

Fall 2021

EMS Medical Director Spotlight

Eric Cortez, MD, FACEP, FAEMS
OhioHealth System EMS Medical Director

Welcome to our new Medical Director Spotlight feature. Though you might briefly interact with our physicians when you hand patients off in the emergency department or attend continuing education events, those moments don't often provide an opportunity to learn about a doctor's interests and experience. We hope this Spotlight provides you with a chance to get to know your EMS team a little better.

MEET DR. SCHNEIDER

DIRECTOR'S CORNER

Ohio EMS Conference Update

Holly Herron, DNP, RN, CNP

The end of summer marks the start of school and the beginning of fall. We reset priorities to include education with the start of each school year. This year, we are still fighting against the COVID-19 pandemic. We are sadly experiencing the fourth wave of the virus in the United States and across the world, causing us to pull back and revise event planning.

In the spirit of safety, conferences will remain virtual at this time. The OhioHealth EMS Update in Dublin on November 12 will now be a virtual conference. We will cover topics such as tranexamic acid (TXA) and blood products, cardiology, obstetrics and medical emergencies. Please stay tuned for further details. We hope you can join us.

EDUCATION UPDATE

Barbara Dean, BSN, RN
Paramedic Program Manager

COVID-19 has presented many challenges to EMS providers seeking continuing education. OhioHealth is now offering online education opportunities. To schedule training via Webex or at your location, [fill out our group education request form](#).

Subscribe to the OhioHealth EMS Newsletter [here](#) or by using the QR code below.



IN THE FIELD

Indications of Carbon Monoxide Poisoning

Erika Kube, MD, FACEP

Intentional carbon monoxide (CO) poisoning may be obvious in the case of a suicidal patient who presents comatose after inhaling car exhaust, but mild, unintentional CO poisoning presents with nonspecific and vague symptoms. If this diagnosis is missed, a potentially treatable patient may be discharged back to the environment that sickened them in the first place, often with dire consequences.

Given that CO poisoning has higher morbidity and mortality rates than all other poisonings, and is the most common poisoning overall, the likelihood of encountering a case in any practice is high. Having a high index of suspicion for CO poisoning is paramount.

Carbon monoxide poisoning is common during cold months, with the misuse of non-electronic heating and cooking devices. Use of these devices has also been shown to increase the incidence of CO poisoning during natural disasters like hurricanes, when prolonged power outages are common. A broken or malfunctioning furnace is the most common source of a CO leak, highlighting the importance of yearly furnace maintenance, regular changing of the air filter, and ensuring that CO detectors are installed in the home and functioning properly.

When family members or group of co-workers present with parallel symptoms, one must consider the diagnosis of CO poisoning, rather than a viral illness that would start in an index patient and then pass to others over time. For any suspicion of CO poisoning, it's prudent for EMS or the local gas company to test ambient CO levels on-site.

Prompt removal of the patient from the source of CO poisoning and high-flow oxygen by nonrebreather mask at 15 L/min is the mainstay of treatment. Breathing this concentration of oxygen effectively reduces the half-life of carboxyhemoglobin from 300 minutes at ambient atmospheric conditions to 90 minutes. Hyperbaric oxygen therapy is indicated for severe poisonings.

SERVICE LINE FEATURE

Big news for cardiac patients in the Dublin community

Natalie Chatterton
Communications Specialist

Earlier this year, OhioHealth Dublin Methodist Hospital began renovations to their Level One Cardiac Catheterization Lab, which will allow for Level Two designation that is percutaneous coronary intervention (PCI) and ST-elevation myocardial infarction (STEMI) capable.

The Level Two cath lab at Dublin Methodist is set to open in Fall 2021 and will welcome cardiologists Todd Cardwell, MD, Timothy Timko, MD and Douglas Van Fossen, MD.

As work continues, stay tuned for an education and information session with providers from the Dublin Methodist Emergency Department, the cath lab cardiologist team, and local EMS teams.

This is exciting news that brings lifesaving cardiac care closer to home for our patients.

CASE STUDY

Carbon Monoxide

Erika Kube, MD, FACEP

A mother, father and two children presented to the emergency department on a Sunday morning with flu-like symptoms. All family members described similar symptoms of fatigue, nausea, headache and loss of appetite over the previous two days. Physical examination findings for all were largely unremarkable. The family was diagnosed with flu/viral syndrome and discharged home.

Relatives were contacted the following Monday morning when the adults failed to report to work. Police were dispatched to the residence, where they found the father, mother and their two dogs dead. Carbon monoxide readings in this family's home were 680 ppm. The children were found comatose in their bedroom, where the windows were open and CO levels were found to be 465 ppm. They were flown to a tertiary referral center with hyperbaric oxygen therapy capabilities.

Carbon Monoxide Fast Facts

- Carbon monoxide poisoning is the most common poisoning, with high morbidity and mortality.
- Symptoms are vague and can be similar to many other conditions, like headache, malaise, nausea and vomiting.
- Treatment is high-flow oxygen, or hyperbaric oxygen for severe poisonings.
- You must consider the diagnosis to make it!