Epinephrine is the 1st drug of choice for acute anaphylaxis. Delay in administration of epinephrine may result in fatal outcomes.

Not only is it important for the healthcare team to be able to recognize signs and symptoms of anaphylaxis but also educating our patients and their families on the signs and symptoms of anaphylaxis are important.
1. Be on the watch if you have had anaphylaxis before. If you encounter the same trigger again, use your auto-injector if you develop symptoms.

2. In anaphylaxis, not everyone has skin manifestations (itching, urticaria, angioedema, flushing).

3. If you have a history of asthma and are having an allergic reaction, strongly consider treating with autoinjection early when having respiratory symptoms, as there is a strong correlation with severe and fatal anaphylaxis in this group.

4. If you have experienced generalized acute urticaria due to a nut allergy or an insect sting, your risk of a more serious reaction from a future exposure is higher.

5. When using the auto-injector (see below) make sure to hold it firmly against the thigh to ensure it produces an intramuscular injection. Peak concentrations of epinephrine differ between by approximately 8 minutes (intramuscular) to approximately 34 minutes (subcutaneous) for injections.

6. Always have an auto-injector available and on your person. Check the expiration date and train with it frequently.

7. When in doubt, err on the side of using the auto-injector rather than waiting too long, because adverse effects from epinephrine use are generally not a concern for healthy children.
How to Administer an EpiPen

1. Form fist around EpiPen® and PULL OFF BLUE SAFETY CAP.

2. POSITION ORANGE END about 10cm away from outer mid-thigh*. * Either clothed, or unclad, avoiding seams and pocket areas.

3. SWING AND JAB ORANGE TIP into thigh at 90° angle and hold in place for 10 seconds.

4. REMOVE EpiPen®. Massage injection site for 10 seconds*. *After use the orange needle cover automatically extends to cover the injection needle.
Common Mistakes

- EMS comes in with a patient with chief complaint of Wheezing. Pt has been given an albuterol tx in route and presents with wheezing, n/v and questionable peanut exposure with known allergic reaction to peanuts.

  This is a common mistake with EMS and nursing. **Epi would be first treatment**

- Injecting the needle through your thumb.

- Not removing the cap is another typical mistake - the pen won't inject if the cap is on.

- No back-up shot in case symptoms return. Symptoms can return, usually about 20 minutes after the initial shot (and more common in older kids or adults where the epi dose wasn't proportional to body weight). Keeping a 2nd epi-pen at bedside is important

- 11 month-old girl who ate hummus for the first time comes in that developed lip swelling and hives and had intermittent stridor and sats in the low 90s when EMS first arrived, although her oxygenation quickly improved she was only given Benadryl en route to ED. **Epi would be first treatment**

- 9 year-old girl who was out with her family at the lake when she developed generalized hives and chest pain. EMS transported to ED and gave Benadryl **Epi would be first treatment**