Vermont EMS Today September 2001

From the Director

EMTALA: It's Not Just for Hospitals Anymore

Here is the scenario: You are transporting a patient with shortness of breath to nearby Hospital A. You make a radio report with the patient's chief complaint, your assessment, the patient's vital signs, the care you have provided and an ETA. The medical control physician in the emergency department comes on the radio and asks who your patient's physician is. You report that the patient's physician is a doctor who practices at Hospital B, a hospital more distant than Hospital A. The medical control physician radios back to you saying: "I think it would be okay to go to Hospital B." You instruct your driver to reroute to Hospital B.

Have any of our EMTs ever been in this situation? Have any of our physicians ever given guidance similar to this over the radio? Does a reroute like the one described represent an improvement in the patient's care or does it carry some risk? The scenario presented above was considered recently by the 9th U.S. Circuit Court of Appeals in the case of Arrington vs Wong. The court ruled that the Emergency Medical Treatment and Active Labor Act (EMTALA) applies to a patient in an ambulance not owned or operated by a hospital even if the ambulance is not on hospital grounds. The decision of the court is mandatory in the states of Alaska, Arizona, California, Hawaii, Idaho, Montana, Nevada, Oregon, Washington, and Guam. It is not mandated in the other states, but will have "persuasive" authority in other jurisdictions.

Does a reroute like the one described represent an improvement in the patient's care or does it carry some risk?

Here is what happened. Harold Arrington was enroute to work one evening in Honolulu, Hawaii when he began to experience difficulty breathing. Co-workers called 9-1-1 for an ambulance. A Honolulu ambulance promptly arrived at the scene and began to transport Mr. Arrington to the Queen's Medical Center. Enroute, they gave a radio report to Dr. Norbert Wong which included the usual information including the patient's vital signs. Dr. Wong inquired as to who Mr. Arrington's physician was. The ambulance crew reported that the doctor was at a more distant hospital. Dr. Wong said he thought it would be okay for the patient to be transported to the farther hospital. The ambulance crew followed that advice. Within an hour of arrival at the more distant hospital, Mr. Arrington was dead.

The case is significant because it extends the scope of the 1986 EMTALA law into the back of ambulances that are not owned or operated by hospitals. In past court decisions, EMTALA had only been interpreted as applying to hospital buildings, the hospital campus and some hospital owned or operated ambulance services. The 9th Circuit Court's decision

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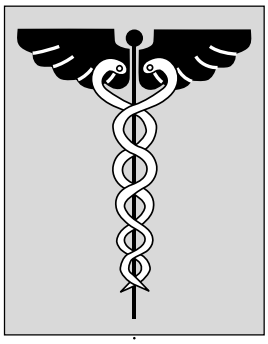
From the Medical Advisor

Resuscitation in Ectopic Locations

An interesting title, don't you think? This is the title of a Grand Rounds Presentation that I was recently asked to attend. The Department of Anesthesiology of the University of Vermont was discussing what an anesthesiologist ought to do when confronted with a "code" outside of the O.R. and wanted some thoughts on the subject.



Many of us in our EMS training have been the beneficiary of the incredible knowledge, skill and training that our colleagues in anesthesia provide. By the very nature of their work, they are masters in airway maintenance and control and are grand masters of managing complex situations in the operating room. Many anesthesiologists also work in intensive care units and all of them are skilled in running "codes" in these areas. The interesting issue, they well realized, was what to do outside of their element.

The discussion was quite interesting and lively, as you no doubt can imagine. Participants had experienced a newborn birth in an airport toilet, near codes on airplanes and first-on-the-scene management of trauma victims in the street. They immediately identified that doing this work in these "ectopic" sites was challenging in more ways than one.

In truth, each participant acknowledged that resuscitation is quite different "out there." In fact, any work outside of the operating room (where they lack their own equipment and team members) was so very different, that they acknowledged that where an EMS response is forthcoming, the most prudent course of action is to stick to the ABC's until the pros get there and then get out of the way!

> **In truth, each participant acknowledged that resuscitation is quite different "out there."**

Moreover, as we discussed, it may actually be prudent to activate an EMS response *inside of the hospital* if the patient is in a non-clinical area (such as medical records, etc.). Everyone in attendance could appreciate that EMS is prepared to manage the airway, protect the C-spine, control bleeding and safely move the patient, among other things. Also of importance, they have somewhere to take the patient for further care and evaluation.

My time spent with the anesthesiologists was, as it has always been, very productive and useful. Without question, they have a great deal to teach us as we learn and grow in EMS. Importantly, they too understand that the professionals in EMS have a great deal to offer them as well and they won't hesitate to seek our skills when the need arises.

It is easy to think that others in the house of medicine have more to contribute than we or that our abilities are frequently not appreciated. I can assure you that EMS is well thought of in this state and that the healthcare team includes us.

Ectopic resuscitation locations means care outside of one's normal environment; but that is our normal environment (and we all know it!).

— Wayne Misselbeck, M.D.
State Medical Advisor, EMS

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This publication can be obtained in other forms: 1-800-244-0911, 1-802-863-7310; ask for Leo Grenon. If you want to reprint articles from this or any Vermont EMS Today publication, please contact Leo Grenon at the above numbers.

Correction

In our last newsletter, we reported that the ***Vermont SAFE Kids Injury Prevention Award*** was given to Catherine Clark. That was correct, but only in part. She is a member of the Northfield Emergency Service. The award was actually presented to all of the Northfield Emergency Services.

— Leo J. Grenon

Number of people holding Vermont EMS certification as of 6/30/01:

ECA		820
EMT–Basic	(does not include advanced levels)	1113
EMT–I		749
EMT–P		81
Total EMTs at all levels:		**1,943**

From the Director—

EMTALA: It's Not Just for Hospitals Anymore

CONTINUED FROM PAGE 1

reverses a lower court ruling that EMTALA does not apply to a patient in a non-hospital owned ambulance. The case will now go back to the lower court for trial with the understanding from the 9th Circuit Court's ruling that EMTALA does apply in this case.

EMTALA was an important law in 1986 when it was written in response to reports that patients were being turned away from emergency departments because of inability to pay. Commonly known as the "Patient Anti-Dumping Act," the law requires all patients who present to the emergency department to receive at least a medical screening exam to determine if any emergency condition requiring further stabilization exists before transferring the patient to another hospital.

In Vermont, as in the rest of the nation, EMTALA creates expectations on how hospitals will receive emergency patients, assess them, stabilize them and if necessary arrange for the transfer of care to another physician and hospital. Hospitals and physicians who fail to comply with EMTALA requirements face significant fines.

How could the 9th Circuit ruling apply in Vermont? Are Vermont ambulance services and emergency physicians providing medical direction now at an increased risk of an EMTALA violation? The answers to these questions are speculative unless there were to be a specific court ruling applicable here. Nonetheless, the 9th Circuit ruling is probably instructive in how some common situations should be approached. As always, this article should not be considered as legal advice. If you have concerns about how the 9th Circuit ruling or the EMTALA law applies to you or your organization, you should seek appropriate legal counsel.

The most common ambulance transport in Vermont is one where the patient is taken to the nearest hospital. There seems to be no EMTALA implication here.

Another common situation is a patient that may be located nearly equal distances between two hospitals. Vermont's statewide EMS destination protocol allows consideration of patient preference, physician location, and similar factors to be considered in making the hospital destination choice in this case. Again, it would appear unlikely that EMTALA requirements would be an issue as the patient is in a location where two or more hospitals are of equal distance or transport time.

A more perplexing situation is one where a patient with major trauma may be somewhat closer to a community hospital and slightly further to a trauma center. There seems to be medical consensus that if the transport time is not significantly longer to get the patient to a trauma center, it usually makes sense to go directly there. The logic in these cases is that the trauma center is the nearest **appropriate** hospital for a major trauma patient. Depending on the specifics of a particular case, EMTALA might suggest that transport to the nearest hospital is preferred.

A related concern could be raised about use of air-medical transport from a scene to a hospital more distant than the nearest one. Provided that the air-medical transport does not add significant time over what would be necessary to reach the closer hospital by ground, there would appear to be no EMTALA issues.

If there is any question about the destination choice for a specific patient, as always, discuss the matter with medical direction. The message of the 9th Circuit Court's ruling to emergency physicians seems to be that conservative guidance to EMS is in order when choosing a transport destination. The message for EMS organizations is that ambulances are no longer outside the scope of EMTALA.

While I was in the process of writing this article, I had a phone conversation with an EMT who got interrupted for an ambulance call. Afterwards she called back to continue the conversation and I asked what kind of call she had been on. She told me that the call came in as the dreaded "unknown medical problem" but actually turned out to be a patient who was vomiting blood. The call took some time to complete because under medical direction, she ended up transporting the patient directly from the scene to a more distant hospital where the patient had recently had surgery.

Does anyone see a parallel here?

—Dan Manz,
State of Vermont Director, EMS

MARK YOUR CALENDAR!

2002 EMS **Conference**

April 6 & 7

Preconference
April 4 & 5

Toll-Free Number

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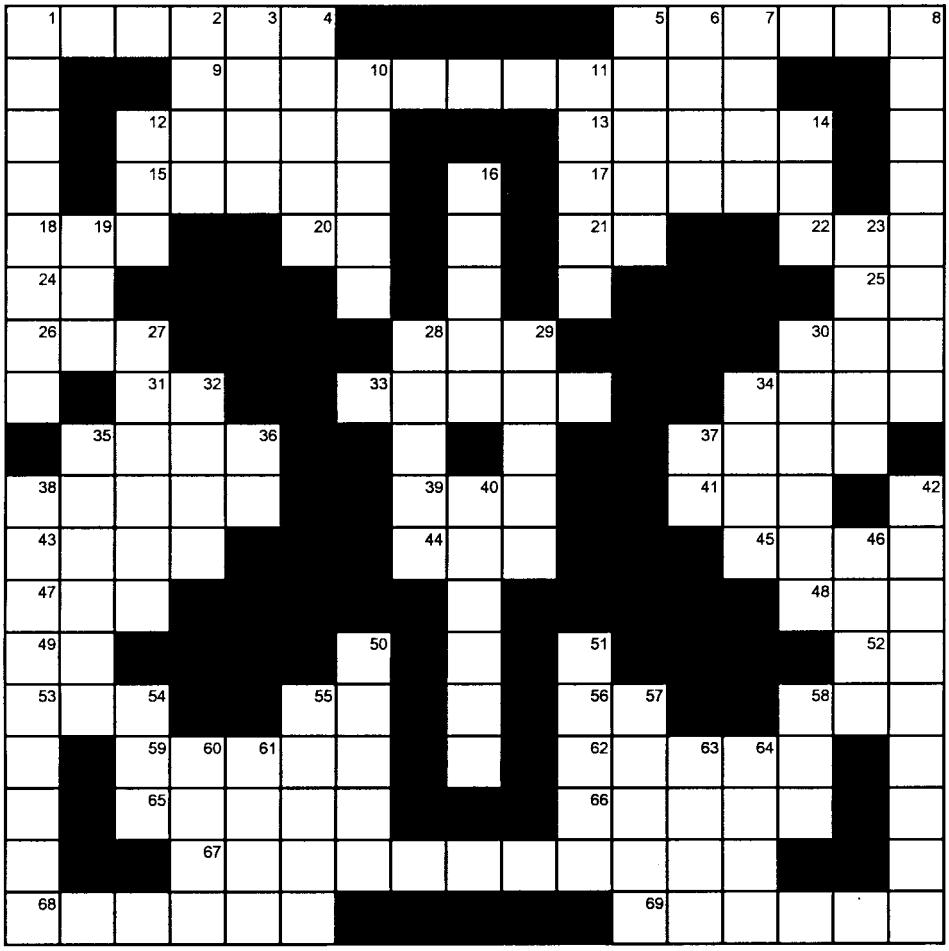
EMS Crossword Puzzle

We thought we would add a little fun to our newsletter, with the introduction of its first crossword puzzle. You can find the answers on page 11.

— Ray Walker



ACROSS

1) Red, Yellow, Green, or Black?
5) Patient assessment acronym
9) Trauma scale
12) Makes the blood go round and round
13) Memorable Texas battle site
15) In a strange way
17) Hawaiian veranda
18) "To be or ___ to be"
20) ___, Med, or Lg.?
21) American monsieur
22) Head injury may cause this (abbr.)
24) Hoosier school
25) Prefix for "two"
26) Oxygen mask
28) "When will we be there?"
30) ___ Moines
31) 155.340, for one
33) What you are to an insect
34) Prescribed amount
35) Cost of being a member
37) Factual
38) Adam and Eve, Sonny and Cher
39) Reduces swelling
41) Grinder
43) Grp. or Org.
44) Canoe propeller
45) Great joy
47) ___ End
48) Small dog's bark
49) Masculine pronoun
52) Type of military hospital
53) Globe
55) Liberty Bell st.
56) Surgeon's workplace
58) Procure
59) Geography book
62) Penetrating rays of radiation
65) South American nation
66) The very best
67) Call 911 for these
68) Loggers' leftovers
69) Water-loving mammals

DOWN

1) EMS practice session
2) Ripe
3) Happy
4) Members of British aristocracy
5) Of the sun
6) "When _____ Loves a Woman" (2 wds.)
7) This bear's bed was too soft
8) MCI Drill, for one
10) Hinder
11) Soothes
12) Jumpsuits in summer
14) Vegetable or motor
16) Cardiac interstate
19) Belonging to you and me
23) Very overweight
27) Contusion
28) Old McDonald had a farm…
29) Rage
30) Adverb meaning twice
32) Flora found on forest floors
34) Medication
35) "On _____, on Dancer…"
36) Gilligan's and Skipper's ___ Minnow
37) Poet ___ Eliot
38) Disease-causing agents
40) Gaping hole
42) Illness causing liver inflammation
46) Roof's edge
50) Powerful light beam
51) Reason
54) Inebriation meas.
55) Grows chalkier
57) Walkie-talkie
58) 4 qts.
60) Us against ____
61) Uneven gait
63) Track & Field event
64) Immobilization device

In the Field…

PART I IN A SERIES OF TOPICS RELATED TO EMS FIELD OPERATIONS

Greetings!

Please allow me to introduce myself. I'm Steve Salengo, the newest addition to the Vermont EMS staff, filling the role of EMS Operations Coordinator. Since I started in May, I've frequently been asked, "What does the title 'EMS Operations Coordinator' mean?" Because this position is rather difficult to define, I've simply stated, "I deal with the field aspects and day-to-day functioning of EMS."

Most people, particularly EMS providers, are not satisfied with this simple retort. As a result, I will describe some of the major duties of my position through a series of articles published in this and future editions of *Vermont EMS Today.* These articles will explain many of the technical aspects of EMS operations and answer frequently asked questions.

The first topic I have chosen, and among the most important, is criminal investigation. Since the EMS Office is part of the Vermont Department of Health—Division of Health Protection, we are charged with assuring a potential or present EMS provider's fitness to serve the public in the role of ECA or EMT. This sometimes involves investigating the criminal histories of applicants for certification.

Under Section 11 of the Vermont EMS rules, "The Department may refuse to issue or refuse to renew a personnel certification, or may suspend or revoke a personnel certification for [including but not limited to] being convicted of a crime, provided the acts involved are found by the Department to have a direct bearing on the person's fitness to serve the public in ways subject to licensure under these rules."

This is why you see the question, "Have you ever been convicted of a crime?" on our certification applications.

The following are answers to common questions about criminal investigation by the EMS Office:

Q: What happens if I have been convicted of a crime?

A: You MUST circle "YES" on the form, and in the space provided, briefly explain the conviction.

Q: Should I include traffic violations?

A: Speeding and minor traffic violations are civil infractions in Vermont and are not in and of themselves considered to be criminal convictions. However, some folks may consider driving under the influence (DUI) to be a "traffic violation" even though it is appropriately considered to be a criminal violation. Therefore, many course coordinators tell students to include traffic violations on the form and disclose the type of traffic violation (e.g., "speeding ticket," "DUI," etc.). In many cases, if the violation is a civil infraction without extenuating circumstances, no action on testing or certification will be taken. Keep in mind, though, that repeated traffic tickets may result in a criminal suspension, which *is* a crime and must be disclosed. In summary, if you have been convicted of a misdemeanor or felony, in any state, you MUST disclose this to the EMS Office.

Q: OK, so what happens if I was convicted of a crime, and I circle "YES" and describe the conviction?

A: If correspondence indicates or suggests a criminal conviction, our office will mail you a Crime Conviction Follow-Up Form. This form asks for specific details about the conviction, and must be thoroughly completed and mailed back within ten (10) working days. Upon our receipt of the completed form, further follow-up may ensue, which often includes review of court documents and background checks. If deemed necessary, a hearing before the Commissioner of Health may be scheduled.

Q: Can I still take the test? Can I become an ECA or EMT in Vermont?

A: This depends on many factors, such as the nature of the conviction, the time elapsed since the conviction, and probation or parole status. For these reasons, a case-by-case approach is used. Ultimately, final decisions on the matter are made by the Commissioner of Health in consultation with the EMS Office and other state officials.

Q: What happens at the hearing?

A: The hearing is an opportunity for both parties (the Department of Health and the individual involved) to address and discuss the ramifications of the conviction. **The hearing is not a trial.** It is intended to help determine "fitness to serve" as described earlier. The person has the option of being represented by an attorney during the hearing at his or her own expense and arrangement. The candidate may also bring family members, coworkers, or others to speak on his or her behalf.

Q: How do I know if I am OK to test and certify?

A: Our office will mail a letter to you indicating the disposition of your case. If you are permitted to test and/or certify, instructions on what to indicate on future exam applications or correspondence will be included, along with any conditions or stipulations if they apply.

Some important notes to consider:

- Individuals MUST disclose *all* criminal convictions when requested by the EMS Office. Failure to do so may result in immediate revocation of certification and may also result in legal action if appropriate. Applicants are encouraged to call the Office if they are unsure of what information to disclose.
- This process doesn't only occur at exam times. If the office becomes aware of criminal matters (via the media, for example), a provider or candidate may be investigated as previously outlined.
- Not all cases result in a hearing with the Commissioner. An individual may be cleared to test and certify after we receive a completed Crime Conviction Follow-Up Form, depending on specifics of the case.

I hope this article provides some insight into our procedures for criminal investigation. Please feel free to contact me should you have any questions or concerns, or if you would like to know more about this process. Thank you, and I look forward to seeing you out in the field.

— Steve Salengo,
State Operations Coordinator

CPR Cards and EMS: Is it Time to End the "Merit Badge" System?

The time has come to renew your EMT card, so you are filling out your continuing education form. The only thing you have left to do is to make a copy of your CPR card. But where is it? You demonstrated your CPR skills just a month ago and received a new provider card last week, but the card is nowhere to be found. The inconvenience leads you to think: Why do I have to present a new CPR card in order to renew my EMT card? I don't have to get a separate card for spine immobilization or for splinting. What's so different about CPR? What justification is there for this extra requirement?

These are some of the many questions the EMS office has begun asking about CPR cards. Because we will soon amend the EMS rules to expand the scope of practice of EMT-Intermediates, we have an opportunity to review our EMS rules and make other appropriate changes at the same time. Eliminating the requirement that a provider hold a current CPR card is one of the changes the EMS office is considering.

This requirement has traditionally been a way for EMS regulatory agencies to be assured providers have adequate skills in CPR. Like many other assumptions, this one is undergoing much closer scrutiny than has occurred in the past. This article will examine some of those assumptions.

Background

The American Heart Association (AHA) and American Red Cross (ARC) have been issuing CPR cards for more than 25 years. They originally issued certification cards, which were later changed to course completion or course participation cards. This change accurately reflected the fact that a CPR card was not a certification or license for the cardholder to perform any particular skills.

At about the same time that CPR cards were first issued, emergency medicine was just beginning to develop as a specialty. The AHA and the ARC were at that time the only nationally recognized organizations to have any kind of system for recognition of proficiency in life-saving skills. Holding a CPR card from one of these organizations became a standard requirement for EMS providers and many other health care workers. In emergency medicine, a card from the AHA in advanced cardiac life support (ACLS) was similar to the requirement for a basic cardiac life support (BCLS) card in EMS. Other specialty courses sprang up over the years, including advanced trauma life support (ATLS), pediatric advanced life support (PALS) and neonatal advanced life support (NALS). The common requirement that an emergency physician hold these cards was sometimes referred to as "merit badge medicine."

With the rapid growth and maturation of emergency medicine as a medical specialty, there has been an increasingly vocal call to eliminate requirements for these cards. Physicians who are residency trained have at least three years of post-graduate education and supervised experience in caring for emergencies. Many people feel this training supersedes the material covered in these courses, which were, after all, not intended to be comprehensive.

> **At about the same time that CPR cards were first issued, emergency medicine was just beginning to develop as a specialty.**

A similar call is beginning in EMS. Some members of the EMS community feel we have progressed to the point where we can guide our own development. They believe we are ready for the challenge of assuring the public of our proficiency without cards issued by other organizations.

Eliminating the requirement for a CPR card is a change that is not to be taken lightly. Before the Vermont Department of Health can implement such a change, we must be confident there will be no deterioration in the quality of care EMS providers administer.

The Arguments For and Against

EMS regulatory agencies have traditionally required providers to hold CPR cards. The assumption was that this was a reliable way to assure that providers have adequate skills in CPR. There is now sufficient evidence to cast doubt on that assumption. A number of studies have shown that graduates of CPR courses perform CPR poorly,[1,2] particularly if some time has passed since the course ended.[3] This is consistent with the growing evidence that shows CPR instructors teach poorly. Investigators in one study[4] found that instructors hand picked by the American Heart Association or American Red Cross taught courses where students performed inadequately or did not even perform CPR at all but received certification cards nonetheless. In another study, the graduates of classes conducted by four instructors who were hand-picked by the ARC delivered ventilations and compressions that were correct less than one-quarter of the time.[5] Both of these studies took place during periods when all students were required to perform CPR proficiently in order to receive cards.

Since that time, we have discovered that a well-designed self-instructional video teaches CPR at least as well as CPR instructors, to both medical students[6] and laypersons of different types.[2,7,8] A well-designed study has even found that Norwegian factory workers with cardboard manikins teach CPR better than authorized CPR instructors.[9] These are just a few of the many studies that raise questions about the quality of CPR instruction and evaluation by authorized instructors.

The assumption EMS agencies have made is that the requirement for a CPR card forces the provider to review and practice CPR. This is not necessarily true, as borne out by Vermont's experience. A number of years ago, EMS did not test EMTs on their CPR skills for several years. When testing of CPR resumed, performance at the station was poor, with a failure rate approaching 30 percent. Within a year or so, after word got around, the failure rate dropped to a level comparable to that of other skill stations. All of these providers had been required to hold CPR cards, but a significant number of them had clearly not been practicing enough. It was only after word got around to the EMS community about the resumption of CPR testing that performance improved.

To obtain an AHA Healthcare Provider CPR card, a provider will soon have to dem-

onstrate ventilation with a bag mask. One potential reason to continue to require CPR cards is that this new skill requirement may improve EMTs' ventilatory skills. Unfortunately, given the experience with CPR instruction and evaluation, there is little reason to believe the bag mask requirement will actually lead to improved ventilation.

The 2000 guidelines for CPR were based on the available evidence as evaluated by invited experts.[10] Requiring demonstration of bag mask ventilation, however, appears to go directly against the evidence. Studies have shown that use of a bag mask leads to inferior ventilation when compared to ventilation with a pocket mask[11,12] and use of a manually triggered oxygen-powered breathing device.[13]

Some of the new guidelines are impossible to implement in the field setting. For example, the recommended tidal volume to use when ventilating a patient with a bag mask depends on whether oxygen is available. If oxygen is available, "the rescuer skilled in bag mask ventilation should attempt to deliver a smaller tidal volume (6 to 7 ml/kg or approximately 400 to 600 ml) over 1 to 2 seconds…The tidal volume should be sufficient to make the chest rise…If oxygen is not available, the rescuer should attempt to deliver the same tidal volume recommended for mouth-to-mouth ventilation (10 ml/kg, 700 to 1000 ml) over 2 seconds. This tidal volume should result in very obvious chest rise."[14] Immediately after a description of the risks of gastric inflation, however, the guidelines state, "to reduce the risk of gastric inflation during mouth-to-mouth ventilation, deliver slow breaths of the lowest tidal volume that will still make the chest visibly rise with each ventilation."[14] Which endpoint should the rescuer use? Chest rise or very obvious chest rise? The guidelines acknowledge, "in the clinical setting, the actual tidal volume delivered is impossible to determine. Tidal volume can be titrated to provide sufficient ventilation to maintain oxygen saturation and produce visible chest expansion."[14] Unfortunately, many of the patients EMS providers ventilate have insufficient perfusion to allow for an oxygen saturation reading and EMT-B courses do not include pulse oximetry. The experts who formulated the guidelines provide contradictory directions and fail to provide useful guidance for EMS field providers.

What about the risk that dropping the requirement for a CPR card will lead to poorer CPR performance in the field? There is no evidence to suggest that people who have CPR cards perform better than those who do not have CPR cards. Vermont's experience has been that it is more productive for EMS to test providers on CPR than to require them to hold CPR cards. There is no evidence to suggest that dropping the requirement for a CPR card will lead to poorer CPR in the field.

Some providers may feel that their liability is limited because they hold CPR cards. If a provider with a CPR card was sued, one part of the defense might be that the provider was holding a CPR card from a nationally recognized organization at the time of the incident in question. But the organization that issued the card is not going to defend the provider in court. In fact, the plaintiff's attorney could easily find experts to describe the problems of traditional CPR courses, like the ones described previously. It would be relatively easy to discredit the value of a card produced by such a flawed process.

What about the argument that with a CPR card, a provider knows what to expect of laypeople doing CPR? The CPR that laypeople perform is a little different from the CPR EMTs do. How is an EMT going to know about these differences? Education, not a card, is the answer to these questions.

Most states and other EMS regulatory agencies require a CPR card, so would dropping the requirement for a card put Vermont EMS providers at a disadvantage? The National Registry of EMTs allows a candidate's CPR instructor or training officer to verify on the registration application that the candidate has demonstrated the skills of CPR. This is perfectly acceptable in lieu of a CPR card. Other states and agencies may require a card, but the number of such organizations may decrease in the future. It is important to note that if the requirement for a card is dropped, Vermont EMS is certainly not prohibiting anyone from obtaining a CPR card or using materials from any of the organizations now involved in CPR instruction. In fact, because CPR cards from only AHA and ARC are currently acceptable for EMS providers, if this requirement was dropped, there would be many more choices for selecting a source of CPR instruction materials.

The cost of obtaining a health care provider CPR card and the accompanying training materials has increased significantly in recent years. This can place a significant financial burden on EMS agencies, with little or no demonstrated return.

Conclusions

As a relatively new health-care profession, EMS has undergone significant growing pains, particularly in the last few years. As these changes have taken place, EMS has begun to take on responsibilities previously performed by other health care professionals on behalf of EMS. This is particularly true in the areas of EMS education and evaluation.

What would change if Vermont EMS treated CPR like other skills and abolished the requirement for a CPR card?

- There would be fewer EMTs whose recertification is delayed because of the lack of a CPR card.
- EMT-Basic courses might be a little longer to cover CPR *in* the course rather than *before* the course. This is questionable since a number of EMT instructors report that their incoming students with CPR cards don't know CPR and must learn it again in the EMT-B course anyway.
- First responders would not have to learn ventilation with a bag mask, which is required for the AHA's new Healthcare Provider card. First responders do not usually have bag masks at emergencies and they are even less likely to have the additional personnel needed to use them properly.
- EMS would need to continue to test CPR on exams.
- EMS agencies would need to recognize and address the issue of ensuring the competency of their members' and employees' skills in CPR.
- EMS agencies would have the choice of using materials from the many organizations providing CPR instruction. They could also instruct and evaluate such skills within the organization rather than depending on someone from another agency. This would of course require consistent and accurate documentation.

Please keep in mind that a CPR card issued within the previous 12 months is still required for certification and recertification.

If you have questions about this potential change, please contact the EMS Office. Comments are welcome, especially if they are in writing, including e-mail.

—Mike O'Keefe,
State Training Coordinator, EMS

ENDNOTES CONTINUED ON BACK PAGE

Training UPDATE

CPR Changes and EMS Exams

With the American Heart Association's release of their 2000 guidelines for cardiopulmonary resuscitation and emergency cardiac care, many EMS providers have asked which version of CPR is included on EMS certification exams.

The answer depends on the exam. The National Registry, as of July 1, 2001, is using the new CPR guidelines. Vermont written exams, on the other hand, are prepared so that it makes no difference which guidelines are used. On Vermont practical exams, use of either set of guidelines will be acceptable until we believe enough providers have made the transition. We will announce that change before we institute it.

EMS-G

The American Geriatric Society, in association with Jones and Bartlett publishers, is working on a new course: Geriatric Education for Prehospital Providers. The EMS-Geriatrics (EMS-G) course, and its accompanying textbook, will focus on the many differences found among the geriatric members of our population. Pilot testing will take place in the spring of 2002.

On-Line Resources

The EMS for Children web site *(www.ems-c.org)* has links to a large assortment of pediatric emergency care products, periodicals, and publications. Some of the EMSC products are available free of charge or as downloadable documents. There are also listings of national and state activities, in addition to educational resources regarding rehabilitation, children with special needs, quality improvement and many other topics.

The next time you receive an e-mail message describing a virus or some kind of danger to the public, you might check one of the many websites now providing accurate and current information regarding viruses and hoaxes. Two of these sites are *www.sophos.com/virusinfo/hoaxes* and *hoaxbusters.ciac.org.* Although there are some malicious viruses circulating on the Internet, there are many false reports of viruses. There are also a number of hoaxes masquerading as warnings. Checking the accuracy of these warnings before sending them on may help reduce the number of people who receive these hoaxes.

— Mike O'Keefe
State Training Coordinator, EMS

ATTENTION:

First Responder Exam Coordinators

The EMS Staff is grateful to all of you who take the time to coordinate and proctor First Responder written and practical exams. You have done an excellent job! This article is to review the role of the exam proctor and offer a few reminders about the testing process.

The proctor for a First Responder certification exam must be approved by the district. In order to preserve the integrity of the exam, a course coordinator may not proctor the exam for his or her own class, even as a district-approved proctor. While a course coordinator may be on hand for the test, the exam proctor shall receive all exam materials and oversee all aspects of the exam. Exam materials will not be sent to course coordinators.

The following are a few points we wanted to bring to your attention to help ensure that the exams you coordinate get processed without delay:

- Make sure students do not write in the exam booklets.
- Requests for exam approval must arrive in the EMS Office at least two weeks before the exam date. Be sure that the proctor's name, address and telephone number appear on the request form, along with the signature of the district training coordinator. If you do not have an exam request form, contact the EMS Office.
- Be sure to give a street address rather than a P.O. Box when requesting exam materials.
- Make sure student applications are complete, including all signatures.
- Make sure to sign the Proctor Signature line on each answer sheet.
- Ensure that the course coordinator wrote the course number on the bottom of Page 3 of the student applications.
- Use the practical evaluation forms provided with the test materials. No other evaluation form is valid.
- Return all test materials to the EMS Office within 48 hours of the exam. The Security Agreement must be signed and included with the test materials and inventory list. The exams will not be sent to the National Registry for scoring until the EMS Office receives the Security Agreement.

Thank you very much for working with the EMS Office to make the First Responder program a success. If you have any questions about First Responder exams, please call Ray Walker at 800-244-0911.

What's Spreading in Infectious Disease

The Centers for Disease Control (CDC) provide a number of resources through the World Wide Web. Fact sheets about specific organisms associated with resistance to antibiotics, like Vancomycin-Resistant Enterococci and Methicillin-Resistant *Staphylococcus aureus* MRSA), can help to educate EMS providers about these increasingly common diseases. These and other fact sheets are available at *www.cdc.gov/drugresistance/factsheets/index.htm.*

Information about internet hoaxes regarding infectious diseases is available at *www.cdc.gov/hoax_rumors.htm.* There is a very popular hoax involving needlesticks. This message typically reports someone who is stuck by a needle in a phone booth coin return, on a movie theater seat (with or without a note saying "Welcome to the world of AIDS"), or on a gas pump handle, among other places. The CDC's site provides accurate (and reassuring) information regarding these and similar hoaxes.

Another very important development from CDC was the publication on June 29, 2001, in *Morbidity and Mortality Weekly Reports* of "Updated U.S. public health service guidelines for the management of occupational exposures to HBV, HCV, and HIV and recommendations for postexposure prophylaxis." This paper updates and supersedes all previous recommendations for the management of exposure to these diseases. It gives recommendations for the information to gather for an occupational exposure report and factors to consider when assessing the need for medical follow-up. It also describes circumstances under which it is appropriate to consult an expert when a health care provider may have been exposed to HIV.

Especially interesting was the inclusion in the report of two sources of expert advice available 24 hours a day. The National Clinicians' Postexposure Prophylaxis Hotline (PEPline at www.ucsf.edu/hivcntr) and Needlestick! web sites (www.needlestick.mednet.ucla.edu) can both provide valuable information. PEPline is run by the University of California—San Francisco. Needlestick! is a web site designed to help clinicians manage and document occupational blood and body fluid exposures. The University of California, Los Angeles (UCLA) Emergency Medicine Center maintains the site with support from the CDC and other federal agencies. The CDC's revised occupational exposure guidelines are available at *www.cdc.gov/mmwr/preview/mmwrhtml/rr5011a1.htm.*

— Mike O'Keefe
State Training Coordinator, EMS

Number of Patients Waiting for Organs is at All-time High!

The number of Americans waiting for lifesaving organs for transplant has reached an all-time high of more than 77,000 people. Each day, 16 people are added to the waiting list and 14 will die due to the lack of suitable organs for transplant. The numbers will continue to rise as medical advancements make transplant available as treatment for more diseases and dysfunctions, and not enough people make the decision to donate.

You Can Make a Difference!

A single organ and tissue donor can help or enhance up to 50 lives. Donated organs can save the lives of adults or children with diseases such as cystic fibrosis, diabetes, a congenital heart defect or liver disease. Donated bone will help someone walk again, and donated skin can enhance the lives of burn victims.

Anyone can become an organ and tissue donor. Here are the facts you should know:

- Transplantable organs include heart, lungs, liver, kidneys, pancreas and intestines.
- Tissues you can donate include eyes, skin, bone, heart valves, veins and tendons.
- Acceptable organ donors can range in age from newborn to 90 years of age.
- A donor's family is never charged for donation.
- All major religious groups in the U.S. approve and support donation, typically considering it a generous act that is the individual's choice.
- You should not rule yourself out as a donor just because you have a disease or disorder. Anyone who chooses to donate will be evaluated after death and after your family's consent has been obtained.
- Organ and tissue recovery happens only after every effort has been made to save your life and death has been declared.
- Donated organs are removed surgically; donation neither disfigures the body nor rules out an open casket funeral.
- You may specify which organs and tissue you want donated.
- Factors such as race, gender, age, income or celebrity status are not considered when determining who receives organs or tissues.
- Buying and selling organs, tissues and eyes is illegal.

The most important thing you can do is discuss your wishes to become an organ and tissue donor with your family. For more information or to obtain an organ donor card, call the Center for Donation & Transplant at (800) 256-7811.

— Sue Cain
Center for Donation & Transplant

Injury Prevention: Whose Responsibility Is It?

I'd like to paraphrase a story written by Joseph Malins in 1895.

It seems there was this village located near a dangerous cliff. Several times each year, a person who wandered out too far would fall, fatally, from the rocky ledge. Before long, the community rallied together to confront the problem with the cliff. Some said a fence should be constructed, others said an ambulance should be placed at the bottom of the cliff. The ambulance proponents won, and the fence idea was cast aside.

The ambulance personnel did what they could for their patients, but the fall from the cliff usually resulted in such terrible injuries that medical care was futile.

In the end, the author remarks that to rescue the fallen is good, but it's far better to prevent them from falling in the first place.

Now, before you go out and trade your ambulance for a fence, let me explain. We will always need ambulances. The care we provide to our patients will always be needed in our communities. However, we don't have to wait until after an injury has occurred to save a life.

Injury prevention programs are emerging in an increasing number of EMS organizations throughout Vermont. EMS providers are offering services and activities ranging from bicycle safety sessions for children to fall prevention programs for seniors. It seems natural for EMS personnel to become involved in injury prevention. We have all seen examples of injuries that could have been prevented or minimized had the victim taken some simple precautions. Our knowledge and experience with injuries gives us a unique perspective on injury prevention.

EMS is not the only emergency services profession to push for prevention. Firefighters have made plenty of progress with their fire prevention programs.

According to Larry Stewart, a fire service specialist with the NFPA, fire prevention efforts have resulted in dramatic decreases in fire related deaths. Mr. Stewart notes that the traditional role of firefighters has been gradually shifting. Many firefighters have taken the responsibility for educating the public about fire safety. Our communities are safer thanks to these efforts. We now have fewer fires and fewer fire related deaths than we did just a decade ago.

The shift toward prevention is occurring in EMS as well. It is not uncommon now to see EMT texts with sections dedicated to injury prevention. Our role as EMS providers is gradually expanding to include public safety education. We now know that we can save more lives through prevention than we can with bandages and IV fluids.

Of course, treatment will always be one of our top responsibilities. There is nothing like the feeling you get when you are able to help a severely injured patient. Knowing that your efforts may have played a part in saving a life can be quite an experience. Still, we can do so much more for our communities by including prevention activities in our list of EMS responsibilities.

So, which is better, an ambulance or a fence? I suggest that the best communities build sturdy fences but keep an ambulance on the other side for the ones who get through. If your EMS organization is already providing prevention activities in your region, I applaud you. If you are interested in offering prevention programs in your region, please call me at the EMS office (or e-mail *wclark@vdh.state.vt.us)*. I may be able to offer some suggestions for programs and funding sources.

— Bill Clark
Pediatric EMS Coordinator

Agency of Transportation
Governor's Highway Safety Program
Department of Health
VT SAFE KIDS
Department of Education

VERMONT SAFE KIDS

Do you remember how much fun you had when you walked to school?

Many students these days have not enjoyed this experience. On October 2, 2001, Vermont schools will participate in the International Walk Your Child to School Day. We hope your school will be among them.

There are a number of reasons to participate:

- promote physical activity
- raise community awareness about pedestrian access and safety
- educate youth in safe walking skills
- reduce traffic congestion
- enhance a sense of community

Do you bus your students to and from school? You can set up drop-off zones a block from school so your students can participate.

Your school can do a lot to make this event memorable as well as educational. For example, one school brought street maps into classrooms so that kids could help design safe routes to school.

To participate, register your school/event on the national web site at *www.walktoschool-usa.org.* The web site has an enormous amount of information to make your event a success.

Additionally, depending on your location, members of the Vermont Teen Leadership Safety Program (VTLSP) may be able to help you. The VTLSP is a

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teen group that promotes a safe, healthy, and drug-free lifestyle.

If you think you may be interested, but still have some questions, call Jon Kaplan at the Vermont Agency of Transportation at 828-0059. The success of your event will depend on a strong commitment at the local level. We look forward to seeing you out walking with the kids from your school on October 2.

Jon Kaplan
VT Agency of Transportation
Bicycle and Pedestrian Program

Jill Nye-McKeown
Physical Activity Promotion
Governor's Council on Physical Fitness and Sports

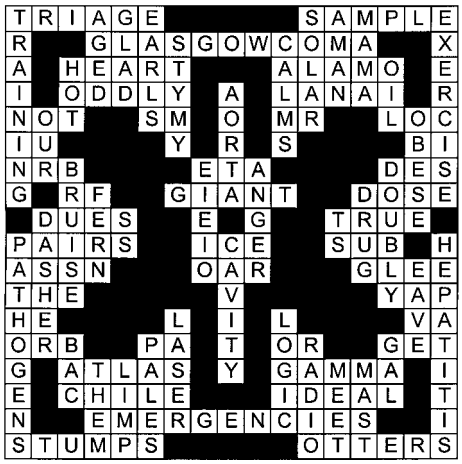
Kathy Keating
VT SAFE KIDS Coordinator

Jeanne Johnson
Governor's Highway Safety Program

Carol Rose
Department of Education

Stephanie Courcy
Injury Prevention Coordinator
Department of Health

EMS Crossword Puzzle Answers



The Vermont EMS Data Project Update

During the early stages of the Vermont EMS Data Project, we recognized the need to develop a carefully balanced data set. For those of you who are not familiar with this term, a data set is a list of data elements, such as name, date of birth, etc. If the list of elements is too short, the usefulness of the data is limited. If the list is too long, EMS providers might become frustrated with the amount of time it takes to enter all the information. After many hours and many meetings, the Vermont EMS data set is nearly complete. The list is both thorough and concise.

We expect that many of you are already collecting most, if not all, of the data elements we included in our data set. Here is a quick look at the features of the Vermont EMS data set:

Injury prevention

The data set contains many elements that injury prevention workers will find useful. These elements include ICD-9 "E" codes listing the suspected cause of injury, safety devices used, suspected intent of injury (which can help identify whether the injury was intentional or not intentional) and the type of location where the injury occurred.

Injury prevention programs can be evaluated for effectiveness by observing changes in injury frequency.

EMS Organization Management

Comprehensive billing data was included in the data set to help services that bill for patient transport. Logistical information, including incident dates and times, will help facilitate scheduling and resource allocation. Personnel reports can be generated which include information on specific members in your organization, for example, "How many calls did John Doe take last month?" and "How many times did John Doe start an IV last year?"

Medical Direction/QI/ Training

The data set will allow district and service managers to evaluate protocol effectiveness, for example, "Do all patients complaining of difficulty breathing get oxygen?" This information will allow trainers to present more targeted instruction focusing on specific issues. Furthermore, this data will demonstrate if a need exists for specialized equipment or technical training in a community.

Privacy

It is extremely important to limit access to this data. Services will have access to all of their own data. Sensitive data like patient name, social security number, etc. will not be made available to unauthorized persons. The finished data system will comply with all state and federal privacy regulations including the most recent Health Insurance Portability and Accountability Act (HIPAA) regulations.

This new data set will be incorporated into our future EMS data system. There is no need for you to change your patient care reports at this time.

If you would like to review this data set, please e-mail me *(wclark@vdh.state.vt.us)*. I prefer to send out electronic copies due to the number of pages included in this data set. You can contact me at the EMS office if you have any questions about this data project.

— Bill Clark
Pediatric EMS Coordinator

Endnotes

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