By Kelly Harrell

Getting the lead out

As of May 1, you have 214 days left to take your EMS certification/licensure test using a pencil and paper. After that, you'll need to belly up to the computer keyboard.

Mark this date in your EMS calendars: Beginning January 1, 2007, Texas will transition to computer-based testing (CBT), along with the other 47 states using the National Registry of EMTs (NREMT). In doing so, EMS joins several other health professions who test on computers such as the National Council of State Boards of Nursing; the American Board of Emergency Medicine; the American Board of Surgery, and others. NREMT has signed a seven-year contract with Pearson VUE to provide computer-based EMS exams.

This means changes that go beyond taking a test on a computer. Right now, testing for first responders and EMTs is scheduled and administered by DSHS personnel and advanced testing is scheduled and set up through National Registry reps. As of January 1, all testing will be scheduled through Pearson VUE and administered at a computer terminal at one of the testing center sites. Students will be able to schedule exam appointments at their own convenience either online or by calling a toll-free number. Basic skills testing will remain within the educational programs. The skills test for EMT-Is and paramedics willoccur at the educational program but with Advanced Level National Registry representatives.

Beta testing on approximately 1200 testing candidates will be done in June and July to make sure that the system is ready for the January launch. Texas was not included in the 13 states offered beta testing but State EMS Director Terry Bavousett is working with NREMT to make sure that Texas' concerns are heard, including the placement of testing centers.

"This is a big change, and we wanted to be sure that NREMT was kept informed of what was important to us in Texas," says Bavousett.

CBT vs. CAT

While these terms have been used interchangeably, there are differences between CBT and Computer-Adaptive Testing (CAT). CBT is simply a description of the method of testing. A computer-based test could be simply a mirror image of a so-called 'linear' pencil and paper test, where each candidate takes a test with the same test questions in the same order. Or it could be a computer-adaptive test, which adapts questions to the candidate's perceived knowledge.

NREMT testing will be computer-based using computer-adaptive techniques. According to testing experts, CAT is a method of question selection for a candidate that allows for the most efficient testing of a candidate's knowledge in the shortest amount of time. For instance, if a candidate correctly answers a question, the computer will choose one slightly more difficult for the next question. This will continue until the candidate misses a question. The computer then asks an easier question. The reverse is true for a candidate with less ability. If a candidate continues to answer incorrectly, then the questions would become easier. The theory of CAT is that it will take fewer questions, answered incorrectly or correctly, to determine that the candidate possesses the required knowledge – or not. The end result is that candidates at the top end and low end of knowledge will have shorter tests. For those in the middle, it might take a bit longer for the computer to determine if the candidate has the knowledge to pass. As you might have guessed, there are no grades in CAT, simply a pass/fail notation.

According to NREMT, there are several advantages to computer testing:

- Rapid turnaround, with test results available in one day from Pearson VUE and provided to NREMT, the candidates and DSHS.
- Choice on exam sites, with Pearson VUE testing centers around Texas. And candidates can take the test in any Pearson VUE testing center in the U.S.
- Online and phone registration make it easy to schedule and pay for the exam.
- Individualized testing available through CAT allows for better assessment of knowledge, usually in a shorter time frame.
- Security of testing is increased because each test is different, and, in general, candidates are exposed to fewer questions.

The move to computer testing comes with an increase in price. These fees cover both the testing center fee and the NREMT registration fee. Texas certification and licensing fees are additional and paid directly to DSHS. Volunteers are not exempt from NREMT/testing center fees.

- ECA/First responder, $65
- EMT-Basic, $70
- EMT-I, $100
- Paramedic, $110

NREMT is working on an educational DVD about the computer testing that will be available for distribution to state offices and EMS educators in fall of 2006. Content planned for the DVD includes an explanation of CBT; how to establish an online account for test scheduling and complete an online application; a virtual tour and what to expect at a testing center; and sample exam questions.

For more information about CAT or the transition to computer-based testing, visit the NREMT website at www.nremt.org. We will post information on the OEMS/TS website as it becomes available.