Scenario 1 - Spontaneous Pneumothorax

Scenario Set Up	*Equipment: NRB/O2 tank* *PROCTOR: The patient is alone in their living room. He was eating dinner and got surprised (Spontaneous pneumo happened). Afterwards, he thought he just had heartburn until he started feeling super tired. He called 911 after feeling super tired.*
Dispatch	You're dispatched to a 25 year old male patient complaining of fatigue.
Scene Size Up	Patient sitting slumped over in a chair with no apparent life threats.
Pertinent Primary Assessment Findings	*AVPU - A&O X 4* *A - Patent* *B* - Breathing is rapid and shallow; patient has clear difficulty breathing. *C - The skin is greyish. Pulse is strong and regular. Cap refill* *under 2 seconds*
Pertinent Secondary Assessment Findings	S - Fatigue, hard to to breath, chest pain A - penicillin M - Albuterol P - no past medical history L - dinner, one hour ago E - Patient was sitting and watching Jaws while eating his TV dinner; there was a jumpscare with the shark and he got scared and then the pain and fatigue started. O - It occurred suddenly P - It hurts when I try breath Q - Stabbing R - No S - 9/10 T - 1 hour

	P - sudden onset with no apparent reason besides the jumpscare A - pleuritic chest pain (difficulty breathing started first) S - no sputum T - 1 hour, pt temp 98.7 degrees, patient speaks in 2-3 word bursts, gasping in between phrases/sentences E - patient would not be able to get up and walk on his own Focused assessment: everything normal except when auscultating lungs, lung sounds absent on one side
Vitals	BP:110/60 , HR: 150, RR: 30, BGL: 110, SPO2: 89
Treatments	O2 via non rebreather - 15 liters Position of Comfort- Head elevated to assist breathing
Key Points	Pt. is tall and thin. PT. IS HAVING SPONTAENEOUS PNEUMOTHORAX
Bonus Questions	Q: Contraindications for Albuterol? A: Allergies, Severely high heart rate Q: Are there contraindications for administering O2? A: Never withhold oxygen from someone who needs it (so technically no contraindications), but keep in mind that hyper-oxygenating a patient with COPD may decrease their respiratory drive. Q: Why should you not give positive-pressure ventilation to a patient with a suspected pneumothorax, hemothorax, or pneumohemothorax? A: You'll inflate the patient like a balloon and worsen their condition!

Scenario 2 - Anaphalayxis

Scenario Set Up	*Equipment: Epinephrine / Oxygen* *PROCTOR: Proctor should be tripoding and barely able to speak/answer questions. The patient got stung by a bee while hiking the fire trails. There is a random bystander who found them tripoding on the trail and called 911, does not know the person. Proctor should give EMTs enough time to begin some treatment/think before handing them their bag with 1 epipen in it. If given a dose of epi, they can talk again for ~5 minutes before having a reaction again. IF EMTs ask about a previous reaction, proctor will tell them last time they were stung it was 5 minutes before they needed another dose and hand them 2x dose of epi, located in their pocket. If EMTs do not ask, the patient will go back into anaphylaxis and eventually code.*
Dispatch	*Medical to fire trail, report of 48y/o M having difficulty breathing and winded.*
Scene Size Up	*Teams will see a bystander comforting patient who is sitting on a rock, tripod position. Patient is conscious, pale/cyanotic, and breathing quickly and shallowly. Patient has hives on neck.*
Pertinent Primary Assessment Findings	*AVPU - A&O X 4* *A - patent airway* *B - 40b/min, rapid, shallow, stridor* *C - cyanotic, ~130bpm, >2 second cap refill (~3 seconds)*
Pertinent Secondary Assessment Findings	P - Bad always, tripoding/sitting relieves A - no chest pain S - no sputum T - 3 wpm E - was hiking and now can't walk A - *Bee stings, nuts, aspirin* M - *Prescribed epi, viagra, metoprolol. Took their metoprolol dose this morning, took viagra last night* P - *STEMI 3 years ago* L - *3 sausage patties, bacon, toast.* E - *Patient was hiking and suddenly got itchy and then found it hard to breathe.*

Vitals	*Set 1: BP: 104/80, HR: 130, RR:40, BGL: 130, SPO2: 90,* *Set 2 (after epi 1): BP: 138/92, HR: 150, RR:32, BGL: 130, SPO2: 95,* *Set 3 (after epi 2): BP: 150/100, HR: 160, RR:30, BGL: 130, SPO2: 96,* *If not given epi when indicated, apneic/pulseless*
Treatments	*Necessary: Epinephrine (2 doses–respiratory FAILURE without), Oxygen (NRB 15 l/m),*
Key Points	*If someone is having an allergic reaction, always ask if they've had one before. Ask if they needed multiple doses of epi previously, and if so how far apart?*
Bonus Questions	*What is the dose of IM epinephrine?* *0.3mg IM*

Scenario 3 - Pulmonary Embolism

Scenario Set Up	*Equipment: Oxygen, O2 Tank, NRB* *PROCTOR: Proctor should be unable to speak well and be lying in a semi-fowler's position. Proctor is also complaining of chest pain with SOB. Proctor states they suddenly felt this sharp chest pain with major SOB a couple of hours ago. Proctor is also feeling anxious and presents with diaphoretic skin and pale. Proctor has a history of blood clots and is taking blood thinners, but hasn't been for about a week due to forgetting them in their home state. Proctor's wife also noted swelling of the patient's right leg, which is now more painful. Proctor had been in bed all morning but realized the condition was worsening with more severe shortness of breath. The wife is next to the patient the whole time and called 911.*
Dispatch	*Dispatched to a home residence for a 73-year-old male complaining of shortness of breath and chest pain.*
Scene Size Up	*EMTs are able to see a 73-year-old male tracking them as they walk into the room. The patient is in semi-flowers and presenting with a dry cough with bloody mucus. No life threats.*
Pertinent Primary Assessment Findings	*AVPU - A&O X 4* *A - patent airway, able to speak in complete sentences* *B - 36b/min, rapid, shallow, wheezing* *C - 130 bpm, >2 sec cap refill, pale, cool, and diaphoretic skin* *signs*
Pertinent Secondary Assessment Findings	*O- patient was lying down in bed due to pain in the right leg when they began to develop SOB.* *P- nothing makes the patient better, but walking does make the SOB worse* *Q- "I feel like I'm suffocating."* *R- This SOB feels similar to the episode 3 months prior, where they developed a clot, and this was found on a CT in the hospital.* *S- 9/10* *T- began 30 minutes ago, now it's unbearable*

	A - *Patient has allergies to penicillin.* M - *Aspirin, metformin- hasn't taken blood thinners due to leaving them at home state while visiting family members elsewhere* P - *patient mentions former blood clots in their deep veins (DVT), which were addressed in the prior 3 months* L - *Last oral intake was in the past night which was a bowl of oatmeal* E - *The patient felt more SOB and realized his leg was also more painful. My wife called when noticing the mucus with blood.*
Vitals	*Set 1: BP: 135/86, HR: 130, RR:40, BGL: 134, SPO2: 85%* *Set 2 (after NRB @ 15LPM): BP: 138/90, HR: 128, RR:32, BGL: 134, SPO2: 89,* *Set 3 (after NRB @ 15LPM): BP: 136/88, HR: 126, RR:30, BGL: 134, SPO2: 91,*
Treatments	*Figuring out the positioning for the patient is important, the tripod position could be uncomfortable even though this normally assists respiratory distress situations well. Thus, semi-fowlers/tripod would be fine in this scenario (semi-fowlers can encourage lung expansion and, in turn, reduce venous return to the heart, thus reducing workload on the right side of the heart).* *The patient will also receive* ***NRB @ 15LPM***
Key Points	*Understanding history is critical, as this could expedite transport if understanding the severity of the patient due to previous occurrences that are similar. Thus, getting medical history in a punctual manner is key.*
Bonus Questions	*Why is the current DVT and history important/relevant to a possible new PE diagnosis?* *A deep vein thrombosis (DVT) is one of the leading reasons for PE development, as this DVT clot can dislodge and travel to the right side of the heart, thus causing a pulmonary embolism (PE).*