NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH (CC)

Plans, directs, and coordinates a national program to develop and establish recommended occupational safety and health standards and to conduct research, training, technical assistance, and related activities to assure safe and healthful working conditions for every working person. In carrying out this mission, the Institute: (1) Administers research in the field of occupational safety and health, including the conduct of health hazard evaluations; (2) develops innovative methods and approaches for dealing with occupational safety and health problems; (3) provides medical criteria which will ensure, insofar as practicable, that no employee will suffer diminished health, functional capacity, or life expectancy as a result of work experience, with emphasis on ways to discover latent disease, establishing causal relationship between diseases and work conditions; (4) serves as a principal focus for training programs to increase the number and competence of personnel engaged in the practice of occupational safety and health; (5) develops and coordinates the appropriate reporting procedures which assist in accurately describing the nature of the national occupational safety and health problems; (6) consults with the U.S. Department of Labor; U.S. Department of the Interior; other Federal agencies; and, in cooperation with the PHS Regional Offices, State and local government agencies; industry; and employee organizations with regard to promotion of occupational safety and health; (7) provides technical assistance to other nations in establishing and implementing occupational safety and health programs; (8) in carrying out the above functions, collaborates, as appropriate, with other Centers and Offices of the CDC.

Office of the Director (CCA)

(1) Manages the operations of the Institute; (2) maintains liaison with, and provides advice and assistance to, the U.S. Department of Labor, the U.S. Department of the Interior, other Federal agencies, State and local Government agencies, international health organizations, and outside groups; (3) provides liaison with PHS and Departmental components providing occupational health programs for Federal employees; (4) provides policy guidance and coordination to occupational safety and health activities in the HHS Regional Offices; (5) provides leadership and coordinates the Institute's planning, evaluation, resource allocation, regulations, legislation, committee management, and administrative management activities.

Office of Administrative and Management Services (CCA1)

(1) Provides management information, advice, and guidance to the Institute; (2) provides administrative and fiscal services to the Institute; (3) provides technical leadership, guidance, and evaluation of management services performed at other geographic locations; (4) provides management information, advice, and guidance to CDC/OPS regarding the conduct and the evaluation of Staff Office procurement activities with respect to their effectiveness in meeting NIOSH's administrative and programmatic needs; (5) develops internal policies, procedures, and operations; and provides special reports and studies; (6) provides management systems consultation and analyses; (7) coordinates the utilization of data processing services within the Institute; (8) serves as the focal point on matters of internal security and safety; (9) maintains

liaison with the Director, Office of Program Support, and Staff Service officials of CDC; (10) serves as the Institute focal point for personnel management activities. (Approved 11/10/2003)

Administrative Services Branch (Pittsburgh) (CCA12)

(1) Provides basic facilities operations, maintenance, and support functions for the offices, laboratories, and grounds at the Pittsburgh Research laboratory; (2) provides access to library and information services for Pittsburgh laboratory personnel; (3) facilitates procurement support for the Laboratory; (4) coordinates Institute activities and overall operations with the facility management activities of the other Agencies operating at the Bruceton Research Center. (Approved 9/4/1997)

Administrative Services Branch, Cincinnati (CCA13)

(l) Provides administrative services including procurement (except research and development contracts), property and supply management, vehicle management, space and facilities maintenance, mail and messenger services, timekeeper coordination, and telephone management; (2) reviews and evaluates all local administrative services and provides policy guidance on such matters.

Administrative Services Branch (Spokane) (CCA14)

(1) Provides basic facilities operations, maintenance, and support functions for the offices, laboratories, and grounds at the Spokane Research Laboratory; (2) provides access to library and information services for Spokane Research Laboratory personnel; (3) provides site-wide safety and health program support, site environmental compliance activities, employee assistance programs, and employee wellness programs; (4) provides materiel management functions, including inventory control for accountable property, and warehouse supply for daily operations. (Approved 9/29/2004)

Management Systems Branch (CCA15)

(1) Conducts management systems studies and provides technical services in the field of operations management; (2) provides for interface with CDC, PHS, and HHS management systems; (3) assures that all functional groups within the Institute have access to suitable and compatible data processing and services; (4) provides Institute-wide consultation assistance in data processing. (Approved 11/10/2003)

Administrative Services Branch, Morgantown (CCA16)

(1) Provides administrative services including procurement (except research and development contracts), property and supply management, vehicle management, space and facilities maintenance, mail and messenger services, timekeeper coordination, and telephone management; (2) reviews and evaluates all local administrative services and provides policy guidance on such matters.

Office of Extramural Coordination and Special Projects (CCA3)

(1) Provides professional technical advice to the Director and other Institute organizational components; (2) advises the Institute on matters relating to the development and progress of Institute-supported grant research; (3) in cooperation with the offices and operating divisions of the Institute, stimulates research and demonstration grants in relevant priority areas; (4) conducts in-depth review of research, training, and demonstration grant applications by use of consultant expert panels; (5) coordinates programming of research funded under special foreign currency program; (6) coordinates the Institute's research and scientific exchange conducted under bilateral international agreements; (7) maintains contact with professional associations, academic institutions, other Government agencies, and safety and health professionals in HHS Regional Offices; (8) assures Institute compliance with ethical scientific research procedures; (9) conducts or coordinates special short-term technical studies including evaluation of technical information transmitted to the Institute, issuing special advisories to the professional community as appropriate.

Health Effects Laboratory Division (CCC)

(1) Provides new focused research capabilities in mechanisms of occupational disease and identifies causative substances and early indicators (biomarkers) of response to chemical, biological, and physical substances which will be directed at prevention and control of occupational disease and integrated into the field research and services programs in NIOSH; (2) develops new state-of-the-art research techniques in physiology, human and animal cellular and molecular pathology; (3) develops new state-of-the-art research techniques in the areas of biochemistry, immunotoxicology, pharmacology, molecular and cellular biology, genetic toxicology, and imaging; (4) provides new research to develop and improve methods for environmental measurement of aerosols; (5) develops and evaluates (including development of performance criteria) intelligent, real-time personal and area direct reading instruments for chemical, biological and physical agents; (6) develops and improves techniques for measuring exposures and human responses to workplace exposures; (7) develops new research techniques in the areas of aeromicrobiology, particle characterization, molecular characterization, microsensors, advanced sampling and instrumentation, electronic monitoring, electrical and mechanical engineering; (8) develops new methodologies for exposure modeling of current and past exposures for use in applied research; (9) provides new research capabilities for developing and establishing engineering solutions for the control of occupational diseases and for utilizing engineering techniques to solve problems; (10) develops new research techniques in the areas of computerized workplace simulations and mathematical models; (11) provides environmental and biological laboratory services for all field and laboratory programs in NIOSH; (12) develops and evaluates effective communication strategies for promoting health education to communicate risk and prevention recommendations to those at risk and form coalitions to advocate prevention activities. (Approved 11/18/1994)

Toxicology and Molecular Biology Branch (CCCB)

(1) Provides focused research in workplace exposures and identifies causative substances and biomarkers of response to chemical, biological, and physical substances; (2) develops laboratory techniques or modifications that could be useful for population-based or large environmental testing; (3) develops molecular programs to examine the toxic effects of workplace exposures/agents on human, animal, and cellular systems; (4) defines the levels and circumstances of exposures that lead to development of pre- and post-toxic biomarkers, toxic responses, repair of damage or alleviation of damage, mechanisms of toxicity, and recommendations for prevention and control of toxic exposures; (5) develops integrated research programs in areas including cell to cell communication, cellular interaction, genome activations, responses to and production/release of cellular signals; and mechanisms of control, blockage, and homeostasis of cellular systems, broadly interpreted with respect to environmental and occupational agents; (6) studies microbial cellular components and production and release of exotoxins and mycotoxins in context with the holistic human and animal response, including targets such as the lung, skin, and nervous system; (7) provides support to the Division on state- of-the-art research in the areas of toxicology, molecular and cellular biology. (Approved 11/18/1994)

Pathology and Physiological Research Branch (CCCC)

(1) Provides research into new ways to identify disease mechanisms, develops pre-disease early warning systems, identifies methods for repair or resolution of disease, and develops and applies new imaging techniques; (2) examines in an applied and preventive research mode the effects of workplace exposures on human and animal body functions and cellular response-receptors in the development of disease/disfunction, mechanisms of action, early functional markers of detection, and recommendations for prevention and control/intervention; (3) provides advice and collaborative service for NIOSH investigators interested in physiological/pharmacological effects of workplace exposures on field-based and animal/cellular systems; (4) examines the alteration of function based on pre-existing disease, induced-disease, or cellular/organ structural impairment in the context of responses to occupational exposures, both actual and laboratorygenerated; (5) assists HELD and other NIOSH divisions by providing animal exposure and pathological support in the development, use, and evaluation of exposure systems that mimic the occupational situation, reach the target organ, and results in sensitive models of change, structural or functional; (6) provides animal pathology support to researchers through the development of sensitive animal-specific tools, molecular probes, or recognition techniques that can be modified or used for animal models of occupational disease/exposure. (Approved 11/18/1994)

Exposure Assessment Branch (CCCD)

(1) Provides research methods for the Division to develop and improve methods for environmental measurement of aerosols; (2) develops and evaluates real-time personal and area direct reading instruments for chemical, biological, and physical agents; (3) develops techniques for measuring human responses to workplace exposures; (4) provides new research techniques in the areas of aeromicrobiology, particle characterization, molecular characterization, micro sensors, advanced sampling and instrumentation, electronic monitoring, and electrical and mechanical engineering; (5) coordinates with other NIOSH laboratory-based research (particularly the toxicology and molecular biology research), as well as NIOSH field studies and

health hazard evaluations to advance exposure assessment methods; (6) develops new methodologies for exposure modeling of current and past exposure for use in applied research (epidemiological and molecular epidemiological studies). (Approved 11/18/1994)

Engineering and Control Technology Branch (CCCE)

(1) Provides research capabilities for developing and establishing engineering solutions for the control of occupational disease; (2) coordinates with the Exposure Assessment Branch to develop engineering techniques to solve problems in measuring and monitoring programs; (3) develops and utilizes techniques in computerized workplace simulations and mathematical models; (4) develops passive protective devices and systems for preventing or minimizing worker exposure to hazardous chemical, biological, and physical substances; (5) develops sophisticated personal protective equipment to provide workers with

Allergy and Clinical Immunology Branch (CCCG)

information about their working environment. (Approved 11/18/1994)

(1) Conducts basic and applied laboratory research in areas of immunology, allergy and inflammation relevant to occupational diseases; (2) provides research laboratory collaboration to support clinical and field investigations focusing on occupational diseases mediated by inflammation and immunity; (3) searches for underlying mechanisms and improved laboratory based approaches to prevent, identify and manage these diseases; identification, characterization and assessment of exposure to high and low molecular weight allergens; assessment of workplace exposures to microbial agents and their constituents; and assessing the impact of workplace exposures on inflammation, immunity, host defense, and their interactions. (Approved 12/27/2004)

Biostatistics and Epidemiology Branch (CCCH)

(1) Provides experimental design and support of laboratory-based research to address the statistical aspects of projects in the Division and throughout the Institute; (2) verifies the statistical quality, both in the design and analysis phase of all experimental research in the Institute; (3) develops and directs the application of new statistical methods as well as the design and analysis of field research projects for the Institute; (4) develops computerized methods for independent research initiatives in statistical methods to advance basic research in experimental and observational studies; (5) collaborates in the design of laboratory and field research studies, providing consultation through the course of the research on computerized methods of data collection and interpretation of results. (Approved 12/27/2004)

Health Communication Research Branch (CCCJ)

(1) Designs, implements, and evaluates effective communication strategies for the Division using expertise in health education, and communication; (2) develops messages, materials, and methods to clearly and effectively communicate risks and prevention recommendations to those at risk and those that can most effectively implement or promote prevention activities; (3) evaluates the effectiveness of the Division's health communication to determine the impact and contribution to prevention of workplace injury and disease; (4) coordinates with others in the field of health communication to form coalitions to advocate prevention activities. (Approved 11/18/1994)

Education and Information Division (CCE)

(1) Develops from existing scientific and technical information documents containing (a) criteria for recommended occupational safety and health standards, and (b) technical and scientific information relevant to a variety of occupational safety and health issues; (2) develops recommended health and safety standards under the Occupational Safety and Health Act of 1970 and the Federal Mine Safety and Health Act of 1977; (3) prepares and coordinates with the Office of the Director comments and testimony on regulations proposed by the Department of Labor and other departments or agencies that pertain to occupational diseases or injuries; (4) assists the Institute Director in establishing and operating a priority system for research, surveillance, document development, and recommended standards; (5) prepares and at least annually revises the legislatively mandated toxic substance list; (6) provides risk evaluations for NIOSH policy recommendations; (7) develops and tests occupational safety and health training materials, technologies, strategies, and courses; (8) determines occupational safety and health workforce needs on a nationwide basis and develops strategies to meet those needs; (9) develops methods, through research, to evaluate and monitor the effectiveness of training, including program features, faculty, training methods, and outcome measures; (10) conducts the NIOSH summer intern training program for minority students; (11) serves as the NIOSH printing office; (12) provides graphic design and audio-visual standards and support for the Institute; (13) serves as the NIOSH Docket Office; (14) evaluates in coordination with other divisions the economic and societal burden of occupationally induced diseases and injuries; (15) establishes and maintains the NIOSH archives; and (16) coordinates all relevant Division activities with the Office of the Director. (Approved 5/25/2006)

Information Resources and Dissemination Branch (CCEB)

(1) Operates the Institute's libraries for occupational safety and health information for use by occupational safety and health professionals; (2) acquires, disseminates, and coordinates scientific and technical information relating to occupational safety and health in support of Division activities and NIOSH research programs; (3) plans, implements, and coordinates dissemination activities for all NIOSH publications (printed and electronic); (4) verifies printing clearance for NIOSH publications within NIOSH/CDC procedures; (5) develops and manages the NIOSH exhibit program for professional meetings and conferences; (6) develops and maintains electronic data systems for the Institute to assess information; and (7) establishes and maintains the NIOSH archives. (Approved 11/13/2008)

Training Research and Evaluation Branch (CCEC)

(1) Develops, through research and evaluation, training resources in industrial hygiene, safety, occupational medicine, nursing, and allied professions; (2) collaborates on cooperative training programs with qualified outside organizations; (3) determines strategies for and advises on occupational safety and health workforce needs on a nationwide basis; (4) defines and evaluates selected workforce certification/accreditation programs; (5) establishes career development guidelines for training of employers and employees in the prevention of injuries and diseases; (6) provides graphic design and audio-visual standards and support for the Institute; (7) consults and advises NIOSH professionals on presentation techniques and selection of media; and (8) consults on workforce development. (Approved 7/21/2004)

Document Development Branch (CCED)

(1) Develops recommended occupational safety and health standards based on knowledge of health and safety risks, and technologic feasibility; (2) coordinates testimony in response to the Department of Labor, Environmental Protection Agency, and other Federal and State agencies' rulemaking; (3) incorporates recommended work practices, engineering controls, and available evidence of technological feasibility into documents and testimony; (4) analyzes the economics of occupational safety and health interventions; (5) maintains the NIOSH Docket Office; and (6) conducts policy review of other Divisions and internationally produced documents. (Approved 7/21/2006)

Risk Evaluation Branch (CCEE)

(1) Identifies occupational health and safety hazards through qualitative reviews of the scientific literature; (2) conducts quantitative risk analyses of health and safety hazards; (3) researches and develops new quantitative risk assessment methodologies; (4) identifies information on worker exposures for risk characterization; (5) assists the Director of NIOSH in establishing a priority system for document development and recommended standards; (6) conducts intervention studies on the effectiveness of current standards in preventing occupational diseases and injuries; and (7) conducts scientific reviews of internationally produced documents. (Approved 1/15/1997)

Division of Applied Research and Technology (CCG)

(1) Provides national and international leadership for the prevention of occupational injury and illness through applied research; (2) conducts laboratory studies, field studies, and demonstrations to develop and evaluate engineering control technology for biological, chemical, and physical hazards, including ergonomic controls for prevention of workplace injury and illness; (3) conducts laboratory studies, field studies, and demonstrations to develop and evaluate work organization strategies to reduce work-related stress, illness and injury and foster healthy worker sensitivity to occupational hazards, and detection of the precursors of or presence of disease or illness; (5) conducts research and demonstration projects to evaluate and improve the effectiveness of occupational health services, and to determine the social and economic burden of occupational illnesses and injuries, and the benefits of interventions; (6) serves as a resource to researchers who may require division expertise in their field or laboratory research; (7) disseminates sampling and analytical methods information in the NIOSH Manual of Analytical Methods. (Approved 12/8/2003)

Biomonitoring and Health Assessment Branch (CCGB)

(1) Plans and conducts laboratory and worksite research on the assessment of workers' exposures or effects of exposures, through the development of biomarkers and analysis of various human tissues and fluids; (2) partners in intervention or prevention studies in which exposure or effect of exposure is assessed through biomonitoring; (3) evaluates worker sensitivity factors that may impact the result of a hazardous exposure; (4) provides technical assistance and consultation to the Institute, other governmental agencies, private industry, and organized labor regarding the toxicologic aspects of workers= response to etiologic agents in the occupational setting; (5) conducts health assessment and exposure assessment studies to determine reproductive, immunotoxic and genotoxic effects from worker exposures to toxicants; (6) provides biomonitoring and health assessment consultation and analyses for health hazard

evaluations, epidemiologic, intervention and prevention, environmental measurement and other investigations; (7) disseminates the information gained during research on sampling and analytical methods by publications in the peer-reviewed literature and other appropriate publications. (Approved 12/8/2003)

Chemical Exposure and Monitoring Branch (CCGC)

(1) Conducts research that develops, improves, and evaluates analytical methods for the qualitative and quantitative analysis of toxic materials, their products, and other significant hazards found in the workplace, in the physical environment, and in industrial and biologic materials; (2) provides industrial hygiene measurement consultation and specialty analyses to NIOSH research through in-house and contract laboratory; (3) provides expert consultation regarding science and analytical methods to assist NIOSH, other government agencies, and voluntary standard setting organizations in the development of standards and occupational health documents; (4) conducts research to improve, evaluate and establish performance requirements for sampling and analytical methods and direct reading instrumentation used in the evaluation and prevention of exposures to hazardous levels of chemical agents; (5) disseminates the information gained during research on sampling and analytical methods by publications in the peer-reviewed literature and in the NIOSH Manual of Analytical Methods. (Approved 12/8/2003)

Engineering and Physical Hazards Branch (CCGD)

(1) Plans and conducts worksite and laboratory research to identify, evaluate, develop and implement technology to prevent workers' exposures to chemical, biological, and physical agents; (2) plans and conducts worksite and laboratory research to identify hazards and engineering controls related to emerging technologies and changing work environments, including the application of substitution, isolation, and ventilation technology to reduce hazardous exposures; (3) plans and conducts laboratory and worksite research to minimize occupational noise exposures and to develop strategies to prevent occupational hearing loss; (4) plans and conducts worksite and laboratory research on occupational health risks resulting from workers' exposures to physical, chemical, and biological agents; (5) plans and conducts worksite and laboratory research in aerosol science and air filtration; (6) performs modeling research to evaluate the efficacy of various sampling and control technologies through the use of computational fluid dynamics, wind tunnel experimentation, particle image velocimetry, and other techniques; (7) develops or evaluates new or improved instruments and exposure assessment techniques, evaluates criteria for the recommendation of such instruments or techniques, and promotes the transfer of widespread application of effective engineering control measures for safeguarding workers health; and (8) provides expert consultation to elements of NIOSH, other agencies, and external partners, in the application of new and improved techniques for hazard prevention and engineering control for the formulation of effective and credible workplace standards. (Approved 12/8/2003)

Organizational Science and Human Factors Branch (CCGE)

(1) Conducts applied laboratory and worksite research on organizational and ergonomic interventions to prevent occupational illness and injury, including physical, neurobehavioral, and psychological disorders, and the economic, social, and organizational burdens associated with these outcomes. Organizational and ergonomic topics of study include management,

supervisory, and employment practices; worker demographics and special populations; job, tool, and environmental design; design of health and safety services; and the interaction of these conditions. The scope of research includes (a) etiologic and health effects studies to serve as the basis for intervention strategies, (b) design and testing of prototype interventions in laboratory and controlled environments, and collaboration with external partners and organizations to field test and validate, and disseminate intervention techniques; (c) methodological research to better characterize exposures, outcomes, and their relationships; (2) provides technical assistance to other NIOSH and governmental units and to private organizations in the investigation of organizational and physical stressors in the workplace and in the design and testing of prevention measures; (3) develops and disseminates scientific and technical reports on organizational and physical risk factors at work, and intervention strategies. (Approved 12/8/2003)

Respiratory Health Division (CCH)

The Respiratory Health Division (RHD) seeks to advance protection against work-related hazards and exposures that cause or contribute to respiratory illness, injury, and death and to promote workplace-based interventions that improve respiratory health. To accomplish its mission, the Division gathers and synthesizes information, makes recommendations, and delivers products and services to a range of stakeholders, including partners able to effect prevention. Specifically, RHD: (1) Prevents work-related respiratory disease and improves workers' respiratory health by generating new knowledge and transferring that knowledge into practice; (2) plans, designs, and conducts a national research program relevant to preventing occupational respiratory disease and optimizing workers' respiratory health; (3) upon request, conducts hazard evaluations and provides technical assistance to address challenges, including emerging issues, in occupational respiratory disease; (4) plans, designs, and conducts a national surveillance program for occupational and work-related respiratory disease; (5) communicates study findings to prevent occupational respiratory disease and optimize workers' respiratory health, and evaluates the effectiveness of these communications; (6) administers a program of legislatively mandated medical monitoring services for coal miners under the Federal Mine Safety and Health Act of 1977; and (7) provides rewarding educational and training opportunities in occupational and work-related respiratory disease prevention to visiting scientists, Epidemiologic Investigations Service Officers, fellows, residents, interns, students and others through a variety of temporary assignments in various Division activities. (Approved 9/17/2015)

Office of the Director (CCH1)

Directs and manages the operations of the Respiratory Health Division. (Approved 9/17/2015)

Field Studies Branch (CCHB).

(1) Plans, designs, and conducts short- and long-term field investigations relevant to preventing occupational respiratory diseases and optimizing workers' respiratory health; (2) responds to requests for health hazard evaluations and technical assistance relevant to occupational respiratory disease; (3) conducts morbidity and mortality studies relating to occupational respiratory diseases in selected worker populations and the general population in order to identify causal agents and other risk factors, quantify exposure effect relationships, and evaluate prevalence and severity of specific respiratory diseases; (4) conducts environmental studies, medical test evaluations, industrial hygiene research, laboratory research, demonstrations of workplace exposures and

controls, and studies the challenges created by new technologies; (5) provides statistical design and implements data analysis and verification for Division research projects; and (6) develops and evaluates research methods of data collection, processing, and statistical analysis that are relevant to the Division mission, including medical tests, sampling approaches and equipment, sample analyses, exposure and dose assessment and modeling (including dermal exposure), bioavailability of exposures, biomarkers of exposure and health effects, and protective measures. (Approved 9/17/2015)

Surveillance Branch (CCHD)

(1) Collects, analyzes, and disseminates accurate and timely health and hazard information related to occupational respiratory diseases and workers' respiratory health, and collaborates in the establishment and analysis of health surveillance systems at the national and state level in order to: (a) provide information relating to overall incidence, prevalence, mortality, and impact of occupational respiratory diseases and workers' respiratory health; (b) describe the occurrence of specific diseases with regard to occupation, industry, exposures, geography, demographic characteristics, temporal trends, and other relevant factors for which information is available; (c) describe the distribution and trends in occupational exposure to agents responsible for respiratory diseases; (d) identify emerging risks for respiratory disease; (e) assess racial/ethnic and other disparities in the occurrence of occupational respiratory diseases and occupational exposures to agents responsible for respiratory diseases; and (f) evaluate impact of interventions, policies, and program activities on the occurrence of occupational respiratory disease; (2) synthesizes data to frame recommendations for priority setting, hypothesis generation, and improved methods for data collection; (3) disseminates information through development and publication of timely information and reports describing workplace hazards and exposures and work-related occupational lung diseases, and application of communication science, media principles, and web design to enhance access to and use of data and information; (4) develops and evaluates innovative surveillance methods; (5) coordinates with other Federal agencies, promulgates rules, and implements programs as authorized by the Federal Mine Safety and Health Act of 1977 and its subsequent amendments, to provide for the collection and reporting of health and hazard surveillance data related to occupational respiratory diseases in coal miners, including planning, coordinating, and processing the medical examinations provided for miners, operating an approval program for participating medical facilities and physicians, and evaluating and approving employer programs for the examination of miners in accordance with published regulations; (6) provides technical assistance and recommendations concerning medical screening and health surveillance of workers exposed to respiratory hazards in the workplace, including administering a national program of spirometry training, providing training and testing on the classification of radiographs for the pneumoconioses, and collaborating with national (e.g., American College of Radiology, American Thoracic Society) and international (e.g., International Labour Organization) groups to develop and improve occupational respiratory disease medical surveillance methods; and (7) establishes collaborations to identify, support, and evaluate interventions designed to improve respiratory health in the workplace. (Approved 9/17/2015)

Division of Safety Research (CCJ)

(1) As the focal point for the Institute's occupational traumatic injury prevention and safety program, identifies the major causes of injuries and safety hazards, identifies interventions to improve worker safety, and supports implementation of these interventions; (2) develops scientifically sound recommendations for programs to prevent and control occupational traumatic injuries; (3) develops scientifically sound recommendations for the performance and

use of equipment and various other devices for protecting workers; (4) evaluates the impact of targeted control programs for preventing or mitigating traumatic injury, diseases, disability, and death; (5) manages program planning/project coordination, including the Division's financial and personnel management systems, and ensures the scientific and program integrity of Division functions. (Approved: 6/7/2002)

Analysis and Field Evaluations Branch (CCJB)

(1) Identifies causes or specific risk factors and hazards associated with fatal and non-fatal occupational traumatic injuries (acute, subacute, chronic, or cumulative) and safety failures; (2) determines the impacts and efficacy of intervention strategies and safety systems for the prevention of these conditions, and the promotion, maintenance, or restoration of an injury free, well-protected work force; (3) develops scientifically sound methods for the conduct of analytic epidemiologic investigations and applied field intervention trials to assess the effectiveness of new, redesigned, and existing technical, managerial, regulatory, and system safety engineering and occupational medicine approaches and programs for preventing injuries and for utilizing recommended work practices and equipment; and (4) provides technical assistance to other components of the Division and to other occupational safety and health entities in evaluating and improving the implementation of recommended interventions. (Approved 12/12/2003)

Protective Technology Branch (CCJC)

(1) Designs and develops new and improved safety engineering systems and controls, protective equipment, and work practices to protect workers from all types of trauma; (2) develops and validates test and measurement methods necessary to conduct safety controls and equipment research; (3) tests and evaluates, in the laboratory, simulated workplace, and actual work-sites, existing and new technological approaches to worker protection, and occupational injury prevention and control; (4) analyzes potentially hazardous operations using systems safety and/or other engineering techniques to identify safety engineering control and safe work practice strategies; (5) evaluates the use and performance of safety engineering controls and protective equipment; (6) develops scientifically sound recommendations for the performance and use of existing or redesigned safety engineering controls, work practices, protective equipment, exposure assessment tools, and occupational safety research technologies; (7) develops technical information to support recommendations for safety standards; (8) provides recommendations to the Analysis and Field Evaluations Branch regarding specific hazards or interventions requiring further epidemiologic research and/or evaluation; (9) provides technical assistance and consultation to other Branches within the Division of Safety Research, other components of NIOSH and CDC, other Federal agencies, and other public and private sector organizations on the use of protective technology for the prevention of worker exposures to safety hazards that lead to injuries. (Approved 12/12/2003)

Surveillance and Field Investigations Branch (CCJD)

(1) Identifies and describes distributions of fatal and non-fatal occupational traumatic injuries and safety hazards; (2) collects, reviews, and summarizes data on injuries and safety hazards, including the major types of traumatic injury and death among workers and those due to the failure of safety measures; (3) conducts in-depth investigations of selected cases or clusters of injuries or safety hazards; (4) evaluates trends in occupational injury at the national level; (5) makes comparisons among rates found for regions, industries, occupations, and other

important variables; (6) provides data which serves as a basis for planning, providing, and evaluating occupational injury prevention and safety services; (7) identifies specific problem areas to be investigated further by the Analysis and Field Evaluations and Protective Technology Branches; (8) provides assistance to State agencies to upgrade occupational injury and injury hazard surveillance at the State level. (Approved 12/12/2003)

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

(1) Develops and maintains a surveillance system of the Nation's work force and its environs to make an early detection and continuous assessment of the magnitude and extent of job-related illness, exposures, and hazardous agents; (2) conducts the legislatively mandated health hazard evaluation and industry-wide epidemiological research programs through longitudinal record studies and clinical/environmental field studies and surveys to identify the occupational causes of disease in the working population and their offspring, and to determine the incidence and prevalence of acute and chronic effects from work-related exposures to toxic and hazardous substances; (3) conducts epidemiological research for input to criteria for standards for the control of occupational health hazards; (4) provides statistical support including the collection, processing, compilation, computation, analysis, editing, and/or presentation of statistical data to CDC; and provides, upon request and on a self-initiated basis, technical assistance, demonstrations, and consultation on technical matters pertaining to occupational safety and health to other Federal agencies, state, and local agencies, other technical groups, unions, employers, and employees. (Approved 10/4//2006)

Hazard Evaluations and Technical Assistance Branch (CCKB)

The Health Evaluations and Technical Assistance Branch conducts the legislatively-mandated health hazard evaluation program in response to employer and employee representatives requests for hazard evaluations and toxicity determinations, including coordinated medical and industrial hygiene field surveys; provides medical/epidemiologic and industrial hygiene technical and consultative assistance to Federal, State, and local agencies, labor, industry, and other groups or individuals to control occupational health hazards and to prevent occupational illness and disease. (Approved 12/8/2003)

Industry-wide Studies Branch (CCKC)

(1) Implements its legislative mandate by conducting rigorous etiologic and exposure assessment research studies in working populations; (2) plans and conducts occupational health and exposure assessment studies of workers who are part of the Occupational Energy Research Program (OERP); (3) provides data for the development of health hazard controls and protective standards; and (4) communicates study results to workers, scientists, industry, and the public. (Approved 6/23/2006)

Surveillance Branch (CCKD)

(1) Develops and maintains a national surveillance system for the early detection and continuous assessment of the magnitude and extent of occupational illness, and exposures to hazardous agents, using new and existing data sources such as Federal, State, and local agencies, labor, industry, tumor registries, physicians, and medical centers; (2) coordinates the collection of surveillance information with the U.S. Department of Labor's compliance activities and State

research and compliance activities; (3) identifies and develops, or in certain instances, supports the development of new sources of data for the surveillance system; (4) develops medical surveillance systems for previously exposed workers.

National Personal Protective Technology Laboratory (CCL)

The National Personal Protective Technology (NPPTL) prevents work-related injury, illness and death by advancing the state of knowledge and application of personal protective technologies (PPT) including instrumentation, respiratory protective devices (RPD), and a diversity of personal protective equipment (PPE) used for the protection of American workers. To accomplish this mission, NPPTL leads and coordinates the National Institute for Occupational Safety and Health's (NIOSH) programs, projects, and policies related to PPT across the Institute. NPPTL: (1) identifies the need for research, conducts and coordinates research to support the development of new technologies, performance, quality and reliability standards, Federal regulations, safety and health criteria, and Institute policy; (2) conducts a variety of laboratory and field investigations relating to the development and evaluation of innovative technologies; (3) directs, implements, and provides national guidance related to conformity assessment programs and functions (e.g. inspection, testing, certification, quality assurance, surveillance); (4) provides national leadership serving on national and international PPT consensus standard setting committees; (5) develops and promulgates standards and regulations; (6) produces and disseminates scientific reports and national guidance documents including research, laboratory and field studies, safety and health investigations, scientific criteria, and national guidance; (7) designs and implements information technology functions including national or program databases, trusted sources for public information and social marketing; and (8) coordinates program support functions including budget, facilities, growth initiatives, and communications, and scientific support functions such as Committee on Personal Protective Equipment and Institute of Medicine evaluations, special projects, nonrespiratory PPE conformity assessment, and federal and consensus standards across NIOSH. (Approved 6/10/2015)

Conformity Verification and Standards Development Branch (CCLE)

(1) Administers the Department of Health and Human Services Title 42 Code of Federal Regulations (CFR), Part 84-Respiratory Protective Devices conformity assessment functions (i.e. inspection, testing, certification, documentation control, quality assurance, and surveillance) including: a) processing respirator approval applications by verifying conformance with Federal regulations and national consensus standards such as performance, quality, reliability, and documentation requirements to determine the effectiveness of respirators used during entry into or escape from hazardous atmospheres, b) issuing or revoking NIOSH certificates of approval, c) evaluating and maintaining official records on NIOSHcertified respirators including the establishment of NPPTL and national databases, d) recommending NIOSH policy relating to RPD conformity verification criteria for traditional and innovative respirator technologies and applications, and, e) investigating and processing Freedom-of-Information-Act requests; (2) establishes and administers an internal audit program to evaluate the conformity assessment functions of NPPTL; (3) maintains official files of policies, standards, standard operating and test procedures used as the basis for granting a NIOSH certificate of approval; (4) provides national recommendations for effective conformity assessment programs associated with non-respiratory PPT; (5) assesses research findings and translates them into effective conformity assessment recommendations for NIOSH policy, standards, regulations, and surveillance practices, for new protective technologies or special

applications of existing technologies; (6) leads NIOSH participation in the development and promulgation of national and international consensus standards, conformity assessment program criteria and guidance, establishment of Federal regulations where necessary, and assesses of economic impact of Federal regulations; (7) prepares criteria for proper selection, recommends national guidance for effective use (e.g. cautions, limitations, and restrictions of use) and maintenance, and provides technical support; (8) plans and conducts public meetings to solicit or provide information concerning technology and conformity assessment practices; and (9) prepares and disseminates national reports related to conformity assessment of PPT. (Approved 6/10/2015)

Research Branch (CCLG)

(1) Conducts hypothesis testing-based PPT research with an emphasis on respiratory protection, protective clothing, and ensemble research; (2) encourages and conducts research related to innovative technologies to improve the use and usability of existing and new PPT products; (3) conducts laboratory and field research projects to measure performance, quality, reliability, and efficacy of the materials, components, and sub-systems used in PPT as well as complete equipment systems, especially for new or emerging hazards, and recommends criteria to improve the selection, care, maintenance, and use of PPT; (4) investigates emerging hazards and personal exposures to identify worker PPT needs and technology gaps; (5) conducts research to identify and recommend effective integration strategies and evidence-based test methods for PPT for use in PPT standards; (6) recommends performance, quality, reliability, and efficacy criteria; (7) studies and improves human/technology interfaces to better understand and mitigate barriers to effective PPT selection, care, maintenance, and use; (8) conducts laboratory and field-based research into the biomechanical, physiological, and psychological stressors and worker responses to PPT; (9) conducts research, developing interventions, and identifies innovative methods (e.g., new software tools, information technology, social marketing, training methods, practices, equipment, etc.) of increasing end-user compliance with proper selection, care, maintenance, and use of PPT; (10) provides systematic collection, analysis, and interpretation of PPT use practices, including investigation of barriers to effective PPT use; (11) produces and disseminates technical information, research findings, training materials, and recommendations for PPT to improve protection of workers; (12) evaluates and disseminates PPT performance trends published through the post market surveillance activities; and (13) identifies and implements an effective communication and outreach program for stakeholders within the NIOSH sectors to inform end users of proper selection, care, maintenance, and use of PPT. (Approved 6/10/2015)

Evaluation and Testing Branch (CCLH)

(1) Conducts evaluations and tests in accordance with prescribed standard test procedures of RPD in support of NIOSH conformity assessment functions that lead to a NIOSH certificate of approval or its revocation; (2) conducts quality management system in-plant manufacturing-site evaluations including post market surveillance, and documents finding and recommendations in proper reports; (3) conducts evaluation and testing of PPT for various purposes, and prepares reports for dissemination to the public; (4) provides testing support to the NPPTL research and standards development initiatives; (5) develops evaluation methodologies, and unique test procedures to address new protective technologies or special applications of existing technologies; (6) conducts post market evaluations of NIOSH-certified RPD including the long-term field evaluation program, and prepares technical information and reports to improve standards for certification, selection, care, and use; (7) administers and conducts surveillance of field deployed PPT to evaluate conformance to applicable regulation, consensus standards, and

NIOSH policy; (8) conducts investigations of PPT associated with complaints of nonconformance and/or concerns related to adverse health and safety including evaluations and analysis associated with NIOSH-certified respirators (e.g. certified product investigation process), and evaluating respirators and protective clothing submitted in conjunction with the NIOSH Fire Fighter Fatality Investigation and Prevention Program investigations conducted by the Division of Safety Research; and (9) maintains and improves laboratory capabilities to perform evaluation and testing of PPT including innovative technologies, implements a laboratory quality program (e.g., ISO 17025) to ensure quality and continuous improvement of PPT evaluations and tests, administers and maintains a chain of custody program to secure technologies or products obtained for evaluation and testing, and conducts an internal audit function to assure evaluation and testing are carried out in accordance policy and standard procedures. (Approved 06/10/2015)

<u>Division of Compensation Analysis and Support (CCN)</u>

(1) Conducts a program in support of Federal rulemaking to promulgate science-based methods and guidelines mandated by the Energy Employees Occupational Illness Compensation Program Act of 2000 (known as the "Act") to estimate the occupational radiation doses of claimants under the Act and evaluate the relationship between such doses and cancers incurred by the claimants; (2) develops and implements a program of science-based analysis and policymaking by which the Secretary of Health and Human Services shall consider and issue determinations on petitions by classes of employees to be included as members of the Special Exposure Cohort established under the Act; and (3) conducts a program of individual dose reconstruction to estimate and report the radiation doses of claimants under the Act. (Approved 2/23/2010)

World Trade Center Health Program (CCP)

(1) Provides the leadership and management to comply with the responsibilities under the James Zadroga 9/11 Act of 2010; Title XXXIII of the Public Health Service Act; (2) administers the World Trade Center Health Program (WTCHP); (3) develops, implements, and maintains a WTCHP quality assurance program; (4) provides annual reports to Congress; (5) consults with stakeholders in carrying out the WTCHP mission; (6) establishes and administers a WTCHP Scientific Technical Advisory Committee; (7) develops and implements an education and outreach program; (8) provides for uniform data collection and for data integration; (9) provides for collaboration between Data Centers and World Trade Center (WTC) Health Registry; (10) enters into and oversees contracts for Clinical Centers of Excellence, Data Centers, and Nationwide Provider Networks; (11) enters into agreement with New York City for purposes of collecting 10% of the specified funds stated in the Zadroga 9/11 Act of 2010; (12) ensures continuity of care; (13) reimburses Clinical Centers of Excellence for infrastructure costs; (14) establishes a process for enrollment of WTC responders, and Pentagon and Shanksville responders; (15) conducts reviews to determine if cancer/types of cancer should be added to list of WTC-related health conditions; (16) issues regulations for medical necessity; (17) reimburses costs for initial health evaluation, monitoring, and treatment; (18) establishes a process to determine and certify screening-eligible WTC survivors as certified-eligible survivors; (19) administers/collects recoupments from private insurance and workers compensation; (20) conducts and/ or supports research; (21) ensures that a Registry of 9/11 victims is maintained; (22) enters into agreement(s) with the Centers for Medicare and Medicaid Services for provider reimbursements; and (23) ensures compliance with all Health Insurance Portability and Accountability Act of 1996 (HIPAA) Public Law 104-191, statutory and regulatory provisions that govern the WTCHP as a covered entity, as well as any HHS HIPAA policies

through the establishment of a WTCHP HIPAA Compliance Program. (Approved 4/28/2014)

Western States Division (CCQ)

The Western States Division (WSD) conducts research and provides technical assistance for the prevention of work-related illness, injury, and death; these activities are predominately focused on, but not limited to, occupational safety and health (OS&H) problems in the Western U.S., including Alaska and Hawaii. WSD conducts specific activities that provide actionable evidence to reduce OS&H hazards. To accomplish its mission, WSD: (1) conducts prevention research for at risk populations; (2) facilitates the development of OS&H programs in states and regions that have minimal or limited OS&H public health program capacity and state-supporting infrastructure; (3) serves as a multi-regional resource to provide outreach, expert advice, and technical assistance on OS&H priority issues, including the development, dissemination, and diffusion of NIOSH research products; (4) enhances and facilitates NIOSH initiatives and programs; and (5) responds to requests for technical assistance and conducts site evaluations to support Division programs and priorities and other NIOSH initiatives and programs, including evaluating exposures to hazardous chemical, biological, physical, and radioactive agents and recommending appropriate controls. Research includes the development of viable strategies to evaluate and prioritize hazards, communicate risk, provide evidence for prevention recommendations, and building state OS&H (capacity or activities) through surveillance data and stakeholder input. At risk populations include, but are not limited to, (a) high-risk industries such as oil and gas extraction, fishing, and aviation; (b) underserved groups such as American Indian/Alaska Native and immigrant and contingent workers; and (c) workers engaged in particularly hazardous activities such as hydraulic fracturing, wind and other renewable energy development, wild land firefighting; and water and air transportation. (Approved 3/6/2015)

Pittsburgh Mining Research Division (CCR)

Provides leadership for the prevention of work-related illness, injury, and fatalities of mine workers through research and prevention activities of the Pittsburgh Mining Research Division (PMRD). Specifically PMRD: (1) conducts field studies to identify emerging hazards, to understand the underlying causes of mine safety and health problems, and to evaluate the effectiveness of interventions; (2) develops engineering and behavioral-based interventions, including training programs, to improve safety and health in the mines, trains mine safety and health instructors, and for evaluation purposes, conducts mine emergency, mine rescue and escape training for miners and mine rescue teams; (3) performs research, development, and testing of new technologies, equipment, and practices to enhance mine safety and health; (4) develops best practices guidance for interventions; (5) transfers mining research and prevention products into practice; and (6) coordinates, with the Spokane Mining Research Division, NIOSH research and prevention activities for the mining sector. (Approved 9/17/2015)

Health Communications, Surveillance and Research Support Branch (CCRB)

(1) Collects and analyzes health and safety data related to mining occupations in order to report on the overall incidence, prevalence and significance of occupational safety and health problems in mining; (2) describes trends in incidence of mining-related fatalities, morbidity, and traumatic injury; (3) conducts surveillance on the use of new technology, the use of engineering controls, and the use of protective equipment in the mining sector; (4) coordinates surveillance activities with other NIOSH surveillance initiatives; (5) provides statistical support for surveillance and

research activities of the division; (6) analyzes and assists in the development of research protocols for developing studies; (7) coordinates planning, analysis, and evaluation of the mining research program for achieving organizational goals; (8) collaborates with research staff to translate findings from laboratory research to produce compelling products that motivate the mining sector to engage in improved injury control and disease prevention activities; (9) coordinates with other health communication, health education, and information dissemination activities within NIOSH and CDC to ensure that mining research information is effectively integrated into the CDC dissemination and intervention strategies; and (10) supports mining research through the development and application of computational tools and techniques that advance the understanding and mitigation of mining health and safety problems. (Approved 9/17/2015)

Ground Control Branch (CCRC)

(1) Conducts laboratory and field investigations of catastrophic events such as cataclysmic structural or ground failures to better understand cause and effect relationships that initiate such events; (2) designs, evaluates, and implements appropriate intervention strategies and engineering controls to prevent ground failures; (3) develops, tests, and promotes the use of rock safety engineering prediction and risk evaluation systems for control or reduction of risk; (4) conducts laboratory and field investigations of surface mining operations to ensure appropriate engineering designs to prevent slope and highwall failures; (5) conducts research using a variety of techniques including numerical modeling and laboratory testing and experiments to ensure a full understanding of rock behavior and performance during rock excavation and mining operations; (6) develops, tests, and demonstrates sensors, predictive models, and engineering control technologies to reduce miners risk for injury or death; and (7) conducts research investigations using a wide-variety of measurement and sensor technologies including in-mine and surface systems and technologies to ensure the structural stability of mining operations. (Approved 9/17/2015)

Dust, Ventilation and Toxic Substances Branch (CCRD)

(1) Develops, plans, and implements a program of research to develop or improve personal and area direct reading instruments for measuring mining contaminants including, but not limited to, respirable dust, silica, diesel particulates and exhaust and a variety of toxic and other potentially harmful exposures; (2) conducts field tests, experiments, and demonstrations of new technology for monitoring and assessing mine air quality; (3) designs, plans, and implements laboratory and field research to develop airborne hazard reduction control technologies; (4) carries out field surveys in mines to identify work organization strategies that could result in reduced dust exposures, diesel particulate exposures, toxic substance exposures and exposures to other potentially harmful exposures; (5) evaluates the performance, economics, and technical feasibility of engineering control strategies, novel approaches, and the application of new or emerging technologies for underground and surface mine dust and respiratory hazard control systems; (6) develops and evaluates implementation strategies for using newly developed monitors and control technology for exposure reduction or prevention; and (7) conducts field and laboratory experiments on mine ventilation systems to develop improved technologies and strategies for applications to dust control, gas control, diesel exhaust control to ensure safe and healthy conditions for underground miners. (Approved 9/17/2015)

Human Factors Branch (CCRE)

Seeking to improve the health and safety of mineworkers, the branch systematically identifies, understands, and evaluates interactions within the mining work system, including the organizational and physical environment, tools and technology, job tasks and social factors. Researchers use a range of established and novel methods to study how the interactions among various individual, environmental, and organizational factors, along with tools and technology affect the mining work process and work system, and how these processes impact worker perceptions, decisions, behavior, health and well-being. The branch: (1) conducts research with an overarching focus on the human component in the mining workplace system and in the mine emergency response system including: designing and testing of proposed interventions related to workplace safety management systems and mine emergency response, rescue and escape systems, including demonstrations of proposed technologies using laboratory mock-ups, fullscale demonstrations at the division's experimental mines, assessments and demonstrations in the branch's virtual reality immersive environment research labs, and field evaluations in operating mines; (2) develops interventions, conducts evaluations and recommends intervention implementation strategies for injury prevention and control technologies developed by the division; (3) conducts human factors research related to worker perceptions, judgment and decision making, hazard recognition, human behavior; and (4) provides effective training and work place organization techniques and strategies for mining. (Approved 9/17/2015)

Electrical and Mechanical Systems Safety Branch (CCRF)

(1) Conducts laboratory, field, and computer modeling research to assess the health and safety relevance of mining equipment design features; (2) using scientific and engineering techniques, analyzes case-studies of injuries and fatalities resulting from mining equipment and develops interventions and strategies for reducing or eliminating the hazards; (3) conducts laboratory and field research to assess the safety hazards of electrical systems used in mining operations and develops interventions and strategies to reduce or eliminate the hazards; (4) develops novel approaches for improving the operational safety of working around, and on, mining machinery; and (5) conducts laboratory and field research on communication systems, tracking systems and monitoring systems as needed to ensure their viability and safety during routine mining operations as well as post-disaster conditions. (Approved 9/17/2015)

Fires and Explosions Branch (CCRG)

(1) Conducts experiments and studies at the Bruceton Experimental Mine, the Bruceton Safety Research Coal Mine, and similar facilities as well as field experiments at operating mines to prevent catastrophic events such as mine explosions, mine fires, and gas and water inundations to better understand cause and effect relationships which initiate such events; (2) develops new or improved strategies and technologies for mine fire prevention, detection, control, and suppression; (3) investigates and develops an understanding of the critical parameters and their interrelationships governing the mitigation and propagation of explosions, and develops and facilitates the implementation of interventions to prevent mine explosions; (4) develops new controls and strategies for eliminating explosions or fires or minimizing the impact of explosions on the safety of mine workers by improving suppression systems, improving detection of sentinel events; (5) works with the mining industry and other government agencies to ensure research gaps and technology needs are met for preventing any and all types of events that could lead to mine explosions, sustained fires or inundations; and (6) identifies and evaluates emerging health and safety issues as mining operations move into more challenging and dangerous geologic conditions. (Approved 9/17/2015)

Workplace Health Branch (CCRH)

(1) Plans and conducts laboratory and field research on all aspects of workplace health including noise-induced hearing loss in miners, cumulative and repetitive injuries and the identification of potential related health and safety hazards; (2) specific to excessive noise levels, conducts field dosimetric and audiometric surveys to assess the extent and severity of the problem; (3) specific to cumulative and repetitive injuries, conducts laboratory and field studies to identify the risk factors most responsible for causing injuries to mine workers at surface and underground operations and develops interventions, conducts evaluations and recommends intervention strategies for cumulative and repetitive injuries; (4) conducts field and laboratory research to identify noise generation sources and develops, tests, and demonstrates new control technologies for noise reduction; (5) evaluates the technical and economic feasibility of noise reduction controls; (6) designs and conducts surveillance based research studies to identify and classify risk factors that cause, or may cause, repetitive and cumulative injuries to miners; (7) conducts research studies to further the understanding of operating equipment on the role of mine worker musculoskeletal disorders in the underground and surface environment; and (8) develops strategies, technologies and approaches for improving the operational aspects of mining systems for mine worker comfort and health. (Approved 9/17/2015)

Spokane Mining Research Division (CCS)

(1) Provides leadership for prevention of work-related illness, injury, and death in the mining industry with an emphasis on the special needs in the western United States; (2) develops numerical models and conducts laboratory and field investigations to better understand the causes of catastrophic failures in underground metal/nonmetal mines that may lead to multiple injuries and fatalities; (3) develops new design practices and tools, control technologies, and work practices to reduce the risk of these global and local ground failures in underground metal/nonmetal mines; (4) conducts numerical studies and field investigations to understand the problems of ventilating deep and multilevel underground mines, and develops improved design approaches and engineering controls to reduce the concentration of toxic substances in the mine air; (5) conducts laboratory and field studies to help leverage and support the Institute's mining research program; (6) develops and recommends appropriate criteria for new standards, NIOSH policy, documents, or testimony related to health and safety in the mining industry. (Approved 9/17/2015)