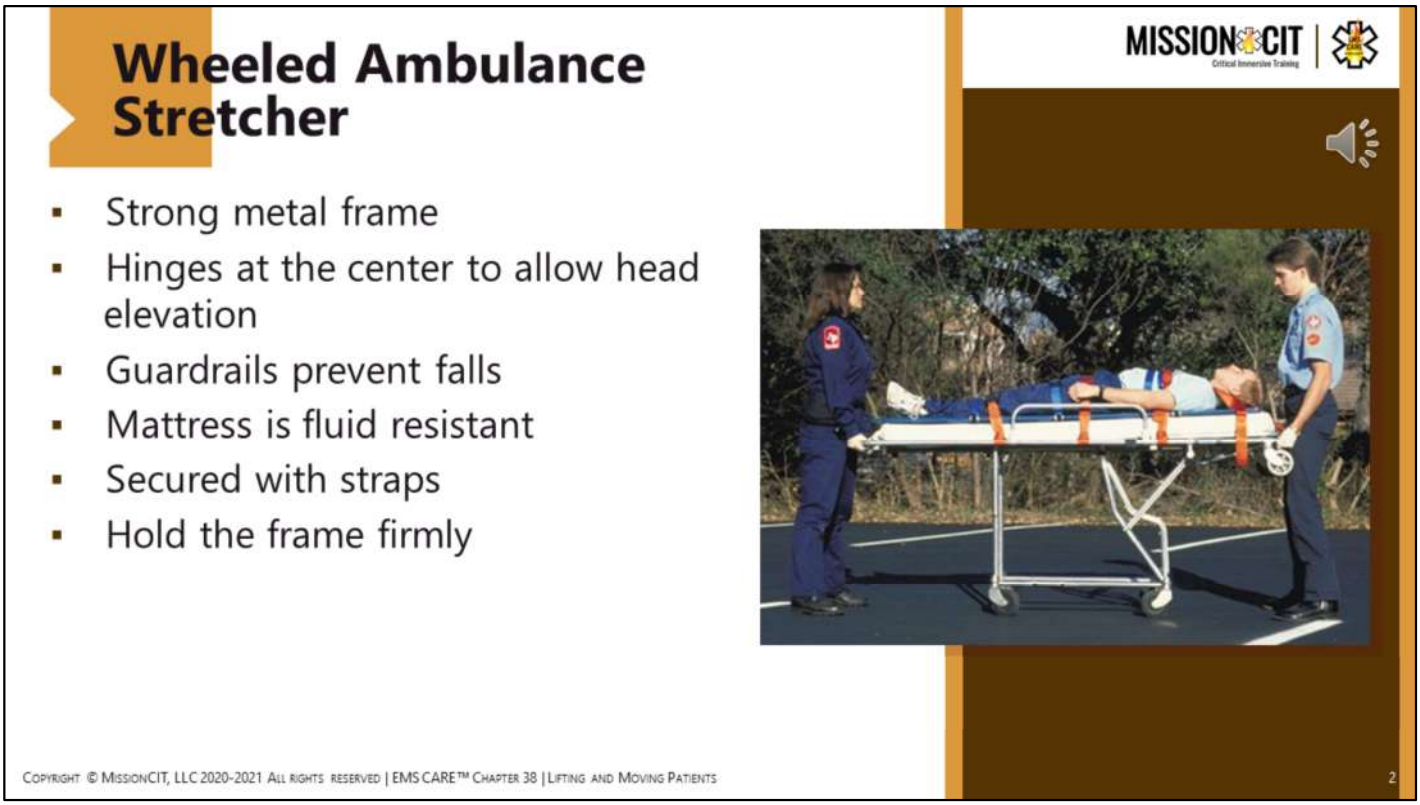


Thank you, Justin!

So far, we have looked at the basic principles of lifting and moving patients and in this lesson, we will look at the different pieces of equipment that are available to make this lifting and moving safely for you and the patient.



The wheeled ambulance stretcher, also known as a stretcher or a gurney, is a device that's most commonly used to lift patients. Some of its features are:

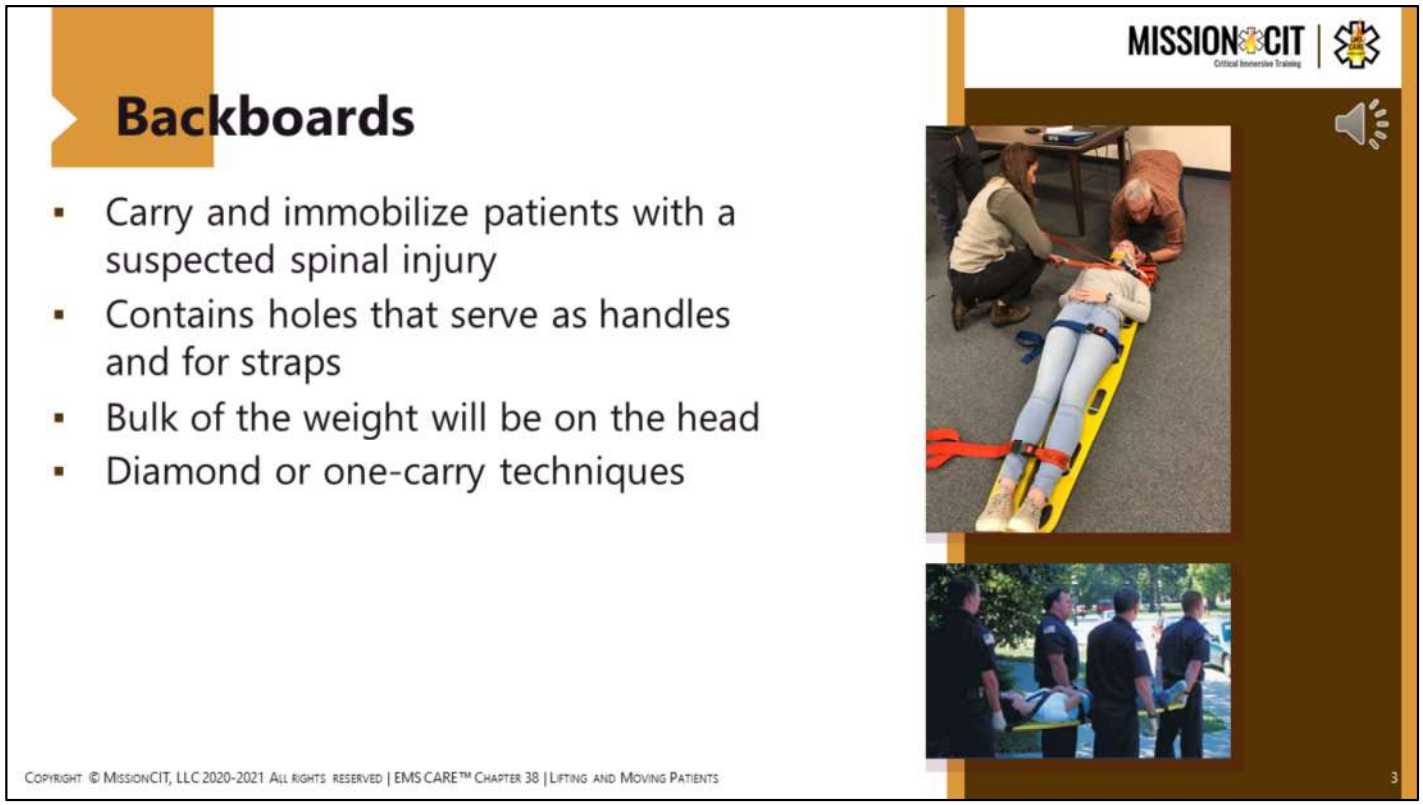
- It has a strong metal frame that can be adjusted to any height
- Comes with hinges at the center to allow the head end to be elevated
- The guardrails present in it prevent the patient from rolling off
- The mattress used must be fluid resistant
- Make sure the patient is secured with straps to prevent falls

Note that this equipment must not be used on stairs.

You can roll the wheelchair though but ensure that it is in the fully elevated position. Also, your partner should control the head end and assist you by pushing with his or her arms. The elbows must be bent.

While moving a patient from a wheeled stretcher to an ambulance or hospital bed, make sure to hold the frame firmly so the patient doesn't tip over.

Some models are self-loading, so you can simply push the stretcher to the ambulance while others have to be lowered and lifted to the height of the ambulance. If you have the later models, make sure to use the clamps in the ambulance to hold the stretcher in place.



Backboards are used to carry and immobilize patients who are suspected to have spinal injury or trauma. It contains many holes that serve as handles to carry and for securing straps.

While carrying a patient on a backboard, know that the bulk of the patient's weight will be on the head. In such situations, use the diamond or one-carry techniques.

Stair Chair

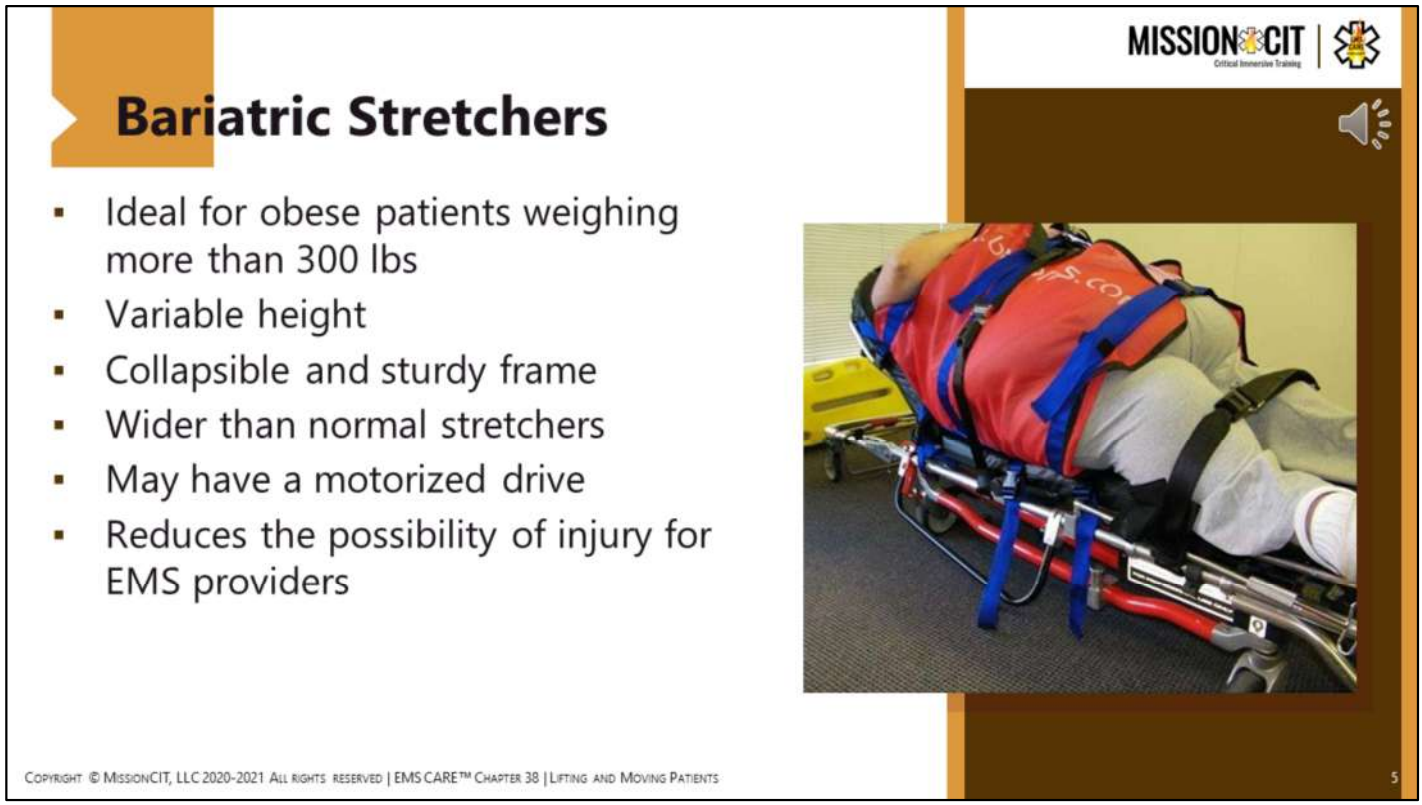
- For moving patients on a staircase
- Lightweight, wheeled, and foldable
- Used only for conscious patients



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Use the stair chair to move a patient on a staircase. As the name suggests, this is a lightweight, wheeled, and foldable chair that can be used on the stairs. Note that this must be used only for a conscious patient.

If the patient is unresponsive or has to be in a supine position, opt for a backboard instead.



Bariatric stretchers are required for obese patients who weigh 300 pounds or more. This has a variable height and yet collapsible and sturdy frame that makes it easy to move a patient from his or her home to the ambulance and eventually, to a hospital bed. They tend to be wider than normal stretchers for additional stability.

They also come with a motorized drive for easy transportation without requiring tons of effort from EMS providers. It can also reduce the possibility of injuries as you don't have to lift or carry patients.

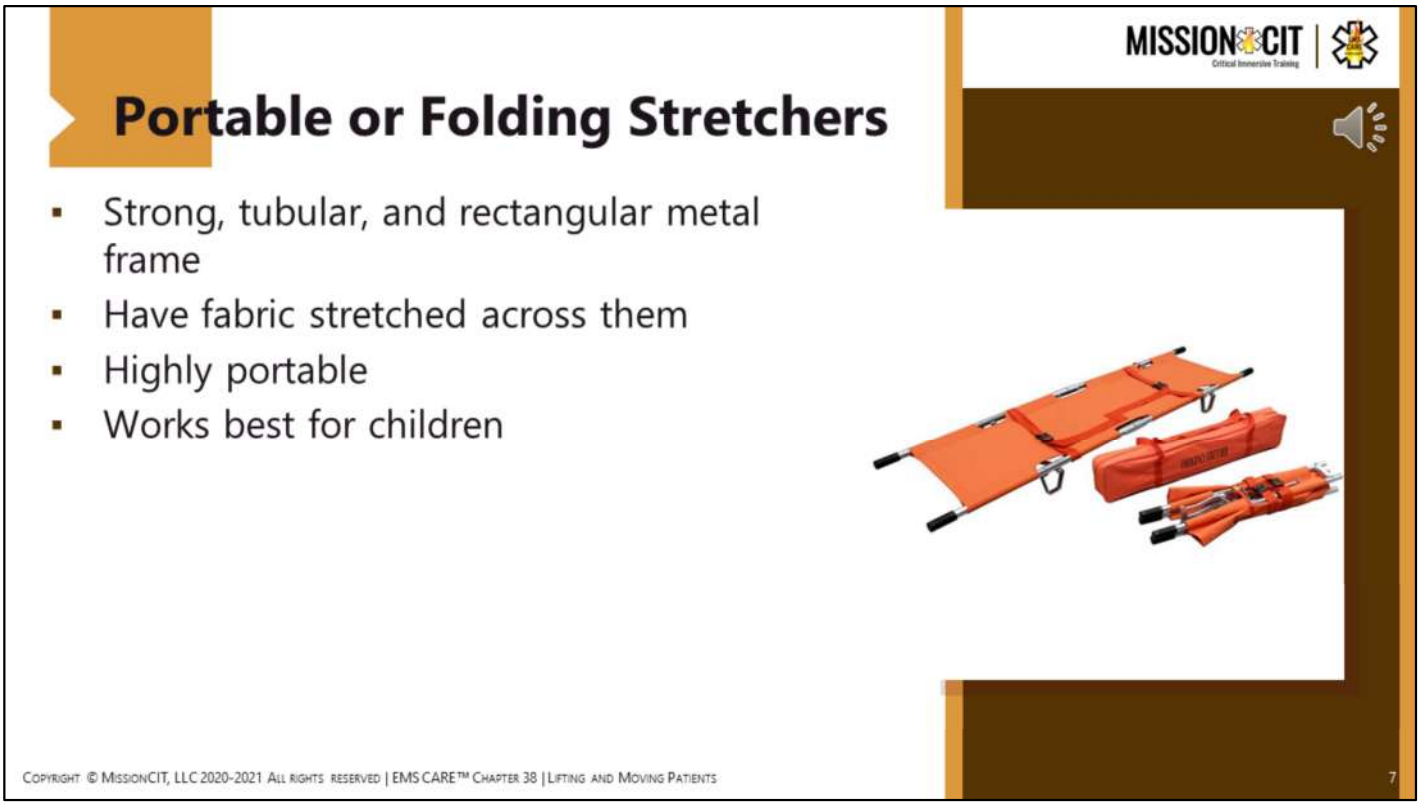
Pneumatic and Electronic-powered Wheeled Stretchers

- Electronically powered
- Have automatic controls to raise or lower the undercarriage
- Can take more weight
- Can be heavy because of the extra controls
- Hazardous in uneven terrains

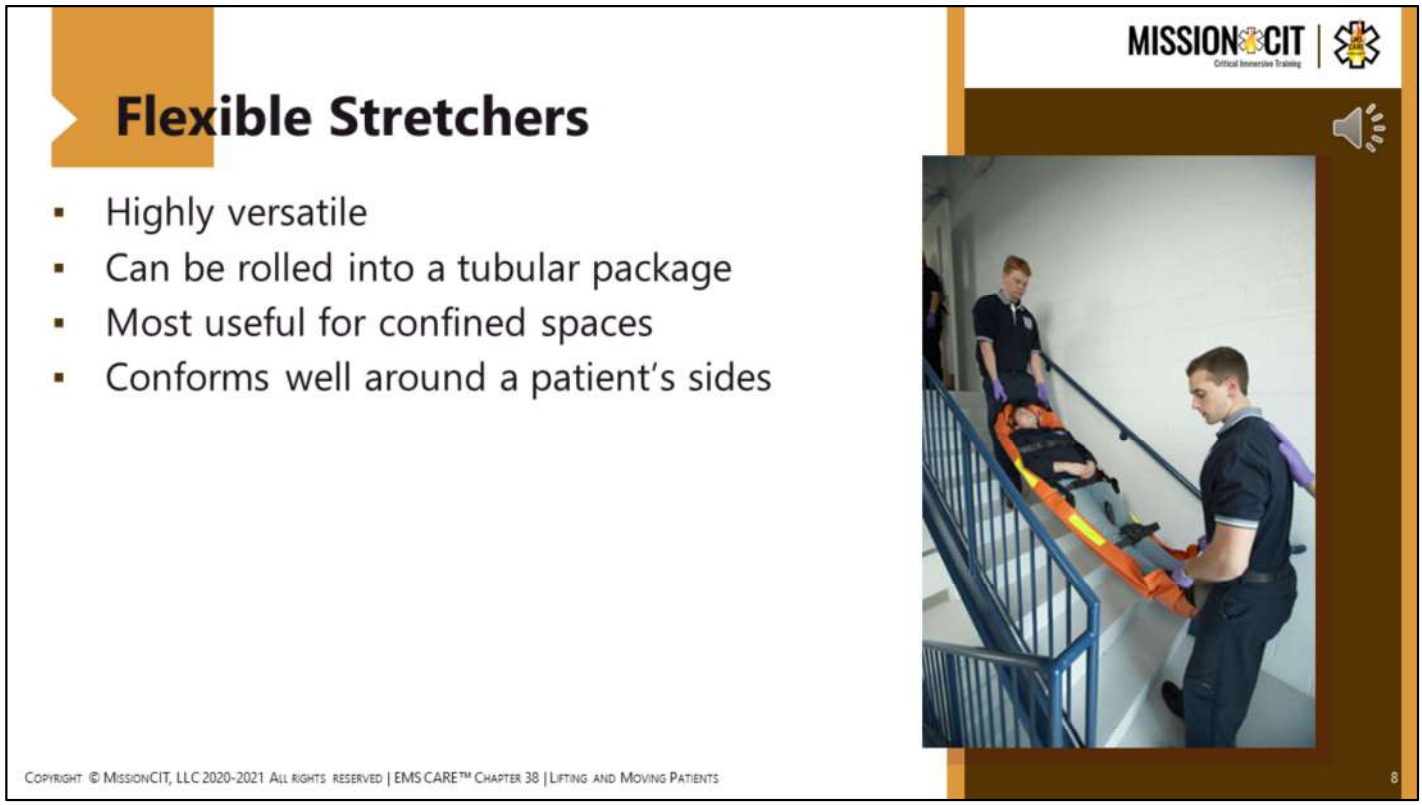


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These stretchers are electronically powered and have automatic controls to raise or lower the undercarriage. It's capable of carrying more weight and the stretcher itself can be heavy because of these electronic controls. But remember, these can be hazardous in uneven terrain, so you must be careful while using them.

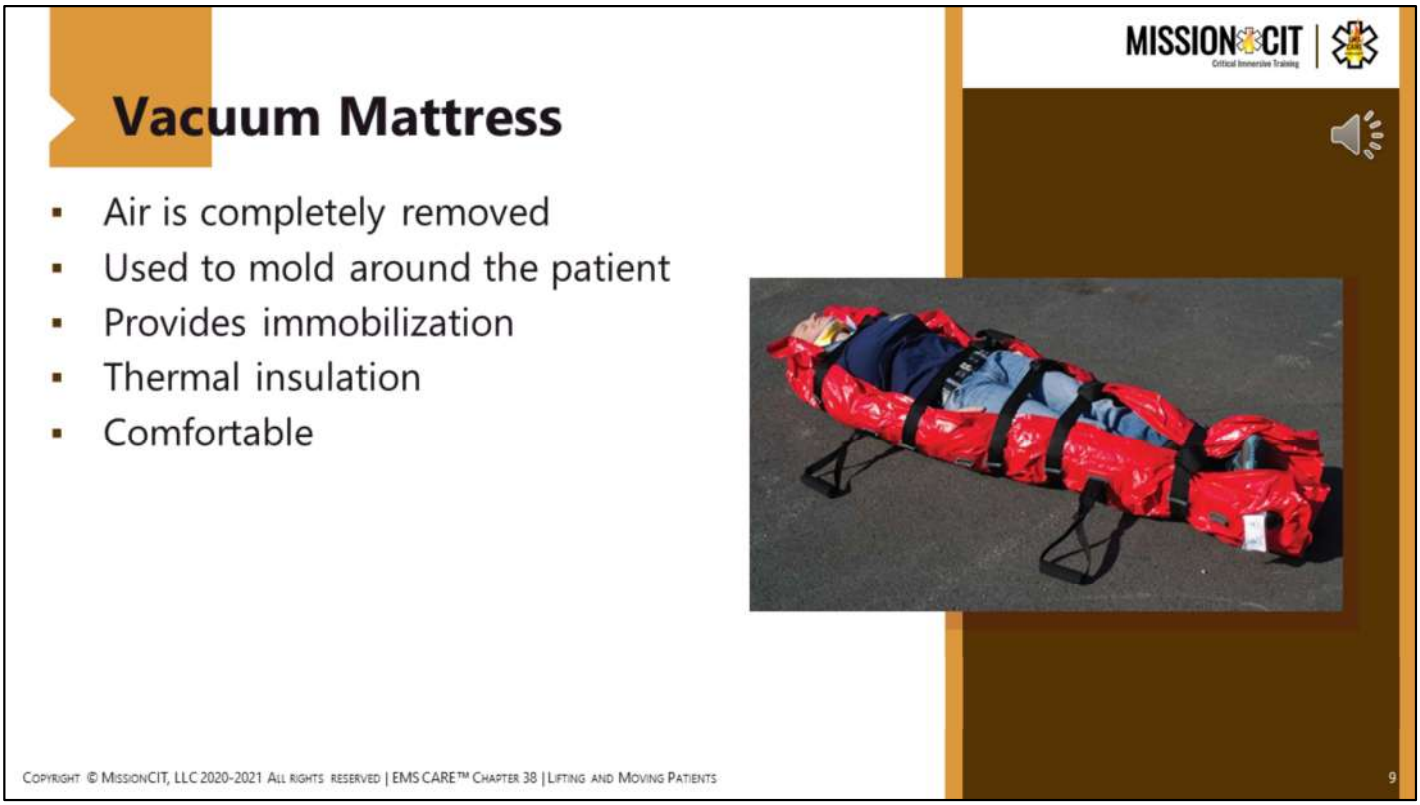


Portable or folding stretchers, as the name suggests, are strong, tubular, and rectangular metal frames with fabric stretched across it. The advantage of these stretchers is that they are easy to carry and highly portable, but the downside is that it can't be used for carrying heavy patients and works best for children.



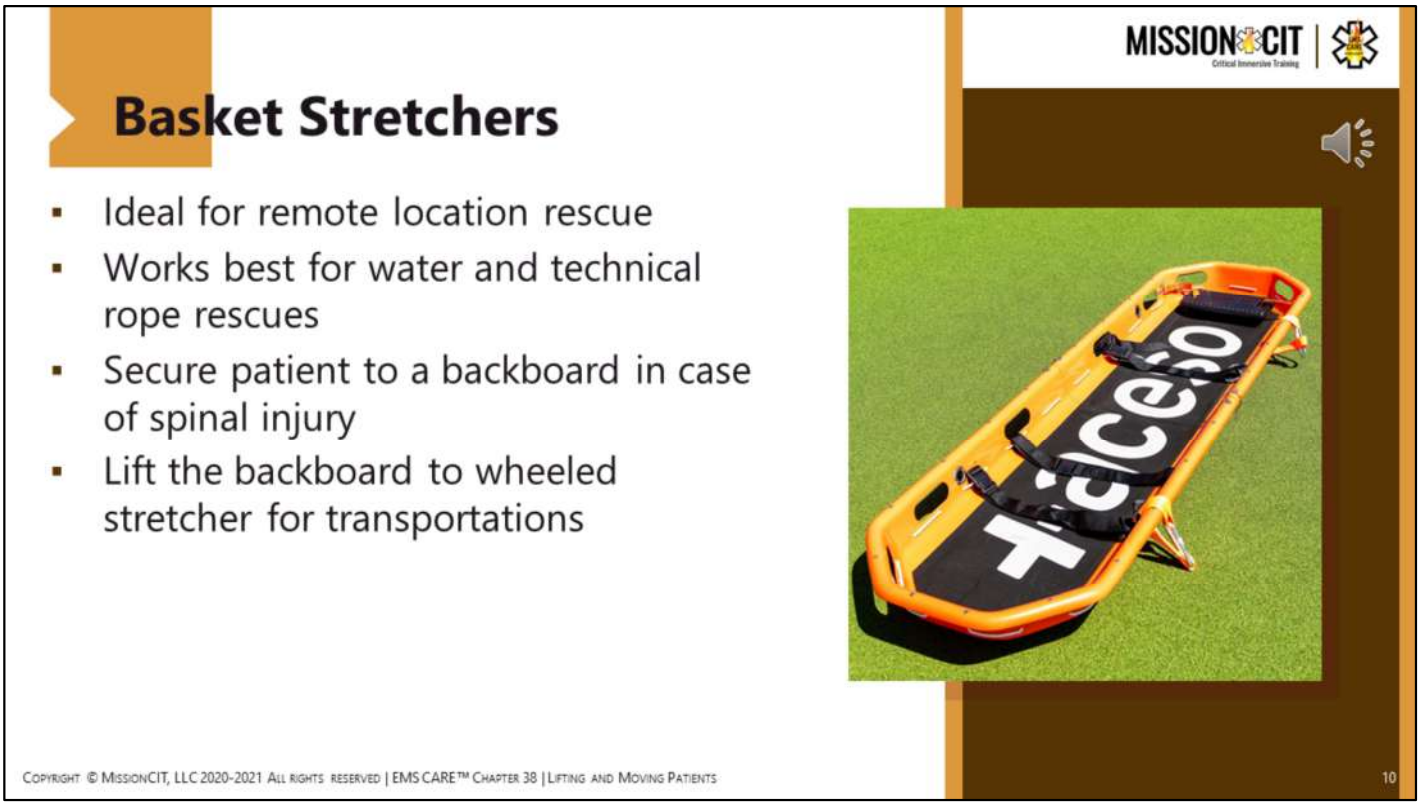
Flexible stretchers are highly versatile and can be used across different environments. You can even roll them into a tubular package for easy transportation.

Such a stretcher is most useful for confined spaces and conforms well around a patient's sides.



This is a good alternative to backboards and can be used for immobilizing geriatric and pediatric patients. As the name suggests, the air is completely removed from this mattress, so it can be used to mold around the patient.

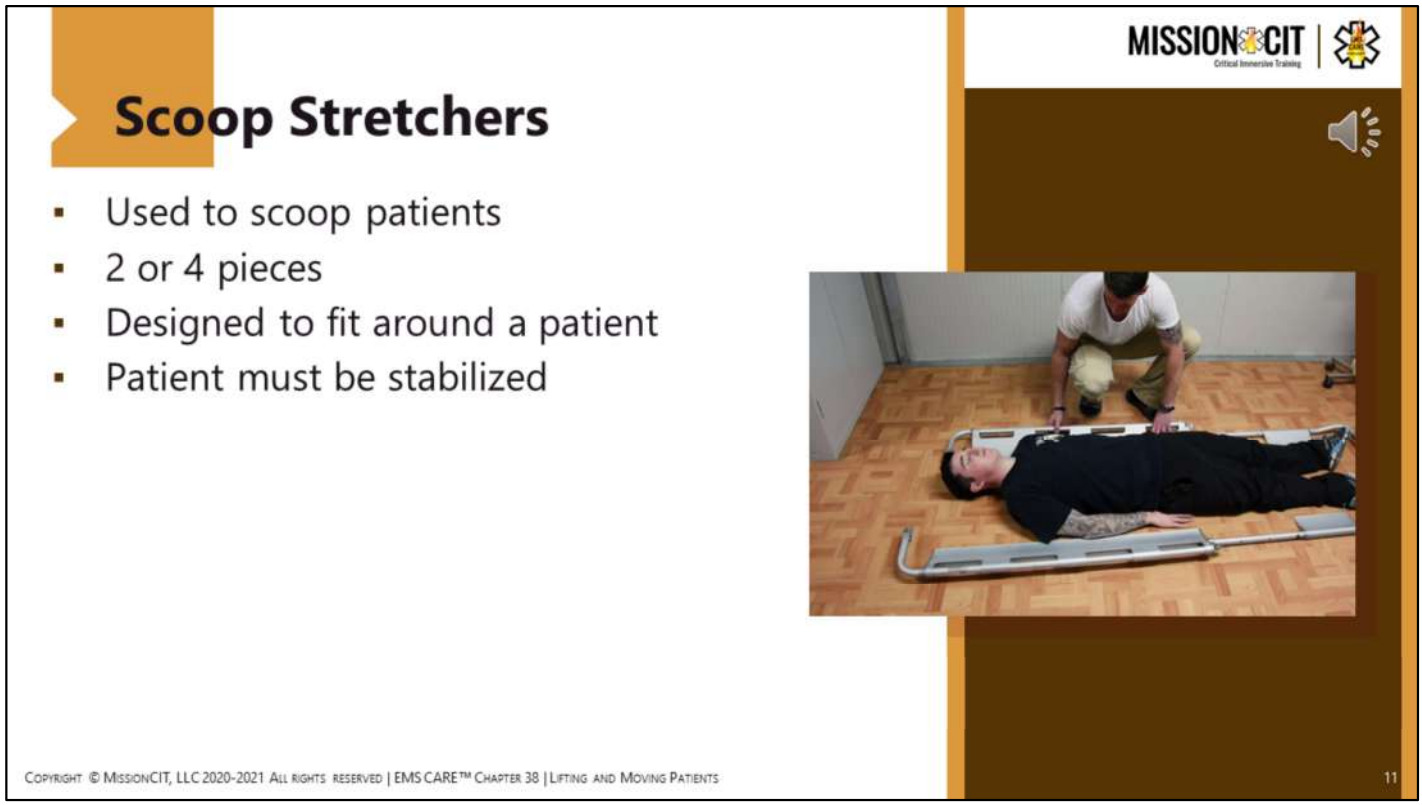
The biggest advantage of these mattresses is that it provides immobilization, comfort, and thermal insulation.



Basket stretchers, also known as stokes litter, are well-suited for remote location rescues. It works best for water and technical rope rescues.

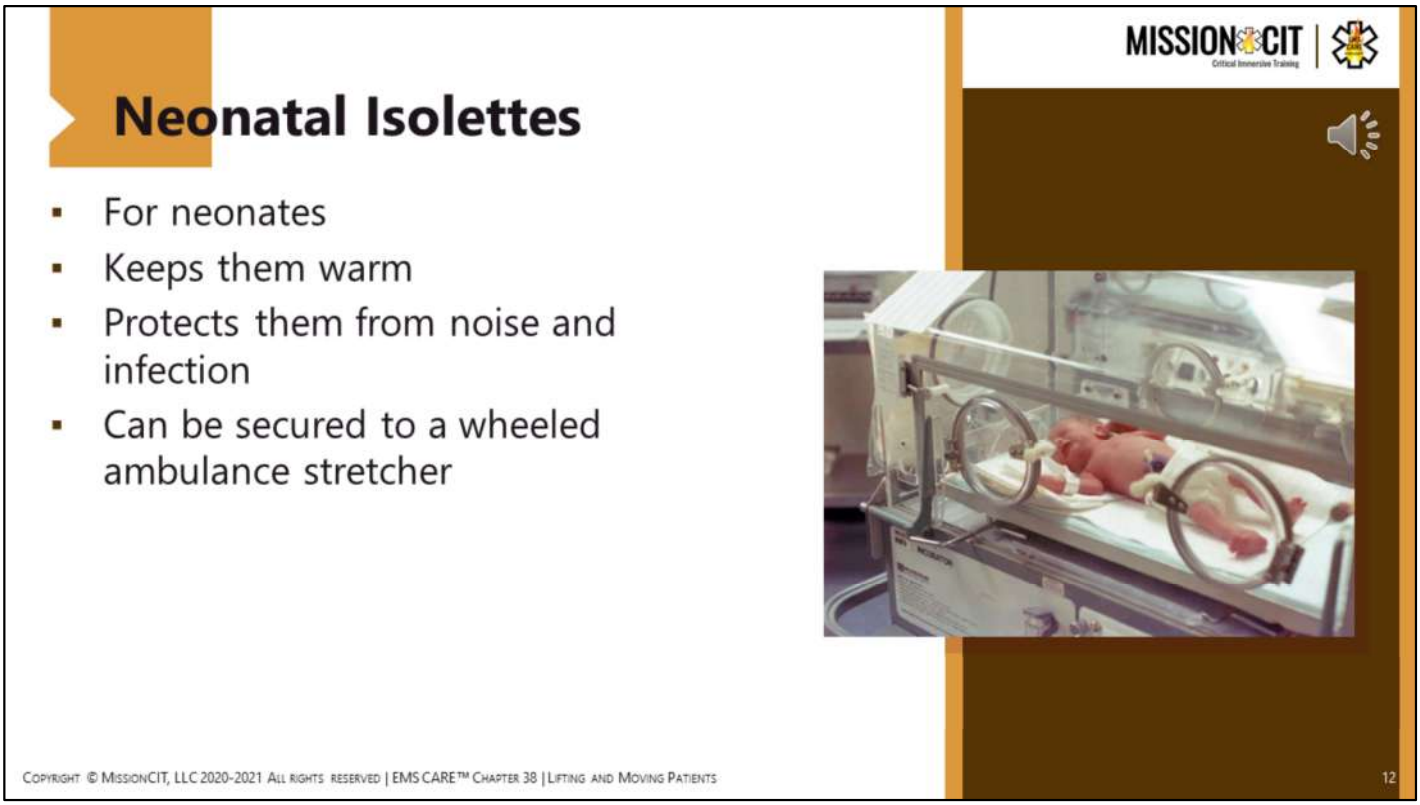
It is made of metal or strong synthetic material and can be lifted with ropes. It is shaped to accommodate an adult in a face-up position. Works best in remote terrain and search and rescue operations.

In case of spinal injury, secure the patient to a backboard and then secure this backboard to the basket stretcher. Similarly, when your return to the ambulance, lift the backboard from the basket stretcher and place it on the wheeled stretcher.



As the name suggests, these stretchers are used to scoop patients. They consist of two or four pieces and are designed in such a way to fit them around the patient who is lying flat on a surface.

However, the patient must be stabilized and secured on a scoop stretcher to prevent the patient from falling off.



Neonates are too small to be transported on a wheeled stretcher, and this is where isolettes come in handy. They are specialized equipment that keeps the neonates warm and protects the child from noise, draft, infection, and excess handling. Depending on the circumstance, the isolette can be secured to a wheeled ambulance stretcher or a freestanding one.

This brings us to the end of this lesson and in the next one, Justin will talk about how you can move patients in different situations and ensuring that they are safe always.