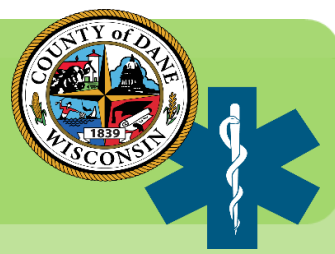


# Dane County EMS Newsletter

March, 2025



## SAVE THE DATE!

The Dane County Cardiac Arrest Survivor Celebration has been scheduled for Sunday, June 8th! It will once again be at the Mallards Duck Pond, with a baseball game to follow. We will be celebrating cardiac arrest survivors from April, 2024 through March, 2025. All EMS members are welcome! Stay tuned for more details to come.



## March Viz Quiz

You receive a call for a patient you often transport from the shelter. Chief complaint is bilateral foot pain, and upon examination you see the below. What diagnosis do you suspect?

- A. Sepsis
- B. Cellulitis
- C. Frostbite
- D. Infestation/scabies
- E. DVT

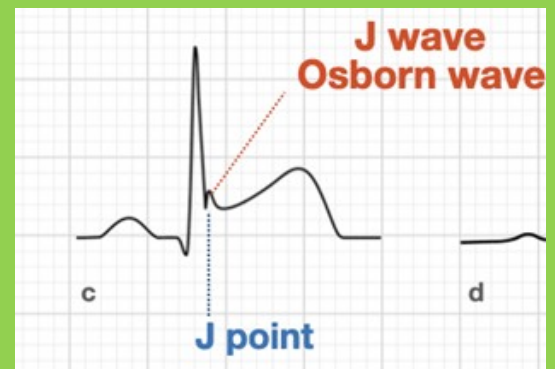


Submit your answer at <https://www.surveymonkey.com/r/8BK56HQ>

## February Viz Quiz Answer

Answer: D. Hypothermia

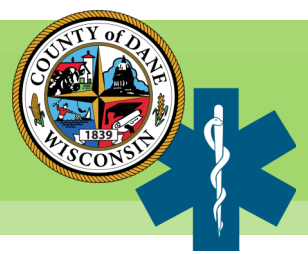
This is a typical ECG you would see in someone suffering from hypothermia (core body temp <35C). Characteristic ECG findings in someone who is hypothermic are bradycardia, Afib with a SLOW ventricular response, developing AV block (1st-3rd), or slow junctional rhythms. Another characteristic finding is the presence of an Osborn Wave (aka J-wave) which is a positive deflection at the J-point (transition from QRS to T-wave). It is usually most prominent in the precordial leads.



Congratulations to Ross from DeerGrove for winning the February Viz Quiz!

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## Case Study

**Case:** You are called to the private residence of a 36 year old woman with a headache. The patient awoke during the middle of the night with a severe, diffuse headache and nausea. No prior history of migraines. When she got up to use the bathroom, she was stumbling and felt unable to hold her balance. The patient further complains of blurry vision and numbness on the left side of her body. Her partner reports that the patient is pregnant and due to deliver in 2 weeks. On your initial assessment, there is a gravid female lying in bed, awake, looking uncomfortable. Eyes are dilated with equal pupils. She has equal strength and is able to speak clearly. Vitals: BP 164/100, HR 100, Resp 20, O2 97%.

### Clinical questions:

1. What do you do first?
2. What do you think is going on?
3. What are you most worried about?
4. Do you activate a code stroke when you call this patient in to the receiving hospital?

### Pre-Eclampsia and Eclampsia

Preeclampsia is a pregnancy-induced hypertension with BP > 140/90. It occurs after 20 weeks gestation and can present up to 6 weeks post-partum. Pre-eclampsia is considered severe when BP is >160/110. Eclampsia is the development of seizures in a patient with pre-eclampsia. Risk factors include: maternal age >35, BMI >30, IVF, prior history of preeclampsia, race (black), diabetes, chronic hypertension.

Preeclampsia happens in 4.6% of all pregnancies. Eclampsia is rare, with only 1% of hypertensive pregnant patients developing eclampsia. Mortality rate for eclampsia is 15% worldwide. In the US, rates are lower, mortality is twice as high for black women. There are 33 deaths per 100,000 pregnancies annually due to complications from either preeclampsia or eclampsia.

**Treatment:** Preeclampsia needs emergent intervention when severe: BP >160/110. Magnesium sulfate, 4g IV over 10 minutes reduces risk of seizures in preeclampsia. It is also considered emergent treatment of choice if seizure occurs. In the ED, delivery of the baby is the treatment for eclampsia.

What about the stroke symptoms? If the patient meets BE-FAST stroke criteria, it is important to communicate that as well. ABCs still take priority and you should treat the emergent condition.

### Back to the questions:

1. You should: check a blood sugar. Start an IV. Place on cardiac monitor. Get an EKG. Place patient in left lateral recumbent position (improves venous return via IVC).
2. Consider preeclampsia vs eclampsia
3. Is the baby at risk? What are the chances the patient could decompensate during transport? What would that look like?
4. This patient meets criteria for a stroke activation on the BE-FAST scale.

**Outcome:** In this particular case, a stroke code was not activated prehospital. Everything else mentioned above was carried out prior to ED arrival. Upon arrival, the patient had sustained tonic-clonic seizure and was subsequently intubated. The patient received emergent CT and CTA imaging that did not show aneurysm or acute thrombotic event. Emergent (crash) ED delivery was considered, but the patient was able to be stabilized enough to get taken to the OR for Cesarean section. Medications given in the ED included Magnesium Sulfate and Clevidipine.

## Upcoming Events and Training

**Spring 2025 EMS Education Session** - April 23, 8am-12pm. Virtual. Register at: <https://forms.office.com/r/wUyq4BGV6k6>

**Dane County CEVO V Classroom** - April 30th, 5:30pm-8pm. Virtual. Register at: <https://www.surveymonkey.com/r/BRN7JQY>

**Active Shooter Incident Management (ASIM) Basic** courses will be offered throughout the year and at various locations. To find a course and register, go here: <https://em.countyofdane.com/documents/pdf/2025-ASIM.pdf>

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