

 NATIONAL REGISTRY OF EMERGENCY MEDICAL TECHNICIANS

 ENGAGING WITH THE EMS COMMUNITY FOR A BETTER FUTURE
 2008 ANNUAL REPORT





## 2008: A YEAR OF CHANGE

The year 2008 historically will be labeled as the year of change. Many These projects, paid for by the taxpayers of the United States, cost a will tie the change to the national elections, particularly the historical combined total of over \$2 million to complete. They are consensus election of Barak Obama as President of the United States. We too. projects that were nationally peer-reviewed and written by EMS in EMS, may also historically remember 2008 as our year of change. professionals. Although not everyone was pleased with every detail of Although EMS began preparations for change in the late 1990s when the final product, consensus was reached. The three federal steps an agenda for the future was written, that future is now! The popularity needed to change our future were completed and the EMS community of creating change for us in EMS back in 2000 has now become today's was at the table. struggle for implementation.

In 1999, after two years, six meetings and a national blue ribbon consensus meeting, a National Highway Traffic Safety Administration (NHTSA) Task force published their work titled EMS Education Agenda for the Future: A Systems Approach. Publication led to widespread endorsement, praise was bestowed upon the authors, kudos were heard in the halls of EMS, and the "lead" organization for this change, the National Association of State EMS Directors (now NASEMSO) proudly took ownership. After all, it was and has always been the State EMS Agencies, their employees, and members of state committees who have best understood the complications of delivery of EMS outside of a "systems" approach. Solutions were finally proposed to eighteen different stumbling blocks that challenged the improvement of EMS education, licensure and certification across America (see pgs 12-15 in the Agenda). In the year 2000, pledges toward accomplishment of the Agenda abounded among the EMS organizations, states and national stakeholder organizations.

In 2008 we saw a slightly different picture. We have accomplished much in the past eight years. The National Association of EMS Physicians and the American College of Emergency Physicians completed a NHTSA-funded "National EMS Core Content." The first and least controversial—component of the National EMS Education Agenda was complete. Then the National Association of State EMS Officials led a much more controversial NHTSA project: the National EMS Scope of Practice Model. Many struggles occurred during development of the Scope of Practice but consensus was reached in the end. Finally, in September of 2008, the National Association of EMS Educators completed step number three of the agenda-the Nationa EMS Education Standards.

In 2008 the focus moved to implementation of all five components of the agenda. The final two components of the agenda—National EMS Education Program Accreditation and National EMS Certification—are private non-governmental components funded via user fees instead of taxpayer dollars. Both agencies are non-profit, which means our government has placed upon them rules and responsibilities for conducting their business while keeping their fees as low as possible, and their mission in the best interests of the public. Both, as required in the EMS Education Agenda, are headed by Boards of Directors who select their members from the EMS community. These private agencies are just as reflective of the national EMS stakeholders as the publicly funded and directed NHTSA components of the agenda. Both have members who are physicians, state regulators, EMS providers, educators, and EMS provider agencies. Constituency groups are at the decision making table for the final two components just as they were for the government sponsored first three components.

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"Although EMS began preparations for change in the late 1990s when an agenda for the future was itten, that future is now!

The time has come to implement all five components of the EMS Education Agenda, which isn't going to happen overnight. Best

estimates are that it will take until 2018 to completely implement all components—a task which is the responsibility of the states and the lead stakeholders within the states. Back in 2000 the system was designed correctly. Modifications to the remaining two components can be made as we progress. Consensus on change will remain the rule; everyone will not like everything, but implementation of the agenda was, and still remains EMS' design and goal. The year 2009 is the time for every state to continue to work toward the change for the future.

An important component of change involves change agents. These are people who find problems within a current system and apply their leadership skills to encourage and eventually implement change. In EMS this is sometimes a problem due to the turnover of change agents. NREMT records indicate that since the year 2000 only 22% of the State EMS Directors, who were in place when the EMS Education Agenda for the Future was written, remain in place today. This means the change agents of 2000 have changed. No one faults people for finding better jobs, taking promotions or retiring. This is a fact of life and new leaders have to educate themselves about the conditions that led former change agents to make their recommendations. Historical perspectives on current issues are difficult to grasp when people are busy and none of the people involved in the historical decisions are in the new decisionmaking process. Education and re-education are a necessary part of change management.

When the NREMT announced in 2008 that it would be requiring National EMS Paramedic Education Program Accreditation starting in 2013, our decision came under scrutiny by today's EMS stakeholders: an understandable reaction. We spent 2008 speaking with leaders, reeducating them on the thinking of the 2000 change agents and their positions. The National Registry was and is not alone in this educational endeavor. Members of the National Association of State EMS Officials (NASEMSO) EMS Education Agenda Implementation Team, members of the Committee on Accreditation for the EMS Professions (CoAEMSP). National Registry Board members and other national stakeholder leaders are getting the word out about the future system of EMS Education. This is a system that will be more productive, lead to a higher percentage of competent providers coming into the workforce, help professionalize our career field and draw closer parity between the EMS workforce and other allied health professionals. Our patients, who can be our biggest advocates, call us when they are in their greatest time of need.

The validity of the voices of advocacy is judged by others who may be members of state or federal legislatures, or physician or nursing professions who judge our contribution to public health and welfare. When EMS does not have a system that proves our professional stature, the voices of our advocates are drowned out by the screams of others who are competing for scarce resources. EMS must compete for funding even though our life-saving mission is obvious to every citizen.

The NREMT does not stand alone in support of the EMS Education Agenda for the Future. The National Association of EMS Educators (NAEMSE) and the National Association of EMTs (NAEMT) have position statements regarding accreditation and the Agenda. The International Association of Fire Chiefs EMS Section and the American Ambulance Association are joining, as members, with the current sponsors of the Committee on Accreditation of Educational Programs for the EMS Professions (CoAEMSP). The National Association of State EMS Officials has an Implementation Team that has visited many states, held meetings and is working with states on implementation. Throughout 2009 more organizations will pass motions supporting the Agenda, accreditation and certification. All of these efforts are followed by many individuals who support implementation because they understand its value.

**The EMS Education Agenda for the Future: A Systems Approach** is the right direction for America's EMS. The year 2008 was, and is, the starting point for difficult implementation decisions that can lead the EMS workforce into the future. The change agents of the past set the course. The change agents of today are responsible for following the plan through to implementation.

We don't like failure in our EMS mission. We feed on success and when change improves patient care and enhances our professional stature we support that change. 2008 was the beginning of the test for change and together we will set our course for a bright and prosperous future.

"The future system of EMS Education will be more productive, lead to a higher percentage of competent providers coming into the workforce, help professionalize our career field and draw closer parity between the EMS workforce and other allied health professionals."

## FROM THE EXECUTIVE DIRECTOR

# THE MISSION OF CARE DRIVES THE NREMT IN 2008

2008 flew by! The NREMT Board of Directors and staff established an ambitious plan and we accomplished a majority of our action steps. We are proud to say that during the past year all NREMT certification programs received re-accreditation by the National Commission for Certifying Agencies (NCCA). This accomplishment attests to our communities of interest that the work we accomplish on their behalf is valid, legally defensible, psychometrically sound, ethical and proper. Later in this annual report we further describe this process and the standards we had to meet to achieve this re-accreditation.

We continued our current functions and enhancements in our administration and operations. We hosted ten item writing meetings with content directed toward the new National EMS Scope of Practice Model. A special thanks to the 100 subject matter experts who spent a weekend at the NREMT offices improving drafted test items. A group of folks investigated revisions of our practical examinations and made recommendations to the Board that were carried over to the 2009 Strategic Plan. More information on the practical revision work will be available later this year.

We invested an additional \$400,000 in our website mainly to allow EMS professionals to recertify online. In 2009 we'll be pilot testing this system with an expected launch for those due to recertify in 2010. In addition, we maintained our research program which is reported on in more detail in this report. The NREMT staff visited many states and spoke to stakeholders regarding the Registry's agenda and projects, and updated everyone on the success of computer adaptive testing CAT. Finally, Associate Director Dr. Gregg Margolis served as the provider level leader for the Paramedic level of the National EMS Education Standards project. Executive Director William E. Brown, Jr. and Associate Director Rob Wagoner also assisted with various aspects of the project.

The NREMT Board directs the Registry to continually assess and enhance the NREMT as the National EMS Certification. The NREMT will help with the development of transition courses for today's EMS providers to migrate toward the new levels of practice outlined in the National EMS Scope of Practice Model. Since the NREMT is not the lead organization in the initiative to write these transition courses, we have not begun any of this important work yet. Finally we're working with the West Virginia EMS Office to develop a process to re-instate all of their former NREMTs back into the National Registry.

Although our country went through some ups and downs in 2008, the NREMT continued to maintain a positive attitude, care about our customers, deliver a fine product and assist in making changes in processes that affect all NREMTs. We are pleased to report that computer based testing (CBT) had a positive effect on workforce recruitment in almost every state (see the related article in the 2009 NREMT newsletter). Hard and enjoyable work, coupled with an outstanding mission of care, make life satisfying at the NREMT. We are looking forward to 2009!

William E. Brown, Jr., MS, RN, NREMT-P





NREMT Senior Leadership left to right: William E. Brown Jr., Executive Director; Gregg S. Margolis, Associate Director; Sherry A. Mason, Director of Information Systems; Robert L. Wagoner, Associate Director; Terry Markwood, Certification Coordinator.

### SENIOR LEADERSHIP

William E. Brown Jr., MS. RN, NREMT-P Executive Director

Gregg S. Margolis, PhD, NREMT-P Associate Director

Terry Markwood, MS Ed, NREMT-B Certification Coordinator

Sherry A. Mason Director of Information Systems

Robert L. Wagoner, BS, NREMT-P Associate Director

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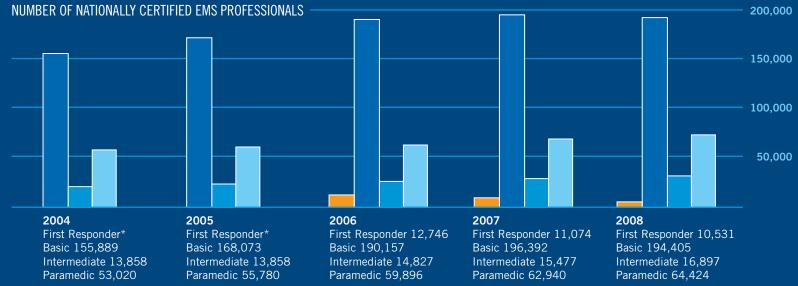
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EXECUTIVE DIRECTOR EMERITUS Rocco V. Morando

## DIRECTORS EMERITI

Rav A. Bias Marilyn Gifford, MD Norman E. McSwain, Jr., MD Roger White, MD

# **5 YEAR NATIONAL CERTIFICATION TRENDS**



Total

\*Not available EMT I/85 and EMT I/99 combined

| FIRST TIME PASS RATE |      |      |      |      |      |  |  |  |  |
|----------------------|------|------|------|------|------|--|--|--|--|
|                      | 2004 | 2005 | 2006 | 2007 | 2008 |  |  |  |  |
| First Responder      | 73%  | 71%  | 65%  | 78%  | 76%  |  |  |  |  |
| EMT Basic            | 64%  | 65%  | 71%  | 70%  | 68%  |  |  |  |  |
| EMT-I 85             | 55%  | 61%  | 65%  | 70%  | 71%  |  |  |  |  |
| EMT-I 99             | 65%  | 63%  | 59%  | 71%  | 72%  |  |  |  |  |
| Paramedic            | 63%  | 64%  | 62%  | 63%  | 68%  |  |  |  |  |

| EXAMS PER YEAR  |        |        |        |        |
|-----------------|--------|--------|--------|--------|
|                 | 2004   | 2005   | 2006   | 2007   |
| First Responder | 7,774  | 6,761  | 7,307  | 4,053  |
| EMT Basic       | 88,222 | 92,090 | 94,616 | 83,709 |
| EMT-I 85        | 6,004  | 5,231  | 5,518  | 5,341  |
| EMT-I 99        | 1,521  | 1,869  | 1,704  | 1,537  |
| Paramedic       | 15,339 | 15,815 | 17,380 | 17,001 |

118.860 121.766 126.525 111.641 121.228

2008

4.335

91,323

5,523

1.623

18.424

# SIMILARITIES EXIST BETWEEN CERTIFICATION PROCESS FOR EMS PROFESSIONALS AND EMERGENCY PHYSICIANS

## AN INTERVIEW WITH NREMT BOARD MEMBER DR. RITU SAHNI

As Oregon State Medical Director and Associate Professor of Emergency Medicine at Oregon Health & Science University, Ritu Sahni, MD, MPH FACEP likes to compare the certification process of EMS professionals to that of emergency physicians.

"In order to become certified as an emergency physician, students are required to complete three specific steps," Dr. Sahni explains. "Students first go through an accredited educational program/residency. They then take the board certification exam that verifies their entry level competency into their specialty. In order to practice, physicians must get local approval (hospital clinical privileges) to practice in an Emergency Department. Finally, individuals must obtain recertification every ten years." In the EMS field, individuals follow a similar path, Dr. Sahni points out. They complete an educational program, then take the national certification exam, get state licensure and local approval, and finally recertify every two years.

EMS professionals must be affiliated with a medical director in order to work, just like a physician must be granted privileges to work at a particular hospital. "Even though a physician is board certified, he or she must be granted privileges to work at a particular hospital," Dr. Sahni explains, saying that the hospital wants to know that the physicia has treated similar patients and has the necessary education, which recertification ensures. In the same way, an EMS provider who

"A competent emergency physician is one who went through an accredited residency, received appropriate training from an accredited educational program, and then demonstrates competency."

is nationally certified also needs to be affiliated with a medical director who grants him or her the privilege to work and ensures his or her competency.

Dr. Sahni makes reference to the five part model of the EMS Agenda for the Future, which proposes an education system that includes national certification as part of an "improved, structured system to educate the next generation of EMS professionals."

The EMS community is facing these issues now, Dr. Sahni believes, because it is a relatively new area of practice—only 30 years old. Yet Dr. Sahni maintains that certification is about more than just passing a test. Dr. Sahni refers to Daniels v. ABEM (American Board of Emergency Medicine), in which Dr. Daniels argued that passing the ABEM test should be enough to grant him the right to practice emergency medicine.

"You can't look at national certification as 'just a test'," Dr. Sahni comments. "Having the ability to pass a test doesn't make someone a competent emergency physician. A competent emergency physician is one who went through an accredited residency, received appropriate training from an accredited educational program, and then demonstrates competency. With EMS professionals, competency is about going through an accredited program AND taking the national certification exam."

Summing up his support of national certification, Dr. Sahni says, "The best way for a State EMS Director to ensure that it is safe to grant a license to someone moving into his state is to know he or she has obtained national certification. Doctors adhere to this process of national certification and expect it in their profession," Dr. Sahni points out. "Why is it unreasonable to expect it from the EMS profession?"

A member of the NREMT Board of Directors, Dr. Sahni is the State of Oregon EMS and Trauma Medical Director and Associate Professor of Emergency Medicine at Oregon Health & Science University, in Portland, Oregon, Dr. Sahni is also on the Board of Directors of the National Association of EMS Physicians and was Chairman of its Standards and Practice Committee. He has completed editorial and ad Hoc review activities for Annals of Emergency Medicine, Academic Emergency Medicine and PreHospital Emergency Care. Dr. Sahni graduated from the University of Michigan and attended medical school at Tulane. He did his emergency medicine residency and an EMS fellowship at the University of Pittsburgh. He is a member of the National EMS Advisory Council (NEMSAC) and has served on the NREMT Practice Analysis Committee.

# CBT DOES NOT HAVE A NEGATIVE AFFECT ON NATIONAL EMS RECRUITMENT

Recruitment is a multi-faceted issue. A number of factors can affect recruitment in both a positive or negative manner. Sometimes it is a case of both positive AND negative. In 2005 and 2006, the NREMT, the states and everyone involved in EMS were concerned that computer based testing (CBT), along with its costs and access issues, would have a negative impact on the number of people entering EMS. Would the travel to test centers cause folks to complete courses but never test for licensure? We've all heard it before, whenever there has been any change proposed in EMS: "That \_\_\_\_\_(fill in the blank with any new proposal) will kill EMS!" While some changes can affect recruitment, the NREMT does not want be involved in decisions that have a negative impact on the delivery of care. Certainly any dramatic decrease in workforce availability or quality would be a concern shared by the NREMT.

However, testing figures for 2008 have been calculated and they are positive! The NREMT compared 2005 to 2008. We did not use 2006 and 2007 because we considered these to be 'transition' years where the volume in pencil-paper exams may have increased due to a 'one last chance before the NREMT goes to a more difficult computer exam' mentality that may have influenced the 2006 and 2007 volume. In 2005, EMT candidates had no choice but to take the pencil-paper exams. In 2008, again there was no choice but to take a CBT exam.



Comparing 2005 and 2008 in states that used the NREMT exam after implementation of CBT, testing volume increased:

by William E. Brown, Jr.,

NREMT Executive Director

- EMT-Basic increased by 15%
- Intermediate /85 increased by 18%
- Paramedic increased by 16%.

Comparing 2005 and 2008 testing volume in individual states at the **FMT-Basic level:** 

- 10 states increased more than 10%
- 4 states decreased by more than 10%
- 36 states fell within 10% of 2005 exams

Comparing 2005 and 2008 testing volume in individual states at the Paramedic level:

- 25 states increased more than 10%
- 6 states decreased by more than 10%
- 19 states fell within 10% of 2005 exam

The NREMT wishes to thank those who made the transition to CBT a complete success. We continue to open more sites in rural areas and we are ready to welcome new states to the NREMT. Our work as the National EMS Certification is not complete. The important finding is that CBT is helpful for recruitment and has not affected recruitment levels.

## RESEARCH DEPARTMENT NOTES

# NREMT STUDIES VARIABLES THAT AFFECT PROBABILITY OF PASSING NATIONAL CERTIFICATION EXAM

The NREMT Research Department continues to conduct research that will benefit the EMS community and further its professionalism. In the past year, Research Fellows Jon Studnek and Antonio Fernandez, as well as NREMT Associate Director Dr. Gregg Margolis, completed peer-reviewed studies that resulted in valuable findings including the following:

- Research suggests that the national accreditation of an education program, the qualifications of the lead instructor, student high school class rank, years of education, whether the training was required for employment, age, race, gender, and estimated time since course completion all had significant effects on the probability of passing the national paramedic certification examination. A change in any of these variables can affect a student's probability of passing the exam.
- 75% of nationally certified first responders work in rural areas and 61% work for fire departments. More than a quarter have received no training in the management and treatment of patients involved in biological, chemical, nuclear, explosive emergencies, or structural collapse within the past 24 months.
- Research was conducted to develop recommendations for EMT-Basic educational programs to improve pass rates on the national certification exam. Recommendations include: 1) secure strong institution support, 2) hire well qualified EMT lead instructors, 3) strive for instructional consistency 4) recruit students who are positively motivated to succeed, 5) admit students who have demonstrated that they have the academic skills necessary to complete the course, 6) develop student test-taking skills, and 7) establish course passing standards that exceed minimum competency. (In collaboration with J Mistovich.)

- NREMT addressed the debate on how much experience is necessary before enrolling in a Paramedic class. Research suggests that EMT-Basics with 2.5-10 years experience were most likely to pass their first paramedic exam attempt, although the advantage is modest. EMS (In collaboration with D Cone.)
- Medical direction is a cornerstone of modern EMS practice. Almost 2/3 of EMS professionals have had direct contact with their medical director within the last 6 months. (In collaboration with RE O'Connor.)
- Tobacco use is a major cause of health problems. Approximately one third of EMS professionals have smoked tobacco; of those, about half no longer smoke. Of the remaining, 98% have attempted to quit within the last 12 months. A higher percentage of females in EMS reported being current smokers with a prevalence notably higher than that found in the general population.
- Obesity and excess weight are significant health concerns in this country. According to research, 71.5% of EMS professionals are classified as overweight (BMI> or =25).
- Nearly a quarter of EMS professionals met the Centers for Disease Control recommendations that individuals participate in moderateintensity physical activity for 30 minutes a day, 5 or more days a week.
- Many EMS leaders have expressed the need for EMS professionals to become involved in disease prevention initiatives. Over 80% of EMS personnel believe that they should participate. (In collaboration with B Lerner and MN Shah.)

# NREMT DEMONSTRATES COMPLIANCE WITH 21 STRINGENT STANDARDS TO RECEIVE RE-ACCREDITATION BY THE NCCA

In 2008 the NREMT submitted its certification processes to the scrutiny of national accreditation. We were pleased to have all of the certifications we offer that were submitted awarded the full five-year accreditation by the National Commission for Certifying Agencies (NCCA). Founded by the National Organization for Competency Assurance (NOCA) in 1987, the NCCA sets voluntary standards that assure quality for certifying agencies. In 2003 the NREMT received its initial accreditation. The certification processes submitted in 2008 were for re-accreditation. By subjecting ourselves to this voluntary process, the NREMT is demonstrating to our customers (state licensing agencies, employers, medical directors and EMTs) that our certification process is comprehensive, legally defendable and high quality.

To meet the accreditation requirements the NREMT had to demonstrate compliance with 21 standards of the NCCA. Although most of the NCCA standards evolve around the psychometrics, validity and defensibility of the written examinations, the NCCA also has standards that cover other components of a certification program. The NREMT had to substantiate our independence as a certifying body, prove we have proper financial resources, demonstrate that there is representativeness on our Board of Directors, and show that we have proper staffing and consultation services available to manage a complex certification agency. The NREMT also had to explain our recertification requirements to the NCCA commissioners as part of the process. Compiling the accreditation self-study required hundreds of hours of preparation, research and writing. The final document, if printed on paper, would have been five inches thick!

Sometimes, explaining a comprehensive process and defending it to a panel of certification experts is not a simple task. However, the NREMT is committed to demonstrating to our customers that we can meet National Standards for Accreditation. We are pleased to have received full accreditation of all NREMT certifications submitted until 2013, when we will once again submit for re-accreditation.



The map below illustrates the states that utilize National Registry certification to issue EMS licenses as of December 31, 2008.



Utilize the Registry

Notes:

Florida uses the National Registry for Basic certification only.

Alaska, Indiana, Maryland, New Jersey, New Mexico, Pennsylvania, Virginia, Washington DC, and Washington use the National Registry for Paramedic certification only.



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Ritu Sahni, MD, FACEP **Oregon State Medical Director** Associate Professor of Emergency Medicine, Oregon Health & Science University Portland, OR

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