

Environmental Emergencies Scenarios

Example Scenario

4 YOF w/ Epiglottitis

Scenario Set Up	<p>Equipment needed: NRB, O2</p> <p>PROCTOR: You are a 4 year old child and are also having trouble breathing so you don't give many answers but rather the mother (proctor #2) does. Be shy towards the EMTs unless they make a real effort to distract or entertain.</p>
Dispatch	Respond C2 to a child w/respiratory problems.
Scene Size Up	Pt sitting on chair, presenting in tripod position
Pertinent Primary Assessment Findings	<p>A- stridor, salivating</p> <p>B- dyspneic</p> <p>C- skin is pink, dry, hot to touch</p>
Pertinent Secondary Assessment Findings	<p>(SAMPLE provided by parent), pt unable to speak</p> <p>A- peanuts</p> <p>M- none, never even been vaccinated</p> <p>P - none</p> <p>L - 2 hour ago</p> <p>E - pt was fine a few hours ago at school, mother just noticed</p>
Vitals	HR: 150, RR: 28, BP:110/70, SPO2: 91%, T: 104 degrees F
Treatments	Keep pt in tripod position, administer O2 via NRB @ 15 LPM
Key Points	Keep pt as still as possible, and do not inspect airway. Administer O2 if tolerated. Do not lay the pt down.
Bonus Questions	<p>What is epiglottitis usually caused by? (A: bacterial infection that causes swelling of the epiglottitis and partial airway obstruction)</p> <p>What signs and symptoms differentiate croup from epiglottitis?</p> <p>What signs and symptoms would indicate impending respiratory failure? (retractions of muscles between ribs, bradycardia, hypoxia, decreased respiratory effort)</p>

Scenario 1- Decompression Sickness from Scuba Diving

Decompression Sickness (32 y/o F pt w/ cc of pain and difficulty breathing)

Scenario Set Up	<p>Students only need the basic emt gear—oxygen is the only treatment they’re able to administer</p> <p>The proctor should either be sitting up against the wall or lying on the ground, gasping for air, and acting like they’re in pain. In decompression sickness, the pain is concentrated around the joints and there is often itchiness and rashes in the shoulders, torso, back, and thighs. Her friend is with her, and she is the one who called 911</p>
Dispatch	32 y/o F at the beach with muscle pain and difficulty breathing.
Scene Size Up	EMTs see a 32 y/o female patient on the ground, gasping for air. Her friend is sitting with her
Pertinent Primary Assessment Findings	<p>AxO x4</p> <p>A - Completely patent airway</p> <p>B - 27 breaths/minute, normal rhythm, labored (gasping for air). Normal lung sounds. 92 SpO2</p> <p>C - Warm skin, under 2 seconds cap refill, pulse: 110 regular</p>
Pertinent Secondary Assessment Findings	<p><i>Indicate here the patient/proctors answers to SAMPLE questions, along with any pertinent further assessments (focused or complete physical assessments, AEIOUTIPS, OPQRST, etc.)</i></p> <p>A - No allergies</p> <p>M - No medications</p> <p>P - None pertaining to this scenario</p> <p>L - She ate a sandwich about 4 hours ago</p> <p>E - She finished scuba diving and was walking with her friend when she began staggering and collapsed. She began complaining of pain and asked her friend to call 911</p> <p>O - Happened about 10 minutes after she finished scuba diving and</p>

	<p>P - nothing makes the pain better or worse but the oxygen is helping a little</p> <p>Q - deep, aching, throbbing also itchy</p> <p>R - The pain stays localized to the joints so the shoulders, knees, elbows</p> <p>S - 8/10</p> <p>T - has been about 20 minutes since symptoms started</p> <p>(I don't think this is needed, but in case students ask):</p> <p>P - started after about 10 minutes after scuba diving</p> <p>A - none</p> <p>S - none</p> <p>T - isn't able to talk much</p> <p>E - unable to assess and pt is unable to stand up</p> <p>In head to toe, you see rashes in the torso, shoulders, back and thighs—nothing else is abnormal</p>
Vitals	<p><i>Indicate the patient's vital signs-> add a second set if necessary for after initial treatment</i></p> <p>BP:132/84 , HR: 110, RR: 27, BGL: 110, SPO2: 92</p> <p>Some time after administering oxygen:</p> <p>BP:128/83 , HR: 110, RR: 25, BGL: 110, SPO2: 93</p>
Treatments	<p>Administering oxygen is crucial through a NRB</p> <p>There is nothing else EMTs are able to do other than rapid transport. At the hospital, the patient will likely be placed in a hyperbaric chamber.</p>
Key Points	<p>They should learn the key signs and symptoms of decompression sickness and why it occurs—maybe at the end of the scenario. Decompression sickness occurs when divers ascend too quickly which causes nitrogen gas to bubble in blood vessels, blocking pathways and causing pain. Without immediate treatment, this can be life threatening.</p>
Bonus Questions	<p><i>Add questions about medications, treatments given, etc. for the proctor to give if there is extra time.</i></p> <p>If extra time, proctors can ask students why they think this happened and what the treatment at the hospital would be? Also, how do divers prevent this from happening? Ascend slowly and perform safety stops</p>

Scenario #2: Heat Exhaustion/Heat Stroke

Scenario Set Up	<p><i>Equipment:</i> O2 tank, Nasal Cannula, Ice packs</p> <p><i>PROCTOR:</i> The proctor should act somewhat altered, and demonstrate that they are hot/out of breath (breathing heavily). Slightly delayed responses to what EMTs are asking the patient.</p> <p>No bystanders, the patient himself called 911- was working alone unloading trucks.</p>
Dispatch	Respond to a 35 y/o male worker who has been behaving abnormally.
Scene Size Up	EMTs see a male sitting on the sidewalk outside a warehouse, bent over, sweating profusely and breathing hard.
Pertinent Primary Assessment Findings	<p>AVPU -Patient is alert A&O X 2 to person, and place (not sure about time/event)</p> <p>A - Airway is patent</p> <p>B - rapid and shallow</p> <p>C - pulse is rapid and weak, skin is flushed, hot and moist</p>
Pertinent Secondary Assessment Findings	<p><i>Indicate here the patient/proctors answers to SAMPLE questions, along with any pertinent further assessments (focused or complete physical assessments, AEIOUTIPS, OPQRST, etc.)</i></p> <p>S: Hot, sweaty, cramps, dizzy A - latex, Sulfa drugs M - none P - no PMH L - Ate a slice of pizza 3 hours ago E - Unloading boxes from the truck</p> <p>O: Came on over a short period of time, patient states he started to feel tired and thirsty all of a sudden while he was carrying heavy boxes</p>

	<p>P: While I was working to off-load the truck I felt worse, also being inside the warehouse</p> <p>Q: Throbbing abdominal pain (pt. will point to RLQ)</p> <p>R: RLQ (palpate)</p> <p>S: 5/10 pain</p> <p>T: started about 1 hour ago while unloading the trucks (along with the sweating, hotness)</p>
Vitals	<p>BP: 110/80 HR: 128 RR: 25 BGL: 90 mg/dL SPO2: 92% RA Pupils: PERRL, Lung sounds: clear bilateral, Temp: 100.2 °F</p> <p>After O2 treatment:</p> <p>BP same, SpO2 improved to 98%, all else the same</p> <p>After cooling:</p> <p>Temperature now 98 °F, patient feels cooler than previously</p>
Treatments	<p>Treat for signs of shock: O2, keep patient warm, and rapid transport</p> <p>Cool the patient with ice packs</p>
Key Points	<p>Make sure to get a temperature, treat for signs of shock, and rapid transport after primary assessment</p>
Bonus Questions	<p>Difference between heat cramps and heat stroke?</p> <p>Complications of hyperthermia?</p> <ul style="list-style-type: none"> - Temperature-induced shock