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Excellence in science, service and research to practice

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Comments accepted until June 30, 2006.

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## **From the Director's Desk**

On May 25, NIOSH recognized contributions by our scientists and engineers for excellence in science, in service, and in applying research for the prevention of occupational illness and injury. I am pleased to highlight this year's awards, which reflect NIOSH's core values of conducting exemplary science to meet important needs, moving that research into practice, and developing historic partnerships nationally and globally.

### **Alice Hamilton Awards**

The annual Alice Hamilton Awards were presented to four NIOSH technical products of superior scientific merit for 2005. It is given on the basis of rigorous reviews by panels of scientific experts, for outstanding NIOSH contributions in the areas of biological sciences, engineering and physical sciences, human studies and education materials. The award is named for pioneering research and occupational physician, Dr. Alice Hamilton. The 2006 winners are:



Dr. Alice Hamilton

### **Educational Materials Category:**

-- Winner:

Scott DF, Drake PL, Brady TM. *HazCom Helper ver. 2.5*. Spokane, WA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 2005-135c [CD-ROM], 2005.

-- Honorable Mention

Cullen ET, and Fein AH. *Tell Me a Story: Why Stories are Essential to Effective Safety Training*. Spokane, WA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication No. 2005-152, 2005.

### **Biological Sciences Category:**

-- Winner:

Shvedova AA, Kisin ER, Mercer R, Murray AR, Johnson VJ, Potapovich AI, Tyurina YY, Gorelik O, Arepalli

S, Schwegler-Berry D, Hubbs AF, Antonini J, Evans DE, Ku BK, Ramsey D, Maynard A, Kagan VE, Castranova V, Baron P. Unusual inflammatory and fibrogenic pulmonary responses to single-walled carbon nanotubes in mice. *Am J Physiol Lung Cell Mol Physiol* 289(5):L698-L708, 2005.

-- Honorable Mention

Tobias HJ, Schafer MP, Pitesky M, Ferguson DP, Horn J, Frank M, Gard EE. Bioaerosol mass spectrometry for rapid detection of individual airborne Mycobacterium tuberculosis H37Ra particles. *Appl Environ Microbiol* 71(10): 6086-6095, 2005.

### **Engineering and Physical Sciences Category:**

-- Winner:

Hsiao H, Whitestone J, Bradtmiller B, Whistler R, Zwiener J, Lafferty C, Kau TY, Gross M. Anthropometric criteria for the design of tractor cabs and protection frames. *Ergonomics* 48(4):323-353, 2005.

### **Human Studies Category:**

-- Winner:

Kubale TL, Daniels RD, Yiin JH, Couch, J, Schubauer-Berigan MK, Kinnes GM, Silver SR, Nowlin SJ, Chen PH. A nested case-control study of leukemia mortality and ionizing radiation at the Portsmouth Naval Shipyard. *Radiat Res* 164(6):810-819, 2005.

-- Honorable Mention

(These two sequential articles represent a single nomination.)

Chen W, Hnizdo E, Chen JQ, Attfield MD, Gao P, Hearl F, Lu J, Wallace WE. Risk of silicosis in cohorts of Chinese tin and tungsten miners and pottery workers (I): an epidemiological study. *Am J Ind Med* 48(1):1-9, 2005.

Harrison J, Chen JQ, Miller W, Chen W, Hnizdo E, Lu J, Chisholm W, Keane M, Gao P, Wallace WE. Risk of silicosis in cohorts of Chinese tin and tungsten miners and pottery workers (II): workplace-specific silica particle surface composition. *Am J Ind Med* 48(1):10-15, 2005.

More information about each of this year's Alice Hamilton Award winners can be found at

<http://www.cdc.gov/niosh/hamilton/>.

### **James P. Keogh Award for Outstanding Service in Occupational Safety and Health**

The 2006 James P. Keogh Award for Outstanding Service in Occupational Safety and Health was presented to Marilyn Fingerhut, Ph.D. in recognition of her distinguished career of scholarship and leadership at NIOSH. The award recognizes one current or former NIOSH employee each year for exceptional service to the field. The award is offered in honor of the late Dr. James P. Keogh, a tireless advocate for worker safety and health. More information on Dr. Fingerhut's distinguished career and Dr. Keogh's contributions to occupational safety and health can be found at <http://www.cdc.gov/niosh/hamilton/fingerhut-keogh-winn-2005.html>.



Dr. James P. Keogh

### **Bullard-Sherwood Research-to-Practice Awards**

The Bullard-Sherwood Research-to-Practice Award is presented for excellence in applying research to occupational illness and injury prevention. The award is named for Edward W. Bullard, inventor of the hard hat, and R. Jeremy Sherwood, inventor of the personal industrial



hygiene sampling pump. The recipients of the award were selected after close reviews for outstanding contributions in three categories: knowledge, for research resulting in developing and transferring new knowledge into practice; interventions, for research resulting in interventions put into practice; and technology, for research resulting in new technologies put into practice. The 2006 winners are:

#### **Knowledge Category:**

-- Winner:

Hsiao H, Whisler R, Zwiener J, Guan J, Spahr J, Kau TY, Bradtmiller B, Whitestone J, Feldstein J, Wolner T, Reynolds R. *Harness Design and Sizing Effectiveness*.

#### **Interventions Category:**

-- Winner:

Cullen ET, Wopat PF, Clough-Thomas KS. *Tell Me a Story: Why Stories are Essential to Effective Safety Training*.

#### **Technology Category:**

-- Winner:

Kovalchik PG, Matetic RJ, Peterson JS. *Engineering Controls for Hearing Loss Prevention*.

-- Honorable Mention

Mark C, Chase F, Owens J. *Preventing Rock Fall Fatalities During Coal Pillar Recovery*.

More information about the 2006 winners and background on the Bullard-Sherwood r2p Awards can be found at <http://www.cdc.gov/niosh/hamilton/bullard-sherwood.html>.

### **NIOSH Invites Public Comment on Dust Monitor Draft Report**

NIOSH is requesting public comment on a Draft Report of Investigations, "Laboratory and Field Performance of a Respirable Personal Dust Monitor." The draft report addresses the laboratory and field testing of the Personal Dust Monitor (PDM). Comments will be accepted until June 30, 2006. A copy of the draft report and links for filing comments by email and online can be found at <http://www.cdc.gov/niosh/review/public/dustmonitor>. Included in the draft report for public comment are extensive technical data and discussions, such as descriptions of the PDM, the tests performed on the equipment, detailed data from test results, and the conclusions drawn from the results. The draft report concludes that, based on the findings of the tests, the device "functioned as well as the current sampler in terms of availability for use, accuracy, precision, and miner acceptance."

### **Flavorings-Related Lung Disease Subject of new NIOSH Topic Page**

A new NIOSH Topic Page provides a resource for findings and recommendations by NIOSH to reduce the risk of severe obstructive lung disease ([bronchiolitis obliterans](#)) associated with occupational exposures to flavorings. Bronchiolitis obliterans is a serious, irreversible lung disease whose symptoms include cough and shortness of breath on exertion. The topic page provides background on NIOSH's extensive research into this occupational disease, outlines the symptoms associated with and treatment for bronchiolitis obliterans, and discusses recommended control measures for reducing job-related exposures to flavorings. Also on the page are links to key NIOSH resources and reports stemming from its research. We invite you to review the Topic Page at <http://www.cdc.gov/niosh/topics/flavorings/>. The page includes an email address for providing feedback and receiving updates of information, [Flavorings@cdc.gov](mailto:Flavorings@cdc.gov).



## New NIOSH State-of-the-Art Mobile Medical Unit Coming to a Location Near You

A new mobile medical unit provides underground coal miners with the opportunity to receive confidential lung disease screening in close proximity to where they work, live or shop. This new NIOSH resource will assist researchers, medical professionals, and others in identifying the distribution and prevalence of coal workers' pneumoconiosis (CWP) or black lung disease and chronic obstructive pulmonary disease in U.S. coal miners. The self-contained unit provides individual privacy and state-of-the-art equipment for education, interviewing, x-ray screening, and lung function testing. The Mine Safety and Health Administration provided initial funding for the unit.



The NIOSH Mobile Medical Unit

To date, 581 miners have been screened in initial uses of the new unit, and further screening visits are planned for the near future in Virginia and Kentucky. Information obtained from the mobile screening activities will help identify conditions and locations where current occupational exposures may pose a risk for CWP, and where interventions may be needed to reduce exposures, prevent the onset of CWP, or identify cases of illnesses for appropriate treatment. To learn more about the program and the Mobile Medical Unit, visit <http://www.cdc.gov/niosh/topics/surveillance/ORDS/CoalWorkersHealthSurvProgram.html> or contact Anita Wolfe at [AWolfe@cdc.gov](mailto:AWolfe@cdc.gov).



NIOSH staff interviewing miners inside the unit.

## NIOSH National Personal Protective Technology Laboratory Update

Between February and May, 160 applications were submitted to NIOSH for approval of new respirators or extension of approvals for currently approved respirators. 129 were approved or extended, of which 8 were devices intended for protection against chemical, biological, radiological or nuclear (CBRN) agents.

Three NIOSH-issued user notices were posted on NIOSH's Web page in March and April. A new category of user notices has been added for the Department of Transportation. <http://www.cdc.gov/niosh/npptl>.

As requested by our stakeholders, the Respirator Standard Test Procedures have now been posted on the NIOSH Web page. This enables manufacturers to review the test procedures that the products will undergo during testing for NIOSH certification. Additional procedures will be added as they are updated. [http://www.cdc.gov/niosh/npptl/stps/respirator\\_testing.htm](http://www.cdc.gov/niosh/npptl/stps/respirator_testing.htm).

## In Memoriam: Priscilla Wopat and David K. Denton Jr.

NIOSH is saddened to report the passing of two valued employees and friends. Priscilla Wopat, a technical writer-editor at the NIOSH Spokane Research Laboratory, passed away on May 13. An excellent editor and publications manager, Priscilla was posthumously awarded a 2006 NIOSH Bullard-Sherwood r2p Award on May 25 for her work in helping to develop and publish the NIOSH publication "Tell Me a Story: Why Stories are Essential to Effective Safety Training." David K. Denton, Jr., a mining engineer also with the Spokane

Research Laboratory, passed away on May 17. Among many research accomplishments, Dave studied the applications of seismic monitoring to predict and control rock bursts in underground mines. Based on the results of his research, he helped to develop and install innovative monitoring systems in mines. He authored and co-authored numerous publications during his career, but was especially dedicated to making an impact by taking new technologies directly to miners and mine operators, and helping them improve the safety of their workplaces.

## NIOSH Office of Extramural Programs

The NIOSH Office of Extramural Programs (OEP) announces three new extramural funding opportunities.

Office of  
Extramural  
Programs

- NIOSH Small Research Grants Program (R03) - PAR-06-364  
<http://grants1.nih.gov/grants/guide/pa-files/PAR-06-364.html>
- Commercial Truck Driver Health and Safety – Preventing Injury and Illness - RFA-OH-07-001 (formerly OH-06-003)  
Letters of Intent Receipt Date: June 21, 2006  
Application Receipt Date: July 21, 2006  
<http://grants1.nih.gov/grants/guide/rfa-files/RFA-OH-07-001.html>
- Childhood Agricultural Safety and Health Research - RFA-OH-07-002 (formerly OH-06-006)  
Application Receipt Date: August 16, 2006  
<http://grants1.nih.gov/grants/guide/rfa-files/RFA-OH-07-002.html>

## r2p Corner

### NIOSH and partners receive Safe Patient Lifting Award

A NIOSH collaboration was recently recognized by the prestigious 2005 Safe Patient Handling and Movement Awards, presented by the Veterans Health Administration Veterans Integrated Service Network 8. The Safe Patient Handling and Movement Educator Award was presented to the collaboration between NIOSH, the American Nurses Association and the Veterans Affairs Patient Safety Center for the development and evaluation of a new Safe Patient Handling and Movement curriculum module to be used in schools of nursing. Faculty members from 26 geographically-dispersed schools participated and were able to successfully integrate the new approach into their existing curricula. From these the University of North Carolina, Chapel Hill School of Nursing; Boise State School of Nursing; and the Belmont University School of Nursing were selected as winners of the Educator Award for Safe Patient Handling, based on outstanding efforts to change the curriculum, including evidence-based approaches to safe patient handling. A draft of the curriculum can be accessed on the NIOSH Web site, <http://www.cdc.gov/niosh/review/public/safe-patient>.



## NORA

### Volunteers needed for the NORA Sector Research Councils.

Now is the time to volunteer to participate on a National Occupational Research Agenda (NORA) Sector Research Council. Eight councils are being formed to create and maintain a sector-specific research strategy for the nation -- and to maximize the impact of this agenda through partnerships. Each council will be led by a Manager, who is typically a NIOSH Division or Laboratory Director, and by a Coordinator, who provides day-to-day Program leadership. If you are interested in contributing to a Sector Research Council, you may contact either the Coordinator of any sector that interests you or Sid Soderholm, NORA Coordinator, at [NORACoordinator@cdc.gov](mailto:NORACoordinator@cdc.gov). After nomination by the NORA Sector Program leaders, NORA Research Council members will be asked to serve by the NIOSH Director. Each NORA Sector Research Council is expected to meet before the end of the summer. Please consider participating!



## NORA Sector Program Leaders in NIOSH

NORA Sector Program	Manager	Coordinator
Agriculture, Forestry & Fishing	George Conway <a href="mailto:GConway@cdc.gov">GConway@cdc.gov</a>	Sid Soderholm <a href="mailto:SSoderholm@cdc.gov">SSoderholm@cdc.gov</a>
Construction	Jeff Kohler <a href="mailto:JKohler@cdc.gov">JKohler@cdc.gov</a>	Matt Gillen <a href="mailto:MGillen@cdc.gov">MGillen@cdc.gov</a>
Healthcare & Social Assistance	David Weissman <a href="mailto:DWeissman@cdc.gov">DWeissman@cdc.gov</a>	Teri Palermo <a href="mailto:TPalermo@cdc.gov">TPalermo@cdc.gov</a>
Manufacturing	Mary Lynn Woebkenberg <a href="mailto:MWoebkenberg@cdc.gov">MWoebkenberg@cdc.gov</a>	Mike Gressel <a href="mailto:MGressel@cdc.gov">MGressel@cdc.gov</a>
Mining	Jeff Kohler <a href="mailto:JKohler@cdc.gov">JKohler@cdc.gov</a>	Jeff Welsh <a href="mailto:JWelsh@cdc.gov">JWelsh@cdc.gov</a>
Services	Terri Schnorr <a href="mailto:TSchnorr@cdc.gov">TSchnorr@cdc.gov</a>	David Utterback <a href="mailto:DUtterback@cdc.gov">DUtterback@cdc.gov</a>
Transportation, Warehousing & Utilities	Nancy Stout <a href="mailto:NStout@cdc.gov">NStout@cdc.gov</a>	Stephanie Pratt <a href="mailto:SPratt@cdc.gov">SPratt@cdc.gov</a>
Wholesale and Retail Trade	Paul Schulte <a href="mailto:PSchulte@cdc.gov">PSchulte@cdc.gov</a>	Vern Anderson <a href="mailto:VAnderson@cdc.gov">VAnderson@cdc.gov</a>

## Around NIOSH

### Division of Applied Research and Technology (DART)

On March 2 – 4, NIOSH, together with the American Psychological Association, the National Institute of Justice, and the National Institute on Disability and Rehabilitation Research, hosted the *Sixth International Conference on Work Stress and Health* in Miami, Florida. The conference's theme was "Making a Difference in the Workplace," focusing on the translation of research to practice. Over 700 researchers from 33 countries attended the conference, which featured 137 scientific poster presentations and 85 symposia and paper sessions, in which 364 peer-reviewed scientific papers were presented. Over three dozen reports addressed workplace interventions to reduce job stress, with other key topics covering organizational restructuring, alternative employment relationships, long working hours, workplace violence, health disparities, and natural disasters. More information on the conference is available at <http://www.apa.org/pi/work/wsh2006.html>. For information on NIOSH research on workplace and organizational stress, contact Jeannie Nigam at [JNigam@cdc.gov](mailto:JNigam@cdc.gov).

### Division of Respiratory Disease Studies (DRDS)

Staff from the DRDS Surveillance Branch conducted a two-day Longitudinal Spirometry Workshop March 9-10, 2006 in Washington, DC. The Workshop addressed statistical methods in longitudinal spirometry research relevant to workplace monitoring. The Workshop was attended by invited experts in lung function from across the U.S. Formal presentations and discussions covered the key issues in the performance and interpretation of longitudinal spirometry in relation to occupational health practice. Topics covered were data quality, methods to measure decline, interpretive criteria, communicating results, and decision making. The workshop provided the opportunity for input and information exchange with stakeholders and researchers in this r2p-oriented project concerning secondary disease prevention through worker medical monitoring. For more information, contact Eva Hnizdo at [EHnizdo@cdc.gov](mailto:EHnizdo@cdc.gov).

### Division of Safety Research (DSR)

In March 2006, the Massachusetts Fatality Assessment and Control Evaluation Program (MA FACE), funded by NIOSH, collaborated with the Massachusetts State Fire Marshal to release a Fire Safety Alert entitled, "Wood Floor Sanders Killed When Floor Finishing Product Catches Fire- Massachusetts." This publication followed two separate incidents in a 10-month period in which three Vietnamese immigrants were killed and others injured when lacquer sealer they were applying was ignited by pilot lights. The sealer used in these incidents was highly flammable, with a flash point of 9°F/-13°C. The Fire Safety Alert recommended using less flammable wood floor finishing products with flash points greater than 100°F/38°C, extinguishing all open flames and other ignition sources before beginning work, and ensuring that the work area is well-ventilated. According to press accounts, a Massachusetts task force announced an agreement by suppliers in May to take lacquer sealers off the market, and a bill requiring certification of wood flooring contractors and employees has been introduced in the Massachusetts legislature. For more information or to receive a copy of the Fire Safety Alert, contact the MA FACE Director, Michael Fiore at 617-624-5627. The MA FACE reports on these two incidents are available at <http://www.cdc.gov/niosh/face/stateface/ma/04ma032.html> and <http://www.cdc.gov/niosh/face/stateface/ma/05ma044.html>.

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

A recent article by NIOSH scientists in a growing area of 21st Century medicine was hailed by William A. See, M.D., a member of the editorial board of the journal *Urologic Oncology: Seminars and Original Investigations*, in the May-June 2006 issue of the journal. The article expanded and updated an earlier NIOSH study on risk of bladder cancer from occupational exposures. The new article found that a particular type of metabolic activity in the body involving the enzyme NAT2 was associated with a decreased risk for bladder cancer from exposure to benzidine, even though the same activity is associated with an increased risk for bladder cancer from exposure to two other industrial chemicals, 2-naphthylamine and 4-aminobiphenyl. This finding suggests that the use of NAT2 as a signal for risk of occupational bladder cancer must be done in a "contextual" way that takes the type of chemical exposure into account, Dr. See said. He added that the potential use of such emerging knowledge for better identifying populations of at-

risk workers represents an "extraordinarily powerful tool" for preventive occupational medicine. "NAT2 slow acetylation and bladder cancer in workers exposed to benzidine" was published by T. Carreón, A.M. Ruder, P.A. Schulte, R.B. Hayes, N. Rothman, M. Waters, D.J. Grant, R. Boissy, D.A. Bell, F.F. Kadlubar, G.P. Hemstreet III, S. Yin, and G.K. LeMasters in the January 2006 issue of the *International Journal of Cancer* (2006;118:161-8). It was referenced by Dr. See in the Urologic Oncology Survey section of *Urologic Oncology: Seminars and Original Investigations* (2006; 24:273).

### **Education and Information Division (EID)**

Paul A. Schulte, PhD, Director of the Education and Information Division, received the 2006 Kammer Merit in Authorship Award for his study "Characterizing the burden of occupational injury and disease" from the American College of Occupational and Environmental Medicine (ACOEM). The Award recognizes outstanding articles published in the *Journal of Occupational and Environmental Medicine*. The literature review (*J Occup Environ Med* 2005 Jun; 47(6):607-622) provided a comprehensive characterization of the burden incurred by occupational injury and disease. Schulte found that while the magnitude of occupational disease and injury burden is significant, it is underestimated, and there is a need for an integrated approach to address these underestimates.

### **Health Effects Laboratory Division (HELD)**

In April, Vince Castranova, Robert Mercer, Petia Simeonova, Dale Porter and Val Vallyathan from HELD presented a mini-symposium on the pulmonary and cardiovascular effects of single-walled carbon nanotubes. The mini-symposium was presented to distinguished colleagues from Japan and from the Woodrow Wilson International Center for Scholars in the U.S. This scientific briefing supported a research collaboration between NIOSH and Japanese industrial and academic scientists on evaluation of the potential cardio-pulmonary effects of aspiration of multi-walled carbon nanotubes. The role of the Japanese scientists is to synthesize and characterize the material. NIOSH scientists will conduct laboratory toxicology screenings to evaluate potential health effects and study translocation of the material deposited in the lungs to other systems of the body.

### **National Personal Protective Technology Laboratory (NPPTL)**

NIOSH's National Personal Protection Technology Laboratory has completed a key phase of a project to develop new technology that will incorporate sensors into air-purifying respirator filter cartridges. The sensors are intended to provide a low-cost electronic system that will alert the user when 90 percent of a cartridge's capacity has been consumed, signaling the need to replace the cartridge. In the completed phase, researchers constructed a cartridge simulation device that accommodates sensors, and successfully evaluated the simulator against criteria used by NIOSH to test respirators for certification. Over the next six months, the laboratory will place sensors in the simulator and test them to determine if they function as expected. If those tests are successful, NIOSH will distribute sensors to eight respirator manufacturer companies that volunteered to pursue this collaborative research with NIOSH in response to a public notice in 2004. The manufacturers will integrate the sensors into their own cartridges, and return the integrated systems to NIOSH for testing and evaluation. For more information, contact Jay Snyder at [JSnyder@cdc.gov](mailto:JSnyder@cdc.gov).

**NPPTL**

## Spokane Research Laboratory (SRL)

The Spokane Research Laboratory obtained and set up a 60 millimeter Split Hopkinson Pressure Bar (SHPB) to measure the dynamic strength of rock and other materials. The semi-truck sized SHPB was designed by researchers at the Los Alamos National Laboratory to determine the dynamic properties of concrete used to make nuclear missile silos. NIOSH researchers will use the SHPB to simulate the stress on rock samples during typical blasting operations in a mine. The process involves pressuring the gas gun with nitrogen which fires the 60mm projectile or striker bar at the sample, in this case rock. Pressure bars capture the shock wave so that it can be measured and then apply the shock wave to the rock sample. From the waves, both going in and out of the rock sample, NIOSH engineers determine the dynamic properties of the rock that makes up the mine being studied. The SHPB will help increase SRL researchers' knowledge of dynamic properties and be useful in developing formulas to predict the length of damage in rock from a given blast. This in turn will help miners design their blasts to break only the rock necessary and therefore, improving mine design and reducing the occurrence of rock falls, a leading cause of fatalities in underground mines. For more information, contact Jeff Johnson at [JCJohnson@cdc.gov](mailto:JCJohnson@cdc.gov).



## News From Our Partners

### Carbon Monoxide Poisoning Prevention National Research and Response Agenda Meeting

The Centers for Disease Control and Prevention (CDC) and the State of Maine will co-host a *Carbon Monoxide Poisoning Prevention National Research and Response Agenda Meeting* July 12-13, 2006 in Portland, Maine. The meeting will focus on both surveillance and communication issues for both emergency-related and non-emergency related carbon monoxide poisoning prevention. For more information, contact Scott Damon at [SDamon@cdc.gov](mailto:SDamon@cdc.gov).

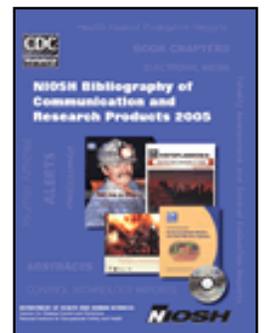
## Communication Products

### **The Team Document [DHHS (NIOSH) Pub. No. 2006-121]**

*The Team Document: Ten years of leadership advancing the National Occupational Research Agenda* describes the successes of the teams and reflects on lessons learned during the first decade of NORA. Each NORA research team has described its efforts through a discussion of its priority area, progress made in the last ten years, and its perspective on important areas for future research. The Team Document can be accessed at <http://www.cdc.gov/niosh/docs/2006-121>.

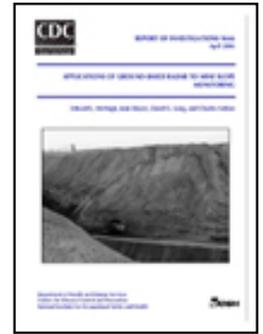
### **NIOSH Bibliography of Communication and Research Products 2005 [DHHS (NIOSH) Pub. No. 2006-132]**

A bibliography of NIOSH communication and research products for the year 2005 is available in this new publication. Product types include journal articles, book chapters, numbered publications, abstracts and proceedings, control technology reports, fatality assessment and control evaluation reports, and fire fighter fatality investigation reports. The publication can be accessed at <http://www.cdc.gov/niosh/docs/2006-132>.



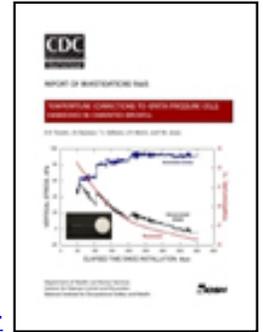
### ***Applications of Ground-Based Radar to Mine Slope Monitoring [DHHS (NIOSH) Pub. No. 2006-116]***

This publication summarizes developments in the application of ground-based radar to slope stability monitoring and presents information on NIOSH-sponsored experiments recently completed. The report can be accessed at <http://www.cdc.gov/niosh/mining/pubs/pubreference/2006-116.htm>.



### ***Temperature Corrections to Earth Pressure Cells Embedded in Cemented Backfill [DHHS (NIOSH) Pub. No. 2006-103]***

This report presents findings from a study by NIOSH and industry to determine physical stress more accurately in backfill used to help keep mines physically stable. The study investigates a process using thermistors to record temperature readings which correct for the influence of temperature on stress data. Determining backfill stress is an important part of evaluating mine safety, whether personnel are working in proximity to backfill or in other areas of the mine where backfill is an integral part of regional support. The report can be accessed at <http://www.cdc.gov/niosh/mining/pubs/pubreference/2006-103.htm>.



## **Health Hazard Evaluations**

- **Evaluation of lead, arsenic, and other exposures among municipal employees at a public park.** NIOSH investigators responded to a request from employee representatives to assess concerns relating to a firing range and the use of arsenic-containing insecticides and arsenic-treated lumber. Neither environmental nor biological assessments found overexposure to lead or arsenic although improvements in work practices in personal hygiene were recommended to reduce unnecessary exposures. NIOSH investigators also documented concerns and made recommendations about employee training, heat stress, chemical handling, and noise exposures. The full report is available at <http://www.cdc.gov/niosh/hhe/reports/pdfs/2005-0153-2997.pdf>.
- **Evaluation of selected occupational hazards at a dairy farm.** NIOSH investigators responded to a request from employees to assess exposure to ammonia, hydrogen sulfide, and dust. NIOSH investigators observed work practices, conducted air sampling, interviewed employees, and reviewed illness and injury logs. Sampling results did not indicate overexposures to measured substances. Overall, the evaluation found that the farm employed good health and safety practices, but some improvements were needed with regards to handling of bleach. The full report is available <http://www.cdc.gov/niosh/hhe/reports/pdfs/2005-0271-2996.pdf>.

## **Upcoming Events**

### ***1<sup>st</sup> American Conference on Human Vibration***

The *1<sup>st</sup> American Conference on Human Vibration* will be held June 5-7, 2006 in Morgantown, WV. The conference will provide a unique opportunity for participants to exchange information on all aspects of human responses to hand-transmitted vibration and whole-body vibration. Information on the conference can be found at <http://www.cdc.gov/niosh/conferences/Vibration/>.

### ***13<sup>th</sup> International Respiratory Protection of Healthcare Workers and Emergency Responders***

The *13<sup>th</sup> International Respiratory Protection of Healthcare Workers and Emergency Responders Conference* will be held August 27-September 1, 2006 in Toronto, Ontario, Canada. Topics for papers include respiratory protection for healthcare workers, emergency responders, and those in developing countries, updates on standards and regulations, emerging hazards and technologies, and fundamentals of respiratory protection. More information on the conference can be found at <http://www.isrp.com/au>.

### ***Noise-Induced Hearing Loss in Children at Work and Play***

NIOSH and partners will cosponsor *Noise-Induced Hearing Loss (NIHL) in Children at Work and Play* October 19-20, 2006 in Cincinnati, Ohio. The conference will focus on the issue of NIHL in children who sometimes begin working as early as age 10-12 years, often in noisy occupational environments, such as construction, agriculture, entertainment and landscaping. Other cosponsors for the conference include the National Hearing Conservation Association, Oregon Health and Science University, the Marion Downs Hearing Center, the University of Northern Colorado, and the National Institute on Deafness and Other Communication Disorders. More information on the conference is available at [http://www.hearingconservation.org/conf\\_childrenconf.html](http://www.hearingconservation.org/conf_childrenconf.html).

### **December Nanotechnology Conference**

NIOSH and the University of Cincinnati will cosponsor the *International Conference on Nanotechnology Occupational and Environmental Health and Safety: Research to Practice* December 3-8, 2006 in Cincinnati, Ohio. Centered on the impact of nanotechnology on occupational and environmental health and safety, abstracts for poster presentations will be accepted until June 30, 2006. For more information, visit the conference Web site at <http://www.uc.edu/noehs>. The conference follows other successful international forums cosponsored by NIOSH in Buxton, U.K., in 2004, Minneapolis in 2006, and Miami earlier in 2006.

### **Word of the Month**

**Bronchiolitis obliterans** is an uncommon lung disease characterized by fixed airways obstruction. Inflammation and scarring occur in the smallest airways of the lung and can lead to severe and disabling shortness of breath.

**[NIOSH eNews on the Web: www.cdc.gov/niosh/enews/](http://www.cdc.gov/niosh/enews/)**

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