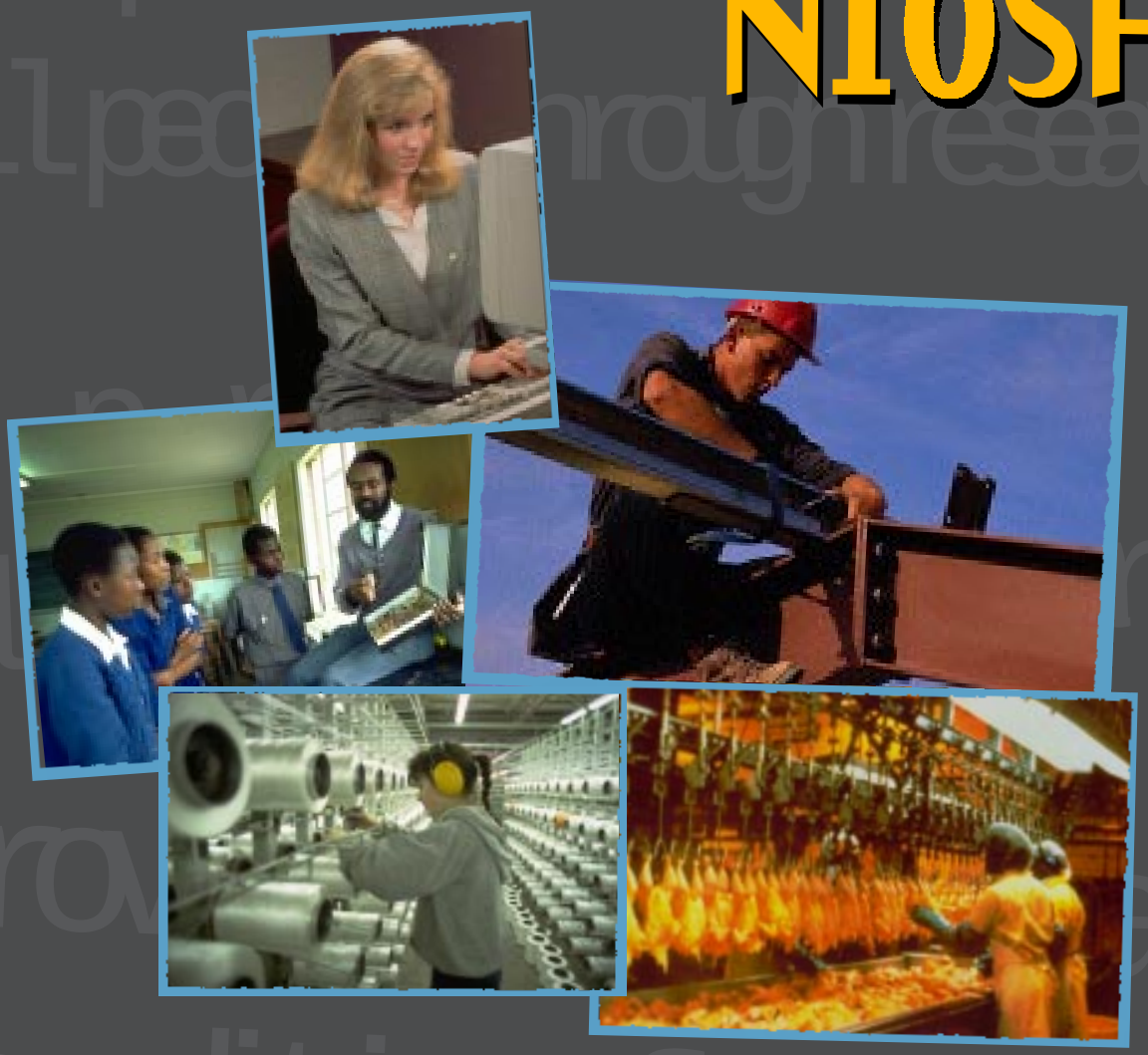
New Directions at NIOSH



National Institute for Occupational Safety and Health

NIOSH

Message from the NIOSH Director

When I became Director of the National Institute for Occupational Safety and Health (NIOSH) in April 1994 the NIOSH headquarters was moved from Atlanta, GA to Washington D.C. The headquarters move had both symbolic and practical implications. It was an important first step in achieving my highest goal, namely, increasing the visibility of occupational safety and health in general, and of NIOSH in particular.

I hoped our new location would help NIOSH improve and expand relationships with our many and varied partners in occupational safety and health. The impact has been much greater than hoped. Since the move, the Institute's ties with our partners have improved tremendously. I can honestly say that NIOSH has a new way of conducting business which involves coordination with our partners on many levels.

This is best exemplified in the creation of the National Occupational Research Agenda. Together with our partners in the public and private sectors, NIOSH developed the Agenda to provide a framework to guide occupational safety and health research in the next decade. Approximately 500 organizations and individuals outside NIOSH provided input into the development of the Agenda. The 21 research priorities contained in the Agenda represent a remarkable degree of concurrence among a large number of stakeholders. Development of the Agenda was truly a national effort with active participation by employers, employees, safety and health professional, public agencies, and industry and labor organizations. Additional information on the research Agenda can be found later in this document.

In the same spirit of partnership, NIOSH embarked on a first-of-its-kind alliance between the Institute, industry, and labor when General Motors, the United Auto Workers, and NIOSH agreed to conduct joint research on work-related injuries and illness. Based on this positive collaboration, representatives from GM and UAW played important leadership roles in the development of the National Occupational Research Agenda.

Another goal of mine is to increase the usefulness and relevance of NIOSH products. Input from NIOSH partners has also been critical in working towards this goal. For example, after receiving many comments from our partners regarding the utility of the NIOSH "no risk" recommendations regarding hazardous workplace exposures, we adopted a new exposure limit policy. NIOSH now recommends levels based not only on health effects data, but also on what is technologically feasible. This focus on increasing the relevance of NIOSH recommendations is evident in our revised respirator regulation and our coal mine dust criteria document.

By continuing to take advantage of our relationships with our partners, NIOSH will continue to improve our ability to protect workers, and ensure that we maintain our stature as a world renowned science organization. We look forward to ongoing interaction with workers and their representatives, employers, other federal and state agencies, and our professional colleagues.

Workplace Injury and Disease

A Mainstream Public Health Problem

In today's society, Americans are working more hours than ever before. The workplace environment profoundly affects health. Each of us, simply by going to work each day, may face hazards that threaten our health and safety. Risking one's life or health should never be considered merely part of the job.

In 1970, Congress passed the Occupational Safety and Health Act to ensure Americans the right to "safe and healthful working conditions," yet workplace hazards continue to inflict a tremendous toll in both human and economic costs.

In 1994, employers reported 6.3 million disabling work injuries and 515,000 cases of occupational illness. An average of 16 American workers die each day from injuries on the job. Moreover, even the most conservative estimates find that about 137 additional workers die each day from workplace diseases. In 1994, occupational injuries alone cost $121 billion in health care and related costs.

Occupational injury and disease create needless human suffering, a tremendous burden upon health care resources, and an enormous drain on U.S. productivity. Yet, to date, this mainstream public health problem has escaped mainstream public attention. Workplace injuries and diseases are neither inevitable nor acceptable. The time has come to protect one of our most valuable resources: the American worker.

Fulfilling the Nation's Promise

The Occupational Safety and Health Act of 1970 committed this nation to ensuring safe and healthful working conditions for working men and women. The Mine Safety and Health Acts of 1969 and 1977 were enacted to provide the same protection for the Nation's miners.

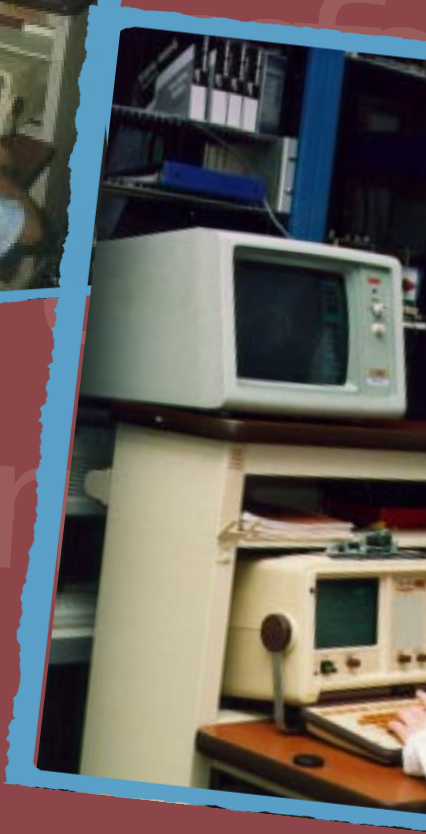
The National Institute for Occupational Safety and Health (NIOSH) was created to conduct research and training and make recommendations for the prevention of work-related illnesses and injuries. NIOSH and its staff of about 1300 are part of the Centers for Disease Control and Prevention (CDC) within the Department of Health and Human Services (DHHS). NIOSH headquarters are in Washington D.C., with offices in Atlanta, Georgia, and research divisions in Cincinnati, Ohio, Morgantown, West Virginia, Bruceton, Pennsylvania, and Spokane, Washington.

One of the Institute's responsibilities is to make recommendations for standards to the Occupational Safety and Health Administration (OSHA) and the Mine Safety and Health Administration (MSHA), both in the Department of Labor. OSHA establishes and enforces workplace safety and health regulations in general industry, and MSHA fulfills these responsibilities in the mining industry.

The philosophy of NIOSH is articulated in the Institute's vision statement: Delivering on the Nation's Promise: Safety and Health at Work for All People...Through Research and Prevention

Surveillance

Surveillance, the identification of hazardous working conditions and their health effects, is one of the most important factors in preventing workplace injury and disease. NIOSH works with a variety of public and private organizations to identify and track hazardous conditions through reporting on disease, injury, and worker exposures. These systems provide the data needed to target research and prevention activities and evaluate their impact. Surveillance plays a key role in defining major occupational safety and health problems and driving the efforts of NIOSH and others toward effective solutions.



Laboratory Research

NIOSH conducts research in the laboratory to evaluate potential hazards under controlled conditions, to develop technology and information needed for field research, and to develop and evaluate protective measures. Laboratory research allows the Institute to:

Understand the causes and mechanisms of disease and disorders: Much of what is known about the substances or conditions that cause work-related disease and the mechanisms by which they act has been learned through laboratory research. By examining in the laboratory the effects of toxicants and hazards on cellular biological, physical, and mental functions, NIOSH researchers develop information needed to design appropriate field studies and prevention measures.

Develop technology for measuring and monitoring exposures: To assess worker exposures, field researchers, industry, and regulatory agencies must be able to detect and measure hazardous environments. To meet this need, NIOSH develops, improves, and assesses methods and equipment for monitoring exposures workers receive through inhalation, ingestion, and skin absorption. Researchers also develop medical tests that can detect subtle biological changes indicating a worker's exposure to a hazard. These laboratory studies, which detect the early effects of exposure, improve the accuracy and utility of field studies and health surveillance efforts.

Develop and evaluate control technology and personal protective equipment: When a hazardous exposure or risk factor for injury or disease is identified, the next step is to develop and evaluate methods for reducing or eliminating that exposure or factor. NIOSH conducts and tests methods and equipment to control hazards. Where hazards cannot be sufficiently reduced, workers may require personal protective equipment such as chemical resistant clothing, hearing protectors, and respirators.

Field Research

A great deal of NIOSH research is conducted by visiting workplaces throughout the United States. These field studies allow researchers to identify potential workplace hazards, determine the extent of worker exposure, measure risk for injury or disease, and demonstrate effective approaches to prevention.

Health Hazard Evaluations - NIOSH conducts hundreds of investigations each year at the request of workers, employers, and Federal and state agencies to evaluate health concerns at specific worksites. This program provides workers and employers with prevention recommendations, helps keep NIOSH informed about changes in working conditions and exposures, and assists the Institute in establishing research priorities.

For example, a series of health hazard evaluations helped NIOSH identify a high prevalence of musculoskeletal disorders among newspaper workers who use video display terminals. To reduce these injuries, NIOSH recommended rest breaks, changes in equipment and work organization, employee training, and eye tests.

Exposure Assessment - If research indicates that specific hazards may threaten workers' health, NIOSH designs studies to evaluate where, how, and to what degree exposure is occurring. This research enables NIOSH and others to determine the importance of specific hazards and to target prevention efforts accordingly.

Epidemiologic Studies - NIOSH researchers conduct large scale studies of worker populations to determine whether exposures to hazardous substances or conditions are causing injury or disease. These studies may span numerous worksites, occupations, and industries. Once the relation between exposure and health effects is determined, NIOSH recommends measures to prevent future injury and disease.

Fatality Investigations - To understand why workers continue to die on the job, NIOSH and State health departments collaborate to investigate worksites where fatalities have occurred through the Fatality Assessment and Control Evaluation (FACE) program. The FACE program investigates workplace deaths from electrocution, falls, machine-related incidents, and entry into confined spaces. From these investigations, NIOSH provides prevention recommendations to the employers and workers at the site and to workers at risk in similar industries.

Intervention Studies - When a hazard is known or suspected to cause disease or injury, NIOSH conducts research to evaluate the effectiveness of existing approaches in reducing or eliminating the risk to workers and to develop new approaches when needed. These prevention measures may involve a single technologic fix, such as substituting a safe chemical for a hazardous one, or a whole system of changes in technology, worksite policies, and training. A special emphasis of this program has been to assist small businesses, which usually do not have in-house safety and health professionals.

Recommendations

NIOSH provides scientific information and recommendations that may be used by OSHA and MSHA in setting workplace standards. Additionally, the Institute works with others in government, industry, labor, professional associations, academia, and the media to communicate findings on workplace risks and promote prevention measures.

Training

A major impediment to improving the prevention and treatment of work-related diseases and injuries is the lack of professionals trained in occupational health. Currently, there are only 1,500 physicians and 4,000 nurses certified in occupational health. That is one occupational medicine physician and fewer than three occupational health nurses to care for every 80,000 active workers and 20,000 retired or disabled workers. Additionally, primary care providers often fail to recognize workplace issues when diagnosing and treating patients. NIOSH, therefore, works to integrate occupational medicine into mainstream medical training. NIOSH training also supports the development of other occupational safety and health professionals essential to protecting workers' health, including industrial hygienists, safety specialists, and engineers.

To train these safety and health professionals, NIOSH funds educational resource centers (ERCs) and training projects at universities across the U.S. NIOSH also funds programs that introduce occupational safety and health into business, engineering, and vocational schools, as well as underserved geographic areas and minority colleges.

Services

800 Number

The NIOSH toll free number (1-800-356-4674) provides convenient public access to NIOSH and its information resources. Callers may request information about NIOSH activities or any aspect of occupational safety and health.

Health Hazard Evaluations

Employers, employees, or their labor representatives who suspect a health hazard in their workplace can request a NIOSH health hazard evaluation to assess the problem and recommend prevention measures.

Publications

NIOSH publishes and distributes a wide range of publications covering the Institute's research and recommendations for providing safe and healthful working conditions. Additionally, the Institute works with numerous organizations and scientific and lay publications to disseminate occupational safety and health information. Internet users can reach the NIOSH publications office at pubstaft@niosdt1.em.cdc.gov.

Home Page

The NIOSH Home Page on the World Wide Web provides information on NIOSH and its services including the full text of recently released publications and information on employment opportunities at NIOSH. Users can reach the Home Page at http://www.cdc.gov/niosh/homepage.html.

Databases

NIOSH maintains several widely used databases providing summary information on occupational safety and health research, including a bibliographic database of literature in the field (NIOSHTIC®) and the Registry of Toxic Effects of Chemical Substances (RTECS®).

Respirator Certification

For millions of workers in environments where controls do not eliminate toxic exposures respirators are often used to prevent overexposure and the resulting disease and injury. To aid in the selection of appropriate respirators, NIOSH certifies models that meet established national standards. NIOSH has updated and improved the current respirator certification standards. The new standards allow the certification of respirators with less leakage and more efficiency at a considerably lower cost.

National Occupational Research Agenda

Despite the continuing need for occupational safety and health research, both public and private sector efforts are facing increasing fiscal constraints. These financial challenges, in the face of the large burden of work-related disease, injury, and death, led NIOSH to work with the occupational safety and health community to develop a National Occupational Research Agenda (NORA). The Agenda, which identifies 21 priority research areas, is the first step in what will be an ongoing, concerted effort to target and coordinate occupational safety and health research.

Approximately 500 organizations and individuals outside NIOSH provided input into the development of the Agenda. This attempt to guide and coordinate research nationally is responsive to a broadly perceived need to address systematically those topics that are most pressing and most likely to yield gains to the worker and the nation.

The 21 Priorities

The Agenda identifies 21 research priorities (see table). These priorities reflect a remarkable degree of concurrence among a large number of stakeholders. The NORA priority research areas are grouped into three categories: Disease and Injury, Work Environment and Workforce, and Research Tools and Approaches.

CATEGORY
Disease and Injury
Work Environment and Workforce
Research Tools and Approaches

PRIORITY RESEARCH AREAS

Allergic and Irritant Dermatitis
Asthma and Chronic Obstructive Pulmonary Disease
Fertility and Pregnancy Abnormalities
Hearing Loss
Infectious Diseases
Low Back Disorders
Musculoskeletal Disorders of the Upper Extremities
Traumatic Injuries

Emerging Technologies
Indoor Environment
Mixed Exposures
Organization of Work
Special Populations at Risk

Cancer Research Methods
Control Technology and Personal Protective Equipment
Exposure Assessment Methods
Health Services Research
Intervention Effectiveness Research
Risk Assessment Methods
Social & Economic Consequences of Workplace Illness & Injury
Surveillance Research Methods

Implementation

NORA is the first step in a collaborative effort between NIOSH and its many partners to guide occupational safety and health research over the next decade. Implementation is the necessary next phase.

NIOSH and its partners will refine the preliminary approaches they agreed to when developing the Agenda. Among these approaches is the commitment by NIOSH to (1) use the Agenda to guide both intramural and extramural funding decisions, (2) encourage and stimulate other government agencies to include NORA priorities in their internal and external research programs, (3) develop procedures and capacity to track the impact of NORA activities on health and safety outcomes using existing tracking models, if available, (4) update NORA, and (5) periodically review and communicate the overall role and effectiveness of NORA in occupational safety and health.

Throughout the process of implementing the Agenda, NIOSH will seek to build upon and extend its partnerships and to improve coordination throughout the occupational safety and health community, with the expectation that these activities hold great promise for improving the protection and well-being of workers.

Health Effects Laboratory Division

NIOSH has strengthened its capability to protect today's diverse workforce, with the opening of a new research facility in Morgantown, West Virginia. The 167,000 square foot building provides state-of-the-art laboratory facilities and has created over 300 new positions.

Researchers in the new Health Effects Laboratory Division (HELD), located in the new facility, conduct basic, applied, and preventive laboratory research, develop intervention programs, and design and implement effective methods for health communications. The Division collaborates with researchers throughout NIOSH and in other public and private institutions to apply the latest scientific research to workplace health problems.

New research in Morgantown will expand and develop NIOSH capabilities with activities in the following areas:

Biostatistics

Researchers in this area have overall responsibility for providing statistical consultation on issues of study design and data analysis for the new laboratory division including development of new statistical methods as needed.

Engineering and Control Technology

NIOSH researchers are expanding the Institute's efforts to develop engineering solutions and protective equipment to prevent occupational diseases. Researchers explore new techniques for worker protection, including the application of sensors and microprocessors in engineering controls and protective equipment.

Expansion of Safety Research

NIOSH is expanding its ability to conduct research in safety engineering and human factors. NIOSH laboratory researchers work to develop automatic sensor systems to safeguard against injuries, conduct biomechanical assessments of lifting and manual handling tasks, and develop and improve personal protective equipment, such as fall restraint devices.

Exposure Assessment

Studies of health effects among workers are frequently limited by existing methods to characterize occupational exposures. Likewise, employers and workers cannot take preventive actions if they do not know that hazardous exposures are occurring. NIOSH researchers develop new methods for measuring and monitoring exposure to hazardous workplace agents in order to advance our understanding of factors that cause occupational disease and improve our ability to prevent hazardous exposures. For example, researchers will develop and evaluate technology that can be worn by workers or placed strategically in the worksite to give immediate notification of exposures as they occur.

Health Communication Research

Researchers in this branch develop and evaluate methods, messages, and materials that communicate risks and necessary action to target audiences. These studies will enable the Institute to ensure that its communication efforts are relevant, appropriate, and ultimately contribute to the prevention of workplace injury and disease.

Pathology and Physiology

Researchers develop highly sensitive, complex, and unique laboratory techniques to increase our understanding of occupational diseases and the ways in which they produce changes in human or cellular function. This research will develop pre-disease early warning systems and identify methods to prevent further damage to health.

Toxicology and Molecular Biology

By developing methods to examine the toxic effects of workplace exposures, NIOSH researchers better address the nature and extent of the relationship between hazardous substances and toxic responses. Research programs focus on cell-to-cell communication, cellular interaction, genome insertions and activations, responses to production and release of cellular signals and mechanisms of control, blockage, and homeostasis of cellular systems.

Employment Opportunities
Health Effects Laboratory Division

The National Institute for Occupational Safety and Health (NIOSH) opened a new research facility in Morgantown, West Virginia in the fall of 1996. This research center provides state-of-the-art laboratory facilities for the new NIOSH Health Effects Laboratory Division (HELD). HELD is dedicated to conducting innovative applied and preventive laboratory research and designing effective methods of health communication.

NIOSH is the federal agency responsible for conducting research and making recommendations for the prevention of work-related illness and injury. The Institute is part of the Centers for Disease Control and Prevention (CDC), within the U.S. Department of Health and Human Services.

NIOSH is seeking to fill positions in the following areas:

- Pathology and physiology
- Exposure assessment
- Biostatistics
- Toxicology and molecular biology
- Engineering and control technology
- Health communications

NIOSH has permanent and temporary positions to be filled by:

Current federal, state, and local employees
Public Health Service Commissioned Corps officers
Academicians seeking a research sabbatical or visiting scientist appointment
Private sector professionals seeking to contribute as public servants
Students (through fellowships, internships, cooperative education programs, or as summer or temporary employees)

To inquire about specific positions and how to apply, contact:

DHHS/Program Support Center
HRS
P.O. Box 5409
Rockville, Maryland 20848-5409
telephone (301) 443-0238
CDC Home Page: http://www.cdc.gov
(Although some positions may be listed on the Home Page under “Training and Employment Opportunities,” check with the above office for the latest information)

NIOSH is an equal opportunity employer.

About Morgantown

Morgantown, West Virginia
Home of the National Institute for Occupational Safety and Health's new research facility

In the fall of 1996, the National Institute for Occupational Safety and Health (NIOSH) opened a new, state-of-the-art research facility in Morgantown, West Virginia. The new facility houses NIOSH's new Health Effects Laboratory Division (HELD). HELD offers special opportunities for individuals looking for challenging careers in public health research, education, promotion, and communication. In addition, Morgantown, West Virginia, located in Monongalia County, offers a high-quality working and home environment for these individuals

The new research facility is located in the heart of the beautiful Monongalia River Valley in Morgantown within walking distance of West Virginia University (WVU). Close proximity to the university makes opportunities for cultural activities, as well as professional enhancement and collaboration, readily available. WVU has produced more than 20 Rhodes scholars and offers a variety of credit and non-credit courses for personal and professional enrichment. In 1995, in-state tuition rates were $93 per undergraduate semester credit hour and $131 per graduate semester graduate hour. NIOSH staff have collaborated extensively with WVU staff through an agreement between the two institutions, and NIOSH is seeking to extend and increase this collaboration.

Morgantown has been consistently cited as one of the most livable cities in the United States. With all the conveniences of similar-sized towns, including top-rated schools and a major medical center, residents enjoy a high quality of life. Hiking, skiing, camping, and a variety of outdoor activities are only minutes away. For those with an interest in regional folk music, art, crafts, and other Americana, the Morgantown area offers unparalleled opportunities. Downtown Morgantown and surrounding areas offer a wide variety of shopping opportunities from small speciality shops and bookstores to national store chains. There are also a wide variety of restaurants to choose from.

Morgantown's Municipal Airport at Hart Field offers access to major metropolitan areas in the East and Midwest with several regularly scheduled daily commuter nonstop flights to Washington, D.C. and Pittsburgh. Driving time to Pittsburgh is approximately 1.5 hours and approximately 3.5 hours to Washington, D.C. both via Interstate highway.

(over)

The Morgantown Community

Population (1990 Census):

Morgantown (25,879)
Monongalia County (78,426)

Climate:

Temperature, Mean Annual	52.5 degrees
Temperature, Means	29.7° F in January, 73.1° F in July
Annual Average Rainfall	40.6 inches
Annual Average Snowfall	32.1 inches

1995 Housing Prices (Source: Morgantown Area Economic Partnership):

Median Single Family Sale : $95,330
Average Rent / 2 Bedroom Apartment : $400-700

Civic organizations: 25
Houses of Worship: More than 70 representing over 30 different religious affiliations
Hospitals: Monongalia General Hospital and Ruby Memorial Hospital
Schools: Diverse (Contact organizations below for listing)

Highway distance to nearby cities:

City	Miles from Morgantown
Pittsburgh, PA	77
Washington, DC	218
Cleveland, OH	208
Baltimore, MD	225

For more information about Morgantown, WV, contact:

The Greater Morgantown
Convention & Visitors Bureau
709 Beechurst Avenue
Morgantown, WV 26505
(800) 458-7373 or (304) 292-5081

Morgantown Area Chamber of Commerce
P.O. Box 658
1009 University Avenue
Morgantown, WV 26507-0658
phone: (304) 292-3311
fax: (304) 296-6619

Morgantown Related World Wide Web sites:

Morgantown Chamber of Commerce:
http://pinnaclemall.com/CM/Morgantown/

City of Morgantown:
http://205.245.78.5/city/

Virtual Morgantown:
http://www.dmssoft.com/mrgntwn/

West Virginia University:
http://www.wvu.edu/

Pathology and Physiology Research Branch

Pathology and Physiology Research Branch (PPRB)
Health Effects Laboratory Division (HELD)
National Institute for Occupational Safety and Health (NIOSH)

The Pathology and Physiology Research Branch, located in the new NIOSH state-of-the-art research facility in Morgantown, West Virginia, provides new and focused, applied and preventive, multi-faceted laboratory-based research into the causes, mechanisms, prevention, and control of adverse health effects due to workplace exposures to hazardous substances or agents.

Employment opportunities exist for those with strong backgrounds in:

- Veterinary pathology
- Cellular & molecular biology
- Biology
- Clinical pathology
- Biochemistry
- Physiology

Functions:

- Study of the toxic effects of workplace exposures to hazardous substances or agents on human, animal, and cellular systems, leading to identification of pre- and post-toxic biomarkers, toxic responses, methods of damage alleviation or repair, mechanisms of toxicity, and recommendations for prevention and control of toxic exposures.
- Elucidate mechanisms involving cellular response-receptors, signal transduction, and cytokine regulation and release in the development and progression of disease or dysfunction.
- Develop sensitive biomarkers of disease detection and susceptibility that allow recommendations for control or prevention.
- Conduct broad studies of the structure and function of the whole body, human and other animals, in a holistic response to insult by complex mixtures of worksite agents, toxins, and materials.
- Develop and evaluate exposure systems that mimic occupational exposures and result in sensitive models of structural or functional changes in the target population.

Health Communications Research Branch

Health Communications Research Branch (HCRB)
Health Effects Laboratory Division (HELD)
National Institute for Occupational Safety and Health (NIOSH)

The Health Communications Research Branch, located in the new NIOSH state-of-the-art research facility in Morgantown, West Virginia, designs, implements, and evaluates effective health communications for HELD and the rest of NIOSH.

Employment opportunities exist for those with strong backgrounds in:

- Health education
- Policy
- Sociology
- Evaluation and assessment
- Communications
- Economics
- Survey research
- Journalism
- Health behavior
- Other related fields

Functions:

- Design effective health communication strategies using expertise in marketing, advertising, health education, communications, and social psychology.
- Develop messages, materials, and methods to clarify and effectively communicate occupational health information, risks, and prevention recommendations.
- Target dissemination of research results to those at risk and those who can most effectively implement or promote prevention activities or measures.
- Form partnerships to foster more effective occupational health messages and dissemination of those messages.
- Evaluate the effectiveness of NIOSH's health communications and continuously revise, expand, and improve communication efforts based on these results.

Engineering and Control Technology

Engineering and Control Technology Branch (ECTB)
Health Effects Laboratory Division (HELD)
National Institute for Occupational Safety and Health (NIOSH)

The Engineering and Control Technology Branch, located in the new NIOSH state-of-the-art research facility in Morgantown, West Virginia, develops and enhances engineering solutions and protective equipment for the control of occupational diseases with focus on engineering control development, applied laboratory research, and workplace simulation.

Employment opportunities exist for those with strong backgrounds in:

- Engineering
- Computer science
- Industrial hygiene
- Physical science
- Other related fields

Functions:

- Develop and assess the reliability and effectiveness of passive protective devices, including microprocessor-based programmable systems and automatic sensing systems with capabilities for environmental monitoring/sensing, worker warning, and automatic intervention.
- Develop engineering controls, safeguarding systems, and protective equipment.
- Using simulation, evaluate, modify, and improve the effectiveness of preventive strategies and their alternatives.

Toxicology and Molecular Biology

Toxicology and Molecular Biology Branch (TMBB)
Health Effects Laboratory Division (HELD)
National Institute for Occupational Safety and Health (NIOSH)

The Toxicology and Molecular Biology Branch (TMBB), located in the new NIOSH state-of-the-art research facility in Morgantown, West Virginia, provides new and focused, applied and preventive, multi-faceted laboratory-based research into the causes, mechanisms, prevention, and control of adverse health effects due to workplace exposures to hazardous substances or agents.

Employment opportunities exist for those with strong backgrounds in:

- Molecular biology
- Dermatotoxicology
- Chemical carcinogenesis
- Immunotoxicology
- Neurotoxicology
- Other related fields

Functions:

- Conduct research toward understanding how biological systems are affected at the molecular, cellular, tissue, and organ levels by workplace exposure to hazardous substances or agents.
- Study of the basic integrative links between various organ systems as they pertain to human health effects from workplace exposures.
- Collaborate with scientific and technical staff within and external to NIOSH to develop new techniques and biological markers for workplace-related exposures and diseases.

Exposure Assessment

Exposure Assessment Branch (EAB)
Health Effects Laboratory Division (HELD)
National Institute for Occupational Safety and Health (NIOSH)

The Exposure Assessment Branch, located in the new NIOSH state-of-the-art research facility in Morgantown, West Virginia, develops new methods and technologies for the evaluation of occupational exposures to hazardous substances or agents.

Employment opportunities exist for those with strong backgrounds in:

- Industrial hygiene
- Physical sciences
- Computer science
- Engineering
- Biology
- Other related fields

Functions:

- Develop methods for evaluating exposure to airborne particulate materials.
- Develop and evaluate real-time personal and area direct reading instruments for chemical, physical, and biological agents.
- Conduct basic and applied research in methods for exposure characterization to improve understanding of exposure measurements as predictors of dose and response.

Biostatistics Branch

Biostatistics Branch
Health Effects Laboratory Division (HELD)
National Institute for Occupational Safety and Health (NIOSH)

The Biostatistics Branch located in the new NIOSH state-of-the-art research facility in Morgantown, West Virginia, provides statistical consultation related to study design and data analysis for HELD and the rest of NIOSH as needed.

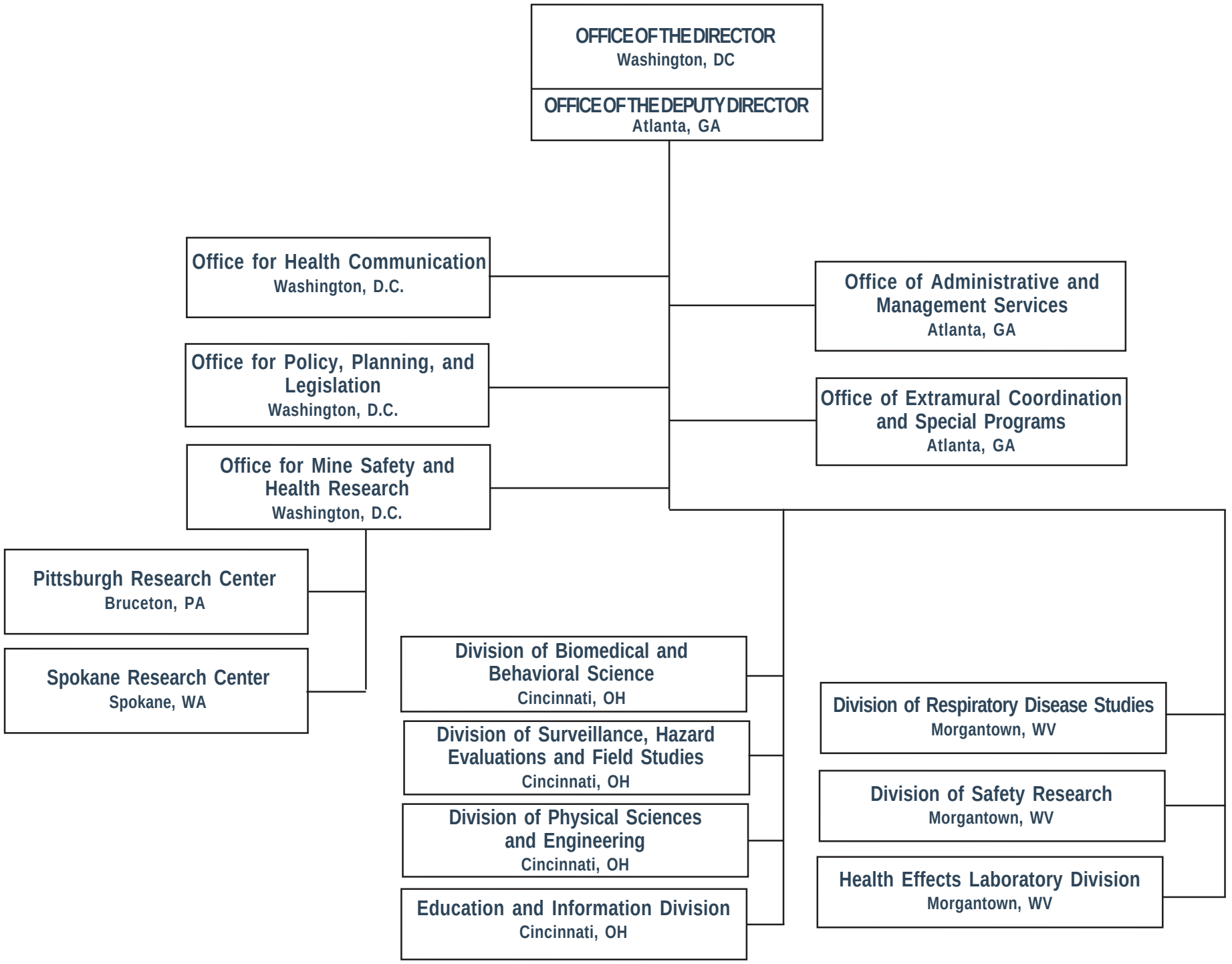
Employment opportunities exist for those with strong backgrounds in:

- Statistics
- Operations research
- Epidemiology
- Other related fields

Functions:

- Provide experimental design and support of the statistical aspects of laboratory-based research.
- Develop independent research initiatives in statistical methods to advance basic research.
- Develop methods and provide support for epidemiologic research.

NIOSH Organizational Chart



Educational Resource Centers

In order to better meet the national and regional needs for trained safety and health professionals, NIOSH developed the Educational Resource Centers (ERCs) in 1977. NIOSH currently funds 14 ERCs at universities which provide multidisciplinary graduate and continuing education programs in occupational medicine, occupational health nursing, industrial hygiene, and safety. These Centers serve as regional resources for all those involved with occupational health and safety, including industry, labor, government, academia, and the general public.

For specific information concerning degree programs, research projects, tuition, or career opportunities, contact the ERCs directly.

Deep South Center for Occupational Health and Safety
University at Birmingham;
Auburn University
(205) 934-8488

Northern California Center for Occupational and Environmental Health

University of California at Berkeley, Davis, and San Francisco
(510) 642-0761

Southern California Educational Resource Center
University of Southern California;
University of California-Los Angeles
(213) 342-1096

The Great Lakes Center for Occupational and Environmental Safety and Health
University of Illinois at Chicago
(312) 996-7887

Johns Hopkins Educational Resource Center
Johns Hopkins University
(410) 955-3602

Harvard Educational Resource Center
Harvard School of Public Health and Simmons College
(617) 432-1262

Michigan Center for Occupational Health and Safety Engineering
University of Michigan
(313) 763-0563

Midwest Center for Occupational Health and Safety
University of Minnesota, St. Paul-Ramsey Medical Center
(612) 626-0900

New York/New Jersey Educational Resource Center
Mount Sinai School of Medicine; Hunter College School of Health Sciences; New Jersey Institute of Technology; New York University Medical Center; University of Medicine and Dentistry of New Jersey (212) 142-4804

North Carolina Educational Resource Center
University of North Carolina;
Duke University Medical Center
(919) 966-5001

University of Cincinnati
University of Cincinnati
(513) 558-1749

Southwest Center for Occupational and Environmental Health
University of Texas, Houston
(713) 500-9458

Rocky Mountain Center for Occupational and Environmental Health
University of Utah
(801) 581-8719

Northwest Center for Occupational Health and Safety
University of Washington
(206) 543-6991

NIOSH Divisions

Division of Biomedical and Behavioral Science

4676 Columbia Parkway • Cincinnati, OH 45226 • (513) 533-8465
Division Director: Janet C. Haartz, Ph.D.

The Division of Biomedical and Behavioral Science (DBBS) conducts both laboratory and worksite research studies to assess occupational hazards and provides technical assistance to other divisions. The research incorporates the disciplines relevant to stress, ergonomics, toxicology, physical agents (noise and radiation) and biological monitoring. Consultation is provided to develop criteria for workplace exposure standards based upon research data. The division is placing increased emphasis on intervention and control procedures to enhance workplace environments and reduce adverse health outcomes.

Division of Physical Sciences and Engineering

4676 Columbia Parkway • Cincinnati, OH 45226 • (513) 841-4321
Division Director: Dennis M. O'Brien, Ph.D.

The Division of Physical Sciences and Engineering (DPSE) conducts worksite and laboratory research to develop procedures and equipment for the control and measurement of occupational safety and health hazards. DPSE also provides assistance to the industrial hygiene community in operating a quality control reference program for industrial hygiene laboratories. DPSE conducts control technology assessments and laboratory research to prevent occupational disease and injury before they occur by assisting employers, including smaller businesses, in better design and operation of the workplace. This work involves development, identification, and evaluation of effective engineering controls and work practices. The division promotes the application of these preventive engineering control measures in the workplace. It also provides engineering expertise in formulating effective workplace standards.

Division of Respiratory Disease Studies (DRDS)

1095 Willowdale Road • Morgantown, WV 26505 • (304) 285-5749
Division Director: Nancy J. Bollinger (Acting)

The mission of the NIOSH Division of Respiratory Disease Studies (DRDS) is national and world leadership for the prevention of work-related illness, injury and death. As such, DRDS is the NIOSH focal point for clinical, epidemiological, environmental and laboratory research and public health response activities directed toward occupational lung disease prevention.

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Division of Safety Research

1095 Willowdale Road • Morgantown, WV 26505 • (304) 285-5894
Division Director: Timothy J. Pizatella, M.S. (Acting)

The Division of Safety Research (DSR) serves as the focal point for the Institute's occupational injury prevention and worker protection research programs. The division also operates the federal respirator and coal mine dust personal sampler unit testing and certification programs, and conducts research to provide criteria for improving respirators and other personal protective equipment and devices.

Division of Surveillance, Hazard Evaluations, and Field Studies

4676 Columbia Parkway • Cincinnati, OH 45226 • (513) 841-4428
Division Director: Lawrence J. Fine, M.D., Dr.P.H.

The Division of Surveillance, Hazard Evaluations and Field Studies (DSHEFS), conducts a comprehensive program of field investigations and surveillance on occupational diseases and hazards. The Division's primary functions are: to conduct site-specific investigations, larger scale research investigations, and National or State-based surveillance activities; to provide scientific management for contracts or cooperative agreements; and to support the policy development process.

Education and Information Division

4676 Columbia Parkway • Cincinnati, OH 45226 • (513) 533-8221
Division Director: Paul A. Schulte, Ph.D.

The Education and Information Division is responsible for the development of recommended criteria for health and safety standards, the development of methods to evaluate and monitor the effectiveness of training programs and outcome measures, the maintenance and upgrading of the Institute's libraries and information clearinghouse, and the evaluation of the burden (economic and societal) of occupationally induced diseases and injuries and the impact of focused interventions. The evaluation of the burden and the impact of intervention strategies on the reduction of this burden brings these two aspects of public health together within NIOSH for the first time.

Health Effects Laboratory Division (HELD)

1095 Willowdale Road • Morgantown, WV 26505-2888 • (304) 285-6121
Division Director: Albert E. Munson, Ph.D.

Researchers in the new Health Effects Laboratory Division (HELD) will conduct focused, applied, and preventive laboratory research, develop intervention programs, and design and implement effective methods for health communications. The Division will collaborate with researchers throughout NIOSH and in other public and private institutions to apply the latest scientific research to workplace health problems.

NIOSH Offices

Office of the Director
200 Independence Avenue, SW, • Washington, DC 20201 • (202) 401-6997
Director: Linda Rosenstock, M.D., M.P.H.

The Office of the Director, located in Washington DC, coordinates the activities of the entire Institute. The OD staff serve as valuable liaisons to NIOSH partners in federal agencies and trade and labor organizations. The Office for Health Communication, Office for Policy, Planning, and Legislation, the Office for Mine Safety and Health Research, and the NIOSH Senior Scientists are located in the Office of the Director.

Office of Administrative and Management Services
1600 Clifton Road, NE, Room 3007 • Atlanta, GA 30333 • (404) 639- 3771
Associate Director: Diane D. Porter

The Office of Administrative and Management Services (OAMS) coordinates the managerial, administrative, and budgetary functions for all programs within NIOSH. OAMS provides guidance on program planning and project evaluation and oversees the personnel and procurement systems within the Institute.

Office of the Deputy Director
1600 Clifton Road, NE, Room 3007 • Atlanta, GA 30333 • (404) 639-3773
Deputy Director: William E. Halperin, M.D., M.P.H.

The Office of the Deputy Director is located in Atlanta, GA in the headquarters of NIOSH's parent organization, the Centers for Disease Control and Prevention (CDC). The Deputy Director serves as an important liaison to the CDC and NIOSH employees.

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Office of Extramural Coordination and Special Programs
1600 Clifton Road, NE, Room 3069 • Atlanta, GA 30333 • (404) 639-3525
Associate Director: John K. Bainbridge

The Office of Extramural Coordination and Special Projects (OECSP) facilitates contributions of extramural scientists and public health professionals to prevent work-related illness, injury, and death among Americans. OECSP accomplished this through extramural financial assistance and coordination with other Centers at CDC. OECSP coordinates and evaluates the financial assistance activities of NIOSH including research and demonstration grants, training grants and fellowships, cooperative agreements, and conference grants. In addition, OECSP coordinates extramural projects with intramural projects and conducts special projects with other CDC Centers.

Office for Health Communication
200 Independence Avenue, SW • Washington, DC 20201 • (202) 401-0721
Associate Director: Max Lum, Ed.D., M.P.A.

The Office for Health Communication (OHC) coordinates the communication efforts for NIOSH. Working in conjunction with the NIOSH divisions, OHC translates laboratory based science into information that is understandable and usable by the public; increases the awareness of the risk of workplace illness and injury and prevention methods; and alerts industry, labor, worker, health professionals, the media and the public to new health and safety information. This office strives to make NIOSH a leader in the field of health communication.

Office for Policy, Planning, and Legislation,
200 Independence Avenue, SW • Washington, DC 20201 • (202) 401-3747
Associate Director: Kathleen E. Sykes, M.P.A.

The Office for Policy, Planning, and Legislation ensures that NIOSH provides appropriate comments on legislation pertinent to the mission and programs of NIOSH and that NIOSH staff are informed of the enactment of such legislation and resulting requirements and opportunities. This office also reviews NIOSH draft recommendations to ensure that they are consistent with NIOSH policies, scientifically justified, and tailored to the target audiences.

Office for Mine Safety and Health Research
200 Independence Avenue, SW • Washington, DC 20201 • (202) 401-0721
Associate Director: Gregory R. Wagner, M.D. (Acting)

The Office for Mine Safety and Health Research is a new office created when NIOSH acquired the Bureau of Mines safety and health research functions. Located within the Office of the Director, the office coordinates all mining-related research with NIOSH, supervises the new mining research activities, and serves as the NIOSH liaison to the Mine Safety and Health Administration.

Epidemic Intelligence Service

Through the Epidemic Intelligence Service (EIS) program of the Centers for Disease Control and Prevention (CDC), NIOSH trains health professionals in the principles and practice of occupational safety and health. During their two-year experience, EIS officers assigned to NIOSH will not only gain knowledge of occupational safety and health, but will also gain unique expertise in the field of applied epidemiology.

EIS Fellows at NIOSH conduct cutting-edge epidemiologic investigations on the important topics of the day including health-care workers exposed to tuberculosis and HIV, lead exposure, fatal occupational injuries, reproductive issues, musculoskeletal disorders, and indoor air quality.

Physicians with at least one year of clinical training; Ph.D., DrPH or other doctoral-degree recipients in health-related fields; and nurses, dentists, and veterinarians with a Masters of Public Health or equivalent degree are eligible to apply to the CDC EIS Fellowship Program.

For more information on the EIS Fellowship program at NIOSH, contact:

Richard L. Ehrenberg, M.D.
Senior Medical Epidemiologist
Office of Extramural Coordination and Special Projects
NIOSH
1600 Clifton Road, N.E., D-26
Atlanta, GA 30333
(404) 639-3346
Internet Address: rle1@niood1.em.cdc.gov

To obtain an application or for more information about the EIS Fellowship program at CDC contact:

CDC EIS Coordinator
1600 Clifton Road, NE
Atlanta, GA 30333
(404) 639-3588


National Institute for
Occupational Safety and Health
NIOSH