



Division of Emergency Medical Services

DISCUSSION POINTS FOR RECENT TRAINING CHANGES

The following summarizes recent changes to Rhode Island EMT course/training requirements as adopted by the Ambulance Service Advisory Board. The purpose of this document is to provide an outline for discussing how these provisions might be modified to better serve the EMS community.

EMT-BASIC COURSE CURRICULUM

The Rhode Island EMT-Basic curriculum has been expanded to include coverage of the state's new *Major Incident* protocol. *Net increase to the EMT-Basic Course: 6 hours.*

Add Major Incident Module

Summary: All Rhode Island EMT-Basic initial training courses ending after September 1, 2007 will include the new Major Incident Module.

Discussion: This new course module reflects the implementation of the Major Incident protocol and associated knowledge for weapons of mass destruction, industrial/agricultural accidents, and other complex or multi-victim incidents. The module's content is based on the training provided to all existing Rhode Island EMTs under the Major Incident program carried out in cooperation with RIEMA using DHS funds. This content includes: WMD awareness, management of major incident scenes, care of patients exposed to various WMD agents (which may also be encountered in industrial settings), introduction to BLS medications in the Major Incident protocol, and practical skills training in use of Level C personal protective equipment (PPE). These changes reflect findings of the RIDI Project, which began in 1999, lessons learned from the Station Nightclub fire, multiple revisions to the RI EMA Mass Casualty Plan, the need to comply with federal National Incident Management System requirements, and other evolving knowledge on this topic post 9/11. Major Incident Protocol development began in 2001, and has been extensively vetted in Rhode Island's fire department HAZMAT, EMA, and EMS communities through multiple drafts, working meetings, discussion groups, and presentations.

Time Added: 3 hours didactic, 3 hours lab

EMT-CARDIAC COURSE CURRICULUM

The Rhode Island EMT-Cardiac curriculum has been expanded to include new skills added to the EMT-C scope-of-practice (IV pumps and transcutaneous pacing) as well as additional coverage of medical emergencies. In addition, an ACLS course must be run in conjunction with an EMT-Cardiac course to ensure that candidates for licensure are prepared to meet the new requirement that EMT-Cardiacs be ACLS certified. *Net increase to the EMT-Cardiac Course: 8 hours plus ACLS course (10-16 hours).*

1. Add IV Infusion Pump

Summary: All Rhode Island EMT-Cardiac initial training courses ending after September 1, 2007 will include instruction in use of the IV infusion pump.

Discussion: This new lesson reflects the addition of the IV infusion pump to the EMT-Cardiac's scope-of-practice (it was previously an Extended Role Skill.) Where the IV infusion pump was once used primarily for interfacility transfers, it is now a tool required for any Rhode Island ALS provider (Cardiac or Paramedic) when delivering medication by IV infusion (such as amiodarone, dopamine and lidocaine.) While not all services elect to equip their ambulances with a pump (it is presently optional), the skill is covered because it is part of the EMT-Cardiac's scope-of-practice. This follows the same rationale as teaching all medications available to the EMT-Cardiac, even though some services may not elect to carry the optional medications on their vehicles.

This change was necessitated by the need for infusion accuracy when delivering these drugs to keep in step with the standards of care. Previously used methods (manual drip adjustment, Dial-a-Flow and similar devices) have been shown to be inaccurate and therefore are potentially dangerous when used with some of these medications.

In almost all cases, the need for emergency ambulances to infuse these medications occurs after other measures in the relevant Protocol. For example, Lidocaine infusion may be indicated after defibrillation from VF or VT cardiac arrest. Given typical transport times in Rhode Island, it is unlikely that most EMTs will “get to” this part of the Protocol often. Therefore, we have made IV Infusion Pumps optional on the equipment list, but understand that this may limit the practice options available to RI ALS EMTs.

To aid services in conducting IV Infusion Pump training, the Division of EMS has recently procured two IV infusion pumps that may be loaned out for training purposes.

Time Added: 1.5 hours didactic, 1.5 hours practical, 1 hour exam

2. Add didactic session to Medical Emergencies

Summary: All Rhode Island EMT-Cardiac initial training courses ending after September 1, 2007 will include an additional lesson in Medical Emergencies.

Discussion: This change was adopted in response to complaints by Instructor/Coordinators that the EMT-Cardiac curriculum did not allow sufficient time to cover medical emergencies. Previously, the curriculum provided only four hours to cover the entire range of non-cardiac-related medical emergencies (such as stroke/TIA, diabetes, impaired consciousness, acute abdomen, overdose, obstetrics, anaphylaxis, and communicable diseases.) This content is now divided into two four-hour lectures instead of one.

Time Added: 4 hours

3. Add transcutaneous pacing

Summary: All Rhode Island EMT-Cardiac initial training courses ending after September 1, 2007 will include instruction in transcutaneous pacing.

Discussion: This change reflects the addition of transcutaneous pacing to the EMT-Cardiac’s scope-of-practice (it has been a pilot program in select services for nearly eight years.) Because pacing can be covered in conjunction with cardiac monitoring, defibrillation, and cardioversion it does not add any time to the overall course.

Time Added: None

4. Add ALS Major Incident medications

Summary: All Rhode Island EMT-Cardiac initial training courses ending after September 1, 2007 will include instruction in ALS medications from the Major Incident protocol.

Discussion: This new course module reflects the addition of the Major Incident protocol. Most Major Incident content is covered in the EMT-Basic course; the only addition to the EMT-Cardiac initial training program is coverage of ALS Major Incident medications (cyanide antidote kit and Versed®.) As such, this information can be covered in conjunction with other pharmacology and does not add any time to the overall course.

Time Added: None

5. Incorporate ACLS course

Summary: All Rhode Island EMT-Cardiac initial training courses ending after September 1, 2007 will incorporate an Advanced Cardiac Life Support (ACLS) module delivered according to current American Heart Association (AHA) standards.

Discussion: This addition reflects the Ambulance Board’s decision that all Rhode Island EMT-Cardiacs must obtain ACLS certification by January 1, 2009. Though ACLS is effectively a standalone course, its inclusion is required for all EMT-Cardiac training programs so as to be consistent with the BLS/CPR course being delivered in conjunction with all EMT-Basic training programs.

See *ACLS Certification* below for further explanation/justification.

Time Added: 12-16 hours

EMT-BASIC REFRESHER CURRICULUM

The EMT-Basic Refresher curriculum has been expanded to include a Major Incident refresher session. *Net increase to the EMT-Basic Refresher: 2-4 hours.*

1. Add Major Incident Module

Summary: All Rhode Island EMT-Basic refresher programs ending after September 1, 2007 will include the new Major Incident Module.

Discussion: This new course module reflects the implementation of the Major Incident protocol and associated knowledge for weapons of mass destruction. See *EMT-Basic Course Curriculum: Add Major Incident Module* for further explanation/justification.

Time Added: 2-4 hours

EMT-CARDIAC REFRESHER CURRICULUM

The Rhode Island EMT-Cardiac curriculum has been expanded to include new skills added to the EMT-C scope-of-practice (IV pumps and transcutaneous pacing.) However, this content has been worked into existing lectures, resulting in no net change in course length. Additional changes approved by the Ambulance Service Advisory Board have not been implemented yet in light of the new ACLS requirement. *Net increase to the EMT-Cardiac Refresher: 0 hours.*

1. IV Infusion Pump

Summary: All Rhode Island EMT-Cardiac refresher programs ending after September 1, 2007 will include instruction in use of the IV infusion pump.

Discussion: This change reflects the addition of the IV infusion pump to the EMT-Cardiac's scope-of-practice. Based on the expectation that individuals will have already completed IV infusion pump training as part of their initial EMT-Cardiac course or an update training, IV infusion pumps are covered in the refresher in conjunction with other IV knowledge/skills. Consequently no additional time is added to the regular EMT-Cardiac refresher.

For individuals that have not yet received initial training on the IV infusion pump, instructors may choose (at their option) to expand the IV infusion pump coverage in their refresher program to provide complete first-time IV infusion pump instruction to their students (see *IV Infusion Pump Update* below.)

To aid services in conducting IV Infusion Pump training, the Division of EMS is in the process of procuring one or more pumps (using EMS-C funds) that may be loaned out for training purposes.

Time Added: None

2. Transcutaneous Pacing

Summary: All Rhode Island EMT-Cardiac refresher programs ending after September 1, 2007 will include instruction in transcutaneous pacing.

Discussion: This change reflects the addition of transcutaneous pacing to the EMT-Cardiac's scope-of-practice (it has been a pilot program in select services for nearly eight years.) Based on the expectation that individuals will have already completed transcutaneous pacing training as part of their initial EMT-Cardiac course or an update training, transcutaneous pacing is covered in the refresher in conjunction with cardiac monitoring, defibrillation, and cardioversion. Consequently no additional time is added to the regular EMT-Cardiac refresher.

For individuals that have not yet received initial training on transcutaneous pacing, instructors may choose (at their option) to expand the transcutaneous pacing coverage in their refresher program to provide complete first-time transcutaneous pacing instruction to their students (see *Transcutaneous Pacing Update* below.)

Time Added: None

3. Add didactic session for pharmacology

Summary: All Rhode Island EMT-Cardiac refresher programs ending after September 1, 2007 will include an additional didactic session for pharmacology.

Discussion: This change has not been implemented in light of the additional instruction received when the EMT-Cardiac completes their ACLS recertification (separate from the refresher.)

Time Added: None (would have been 4 hours)

4. Add practical skills lab session

Summary: All Rhode Island EMT-Cardiac refresher programs ending after September 1, 2007 will include an additional practical skills lab session.

Discussion: This change has not been implemented in light of the additional skills practice received when the EMT-Cardiac completes their ACLS recertification (separate from the refresher.)

Time Added: None (would have been 4 hours)

ACLS CERTIFICATION

1. ACLS Course

Summary: All EMT-Cardiacs must have ACLS certification by January 1, 2009.

Discussion: This requirement was originally suggested by Instructor/Coordinators at the Instructors' Roundtable held at DOH in the spring of 2007. There are ultimately several reasons why this certification process is needed for EMT-Cardiacs:

- The EMT-Cardiac is a level unique to Rhode Island and therefore has no national curriculum, no national examination or credentialing process, and no national scope-of-practice. ACLS covers most of the EMT-Cardiac's core functions and provides some level of national certification for these providers.
- Because of the large number of EMT-Cardiacs in Rhode Island, not all practitioners are afforded sufficient opportunity to practice their skills. ACLS certification represents additional training in place of that practical experience.
- The current Protocols follow the AHA 2005 ACLS guidelines in almost every respect. To increase the efficiency of future updates, the Protocols frequently reference current AHA ACLS standards rather than reproducing every detail. Therefore, it is only logical that all RI EMTs licensed to deliver ALS demonstrate familiarity with AHA ACLS.
- EMT-Cardiacs' scope-of-practice covers nearly all that of the Paramedic while EMT-Cardiacs receive only about 15% of the Paramedic's training (and no clinical time.) Given the EMT-Cardiac's limited training, ACLS certification offers an opportunity to confirm competency on critical cardiac care skills.

As described above, all EMT-Cardiac initial training courses have been required to include ACLS since September 2007. Existing EMT-Cardiacs were given until January 1, 2009. The intent of the Division of EMS in implementing the ACLS requirement was to follow the long-standing model used for CPR certification. This model, as described in regulation, requires all EMTs to obtain re-certification in CPR prior to renewing their license. EMTs may opt to take either an AHA CPR course or a Department-approved equivalent (of which there are about five.) In the case of ACLS, there are at least several alternative vendors for ACLS certification, some of which include web-based delivery. The details of the ACLS requirement were to be finalized at the December 2007 Board meeting but remain pending as a result of that meeting's cancellation.

In summary, there are a number of solutions to the concerns raised by municipal services about ACLS. In addition to the wide variety of course delivery options, the original January 1, 2009 deadline could be extended further to provide services with greater flexibility in scheduling and financing course delivery.

Time: 10-16 hours -- may be reduced if there is redundancy with existing course curriculum

EXTENDED ROLE SKILL: MANUAL DEFIBRILLATION

With the widespread adoption of the Automatic External Defibrillator (AED), manual defibrillation for EMT-Basics is being phased out and new Manual Defibrillation courses are no longer being approved.

EXTENDED ROLE SKILL: IV INFUSION PUMP

Summary: As of June 30, 2007 the IV infusion pump is no longer considered an Extended Role Skill and is part of the scope-of-practice for all Rhode Island EMT-Cardiacs. The Ambulance Board has given all existing EMT-Cardiacs until January 1, 2009 to complete an IV Infusion Pump Update. EMT-Cardiacs may utilize this skill as soon as they have completed the training.

Discussion: For existing EMT-Cardiacs, the IV Infusion Pump Update is used to provide the knowledge and skills needed to use the pump under Rhode Island protocols. For most EMS services, it is expected that this update will be delivered as part of their normal EMT refresher program cycle. However, the IV Infusion Pump Update may be run as a standalone course by any RI-licensed EMT-Instructor/Coordinator.

Like other update trainings, the *IV Infusion Pump Update* is intended to be competency based rather than requiring a set number of hours. The number of hours recommended by the curriculum is 3-4 but experienced EMT-Cardiacs will likely require significantly less time to complete the training.

To ease this transition for EMS services, the original January 1, 2009 deadline could be extended further to provide services with greater flexibility in scheduling and financing course delivery.

Time: Varies (1-3 hours)

TRANSCUTANEOUS PACING UPDATE

Summary: As of June 30, 2007 transcutaneous pacing is no longer a pilot program and is part of the scope-of-practice for all Rhode Island EMT-Cardiacs. The Ambulance Board has given all existing EMT-Cardiacs until January 1, 2009 to complete a Transcutaneous Pacing Update. EMT-Cardiacs may utilize this skill as soon as they have completed the training.

Discussion: For existing EMT-Cardiacs, the Transcutaneous Pacing Update is used to provide the knowledge and skills necessary to use transcutaneous pacing under Rhode Island protocols. For most EMS services, it is expected that this update will be delivered as part of their normal EMT refresher program cycle. However, the Transcutaneous Pacing Update may be run as a standalone course by any RI-licensed EMT-Instructor/Coordinator.

Like other update trainings, the *Transcutaneous Pacing Update* is intended to be competency based rather than requiring a set number of hours. The number of hours recommended by the curriculum is 3-4 but experienced EMT-Cardiacs will likely require significantly less time to complete the training.

Time Added: Varies (1-3 hours)

MAJOR INCIDENT UPDATE

Summary: All Rhode Island EMS services must deliver the state's Major Incident training to all available EMTs by December 31, 2007 (subsequently extended to March 1, 2008.)

Discussion: This is a required one-time update for all existing EMTs and is delivered by their affiliated services. In conjunction with this training, RIDOH and RIEMA are issuing over \$500k in major incident medications and protective gear to all RI-licensed EMS services (purchased with Federal grant funds.) The content of this training is the same as that described above in *EMT-Basic Course Curriculum*.

Time Added: 3 hours didactic, 3 hours lab