

# Dane County EMS Newsletter

October, 2022



## October Viz Quiz

Group these natural and synthetic opioids into the following durations of action: VERY SHORT (<1 hour), SHORT (1-6 hours), or LONG (>6 hours).

- |                  |                |
|------------------|----------------|
| A. Morphine      | F. Hydrocodone |
| B. Codeine       | G. Oxycodone   |
| C. Heroin        | H. Fentanyl    |
| D. Hydromorphone | I. Methadone   |
| E. Buprenorphine |                |



Image sources: [x][x][x][x][x][x][x][x][x]

Submit your answers at <https://www.surveymonkey.com/r/Q2S9DK8> for the chance to win a prize!

## September Viz Quiz Follow-Up

**Answer: C. Herpes Zoster (VZV or “Shingles”)**

- Varicella Zoster Virus (VZV) infection causes two distinct diseases; Primary infection results in varicella (“chickenpox”) which is characterized by a vesicular lesion on an erythematous base in different stages of development, most concentrated on the face and trunk. Reactivation of the latent VZV virus causes herpes zoster (“shingles”), a painful, unilateral vesicular eruption, which usually occurs in a single or two contiguous dermatomes.
- Herpes Zoster affects more than 1.2 million Americans annually. The CDC estimates that 30% of persons in the US will experience shingles during their lifetime.
- The natural history of herpes zoster is influenced by the immune status of the host. Reactivation is influenced by age-related decline of the immune system, disease-related immune-compromise or iatrogenic immunosuppression (caused by medications like steroids).
- People with herpes zoster can transmit Varicella Zoster Virus, causing chickenpox in patients who have never had varicella or the varicella vaccine. VZV is spread by direct contact with the active herpes lesions or via airborne transmission from individuals with localized shingles.
- Presenting clinical manifestations of herpes zoster are usually rash and acute pain. Fewer than 20% of patients who develop a rash have systemic symptoms, such as headache, fever or fatigue. Pain is the most common symptom of zoster, and is described as “burning”, “throbbing” or “stabbing”.
- In immunocompetent hosts, the lesions crust by 7-10 days and are no longer considered infectious.
- Some complications include postherpetic neuralgia (10-15% of cases, defined by significant pain lasting 90 days after the rash), herpes zoster ophthalmicus (8-20% of cases, defined as zoster involvement of the 5th cranial nerve and a sight-threatening condition), Ramsay Hunt Syndrome (ipsilateral facial paralysis, ear pain and vesicles in the auditory canal), aseptic meningitis, encephalitis or Guillain-Barre Syndrome.
- Treatment with antiviral medications is recommended within 72 hours of clinical symptoms. The benefit appears to be greatest in patients >50 years old.
- Episodes of recurrent zoster are fortunately uncommon.



Citation: [https://www.uptodate.com/contents/epidemiology-clinical-manifestations-and-diagnosis-of-herpes-zoster?search=zoster&source=search\\_result&selectedTitle=2~150&usage\\_type=default&display\\_rank=2](https://www.uptodate.com/contents/epidemiology-clinical-manifestations-and-diagnosis-of-herpes-zoster?search=zoster&source=search_result&selectedTitle=2~150&usage_type=default&display_rank=2)

**Congratulations to Danny from DeerGrove EMS for winning the September Viz Quiz!**

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## Case Study

**Case:** You are called out for a 23D, overdose. Upon arrival on scene, you are met at the door by a tearful young woman who asks you to hurry, her boyfriend needs help. She leads you to a bedroom at the back of the house that is dark and with some significant clutter, making it difficult to reach the young male in the bed. Once you are able to make patient contact, you identify a male, appears to be about mid 20s in age, palpable pulse, breathing about 6-8 breaths/minute. You note pinpoint pupils and upon further questioning of the girlfriend, she does admit they did heroin. After your partner initiates supportive breaths with BVM, you administer naloxone IN. As you are working to obtain your initial set of vitals, you note the patient is starting to move around and pushes the BVM off of his face.

- Did you know that in 2020, of the people who died in Dane County of an overdose, 33% had had an encounter with EMS in the year before they died?
- Though it is not infrequent that patients in these situations may not be interested in further assistance or transport at the time of our EMS call - these interactions may still be an opportunity to help reduce the likelihood of a future fatal overdose.
- Leave behind naloxone kits offer a non-judgmental, non-coercive strategy to reduce harm. Dane County EMS, in partnership with Public Health, plans to expand this program to more EMS agencies starting in 2023.

## Leave Behind Kit Components



- CPR pocket-sized breathing mask
- Pair of gloves
- Fentanyl test strip kit (3 strips, 3 vials of water, directions)
- Narcan® kit (box with two, 4mg nasal spray doses and directions)
- Resource guide includes information on crisis, treatment, recovery, and harm reduction services



Of the people with an EMS encounter in the year before they died...

**49%** were for a non-fatal overdose.\*

**26%** occurred within 30 days of death\*

**33%** had 3 or more EMS encounters in the past year.

Percentages among people with an EMS encounter are based on small numbers and should be interpreted cautiously.

## Distribution:

- Can occur regardless of transportation status
- Consider leaving with family and/or friends
- Can be left at the scene or at the hospital with patient
- No limits on the number of kits that can be distributed
- Remember the importance of the people surrounding the overdose victim as well
- Don't forget to document how many kits were distributed and to whom (make sure to include the key words: "LEAVE BEHIND KIT" in your narrative).

## Case Vignette of the Month

**Case Study:** You are paged to a 9E PNB. CAD notes law enforcement has given naloxone x 2 as they saw drug paraphernalia in the house, with no response. Upon your arrival, law enforcement is providing breaths via BVM and compressions to an approximate 55-year-old obese, male on the living room floor of a residential home. Per family member bystander, he was last seen about an hour ago resting on the couch watching TV. On your initial assessment, the patient pulseless and not responsive.

## Discussion:

- What are your priorities in managing this patient?
- What medications would be most valuable to consider in the management of this patient?
- What are the benefits/risks of naloxone use in cardiac arrest?
- Any additional considerations in regards to where you work the arrest, disposition/termination criteria or overall management of the cardiac arrest?

## Kudos!

**Recognize a member, crew, or agency for going above and beyond to provide exceptional patient care using this link.**

## Upcoming Events and Training

10/20, 6:30-10:30pm - The Lethal Triad of Trauma and Hemorrhage Control (700 S. Park St. or Virtual)

<http://bit.ly/ssmemstraining>

11/9 and 11/10, 8am-4:30pm - Crisis Intervention Partner (CIP) Training

- Understanding Mental Illness
- Elderly, including dementia
- Trauma-Informed Care
- Developmental Disabilities and Autism Spectrum Disorder

Email [jhyatt@namidanecounty.org](mailto:jhyatt@namidanecounty.org) to register

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