Paramedic Committee
Meeting Minutes
April 14, 2008

PRESENT	REPRESENTING
Chief Daryl McNutt	Whitehouse Fire
EMS Chief Martin Fuller	Whitehouse Fire
Rich Ellett	Maumee Fire – LS7
Jeff Nissen	Oregon Fire – LS8
Brian Dotson	Whitehouse Fire – LS9
Chief Rick Helminski	Springfield Twp. Fire
Captain William Hull	Toledo Fir e EMS Bureau
Chief Charles Flack	Jerusalem Twp. Fire
Craig Koperski	Sylvania Twp. Fire – LS6
James Fenn	Flower Hospital Trauma
Mickie Linkenda	ProMedica
Peter Grehl	DTS Mobile Medical Services

STAFF	
David Lindstrom	Medical Director
Dennis Cole	Emergency Services Director
Brent Parquette	QI/QA
Pat Moomey	EMS Dispatch Manager

ABSENT	
Starr Stockton	Toledo Fire
Gina Shubeta	Toledo Fire
Robert Kendrick	Toledo Fire – LS4
Tim Treadaway	Toledo Fire – LS3
Sherry Watson	Nurse Manager – Flower EC
Jodi Livecchi	Springfield Twp– LS10
Tracy Stanford	Washington Twp. Fire
Keith Mooseman	Waterville Fire
Mark Briggs	Ottawa Hills
Matt Homik	Monclova Twp. Fire

Call to Order

Chief McNutt called the meeting to order at 9:02 a.m.

Minute Approval

The minutes from March 10, 2008 meeting were available for review. A motion by Rich Ellett to accept the minutes was seconded by Craig Koperski. Minutes were approved as printed.

Training & QA

Brent reported March's CE was entitled Medical Emergencies/Case Reviews. The paramedics had nine difference scenarios, some medical and some trauma. There were no instructors. In the past when the paramedics broke out in groups, they would migrate to their own entity. Brent reported he changed the dynamics where he separated them. Brent reported he would go into the different groups to see who took charge and how they dealt with scenarios. Brent reported it was very interesting to see. This removed people from the comfort zone March also dealt with going over the ResQGard and implementation was April 1st. To date there have been five uses of the ResQGard. The outcomes have been favorable in the preliminary results. It's doing what it is suppose to and the data will be forward to the company representative. Brent reported that he or Dr. Lindstrom contacts the paramedics involved in each case the ResQGard is used. Brent reported the EPCR has been updated to populate the information when the device is used. Also the paramedics are told when the equipment is taken off the patient at the hospital, they are to take it. Brent reported there is a concern that when the pressure is up with the use of the ResQGard without fluid, the pressure plummets after it is taken off.

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Brent reported April's CE is the renewal PEPP training. It is an eight hour class, having eight sessions this month. It has two lectures, a video and scenarios.

May's CE will provide training on hypothermia on post cardiac arrest patients. Brent distributed a **draft** protocol. (attached) Dr. Lindstrom reported the protocol is modeled from Wake County EMS, North Carolina, and solely targets post arrest patients with a pulse. These patients will be taken to a STEMI hospital. All the STEMI hospitals have agreed to do the ICE (Induce Cooling by EMS) therapy. American Heart Association has recommended this treatment for the last 3-5 years. Dr. Lindstrom reported there are few systems currently doing this. Dr. Lindstrom reviewed the draft protocol with the committee. Dr. Lindstrom reported the paramedics will have 'work tools' to help them when doing the procedure. These are new to LCEMS and we are looking for feedback.

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The question was raised as to how the saline would be kept cold. Dr. Lindstrom reported the vehicles will have a 12 volt cooler. The cooler costs $400 and in this way it will keep a temperature range. The cooler will also have a temperature logging device that will be downloaded periodically for data collection purposes. Dr. Lindstrom also reported the paramedics will be trained in the use of an Electronic Tympanic Thermometer. The paramedics will be responsible to check the temperature at the beginning and after patient is at the hospital. Dr. Lindstrom described three things LCEMS will be getting back from the hospital's data from this protocol: (1) initial core temperature by hospital in EC, (2) initial blood pressure and (3) status at discharge. Dr. Lindstrom reported paralytics used for these patients will not be used with any other type of patient. Dr. Lindstrom reported a target implementation is June 1st. Also the nurse managers were told and the Medical Committee meeting and Brent informed the regional managers April 11th. Dr. Lindstrom reported there are two hospital phases of support of ICE: (1) what the ER does with these patients and (2) critical care support at the hospital. Dr. Lindstrom reported the hospitals are at various stages of preparation to receive these patients and as June 1 approaches, he will be in contact with the hospitals to gauge readiness.

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Old Business

Rig issues – Dennis Cole reported they are continuing to work with the air horn issue. Marty Fuller reported LS9's driver's seat broke and was told it was a compressor issue. Chief Flack brought up the issue of the vehicles swaying with others reporting the same type of problem.

Parking at Toledo Hospital – Dr. Lindstrom reported the issue of lack of adequate ambulance parking under the overhang was shared with Brian Biggie, department director. Dr. Lindstrom reported he personally doesn't know if there will be a resolution to it. Dr. Lindstrom reported the proper process is the squad/ambulance will drop the patient off and then move their vehicle out of the way, but what happens is the paramedics do their paperwork, get their linen, drugs and whatever needs to be done before they leave, and fail to reposition the vehicle to the parking area. Historically, security moved the vehicles, but the hospital doesn't have security do that anymore and his suggestion is the driver of the vehicle move the vehicle right after the patient is dropped off. Brent will reinforce this in CE. TTH is reportedly reminding privates of this process as well.

Adapters – Jeff Nissen reported the committee discussed in February's meeting obtaining adapters for the Life Pak fast patch pads for the Phillips units so the pads wouldn't have to be replaced. The suggestion was made to ask the Philips representative to provide them.

Dennis Cole reported LCEMS met with a Medtronic representative regarding the quality of transmissions and where the technology systems in the future are heading. There is a future connectivity issue. There was also discussion regarding Phillip's central data hub and whether jurisdictions will commit to data cards with the modem and the monthly charge to make this work.

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Mapping – Chief Fuller asked about mapping on the life squads and any movement towards that. He suggested Garmin GPS units for a couple hundred dollars each as an ecomonical solution pending integration into the CAD system. Dennis Cole reported it is being researched and the issue of technology and where we are going to go.

Rich Ellet asked if the use of Romazicon is being considered to use. Dr. Lindstrom reported it has been looked at it and will be added to the list of things for 2009. Dr. Lindstrom reported it's a good drug.

Backboard – Rich Ellett distributed a picture of a bloody backboard found in the equipment locker at UTMC that had been in there for a couple of days. Rich asked whose job it is to clean the back boards. Dr. Lindstrom reported most of the time it's the hospital's job because they take the patient off the backboard. Dr. Lindstrom reported he will pass this on to the UTMC.

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New Business

Catheters – Marty Fuller passed around a couple of twin pack blunt catheter tips. He reported this single unit would replace two. Marty suggested it for use.

Open Discussion

Select 3 tubing – Rich Ellett reported he thought the county should get rid of the Select 3 tubing because it gets thrown away at the hospital. He suggested going back to the different types used before. Marty suggested again the use of saline locks.

Adjournment and Next Meeting

With no further business the meeting was adjourned at 10:25. The next meeting is scheduled for Monday, May 12th at 9:00 a.m.

DRAFT

I.C.E – Hypothermia Protocol (Induced Cooling by EMS)

DRAFT

Current research has shown, almost universally, that therapeutic hypothermia reduces brain damage following cardiac arrest. It is well known that the brain responds poorly to hypoxic events. In most situations, the 4-6 minute "point of no return" still applies. Part of the problem (perhaps not realized by many responders) is that brain damage will continue for several hours following resuscitation; it doesn't simply stop because the patient's heart starts beating again. Therapeutic hypothermia can help increase the odds of these patients recovering completely.

Paramedics play an important role in beginning the therapeutic hypothermia process, which usually must continue for a minimum of 12 hours following cardiac arrest. Since therapeutic hypothermia benefits decrease drastically after a delay of even a few minutes following successful cardiac arrest resuscitation, EMS may be in the best position to begin immediate treatment.

Criteria for Induced Hypothermia:

1. ROSC after cardiac arrest not related to trauma or hemorrhage
2. Age $\geq$ 16
3. Initial temperature > 34C
4. Patient has advanced airway in place (e.g., ETT, LMA) and remains comatose (no purposeful response to pain)
    a. If unable to secure an advanced airway in place, **DO NOT** initiate induced hypothermia
5. Pregnant female with obviously gravid uterus

Assessment Notes:

1. When exposing patient for purpose of cooling, undergarments may remain in place. Be mindful of your environment and take steps to preserve the patient's modesty.
2. **DO NOT** delay transport for the purpose of cooling.
3. Reassess airway frequently and with every patient movement.
4. Patients develop metabolic alkalosis with cooling. **DO NOT** hyperventilate.
5. If there is a loss of ROSC at any time, discontinue cooling and go to appropriate protocol for treatment.
6. Continue to address specific differentials associated with original dysrhythmia or cause of arrest (H's and T's).
7. Patients with ROSC and/or induced hypothermia should be triaged to the closest "Hypothermia" center for continuation of the cooling process. A hypothermia "Alert" should be declared through LCEMS Dispatch.

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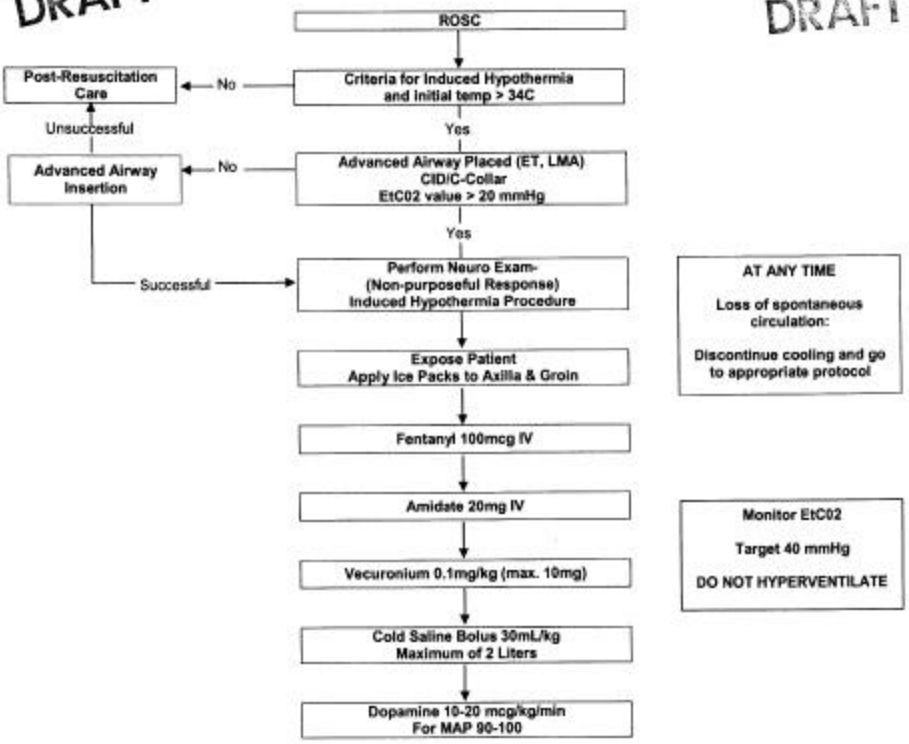
I.C.E – Hypothermia Protocol (Induced Cooling by EMS)

History:	Signs/Symptoms:	Differential:
• Non-Traumatic Cardiac Arrest	• Return of Pulse (ROSC)	• Continue to address specific differentials associated with the original dysrhythmia



Assessment Notes:

- In the event that your patient's MAP increases to > 120, re-dose Amidate at 20mg IV (at least 5 minutes after initial dose).
- With signs of patient movement (i.e., gasping, eye fluttering, seizure activity, movement), re-dose Vecuronium at 1/10 the original dose (.01mg/kg IV) and repeat Amidate at 20mg IV.

I.C.E – Hypothermia Protocol
(Induced Cooling by EMS)

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Screening for Utilization

- ☐ Return of Pulse (ROSC)
- ☐ Age ≥ 16
- ☐ Temperature > 34C (Tympanic measurement)
- ☐ No purposeful pain response
- ☐ Intubated (or LMA) with EtC02 > 20 mm Hg
- ☐ Pregnant female with obviously gravid uterus

Preparation for Induction - Hypothermia

- ☐ Conduct NEURO assessment:
  a. Pupils (size, reactivity, equality)
  b. Motor Response to Pain
- ☐ Remove clothing, protect modesty
- ☐ Apply cold packs to axilla and groin
- ☐ Goal EtC02 = 40; NO Hyperventilation
- ☐ Attempt second IV (if not in place)

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Induction of Paralysis

1. Administer Fentanyl 100mcg IV

2. Administer Amidate 20mg IV

3. Administer Vecuronium 0.1mg/kg IV (max. 10 mg)

Weight (lbs)	Weight (kg)	Dose (mg)	Volume (cc)
88	40	4	4
110	50	5	5
132	60	6	6
154	70	7	7
176	80	8	8
198	90	9	9
220	100	10	10

Vecuronium 1mg/mL Only

2

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Saline Infusion and Maintenance of Mean Arterial Pressure

1. Initiate cold saline bolus through up to two (2) IV or IO access points
2. Infuse cold saline at 30mL/kg to maximum of 2 Liters

Weight (lbs)	Weight (kg)	Volume Target (mL)
88	40	1200
110	50	1500
132	60	1800
> or =143	> or =65	2000

3. **Target Mean Arterial Pressure (MAP): 90-100**
4. Check MAP on the LP12, but manually monitor

Systolic	Diastolic	MAP
110	80	90
120	75-90	90-100
130	70-85	90-100
140	65-80	90-100

MAP = Diastolic Value + 1/3 Pulse Pressure
- **80 ≤ Target Diastolic ≤ 90**

5. If chilled saline does not maintain MAP go to 4

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Maintenance of MAP with Pressors

1. Support BP with Dopamine as required to **maintain MAP of 90-100**

The values in this chart are drips per minute on a 60 drop/minute drip set:

Dopamine 400mg/250mL D5W

Weight (lbs)	Weight (kg)	5mcg/kg/min	10mcg/kg/min	20mcg/kg/min
88	40	8	15	30
110	50	9	19	38
132	60	11	23	45
154	70	13	26	53
176	80	15	30	60
198	90	17	34	68
220	100	19	38	75
242	110	21	41	83

NOTE: Discontinue Dopamine drip when diastolic pressure is ≥ 90 or MAP ≥ 100.

2. Cold saline is a strong vasoconstrictor. Watch MAP closely!

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Lucas County EMS
Noncredit Course and Instructor Evaluation
Course: PEPP
Instructor: Brent Parquette
Course Dates: April 3, 8, 9, 10, 15, 16, 17, 22, 23, 24, 29, 30, 2008

COMMENTS

April 3 2008

- Skills were excellent!!
- Mr. Couture did a fine job with his lecture.
- Marty was great.

April 8 2008

- Good course.
- Love the skill stations.

April 9 2008

- Good info and great review.
- This PEPP was way better & ran smoother than last year.
- Good review. Keep it up.

April 10 2008

- Good Review
- This course is worse than ACLS!
- Good Review

April 15 2008

- Day went by quickly.
- Glad to have Tom Back. He really does a nice job on lectures and is sharply dressed as always.
- Mints – a bowl of mints! $1.00 a bag.

April 16 2008

- It's good to have T. Couture back fro C.E. sessions.
- Video lessons are usually quite redundant. Today is no exception. The whole video on airway management was handled in the practice stations. I realize this is mandated by PEPP. Perhaps an eval to the National level would be appropriate. No complaints on the LCEMS staff.

- Tom's moulage was hilarious, his sabbatical from the comedy tour really paid off. Kudos Tom!
- It was nice to have thrown Tom Couture a bone and let him visit the class to lecture and have the opportunity to try out new material. You could tell he was thrilled it was as if he never left.
- Bring PALS back!!!
- Everyone knew what they were teaching & did a great job.
- Great class!
- E-Z-IO system is needed! Protocol consideration for bypass of hospitals to pediatric acute care hospitals. We do it for adults why not our kids?
- Please!! Bring PALS back too!!

April 17 2008

- Good use of time.
- Video was bland.

April 22 2008

- Ryan did surprisingly well! Good job Ryan
- Do 8 hour classes during winter months, not on nice spring days. Thanks for getting rid of PALS.
- Good job on the lectures & skill stations. Very helpful & informative.
- Once again, the hands-on work is helpful.
- Good course.
- Skill stations were very good & reinforced seldom used skills.
- Excellent job done by all. Need one broselow tape for station though.

April 23 2008

- Good, informative course.
- I wasn't sure I liked the 9 a.m. start – but I think it works out better – what about another a.m. session? I have never seen the pedi IV/IO video before today – it was very helpful. – Ditto on use of Magills.
- Videos were HORRIBLE!!! - Basic paramedic skills & info– Gained NO knowledge from them.
- The class was informative and enjoyable.
- Break out sessions were informative. Lectures are always well done.
- Maybe have a few more real life case studies.

April 24 2008

- Very good!
- Good hands on station
- Good as last year. Hands on scenarios were good refreshers.
- Good classroom & practicals.
- Good review/good stuff – scenarios
- Good review

April 29 2008

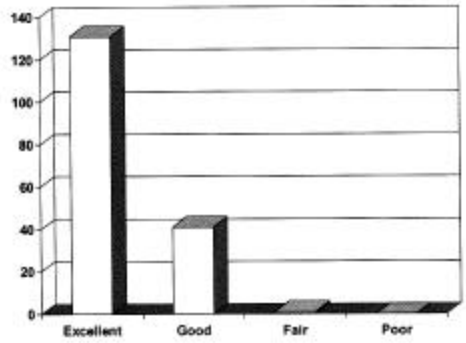
- Good use of time between lecture/v ideo/hands-on. Although we do not see a lot of peds, would still like to see the PALS updates similar to that of ACLS, maybe do alternating years so it does not take from other materials.
- Instructors were awesome!!
- Good job!

April 30 2008

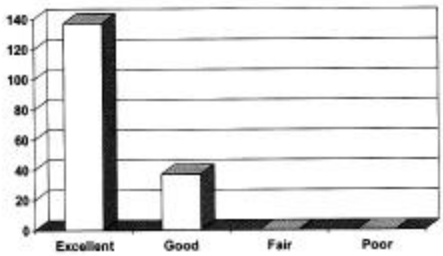
- It's bad when one of your instructors says that they won't use ResQGuard or ICE protocol, after all I can't get in trouble for doing it wrong if I don't do it. That is a great instructor. Why have CE's, just give my _____? _____? all the time.
- I think that we should have LCEMS buy monkeys to help us on the rig after all they are good with these hands and feet. Seriously though, there is an instructor who is telling the groups not to do the new things like ResQGuard or Hypothermia. He said he's not either. If you don't do it you can't get in trouble. I on the other hand am up for new things. Keep it up.
- Good job.
- Good class.
- Thank you for making this a truly PRE-HOSPITAL class.

Noncredit Course and Instructor Evaluation
PEPP

1. The course started on time



2. Course Objectives were clearly stated



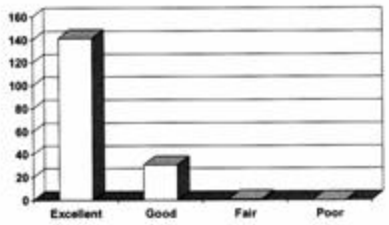
3. Material was presented in an understandable manner

4. The instructor spoke clearly and loud enough to be heard

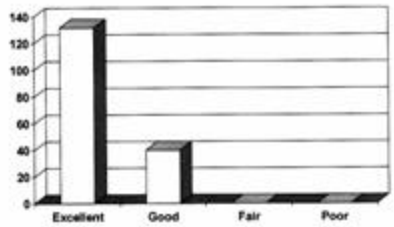
Course Dates: Apr 3,8,9,10,15,16,17,22,23,24,29,30, 2008
Number of Evaluations: 175
Location: Lucas County EMS

Noncredit Course and Instructor Evaluation
PEPP

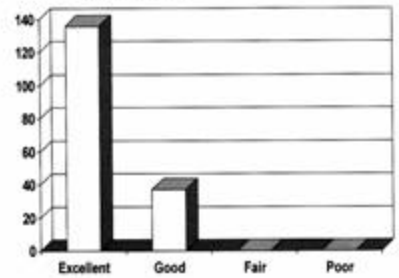
5. The instructor encouraged participation where appropriate



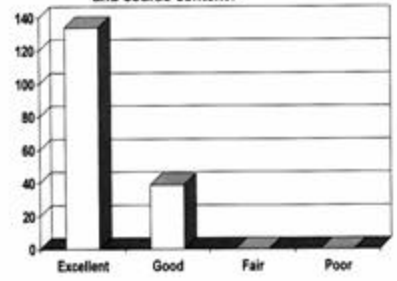
6. Handouts were easy to use and helpful



7. Rate your overall evaluation of the C.E. session



8. Did the written test reflect the objectives and course content?



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Summary of All Responses to All Questions

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