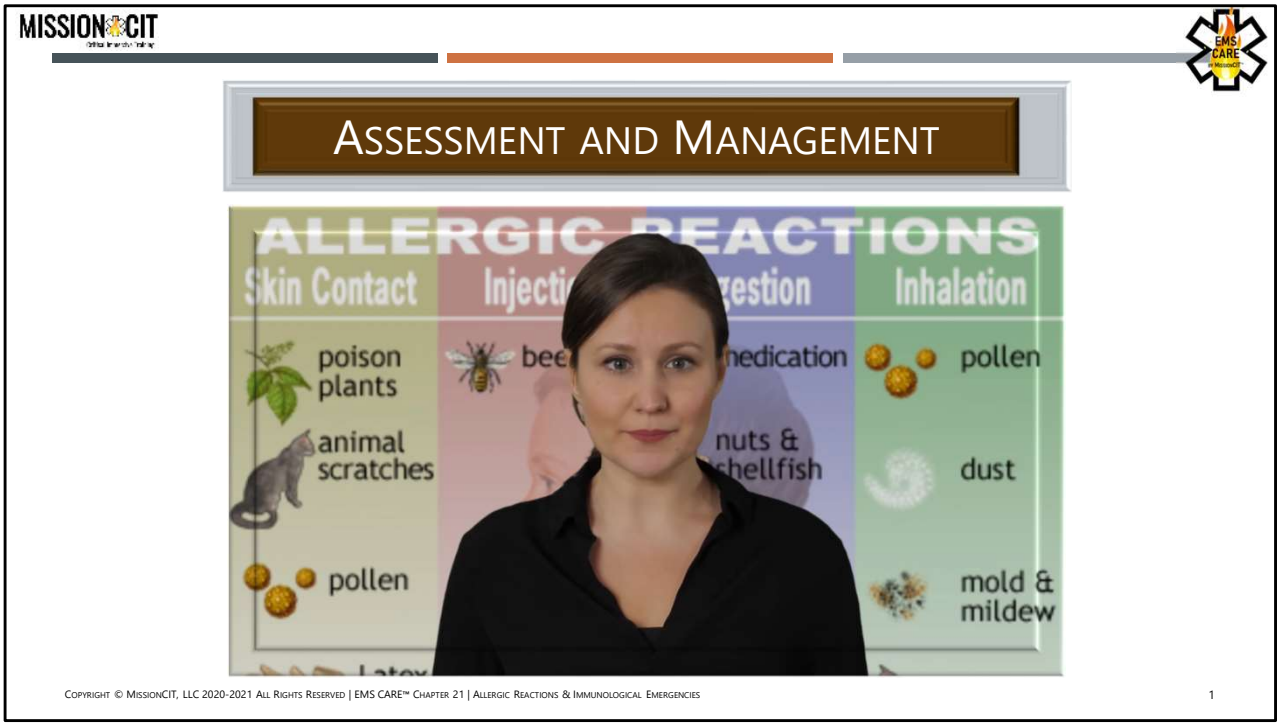


Thank you Justin!

This lesson will talk about primary and secondary assessments while handling immunologic emergencies.

So, let's get started.

Scene Assessment and Safety

- Assess the scene
- Your safety is top priority
- Look for medications, food packets that could have caused allergy
- Look for stings and bites
- Get information from patient, friends, family members, and bystanders



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As soon as you walk in, quickly look around and assess the scene. First off, determine if it is safe for you to enter, as your safety is the top priority. For the most part, Allergic Reactions & Immunological Emergencies don't pose any threat for you. Still, it helps to assess safety quickly.

Next, look around for any medications or food packets that could have caused the allergic reaction. Check the patient for any visible signs of stings or animal bites that could have caused the allergy.

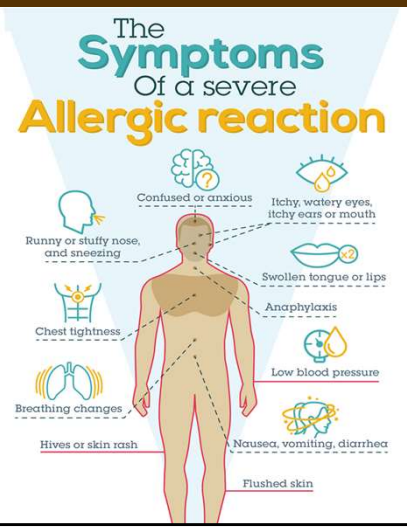
If the patient can communicate, get as much information

as you can about the food and medications that the person had in the last 24 hours, any contact with plants or insects, or just about anything else that could have caused the reaction.

Talk to family members, care providers, friends, and bystanders to get more inputs.

Life-Threatening Situation

- Anaphylaxis
- Only a few minutes
- Check the pulse at radial and carotid site
- Verbal or tactile stimuli
- Check vitals
- Monitor pupils, abdomen movement, and lung sounds
- Pale or blue skin
- Look for rashes



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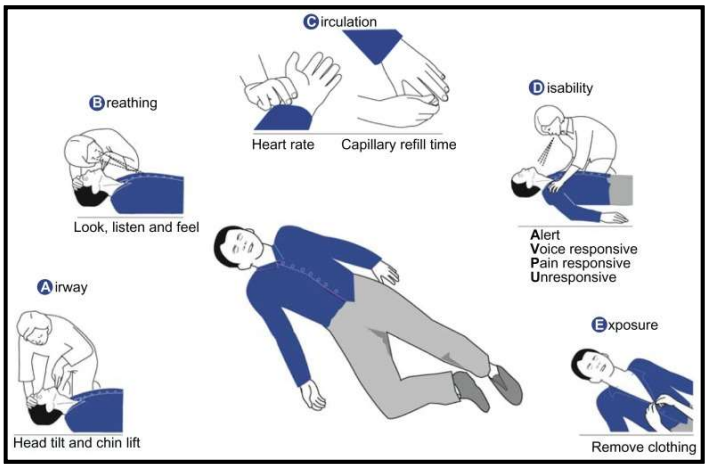
Anaphylaxis is a truly life-threatening situation, so you must act quickly, as it could make a big difference between life and death. To give you a perspective, 40.9 million people in the United States suffer from varying degrees of Anaphylaxis each year. What makes it so lethal is it just takes only a few minutes for the allergic reaction to become an anaphylactic one, so understanding the symptoms is essential.

In life-threatening situations, check the pulse at the radial and carotid site. See if the patient is responding to verbal or tactile stimuli. Based on the response and the pulse rate, check the vitals, and place the patient on an ECG monitor. Continue to check the pupils, abdomen movement, and lung sounds for any signs of trauma. Also, evaluate if the skin is pale and look for rashes. All these can tell you the cause when the patient is unable to communicate.

Call for advanced life support immediately, and in the meantime, inject Epinephrine. Understand your local protocols as to what else you may administer if anything.

Circulation, Airways, and Breathing

- Chest compressions to ensure blood circulation
- Open the airways
- Provide rescue breaths



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Start with the fundamentals of a primary assessment - Circulation, airways, and breathing.

Blood flow is a top priority in these emergencies, especially when a patient is in a state of shock due to an allergic reaction. The immune system pumps blood to the allergy area, reducing blood flow availability in the other parts of the body. This could quickly lead to cardiac arrest in some patients, so the first thing you must do is get the blood flowing again. So, start the chest compressions if you think the patient is in an anaphylactic shock.

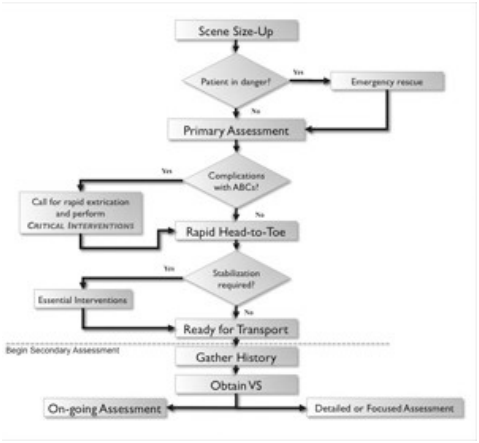
Next, bronchoconstriction happens when the bronchi responsible for transporting air to a patient's lungs have insufficient airflow. In this situation, open the airways with a head-tilt chin-lift motion.

As breathing may be impaired, be ready with a Bag Valve Mask or to provide rescue breathing.

Continue doing chest compressions to restore circulation until the patient is hospitalized, until another healthcare provider takes over, or normal function returns.

Transport Decision

- Critical decision is transportation
- Depends on local guidelines and protocols
- Enough time to get to the hospital
- Consider patient's stability
- Weigh the benefits and risks
- Safety of crew, patient and public



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A critical decision that you'll make is transportation. Does the patient need emergency transportation or a non-emergency one?

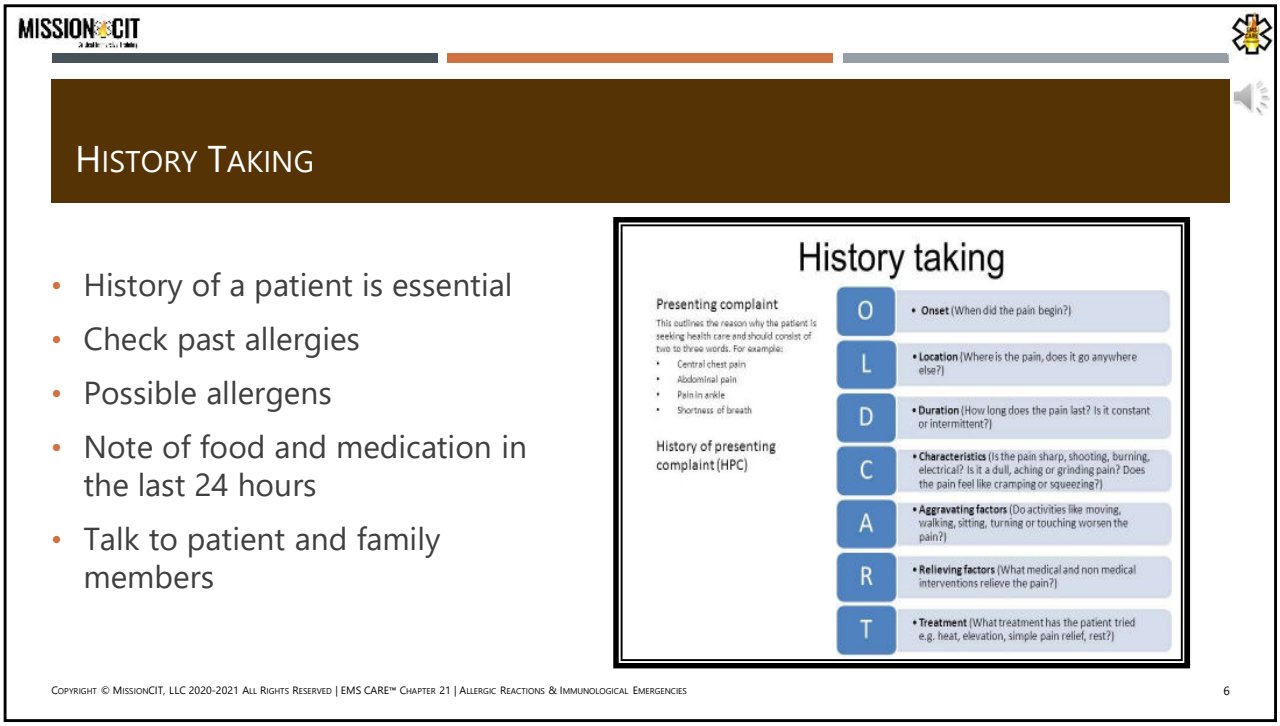
The answers depend on the local guidelines and protocols.

The first question you must ask is whether the patient may die from the reaction, and if so, how soon? Based on this answer, you can decide if there is enough time to transport the patient to the nearest hospital or does the patient need an intervention before that.

Alongside this question, you must consider your patient's stability. Has the patient gotten better with the prehospital care you provided? Do you see a difference between the time you walked in and now? If the patient isn't responding well, emergency transportation is necessary.

The next pertinent question you must ask is the nearest hospital's distance to provide care for the patient. Finally, evaluate the potential benefit of transportation considering the safety of your crew, the patient, and the public in general.

Undoubtedly, this is a tough decision that depends on the situation at hand.



Taking down the history of the patient is essential when possible. Check if the patient has a history of allergies, and if so, record the potential allergens. Check when the last time such an allergic reaction occurred and what were the steps taken to treat it. Also, note the patient's foods and medications in the previous 24 hours if the cause of the allergy is unknown. It also makes sense to gather some family history to understand if there is a genetic angle to the patient's allergic reaction.

You can take this information from the patient and other family members or care providers to get a

comprehensive idea of the allergy.

Using Monitoring Devices

- Check the vitals of the patient
- Readily available
- Handy and portable
- Use it to get accurate readings
- Gives patient's current state
- Check local protocols and guidelines



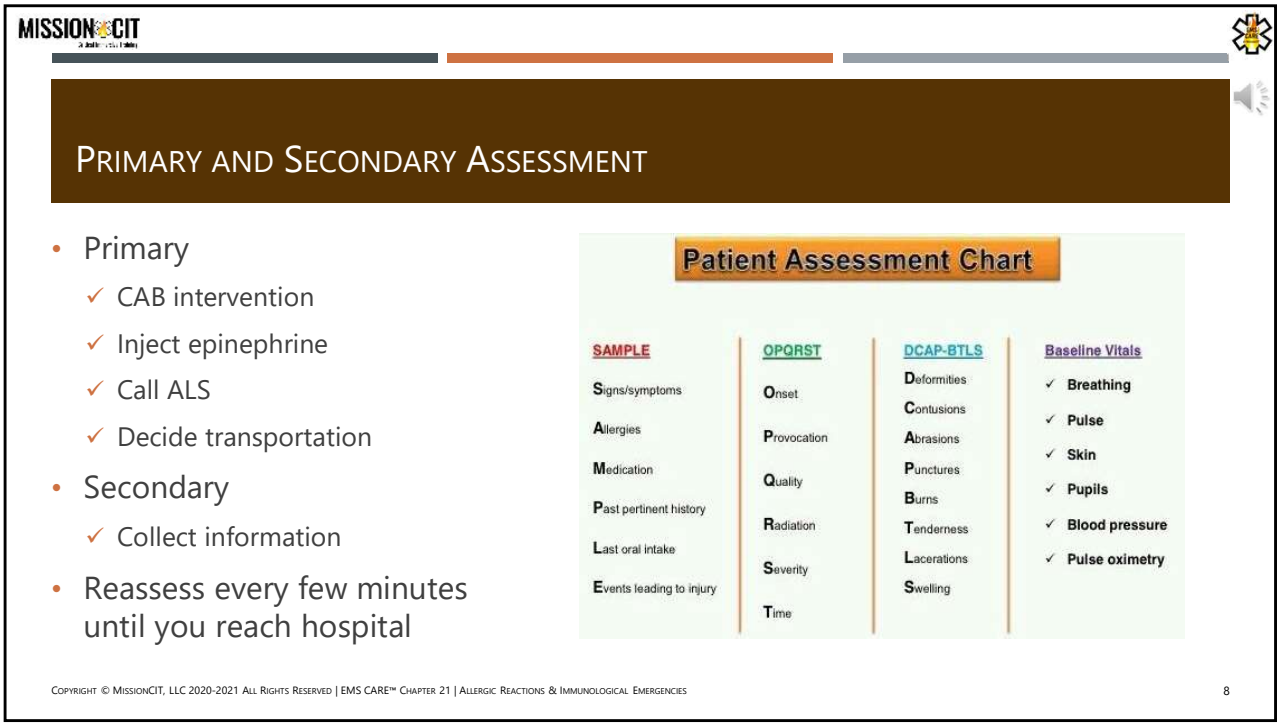
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As an EMT, one of the first things you must do is check the patient's vitals. The good news is that technological innovations have made advanced pieces of equipment and monitoring devices readily available. Many of them are handy and portable, so you can quickly connect it to a patient to get an accurate reading of the pulse rate, blood pressure, and other vital signs.

This equipment gives you a better idea of the patient's current state to decide the patient's most appropriate option.

That said, check with your local protocols and guidelines

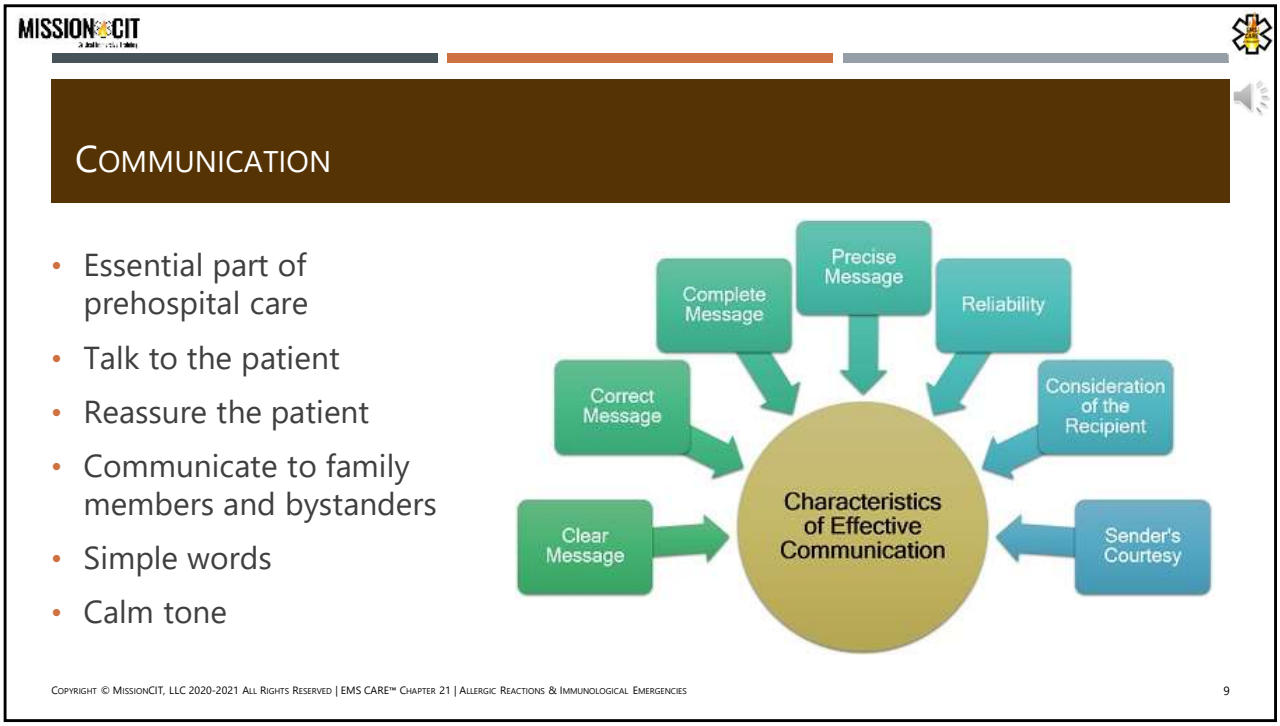
about what devices are available and what you can use.



The primary assessment includes identifying the possible cause of allergy and the current state of the patient. Based on this primary assessment, you can provide C A B intervention, hook up monitoring devices, inject Epinephrine, call for advanced life support, or arrange emergency transportation.

Once the patient is stable, do a secondary assessment that includes checking the patient's background and history, exposures, signs, symptoms, interventions, progression, and any other pertinent information to help with the patient's future care.

If you have to transport a patient, continue to reassess the vitals, and make a note of it. If you have to inject Epinephrine, do so once every 5 to 15 minutes, as needed. Make sure you check the local protocols.



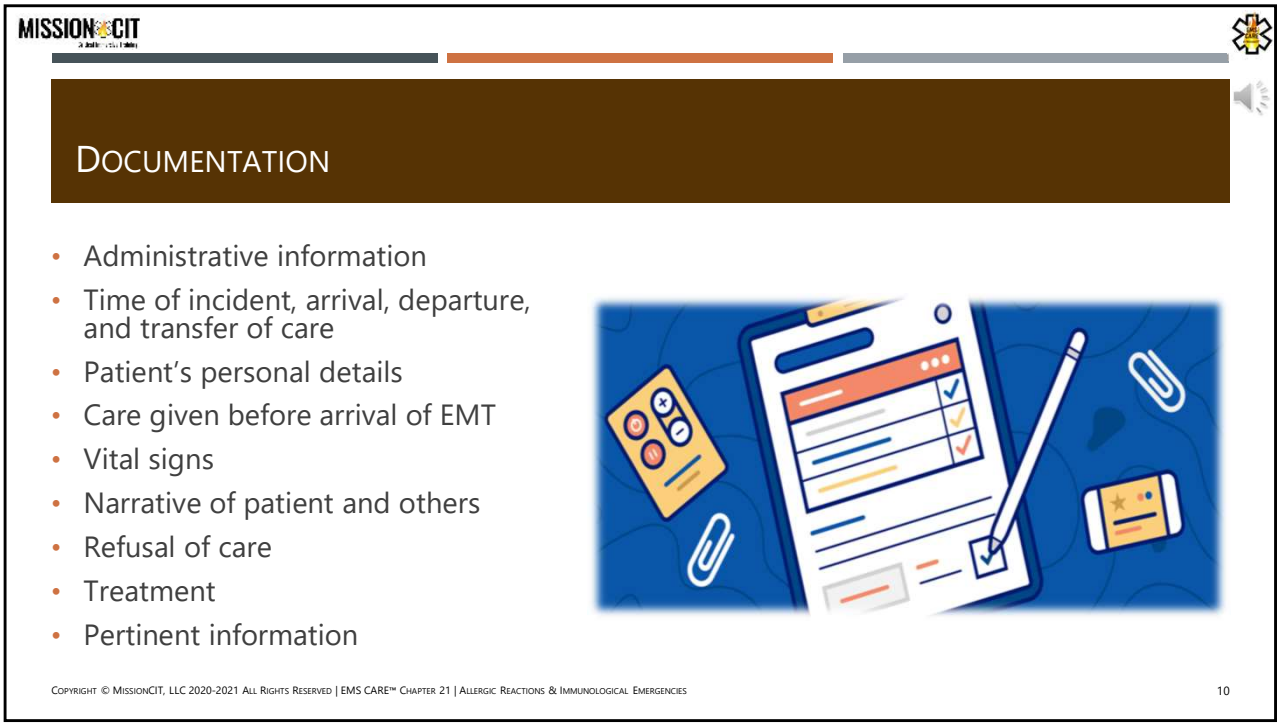
Communication is an essential part of prehospital care.

If the patient is in a position to talk or understand what you're saying, explain what's going on, and take your patient through each step and action. Reassure the patient that help is available, and the patient is going to be all right soon.

Likewise, communicate the cause of the problem or allergic reaction to other family members, friends, care providers, or even bystanders.

Overall, keep everyone apprised of the situation. Be calm

and use simple words to explain the situation.



A Prehospital Care Report, or PCR in short, is an essential statement that an EMT has to create and submit. This document aims to provide a written record of the patient's assessment and treatment for the patient's future care.

It also gives a comprehensive idea of the situation to a hospital clinician to provide appropriate care.

The PCR must include

- Administrative information about the EMT crew.
- Address of dispatch

- Time of the incident, arrival time, departure time, arrival at the medical facility, time of transfer of care.
- Patient's details such as name, age, gender, location
- The care given before the arrival of EMT
- Vital signs
- Narrative of the patient and others
- Treatment or intervention provided
- If a patient refuses treatment, the reason for the same, and a refusal of care signed by the patient, and
- Any other pertinent information



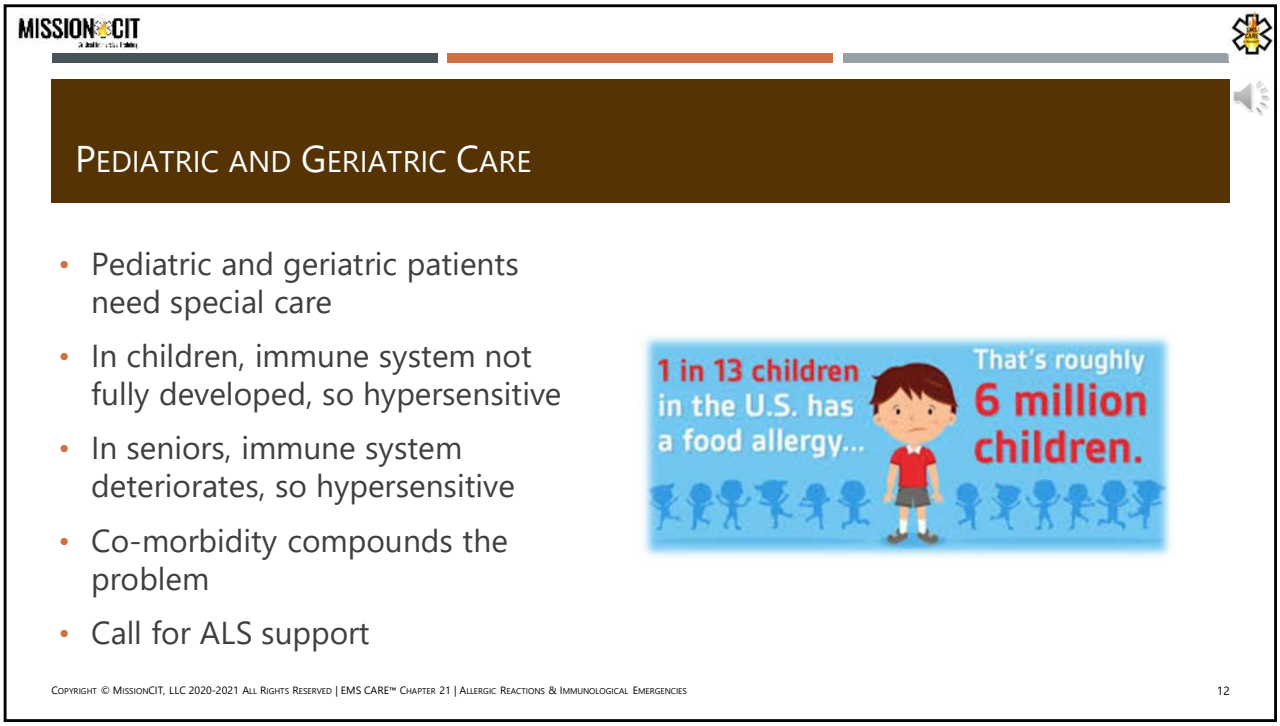
Emotional support is an integral part of an EMT's job, especially in non-emergency situations. Most incidents are not life-threatening and do not require a ton of medical intervention. Often, the calls are due to a fear of dying or other medical complications, so you have to reassure the patient and others around that the patient will be okay.

This requires you to stay calm and collected to assess the situation and provide the much-needed support to the patient and family members. Answer their queries patiently and confidently, so they know that the patient

will be fine.

In the unfortunate event of a death, stay for a few extra minutes with the patient's family to console and support them.

Remember, these are difficult and uncertain times, so any help that you provide is much appreciated.



Pediatric and geriatric patients require special care because of their physiology.

In small children, the immune system is not developed well enough to handle allergens, so they tend to be hypersensitive. Also, it is challenging to administer Epinephrine to small children. If unsure about the situation, perform a primary assessment, resolve any life-threatening condition, and call for Advanced Life Support if the child's condition is severe.

When it comes to seniors, the immune system's efficacy goes down, thereby making them hypersensitive to even

common allergens. As a result, they tend to go into shock rather quickly and take a long time to recover. Co-morbidity factors like obesity, diabetes, and COPD further complicate prehospital care.

In this case, stabilize the patient, and call for medical control or ALS support if the patient appears serious.

With this, we have come to the end of this lesson, and Justin will take you through the next one on Epinephrine.