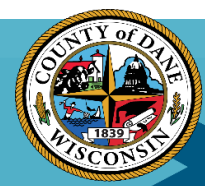


# Dane County EMS Newsletter

January, 2025



## Paramedic of the Year



Congratulations to Patrick McDonnell for winning the Paramedic of the Year Award! Patrick has been an exceptional member of Belleville EMS and other Dane County EMS agencies. His dedication, hard work, and service to our community are truly deserving of this recognition. This award is a testament to his tireless efforts and outstanding contributions to the field of emergency medical services.

## January Viz Quiz

You are responding to the local high school for a 16 year old male with a rash. The wrestling coach tells you that the patient had been complaining of itching at the site, but has not been able to get an appointment with his primary care physician. The coach is concerned because the child now seems confused and has a hard time following directions; his Google search has him concerned that this might be a sign of meningitis. The patient is alert and responsive, but seems distracted by an itchy rash on the back of his neck. The patient has a FSBS of 112, BP of 120/60, HR in the 60's, RR 16 and SpO2 of 99% on room air. Your partner notes an erythematous rash near the patients hairline, and you notice that your partner seems to be compulsively itching themselves now. The photo is what you see.



You believe the underlying cause of this patient's presentation is:

- A. Early Viral Meningitis
- B. Cimex lectularis infestation
- C. Tinea Capitis
- D. Nummular Eczema

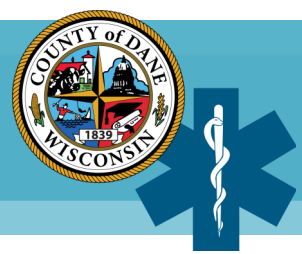
Submit your answer at <https://www.surveymonkey.com/r/KFT377T>

## November Viz Quiz Answer

Match the symptoms with the toxic exposure

- |  |                               |
|--|-------------------------------|
| 1. Tachycardia, fever, dry skin, confusion                     | A. Methamphetamines           |
| 2. Sweating, fever, vomiting, lethargy, upper abdominal pain   | B. Citalopram (SSRI)          |
| 3. Somnolent, jerking movements, long QTc                      | C. Amitriptyline (TCA)        |
| 4. Lethargy, vomiting, wide QRS                                | D. Benadryl (anticholinergic) |
| 5. Agitation, tachycardia, wide pupils, sweating, hypertension | E. Tylenol (acetaminophen)    |

Congratulations to Julie from Madison Fire for winning the November Viz Quiz!



## Case Study

You have been paged to a 31D02, Unconscious / Fainting (Near), unconscious person. Per the CAD notes you are being dispatched to a 65 y/o male who was having abdominal pain and nausea, then nearly passed out. On arrival, you recognize the patient as someone with whom you are familiar as you have transported him several times in the past for alcohol related complaints. The patient acknowledges an ongoing struggle with alcohol, and that he recently relapsed but is trying to “get clean” again. He has had diffuse abdominal pain, nausea and vomiting most of the day today. During your interview, he says to you that he has been having a hard time getting alcohol for the last few days, and was thinking about drinking rubbing alcohol after he saw Wolverine do it in the new Deadpool movie.

You look around the home and note a stray bottle of windshield washer solvent, but do not see any containers or rubbing alcohol. He allows you to take his vital signs; HR – 135, BP 160/84, RR 18, SpO2 99% on RA, temperature 97.6F. You note that he is diaphoretic when you check his blood sugar, which is 135. Your partner says, “He’s just drunk. AGAIN. Do we really need to transport him?”

### Discussion:

- What are you concerned may have led to this patient calling for EMS?
- If this patient wishes to refuse EMS transport, should he be allowed?
- What are some complications that can happen with chronic alcohol abuse?

**Rubbing Alcohol (Isopropyl Alcohol) Ingestion** - Symptoms of toxic ingestion may include nausea, vomiting, abdominal pain, dizziness, confusion, seizures, respiratory depression. While the exact amount varies, it is generally considered that ingesting 250 mL (8oz) of 70% isopropyl alcohol can be fatal for an adult. Treatment is generally supportive care, with IVF, airway support and seizure management.

**Methanol (windshield washer solvent) Ingestion** - Methanol is metabolized into formic acid, which causes severe metabolic acidosis and can lead to blindness, neurological damage, and death. Initial symptoms may be mild and can be mistaken for other conditions. More serious symptoms, such as vision problems and neurological complications, typically appear 12-36 hours after ingestion. *Treatment is time sensitive: Fomepizole is a medication that inhibits metabolism of methanol into formic acid. Hemodialysis can remove the toxic metabolites from the body. Ethanol can be administered to competitively inhibit the alcohol dehydrogenase enzyme and allow the body to clear the methanol.*

**Ethylene Glycol (antifreeze) Ingestion** - Ethylene Glycol is a sweet-tasting but highly toxic substance that can lead to kidney failure and death. Treatment is time sensitive, and is approved similarly to methanol toxicity (above).

**Alcoholic Ketoacidosis** - Alcoholic Ketoacidosis (AKA) is a serious metabolic disorder that occurs in chronic alcoholics who experience prolonged periods of heavy alcohol consumption followed by abrupt cessation of alcohol intake. Common symptoms of AKA may be nonspecific and include: abdominal pain, nausea and vomiting, dehydration, confusion and lethargy. Treatment is similar to Diabetic Ketoacidosis, with focus on IVF resuscitation, close blood sugar monitoring and replacement of potassium as needed.

### Don't be Fooled by Alcohol

In 2022, 24/7 Wall St. ranked Wisconsin as the nation's “drunkest” state based on self reporting, with 25.2% of residents drinking excessively. In 2021, 41 of the 50 most heavily drinking counties were located in Wisconsin. Alcohol intoxication, alcohol withdrawal and ingestion of toxic alcohols such as methanol, polyethylene glycol or isopropyl alcohol are very difficult to distinguish in the field - don't be complacent and always have a high index of suspicion!

<https://www.uptodate.com/contents/methanol-and-ethylene-glycol-poisoning-pharmacology-clinical-manifestations-and-diagnosis>

<https://wisconsinwatch.org/2023/03/do-wisconsin-residents-report-excessively-drinking-more-alcohol-than-those-in-other-states/#:~:text=Yes.,of%20Wisconsin%20residents%20drinking%20excessively.>