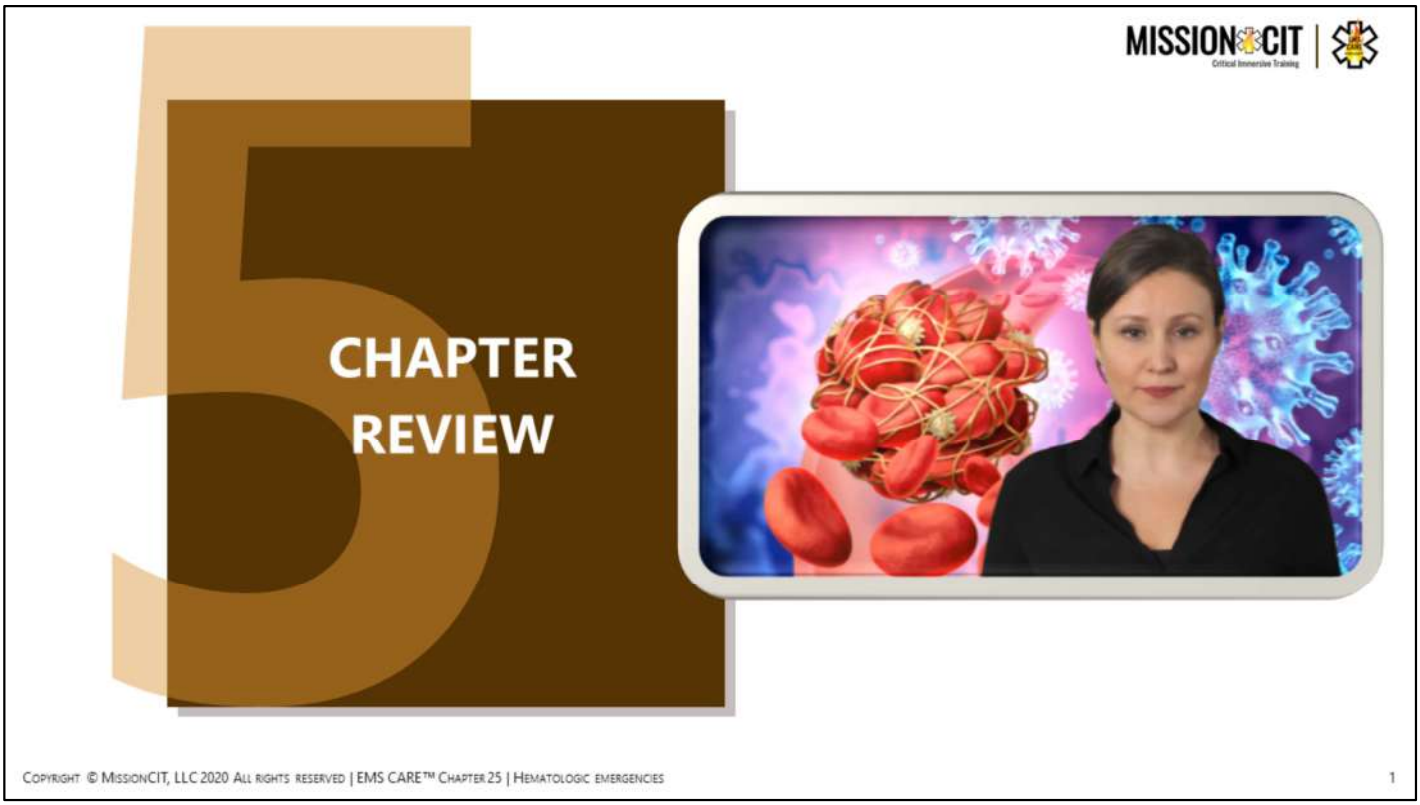
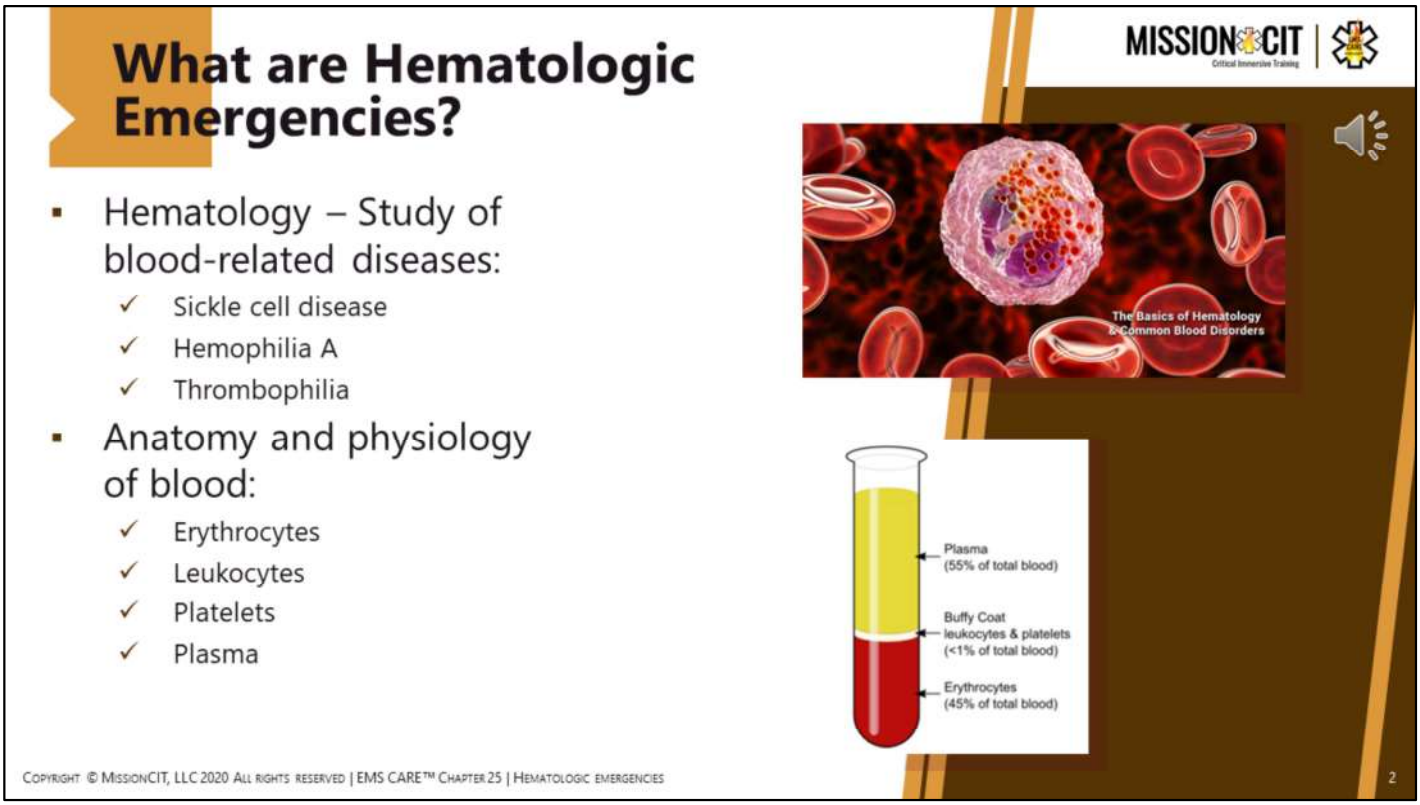
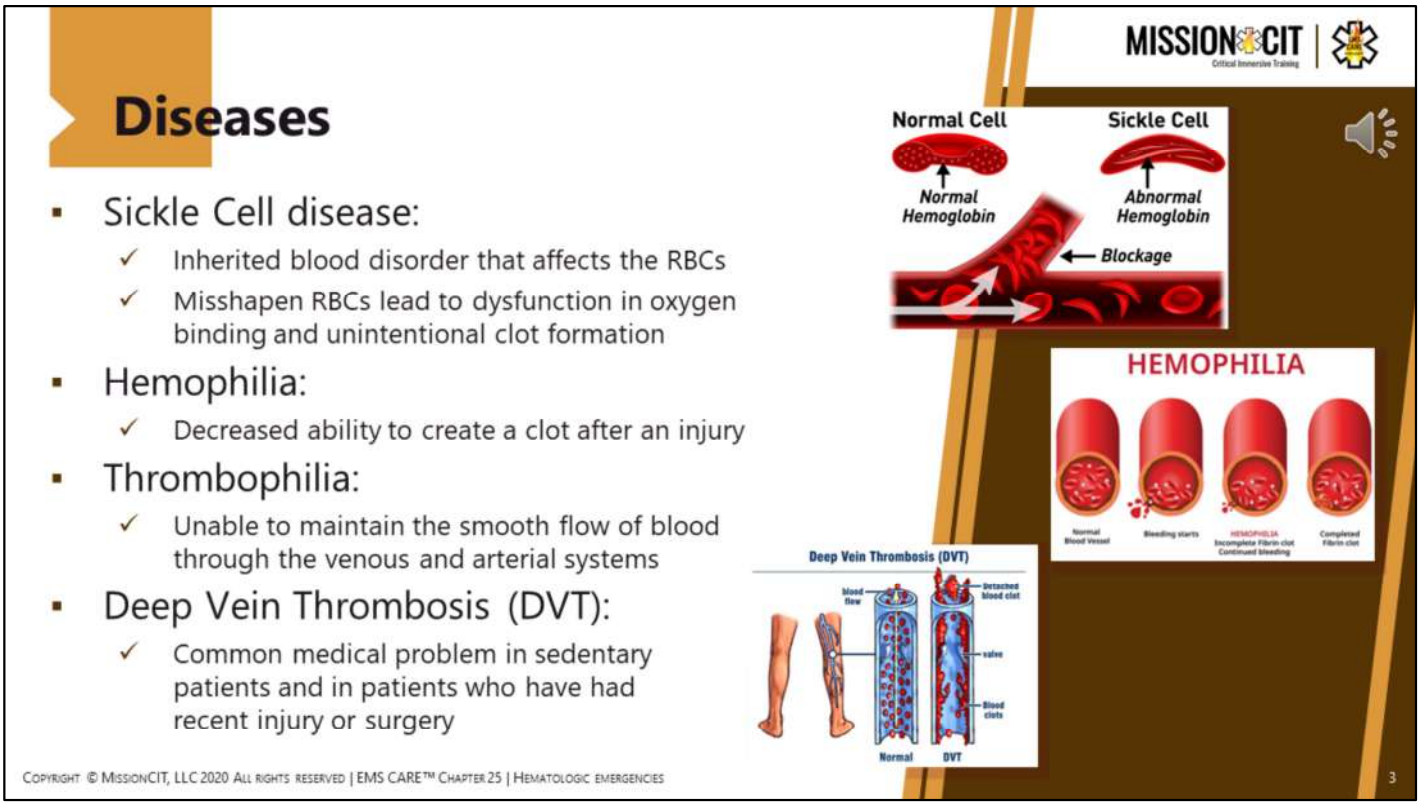


Thank you, Justin. Here's a quick recap of what we have learned so far.



Hematology is the study of blood-related diseases. Three disorders that can create a prehospital emergency are: Sickle cell disease, Hemophilia A, and Thrombophilia. Recollecting the components of blood, blood is made up of four components, namely, erythrocytes, leukocytes, platelets, and plasma. Each of the components of the blood serves a purpose in maintaining the body's homeostatic balance.

Red blood cells, called RBCs or erythrocytes, contain hemoglobin, which carries oxygen to the tissues. White blood cells, also called WBCs or leukocytes, on the other hand, respond to infection and collect dead cells for their correct disposal. Platelets assist in forming a clot to stop bleeding and finally, plasma serves as the transportation medium for blood components, proteins, and minerals.



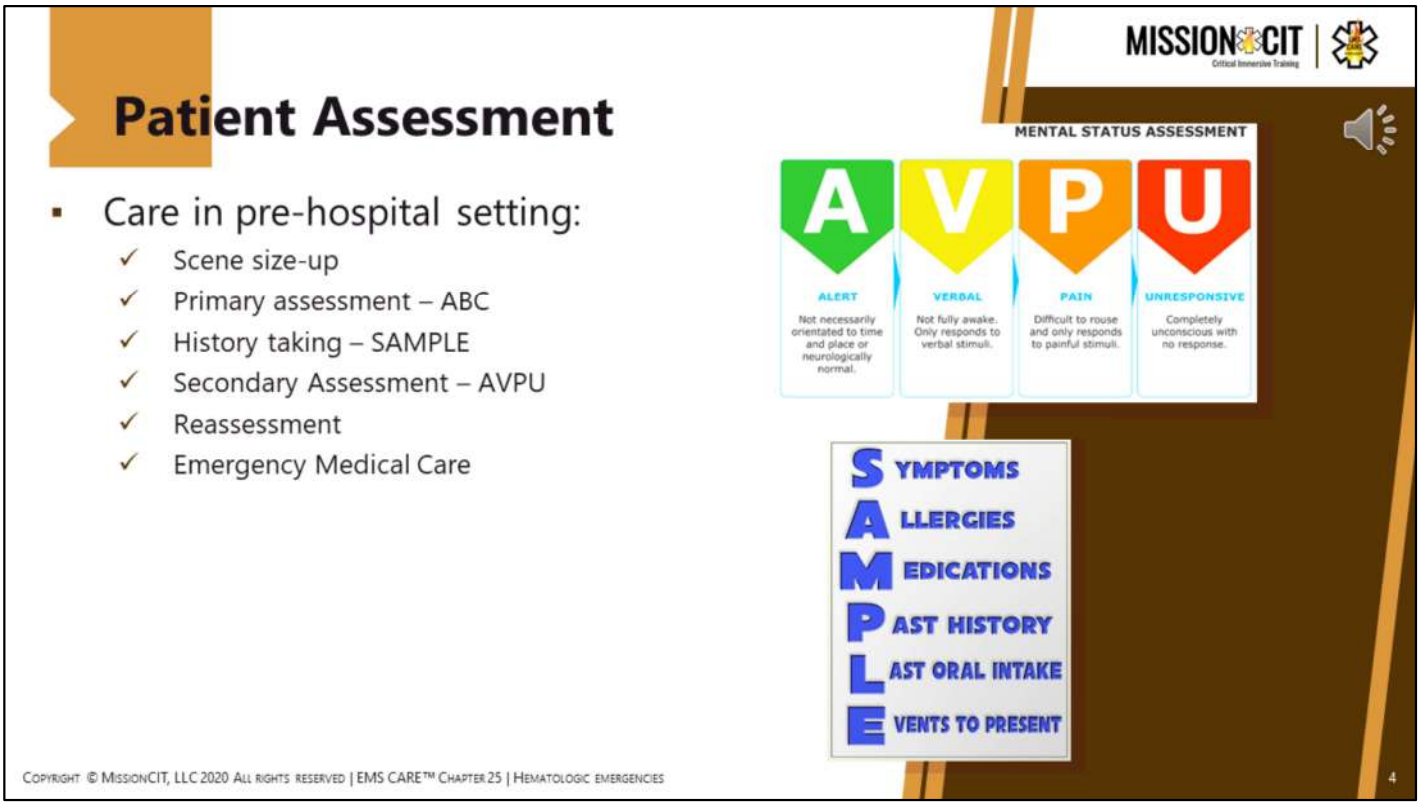
Next, we discussed the pathophysiology of specific hematologic emergencies.

Sickle cell disease, also called Hemoglobin S disease, is an inherited blood disorder that affects the RBCs. People with sickle cell disease have misshapen RBCs that lead to dysfunction in oxygen binding and unintentional clot formation.

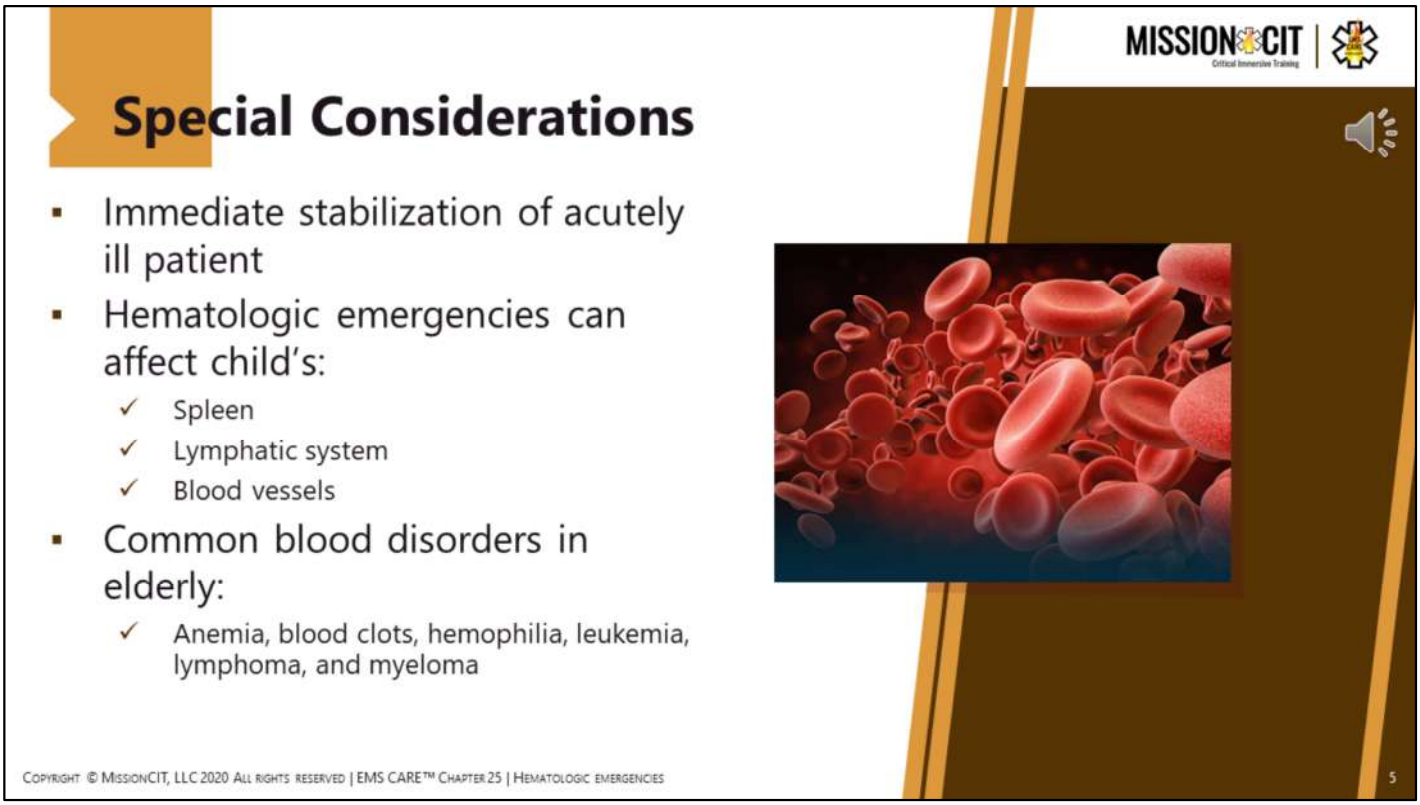
Clotting disorders, also called Hemophilia, is another hematologic emergency. People with Hemophilia A have a decreased ability to create a clot after an injury, which can be life-threatening.

Thrombophilia is a disorder in the body's ability to maintain the smooth flow of blood through the venous and arterial systems.

The last kind of clotting disorder that we spoke about is deep vein thrombosis. It is a common medical problem in sedentary patients and in patients who have had recent injury or surgery.



Moving on, we mentioned the kind of care you can provide in a pre-hospital setting for such emergencies. Scene size-up is the first step. Ensure your personal safety during this stage. Then, determine the Mechanism of Injury and the Nature of Illness. Once you have an idea of the situation, start the primary assessment. Once you've done the primary assessment and stabilized the patient, it's time to know the patient's history. Next, move on to secondary assessment where you can systematically examine the patient. Reassess the vital signs frequently to determine changes in the patient's condition. Specifically, check for the mental status and ABCs. Finally, provide possible emergency medical care. This care will be limited mainly supportive and symptomatic.



The management of pediatric hematologic emergencies is directed toward immediate stabilization of the acutely ill patient. Hematologic emergencies arise in children who have known blood disorders, or who have systemic disease. Hematologic disorders can affect the child's spleen, lymphatic system, or blood vessels. To diagnose hematological disorders, start with a physical examination and medical history.

The hematologic and immune systems are affected by aging in multiple ways. The most common blood disorders in the elderly include anemia, blood clots, hemophilia, leukemia, lymphoma, and myeloma. This brings us to the end of the review, please proceed to take the quiz.