

Vermont EMS District 6

Protecting the heart of Vermont

Meeting the New EMS Liaison of District 6

THE TEST TONE

1st Edition

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Hi everybody!

Many of you know me as an ER nurse, and some of you remember me from my previous EMS career. Some of you don't know me at all! I'm taking this opportunity to introduce myself in my new role as CVMC's EMS Liaison.

I'm a local, originally from South Royalton but moved to Berlin Corners in 1967.

I joined the Berlin Volunteer Fire Department in 1974, and began my EMS career on UVM Rescue in 1976. I took the EMT course here in District 6 from Virginia Caffin. My first job after UVM was with the Montpelier Fire Department. I took the District 6 IV course; the fore-

runner of today's EMT-Intermediate course, then went to Michigan to paramedic school.

Over the years I've worked as a firefighter, paramedic, state EMS staffer, supervisor, paramedic instructor, service director, and in many other related roles, including EMS systems development, quality improvement, and disaster planning. I've worked in EMS in Vermont, Michigan, Maine, New Hampshire, and Massachusetts. My last job before returning to Vermont was with the Lowell Tri-Hospital Paramedics (now Greater Lowell EMS), starting as one of the original paramedics and ending up as director. This service was started by a group of hospitals to cover the city of Lowell and seven sur-



rounding towns with a non-transporting hospital based paramedic service. We covered nearly 300,000 people with one paramedic unit, working with basic life sup-

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Service of the Quarter: Northfield Ambulance By Jim Baraw

Northfield Ambulance was founded back in 1967 by a group of volunteers and a little help from the Town of Northfield. At that time, we had one E-150 FORD Econoline

van, a stretcher, oxygen, and first aid equipment only.

There was no paging or tone dispatch system only red phones; if you were "on call", you had to be at home or close to

home so you could be "found quickly". Back then the ambulance didn't have a radio, you went to the scene, picked up a patient, and took them to the hospital

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Meeting the Liaison Cont'd



port ambulances operated by 6 ambulance services. Our area included large urban blight zones with severe drug and violence problems, especially through the crack epidemic of the 1980's. HBO made a documentary there entitled "High Times on Crack Street - Lost Lives in Lowell". After 9 years on one of the busiest paramedic units in the US, I was ready to move back to Vermont.

I went to nursing school at Norwich Univer-

sity, and worked for Barre Town EMS as their training officer while going to school. I started working as an ER nurse in 1994, and have been an ER staff nurse, charge nurse, and clinical nurse coordinator. I have also continued to work as a paramedic, initially part time with Regional Ambulance in Rutland and most recently as a nurse/paramedic with FACT Critical Care Transport at Fletcher Allen.

After 12 years in the ER, I'm returning to the EMS field full time. Please don't hesitate to call me (371-4516) or come and visit at the EMS office. I'm looking forward to working with you to improve EMS in Central Vermont.

Mike

Michael R. Morgan RN, CEN, EMT-P

Training Corner



There seems to be a lot of confusion regarded the new National Registry Computerized testing. Some of the misinformation I'm hearing is; We are not doing this in Vermont (false), We have to take our recert this way (false), the Intermediate exam is computerized (false), the First Responder exam is still a paper test (false). So here is the low down at this point in time: The INITIAL FIRST RESPONDER AND BASIC EXAMS are computerized. Folks will still be taking their practical evaluations as a group as we have always done. After successfully passing the practicals, the candidate will make an appointment at the design-

ated test center to take the written (computerized) test. So, how many questions are on the exam? That is entirely up to the candidate.

Computer based testing allows the National Registry to take advantage of one of the most accurate methods for determining professional competency – computer adaptive testing (CAT). Each candidate is given a set of starting questions. Based on answers to those questions, the computer estimates the candidate's ability and selects the next set of questions. With each answered

question, the computer will reestimate the candidate's ability and select questions that he or she will find challenging. As the exam progresses, the ability estimate becomes more precise.

This state-of-the-art type of testing is based entirely on individual ability, more accurately demonstrating the candidate's competency as an EMT. When the candidate answers enough questions successfully, the exam is over. Conversely, if the candidate answers too many questions incorrectly the exam is over too. Results will be available online about 24 hours. Con't on pg 4

in Montpelier, Barre City or to the local clinic here in Northfield. In that time we answered about 200 calls for service per year.

Currently the Department is under the direction of James H. Baraw; Jim took over as Director of EMS in December of 1996, and at present time Jim remains in the roll of EMS Director for the Town of Northfield's Ambulance service.

In 1996, we had three units, a 1990, Type II Wheeled Coach, a 1981 E-250 FORD Econoline van, and a 1971 Chevy Van serving as the Rescue Unit. Since that time we have upgraded our equipment to a newer fleet of equipment, to include, our new 2003 AEV Type I, Ford F450 4x4, our 1997 E-One Type I, F-450 4x2, our 1991 Ford F-350 Heavy Rescue Unit, and our Mobile Command Unit "MCU" & Off Trail Rescue Unit, this unit includes a 500cc Arctic Cat ATV with wheels and tracks for winter use, and our Rescue – Boggan. At current time Northfield Ambulance answers an average of 850 calls for service per year.

Northfield Ambulance is a Municipally owned Ambulance Service staffed by 1 paid municipal employee, and a cadre of volunteer members provided by the Northfield Ambulance Volunteers Inc. NAVI has been very active in fund raising and providing some essential equipment. Serving

Mission Statement: Northfield Ambulance Service (NAS), and the Northfield Ambulance Volunteers Inc. (NAVI) work in conjunction with each other to provide 24 hour Basic and Advanced level emergency medical care provided by a paid and volunteer professional staff.

The Northfield Ambulance provides emergency treatment and transportation, non Emergency transportation, vehicle extrication, confined space / technical rescue, along with other related services to the communities of Northfield, Roxbury, and West Berlin, Vermont. Northfield Ambulance also provides backup services to it's surrounding communities upon request from authorized personnel. Northfield Ambulance is dedicated to providing fully certified employees & members to staff it's units 24 hours a day, Community education within our service communities, and assist in EMS education, along with injury prevention programs within Washington County, Vermont. Northfield Ambulance Service is owned and operated by the Town of Northfield, and Northfield Ambulance Volunteers Inc. is the non profit agency of membership that provides the manpower as well as fund raising. Northfield Ambulance Volunteers Inc. is a 501(c)(3) corporation, listed with the State of Vermont



Training Corner con't



hours after the exam is taken.

As far as EMT recert, First Responder recert, Intermediate 03, Intermediate Transition, these are still paper tests administered at the test site as we have done in the past. I hope this clears up any confusion.

There are a tremendous amount of training opportunities in the district du-

ing the first quarter of 2007 (see the training schedule elsewhere in the newsletter). The district Training Committee has been working very hard to offer a wide range of training opportunities.

Lastly, the first meeting of the 2008 District 6 conference committee will be held on 31 January 2007 at 1800 in conference room 3 at CVMC. If you have a desire to be on this committee or just want to see what its all

about, meet us at 1800!

Until next quarter

Mark

Upcoming District Training

UPCOMING DISTRICT TRAINING

Date	Time	Subject	Location	Contact
16 Jan 2007	1900	Test Evaluator Training	NERSA	nfldr31@trans-video.net
20 Jan 2007	0900	I-03 Transition	NERSA	kinsella@madriver.com
20 Jan 2007	TBA	NR First Responder	NU	erearick@trans-video.net
20 Jan 2007	0800	CEVO	NERSA	nfldr31@trans-video.net
31 Jan 2007	1800	District Conference Planning	CVMC	nfldr31@trans-video.net
All Welcome				
Febraury 3, 17 and March 3 and 17 EMT-B Refresher Classes to be held from 9-3 at Community National Bank in Barre				
*16 Feb 2007	1800	EMT Test & Recert	NU Cabot	northfieldems@trans-video.net
17 April 2007	1900	Train the Trainer	NERSA	nfldr31@trans-video.net
For Training Officers				



*New Date and Time

Cardiac Arrest Cardiac Arrest 1 of 3

CARDIAC ARREST CARDIAC ARREST 1 OF 3 Revised December 2006 I. General Considerations

A. Defibrillation and CPR take precedence over all other treatments in medical cardiac arrest. Although high quality CPR improves cardiac output in arrest, EMS providers should not perform CPR while an AED is charging. An AED evaluates the rhythm while it is charging and may abort a shock because of interference with the rhythm from CPR.

B. When ineffective cardiac activity exists, perfusion is lacking and irreversible brain damage will occur in normothermic patients within 4 to 6 minutes.

C. CPR should not be interrupted any longer than necessary until an effective pulse is reestablished.

D. The prime concerns in the pediatric cardiac arrest are airway management and oxygenation. Ventricular fibrillation (VF), although not common in children, does occur occasionally and sometimes responds to a shock from an AED. When an EMS provider encounters a child older than 1 year, the provider should apply an AED to the patient's chest and shock the patient as advised. If a pediatric adapter and pads are available, the provider should use them, but they are not required.

E. Some patients may take gasping breaths (agonal respirations) which are not adequate respirations. Do not confuse this with adequate ventilation.

F. Traumatically induced cardiac arrest is quite different from "medical" cardiac arrest. Trauma arrest is generally the result of volume loss and shock. Consequently, the priority for treatment is routinely rapid transport. If defibrillation is indicated and will not delay transport, it should be used.

G. Defibrillators that are FDA approved and acceptable to the EMS District Medical Advisor may be used.

H. A biphasic AED should be programmed to deliver the dose at which it has proved effective in eliminating VF. Depending on the device, this may vary from 120 joules to 200 joules for the initial shock. Subsequent doses should be the same or greater. A monophasic AED should be programmed to deliver 360 joules for each shock.

I. If an EMS provider uses an AED that has not been (or cannot be) reprogrammed to deliver single shocks, the provider should follow current guidelines for ventilation and compression rates, depth and ratios, but follow the prompts of the AED regarding timing and sequence of shocks. This should minimize confusion and result in acceptable patient outcomes.

II. History

Perform a focused history and physical exam with particular attention to:

A. What was the time of onset of the arrest?

B. Does the patient have an apparently valid Do Not Resuscitate (DNR) order or identification?

What symptoms immediately preceded the arrest? (e.g., chest pain, lightheadedness,

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Cardiac arrest Cardiac Arrest 1 of 3 Cont'd

trouble breathing, etc).

D. What medications is the patient taking?

E. What has been done for the patient since the arrest? Has the patient received effective CPR and for how long?

III. Physical Examination

- A. Perform an initial assessment with particular attention to: Verifying absence of effective respirations. Verifying absence of a pulse (e.g., carotid in the adult, carotid or femoral in child and brachial or femoral in infant).
- B. Perform a brief history and physical exam to determine if there are unsurvivable injuries, **CARDIAC ARREST CARDIAC ARREST 2 OF 3 Revised December 2006** rigor mortis or discoloration of the skin at the lowest parts of the body. Paramedic
- C. Determine the cardiac rhythm. IV. Treatment (see appropriate protocol) {Notes: If the patient meets criteria for “Dead on the Scene” , refer to that protocol. If the patient is in cardiac arrest with major multiple system trauma, refer to that protocol. If the patient has an apparently valid Do Not Resuscitate (DNR) order or identification, see the Do Not Resuscitate protocol. }

Basic

- A. EMT Basics should follow the Automated External Defibrillation (AED) sequence for patients more than 1 year old.
- B. B. Establish an airway, maintain as indicated, suction as needed.
- C. Perform CPR. Avoid hyperventilating the patient. Evidence strongly suggests hyperventilation is harmful unless there is a clear, compelling reason to institute it. Good ventilations at the recommended rate (10 – 12 in the adult) are more beneficial than faster ventilations.
- D. Administer high concentration oxygen.

Intermediate

- E. If the patient remains in respiratory arrest, perform advanced airway management. F. Secure IV access.

Paramedic

- G. Shock persistent ventricular fibrillation (VF) with the energy level at which the defibrillator has proved effective in eliminating VF. Perform CPR when the patient is not being shocked or assessed.
- H. Assess and monitor the cardiac rhythm? treat arrhythmias/dysrhythmias per applicable protocols. Consult medical direction regarding pediatric medication doses.
- I. Intubate the patient.

CARDIAC ARREST CARDIAC ARREST 3 OF 3 Revised December 2006 CARDIAC ARREST TREATMENT SEQUENCE WITH AUTOMATED EXTERNAL DEFIBRILLATION Notes:

Whenever a no shock indicated (NSI) message appears, perform CPR for 2 minutes (5 cycles). · If the patient regains a pulse, check breathing. Ventilate with high concentration oxygen, or give oxygen by nonrebreather mask as needed.

Cardiac Arrest Cardiac Arrest 1 of 3 continued

If you initially shock the patient and then receive an NSI message before giving three shocks, follow the steps in the above right hand column.

- If you initially receive an NSI message and then on a subsequent analysis receive a shock indicated (SI) message, follow the steps in the above left hand column.

- Occasionally you may need to shift back and forth between the two columns. If this happens, follow the steps until one of the indications for transport (described below) occurs.

- Transport as soon as one of the following occurs:

- You have administered three shocks.

You have received three consecutive NSI messages (separated by two minutes of CPR).

- The patient regains a pulse.

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If you shock the patient out of cardiac arrest and he arrests again, start the sequence of shocks from the beginning.

Source: Limmer/O'Keefe, EMERGENCY CARE, 10/e, © 2005, p. 385.

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Verify arrest: unresponsive, apneic and pulseless.

If arrest unwitnessed, ensure patient receives CPR for approximately 2 minutes (5 cycles).

Turn AED on , apply pads and clear patient.

Press analyze button.

Shock indicated (SI)

- Deliver 1 shock.
- CPR X 2 minutes (5 cycles).
- Check pulse.
- If no pulse, analyze rhythm.
- If SI, deliver 2nd shock.
- CPR X 2 minutes (5 cycles).
- Check pulse.
- If no pulse, analyze rhythm.
- If SI, deliver 3rd shock.
- CPR and transport. Follow local medical direction regarding additional shocks.

No shock indicated (NSI)

- CPR X 2 minutes (5 cycles).
- Check pulse.
- If no pulse, analyze rhythm.
- If NSI, CPR x 2 minutes (5 cycles).
- Check pulse.
- If no pulse, analyze rhythm
- If NSI, CPR and transport.

THE TEST TONE



District 6 EMS
C/O EMS Liaison
130 Fisher RD
Barre, VT 05641
Your Address Line 4

Winners of the Virginia Caffin Award Announced

This year at the 1st Annual EMS Banquet the winners of the Virginia Caffin Awards for the years 2003, 2004 and 2005 were announced. The winner of the 2003 award was Doug Hanson, 2004 winner was Susan Barnes, and the winner of the 2005 award was Mark Podgwaite. The banquet arrangements for last years banquet were put together by Amy Holt and Joe Aldsworth. They have been asked to head up the committee for it again this year as well.

The District 6 Board:
Medical Director: Dr. Phil Brown
Chairman: Chris Gringa
Assistant Chair: James Baraw
Secretary: Sheila Brown
Treasurer: Susan Barnes
Training Coordinator: Mark Podgwaite
District 6 EMS Liaison: Mike Morgan

This publication is for anyone in the district to contribute to and enjoy. We are currently producing the TEST TONE on a quarterly basis. If there is any thing the you would like to see in future editions please feel free to contact the editor or one of the members, so that we can know how to better serve you.

The deadline for the next edition is March 15,2006

Editor: Jennifer Miner

You can reach me at either of the following email addresses if you have questions, concerns or suggestions:

jennifer.miner@hitchcock.org

mooselayer9711@hotmail.com