under which you practice. A bag that is carefully planned and well organized and kept in excellent working order will serve you well, no matter what the next call may be.

With a well-provisioned first-in bag, you'll be more likely prepared for any type of emergency.

