From the Director's Desk
NIOSH research and activities help keep young workers safe on the job.

Futures Initiative
Stay up-to-date with the CDC Futures Initiative through this new topic page.

Immunoassays for Mold: New Information for Physicians
Technical review finds immunoassays are one of several important tools for determining mold exposure.

NIOSH Director Receives Steiger Memorial Award
Presented at 2004 American Industrial Hygiene Conference and Exposition in honor of the late Representative William Steiger.

Impact of Long Working Hours
National conference and new NIOSH document focus on the health and safety of long working hours.

Engineering Literary Awards
U.S. Public Health Service officers recognized at annual meeting.

Fast 'Steps' by a NIOSH Marathon Champion
T.J. Lentz wins Cincinnati’s Flying Pig Marathon

Around NIOSH

Office of the Director

NIOSH Diversity Project
NIOSH Panel Focuses on Worker Health Disparities

Division of Applied Research and Technology (DART)
Roger H. Lynch Public Health Service Outstanding Young Engineer Award for 2004

Division of Respiratory Disease Studies (DRDS)
Public Stakeholder Meeting on NIOSH B-Reader Certification Program

Division of Safety Research (DSR)
Researchers begin identifying highway work sites to evaluate new prevention measures

Health Effects Laboratory Division (HELD)
HELD Scientists Release State-of-the-Art Publication

National Personal Protective Technology Laboratory (NPPTL)
NPPTL Receives "Best of Session" Poster Award at AIHce 2004

NPPTL Employees Receive Excellence in Government Awards

Pittsburgh Research Laboratory (PRL)
PRL Employees Receive Excellence in Government Awards

Spokane Research Laboratory (SRL)
High-Tech System to Reduce Forklift Injuries

News From Our Partners

Look for Us

Communication Products
NIOSH Bibliography of Communication and Research Products 2003

Workers’ Health Chartbook 2004

Nanotechnology Topic Page

Upcoming Events
Hand-Arm Vibration Conference

2004 National Symposium on Agricultural Health and Safety

3rd Conference on Metal Toxicity and Carcinogenesis

2nd International Symposium on
This summer over 4 million teens are expected to enter the U.S. workforce as food handlers, laborers, cashiers, farm workers, and lifeguards, among other occupations. While eager to learn new skills and enthusiastic to earn a few bucks, young workers are at an increased risk of being injured on the job due to lack of experience and unfamiliarity with safe operating procedures. About 70 teens die from work-related injuries in the U.S. each year and nearly 77,000 get hurt badly enough to warrant an emergency room visit. Ensuring that these young workers are safe on the job is a critical part of the surveillance, research and outreach activities that NIOSH conducts and supports each year.

Identifying the Problems

NIOSH conducts and supports data collection and analyses to better understand the circumstances of young worker injuries and illnesses.

- In 1997, with funding from Congress, NIOSH launched an initiative to reduce childhood agricultural injuries and illnesses by advancing scientific knowledge on causes and prevention. NIOSH collects and disseminates new data on childhood agricultural injuries, funds research projects to advance knowledge about causes and prevention, and funds the National Children’s Center for Rural and Agricultural Safety and Health to translate scientific findings into easy-to-read language and facilitate prevention efforts across the country.

- In collaboration with NIOSH, the U.S. Department of Agriculture recently released new data on agricultural-related injuries among children on minority-operated farms, [http://usda.mannlib.cornell.edu/reports/nassr/other/injury/injr0104.pdf](http://usda.mannlib.cornell.edu/reports/nassr/other/injury/injr0104.pdf).

- In response to a recommendation in the National Research Council/Institute of Medicine report “Protecting Youth at Work,” NIOSH conducts and supports investigations of youth injury deaths through the Fatality Assessment and Control Evaluation program, [http://www.cdc.gov/niosh/facwb.html](http://www.cdc.gov/niosh/facwb.html). These investigations are used to develop recommendations for preventing future similar deaths.

Getting the Word Out


- In partnership with the public and private sectors, NIOSH recently published the CD-ROM “NIOSH Safety Checklists Program for Schools and Other Safety Databases” [DHHS (NIOSH) Publication No. 2004-101]. This Checklist provides information to assist schools in maintaining safe classrooms, shops, and labs for teachers and students. More than 15,000 copies of the CD-ROM have been distributed and the program is
being implemented in school systems in Iowa, Ohio and Florida. Additionally, the Miniterio de Trabajo y Asuntos Sociales of Spain has requested permission to translate the Checklist Program into Spanish for use in their high schools and technical schools. The Checklist can be accessed at http://www.cdc.gov/niosh/docs/2004-101/.

- In 2003, NIOSH became one of 26 federal agencies participating in an interagency workgroup established by the Occupational Safety and Health Administration to optimize the impact of federal resources in addressing young worker injuries and illnesses. One example of this work was the development of an occupational safety and health training curriculum targeted to the needs of teens and young adults. The curriculum was adopted by the Job Corps to help train youth participating in their programs. The curriculum currently contains modules on understanding the risk of teen work injuries, identifying potential hazards in the workplace, identifying ways to make jobs safer, dealing with emergencies at work, understanding one’s legal rights as a teen worker, and suggested strategies for communicating with a supervisor and taking action to prevent work-related injury or illness. NIOSH is continuing to refine the curriculum through additional evaluations in traditional vocational high schools. Contact Carol Merry Stephenson at CStephenson@cdc.gov for more information.

- For an overview of NIOSH efforts to protect young workers, please visit the NIOSH Young Worker Safety and Health Topic Page at http://www.cdc.gov/niosh/topics/youth/.

**Futures Initiative**

On May 13, CDC Director Dr. Julie Gerberding announced new organizational changes in CDC resulting from the CDC Futures Initiative. As described in the May 13 eNews FLASH, NIOSH will join the National Center for Environmental Health, the Agency for Toxic Substances and Disease Registry, and the National Center for Injury Prevention and Control in the new Coordinating Center for Environmental Health, Injury Prevention, and Occupational Health. This alignment will provide new opportunities for many productive collaborations to help achieve our common goals. NIOSH will continue to keep you informed of the latest developments through our new Futures Initiative web page http://www.cdc.gov/niosh/futures. We encourage you to send your comments and concerns regarding this new initiative to NIOSHNews@cdc.gov.

**Immunoenas for Mold: New Information for Physicians**

A May 2004 technical review by six NIOSH scientists and an outside colleague provides current information to help physicians in determining whether a patient’s allergic rhinitis, asthma, or other symptoms may have been caused by occupational or environmental exposure to mold or other fungi. The review found that immunoenas are a useful adjunct to a complete clinical evaluation, but as a rule they should not be used as the primary means of assessment. The review noted that although an immunoenas can reveal that a person was exposed to mold or fungus (which are widespread in nature), it cannot specify when the exposure occurred, or reliably identify the particular type of mold or fungus involved, which are key elements for linking symptoms to a given exposure. The article was published in the May 2004 issue of the *Annals of Allergy, Asthma, & Immunology*, the scientific journal of the American College of Allergy, Asthma, and Immunology (*Ann Allergy Asthma Immuno*, 2004;92:483-492).

**NIOSH Director Receives Steiger Memorial Award**

NIOSH Director John Howard received the prestigious William Steiger Memorial Award from the American Conference of Governmental Industrial Hygienists at the American Industrial Hygiene Conference and Exposition in Atlanta last month. The award honors individuals from the social and political sphere whose efforts have contributed to advancements in occupational health and safety. The award is named for the late Representative William Steiger, the co-author of the Occupational Safety and Health Act of 1970.
**Impact of Long Working Hours**

A new NIOSH publication entitled *Overtime and Extended Work Shifts: Recent Findings on Illnesses, Injuries, and Health Behaviors* [DHHS (NIOSH) Publication No. 2004-143] presents an integrative review of the methods and findings from 52 studies. The review indicates that the influence of long working hours on health and safety involves a complex interaction of a number of factors. It also recommends issues and priorities to consider in future research. The document was released in conjunction with a national conference entitled *Long Working Hours, Safety, and Health: Toward a National Research Agenda* which was held on April 29-30, 2004 on the University of Maryland campus in Baltimore, Maryland. The conference brought together researchers and representatives from labor and industry to discuss the sociological, economic, and health aspects of long work hours. The conference was conducted under the auspices of the National Occupational Research Agenda (Organization of Work Team) and cosponsored by NIOSH, the University of Maryland School of Nursing, and the U.S. Department of Justice. For more information on the conference, visit [http://nursing.umaryland.edu/longworkhours](http://nursing.umaryland.edu/longworkhours). The document can be accessed at [http://www.cdc.gov/niosh/docs/2004-143](http://www.cdc.gov/niosh/docs/2004-143).

**Engineering Literary Awards**

Several NIOSH researchers are recipients of the U. S. Public Health Service Engineering Literary Award presented at the Commissioned Officers Association Conference in May. These awards are presented annually to recognize the written works of engineers and architects within the Public Health Service. The winners include:

- **Engineering Applications Category**  

- **Research Category**  

- **Engineering Publications Category**  

**Fast ‘Steps’ by a NIOSH Marathon Champion**

Congratulations to T.J. Lentz, industrial hygienist with the NIOSH Education and Information Division, who won the men’s division competition May 2 in the Cincinnati, Ohio, Flying Pig Marathon. The internationally popular contest, which benefits Cincinnati-area charities, drew 11,928 participants this year. NIOSH is proud to recognize T.J.’s achievement as we work with our partners and stakeholders to further the *Steps to a HealthierUS Workforce* initiative. Encouraging physical fitness and other healthy lifestyles, and integrating them with traditional occupational health initiatives, benefits the employer, the employee, and the community alike. Further information on the Steps initiative is available at [http://www.cdc.gov/niosh/steps/](http://www.cdc.gov/niosh/steps/).
Office of the Director

Kathleen Rest, Ph.D., NIOSH Deputy Director for Program, departed NIOSH on May 7 for a new position as executive director of the Union of Concerned Scientists in Boston. Dr. Rest joined NIOSH as Deputy Director for Program in 1999, and she also served as Acting Director of NIOSH from June 2001 to June 2002, leading the Institute’s assistance within CDC in responding to the World Trade Center attack of September 2001 and the anthrax incidents of October 2001. NIOSH is grateful for Dr. Rest’s leadership and wishes her the best of luck in her new endeavor.

Congratulations to DeLon Hull, acting director of the Division of Surveillance, Hazard Evaluations, and Field Studies (DSHEFS), on his appointment as Coordinator of the Office of Research and Technology Transfer in the NIOSH Office of the Director. Congratulations also to Teresa Schnorr on her appointment as the new Director of DSHEFS.

NIOSH Diversity Project

NIOSH Panel Focuses on Worker Health Disparities

NIOSH’s newly established Priority Populations Steering Committee, formed of representatives from across NIOSH, met April 19-20, 2004, to focus efforts on better understanding the role of occupational health and occupational exposures in the development of health disparities among specific worker populations. Priority populations are groups of workers 1) whose biological, social, or economic characteristics may place them at increased risk of developing work-related conditions, and 2) about whom inadequate data were collected in the past. They may be disproportionately exposed to occupational hazards, particularly vulnerable to hazardous exposures, and less likely to receive care or adequate care after an injury or illness.

Division of Applied Research and Technology (DART)

Roger H. Lynch Public Health Service Outstanding Young Engineer Award for 2004

Duane Hammond was selected for the Roger H. Lynch Public Health Service Outstanding Young Engineer Award for 2004. Duane is a mechanical engineer and is recognized for his work on a variety of engineering control projects. He received the award from the U.S. Public Health Service Chief Engineer, Rear Admiral Robert Williams during the Public Health Service Professional Conference on May 16-20.

Division of Respiratory Disease Studies (DRDS)

Public Stakeholder Meeting on NIOSH B-Reader Certification Program

Lee Petsonk, Mike Attfield, Jennifer Keller, Lea Pyles, Anita Wolfe, and Greg Wagner conducted a public stakeholder meeting entitled, “Imaging of Pneumoconiosis and the NIOSH B-Reader Certification Program: Looking to the Future,” as an important step in maintaining the NIOSH B-Reader program as a contemporary, relevant, and effective quality assurance program for occupational lung disease research and prevention. Among other objectives, NIOSH and its stakeholders are evaluating the program to ensure that it continues to adhere to the International Labour Organization’s world-wide system for classifying chest radiographs to identify cases of lung disease caused by occupational dust exposures; the ILO recently completed a revision of its system, with involvement and support from NIOSH. Further information on the NIOSH B-Reader program is available at http://www.cdc.gov/niosh/pamphlet.html.
Researchers begin identifying highway work sites to evaluate new prevention measures

During the next two construction seasons, NIOSH will work with construction companies, labor unions, and State Departments of Transportation to identify highway construction projects where new occupational injury prevention measures can be implemented and evaluated. To participate in the study, a site must meet the following criteria: a hot-mix asphalt paving operation, a paving operation lasting two or three weeks, new construction or reconstruction, a multi-lane highway project, and construction during daylight hours. The prevention measures include internal traffic control plans, and a variety of proximity warning systems. NIOSH will observe paving operations on construction sites where prevention measures are used and on sites where they are not. Criteria for evaluating the prevention measures include worker occupancy of hazardous areas around construction equipment, paving crew implementation and use of the prevention strategies, and impact of the prevention strategies on paving productivity. For more information, contact David Fosbroke at def2@cdc.gov. For more information about worker safety in highway construction workzones, see Building Safer Highway Work Zones: Measures to Prevent Worker Injuries from Vehicles and Equipment [DHHS (NIOSH) Publication No. 2001-28] http://www.cdc.gov/niosh/2001128.html or visit http://www.cdc.gov/niosh/injury/traumazone.html.

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Division of Surveillance, Hazard Evaluations, and Field Studies (DSHEFS)

DSHEFS employee is named Physician of the Year

CAPT Geoffrey Calvert received the Physician Researcher of the Year Award from the Physicians Professional Advisory Committee of the U.S. Public Health Service for his work on the SENSOR Pesticides Program. The award was presented on May 18 by the Assistant Secretary of Health RADM Cristina Beato and the Surgeon General VADM Richard Carmona at the annual meeting of the Commissioned Officers Association.

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Education and Information Division (EID)

Stop Sticks Campaign

The “Stop Sticks Campaign,” a partnership involving NIOSH, health professionals, and health agencies in Columbia, South Carolina, recently marked the completion of seven “safety blitz” information and education projects at five Columbia health care facilities. Information on needlestick prevention was disseminated in different departments in the facilities in different ways (including posters, articles, staff meetings, demonstrations, and other means). Each project or “blitz” was tailored to the needs of the specific department involved (operating room, emergency department, or facility-wide), as identified by a team of partners including health care employees, management, and educators. Data analysis is currently being conducted to look for differences in message exposure, attitudes, and behaviors before and after the intervention. For more information on this project, contact Ray Sinclair at RSinclair@cdc.gov.

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Health Effects Laboratory Division (HELD)

HELD Scientists Release State-of-the-Art Publication

HELD scientists Val Vallyathan, Vincent Castranova, and Xianglin Shi are editors of a new book “Oxygen/Nitrogen Radicals: Lung Injury and Disease.” This book is part of a continuing series of monographs on “Lung Biology in Health and Disease.” The edited treatise is a state-of-the-art book dealing specifically with lung injury induced by oxygen and nitrogen radicals. The book explores the mechanisms involved in lung injury, inflammation and development of diseases triggered by oxidative stress and discusses molecular, cellular, and mechanistic events leading to disease development.

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National Personal Protective Technology Laboratory (NPPTL)

NPPTL Receives "Best of Session" Poster Award at AIHce 2004

Ziging Zhuang received a “Best of Session” award at the American Industrial Hygiene Conference and Exposition for his poster presentation titled “The effect of ambient aerosol concentration and exercise on PortaCount™ quantitative fit factors.” The abstract can be viewed at http://www.aiha.org/abs04/ps403.htm by scrolling to poster number 349.
OSHA Announces FY2004 Safety and Health Training Grants

OSHA is accepting proposals for the Susan B. Harwood Training Grants Program. These safety and health training grants are for nonprofit, community and faith-based organizations. Grants will be awarded in two categories: Targeted Topic Training Grants focusing on construction and general industry hazards, ergonomics, and the health care industry; and Training Materials Development Grants that support the development, evaluation, and validation of training materials for construction and general industry hazards, lead hazards and work-related transportation hazards. More information on the training grants can be found on OSHA's web site http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=NEWS_RELEASES&p_id=10845.

NORA Profiles the Intervention Effectiveness Research Team

In the first of our National Occupational Research Agenda (NORA) team profiles, eNews presents the accomplishments of the Intervention Effectiveness Research (IER) Team. Promoting the importance of measuring the impact from occupational health interventions represents this team's mission. Team Leader Ray Sinclair explains that currently few worksites measure the effectiveness of their safety programs. For example, an organization may implement a policy requiring the use of safety shoes but may fail to measure subsequent rates of slips and falls to determine if the rates decline. The IER Team believes intervention effectiveness research helps organizations better manage their resources. As a result, the team currently sponsors over 40 research projects evaluating training programs and technical innovations from a variety of industries. Other team accomplishments include: two peer reviewed journal publications, two NIOSH documents, and numerous workshops and conference presentations. Their most recent accomplishment involves the publication of Does it really Work? How to Evaluate Safety and Health Changes in the Workplace, a straightforward guide designed to motivate workplace safety practitioners to measure their occupational safety and health programs. To view a copy of this booklet, review current team projects, or view a list of team members, please visit the IER site at http://www2a.cdc.gov/nora/noratopictemp.asp?rscharea=ier.
Look for Us

Look for the NIOSH exhibit at the American Society for Safety Engineers (ASSE) conference, Safety2004, on June 7-9 in Las Vegas, NV. We will be in booth number 1316. More information on the conference is available at http://www.asse.org/safety2004.htm.

NIOSH will also have an exhibit at the Elko Mining Expo on June 9-12 in Elko, NV. More information on the expo is available at http://www.elkocva.com/miningexpo.html.

Communication Products

NIOSH Bibliography of Communication and Research Products 2003

Workers’ Health Chartbook 2004
The Worker Health Chartbook 2004 consolidates information from the network of injury and illness surveillance tracking systems in the U.S. and is designed for agencies, organizations, employers, researchers, workers, and others who need to know about occupational injuries and illnesses. The document presents the data in an easy-to-read, visually compelling manner. The prepublication version of the Chartbook is accessible at http://www.cdc.gov/niosh/docs/chartbook.

Nanotechnology Topic Page
Learn more about the new NIOSH initiative on nanotechnology by visiting the Nanotechnology topic page at http://www.niosh.cdc.gov/niosh/topics/nanotech.

Upcoming Events

Hand-Arm Vibration Conference
NIOSH will cosponsor the 10th International Conference on Hand-Arm Vibration to be held June 7-11, 2004 in Las Vegas, Nevada. Alice Hamilton, the first American physician to devote her life to the practice of industrial medicine, published the first comprehensive study in 1918 on the occupational origin of Raynaud’s Phenomenon, now called Hand-Arm Vibration Syndrome (HAVS). Significant progress has been made since that time towards understanding HAVS, risk assessment of vibration exposure, and the development of effective strategies to reduce the prevalence of HAVS, but research is essential for further progress to be made. The top scientists and research engineers in this field from all over the world will attend this conference and present information on the most recent scientific discoveries. For more information on this conference can be found at http://www.cdc.gov/niosh/pdfs/10th-Int-Conf-H-A-Vib-final.pdf or by contacting Ren G. Dong at rkd6@cdc.gov. Additional information on NIOSH research pertaining to hand-arm vibration is available at http://www.cdc.gov/niosh/handvibra.html.

2004 National Symposium on Agricultural Health and Safety
3rd Conference on Metal Toxicity and Carcinogenesis
The 3rd Conference on Molecular Mechanisms of Metal Toxicity and Carcinogenesis will be held on September 12-15, 2004 at the NIOSH Morgantown facility. The meeting is cosponsored by NIOSH and the Occupational Safety and Health Administration. The conference will provide an opportunity to exchange most recent information on new and emerging advances concerning mechanisms of metal-induced toxicity and carcinogenesis, formulate molecular mechanisms of metal carcinogenesis and propose novel therapeutic interventions, risk assessments and prevention strategies. Contact Xianglin Shi at xshi@cdc.gov for more information.

2nd International Symposium on Work Ability
The 2nd International Symposium on Work Ability is scheduled for October 18-20, 2004 in Verona, Italy. The Symposium is being organized by the Universities of Milano and Verona, the International Commission on Occupational Health (ICOH) Scientific Committee “Ageing and Work” and the International Ergonomics Association (IEA) Technical Committee “Ageing.” Topics include ways to assess and promote work ability and the factors affecting the work ability of older workers. NIOSH is an institutional member of ICOH. For more information on the symposium, go to http://www.cdc.gov/niosh/pdfs/workability-a.pdf.

Steps to a HealthierUS Workforce Symposium
NIOSH will sponsor the Steps To A HealthierUS Workforce 2004 Symposium on October 26-28, 2004 at the Morris & Gwendolyn Cafritz Foundation Conference Center on the campus of George Washington University in Washington, DC. The symposium will bring together communities of occupational safety and health protection and health promotion to develop a coordinated system that addresses both workplace and worker health. More information on the symposium is available at http://www.cdc.gov/niosh/steps.

Word of the Month
Hand-Arm Vibration Syndrome (HAVS) is caused by repeated and frequent use of hand-held vibrating tools or working with machinery that vibrates. Symptoms of HAVS include numbness, pain and “white finger” or Raynaud’s phenomenon.

NIOSH eNews on the Web: www.cdc.gov/niosh/enews/

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