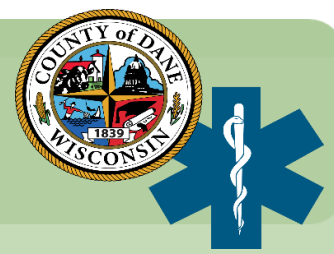


Dane County EMS Newsletter

August, 2023



2023 Cardiac Arrest Survivor Celebration

On July 23rd, we had the honor of celebrating the survivors of cardiac arrest and those who were involved in their saves. This included 911 calltakers, bystanders, family members, law enforcement, fire, EMS, and hospital staff. The dedication and skill shown by these groups has given the survivors another day, another month, another year with their family and friends – another chance at life!

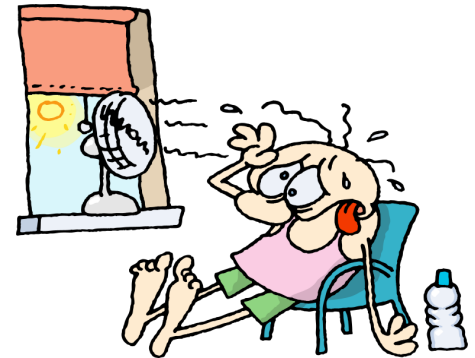
EMS has a critical role in caring for these patients, and we thank you for the service you provide!



August Viz Quiz

It is important to be able to differentiate between heat-related illnesses in order to determine the level of severity. Per the Dane County EMS protocols, please select all of the below signs/symptoms that may indicate the patient is experiencing a **heat stroke**.

- A. HR < 100
- B. Altered Level of Consciousness
- C. Temp > 104F
- D. Hot, dry, red skin



Submit your answers at <https://www.surveymonkey.com/r/LKT3JZB> for the chance to win a prize!

July Viz Quiz Follow Up

The following patients screened positive on BEFAST for a possible stroke. Calculate a FAST-ED score for each of them. Which of these patients would score a 4 or greater?

Case 1: 67-year-old right-handed male developed sudden onset right arm weakness while eating breakfast at 6:30AM with his wife

Case 2: 58-year-old male arrived at work at 7AM. Co-workers note he seemed normal upon arrival to work. He was found pacing the office at 9:00AM and when co-worker attempted to find out what was wrong, his speech was gibberish.

Case 3: 63-year-old female last talked to her daughter on the phone yesterday morning at 10AM and she seemed normal. When she didn't answer the phone at 3PM today, her daughter called 911 to have them check on her. She was found in bed, not speaking at all with right-sided paralysis and a right gaze preference.

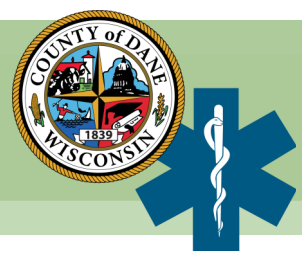
- a. All three cases
- b. Cases 1 and 2
- c. Cases 2 and 3
- d. Cases 1 and 3
- e. Case 2 Only
- f. Case 3 Only
- g. None

Answer: f. Case 3 Only

Congratulations to Alissa for winning the July Viz Quiz prize!

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Case Study

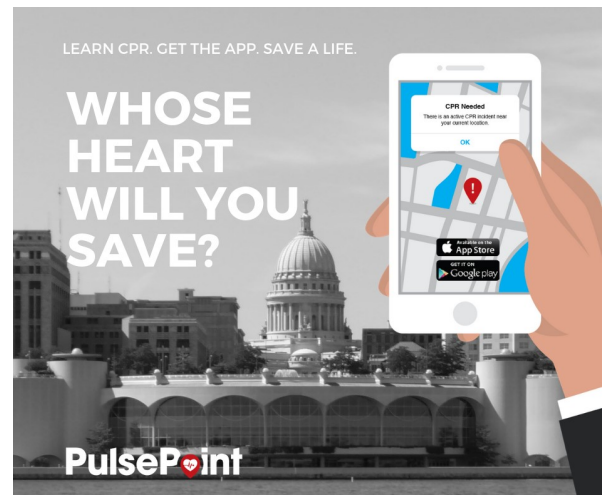
Case: You are called to a city park for an unconscious patient. When you arrive on scene, you are directed to the finish line of a race. A 40 year old man finished the half marathon and then collapsed after crossing the line. You notice a thin, athletic man who opens eyes on command but is minimally verbal on this hot July day. He has a patent airway and is breathing spontaneously but has a faint pulse. Initial vitals are: HR 130, BP 70/palp, RR 28, O2 99% and Temp of 104.0F. The patient is able to move all 4 extremities but appears confused and is intermittently following commands.

Heat-related illnesses should be considered as a spectrum, starting with heat cramps. Symptoms may include muscle cramps and nausea, treated with proper oral hydration and electrolyte replacement. Heat exhaustion is more serious and manifests as weakness, dizziness, near-syncope, fatigue. Additional treatment includes rest, passive cooling and more aggressive oral hydration, consider IV as well. Heat stroke is a life-threatening illness that may present with altered mental status and/or focal neurologic deficits. It is imperative that active cooling measures are started immediately. Remove clothing and remove the patient from the hot environment if possible. An ice bath on-scene (if available) should be prioritized. Transport with IV, monitor for cardiac arrhythmia, and continue cooling measures – ice packs to axillae, groin, and head. There were over 1300 deaths from heat-related illness in the US last year. The outcome is dependent on providing RAPID cooling measures to reduce the core body temperature.

Case Vignette

You are called to the home of a 16 year old male with chief complaint of shortness of breath. The parents called 911 after the child started complaining that “I can’t catch my breath.” On arrival, you find a tall, thin 16 year old boy sitting up in a chair. He looks apprehensive but is able to speak in complete sentences. He denies chest pain. Symptoms began at rest, without any recent trauma or illness. Vitals are BP 100/60, HR 100, RR 24, O2 sat 100%. On exam, he has diminished breath sounds on the right side, with clear lung sounds on the left. The heart has a regular rate and rhythm, NSR on the monitor.

Spontaneous pneumothorax: Incidence in children is 4 per 100,000 (male) and 1 per 100,000 (female). It is 22 times more common in smokers and also much more likely in tall, thin males. Most occur at rest. Physical exam may elicit decreased breath sounds on auscultation, hyper-resonance (sounds hollow if you tap on the chest wall), and muffled sounds (have patient hum or speak, will sound more dull on affected side). Diagnosis in the ED can be made by chest X-ray, though bedside ultrasound has more recently been shown to be even better than X-ray! During transport, use cardiac monitoring. Use supplemental O2 as needed or for comfort. Definitive treatment depends on the size of the collapse and the symptoms. Many are observed with serial X-rays, while others receive a small pig-tail catheter placed in the pleural space to apply suction to re-inflate the lung. The most common complication is recurrent pneumothorax. Keep this diagnosis in mind, as you can make a difference!



Protocol Suggestions

Have you noticed a typo or error in the Dane County Protocols? Or do you have a suggestion for the next update? We encourage you to use this [link](#) to share with our office any suggestions or concerns you may have!

Uplift WI - Peer Support Hotline

The Wisconsin Department of Health Services recently announced a new phone line available for Wisconsinites to get peer support if they are experiencing life challenges or mental health concerns. If you need peer support, you can call [534-202-5438](tel:534-202-5438) from the hours of 12pm-12am. Learn more at mhawisconsin.org.

Upcoming Events and Training

8/16 - 6pm, UW Health Monthly Training: Emergency Care for Large Burns

Register at uwhealth.org/EEN23

8/17 - SSM Health Monthly Training: Positioning for Success - Airway Management with Bob Barrix

6-7pm Virtual, or 7-8pm In-Person Only

9/21 - 6-8pm, SSM Health Monthly Training: Harm Reduction with Opioid Prevention Specialist Kailey Peterson

Thank you for reading! For questions, comments, or feedback you can contact the DCEMS office at dcems@countyofdane.com or by calling 608-335-8228. All other staff contact information can be found at em.countyofdane.com/EMS/contactus.