

*Save the Date: September 27*

## How to Decrease Cardiovascular Mortality in Your Fire Department.



**Saturday,, September 27**  
**Old Sturbridge Village**  
**9:15 am until 1:00 pm**  
(breakfast and lunch included)

**Families Welcome to tour the Village at a discount rate**

For more information:  
[NECOEM@comcast.net](mailto:NECOEM@comcast.net)  
[OEMAConn@comcast.net](mailto:OEMAConn@comcast.net)  
registration attached or at  
[www.necoem.org](http://www.necoem.org)

Cardiovascular Disease in Firefighters: State of the Science  
Setting Up and Assessing Fitness Programs

NFPA 1582 Standard: CAD Screening and Cardiac Fitness

Panel Discussion:

**Stefanos Kales, MD, MPH, FACP, FACOEM**  
**Bruce A. Jacobsen, PT, M.Ed.**  
**Chief Ronald Samul, New London Fire Dept.**  
**Thomas R. Hales, MD, MPH, CDC/NIOSH**

**Combat Challenge Course Demo**  
**Bonnie Benson, rated #3 in the nation, and her coach, Chuck Leblanc.**

*Presented Jointly by:*

*New England College of Occupational and Environmental Medicine, (NECOEM) and Occupational and Environmental Medical Association of Connecticut (OEMAC) and sponsored by Industrial Protection Services (IPS), LLC.*

*Attendees will be eligible to receive up to 3.5 AMA PRA Category 1 Credit(s), or a Certificate of Attendance for 3.5 CEUs*

## Registration Please register by Friday, September 12.

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You may register online at [www.necoem.org](http://www.necoem.org)

You may also register by sending a check or credit card info with the following information\*

Name(s) \_\_\_\_\_  
Employer \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
Telephone \_\_\_\_\_  
\*Email \_\_\_\_\_

Issue checks to <b>NECOEM</b> 22 Mill Street, Groveland, MA 01834
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**Fee:** \_\_\_\_\_ \$65. for Practicing Medical Professionals, includes CME, breakfast, lunch  
\_\_\_\_\_ \$25. for Fire Chiefs, Safety Officers, Guests, includes breakfast, lunch  
\_\_\_\_\_ \$25. for Residents and Students, includes CME, breakfast, lunch  
\_\_\_\_\_ \$15. per lunch age 12 and over  
\_\_\_\_\_ \$10. per lunch under age 12.  
\_\_\_\_\_ Old Sturbridge Village discounted admission at \$15. adult, \$6. child (under 12)

**Total** \_\_\_\_\_ **Please specify type of admissions requested** \_\_\_\_\_ # Adult \_\_\_\_\_ # Child

### Payment Options:

\_\_\_\_\_ check \_\_\_\_\_ MasterCard \_\_\_\_\_ Visa \_\_\_\_\_ Am. Express

Number \_\_\_\_\_ Exp. Date \_\_\_\_\_ Sec. Code \_\_\_\_\_

Signature \_\_\_\_\_

Street Address, Zip Code of Card Holder \_\_\_\_\_

Inquiries:

**Voice/fax: 978-373-5597 or [NECOEM@comcast.net](mailto:NECOEM@comcast.net)**

*\*Please note that a reservation by fax or email is considered to be a commitment to attend.*

### Schedule for September 27

**9:00 to 9:15 Registration/Breakfast**

**9:20 to 10:00 Cardiovascular Disease in Firefighters: State of the Science**

**10:00 to 10:40 Setting Up and Assessing Fitness Programs**

**10:40 to 11:10 NFPA Medical Guidelines**

**11:10 to 12:00 Panel**

**12:00 to 12:15 Combat Challenge Guidelines**

**12:15 to 1:00 Combat Challenge Demo (held outdoors rain or shine)**

**12:30 to 1:00 Luncheon served for all**

### Accreditation:

"This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education through the Joint Sponsorship of the American College of Occupational and Environmental Medicine and NECOEM/OEMAC. The American College of Occupational and Environmental Medicine is accredited by the ACCME to provide continuing medical education for physicians."

"The American College of Occupational and Environmental Medicine designates this educational activity for a maximum of 3.5 *AMA PRA Category 1 Credit(s)*". Physicians should only claim credit commensurate with the extent of their participation in the activity."

*\*This offering was not submitted to MNA, however, the contact hours provided in this offering are applicable toward licensure renewal. Reference No. 244 CMR.04, Board of Nursing Code of Massachusetts Regulations.*

### Registration Policies

- Advance registration is advised. Any registration received, regardless of payment status, is considered to be a commitment to pay and to attend.
- The cancellation deadline is at the close of business on September 12th.
- Participants who register, but do not attend, are not eligible for a refund. If the registration fee has not been paid in advance, participants who do not cancel by September 12th and do not attend are responsible for the cost.
- Registration after September 12 incurs an additional \$10. late fee.

## Description of Presentations/Objectives:

Over the last 10 years, **Dr. Kales** and his team have been performing research on cardiovascular issues in firefighters, including hypertension, obesity, dyslipidemias, disability retirement, and on-duty cardiovascular disease events. They have published landmark studies describing the occupational and medical factors that contribute to on-duty coronary heart disease (CHD) events. During his talk, Dr. Kales will review the current state of the science with respect to the progression of undetected or inadequately managed CVD risk factors into sub-clinical and clinical disease; and 2) the contribution and interaction of occupational hazards and pre-existing pathology in the development of on-duty heart disease events.

### Objectives:

- 1) Understand the occupational and personal factors underlying heart disease in firefighters;
- 2) Learn key evidence-based ideas for preventing cardiovascular disease and on-duty events among firefighters

**Bruce Jacobsen** will discuss various strategies for implementing fitness programs into local fire departments. NFPA fitness recommendations will be reviewed as the baseline to frame fitness program development and implementation. Discussion will include potential implementation obstacles, educational opportunities that may enhance the fitness program, the ultimate benefits of fitness programs as related to the essential functions of the job and the importance of data collection, analysis and communication of data with the fire departments.

### Objectives:

- 1.) Understand the basic four components of physical fitness and the assessment process of each.
- 2.) Understand exercise prescription protocols that will enhance fitness deficits and help to maintain fitness levels.
- 3.) Understand potential obstacles to implementing fitness programs into local fire departments, and strategies to help overcome these obstacles during their planning process.
- 4.) Better understand the importance of data collection and interpretation that will help support the need for annual firefighter fitness assessment.
- 5.) Understand associate educational opportunities that will enhance the fitness program.

**Dr. Hales** is with the NIOSH Fire Fighter Fatality Investigation and Prevention Program, Cardiovascular Disease Component located in Cincinnati, Ohio. Dr. Hales is board certified in Internal Medicine, Occupational Medicine, and a member of NFPA Fire Service Occupational Safety and Health Committee.

### Objective:

Understand the NFPA 1582 Standard regarding CAD screening and cardiac fitness for duty issues for both candidates and members.

### Panel discussion:

Conference speakers will be joined by **Chief Ron Samul** of the New London Fire Department to discuss best approaches to implementing programs for the Fire Department to reduce cardiovascular mortality. The discussion will cover screening programs, fitness assessments and fitness programs as well as providing a forum for those attending to ask questions of the panelists.

### Objectives:

- 1) Appreciate the controversies involved with implementing programs to reduce cardiovascular mortality
- 2) Understand one approach involved in setting up a firefighter fitness program

### Combat Challenge:

The Challenge seeks to encourage firefighter fitness and demonstrate the profession's rigors to the public. Wearing "full bunker gear" competitors race head-to-head as they simulate the physical demands of real-life firefighting.

### Objectives

- 1) understand firefighting equipment and gear
- 2) learn about the cardiovascular, flexibility and agility requirements for the work of firefighting.

Additional information about speakers:

**Dr. Stefanos Kales** earned an MD from Harvard Medical School, and an MPH from the Harvard School of Public Health. He completed residencies in Internal Medicine at the Cambridge Hospital/ Harvard Medical School and in Occupational and Environmental Medicine at the Harvard School of Public Health. He is Board Certified in both specialties and practices Occupational and Environmental Medicine at the Cambridge Hospital, where he is the Director of Employee Health & Industrial Medicine.

Dr. Kales is an Assistant Professor of Medicine at Harvard Medical School and of Occupational Medicine at the Harvard School of Public Health. Dr. Kales has been the principal investigator on several grants related to hazardous materials teams and firefighters. His group has published extensively on firefighters. Dr. Kales is also active in other occupational and environmental research and education, including metals and chemical terrorism. Dr. Kales is an Occupational & Environmental medicine consultant to the Poison Control Center and has worked with Massachusetts' hazardous materials teams for the last 10 years. He was the principal author of a chemical recognition guide for the American College of Physicians featured as part of the ACP bioterrorism website (<http://www.acponline.org/bioterro/>), and was an invited speaker at ACP's National 2003 session regarding Chemical Terrorism.

**Bruce Jacobsen** manages the Hospital of Saint Raphael's Occupational Health Plus™ program in Branford, Connecticut. He is a Connecticut licensed Physical Therapist. Bruce has a Bachelor of Science in Physical Education ('83), and a Masters of Education in Sports Medicine ('84), both from Springfield College, MA. Bruce was also a Nationally Certified Athletic Trainer for 20-years. He earned a Bachelor of Science Degree in Physical Therapy ('89) from the University of Connecticut. He is certified to perform Functional Capacity Evaluations with WorkWell Systems, Inc. and was trained in Functional Job Analysis, Functional Job Descriptions, Post-offer Pre-employment Screenings and Work Conditioning programs through Isernhagen Work Systems Inc. Bruce has focused his Physical Therapy practices toward Industrial Medicine since 1992.

**Chief Ron Samul** is a 37 year veteran of the New London, CT Fire Department having served as Firefighter/EMT, Fire Inspector, Fire Marshal, Deputy Chief and was appointed Fire Chief in 1985. He is a graduate of the Thames Valley State Technical College and the State University of New York with a Bachelor of Science degree in Business Management and Economics with a concentration in Fire Service Administration.

**Charles "Chuck" LeBlanc** has been in the fire service 35 years and is currently a Lieutenant on Engine 3 in the City of Leominster, MA. He has been the EMS Director for the Leominster Fire Department for 34 years. Chuck is an EMT-D and a Fire Instructor II for the Department of Fire Services at the MA State Fire Academy. He has been a Firefighter Combat Challenge Competitor for 16 years and is currently ranked 5th in the over 55 category and 4th in the over 50 Tandem category in the world. Chuck has been the coach of the Providence Fire Department Combat Challenge Team for 6 years.

**Bonnie Benson** has been in the fire service for 8 years. Prior to working in the fire service she was a trauma nurse at Rhode Island Hospital in Providence, RI. Bonnie is currently an Acting Lieutenant on Rescue 2 with the Providence Fire Department. She is also the Medical Team Manager for the Rhode Island Urban Search and Rescue Team, TF-1. Bonnie is a Fire Instructor I for the RI State Fire Academy and lectures at the Barnstable Fire Academy in Barnstable, MA as well as the NH State Fire Academy in Concord, NH. She has been a Firefighter Combat Challenge Competitor for 8 years and is currently ranked 3rd in the United States and 9th in the world for female firefighters.