

# EMS Beat



News You Can  
Use From the  
Office of EMS  
Activities

MARCH / APRIL 2008

## Epinephrine in Cardiac Arrest?

### New Study Raises Questions on Epinephrine use in Resuscitation

There have always been some lingering questions about the real effectiveness of Epinephrine in cardiac arrest. However it had become impossible to study because it is currently written in all guidelines and has been ingrained as the standard of care. Several years ago Singapore EMS began to train its paramedics in the intravenous administration of drugs and they realized this presented them with a unique opportunity to look at the effect of adding Epi to their resuscitation efforts, which up until then had consisted only of defibrillation and CPR.

From Oct 1, 2002 through Oct 30, 2004 they enrolled 1,296 patients, with 615 in the pre-Epi group and 681 in the Epi-group. There were no demographic (age, sex, rate of V-fib etc) differences in the two groups, however only 44% (301) received the drug during resuscitation. Nonetheless the addition of Epinephrine did nothing to improve resuscitation. ROSC (return of spontaneous circulation) was 15.9% when epi was given vs. 17.9% when it was not used. Survival to hospital admission was (SEE NEXT PAGE)

### FIRST EMS FELLOW FOR SUMMA HEALTH SYSTEM

The Office of EMS and the Department of Emergency Medicine at Summa Health System is proud to announce that Dr. Colleen Bahlla, M.D. will start as EMS Research and Education Fellow at Summa Health System this July. Although there are approximately 50 EMS fellowships around the country, this is the first in Northeastern Ohio and only the third in Ohio. The other two are at Ohio State and Cincinnati. This will be the only EMS Fellowship in the country with an emphasis on research and education.

Native to Akron, Dr. Bahlla is a graduate of Northeastern Ohio University School of Medicine (NEOUCOM) and the EM residency program at Summa Health System. She has an interest in research and teaching and enjoyed EMS as a resident. She will split her time between the emergency department and EMS, where she will work on a number of research projects and assist with the teaching of EMS. Please join us in welcoming her to this new position.

### ISRAELI INTERNATIONAL EMS CHAMPIONSHIP SEPTEMBER 2008

The 2<sup>nd</sup> Israeli International EMS competition will be held September 7 through September 9, 2008. It will take place on two levels with BLS teams staffed by EMTs and volunteers and ALS teams staffed by EMTs, paramedics or nurses and doctors according to the system used in their country. The event is patterned after the long-running European Rallye-Rejviz which combines features of a road rally and EMS competition.

Teams will be provided an equipped ambulance and an Israeli driver/translator (paramedic or EMT –according to the team's level). The official language will be English. We are looking to put together a team or two from the Akron area to compete. A couple of days of sightseeing and visits to local fire and EMS stations are also planned. Interested individuals are urged to contact Dr. Mencl at 330-379-9630.

## QUESTIONS FROM THE FIELD

Who am I supposed to call about my patient?

All right, so you don't really want to call Ghostbusters and you aren't sure of who to call. Here are some guidelines.

In all cases call the destination hospital (see below) even if it's a protocol type question or med control issue such as a refusal. That facility will be assuming care of and responsibility for the patient and should be aware of what is being done or happening to the patient.

If the patient's condition requires them to go to a specific hospital such Children's for burns, a level one trauma center or a STEMI, discuss this with the patient and call their choice if possible or the closest appropriate facility.

Determining the destination hospital:

<b>Pediatrics –</b>	this one is easy call Akron Children's
Unless ...	
<b>Major trauma -</b>	The adult level one trauma centers will except 16 years or older
<b>Psych –</b>	however they (the adult hospitals) will not take anyone under 18 that is still in school.

Ask the patient or family where they get care or where they would like to go.

## (Epi in Cardiac Arrest continued)

7.5% in both groups while 30 day survival was 1.6% for those receiving Epi vs 1.0 % for those who did not.

The study was published in the November 2007 issue of Annals of Emergency Medicine.

Why didn't everyone get Epi after it was approved? It may be because the paramedics were only allowed two attempts at starting an IV. Nonetheless it was given to enough people that an effect should have been detected. Certainly in our own experience high dose Epi did not pan out either and it may be that it really doesn't do anything for many of these patients. At this point this doesn't mean we should chuck all our Epi but it certainly supports the increased emphasis on chest compression and defibrillation.

## Reference

Ong ME, Tan EH, Ng FS, et al.; Cardiac Arrest and Resuscitation Epidemiology Study Group. Survival outcomes with the introduction of intravenous epinephrine in the management of out-of-hospital cardiac arrest. Ann Emerg Med. 2007 Dec;50(6):635-642.

If you have any ongoing questions or ideas contact the EMS Activities Office at 330-379-9630.

Missed any editions of EMS Beat? Contact Jon Zalewski at 330-379-9582 or [zalewskj@summa-health.org](mailto:zalewskj@summa-health.org) to request a copy.

## EMERGENCY PREPAREDNESS UPDATE

With the weather breaking the Summa Health System Decon Team will be having regular training drills on Decon tent deployment. These drills will be taking place in the ambulance bay at Akron City Hospital. Precautions will be taken to minimize space utilized but these deployments will affect ambulance traffic patterns. Thank you in advance for your patience in this matter.

## UPCOMING EVENTS

**Summa Health System  
EMS Advisory Meeting**  
May 27, 2008  
1:00 PM  
Akron City Hospital  
Professional Center South  
Pods A/B

## CONTINUING EDUCATION OPPURTUNITIES

**12 – Lead EKG Interpretation Course**  
5/27 @ 7:30 am  
Registration Required  
Contact Jon Zalewski @  
330-379-9582

**Geriatrics  
OB/GYN Emergencies**  
Dr. Scott Wilbur  
Dr. Stacey Shundry  
6/30 @ 6 pm  
Contact Lee at 330-379-5966 to register

The above classes posted are at St. Thomas Hospital in the auditorium.