An allergic reaction is the result of a disorder of the immune system. Essentially, an allergy is when the body has an extreme response to an antigen that is usually not harmful or an actual threat to the body. Antigens can be introduced into the body through the skin, respiratory tract, injection, or ingestion. The body perceives these invaders as a threat and responds with defense mechanisms that ultimately only end up causing more harm than good. For example, pollen causes allergic reactions in 1 in 5 people. It is also known as "hay fever", the majority of people experience this seasonally and it affects their daily life. Allergens, in this case, are more of an annoyance than an actual threat to health. On the other hand, anaphylaxis is a severe and life threatening reaction to antigens that must be treated immediately. In anaphylaxis, when an antigen enters the body, mast cells degranulate to release histamine and chemical mediators that travel throughout the body that manifest symptoms of anaphylaxis. Some of the most notable symptoms include; vasodilation, bronchoconstriction, peripheral vasodilation, coronary vasoconstriction, inflammation, and increased capillary membrane permeability. Perfusion and ventilation problems are a huge risk for anaphylactic shock and can lead to death if left untreated. Epinephrine is an antihistamine that is used to stop this response. It is a life saving drug and the priority intervention when anaphylaxis is occuring. Corticosteroids can be administered to stabilize capillary membranes and to prevent any delayed allergic responses. It is important to note that neither allergic or anaphylactic reactions occur at the first exposure to the antigen. Only after an initial exposure does the body create specific antigens that mediate these responses. It is so important to always take a thorough patient history and verify allergies to prevent recurrences or adverse drug reactions in the health care setting, as well as being prepared for a new reaction to present itself.