Projects of the National Institute for Occupational Safety and Health

NIOSH

1987

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES • PUBLIC HEALTH SERVICE • CENTERS FOR DISEASE CONTROL • NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

National Institute for Occupational Safety and Health

Projects for FY 1987

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Centers for Disease Control
National Institute for Occupational Safety and Health

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PREFACE

NIOSH PROJECTS FOR FY 1987

In October of 1986, we convened the second NIOSH National Symposium on the Prevention of Leading Work-Related Diseases and Injuries. This symposium presented and modified the second five of the "ten leading work-related diseases and injuries." Like the first which was held in May 1985, it was a resounding success. These symposia provided an opportunity for discussion, modification, and input to the strategies that were developed by NIOSH. We now have the first "national" plan to eliminate and prevent negative health effects of work. NIOSH projects for FY 1987 and future years will be directed toward the implementation of these strategies.

As preface to the NIOSH FY 1987 Projects document, I offer excerpts from my opening remarks at the meeting of the Faculty of Occupational Medicine, Royal College of Physicians, on May 6, 1987, in London. These remarks represent my most recent reflection on the strategies' development and the potential for their implementation:

> Last fall, we published the first five strategies, "Proposed National Strategies for the Prevention of Leading Work-Related Diseases and Injuries," Part I, in collaboration with the Association of Schools of Public Health. The "new five" strategies are now in final preparation for review by the Public Health Service. These Proposed Strategies generally include four parts: definitions, description of the nature of the problem, depiction of the preventive measures that can be taken now, and depiction of the knowledge required to move forward. The specific content of these strategies is diverse, reflecting the many professionals whose ideas are there; however, the attempt to emphasize "basics" undergirds each.
>
> Looking at all 10 strategies, common themes emerge. All of them call for improved surveillance both of health effects and hazards. Numerous systems collect data, but neither singly nor in sum do they provide accurate quantification, or, more importantly, reliable secular trends. All discuss research, and may have as much utility in determining a national agenda for science in this field as in guiding action. Nine urge specific control measures. There are pleas for better definition of conditions such as for neurotoxic disorders and disorders of reproduction, as well as a hopeful conviction that they may be reduced by controlling the hazardous agent(s) before the health effects are defined. Several urge greater care in advance of introducing new agents and processes. Education at all levels about risks is urged, including special training for design engineers in basic concepts of occupational health. Can these documents without any force of law, regulation, or funding provoke productive change? It is too early to judge. The question most frequently asked is, "Who should implement these things?" Our answer, "Those who can!" There are signs that aspects of these Strategies are being implemented.

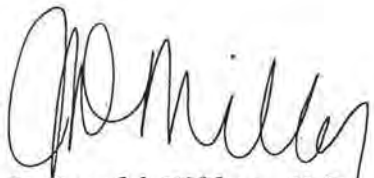
The first visible effects were on the research plan of NIOSH. We sifted the recommendations for research, looking for ideas which NIOSH should pursue. As a result, our research is now focused on the most important problems in the field. Moreover, the scientific staff of NIOSH has a much clearer understanding of the opportunity and the responsibility we have for national leadership in occupational health. The Strategies have accelerated efforts to improve surveillance. A growing number of State Health Departments are taking up surveillance of occupational diseases, which may bring them back into the fray more broadly.

The health promoters who usually see the world as physical fitness, smoking cessation, and weight loss, are putting occupational risk factors in their health risk appraisals and their educational programs. We are receiving inquiries from schools of public health, business, and engineering, asking for curricular guides and materials to use in introducing the Strategies in courses on occupational health.

There is not now a satisfying body of evidence affirming the value of these attempts at strategic thinking in occupational public health. Much depends on how good these documents really are, and how good we are at communicating the principles to others. This is a formidable task when one considers the huge numbers of organizations who might be affected or interested.

There are no guarantees of success. However, one thing seems reasonably sure: if there is no strategy at all, we will likely achieve either the wrong thing, or nothing at all.

We are enormously pleased with the accomplishments of these symposia. We believe that the NIOSH strategies were refined and expanded during the workshops and discussions, and these strategies will be reflected in all our future goals and plans.



J. Donald Millar, M.D.
Assistant Surgeon General
Director
National Institute for Occupational
Safety and Health

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INTRODUCTION

NIOSH PROJECTS FOR FY 1987

Program planning for NIOSH changed dramatically during 1986 and 1987. The basis for that change was the completion of the National Prevention Strategies for the Ten Leading Work-Related Diseases and Injuries. Those strategies, while national in scope, will provide NIOSH with a standard for strategic, tactical, and operational planning.

In the "Program Plan of the National Institute for Occupational Safety and Health" for 1986, the introduction presented a NIOSH planning format showing the generation of program operations from a variety of "national targets." That format has changed considerably with the completion of the Strategies. Now, the National Strategies are identified as the primary forces generating more specific plans. The graphic comparison of those two planning formats, attached, depicts the consideration of planning efforts based on the Strategies.

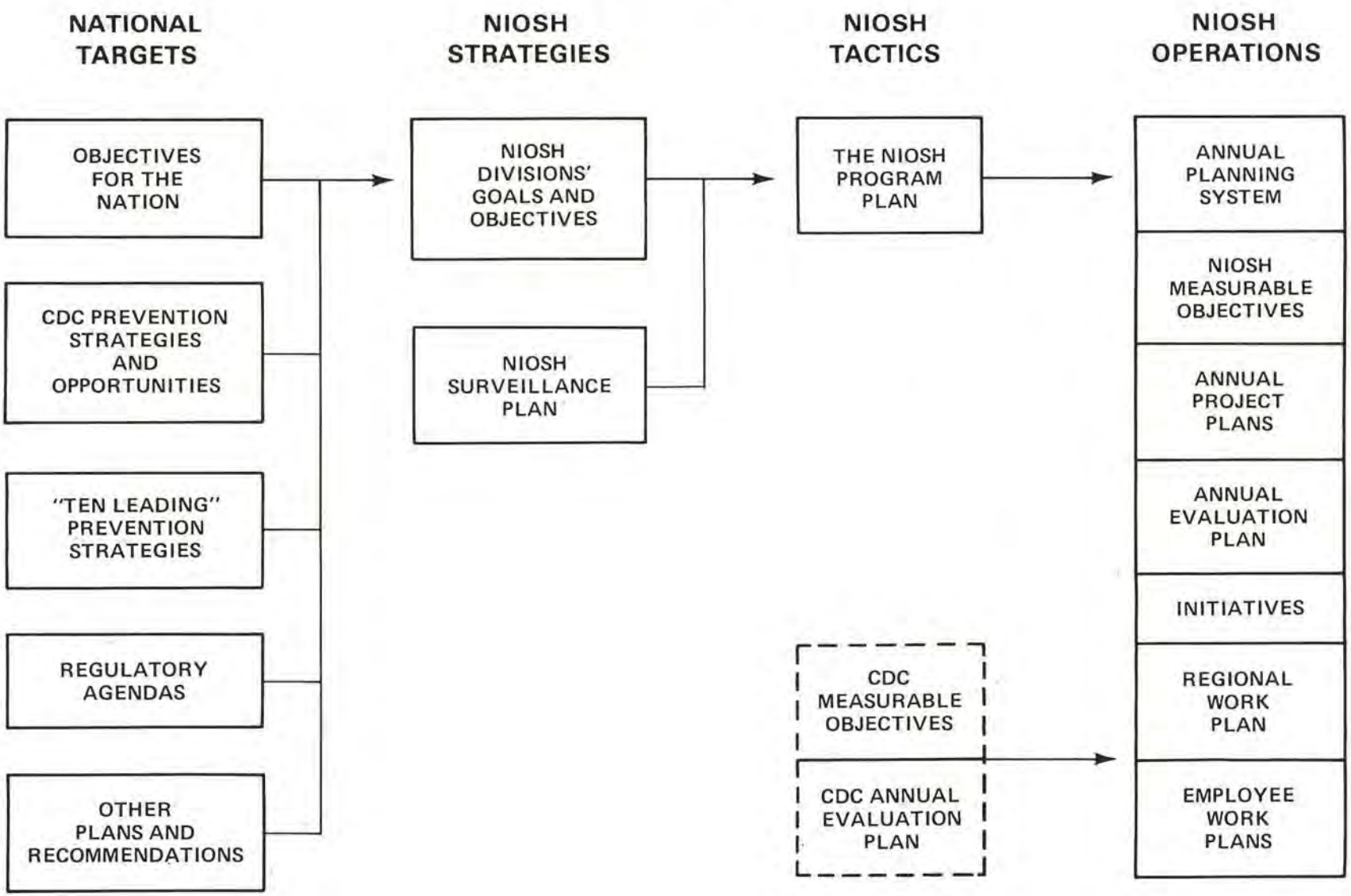
The actual implementation plan for the National Strategies will be realized at two levels. First, because they are "national" strategies, developed by experts from across the spectrum of the occupational safety and health community, NIOSH cannot be wholly responsible for their realization. There must be a national effort to respond to such a national plan. NIOSH must, however, accept the leadership role in the formulation of an actual implementation plan.

Second, the National Strategies will give direction to all NIOSH internal program planning. Specific division goals and objectives must be evaluated and adjusted to be in synchronization with the Prevention Strategies. Finally, the division projects which are the specific research and service efforts directed at identifying risks or developing controls, must be directed toward the recommendations of the Prevention Strategies.

The publication of the National Prevention Strategies is important in that, taken together, these documents represent the first comprehensive national plan to prevent occupational diseases and injuries. That importance is compounded as the Strategies also represent a focus for planning in the Institute.

Note: This document, "NIOSH Projects for FY 1987" was previously titled "Program Plan of the National Institute for Occupational Safety and Health." The title and publication date for the document have been changed to more accurately reflect actual operating projects and to include projects developed throughout the year.

NIOSH PLANNING FORMAT
FY 1986



NIOSH PLANNING FORMAT
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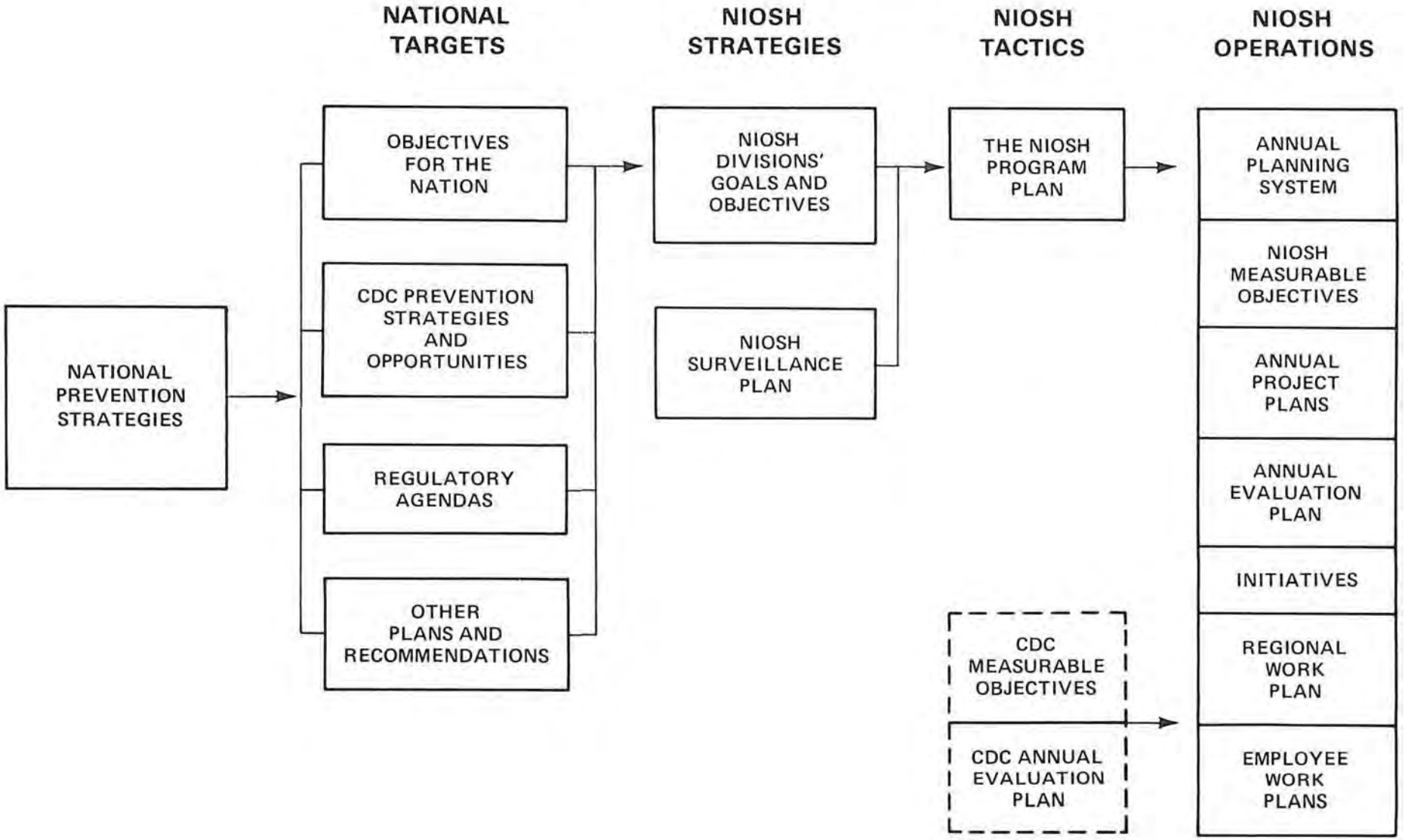


DIVISION OF BIOMEDICAL AND BEHAVIORAL SCIENCE

The Division of Biomedical and Behavioral Science (DBBS) conducts laboratory research for the development of criteria for standards in the areas of toxicology, behavioral science, physiology, ergonomics, and the effects of physical agents. DBBS investigates new problems created by technology requiring ameliorative action, and develops medical criteria to assure that the workplace is not responsible for diminished health, functional capacity, or life expectancy of workers.

DBBS plans and conducts laboratory and worksite research on the psychological, behavioral, physiological, and motivational factors which reflect stress situations posed by job demands as well as those induced by chemical and/or physical agents. The division determines human tolerance limits to physical work and ability to adjust to environmental conditions as influenced by age, sex, body build, state of health, physical fitness, and psychosocial factors.

The division also conducts laboratory investigations designed to evaluate the dose effects of toxic agents, singly and in combination, on neurobehavioral functions in experimental animals, and performs worksite experiments designed to define and characterize effects of toxic agents on the nervous system. Through in-depth and long-term investigations, DBBS develops information on cumulative dose-response effects. The division also develops and applies research methodology to quantify short-term and long-term alterations in the cardiopulmonary function of animals exposed to industrial chemicals. Through laboratory diagnosis of biological samples from animals and humans exposed experimentally or occupationally to toxic industrial substances, DBBS provides clinical and biochemical laboratory consultation and develops procedures for laboratory diagnosis of occupational diseases, including biological monitoring methods.

DBBS conducts laboratory and worksite research on hazards from such physical agents as noise, infrasound and ultrasound, vibration, and non-ionizing and ionizing energy sources in the workplace. The division develops improved procedures, instrumentation, and methodologies for the evaluation of potential occupational hazards resulting from workers' exposure to physical agents, and provides consultation for the development of health criteria and standards pertaining to physical agents found at the workplace.

DBBS is located at the Robert A. Taft Laboratory, 4676 Columbia Parkway, Cincinnati, Ohio 45226. The Division Director is Janet C. Haartz, Ph.D., telephone (513) 533-8465, FTS 684-8465.

DIVISION OF PHYSICAL SCIENCES AND ENGINEERING

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 health hazards. It also operates a quality control reference program for industrial hygiene laboratories.

DPSE conducts a control technology program to prevent occupational disease and injury before they occur by assisting employers, especially the smaller businesses, in better design and operation of the workplace. This work involves identification and evaluation of effective engineering controls used in a variety of processes and industries. The division promotes the transfer and widespread application of these preventive engineering control measures. It also provides engineering expertise in formulating effective workplace standards.

Research is conducted to establish performance requirements for direct reading, area, and personal instrumentation used in the evaluation and prevention of exposures to hazardous levels of chemical and physical agents. The division also provides consultation for the development of criteria and standards on monitoring strategies, instrumentation, and controls.

DPSE conducts research to develop and improve methods for analysis of toxic and carcinogenic substances found in the workplace. DPSE provides consultation in analytical chemistry to all elements of NIOSH and to other government agencies, recommending appropriate sampling and analytical methods.

Quality control is ensured through the Proficiency Analytical Testing (PAT) program. The division provides reference samples to both public and private industrial hygiene laboratories, determines the analytical competence of participating laboratories, and assists the laboratories in improving analytical performance. The division also encourages and supports development and promulgation of national guidelines for accreditation of industrial hygiene laboratory facilities; selects and develops standard reference materials for use in the measurement of industrial hygiene hazards; and provides quality assurance in the analysis of the Institute's laboratory and field programs and contract laboratories.

DPSE provides analytical chemistry support to the Insitute's laboratory research and field investigation programs, including routine measurement of samples by established methods, special measurement of complex samples, and short-term development of methods. This analytical support involves the use of state-of-the-art analytical instrumentation such as high resoultion gas chromatography, gas chromatography-mass spectrometry, high performance liquid and ion chromatography, and Fourier Transform Infrared Spectroscopy (FTIR).

DPSE is located at the Alice Hamilton Laboratory, 5555 Ridge Avenue, Cincinnati, Ohio 45226. The Acting Division Director is Mr. Philip J. Bierbaum, telephone (513) 841-4321, FTS 684-4321.

DIVISION OF RESPIRATORY DISEASE STUDIES

The Division of Respiratory Disease Studies (DRDS) is the Institute focal point for clinical and epidemiological research on occupational respiratory diseases. The division provides legislatively mandated medical and autopsy services and conducts medical research to fulfill the Institute's responsibilities under the Federal Mine Safety and Health Act of 1977.

The division conducts field studies of occupational respiratory diseases, and designs and interprets cross-sectional and prospective morbidity and mortality studies of occupational respiratory disease. Field studies are conducted at mines, mills, and other industrial plants where occupational respiratory diseases occur among workers at those installations. The division uses epidemiological techniques, including studies of morbidity and mortality, to detect common characteristics related to occupational respiratory diseases.

To formulate and implement programs which will identify factors involved in the early detection and differential rates of susceptibility to occupational respiratory diseases, DRDS conducts cell biology research to determine the role of microorganisms and environmental exposure in occupational respiratory diseases. The division also provides autopsy evaluations and a pathology research program. Research is conducted on immunological mechanisms and cell physiology to elucidate the effects of environmental exposure associated with occupational respiratory diseases.

DRDS provides for planning, coordinating, and processing medical examinations mandated under the Federal Mine Safety and Health Amendments Act of 1977, and operates a certification program for medical facilities and physicians who participate in the examination program. DRDS also evaluates and approves employer programs for the examination of employees in accordance with published regulations, and arranges for the examination of employees who work at locations not having an approved examination program. The division also conducts the National Coal Workers' Autopsy Program and performs research into the post-mortem identification and quantification of occupational respiratory exposures.

DRDS is located at 944 Chestnut Ridge Road, Morgantown, West Virgina 26505. The Division Director is Mr. Robert E. Glenn, telephone (304) 291-4474, FTS 923-4474.

DIVISION OF SURVEILLANCE, HAZARD EVALUATIONS, AND FIELD STUDIES

The Division of Surveillance, Hazard Evaluations, and Field Studies (DSHEFS) conducts surveillance 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 illnesses, exposures, and hazardous agents. DSHEFS conducts legislatively mandated health hazard evaluations and industrywide epidemiological research programs through longitudinal record studies and clinical/environmental field studies and surveys. DSHEFS also 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, and other technical groups, unions, employers, and employees.

Surveillance efforts are designed for the early detection and continuous assessment of the magnitude and extent of occupational illnesses and exposures to hazardous agents, using new and existing data sources from federal, State, and local agencies, labor, industry, tumor registries, physicians, and medical centers. DSHEFS also conducts evaluation and validation studies of occupational illness reporting systems with efforts devoted to developing methods for measuring the magnitude of the national occupational health problem.

Health hazard evaluations and industrywide studies programs (1) provide a technical service to the occupational safety and health community, (2) identify the occupational causes of disease in the working population and their offspring, and determine the incidence and prevalence of acute and chronic effects of work-related exposures to toxic and hazardous substances, and (3) provide information used in standards development for the control of occupational health hazards.

DSHEFS is located at the Alice Hamilton Laboratory, 5555 Ridge Avenue, Cincinnati, Ohio 45226. The Division Director is James M. Melius, M.D. telephone (513) 841-4428, FTS 684-4428.

DIVISION OF SAFETY RESEARCH

The Division of Safety Research (DSR) serves as the focal point for the Institute's occupational safety research program, and designs and conducts safety research efforts aimed at preventing or mitigating traumatic injury and death to workers in all industries except mining. The division evaluates, certifies, and maintains records of respirators and hazard measuring instruments, and develops new performance criteria, standards, and guidelines for certification of personal protective equipment and hazard measuring instruments. The division is responsible for the day-to-day operation of the respirator and coal mine dust personal sampling unit testing and certification regulations pursuant to 30 CFR 11 and 30 CFR 74, respectively.

DSR plans and conducts laboratory and worksite studies to establish effective methods for making work safe through the use of personal protective equipment and engineering controls for equipment, machines, tools, safety devices, and other factors in the workplace. The division conducts worksite research to identify, develop, and document effective work practices and managerial approaches for minimizing the risk of workers being injured as the result of exposure to workplace hazards. DSR also provides technical assistance in solving safety problems which require engineering or system safety expertise for solution, and develops technical criteria to support recommendations for safety standards.

DSR maintains a national surveillance data system for the early detection and monitoring of the occurrence and extent of accidents and injuries in occupational settings, and conducts field epidemiologic studies of occupational injuries and their etiologies. To identify and document effective methods for reducing musculoskeletal injuries, DSR conducts studies to characterize the effects of workplace environment factors on safety, and provides technical assistance on problems requiring expertise in ergonomics, industrial engineering, and related disciplines. Using systems safety techniques, the division analyzes operations to identify hazards and develop injury prevention strategies.

The division also conducts general occupational injury surveillance, including the collection, analysis, and interpretation of injury statistics, and maintains various surveillance data bases. DSR works with State agencies to upgrade injury surveillance and maintains a national injury surveillance system for risk assessment, research needs prioritization, and identification of problems for the occupational safety and health community.

To ensure that air purifying respirators and air supplied respirators continue to meet regulatory requirements, DSR conducts audits and reviews performance requirements, standards, and guidelines for certification. The division also develops new performance requirements and standards for respirators and evaluates the quality control plans for them.

DSR is located at 944 Chestnut Ridge Road, Morgantown, West Virgina 26505. The Division Director is Mr. John B. Moran, telephone (304) 291-4595, FTS 923-4595.

DIVISION OF STANDARDS DEVELOPMENT AND TECHNOLOGY TRANSFER

The Division of Standards Development and Technology Transfer (DSDTT) 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. In cooperation with the U.S. Department of Labor, DSDTT coordinates NIOSH testimony at the Department of Labor hearings on proposed standards to support scientific and technical considerations, and prepares and annually revises the legislatively mandated toxic substances list. DSDTT manages a clearinghouse for receiving, storing, retrieving, and disseminating technical information on occupational safety and health, and provides a statistical methodology review for NIOSH research activities.

DSDTT compiles and analyzes the results of research and investigations pertaining to selected occupational safety and health hazards for the purpose of preparing recommended standards. These standards include environmental limits, requirements for medical examinations for workers, labeling, personal protective equipment and clothing, employee notification of hazards, safe work practices, sanitation, monitoring, and recordkeeping. The division prepares special occupational hazard reviews and risk assessments of potential workplace hazards where new evidence of a particular hazard is received, and prepares recommended emergency temporary standards as appropriate.

DSDTT identifies information on worker exposure, chemical hazard severity, and other data through profile development, and maintains a system for determining the status of projects in other federal agencies and the private sector for quick response in identification of potential workplace hazards. The division establishes liaison with government and non-government sources to obtain technical data, and develops and maintains the NIOSH computer-based technical information system and other computer-oriented information resources.

The division identifies, in priority order, those substances, industries, and occupations which pose an unacceptable safety and health hazard, and prepares priority lists of substances, processes, industries, etc., for which document development and Institute research should be developed or revised. DSDTT also analyzes information on the exposure of workers to safety and health hazards, and assesses the adequacy of studies, research, and data collection activities to provide the basic information needed for decisions on document development, priorities establishment, and other actions coming from essential information.

DSDTT is located at the Robert A. Taft Laboratories, 4676 Columbia Parkway, Cincinnati, Ohio 45226. The Division Director is Mr. Richard A. Lemen, telephone (513) 533-8302, FTS 684-8302.

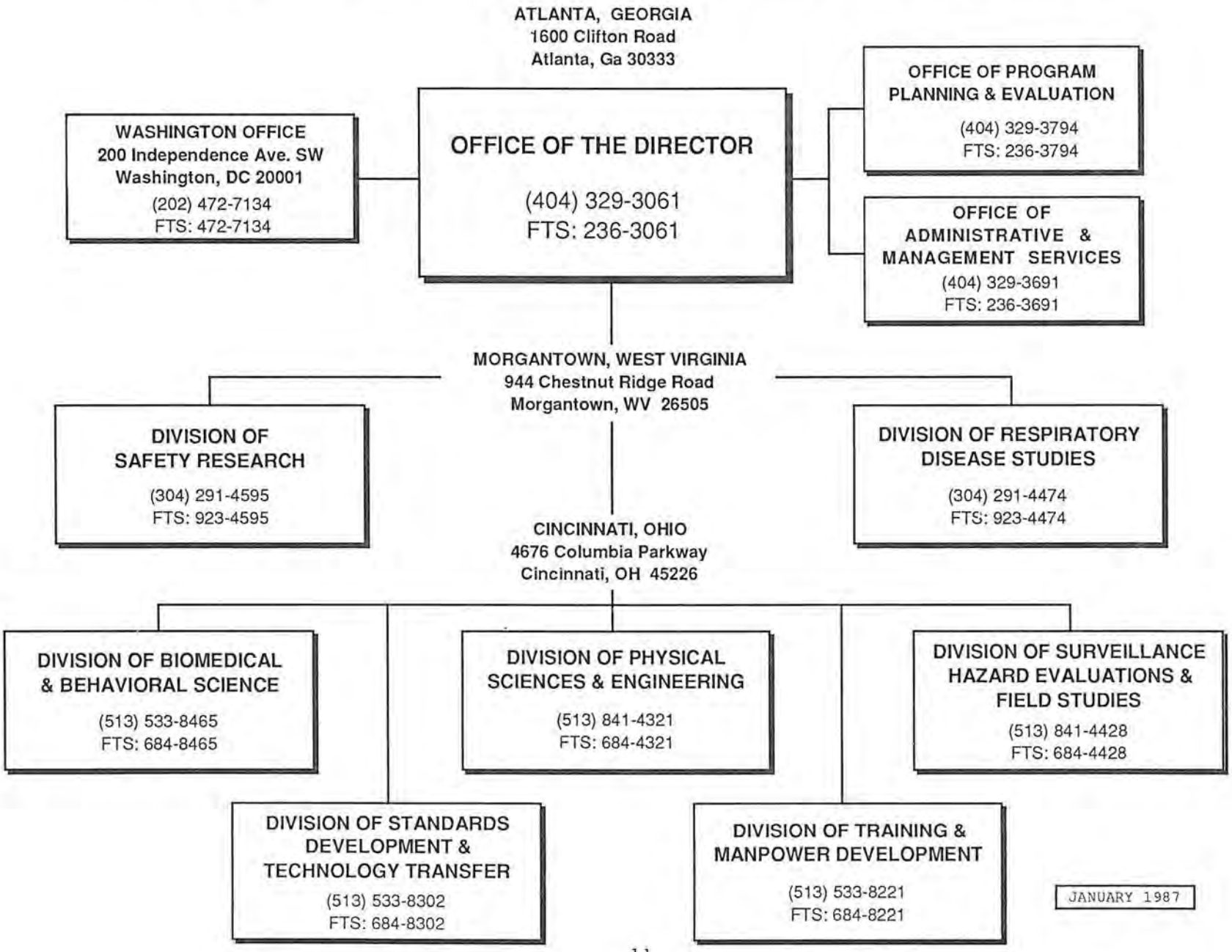
DIVISION OF TRAINING AND MANPOWER DEVELOPMENT

The Division of Training and Manpower Development (DTMD) implements Section 21 of the Occupational Safety and Health (OSH) Act, which mandates the training and education functions. DTMD develops programs to increase the numbers and competence of the OSH professional and paraprofessional work force. This continuing education program provides short-term technical training courses, including seminars, independent study packages, and specialized workshops, to federal, State and local government, private industry, labor unions, and other organizations in the 0SH field. The curriculum development program designs and produces course packages and other training materials for Institute-sponsored training programs, including those presented by in-house faculty as well as those conducted by universities and other outside training organizations.

The educational resource development program continually assesses manpower needs for OSH practitioners and researchers on a nationwide basis. To help meet the demand, DTMD administers a major training grant program to foster the development of academically-based training programs for occupational physicians, occupational health nurses, industrial hygienists, toxicologists, epidemiologists, and safety professionals including engineers and managers. DTMD also develops specific criteria and sets standards for the selection of qualified organizations to conduct and evaluate the effectiveness of Institute-initiated programs.

DTMD is located at the Robert A. Taft Laboratories, 4676 Columbia Parkway, Cincinnati, Ohio 45226. The Division Director is Thomas C. Purcell, Ph.D., telephone (513) 533-8221, FTS 684-8221.

THE NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH



JANUARY 1987

SUMMARIES

OF

NIOSH STRATEGIES

Disorders of Reproduction
Neurotoxic Disorders
Noise-Induced Loss of Hearing
Dermatologic Conditions
Psychological Disorders

DISORDERS OF REPRODUCTION

Since antiquity, certain chemical and physical agents have been recognized as having detrimental effects on human reproduction. For example, the effect of industrial lead poisoning in inducing abortions was noted by the Romans and again in the first decade of this century (6). Evidence from more recent laboratory studies and clinical investigations indicates that a wide range of microbiologic, physical, and chemical agents, such as Brucella, rubella, ionizing and nonionizing radiation, heat and vibration, tobacco, alcohol, and certain drugs, can adversely affect reproductive outcomes. At least 50 chemicals--including heavy metals, such as lead and cadmium, glycol ethers, organohalide pesticides, organic solvents, and chemical intermediates, such as styrene and vinyl chloride--in widespread use in industry have been shown to produce impairment of reproductive functions in animals (7).

Until recently, the potential hazards to human reproduction posed by occupational exposures received little attention. However, adverse effects after thalidomide exposure in the 1960s and the occurrence in 1970 of methylmercury poisoning among residents of Minamata, Japan, dramatically demonstrated the teratogenic potential of chemical exposures. Those events and the increasing entry of women into the workforce focused greater attention on the potential hazards to female reproductive function of occupational exposures. In the late 1970s, the demonstration of sterility among male workers exposed to dibromochloropropane was described; this drew attention to the concomitant potential for hazards to male reproductive function (8).

Occupational exposures can produce a wide range of adverse effects on reproduction. The effects of parental exposure before conception to agents toxic to reproductive functions may be evident as reduced fertility, unsuccessful fertilization or implantation, or an abnormal fetus. Maternal exposure after conception may result in death of the fetus or structural and functional abnormalities in the newborn. Other possible adverse outcomes include spontaneous abortions (both early and late), major and minor birth defects, perinatal death, low birth weight, altered sex ratio, developmental or behavioral disabilities, and transplacental exposure to carcinogen (9-11).

Estimates of the prevalence of adverse reproductive outcomes indicate that these events occur with considerable frequency in the U.S. population. For example, an estimated 560,000 infant deaths, spontaneous abortions, and stillbirths occur each year. The March of Dimes estimates that 200,000 live infants with some type of birth defect--benign or disabling--are born in the United States each year (9).

The causes of most of these adverse outcomes are unknown. For example, 6%-30% of the infertile couples have no recognized anatomic or physiologic abnormalities to account for the infertility (10); neither the etiology of sperm abnormalities nor the cause of sister-chromatid exchange in spontaneous abortions has been established (11,12). The causes for as many as 65%-70% of the birth defects are not known (13).

Maternal Exposures. Studies of occupational reproductive hazards to date have consisted mainly of epidemiologic surveys of pregnancy outcomes following maternal exposures. Such studies have shown increased rates of spontaneous abortions among laboratory and chemical workers (14,15) and among workers exposed to lead (16), ethylene oxide (17), and anesthetic gases (18,19). Studies of adverse outcomes of pregnancy, however, are subject to several methodologic limitations. For example, the detection of rare outcomes, such as birth defects, requires the study of several thousand pregnancies, and retrospective studies are subject to problems of recall and misclassification, both of reproductive events and of exposures (20,21). The timing, duration, and frequency of exposure before and during pregnancy may critically affect reproductive outcomes (22). For example, exposure to ionizing radiation during the first trimester may result in microcephaly and mental retardation, and exposure during the third trimester may produce low birth weight and neonatal death (11). Other studies have been limited by the selection of inadequate comparison groups or the failure to examine the influence of other factors, such as alcohol and tobacco consumption or maternal age, that affect reproductive outcomes.

Paternal Exposures. Since azoospermia (absence of living spermatozoa in the semen) and oligospermia (subnormal concentration of spermatoza) were reported in 1977 among workers exposed to dibromochloropropane (8), at least 14 studies have examined the quality of semen in workers exposed to lead, carbon disulfide, anesthetic gases, ionizing radiation, toluenediamine, dinitrotoluene, carbaryl, and several other pesticides (10). Adverse effects on the quality of semen were reported in workers exposed to lead or ionizing radiation. In other studies (e.g., of exposures to ethylene dibromide) results were inconclusive because of problems in design of the study or inadequate numbers of participants (10). CDC recently used data collected by the Metropolitan Atlanta Congenital Defects Program to examine the risk of serious structural birth defects among the children of male Vietnam veterans; no statistically excessive risks were noted (23). In general, relatively few studies have been conducted of reproductive outcomes associated with paternal exposures (9).

Extent of potential exposures. Estimates have been made of the number of workers potentially exposed to selected agents known or suspected to be toxic to reproductive function. NIOSH estimates that approximately 200,000 workers are potentially exposed to various glycol ethers (24), several of which exhibit marked testicular toxicity in animals (25). An estimated 9 million workers are exposed to radiofrequency/microwave radiation (26), which has been shown to cause embryonic death and impaired fertility in animals but which has yet to be studied adequately in humans. NIOSH has estimated that approximately 50,000 personnel in hospital operating rooms are potentially exposed to waste anesthetic gases, and 139,000 hospital and other industrial workers may be exposed to ethylene oxide (24); both agents have been linked to an increased risk of spontaneous abortions in humans.

The extent to which occupational exposures in American workers produce adverse reproductive outcomes is largely unknown. However, the information presented here suggests that the problem is both widespread and serious. Epidemiologic and toxicologic research into the reproductive effects of occupational exposures is in its infancy. There is a continuing effort to elucidate the etiology of adverse reproductive outcomes, such as fetal chromosomal abnormalities or abnormal spermatogenesis and to develop improved animal models for screening agents for possible mutagenic and toxic effects related to human reproduction. Registries for the surveillance of outcomes of reproduction, such as CDC's Birth Defects Monitoring Program (9), and improved methodologies developed to evaluate such parameters as quality of semen (12) and outcomes of pregnancy (20), will permit further identification of specific occupational hazards to reproduction. When such hazards are identified and controlled in the workplace, the prevention of reproductive disorders in the population as a whole will be substantially improved.

Reported by Industrywide Studies Br, Surveillance Br, Div of Surveillance, Hazard Evaluations, and Field Studies, National Institute for Occupational Safety and Health, CDC.

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Diseases of the nervous system resulting from toxic exposures in the workplace were known as early as the first century A.D., when Pliny identified palsy as a manifestation of lead poisoning among workers exposed to lead dust (7). In 1557, Jean Fernel linked gingival pigmentation, tremor, and behavioral changes to occupational mercury poisoning (8); in the nineteenth century, Delpech recognized rubber processing as the cause of the bizarre psychoses occurring among French workers who manufactured condoms and balloons in small cottage industries. Later, carbon disulfide was implicated as the specific neurotoxic agent (9).

Industrial hygiene practices have improved in the twentieth century, and some animal models of neurotoxic disease have been developed. In addition, workers who become ill often draw attention to outbreaks of neurotoxic diseases. Despite the prior identification of acrylamide as neurotoxic in animals, its neurotoxicity in humans was first recognized in the 1950s, when several Japanese workers involved in a pilot production project developed peripheral neuropathy (10). During the 1960s and early 1970s, dozens of cases of neuropathy occurred among Japanese and Italian workers exposed to solutions containing n-hexane during the manufacture of shoes (11). Subsequently, high doses of n-hexane were found to be neurotoxic in exposed animals. In the past 15 years alone, outbreaks of serious human neurotoxicity occurred among workers exposed to three substances not previously known to be neurotoxic: the chlorinated hydrocarbon, chlordecone, which caused opsoclonus, tremor, disturbances of gait, and changes in personality (12); and two hexacarbons, methyl-n-butyl ketone and 2-t-butylazo-2-hydroxy-5-methylhexane, both of which caused a predominantly peripheral neuropathy (13,14).

Nature of Neurotoxic Disorders. Neurotoxic disorders are on the NIOSH list of Ten Leading Work-Related Diseases and Injuries (1) because of their potential severity--as exemplified by the neurotoxicity of chlordecone--and because of the large number of workers potentially at risk. A conservative estimate of the workers exposed full time to one or more neurotoxic agents is 7.7 million (15). The number of potentially neurotoxic chemicals found in the workplace exceeds 850.

Clinically, symptoms and signs of neurotoxicity can be diverse. Depending on the intensity of exposure, the molecular configuration of the agent, and the mechanism of toxicity, either central or peripheral neurologic effects may predominate. Most neurotoxic chemicals, however, affect both the central and peripheral nervous systems. Because the symptoms of peripheral neuropathy are more specific and the nerves themselves more directly accessible to precise diagnostic examinations, the effects of neurotoxic agents on the peripheral nervous system are usually more easily identified than effects on the central nervous system (CNS). Early symptoms of peripheral neuropathy may include numbness, tingling, or pain in the feet or hands. As the disease progresses, clumsiness or incoordination due to both sensory and motor changes may develop. Production workers may find their ability to do usual work partially or fully impaired. Chemicals used extensively in industry, which cause peripheral neuropathy when present in sufficiently high and persistent concentrations, include: lead, n-hexane, acrylamide, carbon disulfide, mercury, and methyl bromide (17,18). Several chemicals are known to cause selective impairment of cranial-nerve function, including dysfunction of the fifth cranial nerve (trichloroethylene) (18).

The effects of neurotoxic agents on the CNS present a far wider range of disturbances (16,18,19). At times, the most striking effects are changes in mood and personality (20). High levels of exposure to manganese or carbon disulfide produce psychoses and suicidal tendencies. Delusions and hallucinations may result from exposure to high concentrations of solvents, such as methylene chloride. Manifestations of cognitive dysfunction, such as reduced attention span, lack of alertness, and memory loss, are prominent neurotoxic effects that may occur in addition to personality changes after exposure to many solvents and to asphyxiants, such as carbon monoxide. Other neurologic effects occur under certain restricted conditions of exposure to unique chemical substances.

Although research into the neurobehavioral effects of industrial chemicals is relatively new, early results suggest that occupational neurotoxicity may be a larger problem than previously suspected. Sensitive methods for evaluating subtle losses in cognitive function have only recently been applied to the evaluation of exposed workers. Because of the complexity of the nervous system and the variety of potentially neurotoxic exposures, the true scope of this health hazard in the workplace is unknown.

Studies of the neurotoxicity of workplace chemicals demonstrate the problems encountered in recognizing occupational disease in general. Despite occasional large and dramatic outbreaks of neurotoxic disorders, such as those mentioned above, more often small numbers of workers in many workplaces are chronically exposed to neurotoxic agents that subtly and slowly alter nervous-system functions. Several neurotoxic syndromes mimic diseases of nonoccupational and "idiopathic" etiology, e.g., the toxic axonopathy associated with exposure to various metals and solvents, the parkinsonian syndrome of chronic intoxication with manganese, and the organic brain syndrome of chronic solvent intoxication. Because of these similarities to other nonoccupational diseases, such cases are frequently not identified as occupational in origin. In addition, many physicians are not trained to take an adequate occupational medical history (21). For these reasons, the prevalence of occupational neurologic disease is unknown, and important causal relationships between chemicals and disease remain obscure.

The prevention of neurotoxicity among workers will require strategies such as those suggested in the 1990 objectives for improving the nation's health (22), developed by the U.S. Public Health Service: (1) analyses of structural analogues of known neurotoxic agents in an effort to predict the neurotoxicity of untested chemicals; (2) continuing search for animal models of disease; (3) ongoing research in establishing an acceptable human exposure level for identified neurotoxic agents; (4) epidemiologic evaluations of suspected neurotoxicity;(5) development of simple screening tools for use on asymptomatic populations exposed to known neurotoxic agents; and (6) premanufacture and premarket testing of new chemicals as required by the Toxic Substances Control Act (23). As in the prevention of other work-related diseases, however, the most direct and effective method for preventing neurotoxic illness will continue to be the environmental control of exposures to neurotoxic chemicals. Such efforts as the substitution of less toxic substances where possible, engineering controls, teaching appropriate work practices, and educating workers about the potential neurotoxicity of chemicals will aid a comprehensive prevention effort.

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NOISE-INDUCED LOSS OF HEARING

Occupational deafness was first documented among metalworkers in the sixteenth century (8). Since then, workers have experienced excessive hearing loss in many occupations associated with noise. Noise-induced loss of hearing is an irreversible, sensorineural condition that progresses with exposure. Although hearing ability declines with age (presbycusis) in all populations, exposure to noise produces hearing loss higher than that resulting from the natural aging process; this is caused by damage to nerve cells of the inner ear (cochlea) and, unlike some conductive hearing disorders, cannot be treated medically.

While loss of hearing may result from a single exposure to a very brief impulse noise or explosion, such traumatic losses are rare. In most cases, noise-induced hearing loss is insidious. Typically, it begins to develop at 4,000 hertz (Hz, or cycles per second) in the hearing range of 20 Hz to 20,000 Hz and spreads to lower and higher frequencies. Often, material impairment has occurred before the condition is clearly recognized.

Such impairment is usually severe enough to permanently affect a person's ability to hear and understand speech under everyday conditions. Although the primary frequencies of human speech range from 200 Hz to 2,000 Hz, research has shown that the consonant sounds, which enable people to distinguish words such as "fish" from "fist," have still higher frequency components. As a result, an average hearing threshold (lowest audible sound level) at separate frequencies of 1,000 Hz, 2,000 Hz, and 3,000 Hz is used widely to define material impairment caused by noise (10,11).

Recent estimates by the Occupational Safety and Health Administration (OSHA) indicate that about 9,400,000 U.S. production workers (7,900,000 active and 1,500,000 retired) either now work or have worked in industrial locations where noise-exposure levels are 80 decibels (dBA) or higher. This estimate includes most noisy workplaces in the United States, except agricultural, mining, construction, transportation, and government (11). At exposure levels below 80 decibels (weighted to the approximate response of the human ear), an increased risk of hearing loss caused by occupational noise has not been found. Based on the average hearing threshold level at 1,000 Hz, 2,000 Hz, and 3,000 Hz, OSHA estimated that 1,624,000 (17%) production workers have at least mild hearing loss resulting from their occupational noise exposures; 1,060,000 (11%) have material hearing impairment; and 473,000 (5%) have moderate to severe impairment (11). These estimates generally agree with NIOSH survey findings, which indicate that one-fourth of persons 55 years of age or older who have been exposed over their working lifetime to an average of about 90 dBA have developed a material hearing impairment caused by occupational noise exposure (10,12). An estimated $835 million will be paid in workers' compensation claims for occupational hearing impairment for the 10-year period 1978-1987 (13).

Occupational noise-induced loss of hearing is preventable. In its 1990 objectives for the nation, the U.S. Public Health Service set an objective that "By 1990, the prevalence of occupational noise-induced hearing loss should be reduced to 415,000 cases" (14). This objective relates to the number of cases of hearing loss that result in moderate to severe impairment (Table 2). However, it is important to note that if the number of moderate to severe impairments is reduced, the number of mild hearing loss and of material impairments would be reduced proportionately. OSHA has estimated that within 10 years, the number of cases of noise-induced hearing impairment can be reduced by 20% if all workers exposed to noise levels higher than 85 dBA wear personal hearing protectors (earplugs or muffs) and receive on the average 15 dBA noise reduction (11). However, this estimate hinges on effective use of hearing protectors to an extent that has not yet been demonstrated for all workers. NIOSH field investigations of industrial workers who routinely use earplugs indicate average noise reduction ranging from 7 dBA to 20 dBA, depending on the type of plug used (15).

A noise-control/hearing-conservation program is the most important step in eliminating occupational hearing loss. Such a program must include:

1. Reduction of noise through engineering controls, and the purchase of new, noise-engineered equipment.
2. Proper fit of personal hearing-protection devices.
3. Education of workers and managers about certain characteristics of noise-induced loss of hearing (e.g., irreversible, subtle in onset, psychologically distressing).
4. Proper periodic audiometric testing and notification of workers who are developing hearing loss.
5. Visible commitment of management and workers to the program.

The joint efforts of management, labor, and health-care providers are needed to establish effective hearing-conservation programs in industry. All interested groups must work together to achieve the goal of protecting workers' hearing.

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DERMATOLOGIC CONDITIONS

A worker's skin is directly exposed to the occupational environment and is susceptible to a large number of dermatologic injuries and other conditions. Complete data on the extent and cost of dermatologic injuries are not available; however, dermatologic conditions other than injuries accounted for 37% of the 106,100 occupational illnesses recorded in 1983 in the Bureau of Labor Statistics (BLS) Annual Survey of Occupational Injuries and Illnesses (1). Results from the BLS Annual Survey for 1972-1976) indicated that 20%-25% of all occupational dermatologic conditions resulted in lost time from work (average 10-12 lost work days) (2). Similar data based on workers' compensation claims have been reported from California and South Carolina (3,4). Assuming that only 2%-10% of cases are actually reported, the annual cost of occupational dermatologic conditions resulting from lost worker productivity, medical care, and disability payments may range between $222 million and $1 billion (5,6).

Because 10%-15% of requests that NIOSH receives for health hazard evaluations involve skin complaints, and because the economic impact of work-related dermatologic conditions is substantial, NIOSH has included dermatologic conditions on its list of 10 leading work-related diseases and injuries in the United States (7).

Dermatologic Injuries. Dermatologic injuries are usually described as the immediate adverse effects on skin that result from instantaneous trauma or brief exposure to toxic agents involving a single incident in the work environment (1). Skin injuries may constitute 23%-35% of all injuries (8,9). Thus, based on 4,748,000 injuries of all types, and a full-time worker population of 74,750,000 for 1983 (1), an estimated 1,070,000-1,650,000 dermatologic injuries may occur yearly, with an estimated annual rate of skin injury of 1.4-2.2 per 100 full-time workers. The highest percentage of skin injuries are due to lacerations/punctures (82%), followed by burns (chemical and other) (14%) (8).

Other Dermatologic Conditions. Other dermatologic conditions, "illnesses of the skin," may also result from exposure to environmental factors or toxic agents associated with employment. However, they usually result from more sustained or cumulative exposures and involve longer intervals between exposure and occurrence of disease. These conditions include contact dermatitis, infection, acne, and skin cancer. Workers' compensation claims data from California suggest that 95% of these occupational skin conditions are either contact dermatitis (90%) or infections (5%) (3). Field investigations in the 1950s showed that at least 80% of occupational contact dermatitis cases may be caused by the irritating direct cytotoxic effects of causal agents rather than immunologically mediated allergic reactions (10).
The highest number of other occupational skin conditions (23,017) in 1984 occurred in the manufacturing sector; the highest incidence rate (28.5/10,000 full-time workers) involved the combined agriculture/forestry/fishing division.

The clinical course for occupational contact dermatitis is relatively poor. In three studies, complete resolution occurred in 25% of workers affected; 50% improved but had periodic recurrences; and 25% developed persistent dermatitis as severe as or worse than the original condition (11-13). Contact dermatitis often necessitates job changes or modifications. Despite these, however, complete resolution may occur in only a limited proportion of cases.

Prevention of Work-Related Dermatologic Disorders. The most effective prevention measures are engineering controls that eliminate exposures of the skin to chemical, physical, or mechanical agents through isolation, containment, or redesign of industrial processes. Substitution of less toxic substances through chemical engineering may also be effective (14). Protective clothing should be selected on the basis of resistance to both chemical and physical hazards, as well as on the relative permeabilities to specific chemical exposures. Effective cleaning of skin and clothing is important, but workers should not wash vigorously or excessively with harsh soaps and detergents (15). Barrier creams have been suggested as alternatives, although their effectiveness has not yet been established (16). Prevention strategies should always include education of workers and management.

Expanded activities concerning occupational dermatologic conditions include improved methods for surveillance of occupational skin disease and vigorous research in dermatotoxicology to identify preventable risk factors and facilitate effective interventions at early stages.

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PSYCHOLOGICAL DISORDERS

There is increasing evidence that an unsatisfactory work environment may contribute to psychological disorders. Studies have shown that factors contributing to an unsatisfactory work environment may include work overload, lack of control over one's work, nonsupportive supervisors or co-workers, limited job opportunities, role ambiguity or conflict, rotating shiftwork, and machine-paced work (1-4). Psychological disorders that can result from such factors may be classified as a) affective disturbances (e.g., anxiety, irritability), b) behavioral problems (e.g., substance abuse, sleep difficulties), c) psychiatric disorders (e.g., neuroses), and d) somatic complaints (e.g., headache, gastrointestinal symptoms). In addition to psychological disorders, stressful working conditions may have a systemic influence, possibly affecting the etiology and/or prognosis of other disease states, as suggested by recent studies of stress-related immunologic suppression (5).

Although data bases currently available for determining the extent of work-related psychological disorders are limited, several indicators suggest that these problems impose substantial health and financial costs in the United States. A recent study in California showed that claims for the development of "work-related neuroses" more than doubled during 1980-1982; claims for all other disabling work-related injuries during the same period actually decreased by about one-tenth (6). A study of representative medical claims throughout the country showed that during 1980-1982 claims for "mental stress" that developed gradually (i.e., a chronic problem unrelated to a single traumatic incident or to any physical work-related disorder) accounted for about 11% of all occupational disease claims (7). Average medical costs and indemnity payments in 1981-1982 for these forms of mental stress actually surpassed the average amounts for other occupational diseases (7). The American Psychiatric Association now lists occupational stress in its Diagnostic and Statistical Manual as a subcategory of the major diagnostic axis of "psychosocial stress" (8).

There are increasing data on the relationship between specific working conditions and psychological disorders. For example, in a questionnaire survey of over 2,000 workers in 23 different occupations, strong occupational differences were found in psychosocial job stressors and in somatic and affective complaints (1). Ratings of boring, repetitive job tasks and role ambiguity were more prominent among several classes of blue-collar workers (e.g., assembly-line workers, fork-lift truck drivers, and machine operators) than among white-collar professionals (e.g., professors and family physicians). The most satisfied occupational groups were physicians, professors, and white-collar supervisors. Groups experiencing the highest levels of job stressors and their resultant ill effects were assemblers and relief workers on machine-paced assembly lines.

NIOSH investigators ranked 130 occupations by rate of admission to community mental health centers in Tennessee to determine the relative risk of psychological or stress-related disorders by occupation (9). Heading the list were jobs in health care, service occupations, and blue-collar factory work--which tend to be characterized by stress-producing conditions such as a lack of control over the job by the worker, repetitive work, shift work, and a responsibility for others. In other studies, workers on night and rotating shifts (including the health-care occupations) reported more disturbances of sleep; altered eating habits; and higher rates of visits to clinics, absences due to sickness, and on-the-job injuries than did those on fixed day shifts (10-12).

Work environments characterized by technological innovation have also been investigated; a major focus has been on office work influenced by the introduction of computers (13,14). "Adverse working conditions" (e.g., poorer physical environment, reduced job control and social support) tend to be reported more frequently by workers using new-technology office equipment such as video display terminals. Some of these conditions have been linked to chronic stress-related disorders (4,15).

Worksite studies by NIOSH have revealed that job stresses may contribute to acute disturbances among groups of workers, including those termed "mass psychogenic illness" (16). The sudden appearance of symptoms, usually in response to some "trigger factor" such as a strange odor, may result in spread of the apparent "illness" throughout the plant, with symptoms such as headaches, dizziness, and nausea. Investigations often fail to detect specific physical or chemical causative agents. However, factors such as heavy work load, strained labor/management relations, and physical discomfort at work may be present and related to the reporting of symptoms.

Emerging trends in technology, the economy, and demographic characteristics of the work force may lead to increased risk for psychological disorders. For example, a 26% increase is projected for employment in the health services, an area that may be associated with elevated risk (9, 17). Computers and robots are expected to affect seven million factory jobs and 39 million office jobs (18). According to some forecasters (18), possible consequences may include job displacement, reduced skill requirements, and lower-paying jobs. It has been projected that in the next decade, nine of every ten new jobs will be in the service sector (19). Routine service jobs may not provide the compensation and benefits associated with the more traditional industrial and manufacturing jobs (18). Six of ten new jobs in the next decade will be filled by women (19), and dual job/home role demands and constrained occupational opportunities for women may result in an adverse impact on their mental health.

A prevention strategy for psychological disorders should take into account both the causal mechanisms and the factors that perpetuate these disorders. Work-related psychological disturbances are known to be influenced by both the physical and psychosocial characteristics of given job situations. Moreover, these factors operate in concert with factors unrelated to the job--such as life events; familial demands and support; and the traits, capacities, and needs of the workers themselves (e.g., personality, age, sex, experience/learning). The interaction of these variables is complex, and the relative influence of each is not thoroughly understood. Nevertheless, approaches to prevent work-related psychological disorders should still be taken using the information currently available.

Stress-reduction techniques (e.g., meditation, biofeedback, muscle relaxation, cognitive restructuring, and anxiety management) have been taught to both blue- and white-collar workers in worksite training sessions. Follow-up studies have shown decreases in psychophysiologic activity (e.g., muscle tension and blood pressure levels) and reductions in subjective reports of anxiety, sleep disturbances, and other health complaints with each technique (20). However, improvement in all these parameters persisted less than 3 months after training ended.

Stress management treats only the symptoms of the problem--not the cause. Therefore, efforts to control risk factors at the worksite are also important. Some previously described suggestions for controlling worksite risk factors for psychological disorders are listed below (21). These suggestions appear to have merit for reducing work-related psychological disorders, but further evaluation and study are needed for a complete understanding of their impact.

Work schedule. Design work schedules to avoid conflict with demands and responsibilities unrelated to the job. Schedules for rotating shifts should be stable and predictable, with rotation in a forward (day-to-night) direction.

Participation/control. Allow workers to provide input for decisions or actions affecting their jobs.

Workload. Ensure assignments are compatible with the capabilities and resources of the worker, and allow for recovery from especially demanding physical or mental tasks.

Content. Design tasks to provide meaning, stimulation, a sense of completeness, and an opportunity to use skills.

Roles. Define work roles and responsibilities clearly.

Social environment. Provide opportunities for social interaction, including emotional support and help directly related to one's job.

Future. Avoid ambiguity in matters of job security and career development.

In addition to evaluation of these suggested actions, efforts are needed to advance the understanding of work-related psychological disorders and of methods appropriate for their control, including:

1. Improving the systems for surveillance of psychological disorders in the work force as related to working conditions.
2. Improving research techniques for investigating stressful working conditions and their health consequences.
3. Improving training of occupational health professionals and workers in recognizing stressful workplace conditions and signs of worker stress and in effecting remedial measures.
4. Furthering the development of mental health components in occupational health and safety programs.

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NIOSH PROGRAM AREAS

OCCUPATIONAL LUNG DISEASES
MUSCULOSKELETAL INJURIES
OCCUPATIONAL CANCERS
SEVERE OCCUPATIONAL TRAUMATIC INJURIES
CARDIOVASCULAR DISEASES
DISORDERS OF REPRODUCTION
NEUROTOXIC DISORDERS
NOISE-INDUCED HEARING LOSS
DERMATOLOGICAL CONDITIONS
PSYCHOLOGICAL DISORDERS
ASSISTANCE REQUESTS
ADMINISTRATION
OTHER

NIOSH has thirteen program areas which represent the primary focus for the Institute. All NIOSH projects relate to one or more of these program areas which consist of the Top Ten Leading Work-Related Diseases and Injuries, Assistance Requests, Administration, and Other.

Although the preponderence of the Institute's effort is directed toward the "Top Ten," NIOSH Administrative projects provide management, guidance, and direction for this effort. The program area titled "Assistance Requests," identifies those projects which respond to a variety of requests for evaluations, consultations, interactive support functions, and technical assistance. In those instances where NIOSH projects are directed to areas other than Administration or the "Top Ten," they are included in the program area titled "Other." Also included in this category are some support projects which address more than one of the other program areas.

NIOSH

Projects

By

Program Areas

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: NTP CHEMICAL MANAGEMENT OF VANADIUM PENTOXIDE

BEGIN DATE: 10/86 END DATE: 09/90 DIV: DBBS

CAN: 283 PROJECT OFFICER: MOORMAN, WILLIAM J

PURPOSE: VANADIUM PENTOXIDE WAS NOMINATED TO THE NTP AS A VANADIUM COMPOUND WITH SIGNIFICANT POTENTIAL FOR HUMAN EXPOSURE BY NCI, OSHA, EPA, NIOSH, AND MSHA. THIS PROJECT WILL PROVIDE NTP TOXICOLOGICAL DIRECTION FOR ACUTE AND CHRONIC INFORMATION (ORGAN FUNCTION TOXICITY AND CANCER).

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
INITIATE PRE-CHRONIC INHALATION TOXICITY TESTING (NTP MAO CONTRACT), INCLUDING SITE VISIT AND REVIEW OF PRELIMINARY STUDIES INVOLVING INHALATION TECHNOLOGY AND ORGAN SYSTEM TOXICITY.

TITLE: PULMONARY HYPERSENSITIVITY TO INDUSTRIAL AGENTS

BEGIN DATE: 10/78 END DATE: 12/87 DIV: DBBS

CAN: 329 PROJECT OFFICER: KNECHT, EDWIN A

PURPOSE: THIS PROJECT WILL DETERMINE IF VANADIUM PENTOXIDE EXPOSURE CAUSES DELAYED ONSET ASTHMA, AND WILL ASSESS THE CONTRIBUTIONS OF IMMUNOLOGIC AND NON-IMMUNOLOGIC MECHANISMS OF INDUCTION OF ASTHMATIC DISEASE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE THE 6-MONTH V 2 0 5 INHALATION EXPOSURES AND THE POST-EXPOSURE PULMONARY EVALUATIONS.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: DEVELOPMENT OF SHORT-TERM ASSAYS TO PREDICT DUST-INDUCED LUNG DISEASE

BEGIN DATE: 10/86 END DATE: 09/87 DIV: DBBS

CAN: 346 PROJECT OFFICER: MASTIN, JAMES P

PURPOSE: THIS PROJECT WILL DEVELOP A SYSTEM OF SHORT-TERM IN VITRO AND IN VIVO ASSAYS THAT CAN BE USED TO SCREEN POTENTIALLY TOXIC DUSTS TO DETERMINE WHICH DUSTS SHOULD BE FURTHER STUDIED USING CHRONIC TOXICITY TEST.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
ESTABLISH BEST PROCEDURES FOR THE EXPOSURE, LAVAGE, TISSUE CULTURE, AND ANALYTICAL METHODS, AND SUBMIT FINAL REPORT.

TITLE: EVALUATION OF MESOTHELIOMA PRODUCTION BY ASBESTOS SUBSTITUTES

BEGIN DATE: 10/84 END DATE: 09/90 DIV: DBBS

CAN: 376 PROJECT OFFICER: PLATEK, STANLEY F

PURPOSE: THIS PROJECT WILL ASSESS THE SAFETY OF TWO MODIFIED CHRYSOTILE PRODUCTS THROUGH ANIMAL TESTING AS SAFE SUBSTITUTES FOR ASBESTOS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
FY87 ACCOMPLISHMENTS WILL INCLUDE CHARACTERIZATION OF ASBESTOS FIBERS AND COMPLETION OF ANIMAL DOSING/IMPLANTATIONS.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: PARTICULATE AND TISSUE ANALYSIS RESEARCH AND SERVICE

BEGIN DATE: 10/76 END DATE: C DIV: DBBS

CAN: 387 PROJECT OFFICER: PLATEK, STANLEY F

PURPOSE: THIS PROJECT WILL PROVIDE LUNG PARTICULATE BURDEN DATA THROUGH THE ANALYSIS OF HUMAN LUNG TISSUES BY AUTOMATED ANALYTICAL ELECTRON MICROSCOPY.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PARTICLE ANALYSES FOR 43 LUNG SPECIMENS WITH COAL WORKERS' PNEUMOCONIOSIS WILL BE SUMMARIZED AND CORRELATED WITH HISTOPATHOLOGY. ELECTRON MICROSCOPY SUPPORT WILL BE PROVIDED TO NIOSH PROGRAMS.

TITLE: APPLIED CONTROL TECHNOLOGY STUDIES

BEGIN DATE: 10/80 END DATE: C DIV: DPSE

CAN: 403 PROJECT OFFICER: CAPLAN, PAUL E

PURPOSE: THIS PROJECT WILL PROVIDE CONTROL TECHNOLOGY (CT) SOLUTIONS TO STUDIES AND PROJECTS CONDUCTED BY OTHER NIOSH DIVISIONS/OFFICES AND DISSEMINATE NEW CT INFORMATION TO USERS BY MEANS OF WRITTEN AND ORAL PRESENTATIONS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PROVIDE CONTROL TECHNOLOGY ASSISTANCE TO OUTSIDE ORGANIZATIONS, TO OTHER DIVISIONS, AND TO ENGINEERING EDUCATION; DISSEMINATE CONTROL TECHNOLOGY FINDINGS VIA ORAL PRESENTATIONS AND PUBLICATIONS.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: DUST CONTROL FOR FALLING SOLIDS

BEGIN DATE: 01/86 END DATE: 12/88 DIV: DPSE

CAN: 406 PROJECT OFFICER: HEITBRINK, WILLIAM A

PURPOSE: FREE-FALLING POWDERS GENERATE DUST. THE PHYSICAL PARAMETERS OF THE FREE-FALL (DROP HEIGHT, MASS FLOW RATE, BULK DENSITY OF THE POWDER) ARE AFFECTED BY EQUIPMENT DESIGN. THE PROJECT WILL INVESTIGATE HOW THESE PARAMETERS AFFECT DUST GENERATION. GUIDELINES WILL BE DEVELOPED FOR EQUIPMENT DESIGNERS TO MINIMIZE THE GENERATION OF DUST.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE FIELD EVALUATION OF DUSTINESS TESTS AND SUBMIT JOURNAL ARTICLE FOR PUBLICATION.

TITLE: ASBESTOS REMOVAL CONTROL TECHNOLOGY ASSESSMENT

BEGIN DATE: 10/84 END DATE: 09/87 DIV: DPSE

CAN: 408 PROJECT OFFICER: HOLLETT, BRUCE A

PURPOSE: TO IDENTIFY CONTROLS AND DISSEMINATE INFORMATION THAT WILL MINIMIZE ASBESTOS EXPOSURE, THEREBY REDUCING THE RISK OF ASBESTOSIS AND CANCER.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE FINAL GLOVE BAG REPORTS. SUBMIT TOTAL PROJECT REPORT TO DIRECTOR, DPSE.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: ASBESTOS ANALYSIS SURVEILLANCE PROGRAM

BEGIN DATE: 10/86 END DATE: C DIV: DPSE

CAN: 412 PROJECT OFFICER: ABELL, MARTIN T

PURPOSE: NIOSH WILL ASSIST AIHA IN ESTABLISHING AN ASBESTOS COUNTER REGISTRY BY SETTING UP A NEW PROFICIENCY TESTING PROGRAM. THE NEED FOR SUCH A PROGRAM HAS BECOME ACUTE (SEE PROJECT DESCRIPTION). INITIALLY, QUALITY AUDIT SAMPLES WILL COME FROM THE PAT PROGRAM, BUT A NEW DATA SYSTEM WILL BE DEVELOPED THAT CAN TRACK INDIVIDUAL COUNTERS RATHER THAN LABS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DEVELOP SYSTEM FOR REPORTING AND ANALYSIS OF ASBESTOS REGISTRY PROFICIENCY TEST DATA. PROCESS AND ARCHIVE DATA FOR 500 COUNTERS BY THE 4TH QUARTER.

TITLE: ANALYTICAL METHODS FOR INORGANIC SUBSTANCES

BEGIN DATE: 01/86 END DATE: C DIV: DPSE

CAN: 413 PROJECT OFFICER: CRABLE, JOHN V

PURPOSE: IN RESPONSE TO NEEDS ARISING FROM NIOSH INDUSTRIAL HYGIENE STUDIES, ANALYTICAL METHODS FOR INORGANIC SUBSTANCES IN AIR OR OTHER MATRICES WILL BE DEVELOPED. NEW ANALYTICAL CHEMISTRY TECHNIQUES WILL BE EVALUATED FOR APPLICATION TO INDUSTRIAL HYGIENE SAMPLING AND ANALYTICAL NEEDS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE FIRST METHOD DEVELOPMENT AND INITIATE SECOND DEVELOPMENT.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: COMPUTER APPLICATIONS OF ENGINEERING CONTROLS

BEGIN DATE: 10/86 END DATE: 09/87 DIV: DPSE

CAN: 414 PROJECT OFFICER: MCGLOTHLIN, JAMES D

PURPOSE: THE PURPOSE OF THIS PROJECT IS THE TRAINING OF ALL ECTB PERSONNEL IN THE USE OF THE PERSONAL COMPUTER.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
BY THE END OF THE FISCAL YEAR, MOST ECTB PERSONNEL SHOULD POSSESS PROFICIENCY IN WORD PROCESSING, SPREADSHEET ANALYSIS, AND DATABASE MANAGEMENT.

TITLE: HEALTH HAZARD EVALUATION (HHE) SUPPORT

BEGIN DATE: 10/86 END DATE: 09/87 DIV: DPSE

CAN: 415 PROJECT OFFICER: GIDEON, JAMES A

PURPOSE: ENGINEERING CONTROL TECHNOLOGY SUPPORT WILL BE PROVIDED TO SPECIFIC HAZARD EVALUATIONS. THE FIRST STUDY WILL RECOMMEND CONTROLS FOR POWDERED EGG PRODUCTION (IDENTIFIED AS PRODUCING AN OCCUPATIONAL ASTHMA ON EXPOSURE TO EGG DUST PROTEINS).

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
CONTROL RECOMMENDATIONS WILL BE MADE FOR THE SITES VISITED IN THE HEALTH HAZARD EVALUATIONS.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: MINING AND RESPIRATORY DISEASE RESEARCH ANALYTICAL SUPPORT

BEGIN DATE: 10/84 END DATE: C DIV: DPSE

CAN: 426 PROJECT OFFICER: GERACI, CHARLES

PURPOSE: THIS PROJECT WILL PROVIDE ANALYTICAL CHEMISTRY SUPPORT TO MINING INVESTIGATIONS, RESPIRATORY DISEASE STUDIES, AND SAFETY RESEARCH. ANALYTICAL CHEMISTRY SUPPORT WILL BE GIVEN TO NOHS MINING STUDIES AND TO STUDIES OF FIBROUS MINERALS COMBINED WITH OTHER MINERAL DUST.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
CHARACTERIZATIONS WILL BE PERFORMED ON FIVE SPECIFIC FIBROUS AND NON-FIBROUS MINERALS TO WHICH A LARGE NUMBER OF MINERS ARE EXPOSED.

TITLE: EVALUATION OF BRAKE DRUM SERVICE CONTROLS

BEGIN DATE: 10/85 END DATE: 09/88 DIV: DPSE

CAN: 428 PROJECT OFFICER: SHEEHY, JOHN

PURPOSE: THIS PROJECT WILL IDENTIFY EFFECTIVE ASBESTOS CONTROL DEVICES, METHODS, AND TECHNIQUES USED IN THE VEHICLE BRAKE DRUM SERVICE INDUSTRY.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE IN-DEPTH SURVEYS OF ASBESTOS CONTROL DEVICES, METHODS, AND TECHNIQUES USED IN THE VEHICLE BRAKEDRUM SERVICE INDUSTRY.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: PILOT STUDY; EVALUATION OF PROCESS CONTAINMENT FOR BIOAEROSOLS

BEGIN DATE: 10/86 END DATE: 09/87 DIV: DPSE

CAN: 429 PROJECT OFFICER: MARTINEZ, KENNETH

PURPOSE: THIS PROJECT WILL IDENTIFY IMPROVED METHODS OF EVALUATING BIOPROCESS CONTAINMENT AND IDENTIFY SPECIFIC EQUIPMENT FOR EVALUATION.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PREPARE REPORT RECOMMENDING EQUIPMENT TO BE EVALUATED, SAMPLING EQUIPMENT, AND PROCEDURES TO BE USED IN FUTURE WORK.

TITLE: ANALYTICAL METHODS FOR ORGANIC COMPOUNDS

BEGIN DATE: 10/82 END DATE: C DIV: DPSE

CAN: 437 PROJECT OFFICER: TEASS, ALEXANDER W

PURPOSE: ANALYTICAL METHODS FOR ORGANIC COMPOUNDS IN WORK-PLACE AIR AND OTHER MATRICES OF INDUSTRIAL-HYGIENE INTEREST WILL BE DEVELOPED. NEW ANALYTICAL-CHEMISTRY TECHNIQUES WILL BE EVALUATED FOR APPLICATION TO INDUSTRIAL HYGIENE PROBLEMS. SPECIAL GC/MS ANALYTICAL SUPPORT WILL BE PROVIDED.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
A METHOD FOR DICHLOROMETHANE IN AIR AND A NONSPECIFIC SEMIQUANTITATIVE METHOD FOR POLYCYCLIC AROMATIC COMPOUNDS IN AIR WILL BE REPORTED.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: REVISION OF THE NIOSH MANUAL OF ANALYTICAL METHODS

BEGIN DATE: 10/82 END DATE: C DIV: DPSE

CAN: 445 PROJECT OFFICER: ELLER, PETER M

PURPOSE: THIS PROJECT PROVIDES A COLLECTION OF CURRENT NIOSH ANALYTICAL METHODS FOR USE IN HEALTH HAZARD EVALUATIONS, INDUSTRY-WIDE STUDIES, AND CONTROL TECHNOLOGY ASSESSMENTS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PRINT THE SECOND (1986-1987) SUPPLEMENT AND DISTRIBUTE IT THROUGH THE GOVERNMENT PRINTING OFFICE.

TITLE: ANALYTICAL METHODS FOR ASBESTOS FIBERS

BEGIN DATE: 10/84 END DATE: 09/89 DIV: DPSE

CAN: 448 PROJECT OFFICER: BARON, PAUL A

PURPOSE: THE PROJECT WILL INVESTIGATE THE PRECISION OF METHOD 7400 FOR FIBERS AND SUGGEST IMPROVEMENTS IF NEEDED. TRANSMISSION AND SCANNING ELECTRON MICROSCOPE METHODS WILL BE DEVELOPED FOR ASBESTOS. IMPROVED FIBER COUNTING STRATEGIES AND PROCEDURES WILL BE INVESTIGATED. IMAGE ANALYSIS TECHNIQUES TO AUTOMATE ASBESTOS COUNTING WILL BE IMPLEMENTED.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PUBLISH RESULTS OF ELECTROSTATIC EFFECTS OF FIBER SAMPLING, AND FIBER GENERATION FOR QUALITY ASSURANCE.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: QUALITY ASSURANCE (EXTERNAL)

BEGIN DATE: 10/82 END DATE: C DIV: DPSE

CAN: 458 PROJECT OFFICER: ABELL, MARTIN T

PURPOSE: NIOSH WILL CONTINUE TO ANALYZE PAT DATA, BUT IN FY87, ALL LABORATORIES WILL PURCHASE PAT SAMPLES THROUGH AIHA. IH LABORATORY PERFORMANCE WILL BE DOCUMENTED IN 2 PUBLICATIONS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
ANALYZE DATA FOR 600 LABORATORIES, COORDINATE PAT PROGRAM WITH AIHA AND THE SAMPLE PRODUCTION CONTRACTOR, SUBMIT TWO ARTICLES FOR PUBLICATION THAT DOCUMENT PAT LABORATORY PERFORMANCE.

TITLE: MAINTENANCE AND CALIBRATION

BEGIN DATE: 10/82 END DATE: C DIV: DPSE

CAN: 459 PROJECT OFFICER: GROFF, JENSEN H

PURPOSE: THIS PROJECT WILL: 1) PROVIDE REPAIR, CALIBRATION OF FIELD AND DIRECT-READING EQUIPMENT (DPSE ECTB, DSHEFS IWSB, DTMD, AND SOME STATE LABS); 2) PROVIDE ELECTRONIC REPAIR & FABRICATION SUPPORT FOR DIRECT-READING INSTRUMENT DEVELOPMENT; 3) INVESTIGATE EQUIPMENT USAGE, MAINTENANCE AND FAILURES; AND 4) PUBLISH AN ARTICLE ABOUT A BATTERY CAPACITY TESTER

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
REPAIR 160 INSTRUMENTS, COMPLETE BATTERY TRACKING SYSTEM, AND PUBLISH ONE PAPER.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: DEV. OF PREDICTIVE MODELS FOR DETERMINING CONTROL EFFECTIVENESS

BEGIN DATE: 10/85 END DATE: 09/90 DIV: DPSE

CAN: 494 PROJECT OFFICER: ANASTAS, MAZEN Y

PURPOSE: THIS PROJECT DEVELOPS PREDICTIVE MODELS FOR LOCAL EXHAUST VENTILATION SYSTEMS USED TO CONTROL SOURCES OF CONTAMINANTS. THE END PRODUCT WILL BE A SERIES OF MODELS WHICH HELP THE DESIGNER TO DESIGN EFFECTIVE LOCAL EXHAUST SYSTEMS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DEVELOP TWO-DIMENSIONAL MODELS FOR FLOW INTO UNOBSTRUCTED LOCAL EXHAUST OPENINGS. CONDUCT VISUAL STUDIES TO DETERMINE AND REDUCE THE EFFECT OF THE WORKERS'S BODY ON BREATHING ZONE LEVELS.

TITLE: DEVELOPMENT OF MONITORING NETWORKS AND CONTROL MONITORING TECHNIQUES

BEGIN DATE: 10/85 END DATE: 09/89 DIV: DPSE

CAN: 495 PROJECT OFFICER: SMITH, JEROME P

PURPOSE: THE PROJECT WILL EXAMINE THE ACQUISITION AND ANALYSIS OF DATA FROM A NETWORK OF MONITORING LOCATIONS. A SECOND PART OF THE PROJECT WILL EXAMINE THE DEVELOPMENT OF LOWER COST MONITORING TECHNIQUES TO DETERMINE THE FEASIBILITY OF THE USE OF THESE TECHNIQUES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE REVIEW AND DETERMINE FEASIBILITY OF INCLUSION OF A NETWORK OF MONITORS IN AVAILABLE DATA ACQUISITION-COMMUNICATION SYSTEMS. COMPLETE TESTING AND DETERMINE IF LOW COST IMS IS FEASIBLE.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: GAS AND VAPOR MEASUREMENT TECHNIQUES

BEGIN DATE: 10/84 END DATE: 09/89 DIV: DPSE

CAN: 496 PROJECT OFFICER: PILTINGSRUD, HARLEY V

PURPOSE: THE PHOTO-OPTICAL STUDY MAY LEAD TO A VERY VERSATILE SYSTEM FOR SURVEILLANCE OF AIRBORNE POLLUTANTS IN THE WORKPLACE, PRODUCING REAL- TIME MAPPING OF POLLUTANTS, IMPROVING ESTIMATES OF PERSONAL EXPOSURE, AND EVALUATING EFFECTIVENESS OF CONTROL METHODS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE PAPERS ON PHOTO-OPTICAL SYSTEM, SAMPLER LAGS, AND AEROSOL GENERATION.

TITLE: COMPARATIVE RESEARCH IN ANALYTICAL PATHOLOGY

BEGIN DATE: 10/71 END DATE: C DIV: DRDS

CAN: 105 PROJECT OFFICER: TUCKER, JAMES H

PURPOSE: THE RESULTS OBTAINED FROM THE AUTOPSY PROGRAM AND THE DISASTER PLAN WILL AID IN EVALUATING THE EFFECTIVENESS OF THE COAL MINE DUST STANDARD.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
ADMINISTER THE NCWAS AND DISASTER PLAN AND SUBMIT ANNUAL REPORT. PROVIDE PATHOLOGY SUPPORT TO DRDS PROJECTS. PROVIDE TEM, SEM, EDXA SUPPORT TO DRDS PROJECTS.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: CHARACTERIZATION OF SILICA IN LUNGS OF AUTOPSIED COAL MINERS

BEGIN DATE: 10/85 END DATE: 09/87 DIV: DRDS

CAN: 106 PROJECT OFFICER: TUCKER, JAMES H

PURPOSE: THIS PROJECT WILL DETERMINE THE SIZE OF SILICA PARTICLES THAT DEPOSIT IN HUMAN LUNGS AND DETERMINE THE PREVALENCE OF SILICOSIS IN THE NATIONAL COALWORKERS' AUTOPSY STUDY.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DETERMINE THE PREVALENCE/PROGRESSION OF SILICOTIC LUNG DISEASE, IN NCWAS CASES. SUBMIT REPORT/PUBLICATION.

TITLE: SILICOSIS - INHALATION STUDIES

BEGIN DATE: 10/83 END DATE: 12/87 DIV: DRDS

CAN: 112 PROJECT OFFICER: MILES, PHILIP R

PURPOSE: THIS PROJECT WILL PROVIDE ANIMAL INHALATION STUDIES TO ANSWER THE DETAILED QUESTIONS REGARDING TOXICITY OF DIFFERENT TYPES OF SILICA, CELL AND ORGAN RESPONSES TO SILICA, AND THE WHOLE BODY RESPONSE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DEVELOP AND EVALUATE AN APPROPRIATE ANIMAL MODEL OF ACUTE SILICOSIS TO DETERMINE THE MECHANISM(S) OF LUNG RESPONSE TO INHALED SILICA.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: DEVELOPMENT OF A LUNG-CELL MODEL FOR STUDYING WORKPLACE GENOTOXICANTS

BEGIN DATE: 10/86 END DATE: 12/89 DIV: DRDS

CAN: 113 PROJECT OFFICER: WHONG, WEN-ZONG

PURPOSE: THIS PROJECT WILL DEVELOP AND CHARACTERIZE BIOLOGICAL ASSAY SYSTEMS WHICH WILL PROVIDE USEFUL METHODS FOR THE DETECTION AND MONITORING OF TOXIC CHEMICALS AND ORGANIC DUSTS IN THE WORKPLACE ENVIRONMENT, AND FOR THE DETECTION OF POTENTIAL HEALTH HAZARDS TO WORKERS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE ESTABLISHMENT OF THE UNSCHEDULED DNA SYNTHESIS ASSAY SYSTEM IN LUNG CELLS.

TITLE: PULMONARY RESPONSE TO INHALED FIBROGENIC MINERALS

BEGIN DATE: 10/86 END DATE: 09/89 DIV: DRDS

CAN: 114 PROJECT OFFICER: VALLYATHAN, VAL

PURPOSE: SHORT TERM HIGH DOSE INHALATION EXPERIMENTS DESIGNED IN THESE STUDIES WILL PROVIDE VALUABLE INFORMATION ON THE PATHOGENESIS OF FIBROGENIC MINERAL. THIS STUDY WILL CONTRIBUTE TO OUR KNOWLEDGE OF MAJOR OCCUPATIONAL LUNG DISEASES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE ALL EXPERIMENTAL PROTOCOLS AND ONE INHALATION STUDY.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: OCCUPATIONAL ASTHMA-ETIOLOGIC AGENT(S) AND DISEASE MECHANISM(S)

BEGIN DATE: 10/84 END DATE: 01/87 DIV: DRDS

CAN: 115 PROJECT OFFICER: FEDAN, JEFFREY S

PURPOSE: BY SEPTEMBER 30, 1988, EVALUATE SELECTED FACTORS RELATED TO OCCUPATIONAL ASTHMA.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE DOSE RESPONSE CURVE STUDIES.

TITLE: BYSSINOSIS - INHALATION STUDIES

BEGIN DATE: 10/83 END DATE: 12/87 DIV: DRDS

CAN: 116 PROJECT OFFICER: MILES, PHILIP R

PURPOSE: THIS PROJECT WILL INCREASE OUR UNDERSTANDING OF THE ETIOLOGIC AGENT(S) AND THE DISEASE MECHANISM(S) OF BYSSINOSIS THROUGH THE DEVELOPMENT AND USE OF AN ANIMAL MODEL. THE ANIMAL MODEL WILL BE USED BECAUSE MUCH MORE DETAILED EXPERIMENTATION CAN BE ACCOMPLISHED IN ANIMALS THAN IN HUMANS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE DEVELOPMENT OF AN APPROPRIATE ANIMAL MODEL OF BYSSINOSIS USING THE DRDS INHALATION FACILITY.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: DEVELOPMENT OF PATHOLOGY STANDARDS FOR SILICOSIS

BEGIN DATE: 03/85 END DATE: 09/87 DIV: DRDS

CAN: 117 PROJECT OFFICER: VALLYATHAN, VAL

PURPOSE: ESTABLISH AND DISSEMINATE PATHOLOGICAL STANDARDS FOR SILICOSIS NOW BEING DEVELOPED FOR THE INSTITUTE BY CONTRACT THROUGH THE UNIVERSITY OF VERMONT.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE A PATHOLOGY STANDARD FOR CORRELATION OF DIAGNOSTIC METHODS WITH PATHOLOGIC FINDINGS OF SILICA EXPOSED WORKERS.

TITLE: ROLE OF ALVEOLAR CELL INTERACTIONS IN THE PATHOGENESIS OF SILICOSIS

BEGIN DATE: 10/83 END DATE: 09/87 DIV: DRDS

CAN: 118 PROJECT OFFICER: CASTRANOVA, VINCENT

PURPOSE: DETERMINE THE MECHANISTIC DIFFERENCES IN ANIMALS BETWEEN ACUTE AND CHRONIC SILICOSIS AND THE CELLULAR PROCESSES INVOLVED IN THE DEVELOPMENT OF FIBROSIS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DETERMINE THE EFFECTS OF PLATELET ACTIVATING FACTOR ON PULMONARY CELLS AND SUBMIT FINAL REPORT TO DIRECTOR, NIOSH.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: OCCUPATIONAL ASTHMA ROLE OF AIRWAY EPITHELIUM

BEGIN DATE: 02/87 END DATE: 09/90 DIV: DRDS

CAN: 119 PROJECT OFFICER: FEDAN, JEFFREY S

PURPOSE: OZONE, TOLUENE DIISOCYANATE, METHYL ISOCYANATE, SULFUR DIOXIDE AND SOME ORGANIC DUSTS INDUCE AIRWAY HYPERREACTIVITY AND AIRWAY EPITHELIAL CELL DAMAGE/LOSS AFTER INHALATION. THE EPITHELIUM MODULATES AIRWAY SMOOTH MUSCLE REACTIVITY IN VITRO. WE WILL CORRELATE EPITHELIAL DAMAGE/LOSS IN VIVO AND IN VITRO WITH AIRWAY REACTIVITY IN VIVO AND IN VITRO.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE DETERMINATION OF THE EFFECT OF EPITHELIUM REMOVAL IN VITRO ON SMOOTH MUSCLE REACTIVITY: DOSE-REPONSE STUDIES.

TITLE: ANIMAL AND EXPOSURE FACILITY SUPPORT FOR DRDS

BEGIN DATE: 10/80 END DATE: C DIV: DRDS

CAN: 123 PROJECT OFFICER: WEBER, KENNETH C

PURPOSE: THIS PROJECT PROVIDES ANIMALS TO NIOSH RESEARCHERS FOR THE PURPOSES OF DEFINING ETIOLOGIC AGENTS, ANIMAL MODELS OF ORD, PATHOGENETIC AND DEFENSE MECHANISMS AND NATURALLY OCCURRING VARIABILITY IN EXPOSURES WHICH CAUSE OR INFLUENCE OCCUPATIONAL LUNG DISEASE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PROVIDE DRDS AND COLLABORATING UNITS WITH EXPERIMENTAL ANIMALS. THIS INCLUDES PURCHASE OF ANIMALS, ANIMAL HUSBANDRY AND SELECTED CONTROLLED EXPOSURES. ANIMALS ARE MAINTAINED ACCORDING TO NIH GUIDELINES.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: VALIDATION STUDIES OF IN SITU ASSAY SYSTEM IN OCCUPATIONAL SETTING

BEGIN DATE: 07/86 END DATE: 03/90 DIV: DRDS

CAN: 124 PROJECT OFFICER: ONG, TONG-MAN

PURPOSE: THIS PROJECT WILL DEVELOP AND CHARACTERIZE A BIOLOGICAL ASSAY SYSTEM TO PROVIDE METHODS FOR THE DETECTION AND MONITORING OF TOXIC CHEMICALS AND ORGANIC DUSTS IN WORKPLACE ENVIRONMENTS, AND FOR THE DETECTION OF POTENTIAL HEALTH HAZARDS TO WORKERS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE DEVELOPMENT OF ASSAY PROTOCOL.

TITLE: ENDOTOXINS IN COTTON

BEGIN DATE: 10/82 END DATE: 09/87 DIV: DRDS

CAN: 125 PROJECT OFFICER: OLENCHOCK, STEPHEN A

PURPOSE: PROJECT WILL EVALUATE THE ROLE OF ENDOTOXIN AS AN ETIOLOGIC AGENT IN COTTON DUST.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE (ENDOTOXIN) DATA COLLECTION AND CORRELATE RESULTS. SUBMIT FINAL REPORT TO DIRECTOR, NIOSH.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: AGRICULTURE: CHRONIC BRONCHITIS STUDIES

BEGIN DATE: 01/87 END DATE: 09/90 DIV: DRDS

CAN: 126 PROJECT OFFICER: OLENCHOCK, STEPHEN A

PURPOSE: IDENTIFY IMMUNOLOGIC MECHANISM(S) IN AGRICULTURAL DUST(S) ASSOCIATED WITH CHRONIC BRONCHITIS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE COMPLEMENT ASSAYS ON AGRICULTURAL DUST.

TITLE: ANIMAL MODEL VALIDATION STUDIES

BEGIN DATE: 10/84 END DATE: 12/87 DIV: DRDS

CAN: 127 PROJECT OFFICER: FRAZER, DAVID G

PURPOSE: THIS PROJECT WILL DEVELOP AND CHARACTERIZE AN ANIMAL MODEL FOR BYSSINOSIS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE TEST OF NON-INVASIVE PULMONARY FUNCTION TESTS FOR ANIMAL STUDIES.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: NRC POSTDOCTORAL ASSOCIATESHIPS PROGRAM

BEGIN DATE: 07/81 END DATE: C DIV: DRDS

CAN: 132 PROJECT OFFICER: WEBER, KENNETH C

PURPOSE: THE ASSOCIATES WILL INCREASE THE PRODUCTIVITY AND EFFICIENCY OF NIOSH'S RESEARCH BY INTRODUCING IDEAS AND BACKGROUNDS THAT WILL STIMULATE, CRITIQUE, AND CHALLENGE ONGOING EXPERIMENTAL APPROACHES AND RESULTS AND BY INCREASING THE QUALITY AND DIVERSITY OF NIOSH RESEARCH EFFORTS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PROVIDE 14 POSTDOCTORAL SCIENTISTS AND ENGINEERS OF UNUSUAL PROMISE AND ABILITY OPPORTUNITIES FOR RESEARCH THAT ARE COMPATIBLE WITH NIOSH RESEARCH INTERESTS.

TITLE: ALVEOLAR TYPE II CELLS: EFFECTS OF SILICA

BEGIN DATE: 10/85 END DATE: 09/88 DIV: DRDS

CAN: 140 PROJECT OFFICER: RABOVSKY, JEAN

PURPOSE: DETERMINE THE MECHANISTIC DIFFERENCES IN ANIMALS BETWEEN ACUTE AND CHRONIC SILICOSIS AND THE EFFECTS OF SILICA EXPOSURE ON NATURAL DETOXIFICATION MECHANISMS OF THE LUNG.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DETERMINE CYTOCHROME P450 ACTIVITY IN ISOLATED ALVEOLAR TYPE II CELLS AND QUANTITATE THE EFFECTS OF IN VITRO AND IN VIVO EXPOSURE TO SILICA ON P450 ACTIVITY.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: ACTIVE SILICA CONTENT OF COAL MINE DUST

BEGIN DATE: 10/85 END DATE: 01/88 DIV: DRDS

CAN: 143 PROJECT OFFICER: WALLACE, WILLIAM E

PURPOSE: DETERMINE THE SIGNIFICANCE OF THE FACTORS WHICH AFFECT THE FIBROGENIC POTENTIAL OF SILICA (PARTICLE SIZE, MASS, COUNT, SURFACE CHARACTERISTICS, MATRIX COMPOSITION, ETC.).

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE ALL MINE SAMPLING.

TITLE: AGRICULTURE: IMMUNOLOGIC DISEASE STUDIES

BEGIN DATE: 10/85 END DATE: 12/88 DIV: DRDS

CAN: 144 PROJECT OFFICER: OLENCHOCK, STEPHEN A

PURPOSE: IDENTIFY IMMUNOLOGIC MECHANISM(S) IN AGRICULTURAL DUST(S) AND CHARACTERIZE CONSTITUENTS OF THE DUSTS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE COMPARATIVE TOXICITY STUDIES ON SILAGE.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: POLYCYCLIC AROMATIC HYDROCARBONS, PARTICULATES & DEFENSE MECHANISMS

BEGIN DATE: 10/85 END DATE: 12/88 DIV: DRDS

CAN: 145 PROJECT OFFICER: HAHON, NICHOLAS

PURPOSE: THE PROPOSED EXPERIMENTS WILL INVESTIGATE THE EFFECTS OF VARIOUS ORGANIC INDUSTRIAL POLLUTANTS AND THEIR METABOLITES ON THE INTERFERON DEFENSE MECHANISM OF THE LUNG.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE INTERFERON INTERACTION STUDIES WITH BAP METABOLITES, PHENOLS, QUINONES, DIOLS, ARENE OXIDES AND OTHER DERIVATIVES.

TITLE: LABORATORY ANIMAL ALLERGY STUDY - NIEHS

BEGIN DATE: 05/86 END DATE: 09/89 DIV: DRDS

CAN: 147 PROJECT OFFICER: LEWIS, DANIEL M

PURPOSE: THE OBJECTIVE OF THIS PROJECT IS TO DEVELOP A SENSITIVE METHOD TO QUANTITATE AIRBORNE ALLERGEN LEVELS. WITH SUCH TECHNOLOGY, THE EFFECTS OF ENGINEERING CONTROL OR WORK PRACTICES ON ALLERGEN LEVELS CAN BE MONITORED AND ALLERGEN CONCENTRATION NEEDED FOR SENSITIZATION OR REACTION CAN BE ESTIMATED.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE DEVELOPMENT OF RAST AND RAST INHIBITION ASSAY; COMPLETE CROSS-REACTIVITY STUDIES.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: RESPIRATORY MORBIDITY IN INDIAN WORKERS EXPOSED TO ORGANIC DUSTS

BEGIN DATE: 10/86 END DATE: 09/87 DIV: DRDS

CAN: 148 PROJECT OFFICER: CASTELLAN, ROBERT M

PURPOSE: THIS PROJECT WILL EVALUATE BOTH ACUTE AND CHRONIC RESPIRATORY EFFECTS OF COTTON DUST EXPOSURE, AS MEASURED GRAVIMETRICALLY AND IN TERMS OF ENDOTOXIN CONTAMINATION.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE STUDY PROTOCOL TO DETERMINE RESPIRATORY MORBIDITY IN INDIAN WORKERS EXPOSED TO COTTON DUST.

TITLE: MICROORGANISMS IN CONTAMINATED OFF. BLDGS: EFFECTS OF REMEDIAL ACTION

BEGIN DATE: 10/85 END DATE: 09/89 DIV: DRDS

CAN: 152 PROJECT OFFICER: PEACH, MICHAEL J

PURPOSE: IN VITRO MEASUREMENT SYSTEMS WILL BE USED TO ASSESS LEVELS OF KNOWN ANTIGENIC AGENTS TO DEVELOP AND DETERMINE THE EFFECTIVENESS OF CONTROL STRATEGIES USED IN REMEDIAL ACTIONS. ADDITIONALLY, SUSPECT ANTIGENS WILL BE IDENTIFIED AS POTENTIALLY RESPONSIBLE FOR BUILDING-RELATED DISEASE OUTBREAKS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DETERMINE MICROBIAL CONTAMINATION IN VENTILATION SYSTEMS, AND ASSESS THE EFFECTIVENESS OF THE REMEDIAL ACTIONS USED. ISSUE A REPORT/PUBLICATION.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: EPIDEMIOLOGIC REVIEW OF COTTON MILL SURVEILLANCE DATA

BEGIN DATE: 02/85 END DATE: 09/88 DIV: DRDS

CAN: 154 PROJECT OFFICER: CASTELLAN, ROBERT M

PURPOSE: THIS PROJECT WILL EVALUATE THE ROLE OF ENDOTOXIN AS AN ETIOLOGIC AGENT IN COTTON DUST.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DETERMINE ENDOTOXIN LEVELS IN COTTON DUST SAMPLES FROM SELECTED WORKSITES.

TITLE: SURVEILLANCE SYSTEM FOR OCCUPATIONAL LUNG DISEASES

BEGIN DATE: 10/84 END DATE: 09/87 DIV: DRDS

CAN: 155 PROJECT OFFICER: RICHARDS, THOMAS B

PURPOSE: THIS PROJECT PROVIDES MEDICAL TECHNICAL SUPPORT TO STATES DEVELOPING SURVEILLANCE SYSTEMS FOR OCCUPATIONAL RESPIRATORY DISEASES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
ESTIMATE THE PREVALENCE OF SILICOSIS BY ANALYSIS OF BLS SDS WORKERS' COMPENSATION DATA AND NCHS DEATH CERTIFICATES, AND SUBMIT REPORT.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: ANALYSIS OF CWP COMPENSATION DATA

BEGIN DATE: 10/84 END DATE: 09/87 DIV: DRDS

CAN: 156 PROJECT OFFICER: HODOUS, THOMAS K

PURPOSE: THE PROJECT WILL HELP PROVIDE MORE VALID DATA RELATING COAL MINING AND PULMONARY IMPAIRMENT. IT WILL ALSO PROVIDE AN ESTIMATE OF THE HEALTHY WORKER EFFECT IN OUR CROSS-SECTIONAL STUDIES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DETERMINE THE MORTALITY OF MINERS WITH LINKAGE TO PAST PULMONARY MORBIDITY DATA AND SUBMIT REPORT/PUBLICATION. PROVIDE INPUT TO FY88 RECOMMENDATIONS FOR REGULATORY CHANGES TO TRANSFER RIGHTS.

TITLE: SINO-AMERICAN CHEST X-RAY INTERPRETATION TRIALS

BEGIN DATE: 05/86 END DATE: 09/89 DIV: DRDS

CAN: 157 PROJECT OFFICER: HODOUS, THOMAS K

PURPOSE: APPROPRIATE EVALUATION OF THE CHINESE PNEUMOCONIOSIS DATA AND COMPARISON TO ANALOGOUS AMERICAN DATA WILL HELP BOTH COUNTRIES DETERMINE AREAS OF NEEDED CONTROL ACTIONS. PREVIOUSLY UNKNOWN ASSOCIATIONS MAY ALSO BECOME APPARENT.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DEVELOP A MUTUALLY ACCEPTABLE PROJECT PROTOCOL. COMPLETE FILM SELECTION AND BEGIN READING TRIALS.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: EMERGING PROBLEMS IN OCCUPATIONAL RESPIRATORY DISEASE

BEGIN DATE: 10/85 END DATE: 09/90 DIV: DRDS

CAN: 158 PROJECT OFFICER: MCCAWLEY, MICHAEL A

PURPOSE: THIS PROJECT WILL COLLECT EXPOSURE DATA FOR MICROBIAL CONTENT OF UNDERGROUND COAL MINES AND THE THORACIC FRACTION OF COAL MINE DUST. IT ALSO WILL DEVELOP A METHOD FOR EVALUATING EXPOSURE TO AGENTS WHEN THERE IS BOTH SKIN AND LUNG EXPOSURE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE TWO NEW DOCUMENTS ON INITIAL ASSESSMENT OF RESPIRATORY EFFECTS FROM INDUSTRIAL EXPOSURE.

TITLE: EVALUATING PROPHYLACTIC COATINGS FOR SILICA DUSTS

BEGIN DATE: 10/85 END DATE: 09/88 DIV: DRDS

CAN: 159 PROJECT OFFICER: WALLACE, WILLIAM E

PURPOSE: THIS PROJECT WILL DETERMINE THE EFFECTIVENESS OF PROPOSED PROPHYLACTIC AGENTS FOR THE CONTROL OF THE TOXIC PROPERTIES OF QUARTZ DUST.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE TESTING OF ENZYMATIC RETOXIFICATION OF TREATED QUARTZ.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: NIOSH TECHNICAL REPORT ON INDOOR AIR QUALITY DEMOGRAPHICS

BEGIN DATE: 10/85 END DATE: 09/87 DIV: DRDS,

CAN: 160 PROJECT OFFICER: JANKOVIC, JOHN T

PURPOSE: THE PROJECT WILL MAKE AN EARLY ATTEMPT TO DETERMINE THE PREVALENCE AND INCIDENCE OF HYPERSENSITIVITY PNEUMONITIS OUTBREAKS IN BUILDINGS REPORTED TO OR STUDIED BY NIOSH.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
SUBMIT FINAL REPORT SUMMARIZING DEMOGRAPHICS OF NIOSH HAZARD EVALUATIONS CONDUCTED WHERE THE PROBLEM WAS RELATED TO INDOOR AIR QUALITY.

TITLE: PLM SCREENING FOR FREE SILICA IN COAL SAMPLES

BEGIN DATE: 10/85 END DATE: 09/87 DIV: DRDS

CAN: 162 PROJECT OFFICER: KULLMAN, GREG J

PURPOSE: THIS PROJECT WILL HELP DETERMINE THE SIGNIFICANCE OF THE FACTORS WHICH AFFECT THE FIBROGENIC POTENTIAL OF SILICA (PARTICLE MASS, COUNT, SIZE, SURFACE CHARACTERISTICS, ETC.).

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DEVELOP A SIMPLE FIELD TECHNIQUE TO IDENTIFY POTENTIAL SILICA EXPOSURES AND SUBMIT REPORT/PUBLICATION.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: MINE ENVIRONMENTAL DATA ANALYSIS LIBRARY

BEGIN DATE: 10/84 END DATE: C DIV: DRDS

CAN: 163 PROJECT OFFICER: DIEFFENBACH, ALWIN L

PURPOSE: ON AN ANNUAL BASIS, THIS PROJECT WILL IDENTIFY EXPOSURE TRENDS FOR COAL MINE DUST AND SILICA EXPOSURE DATA GATHERED BY MSHA, OSHA AND OTHERS. EXPOSURE LEVELS WILL BE RANKED BY INDUSTRY AND JOB, IDENTIFYING HIGH RISK AREAS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
ANALYZE COLLECTED MSHA, OSHA AND OTHER AVAILABLE SILICA DATA, RANKING JOBS BY POTENTIAL FOR SILICOSIS AND SUBMIT REPORT/PUBLICATION.

TITLE: NATIONAL OCCUPATIONAL HEALTH SURVEY OF MINING

BEGIN DATE: 10/82 END DATE: 12/90 DIV: DRDS

CAN: 164 PROJECT OFFICER: GROCE, DENNIS W

PURPOSE: THIS PROJECT WILL DEVELOP PROGRAMS TO COLLECT AND DISSEMINATE DATA ON THE WORKFORCE AND THEIR POTENTIAL EXPOSURES TO FIBERS, ASBESTOS, SILICA, AND VARIOUS CHEMICAL EXPOSURE AGENTS. THE PROJECT WILL IDENTIFY WORKER GROUPS, JOBS, AND INDUSTRIES AT RISK FROM EXPOSURE TO TOXIC SUBSTANCES OR HARMFUL PHYSICAL AGENTS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE REMAINDER OF SECOND SEGMENT SURVEYS AND 50 THIRD SEGMENT SURVEYS; SUBMIT 9 FIRST SEGMENT COMMODITY REPORTS TO MSHA.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: U.S. ARMY LUNG DEPOSITION STUDY

BEGIN DATE: 08/86 END DATE: 09/87 DIV: DRDS

CAN: 165 PROJECT OFFICER: MCCAWLEY, MICHAEL A

PURPOSE: HUMAN SUBJECTS WILL UNDERGO TESTING TO DETERMINE THE EFFECTS OF AGE, SEX, RACE, PULMONARY FUNCTION STATUS, BREATHING RATE AND INHALATION VOLUME ON THE DEPOSITION OF 0.5. MICROMETER CORN OIL AEROSOL.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PUBLISH A REPORT ON THE FACTORS AFFECTING THE VARIABILITY OF 0.5 MICROMETER AEROSOL.

TITLE: MEASUREMENT OF EXPOSURES DURING FIREFIGHTING

BEGIN DATE: 10/86 END DATE: 09/89 DIV: DRDS

CAN: 166 PROJECT OFFICER: BURKHART, JOSEPH E

PURPOSE: AN INDUSTRIAL HYGIENE SURVEY OF FIRE FIGHTERS WILL BE UNDERTAKEN TO DETERMINE THE EXPOSURES ENCOUNTERED DURING FIREFIGHTING IN URBAN AREAS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
ISSUE PRELIMINARY REPORT ON PILOT ENVIRONMENTAL STUDIES.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: EFFECTIVE SILICA INDICES FOR RESPIRABLE MINERAL DUSTS

BEGIN DATE: 10/84 END DATE: 09/88 DIV: DRDS

CAN: 167 PROJECT OFFICER: WALLACE, WILLIAM E

PURPOSE: THIS PROJECT WILL DETERMINE THE SIGNIFICANCE OF THE FACTORS WHICH AFFECT THE FIBROGENIC POTENTIAL OF SILICA. PRESENT CORRELATION OF EXPOSURE IS BASED ON PARTICLE COUNT OR PARTICLE MASS. THIS PROJECT WILL DETERMINE THE MOST BIOLOGICALLY EFFECTIVE INDEX PROPERTY FOR MEASUREMENT.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE DEVELOPMENT OF SURFACE ANALYSIS METHODS FOR DUSTS.

TITLE: MICROORGANISMS IN HVAC SYSTEMS

BEGIN DATE: 10/84 END DATE: 09/89 DIV: DRDS

CAN: 168 PROJECT OFFICER: PEACH, MICHAEL J

PURPOSE: THIS PROJECT WILL DEVELOP CONTROL CRITERIA AND IN VITRO MEASUREMENT SYSTEMS FOR KNOWN ANTIGENIC AGENTS RESPONSIBLE FOR BUILDING-RELATED LUNG DISEASE OUTBREAKS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DETERMINE MICROBIAL CONTAMINATION IN VENTILATION SYSTEMS RESPONSIBLE FOR BUILDING-RELATED LUNG DISEASE OUTBREAKS, DEVELOP CONTROL CRITERIA AND SUBMIT REPORT/PUBLICATION.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: SILICOSIS SURVEILLANCE FEASIBILITY STUDY

BEGIN DATE: 10/85 END DATE: 09/88 DIV: DRDS.

CAN: 169 PROJECT OFFICER: AMANDUS, HARLAN E

PURPOSE: THIS PROJECT WILL IDENTIFY INDUSTRIES WITH WORKERS AT AN INCREASED RISK OF ACQUIRING SILICOSIS, DETERMINE THE PREVALENCE OF SILICOSIS, AND IDENTIFY THE SAFE LEVEL OF SILICA EXPOSURE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
OBTAIN OSHA SILICA SAMPLES.

TITLE: NORTH CAROLINA DUSTY TRADES FILE

BEGIN DATE: 10/84 END DATE: 09/89 DIV: DRDS

CAN: 172 PROJECT OFFICER: AMANDUS, HARLAN E

PURPOSE: ESTIMATES OF EXPOSURE-RESPONSE RELATIONSHIPS WILL BE DERIVED.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
MONITOR UNC AGREEMENT. ENUMERATE TEXTILE COHORT AND INITIATE VITAL STATUS FOLLOW-UP.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: O.L.D. ASSOCIATED WITH EXPOSURE TO DIESEL EMISSIONS

BEGIN DATE: 10/81 END DATE: 09/87 DIV: DRDS

CAN: 178 PROJECT OFFICER: COCALIS, JOSEPH C

PURPOSE: THIS PROJECT WILL DETERMINE THE LEVELS OF EXPOSURE TO DIESEL EMISSIONS IN COAL MINES AND PROJECT DOSES FOR A 10-YEAR MEDICAL FOLLOW-UP OF THE COHORT.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
SUBMIT FINAL PROJECT REPORT TO BUREAU OF MINES.

TITLE: CASE CONTROL STUDY OF SILICA, SILICOSIS AND LUNG CANCER

BEGIN DATE: 10/84 END DATE: 09/87 DIV: DRDS

CAN: 179 PROJECT OFFICER: COSTELLO, JOSEPH

PURPOSE: THIS PROJECT WILL ATTEMPT TO DETERMINE IF THERE IS AN ASSOCIATION BETWEEN SILICA, SILICOSIS, AND LUNG CANCER.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE DETERMINATION OF THE RELATIONSHIP BETWEEN SILICA, SILICOSIS AND LUNG CANCER AND SUBMIT REPORT.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: MEDICAL FIELD TEAM TECHNICAL SUPPORT

BEGIN DATE: 10/86 END DATE: C DIV: DRDS

CAN: 182 PROJECT OFFICER: SPRANSY, GREGORY C

PURPOSE: THIS PROJECT WILL PROVIDE TECHNICAL SUPPORT IN THE COLLECTION OF DATA FROM ACTUAL WORK SITES THROUGHOUT THE COUNTRY TO ENABLE ACCURATE DETERMINATION OF THE PREVALENCE OR PROGRESSION OF RESPIRATORY OCCUPATIONAL HEALTH PROBLEMS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PROVIDE FIELD TEAM SUPPORT IN THE ARRANGEMENT AND CONDUCT OF DIVISION FIELD STUDIES.

TITLE: ANALYSIS OF RECEIVING CENTER DATA

BEGIN DATE: 10/83 END DATE: 09/87 DIV: DRDS

CAN: 184 PROJECT OFFICER: ALTHOUSE, ROCHELLE B

PURPOSE: THIS PROJECT WILL ANALYZE FINDINGS FROM THE COALMINERS X-RAY SURVEILLANCE PROGRAM AND IDENTIFY TRENDS IN PNEUMOCONIOTIC LUNG DISEASE. THE EFFECTIVENESS OF THE CURRENT X-RAY SURVEILLANCE PROGRAM WILL BE ASSESSED, AND NEW AND/OR REVISED CRITERIA FOR AWARDING TRANSFER RIGHTS TO COAL MINERS WILL BE RECOMMENDED.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE EVALUATION OF CURRENT YEAR TRENDS IN COAL MINE DUST EXPOSURE/ DISEASES. EVALUATE EFFECTIVENESS AND RECOMMEND CHANGES TO THE CURRENT X-RAY SURVEILLANCE PROGRAM.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: FOLLOW-UP AND DETERMINATION OF VITAL STATUS, MARION COUNTY, WV

BEGIN DATE: 10/82 END DATE: 09/87 DIV: DRDS

CAN: 185 PROJECT OFFICER: COSTELLO, JOSEPH

PURPOSE: THIS PROJECT WILL HELP DETERMINE THE SEVERITY OF OBSTRUCTIVE LUNG DISEASE IN COAL MINERS AND DETERMINE THE RELATIONSHIP OF OBSTRUCTIVE LUNG DISEASE TO SPECIFIC JOB AREAS, LENGTH OF SERVICE AND OTHER FACTORS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DETERMINE THE MORTALITY OF MINERS WITH LINKAGE TO PAST PULMONARY MORBIDITY DATA AND SUBMIT REPORT/PUBLICATION.

TITLE: MORBIDITY/MORTALITY STUDY OF INDUSTRIAL SAND INDUSTRY

BEGIN DATE: 10/83 END DATE: 09/88 DIV: DRDS

CAN: 187 PROJECT OFFICER: AMANDUS, HARLAN E

PURPOSE: THIS PROJECT WILL PROVIDE DATA TO ESTIMATE EXPOSURE-RESPONSE RELATIONSHIP AND PROGRESSION OF SILICOSIS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE COLLECTION OF 20% OF STUDY DATA FROM COMPANIES.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: AN EPIDEMIOLOGICAL/ENVIRONMENTAL STUDY OF WORKERS IN OFFICE BUILDINGS

BEGIN DATE: 10/85 END DATE: 09/89 DIV: DRDS

CAN: 188 PROJECT OFFICER: GAMBLE, JOHN F

PURPOSE: THE MORBIDITY STUDY OF OFFICE WORKERS WILL DETERMINE THE PREVALENCE AND INCIDENCE OF HEALTH/COMFORT SYMPTOMS CHARACTERISTIC OF OFFICE ENVIRONMENTS, THE CORRELATION OF THESE SYMPTOMS WITH ENVIRONMENTAL CONDITIONS, AND THE EFFECTIVENESS OF DIFFERENT CONTROL MEASURES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE RESEARCH STUDY PROTOCOL AND INITIATE FIELD STUDIES AT SELECTED SITES.

TITLE: MEDICAL TECHNICAL SUPPORT

BEGIN DATE: 10/86 END DATE: C DIV: DRDS

CAN: 202 PROJECT OFFICER: HANKINSON, JOHN L

PURPOSE: BY PROVIDING MEDICAL TECHNICAL SUPPORT, THIS PROJECT ENABLES OTHER RESEARCH PROJECTS AS WELL AS HEALTH HAZARDS EVALUATIONS TO COLLECT HIGH QUALITY DATA FOR USE IN THEIR RESPECTIVE STUDIES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PROVIDE DRDS WITH MEDICAL AND TECHNICAL YEARS SUPPORT IN THE FORM OF DATA PROCESSING AND IN THE CALIBRATION AND MAINTENANCE OF PULMONARY FUNCTION EQUIPMENT.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: BYSSINOSIS PREVENTION

BEGIN DATE: 10/81 END DATE: 09/87 DIV: DRDS

CAN: 205 PROJECT OFFICER: CASTELLAN, ROBERT M

PURPOSE: THIS PROJECT REPRESENTS CONSULTATION TO THE GOVERNMENT/INDUSTRY/UNION TASK FORCE FOR BYSSINOSIS PREVENTION, AS WELL AS THE REPORTING OF EXISTING DATA REGARDING THE HEALTH RISKS OF COTTON DUST ENVIRONMENTS. THIS INFORMATION WILL BE PERTINENT FOR FUTURE OSHA RULEMAKING CONCERNING DUST FROM COTTON AND OTHER ORGANIC MATTER.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
ATTENDANCE OF NIOSH REPRESENTATIVE AT ALL MEETINGS OF GOVT/INDUSTRY/INDUSTRY/UNION TASK FORCE FOR BYSSINOSIS PREVENTION. DEVELOP REPORTS OF ENDOTOXIN IN NON-TEXTILE INDUSTRIES. COMPLETE REPORT FOR PUBLICATION

TITLE: EFFECTS OF RESPIRATOR USE IN THE WORKPLACE: FITNESS GUIDELINES

BEGIN DATE: 10/81 END DATE: 09/87 DIV: DRDS

CAN: 212 PROJECT OFFICER: HODOUS, THOMAS K

PURPOSE: THE STUDY WILL HELP FILL A LARGE GAP IN OUR KNOWLEDGE OF THE STRESSES AND PROBLEMS OF RESPIRATOR WEAR IN THE WORKPLACE (AS OPPOSED TO STUDIES DONE UNDER LABORATORY CONDITIONS).

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DETERMINE THE RESPONSES TO RESPIRATOR WEAR UNDER FIELD CONDITIONS AND SUBMIT REPORT/PUBLICATION AND SUBMIT UPDATE ON RESPIRATOR MEDICAL FITNESS GUIDELINES RECOMMENDATION.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: PROSPECTIVE EPIDEMIOLOGIC-IH STUDY OF MILD STEEL WELDERS

BEGIN DATE: 10/85 END DATE: 09/90 DIV: DRDS

CAN: 213 PROJECT OFFICER: GAMBLE, JOHN F

PURPOSE: THE WELDING STUDY WILL EVALUATE THE EXPOSURE-RESPONSE RELATIONSHIP BETWEEN WELDING CONTAMINANTS AND OCCUPATIONAL LUNG DISEASE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE DEVELOPMENT OF SAMPLING PROTOCOL.

TITLE: ANALYSIS OF DATA FROM AN EGYPTIAN SILICA STUDY

BEGIN DATE: 10/86 END DATE: 09/89 DIV: DRDS

CAN: 214 PROJECT OFFICER: RICHARDS, THOMAS B

PURPOSE: THIS PROJECT PROVIDES TECHNICAL SUPPORT TO EGYPT IN DETERMINING THE PREVALENCE OF SILICOSIS AND EXPOSURE-RESPONSE RELATIONSHIPS IN EGYPTIAN INDUSTRIES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE CHEST RADIOGRAPH INTERPRETATIONS BY NIOSH CERTIFIED PNEUMOCONIOSIS READERS.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: MORB/IH STUDY ANTHRACITE SURFACE MINERS/BITUMINOUS HIGHWALL DRILLERS

BEGIN DATE: 10/83 END DATE: 09/88 DIV: DRDS

CAN: 217 PROJECT OFFICER: AMANDUS, HARLAN E

PURPOSE: THIS PROJECT WILL PROVIDE DATA TO ESTIMATE THE PREVALENCE AND PROGRESSION OF PNEUMOCONIOSIS IN ANTHRACITE SURFACE COAL MINERS AND HIGHWALL DRILLERS TO DETERMINE ADEQUACY OF CURRENT STANDARD AND IDENTIFY NEED FOR MEDICAL SURVEILLANCE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DETERMINE THE PREVALENCE AND INCIDENCE OF PNEUMOCONIOSIS IN THE ANTHRACITE SURFACE COAL MINE INDUSTRY. ENUMERATE AND DEVELOP SAMPLE OF WEST VIRGINIA AND PENNSYLVANIA HIGHWALL DRILLERS.

TITLE: INDUSTRIAL HYGIENE TECHNICAL SUPPORT

BEGIN DATE: 10/82 END DATE: C DIV: DRDS

CAN: 223 PROJECT OFFICER: CLERE, JERRY L

PURPOSE: THIS PROJECT WILL PROVIDE WORKING CALIBRATED SURVEY EQUIPMENT, SAMPLING SUBSTRATES, SORBENTS, AND DEVICES. LIMITED LABORATORY ANALYSIS WILL BE PROVIDED FOR THIS SAMPLING.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PROVIDE FIELD TEAM NEEDS WITHIN 7 DAYS OF REQUEST.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: COMPUTER SUPPORT

BEGIN DATE: 08/70 END DATE: C DIV: DRDS

CAN: 232 PROJECT OFFICER: HANKINSON, JOHN L

PURPOSE: THIS PROJECT WILL PROVIDE DATA ENTRY, AND PROGRAMMING SUPPORT TO ALL DRDS PROJECTS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PROVIDE COMPUTER SUPPORT TO DRDS.

TITLE: RECEIVING CENTER - X-RAY SURVEILLANCE

BEGIN DATE: 08/70 END DATE: C DIV: DRDS

CAN: 235 PROJECT OFFICER: MARTIN, MITZIE L

PURPOSE: ANNUALLY THIS PROJECT WILL IDENTIFY EXPOSURE TRENDS FOR COAL MINE DUST/RELATED DISEASE OCCURRENCE FOR EVALUATION OF THE COAL MINE DUST STANDARD THROUGH THE OPERATION OF THE X-RAY SURVEILLANCE PROGRAM AND BY PROVIDING SUPPORT TO FILM READING TRIALS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE IDENTIFICATION OF CURRENT YEAR TRENDS IN PNEUMOCONIOSIS AND COMPLETE EVALUATION OF X-RAY SURVEILLANCE PROGRAM. COMPLETE IDENTIFICATION OF CURRENT YEAR TRENDS IN PNEUMOCONIOSIS.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: ACCESS TO OSHA INSPECTION DATA

BEGIN DATE: 10/83 END DATE: C DIV: DSHEFS

CAN: 504 PROJECT OFFICER: SETA, JOSEPH A

PURPOSE: THIS PROJECT PROVIDES FOR AN INFORMATION SYSTEM INCORPORATING ESTIMATES OF LEVEL OF EXPOSURE FOR HAZARDS OBSERVED BUT NOT MEASURED IN NIOSH HAZARD SURVEYS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
OBTAIN UPDATED OSHA DATA FOR SELECTED AGENTS.

TITLE: ANALYSIS OF HEALTH INTERVIEW SURVEY DATA

BEGIN DATE: 10/83 END DATE: 09/88 DIV: DSHEFS

CAN: 508 PROJECT OFFICER: SHILLING, HARON E

PURPOSE: THIS PROJECT WILL CONTINUE THE SURVEILLANCE OF EMPLOYMENT-RELATED MORBIDITY TO HELP ACHIEVE THE GOAL OF IDENTIFYING AND MONITORING EMPLOYMENT-RELATED HEALTH EFFECTS IN THE U.S. WORKER POPULATION AND TO HELP ESTABLISH PRIORITIES FOR NIOSH RESEARCH.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE REPORT ON CURRENT VS. USUAL I/O AND THE ANALYSIS BASED ON THE JOB EXPOSURE MATRIX AND NATIONAL HEALTH INTERVIEW SURVEY LINKAGE.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: NATIONAL REPORTING OF SELECTED OCCUPATIONAL DISEASES

BEGIN DATE: 10/83 END DATE: C DIV: DSHEFS

CAN: 514 PROJECT OFFICER: MULLAN, ROBERT J

PURPOSE: THIS PROJECT WILL PROVIDE FOR THE SUCCESSFUL IMPLEMENTATION OF STATE-BASED REPORTING OF OCCUPATIONAL DISEASES AND WILL ALLOW FOR DIRECT MONITORING OF OCCUPATIONALLY RELATED DISEASE, DISABILITY, AND DEATH.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
IDENTIFY AND LINK WITH STATES THEIR OCCUPATIONAL DISEASE REPORTING INTERESTS AND CAPABILITIES THROUGH MINET.

TITLE: COHORT MORTALITY STUDY OF ANTIMONY SMELTER WORKERS

BEGIN DATE: 10/83 END DATE: 12/87 DIV: DSHEFS

CAN: 533 PROJECT OFFICER: SCHNORR, TERESA M

PURPOSE: THIS EPIDEMIOLOGIC STUDY WILL ASSESS THE ASSOCIATION BETWEEN EXPOSURE TO ANTIMONY AND THE RISK OF DEVELOPING LUNG CANCER.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE THE DRAFT FINAL REPORT AND THE INTERNAL AND EXTERNAL REVIEWS.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: MORTALITY STUDY OF WORKERS EXPOSED TO TOLUENE DIISOCYANATE

BEGIN DATE: 06/83 END DATE: 09/88 DIV: DSHEFS

CAN: 534 PROJECT OFFICER: SCHNORR, TERESA M

PURPOSE: THIS EPIDEMIOLOGIC STUDY WILL ASSESS THE ASSOCIATION BETWEEN EXPOSURE TO TDI AND THE RISK OF DEVELOPING RESPIRATORY CANCER.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE EDITING THE DATA FOR ALL FOUR PLANTS AND THE DATA ANALYSIS. COMPLETE SUPPLEMENT TO COMPOSITE INDUSTRIAL HYGIENE REPORT.

TITLE: CASE-CONTROL STUDY OF LUNG CANCER IN TEAMSTERS UNION

BEGIN DATE: 10/83 END DATE: 02/89 DIV: DSHEFS

CAN: 539 PROJECT OFFICER: STEENLAND, NELSON K

PURPOSE: THIS EPIDEMIOLOGIC STUDY WILL ASSESS THE ASSOCIATION BETWEEN LUNG CANCER IN TEAMSTERS AND EXPOSURES, ESPECIALLY TO DIESEL EXHAUST. (BLADDER CANCER ALSO WILL BE EVALUATED.)

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE THE IN-DEPTH I.H. SURVEYS. COMPLETE DATA COLLECTION AND CODING FOR THE MORTALITY ANALYSIS.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: MORTALITY AND I.H. STUDY OF WORKERS EXPOSED TO LEAD CHROMATE PAINTS.

BEGIN DATE: 10/82 END DATE: 12/88 DIV: DSHEFS

CAN: 559 PROJECT OFFICER: WALKER, JAMES T

PURPOSE: THIS EPIDEMIOLOGIC STUDY WILL ASSESS THE ASSOCIATION BETWEEN EXPOSURE TO LEAD CHROMATE PAINTS AND THE RISK OF DEVELOPING LUNG CANCER.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
FINALIZE THE I.H. HISTORICAL REPORT AND COMPLETE THE WORK HISTORY CODING.

TITLE: URANIUM MINERS-LOW DOSE INVESTIGATION

BEGIN DATE: 10/82 END DATE: 06/88 DIV: DSHEFS

CAN: 567 PROJECT OFFICER: ROSCOE, ROBERT J

PURPOSE: THIS EPIDEMIOLOGIC STUDY WILL ASSESS THE ASSOCIATION BETWEEN EXPOSURE TO LOW LEVELS OF RADON DAUGHTERS AND THE RISK OF DEVELOPING LUNG CANCER.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE CODING OF THE QUESTIONNAIRE DATA AND THE DATA ANALYSIS.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: MORTALITY AND INDUSTRIAL HYGIENE STUDY OF FORMALDEHYDE

BEGIN DATE: 10/80 END DATE: 03/88 DIV: DSHEFS

CAN: 576 PROJECT OFFICER: STAYNER, LESLIE T

PURPOSE: THIS EPIDEMIOLOGIC STUDY WILL ASSESS THE ASSOCIATION BETWEEN EXPOSURE TO FORMALDEHYDE AND THE RISK OF DEVELOPING RESPIRATORY AND OTHER CANCER.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE THE LABORATORY ANALYSES.

TITLE: BERYLLIUM RETROSPECTIVE COHORT INVESTIGATION

BEGIN DATE: 10/81 END DATE: 09/89 DIV: DSHEFS

CAN: 583 PROJECT OFFICER: WARD, ELIZABETH M

PURPOSE: THIS EPIDEMIOLOGIC STUDY WILL ASSESS THE ASSOCIATION BETWEEN EXPOSURE TO BERYLLIUM AND THE RISK OF DEVELOPING LUNG CANCER AND OTHER RESPIRATORY/CARDIOVASCULAR DISEASES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE COHORT MORTALITY ANALYSES INCLUDING ANALYSIS CONTROLLING FOR SMOKING. CODE 50% OF INDUSTRIAL HYGIENE DATA.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: SENTINEL HEALTH EVENT LIST MAINTENANCE

BEGIN DATE: 10/82 END DATE: C DIV: DSHEFS

CAN: 627 PROJECT OFFICER: MURTHY, LEELA I

PURPOSE: CONTINUED SURVEILLANCE OF THE SCIENTIFIC LITERATURE WILL ENABLE US TO IDENTIFY AND DIRECT SURVEILLANCE EFFORTS AT THOSE DISEASES, DISABILITIES, AND DEATHS WHICH HAVE BEEN ESTABLISHED AS OCCUPATIONALLY RELATED.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE REVIEW OF 1980-84 SCIENTIFIC LITERATURE, SUBMIT UPDATE LIST FOR COMMITTEE REVIEW, AND COLLATE RESPONSE.

TITLE: DOCUMENTATION OF THE NATURE AND EXTENT OF SPECIFIC OCC ILLNESSES

BEGIN DATE: 10/85 END DATE: C DIV: DSHEFS

CAN: 635 PROJECT OFFICER: MORRISON, JOHN H

PURPOSE: EXAMINATION AND ANALYSIS OF HEALTH DATA SETS WILL BE USEFUL FOR THE DEVELOPMENT OF RESEARCH HYPOTHESES FOR FURTHER STUDY, DEVELOPMENT OF CONTROL PROGRAMS, AND DEFINING PROBLEM AREAS FOR POLICY MAKERS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
CONTINUE PRODUCTION OF SEVERAL MINI-REPORTS RELATING TO OCCUPATIONAL DISEASES THAT ARE ON THE SHE(O) LIST OR CONTAINED WITHIN THE "LEADING WORK-RELATED ILLNESSES AND INJURIES" CATEGORIES.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: RETROSPECTIVE COHORT INVESTIGATION OF NON-ASBESTOS WELDERS

BEGIN DATE: 10/84 END DATE: 09/89 DIV: DSHEFS

CAN: 683 PROJECT OFFICER: STEENLAND, NELSON K

PURPOSE: THIS EPIDEMIOLOGIC STUDY WILL ASSESS THE ASSOCIATION BETWEEN EXPOSURES AMONG WELDERS AND THE RISK OF DEVELOPING LUNG CANCER.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE WORK HISTORY CODING FOR PLANT 3.

TITLE: CHARACTERIZING RESPIRATOR FACE FIT

BEGIN DATE: 04/85 END DATE: 09/87 DIV: DSR

CAN: 776 PROJECT OFFICER: CAMPBELL, DONALD L

PURPOSE: PROJECT WILL PROVIDE AN IMPROVED UNDERSTANDING OF HOW FACE FIT IS AFFECTED BY BREATHING RESISTANCE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
AN AUTOMATED FACE FIT METHOD THAT DETERMINES INSTANTANEOUS LEAKAGE RATE AS A FUNCTION OF FACEPIECE PRESSURE WILL BE DEVELOPED AND VALIDATED.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: AEROSOL PARTICULATE FILTER EFFICIENCY

BEGIN DATE: 10/84 END DATE: 09/87 DIV: DSR

CAN: 778 PROJECT OFFICER: MOYER, ERNEST S

PURPOSE: THIS PROJECT WILL DEVELOP AND PROPOSE IMPROVED METHODS TO REVISE METHODS CURRENTLY USED IN 30 CFR 11. THESE METHODS WILL DRIVE ADVANCEMENTS IN RESPIRATOR FILTER TECHNOLOGY BY REQUIRING MANUFACTURERS' PRODUCTS TO MEET MORE STRINGENT CERTIFICATION STANDARDS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
FILTER PERFORMANCE AS A FUNCTION OF PRETREATMENT CONDITIONS (I.E., 1,7, 14, 28, AND 42 DAYS AT 38 DEGREES C AND 85% RH) WILL BE EXAMINED. THE FINAL REPORT WILL BE PREPARED FOR DIRECTOR, DSR.

TITLE: APPLICABILITY OF JONAS KINETIC MODEL FOR PREDICTING ORGANIC VAPOR

BEGIN DATE: 10/84 END DATE: 09/87 DIV: DSR

CAN: 779 PROJECT OFFICER: MOYER, ERNEST S

PURPOSE: THIS PROJECT WILL DEVELOP IMPROVED METHODS FOR EVALUATING ORGANIC VAPOR RESPIRATOR CARTRIDGES FOR 30 CFR 11 TO DRIVE ADVANCEMENTS IN SORBENT TECHNOLOGY.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DATA INDICATING BREAKTHROUGH TIMES FOR CHALLENGE COMPOUNDS WILL BE COLLECTED AND ANALYZED TO PREDICT THESE TIMES FOR OTHER COMPOUNDS. THE FINAL REPORT WILL BE WRITTEN TO INCLUDE RECOMMENDATIONS.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: FIRESMOKE/FEMA

BEGIN DATE: 10/85 END DATE: 03/88 DIV: DSR

CAN: 784 PROJECT OFFICER: NOONAN, GARY P

PURPOSE: THIS PROJECT WILL EVALUATE THE PERFORMANCE OF PRESSURE DEMAND SCBA BY THE COLLECTION OF IN-FACEPIECE CARBON MONOXIDE DATA, AND BY THE COLLECTION OF PERSONAL AND GENERAL AREA SAMPLES OF AIRBORNE CONTAMINANTS BOTH DURING AND AFTER ACTUAL FIREFIGHTING ACTIVITIES. A PULMONARY EVALUATION OF FIREFIGHTERS WILL ALSO BE CONDUCTED.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE PROTOCOL REVISION. COMPLETE RESPIRATOR, IH, AND MEDICAL EVALUATION PORTIONS OF PILOT STUDY.

TITLE: NEW PROCEDURE IN-FACEPIECE SAMPLING ON FULL-FACEPIECES

BEGIN DATE: 10/85 END DATE: 09/87 DIV: DSR

CAN: 799 PROJECT OFFICER: MYERS, WARREN R

PURPOSE: THIS PROJECT WILL EVALUATE NEW ALTERNATIVES TO THE CURRENT TECHNIQUE OF IN-FACEPIECE SAMPLING ON FULL FACEPIECES, EVALUATE THEIR INDEPENDENCE TO SOURCES OF SAMPLING BIAS WITH FULL FACEPIECES, COMPARE THEIR ACCURACY AND PRECISION TO DETERMINE IF ANY ALTERNATIVE WILL BE SUITABLE FOR QNFT AND WPF STUDIES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE DATA ANALYSIS; RECOMMEND A SAMPLING METHODOLOGY FOR QNFT AND WPF TESTING OF NEGATIVE PRESSURE RESPIRATORS; PRESENT INFORMATION AT AIHC AND SUBMIT JOURNAL ARTICLE.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: NEW PROCEDURE IN-FACEPIECE SAMPLING ON HALF-MASKS

BEGIN DATE: 10/85 END DATE: 09/87 DIV: DSR

CAN: 800 PROJECT OFFICER: MYERS, WARREN R

PURPOSE: THIS PROJECT WILL IDENTIFY ALTERNATIVES TO CURRENT IN-FACEPIECE SAMPLING TECHNOLOGIES, EVALUATE THEIR INDEPENDENCE TO SOURCES OF SAMPLING BIAS WITH HALF-MASKS, COMPARE THEIR ACCURACY AND PRECISION, AND DETERMINE IF ANY OF THE ALTERNATIVES HAVE SUFFICIENT ACCURACY AND PRECISION FOR QNFT AND WPF STUDIES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE DATA ANALYSIS. RECOMMEND A SAMPLING METHODOLOGY FOR QNFT AND WPF TESTING OF NEGATIVE PRESSURE HALF FACEPIECE RESPIRATORS. SUBMIT A REPORT OF RESULTS TO EPA AND SCIENTIFIC JOURNAL.

TITLE: EFFECT OF PARTICLE SIZE ON FACESEAL LEAKAGE ASSESSMENT

BEGIN DATE: 08/86 END DATE: 09/88 DIV: DSR

CAN: 804 PROJECT OFFICER: MYERS, WARREN R

PURPOSE: THIS PROJECT WILL DETERMINE HOW THE PARTICLE SIZE OF THE CHALLENGE AEROSOL MAY DISTORT ESTIMATES OF FACESEAL LEAKAGE. THE "TRUE" RATE OF LEAKAGE WILL BE DETERMINED SIMULTANEOUSLY WITH TRACER GAS ANALYSIS. MEASUREMENT OF LEAKAGE MADE WITH THE PARTICULATE SYSTEM CAN THEN BE COMPARED TO THE "TRUE" LEAKAGE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
ASSEMBLE TEST SETUP AND EVALUATE TEST SYSTEM FOR CONFORMANCE TO REQUIRED FIT FACTOR AND PARTICLE SIZE RANGES. AN INTERIM REPORT WILL BE PREPARED FOR THE USAF SCHOOL OF AEROSPACE MEDICINE.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: FIBROUS AEROSOL RESEARCH (SUPPLEMENTAL)

BEGIN DATE: 07/86 END DATE: 09/88 DIV: DSR

CAN: 806 PROJECT OFFICER: STEVENS, GREGORY A

PURPOSE: THIS PROJECT WILL CONDUCT A LABORATORY STUDY TO MEASURE THE PERFORMANCE OF AIR-PURIFYING PARTICULATE FILTERS AGAINST FIBROUS AEROSOLS AND TO DETERMINE FIBER RELEASE FROM FILTER MEDIA.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
EQUIPMENT WILL BE PURCHASED. THE LABORATORY SETUP WILL BE COMPLETED AND PRELIMINARY TEST SAMPLES WILL BE SUBMITTED FOR ANALYSIS.

TITLE: WORKPLACE PROTECTION FACTOR (WPF) STUDY

BEGIN DATE: 10/86 END DATE: 09/89 DIV: DSR

CAN: 832 PROJECT OFFICER: PALLAY, BARRY G

PURPOSE: THE PROJECT WILL EVALUATE A NEW IN-FACEPIECE SAMPLING METHOD THROUGH A PILOT STUDY INVOLVING QNFT AND WPF TESTING. A VARIETY OF HALF AND FULL FACEPIECE, NEGATIVE PRESSURE RESPIRATORS WILL THEN BE EVALUATED IN ACTUAL WORK SITUATIONS. THE WPF DATA WILL BE EVALUATED AND USED AS A BASIS FOR SETTING LEVELS OF ASSIGNED PROTECTION.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DEVELOP STUDY PROTOCOL AND CONDUCT PEER, HSRB AND SPRG REVIEWS; DEVELOP A FUNDING MECHANISM TO OBTAIN IH SUPPORT; CONDUCT A PILOT STUDY.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: ASBESTOS INFORMATION/RESPIRATORY PROTECTION

BEGIN DATE: 10/86 END DATE: 09/87 DIV: DSR

CAN: 835 PROJECT OFFICER: NOONAN, GARY P

PURPOSE: THIS PROJECT WILL PROVIDE TO EPA ASBESTOS ABATEMENT EDUCATION CENTERS IN-DEPTH REVIEW AND DISCUSSION OF NIOSH RECOMMENDATIONS AND REGULATIONS REGARDING THE PROPER USE AND SELECTION OF RESPIRATORY PROTECTION FOR ASBESTOS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PRESENT AND DISCUSS WITH 6 EPA ASBESTOS ABATEMENT EDUCATION CENTERS NIOSH POLICY ON THE PROPER USE AND SELECTION OF RESPIRATORY PROTECTION FOR ASBESTOS AND PRESENT A SUMMARY OF THESE POLICIES AT THE AIHC.

TITLE: SCBA "USE TEST" PERFORMANCE REQUIREMENTS

BEGIN DATE: 04/87 END DATE: 03/88 DIV: DSR

CAN: 836 PROJECT OFFICER: KNOWLES, DONALD F

PURPOSE: THIS PROJECT WILL DEVELOP MODERNIZED PERFORMANCE CRITERIA AND TEST METHODS FOR HUMAN "USE TESTS" TO BE USED IN 30CFR11 TO EVALUATE THE PERFORMANCE OF SELF-CONTAINED BREATHING APPARATUS (SCBA).

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE DATA COLLECTION.

PROGRAM AREA: OCCUPATIONAL LUNG DISEASES

TITLE: COAL MINE DUST PERSONAL SAMPLER UNIT

BEGIN DATE: 05/72 END DATE: C DIV: DSR

CAN: 855 PROJECT OFFICER: JOHNSON, RITA J

PURPOSE: THIS PROJECT WILL ENSURE CONTINUED CERTIFICATION OF CMDPSU IN ACCORDANCE WITH 30 CFR 74, AND UPGRADE PERFORMANCE TESTING.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
CONTINUE CERTIFICATION IN ACCORDANCE WITH 30 CFR 74.

PROGRAM AREA: MUSCULOSKELETAL INJURIES

TITLE: LOWER EXTREMITY DISORDERS OF OCCUPATIONAL ORIGIN

BEGIN DATE: 10/83 END DATE: 03/88 DIV: DBBS

CAN: 245 PROJECT OFFICER: HABES, DANIEL J

PURPOSE: THIS PROJECT WILL USE THE BIOMECHANICAL MODEL TO DEVELOP FIELD READY EVALUATION SYSTEMS FOR DETERMINING THE LEVEL OF HAZARD TO THE LOWER EXTREMITY IN HIGH-RISK OCCUPATIONS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE DEVELOPMENT AND TESTING OF MODEL. USE BIOMECHANICAL MODEL TO EVALUATE NEW KICKING DEVICES AND VARIOUS MATERIALS FOR IMPACT PADS FOR KNEE KICKERS.

TITLE: APPRAISAL/EXPANSION OF MANUAL MATERIALS HANDLING LIMITS

BEGIN DATE: 10/84 END DATE: 12/87 DIV: DBBS

CAN: 252 PROJECT OFFICER: BADGER, DONALD W

PURPOSE: THIS PROJECT PROVIDES ADDITIONAL CONTROL TECHNIQUES FOR REDUCING BIOMECHANICAL STRESS TO THE MUSCULOSKELETAL SYSTEM RESULTING FROM MANUAL MATERIALS HANDLING TASKS; AND PROVIDES RECOMMENDATIONS FOR PERMISSIBLE LOAD LIMITS FOR ASYMMETRICAL LOADING OF THE SPINAL COLUMN, AND REPETITIVE LIFTING NOT COVERED BY CURRENT GUIDELINES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE PERMISSIBLE LIMIT RECOMMENDATIONS FOR ADDITIONAL MANUAL MATERIALS HANDLING TASKS. COMPLETE DRAFT OF GUIDELINES FOR APPLYING LIMITS AT THE WORKSITE. SUBMIT RECOMMENDATIONS FOR NIOSH REVIEW.

PROGRAM AREA: MUSCULOSKELETAL INJURIES

TITLE: SHOULDER/NECK MUSCLE TENSION FOR REPETITIVE WORK

BEGIN DATE: 10/85 END DATE: 09/88 DIV: DBBS

CAN: 260 PROJECT OFFICER: PUTZ-ANDERSON, VERNON

PURPOSE: THIS PROJECT WILL PROVIDE DESIGN ENGINEERS WITH ACCEPTABLE WORK-REST RATIOS FOR STATIC AND REPETITIVE TASK FACTORS (HEIGHT, REACH, ETC.) THAT LOAD THE SHOULDER/NECK MUSCLES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE SUBJECT TESTING USING PSYCHOPHYSICAL METHODOLOGY TO EVALUATE THE EFFECTS OF STATIC TASK FACTORS ON SHOULDER/NECK FATIGUE AS RELATED TO SHOULDER/NECK MUSCLES.

TITLE: FATIGUE EFFECTS OF EXTENDED WORKDAYS AND WORKLOAD

BEGIN DATE: 10/82 END DATE: 12/87 DIV: DBBS

CAN: 263 PROJECT OFFICER: ROSA, ROGER R

PURPOSE: THE IMPACT OF EXTENDED WORK HOURS (12-HOUR SHIFTS) ON PHYSICAL AND PSYCHOLOGICAL FATIGUE HAS BEEN TESTED IN THE LABORATORY AND IS NOW BEING TESTED AT WORKSITES. PROJECT WILL IDENTIFY OCCUPATIONS AT RISK FOR ACCIDENTS OR JUDGMENT ERRORS UNDER EXTENDED-HOURS WORK SCHEDULE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
A 1-YR FOLLOW-UP STUDY TO TEST FOR ADAPTATION TO 12-HR SHIFTS WILL BE COMPLETED. A SECOND WORKSITE ON 12-HR SHIFTS IN AN OCCUPATION WITH MORE PHYSICAL DEMAND WILL ALSO BE TESTED WITH A SIMILAR DESIGN.

PROGRAM AREA: MUSCULOSKELETAL INJURIES

TITLE: PSYCHOLOGICAL AND ORGANIZATIONAL ASPECTS OF LOWER BACK PAIN

BEGIN DATE: 10/86 END DATE: 09/87 DIV: DBBS

CAN: 278 PROJECT OFFICER: COLLIGAN, MICHAEL J

PURPOSE: THIS PROJECT WILL IDENTIFY PSYCHOLOGICAL SEQUELAE (E.G., DEPRESSION, APATHY, LOSS OF SELF-ESTEEM) OF OCCUPATIONALLY-RELATED LOWER BACK PAIN WHICH MAY IMPEDE REHABILITATION EFFORTS AND PRECIPITATE REINJURY.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DEVELOP A DATA BASE FOR EXAMINING THE IMPACT OF PSYCHOLOGICAL/ORGANIZATIONAL FACTORS ON REHABILITATION/RECOVERY RATES OF BACK PAIN VICTIMS.

TITLE: TRAUMATOGENIC FACTORS IN OCCUPATIONAL WRIST DISORDERS

BEGIN DATE: 10/80 END DATE: 09/87 DIV: DBBS

CAN: 280 PROJECT OFFICER: HABES, DANIEL J

PURPOSE: THIS PROJECT WILL DEFINE OCCUPATIONAL AND PERSONAL FACTORS AS THEY CONTIBUTE TO CUMULATIVE TRAUMA DISORDERS OF THE UPPER EXTREMITY, AND TO THEIR REMEDIATION BY ERGONOMIC REDESIGN.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
STENOSIS AS A FACTOR IN CARPAL TUNNEL SYNDROME WILL BE ASSESSED, AS WILL GRIP FORCE, AS A PREDICTOR OF INJURY. THE EFFICACY OF ERGONOMICS INTERVENTIONS IN MANUFACTURING PLANTS WILL BE REPORTED.

PROGRAM AREA: MUSCULOSKELETAL INJURIES

TITLE: FIELD MEASUREMENTS OF WORKERS EXPOSED TO WHOLE-BODY VIBRATION

BEGIN DATE: 10/83 END DATE: 09/87 DIV: DBBS

CAN: 356 PROJECT OFFICER: DUNN, DEREK E

PURPOSE: THIS PROJECT WILL DEVELOP METHODS FOR CHARACTERIZING WHOLE-BODY VIBRATION STRESS AND STRAIN TO THE BACK AND TRUNK AS EXPERIENCED IN VEHICLE OPERATIONS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
VIBRATION DATA WILL BE COLLECTED, AND A REPORT ON A PORTABLE SYSTEM FOR FIELD MEASUREMENTS WILL BE SUBMITTED TO THE AIHA JOURNAL.

TITLE: SENTINEL HEALTH EVENT FOLLOW-BACK

BEGIN DATE: 10/85 END DATE: 09/89 DIV: DSHEFS

CAN: 563 PROJECT OFFICER: SELIGMAN, PAUL J

PURPOSE: THIS PROJECT WILL IDENTIFY POPULATIONS WHERE OCCUPATIONAL DISEASE IS OCCURRING AND WHERE MORE STUDY IS NEEDED, WHICH WILL HELP PRIORITIZE OUR RESEARCH.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
CONDUCT 100% OF WALK-THROUGH SURVEYS FOR CHRONIC TRAUMA DISEASES AND FOR LEAD SURVEILLANCE FOLLOW-BACK. OBTAIN FINAL REPORT FROM UAW.

PROGRAM AREA: MUSCULOSKELETAL INJURIES

TITLE: DISABILITY SURVEILLANCE OF OCCUPATION AND INDUSTRY

BEGIN DATE: 10/80 END DATE: C DIV: DSHEFS

CAN: 629 PROJECT OFFICER: BRACKBILL, ROBERT M

PURPOSE: THE PROJECT PROVIDES UNIQUE DATA ON PERMANENT DISABILITY THAT RELATES TO OCCUPATION AND INDUSTRY SUBGROUPS OF AMERICAN WORKERS. THE PROJECT'S DATABASE IS A BUILDING BLOCK FOR THE BRANCH'S EFFORT TO DEVELOP A NATIONWIDE SYSTEM FOR THE SURVEILLANCE OF OCCUPATIONALLY RELATED MORBIDITY AND MORTALITY.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE TESTING OF CASE COMPARISON ANALYSIS SOFTWARE AND REPORTS ON THE SOFTWARE.

TITLE: DEVELOPMENT OF NORMAL MOTOR AND SENSORY NEURONAL CONDUCTION IN HUMANS

BEGIN DATE: 10/85 END DATE: 09/88 DIV: DSR

CAN: 817 PROJECT OFFICER: NESTOR, DAVID E

PURPOSE: THIS PROJECT WILL DEVELOP NORMAL NERVE CONDUCTION VALUES WHICH ALLOW FOR THE OBJECTIVE EVALUATION OF NERVE INJURIES WHICH CANNOT NOW BE PERFORMED.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE DATA COLLECTION AT THREE SITES AND BEGIN DATA ANALYSIS.

PROGRAM AREA: MUSCULOSKELETAL INJURIES

TITLE: OBJECTIVE EVALUATION OF LOW BACK INJURIES (LBE)

BEGIN DATE: 10/83 END DATE: 09/88 DIV: DSR

CAN: 824 PROJECT OFFICER: NELSON, ROGER M

PURPOSE: THIS PROJECT WILL DEVELOP AN OBJECTIVE EVALUATION SYSTEM FOR LOW BACK DISORDERS REFERRED TO AS THE NIOSH LOW BACK EVALUATION (LBE) SYSTEM.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
INITIATE CONTRACT STUDY TO FIELD TEST VALIDITY OF LBE SYSTEM.

TITLE: MUSCULOTENDINOUS INJURIES RELATED TO MUSCLE FATIGUE

BEGIN DATE: 10/82 END DATE: 09/87 DIV: DSR

CAN: 825 PROJECT OFFICER: NELSON, ROGER M

PURPOSE: THIS PROJECT WILL STUDY AND DETERMINE THE ROLE OF MUSCLE FATIGUE AND MUSCLE TRAINING IN MUSCULOSKELETAL INJURIES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE PAPERS ON MUSCLE TRAINING AND MUSCLE FATIGUE AND SUBMIT FOR PUBLICATION.

PROGRAM AREA: MUSCULOSKELETAL INJURIES

TITLE: IDENTIFICATION OF MUSCULOSKELETAL STRESSES DURING ASYMMETRIC LIFTING

BEGIN DATE: 10/84 END DATE: 09/87 DIV: DSR .

CAN: 837 PROJECT OFFICER: JENSEN, ROGER C

PURPOSE: THIS PROJECT WILL IDENTIFY IMPORTANT BIOMECHANICAL AND PHYSIOLOGIC STRESSES ASSOCIATED WITH ASYMMETRIC LIFTING TASKS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE FINAL REPORTS IDENTIFYING IMPORTANT BIOMECHANICAL AND PHYSIOLOGIC STRESSES ASSOCIATED WITH ASYMMETRIC LIFTING AND PUSHING/PULLING TASKS; SUBMIT BOTH FOR PUBLICATION.

TITLE: HEALTH CARE INDUSTRY - LOW BACK - EPIDEMIOLOGIC STUDY

BEGIN DATE: 10/84 END DATE: 09/88 DIV: DSR

CAN: 838 PROJECT OFFICER: JENSEN, ROGER C

PURPOSE: THIS PROJECT WILL IDENTIFY HIGH RISK JOBS AND TASKS FOR NURSING PERSONNEL. USING INJURY DATA AND A COHORT STUDY, THE EFFECTIVENESS OF AN INTERVENTION METHOD FOR REDUCING BACK INJURY AMONG NURSING PERSONNEL WILL BE ASSESSED.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PRESENT PAPERS AT TWO CONFERENCES AND ARRANGE AND CHAIR A SESSION AT A THIRD CONFERENCE. PUBLISH PAPER ON HOSPITAL RECORD REVIEWS. MONITOR INTERVENTION CONTRACT.

PROGRAM AREA: MUSCULOSKELETAL INJURIES

TITLE: HOSPITAL EQUIPMENT DESIGN EFFECT ON MUSCULOSKELETAL INJURIES

BEGIN DATE: 10/86 END DATE: 09/89 DIV: DSR

CAN: 883 PROJECT OFFICER: NESTOR, DAVID E

PURPOSE: THIS STUDY WILL EXAMINE THE EFFECTS OF A VARIETY OF HOSPITAL BED AND STRETCHER DESIGNS ON LIFTING AND PUSHING/PULLING TASKS. RESULTS CAN BE USED TO PROVIDE GUIDELINES FOR DESIGNING HOSPITAL EQUIPMENT TO REDUCE MUSCULOSKELETAL STRESSES TO NURSING AND OTHER HOSPITAL PERSONNEL.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE LITERATURE AND EPIDEMIOLOGIC REVIEWS. IDENTIFY SPECIFIC HOSPITAL EQUIPMENT TO BE USED IN STUDY. DEVELOP RESEARCH PROTOCOL AND DESIGN.

PROGRAM AREA: OCCUPATIONAL CANCERS

TITLE: IMPROVING HEALTH RISK MESSAGES TO WORKERS - FIELD TRIALS

BEGIN DATE: 10/85 END DATE: 09/88 DIV: DBBS

CAN: 253 PROJECT OFFICER: COHEN, ALEXANDER L

PURPOSE: THIS PROJECT WILL TEST FOR IMPROVED WORKER UNDERSTANDING OF HEALTH RISKS FROM TOXIC/CARCINOGENIC AGENTS FOUND IN THEIR JOB ENVIRONS AND ADHERENCE TO SAFE WORK PRACTICES AS A RESULT OF APPLYING NIOSH GUIDELINES TO COMPANY HAZARD INFORMATION PROGRAMS. POSITIVE RESULTS WOULD VERIFY EFFICACY OF GUIDELINES IN ACHIEVING PROGRAM AIMS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
BEGIN DATA COLLECTION AT ONE COMPANY SITE TO INDICATE WORKER RESPONSE TO HAZARD COMMUNICATION PRACTICES AS MODIFIED BY NIOSH GUIDELINES; SECOND SITE SECURED FOR TRIAL WORK.

TITLE: DIMETHYLFORMAMIDE - NTP CHEMICAL MANAGEMENT

BEGIN DATE: 10/86 END DATE: 02/92 DIV: DBBS

CAN: 282 PROJECT OFFICER: LEWIS, TRENT R

PURPOSE: DIMETHYLFORMAMIDE WAS NOMINATED BY NIOSH FOR TESTING BY THE NTP ON THE BASIS OF ITS HIGH BIOAVAILABILITY, STRUCTURAL SIMILARITY TO OTHER SUSPECT CARCINOGENS, POPULATION AT RISK, AND PRODUCTION VOLUME. THIS PROJECT WILL PROVIDE TOXICOLOGIC AND CARCINOGENIC DATA PRESENTLY UNAVAILABLE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
ISSUE RFP AND SELECT CONTRACTOR TO PERFORM 90-DAY SUBCHRONIC INHALATION TOXICOLOGIC STUDIES.

PROGRAM AREA: OCCUPATIONAL CANCERS

TITLE: TEMPORAL FACTORS INFLUENCING CARCINOGENICITY OF INDUSTRIAL CHEMICALS

BEGIN DATE: 10/85 END DATE: 09/90 DIV: DBBS

CAN: 313 PROJECT OFFICER: MOORMAN, WILLIAM J

PURPOSE: THIS PROJECT WILL OBTAIN SALIENT INFORMATION ON THE IMPORTANCE OF DOSE-RATE OF A SUSPECT OCCUPATIONAL CARCINOGEN USING A KNOWN RAT CARCINOGEN, ETHYLENE OXIDE, WHICH WILL BE THE REPRESENTATIVE CHEMICAL TO STUDY THE INFLUENCE OF VARIOUS EXPOSURE COMBINATIONS OF CONCENTRATION TIMES TIME (CXT) ON THE CARCINOGENIC POTENTIAL.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE PROJECT PROTOCOL; CONDUCT PEER REVIEW; COMPLETE PILOT STUDIES TO CHARACTERIZE INHALATION EXPOSURE REGIMENS AND METHODOLOGIES TO ASSESS DNA ADDUCTS; INITIATE 2-YEAR EXPOSURES.

TITLE: ASSESSMENT OF COCARCINOGENIC ACTIVITY OF ASPHALT FUMES

BEGIN DATE: 10/82 END DATE: 03/89 DIV: DBBS

CAN: 327 PROJECT OFFICER: LEWIS, TRENT R

PURPOSE: THE PROJECT WILL IDENTIFY THE ACTIVE COMPONENTS OF ASPHALT FUMES IN ORDER TO DEVELOP INDUSTRIAL HYGIENE INDICATORS FOR ASSESSING EXPOSURE AND ULTIMATELY REDUCING THE CARCINOGENIC RISK.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE 15 MONTHS OF ANIMAL TREATMENT AND INTIATE PATHOLOGY ON ANIMALS THAT DIE DURING THE YEAR.

PROGRAM AREA: OCCUPATIONAL CANCERS

TITLE: IN VITRO TESTS FOR WORKPLACE COCARCINOGENS

BEGIN DATE: 10/80 END DATE: 09/88 DIV: DBBS

CAN: 343 PROJECT OFFICER: BOHRMAN, JEFFREY S

PURPOSE: THIS PROJECT WILL RESULT IN THE DEVELOPMENT AND EVALUATION OF THE V79 CELL METABOLIC COOPERATION ASSAY AS A SCREENING TEST TO DETERMINE THE COCARCINOGENIC/TUMOR PROMOTING POTENTIAL OF CHEMICALS; EACH OF THE TWO CONTRACTORS WILL CONDUCT 42 METABOLIC COOPERATION ASSAYS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
TWENTY-ONE METABOLIC COOPERATION ASSAYS WILL BE PERFORMED BY THE CONTRACTORS. A MANUSCRIPT WILL BE PREPARED ON CHEMICALS TESTED IN THE PREVIOUS YEAR.

TITLE: GLYCOL ETHERS--NTP MANAGEMENT

BEGIN DATE: 10/86 END DATE: 09/90 DIV: DBBS

CAN: 345 PROJECT OFFICER: LAL, JAG B

PURPOSE: THIS PROJECT PROVIDES AN NTP CHEMICAL MANAGER TO DEVELOP PRECHRONIC AND CHRONIC STUDY DESIGNS FOR TOXICITY AND CANCER. THE THREE GLYCOL ETHERS WERE NOMINATED TO NTP BECAUSE OF THEIR WIDE USE IN THE INDUSTRY, POTENTIAL FOR INCREASED USAGE, AND CONCERN ABOUT CHRONIC TOXICITY BY UAW INT. UNION, CPSE AND NIOSH.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
ALL WORK NECESSARY TO AWARD THE CONTRACT FOR THE PRECHRONIC DERMAL STUDIES OF THE GLYCOL ETHERS WILL BE COMPLETED.

PROGRAM AREA: OCCUPATIONAL CANCERS

TITLE: SYMPOSIA ON HAZARD CONTROL IN SEMICONDUCTOR MANUFACTURING

BEGIN DATE: 10/86 END DATE: 09/88 DIV: DPSE

CAN: 404 PROJECT OFFICER: JONES, JAMES H

PURPOSE: THIS PROJECT WILL DISSEMINATE INFORMATION ON CONTROLS FROM RESEARCHERS AND PROMOTE THE INCLUSION OF EFFECTIVE CONTROLS IN NEW OPERATIONS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PLAN AND CONDUCT SYMPOSIUM ON WORKER EXPOSURE AND CONTROLS IN SEMI-CONDUCTOR MANUFACTURING.

TITLE: EVALUATION OF EXPOSURE CONTROLS & PREDICTIVE MODEL: FILTERS & DRYERS

BEGIN DATE: 10/85 END DATE: 09/88 DIV: DPSE

CAN: 422 PROJECT OFFICER: FROEHLICH, PHILLIP A

PURPOSE: THIS STUDY WILL ATTEMPT TO DEVELOP TECHNIQUES TO PREDICT OCCUPATIONAL EXPOSURE FROM FILTRATION AND DRYING OPERATIONS AND EVALUATE THE EFFECTIVENESS OF HAZARD CONTROLS IN CURRENT USE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE PRELIMINARY FIELD VISITS (20) AND HALF OF THE PLANNED IN-DEPTH SITE AND PILOT PLANT STUDIES TO EVALUATE CONTROL TECHNIQUES AND TO DEVELOP A PREDICTIVE MODEL FOR EMISSIONS AND WORKER EXPOSURE.

PROGRAM AREA: OCCUPATIONAL CANCERS

TITLE: EVALUATION AND PREVENTION OF HAZARDOUS CHEMICAL RELEASES

BEGIN DATE: 10/86 END DATE: 09/88 DIV: DPSE

CAN: 424 PROJECT OFFICER: GIDEON, JAMES A

PURPOSE: FAULTS THAT HAVE OCCURRED IN EXISTING TECHNOLOGY NEED TO BE IDENTIFIED AND AVOIDED AS NEW TECHNOLOGIES ARE IMPLEMENTED.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DEVELOP CONTACTS FOR WORK, COMPLETE TRAINING OF PERSONNEL, DEVELOP PEER REVIEW PROTOCOL FOR WORK.

TITLE: CONTROL TECHNOLOGY FOR GALLIUM ARSENIDE PROCESSING

BEGIN DATE: 05/86 END DATE: 09/87 DIV: DPSE

CAN: 427 PROJECT OFFICER: LENIHAN, KAREN L

PURPOSE: THE ELECTRONICS INDUSTRY IS EXPANDING THE USE OF GALLIUM ARSENIDE. IT WILL REQUIRE MORE CONTROLS THAN SIMILAR SILICON PROCESSING. BY DETERMINING CONTROLS NEEDED BEFORE MAJOR EXPANSION OF GALLIUM ARSENIDE PROCESSING, CONTROLS ARE MORE LIKELY TO BE INCLUDED DURING CONSTRUCTION RATHER THAN BEING RETROFITTED.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
CONDUCT TWO INDEPTH SURVEYS, PREPARE FINAL REPORT AND DISSEMINATE TO THE INDUSTRY.

PROGRAM AREA: OCCUPATIONAL CANCERS

TITLE: CHEMICAL CHARACTERIZATION OF ROOFING ASPHALT FUME

BEGIN DATE: 01/83 END DATE: 09/88 DIV: DPSE

CAN: 433 PROJECT OFFICER: LUNSFORD, ROBERT A

PURPOSE: CHEMICAL CHARACTERIZATION OF ASPHALT FUME FRACTIONS BY IDENTIFICATION AND SEMI-QUANTITATION OF THE CLASSES OF COMPOUNDS, AND PARTICULARLY, MEMBERS OF TOXICOLOGICALLY IMPORTANT CLASSES, WILL HELP IN ASSESSING THE RESULTS OF NCI/DBBS ANIMAL SKIN PAINTING STUDY.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE IDENTIFICATION OF ORGANIC COMPOUNDS IN PETROLEUM ASPHALT FUME FRACTIONS AND REPORT TO PROJECT OFFICER OF DBBS/NCI STUDY.

TITLE: ANALYSIS OF EXHALED BREATH

BEGIN DATE: 10/83 END DATE: 12/86 DIV: DPSE

CAN: 435 PROJECT OFFICER: GLASER, ROBERT A

PURPOSE: A PROTOTYPE SOLID SORBENT DEVICE FOR THE DIRECT COLLECTION OF EXHALED BREATH SAMPLES WILL BE EVALUATED IN A FIELD TEST. THIS WILL PERMIT FURTHER REFINEMENTS TO BE MADE TO ITS DESIGN AND USE. THE SAMPLER WILL PROVIDE A SIGNIFICANT BIO-MONITORING ADVANTAGE IN ORDER TO CONTROL THE UPTAKE OF HAZARDOUS SOLVENTS BY EXPOSED WORKERS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE FINAL REPORT.

PROGRAM AREA: OCCUPATIONAL CANCERS

TITLE: SENSOR DEVELOPMENT

BEGIN DATE: 10/86 END DATE: 09/89 DIV: DPSE

CAN: 447 PROJECT OFFICER: BARTLEY, DAVID L

PURPOSE: RESEARCH WILL BE DIRECTED TOWARDS DEVELOPMENT OF GAS OR VAPOR MONITORS BASED ON BOTH MICRO-ELECTRONIC SURFACE ACOUSTIC WAVE (SAW) SENSORS AND ON COLOR-CHANGING SELECTIVE FILMS ("CHROMO-FILMS").

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE SURFACE ACOUSTIC (SAW) LAB.

TITLE: ANALYTICAL SUPPORT TO DBBS RESEARCH AND IWSB/DSHEFS

BEGIN DATE: 10/85 END DATE: C DIV: DPSE

CAN: 483 PROJECT OFFICER: BELINKY, BARRY R

PURPOSE: ANALYTICAL SUPPORT TO DBBS AND IWSB/DSHEFS WILL BE PROVIDED IN THE AREAS OF (1) INHALATION STUDIES OF TOXIC SUBSTANCES (2) CHEMICAL CHARACTERIZATION OF COMPLEX MIXTURES SUCH AS ASPHALT, DIESEL EMISSIONS, AND NEWSPRINT INKS, AND (3) INDUSTRY-WIDE STUDIES OF DYE WORKERS AND ETHYLENE OXIDE IN HOSPITALS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
ANALYZE DBBS SAMPLES GENERATED BY SKIN EXPOSURE STUDIES. ANALYZE 2000 IWS SAMPLES. ANALYZE 1600 DBBS SAMPLES. DEVELOP THREE SAMPLING AND ANALYTICAL METHODS.

PROGRAM AREA: OCCUPATIONAL CANCERS

TITLE: CONTROL OF PARTICULATE AND GASEOUS AGENTS BY AIR CURTAIN TECHNOLOGY

BEGIN DATE: 10/85 END DATE: 09/88 DIV: DPSE

CAN: 492 PROJECT OFFICER: HAMPL, VLADIMIR

PURPOSE: AIR CURTAIN DESIGN CRITERIA WILL BE DEVELOPED TO IMPROVE CONTROL FOR PROCESSES WHERE CONTAMINANTS ARE EMITTED OVER A LARGE AREA OR WHERE LOCAL EXHAUST IS NOT FEASIBLE. WHILE FOCUSED ON MATERIAL OR PROCESSING HANDLING AND ADHESIVE JOINING, DEVELOPED TECHNOLOGY WILL BE APPLICABLE TO MANY OTHER PROCESSES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DESIGN CRITERIA FOR VAPOROUS EMISSIONS WILL BE COMPLETED AND SUBMITTED TO A JOURNAL AND ACGIH VENTILATION MANUAL. A PARTICULATE EMISSION PROCESS APPLICATION WILL BE SELECTED AND RESEARCH STARTED.

TITLE: DOSE-RESPONSE RELATIONSHIP: LUNG CA/ASBESTOSIS - TREMOLITE ASBESTOS

BEGIN DATE: 10/85 END DATE: 09/88 DIV: DRDS

CAN: 189 PROJECT OFFICER: AMANDUS, HARLAN E

PURPOSE: THIS PROJECT WILL ESTIMATE THE EXPOSURE-RESPONSE CURVE FOR TREMOLITE, AND ASSESS RADIOGRAPHIC CHANGES ATTRIBUTABLE TO VERMICULITE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DETERMINE THE EFFECTS OF VERMICULITE AND TREMOLITE ON MORBIDITY AND MORTALITY AND DOSE-RESPONSE RELATIONSHIP AND SUBMIT REPORT.

PROGRAM AREA: OCCUPATIONAL CANCERS

TITLE: MORTALITY STUDY OF WORKERS EMPLOYED IN DIESEL MINES

BEGIN DATE: 10/85 END DATE: 09/89 DIV: DRDS

CAN: 215 PROJECT OFFICER: GAMBLE, JOHN F

PURPOSE: THIS MORTALITY STUDY OF MINERS EXPOSED TO DIESEL EXHAUST WILL DETERMINE THE RISK OF LUNG CANCER FROM EXPOSURE TO DIESEL EXHAUST.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
BEGIN PERSONNEL/ENVIRONMENTAL DATA RECORD COLLECTION.

TITLE: CASE-CONTROL SURV. TO TEST HYPOTHESES GENERATED BY COMPUTER MAPS

BEGIN DATE: 10/83 END DATE: 09/88 DIV: DSHEFS

CAN: 509 PROJECT OFFICER: DUBROW, ROBERT D

PURPOSE: THIS PROJECT WILL HELP TO BUILD DEATH CERTIFICATE BASED CASE-CONTROL STUDIES AS A NEW, IN-HOUSE SURVEILLANCE CAPABILITY. THESE HYPOTHESIS TESTING ACTIVITIES FACILITATE THE INSTITUTE'S SETTING OF RESEARCH PRIORITIES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE MASSACHUSETTS, MAINE, AND RHODE ISLAND EVALUATION REPORTS.

PROGRAM AREA: OCCUPATIONAL CANCERS

TITLE: INDUSTRYWIDE STUDY OF WORKERS EXPOSED TO 4,4'-METHYLENE DIANILINE

BEGIN DATE: 10/84 END DATE: 09/87 DIV: DSHEFS

CAN: 512 PROJECT OFFICER: BOENIGER, MARK F

PURPOSE: THIS STUDY WILL USE SEVERAL INNOVATIVE TECHNIQUES AND NEW ANALYTICAL METHODS TO SAMPLE FOR MDA. THESE NEW PROCEDURES WILL BE COMPARED TO ROUTINE METHODS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE 100% OF INDEPTH AIR MONITORING SURVEYS AND THE FINAL COMPOSITE INDUSTRIAL HYGIENE REPORT, AND DISSEMINATE TO ALL INVOLVED PARTIES (PUBLISH).

TITLE: INVENTORY OF UNION RECORDS SYSTEMS

BEGIN DATE: 04/83 END DATE: 12/87 DIV: DSHEFS

CAN: 527 PROJECT OFFICER: OKUN, ANDREA H

PURPOSE: THIS PROJECT WILL IDENTIFY UNION RECORDS APPROPRIATE FOR EPIDEMIOLOGIC RESEARCH AND THEREFORE HELP IN PRIORITIZING PROJECTS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE 100% OF ALL DATA RETRIEVAL.

PROGRAM AREA: OCCUPATIONAL CANCERS

TITLE: EPIDEMIOLOGIC METHODS DEVELOPMENT

BEGIN DATE: 10/84 END DATE: C DIV: DSHEFS

CAN: 532 PROJECT OFFICER: BROWN, DAVID P

PURPOSE: THIS EPIDEMIOLOGIC METHODS PROJECT WILL IMPROVE THE OVERALL RESEARCH PROGRAM BEING CONDUCTED AS PART OF THE INDUSTRYWIDE STUDIES PROGRAM BY MAINTAINING STATE-OF-THE-ART METHODS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE THE DIRECT STANDARDIZATION FEATURE OF LTAS AND THE INTERFACE PROGRAMS BETWEEN "DSHEFS" FORMAT AND THE ANALYTICAL PROGRAMS.

TITLE: O-DIANISIDINE AND O-TOLIDINE DYE WORKERS EXPOSURE STUDY

BEGIN DATE: 10/82 END DATE: 03/88 DIV: DSHEFS

CAN: 535 PROJECT OFFICER: HILLS, BRUCE W

PURPOSE: THIS STUDY WILL ASSESS THE PRESENCE OF A BIOLOGICAL MARKER (METABOLITES OF THE DYES) IN THE URINE OF EXPOSED WORKERS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE COLLECTION OF URINE SPECIMENS, ANALYSES FOR MUTAGENICITY AND DYE METABOLITES, AND THE DRAFT FINAL REPORT.

PROGRAM AREA: OCCUPATIONAL CANCERS

TITLE: MORTALITY STUDY OF WORKERS EXPOSED TO HALOWAX

BEGIN DATE: 10/83 END DATE: 09/88 DIV: DSHEFS

CAN: 536 PROJECT OFFICER: WARD, ELIZABETH M

PURPOSE: THIS EPIDEMIOLOGIC STUDY WILL ASSESS THE ASSOCIATION BETWEEN EXPOSURE TO HALOWAX AND THE RISK OF DEVELOPING CANCER.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE 90% OF THE VITAL STATUS FOLLOW-UP AND REQUEST 90% OF THE HOSPITAL RECORDS.

TITLE: LARYNGEAL CANCER INCIDENCE IN WORKERS EXPOSED TO SULFURIC ACID

BEGIN DATE: 09/83 END DATE: 03/88 DIV: DSHEFS

CAN: 537 PROJECT OFFICER: STEENLAND, NELSON K

PURPOSE: THIS EPIDEMIOLOGIC STUDY WILL ASSESS THE ASSOCIATION BETWEEN EXPOSURE TO SULFURIC ACID AND THE RISK OF DEVELOPING LARYNGEAL CANCER.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE THE DATA ANALYSIS, ADJUSTING FOR BOTH SMOKING AND ALCOHOL, AND COMPLETE THE DRAFT FINAL REPORT.

PROGRAM AREA: OCCUPATIONAL CANCERS

TITLE: UPDATE OF COMPLETED COHORT MORTALITY STUDIES

BEGIN DATE: 10/82 END DATE: C DIV: DSHEFS

CAN: 542 PROJECT OFFICER: BROWN, DAVID P

PURPOSE: THESE ARE EPIDEMIOLOGIC STUDIES THAT ASSESS THE ASSOCIATION BETWEEN EXPOSURE AND THE RISK OF DEVELOPING DISEASE (PRIMARILY CANCER).

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE THE DATA ANALYSES FOR ATTAPULGITE CLAY AND VINLY CHLORIDE AND THE DRAFT FINAL REPORTS.

TITLE: MEDICAL, BIOMETRIC AND IH STUDY OF EMERGING PROBLEMS

BEGIN DATE: 10/79 END DATE: C DIV: DSHEFS

CAN: 543 PROJECT OFFICER: HALPERIN, WILLIAM E

PURPOSE: THIS PROJECT WILL ASSESS THE FEASIBILITY OF CONDUCTING EPIDEMIOLOGIC RESEARCH WHICH WILL HELP US PRIORITIZE THE PROGRAM. MANY OF THE STUDIES DONE AS PART OF THIS PROJECT ARE RELEVANT TO OTHER IWSB GOALS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
RESPOND TO FOUR NEW EMERGING PROBLEMS. ASSIST WITH FOUR HEALTH HAZARD EVALUATIONS. COMPLETE REPORTS AND CLOSE OUT SIX FILES.

PROGRAM AREA: OCCUPATIONAL CANCERS

TITLE: EPIDEMIOLOGIC AND INDUSTRIAL HYGIENE SUPPORT OF TSCA-EPA

BEGIN DATE: 10/81 END DATE: C DIV: DSHEFS

CAN: 544 PROJECT OFFICER: HERRICK, ROBERT

PURPOSE: AS PART OF A COLLABORATIVE EFFORT WITH THE EPA, EXTENT OF EXPOSURE ASSESSMENTS WILL BE CONDUCTED ON CHEMICAL EXPOSURES WITH MUTUAL INTEREST TO THE TWO AGENCIES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE COMPOSITE INDUSTRIAL HYGIENE REPORTS FOR MBOCA AND ACRYLATES AND INDEPTH STUDIES FOR 7TH AGENT SELECTED. DISSEMINATE REPORTS TO ALL INVOLVED PARTIES AND PUBLISH.

TITLE: WORKER NOTIFICATION

BEGIN DATE: 03/85 END DATE: C DIV: DSHEFS

CAN: 554 PROJECT OFFICER: SCHULTE, PAUL A

PURPOSE: IT HAS BEEN DETERMINED THAT NOTIFICATION OF WORKERS REGARDING THEIR RISK OF DISEASE SHOULD BE CONDUCTED IN SELECTED EPIDEMIOLOGIC STUDIES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
SELECT FIRST NOTIFICATION POPULATION AND COMPLETE MAILING OF FIRST NOTIFICATION.

PROGRAM AREA: OCCUPATIONAL CANCERS

TITLE: ETHYLENE OXIDE MORTALITY STUDY

BEGIN DATE: 10/82 END DATE: 09/90 DIV: DSHEFS

CAN: 557 PROJECT OFFICER: STEENLAND, NELSON K

PURPOSE: THIS EPIDEMIOLOGIC STUDY WILL ASSESS THE ASSOCIATION BETWEEN EXPOSURE TO ETHYLENE OXIDE AND THE RISK OF DEVELOPING LEUKEMIA.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE CODING OF WORK HISTORIES FOR PLANT 5, CODING OF MASTER FILES FOR PLANTS 13 AND 14, AND SSA FOLLOW-UP FOR PLANTS 8, 9, AND 11.

TITLE: MORTALITY STUDY OF CHEMICAL PLANTS IN KANAWHA VALLEY, WEST VIRGINIA

BEGIN DATE: 10/79 END DATE: 09/89 DIV: DSHEFS

CAN: 560 PROJECT OFFICER: WARD, ELIZABETH M

PURPOSE: THIS EPIDEMIOLOGIC STUDY WILL ASSESS THE ASSOCIATION BETWEEN EXPOSURES IN A LARGE CHEMICAL PLANT AND THE RISK OF DEVELOPING CANCER AND OTHER CHRONIC DISEASES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
SELECT THE SUBCOHORTS FOR THE BUTADIENE AND COAL HYDROGENATION STUDIES AND COMPLETE DATA ABSTRACTION FOR THE TWO SUBCOHORTS.

PROGRAM AREA: OCCUPATIONAL CANCERS

TITLE: INVESTIGATION OF WORKERS EXPOSED TO MBOCA

BEGIN DATE: 10/82 END DATE: 09/88 DIV: DSHEFS

CAN: 572 PROJECT OFFICER: WARD, ELIZABETH M

PURPOSE: THIS STUDY WILL ASSESS THE PRESENCE OF BIOLOGICAL MARKERS (MBOCA IN URINE AND BLADDER CYTOLOGY) IN EXPOSED WORKERS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE THE ANALYSIS OF THE INITIAL SCREENING; COMPLETE THE FINAL REPORT, DISSEMINATE TO ALL INVOLVED PARTIES AND PUBLISH.

TITLE: SUPPORT OF EPA'S ENVIRONMENTAL EPIDEMIOLOGIC PROGRAM

BEGIN DATE: 10/85 END DATE: 06/89 DIV: DSHEFS

CAN: 607 PROJECT OFFICER: SCHULTE, PAUL A

PURPOSE: THIS STUDY WILL ASSESS THE ROLE OF BIOLOGICAL MARKERS AMONG WORKERS WHO HAVE BEEN EXPOSED TO ETHYLENE OXIDE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE REVISED STUDY PLAN AND COLLECT 50% OF SPECIMENS.

PROGRAM AREA: OCCUPATIONAL CANCERS

TITLE: SURVEILLANCE COOPERATIVE AGREEMENTS BETWEEN NIOSH AND STATES (SCANS)

BEGIN DATE: 10/79 END DATE: C DIV: DSHEFS

CAN: 624 PROJECT OFFICER: LALICH, NINA R

PURPOSE: THIS PROJECT TESTS THE ABILITY OF STATES TO DEVELOP AND MAINTAIN OCCUPATIONAL HEALTH AND SAFETY SURVEILLANCE PROGRAMS, THROUGH INFORMATION EXCHANGE AND ROUTINE OCCUPATIONAL HEALTH DATA SUBMISSIONS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT
ANALYSIS STRATEGY, STATE SURVEILLANCE GUIDELINES, SITE VISITS, AND SURVEILLANCE WORKSHOP.

TITLE: JOB/EXPOSURE MATRIX

BEGIN DATE: 10/85 END DATE: C DIV: DSHEFS

CAN: 637 PROJECT OFFICER: SIEBER, WILLIAM K

PURPOSE: COMPUTERIZATION OF AN INDUSTRY/OCCUPATION/HAZARD MATRIX OF MORE THAN 2 MILLION CELLS WILL MAKE READILY AVAILABLE TO RESEARCHERS A TECHNIQUE FOR ASSESSING 1971-1983 CHANGE IN WORKERS' EXPOSURE TO POTENTIAL HAZARDS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DISSEMINATE THE JOB EXPOSURE MATRIX TO POTENTIAL USERS.

PROGRAM AREA: OCCUPATIONAL CANCERS

TITLE: ACCESS TO NOHS DATABASE - PROFILE DEVELOPMENT

BEGIN DATE: 10/78 END DATE: C DIV: DSHEFS

CAN: 662 PROJECT OFFICER: SETA, JOSEPH A

PURPOSE: TREND ANALYSES FOR THE PERIOD SPANNED BY NOHS (1972-74) AND NOES (1981-83) WILL BE ACCOMPLISHED BY COMPARING KEY VARIABLES COMMON TO BOTH SURVEYS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
RESPOND TO REQUESTS FOR NOHS INFORMATION (APPROXIMATELY 200).

TITLE: TRADENAME INGREDIENTS - NATIONAL OCCUPATIONAL EXPOSURE SURVEY (NOES)

BEGIN DATE: 10/77 END DATE: C DIV: DSHEFS

CAN: 663 PROJECT OFFICER: SUNDIN, DAVID S

PURPOSE: THIS PROJECT WILL RESULT IN DEVELOPMENT OF AN UPDATED OCCUPATIONAL HAZARD FILE AS A NECESSARY PREREQUISITE FOR A NATIONAL DATABASE THAT CAN BE USED TO ASSESS INDUSTRY HAZARD CHANGES DURING THE PERIOD 1971-1983.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
CLARIFY APPROXIMATELY 50,000 TRADE NAMED PRODUCTS.

PROGRAM AREA: OCCUPATIONAL CANCERS

TITLE: INDUSTRIAL HYGIENE CHARACTERIZATION OF 1,3-BUTADIENE EXPOSED WORKERS

BEGIN DATE: 10/84 END DATE: 09/88 DIV: DSHEFS

CAN: 675 PROJECT OFFICER: FAJEN, JOHN M

PURPOSE: THIS STUDY WILL CHARACTERIZE THE EXTENT OF EXPOSURE TO THE SUSPECTED CHEMICAL CARCINOGEN, 1, 3-BUTADIENE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE MONOMER AND POLYMER COMPOSITE SURVEY REPORTS. COMPLETE 50% OF END-USERS WALK-THROUGH SURVEYS.

TITLE: REGISTRY OF DIOXIN WORKERS AND MORTALITY STUDY

BEGIN DATE: 10/79 END DATE: 06/88 DIV: DSHEFS

CAN: 685 PROJECT OFFICER: FINGERHUT, MARILYN A

PURPOSE: THIS EPIDEMIOLOGIC STUDY WILL ASSESS THE ASSOCIATION BETWEEN EXPOSURE TO DIOXIN AND THE RISK OF DEVELOPING CANCER, ESPECIALLY SOFT TISSUE SARCOMA.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE THE COHORT MORTALITY ANALYSES USING THE EXPOSURE MATRIX AND THE DRAFT FINAL EPIDEMIOLOGY REPORT.

PROGRAM AREA: OCCUPATIONAL CANCERS

TITLE: QUANTITATIVE RISK ASSESSMENT

BEGIN DATE: 10/70 END DATE: C DIV: DSDTT

CAN: 085 PROJECT OFFICER: MEINHARDT, THEODORE J

PURPOSE: THIS PROJECT PROVIDES FOR THE CONTINUED DEVELOPMENT OF IN-HOUSE EXPERTISE IN THIS AREA. GUIDELINES WILL BE DEVELOPED FOR USE IN FUTURE IN-HOUSE EFFORTS. THESE GUIDELINES WILL CONSIDER: MODEL SELECTION; SELECTION OF PARAMETERS FOR DATA EXTRAPOLATION; AND QUALITY OF DATA TO BE USED IN A RISK ASSESSMENT.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
AT LEAST TWO RISK ASSESSMENTS WILL BE CONDUCTED. CANDIDATES INCLUDE THE FOLLOWING: GLYCOL ETHERS, DIESEL EXHAUST AND BUTADIENE.

PROGRAM AREA: SEVERE OCCUPATIONAL TRAUMATIC INJURIES

TITLE: SAFETY IN HAZARDOUS MATERIALS INCIDENTS

BEGIN DATE: 10/81 END DATE: C DIV: DSR

CAN: 803 PROJECT OFFICER: RONK, RICHARD M

PURPOSE: THIS PROJECT WILL DEVELOP ON-LINE DATABASE AND CRITERIA FOR SELECTION AND USE OF PERSONAL AND EQUIPMENT DECONTAMINATION PROCEDURES FOR EMERGENCY RESPONSE PERSONNEL; AND DETERMINE INFLUENCE OF MAJOR HAZARD PREVENTION STRATEGIES ON OCCUPATIONAL SAFETY AND HEALTH IN CHEMICAL INDUSTRY.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DEVELOP DATA BASE ON MAJOR HAZARD CONTROL. CONDUCT LITERATURE SEARCH AND ON-SITE STUDIES OF EXISTING MAJOR HAZARD CONTROL PROGRAMS.

TITLE: OCCUPATIONAL FATALITY INJURY SURVEILLANCE

BEGIN DATE: 10/84 END DATE: C DIV: DSR

CAN: 805 PROJECT OFFICER: STOUT-WIEGAND, NANCY

PURPOSE: THIS PROJECT WILL IDENTIFY THE NUMBER OF OCCUPATIONAL FATALITIES OCCURRING IN THE NATION THROUGH ESTABLISHMENT OF A NATIONAL OCCUPATIONAL INJURY FATALITY REGISTER.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COLLECT AND AUTOMATE FY86 DEATH CERTIFICATES. MATCH DEATH CERTIFICATES WITH STATE WORKERS' COMPENSATION CASES. PROVIDE GEOGRAPHIC ATLAS OF OCCUPATIONAL INJURY MORTALITY EXPERIENCE.

PROGRAM AREA: SEVERE OCCUPATIONAL TRAUMATIC INJURIES

TITLE: FATAL ACCIDENT CIRCUMSTANCES AND EPIDEMIOLOGY-TECHNICAL ASSISTANCE

BEGIN DATE: 10/83 END DATE: C DIV: DSR

CAN: 807 PROJECT OFFICER: MILLS, GARY R

PURPOSE: THIS PROJECT WILL IDENTIFY PERSONAL, ORGANIZATIONAL, AND CIRCUMSTANTIAL RISK FACTORS CONTRIBUTING TO OCCUPATIONAL FATALITIES AND INJURIES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
MAINTAIN TECHNICAL ASSISTANCE ACTIVITY. REQUEST AND RECEIVE APPROVAL FOR RESEARCH ACTIVITY-ELECTROCUTIONS/CONFINED SPACES. CONDUCT SYMPOSIUM.

TITLE: NEISS OCCUPATIONAL RELATED DATA SHARING

BEGIN DATE: 10/81 END DATE: C DIV: DSR

CAN: 814 PROJECT OFFICER: TRENT, ROGER B

PURPOSE: THIS PROJECT WILL PROVIDE TIMELY DATA ON OCCUPATIONAL INJURIES BY INDUSTRY, OCCUPATION, NATURE, SOURCE, ETC., AND PROVIDE NATIONAL ESTIMATES OF THE MAGNITUDE OF SUCH TRAUMA.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PRODUCE VARIOUS PLANNED AND REQUESTED REPORTS FROM DATA, INCLUDING MONTHLY SUMMARIES. INCORPORATE OCCUPATION AND INDUSTRY CODING. MAKE DECISION TO CONTINUE/TERMINATE BASED ON REPRESENTATIVENESS STUDY.

PROGRAM AREA: SEVERE OCCUPATIONAL TRAUMATIC INJURIES

TITLE: HUMAN MOTOR REACTION TO DANGEROUS MOTIONS

BEGIN DATE: 10/85 END DATE: 09/88 DIV: DSR

CAN: 818 PROJECT OFFICER: ETHERTON, JOHN R

PURPOSE: THIS PROJECT CAN IDENTIFY RISK FACTORS BY EVALUATING HAZARDS INTRODUCED BY THE DEVELOPMENT AND DEPLOYMENT OF NEW MANUFACTURING TECHNOLOGIES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PRESENT PAPER ON HUMAN MOTOR REACTION (HMR) AT SYSTEM SAFETY SOCIETY SYMPOSIUM. COMPLETE PEER, SPRG, HSRB REVIEWS OF PILOT STUDY TO TEST HMR MODEL, AND BEGIN DATA COLLECTION.

TITLE: INTERFACING AND EVALUATION OF ROBOT SAFETY SENSORS

BEGIN DATE: 10/85 END DATE: 09/87 DIV: DSR

CAN: 822 PROJECT OFFICER: COLLINS, JAMES W

PURPOSE: THIS PROJECT WILL DEVELOP RELIABLE SENSORS WHICH WILL STOP MACHINE MOTION DUE TO HUMAN INTRUSION INTO THE WORKING AREA AND SAFE WORK PRACTICES GUIDELINES FOR MAINTENANCE AND SERVICE PERSONNEL FOR PROGRAMMABLE MACHINE SYSTEMS WILL PREVENT WORK-RELATED TRAUMA.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PUBLISH MAINTENANCE WORK PRACTICES GUIDELINE DOCUMENT. PUBLISH RECOMMENDED CRITERIA FOR SENSOR SYSTEMS.

PROGRAM AREA: SEVERE OCCUPATIONAL TRAUMATIC INJURIES

TITLE: EYE AND FACE PERSONAL PROTECTIVE EQUIPMENT

BEGIN DATE: 10/86 END DATE: 09/87 DIV: DSR

CAN: 827 PROJECT OFFICER: CAMPBELL, DONALD L

PURPOSE: THIS PROJECT WILL CONTRIBUTE TO THE DEVELOPMENT OF NATIONAL STANDARDS FOR EYE AND FACE PERSONAL PROTECTIVE EQUIPMENT (E&F PPE).

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
THE DESIGN OF CURRENTLY AVAILABLE PROTECTIVE EYEWEAR WILL BE REVIEWED, AS WILL DATA RELATING TO USE OF E&F PPE. RECOMMENDATIONS WILL BE INPUT TO THE REGULATORY PROCESS THROUGH ESTABLISHED POLICY CHANNELS.

TITLE: FALL HAZARDS ASSOC. WITH ERECTION OF PAINTED STEEL STRUCTURES-PART I

BEGIN DATE: 10/85 END DATE: 09/88 DIV: DSR

CAN: 828 PROJECT OFFICER: STANEVICH, RONALD L

PURPOSE: THIS PROJECT WILL DEVELOP MEASURES FOR REDUCING TRAUMATIC FATALITY/INJURY INCIDENCE IN CONSTRUCTION INVOLVING STEEL STRUCTURES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE DATA COLLECTION VIA CONTRACT AND DRAFT FINAL REPORT.

PROGRAM AREA: SEVERE OCCUPATIONAL TRAUMATIC INJURIES

TITLE: GENERAL SURVEILLANCE

BEGIN DATE: 10/79 END DATE: C DIV: DSR

CAN: 834 PROJECT OFFICER: STOUT-WIEGAND, NANCY

PURPOSE: THIS PROJECT WILL PROVIDE INTEGRATED MANAGEMENT OF DATA SUPPORT SERVICES TO DSR. ALSO, DATA FOR DETERMINING NATIONAL AND STATE OCCUPATIONAL INJURY RESEARCH PRIORITIES WILL BE DEVELOPED.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
THE MOST RECENT DATA FILE FOR EACH INJURY DATA BASE WILL BE ACQUIRED. ONE OR MORE REPORTS DESCRIBING OCCUPATIONAL INJURY PATTERNS IN SPECIFIC INDUSTRIES WILL BE PUBLISHED.

TITLE: SAFE DISTANCE REQUIREMENTS FOR MECHANICAL POWER PRESSES

BEGIN DATE: 10/85 END DATE: 09/87 DIV: DSR

CAN: 843 PROJECT OFFICER: JENSEN, ROGER C

PURPOSE: THIS PROJECT WILL DEVELOP CRITERIA FOR ESTABLISHING SAFE WORKSTATION DESIGN ON MECHANICAL POWER PRESSES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
OBTAIN AND ANALYZE OSHA MECHANICAL POWER PRESS INJURY DATA, COMPLETE TWO PAPERS ON RESEARCH RESULTS FOR PUBLICATION, AND ISSUE RECOMMENDATIONS FOR SAFETY DISTANCE FORMULA.

PROGRAM AREA: SEVERE OCCUPATIONAL TRAUMATIC INJURIES

TITLE: HAND TOOL DEXTERITY IN CPC - PHASE II

BEGIN DATE: 10/85 END DATE: C DIV: DSR

CAN: 844 PROJECT OFFICER: RONK, RICHARD M

PURPOSE: THIS PROJECT WILL DEFINE HUMAN FACTOR ISSUES RELATED TO THE USE OF PPE RESULTING IN THE DEVELOPMENT OF PPE, TOOL, AND TASK INTERFACE CRITERIA.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE STUDENT REPORT ON PHASE II. BEGIN STUDY OF SUIT ENCUMBRANCE.

TITLE: TRAUMA EPIDEMIOLOGY OF OCC HIGHWAY VEHICLE FATALITIES AND INJURIES

BEGIN DATE: 10/86 END DATE: 09/90 DIV: DSR

CAN: 862 PROJECT OFFICER: STOUT-WIEGAND, NANCY

PURPOSE: THIS PROJECT PROVIDES A MEANS TO COORDINATE DSR OCCUPATIONAL HIGHWAY FATALITY AND INJURY RELATED ACTIVITIES WITH NHTSA WITH A VIEW TOWARD FUTURE COORDINATED RESEARCH PROJECTS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
EVALUATE USEFULNESS OF EXISTING DATA BASES IN CHARACTERIZING WORK-RELATED, OVER-THE-ROAD VEHICLE INJURIES AND FATALITIES, AND REPORT TO DIRECTOR, DSR.

PROGRAM AREA: SEVERE OCCUPATIONAL TRAUMATIC INJURIES

TITLE: AGRICULTURAL INJURY SURVEILLANCE SYSTEM

BEGIN DATE: 10/86 END DATE: 09/89 DIV: DSR

CAN: 863 PROJECT OFFICER: TRENT, ROGER B

PURPOSE: THIS PRJECT WILL EVALUATE EXISTING INJURY DATA ON AGRICULTURAL AND RELATED INDUSTRIES, DEVELOP EXISTING DATA INTO A SURVEILLANCE SYSTEM, AND PERFORM ANALYSIS IN SUPPORT OF INTERVENTION TO REDUCE FATALITIES AND SEVERE TRAUMATIC INJURIES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PERFORM ANALYSIS OF HIGH RISK CATEGORIES AND MAKE RECOMMENDATIONS TO DIRECTOR, DSR, ON METHODS FOR IMPROVING AGRICULTURAL INJURY SURVEILLANCE.

TITLE: DISSEMINATION OF FACE

BEGIN DATE: 10/86 END DATE: 09/87 DIV: DSR

CAN: 864 PROJECT OFFICER: MILLS, GARY R

PURPOSE: THIS PROJECT WILL IDENTIFY AND EVALUATE VARIOUS METHODS OF DISSEMINATION OF FACE-RELATED INFORMATION TO ENABLE INTERVENTION STRATEGIES TO BE DEVELOPED THAT REACH INDUSTRY AND LABOR ORGANIZATIONS CONCERNED WITH THE CAUSES OF WORK-RELATED FATALITIES. A PUBLIC SERVICE ANNOUNCEMENT AND FOUR NIOSH ALERTS WILL BE DEVELOPED AND PUBLISHED.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
VARIOUS METHODS OF DISSEMINATING FACE-RELATED FINDINGS WILL BE IDENTIFIED AND EVALUATED. A PUBLIC SERVICE ANNOUNCEMENT WILL BE DEVELOPED CONCERNING THE HAZARDS ASSOCIATED WITH CONFINED SPACES.

PROGRAM AREA: SEVERE OCCUPATIONAL TRAUMATIC INJURIES

TITLE: INVENTORY OF CONFINED SPACES

BEGIN DATE: 04/87 END DATE: 09/88 DIV: DSR

CAN: 869 PROJECT OFFICER: MILLS, GARY R

PURPOSE: THIS PROJECT WILL DEVELOP A GUIDE TO ENABLE EMPLOYERS AND EMPLOYEES TO IDENTIFY CONFINED SPACES THAT ARE NORMALLY LOCATED IN THEIR FACILITIES AND INDUSTRIES. DOCUMENT WILL SUPPORT AND COMPLEMENT OSHA EFFORTS TO DEVELOP CONFINED SPACE STANDARDS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DEVELOP GUIDE TO THE IDENTIFICATION OF CONFINED SPACES.

TITLE: EMS RESPONSE

BEGIN DATE: 10/86 END DATE: 09/87 DIV: DSR

CAN: 877 PROJECT OFFICER: MIDDLETON, DAN C

PURPOSE: THIS PROJECT WILL EVALUATE A COMPUTER DATA BASE OF ALL EMS RESPONSES FOR 1985/86 IN THE STATE OF WEST VIRGINIA.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
THE RESULTS OF THE ANALYSIS OF THE COMPUTERIZED DATABASE WILL BE PUBLISHED. RECOMMENDATIONS CONCERNING PRACTICALITY OF NATIONWIDE APPLICATIONS WILL BE MADE.

PROGRAM AREA: SEVERE OCCUPATIONAL TRAUMATIC INJURIES

TITLE: STUDY OF LINEMAN-RELATED FATALITIES AND INJURIES

BEGIN DATE: 10/86 END DATE: C DIV: DSR

CAN: 878 PROJECT OFFICER: COLLINS, JAMES W

PURPOSE: THIS PROJECT WILL ASSESS AND RANK INJURY RISK FACTORS TO LINEMAN. RISK FACTORS WILL THEN BE SEGREGATED INTO CASUAL COMPONENTS. INTERVENTION STRATEGIES WILL BE DEVELOPED TO COUNTERACT THE CASUAL COMPONENTS AND WILL BE TESTED IN FIELD TRIALS. RESULTS OF FIELD TRIALS WILL BE EVALUATED.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DEVELOP FIELD EVALUATION INSTRUMENT TO DETERMINE RISK FACTOR COMPONENTS; CONDUCT INVESTIGATIONS OF 9 LINEMAN-RELATED ACCIDENTS; AND DEVELOP RESEARCH PLAN, CONDUCT PEER REVIEW, AND FINALIZE PROTOCOL.

TITLE: STUDY OF DOZER-RELATED FATALITIES AND INJURIES

BEGIN DATE: 10/86 END DATE: 09/89 DIV: DSR

CAN: 879 PROJECT OFFICER: STANEVICH, RONALD L

PURPOSE: THIS PROJECT WILL ASSESS AND RANK INJURY RISK FACTORS TO DOZER OPERATORS. RISK FACTORS WILL THEN BE SEGREGATED INTO CASUAL COMPONENTS. INTERVENTION STRATEGIES WILL BE DEVELOPED TO COUNTERACT THE CASUAL COMPONENTS AND WILL BE TESTED IN FIELD TRIALS. RESULTS OF FIELD TRIALS WILL BE EVALUATED.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DEVELOP FIELD EVALUATION INSTRUMENT TO DETERMINE THE RISK FACTOR COMPONENTS; CONDUCT INVESTIGATIONS OF 9 DOZER-RELATED ACCIDENTS; AND DEVELOP RESEARCH PLAN, CONDUCT PEER REVIEW, AND FINALIZE PROTOCOL.

PROGRAM AREA: SEVERE OCCUPATIONAL TRAUMATIC INJURIES

TITLE: CENTER FOR EXCELLENCE IN CONSTRUCTION SAFETY

BEGIN DATE: 09/86 END DATE: 09/89 DIV: DSR

CAN: 882 PROJECT OFFICER: HERRINGTON, GARY B

PURPOSE: THIS PROJECT INITIATES DEVELOPMENT AND IMPLEMENTATION OF ENGINEERING CONTROLS FOR SAFE CONSTRUCTION PRACTICES DURING THE CONCEPT AND DESIGN PHASES. THROUGH THE GRADUATE AND UNDERGRADUATE CIVIL ENGINEERING EDUC. PROCESS, IMPROVED CONCEPTS OF CONSTRUC. PRACTICE WILL BE INTERFACED WITH DESIGN PARAMETERS TO ELIMINATE OR CONTROL WORKER EXPOSURES TO HAZARDS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DEVELOP INJURY DATA RELATIVE TO DESIGN PROBLEMS AND HAZARDS AND IDENTIFY APPROPRIATE RESEARCH AREAS. DEVELOP CURRICULA IN CONSTRUCTION SAFETY FOR ENGINEERING STUDENTS.

TITLE: IDENTIFICATION OF RISK FACTORS FOR ROBOTIC WORKSTATIONS

BEGIN DATE: 10/86 END DATE: 09/89 DIV: DSR

CAN: 884 PROJECT OFFICER: ETHERTON, JOHN R

PURPOSE: THIS PROJECT WILL IDENTIFY WORKSTATION DESIGN FACTORS WHICH CONTRIBUTE TO A HIGH RISK OF FATALITY AND SEVERE TRAUMATIC INJURY AT ROBOTIC WORKSTATIONS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
IDENTIFY FACTORS WHICH INCREASE RISK OF INJURY VIA ANALYSIS OF ROBOT-RELATED INJ & EXPOSURE DATA & INFO ON WORKSTATION DESIGN COLLECTED DURING FACTORY SITE VISITS; SUBMIT RFC FOR DIVISION OF SAFE TEACH PENDANT.

PROGRAM AREA: SEVERE OCCUPATIONAL TRAUMATIC INJURIES

TITLE: COMPUTER PROGRAM FOR IDENTIFYING SHORING/SLOPING REQUIREMENT OF TRENCHES

BEGIN DATE: 10/86 END DATE: 09/88 DIV: DSR

CAN: 885 PROJECT OFFICER: HERRINGTON, GARY B

PURPOSE: THIS PROJECT WILL DEVELOP, USING NIOSH/NBS GUIDELINES, SOFTWARE FOR A MICROCOMPUTER FOR USE IN EVALUATING THE FEASIBILITY AND COST OF VARIOUS SHORING PROTECTION SYSTEMS BEFORE CONSTRUCTION BEGINS. THE PROGRAM CAN BE UTILIZED IN THE FIELD AND WOULD BE ESPECIALLY USEFUL TO SMALLER FIRMS WHO MAY LACK EXPERTISE IN THIS AREA.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
CONDUCT LITERATURE REVIEW TO IDENTIFY CURRENT SHORING PRACTICES/SYSTEMS AND KEY STRUCTURAL DESIGN PARAMETERS. COMPLETE ENGR. ANALYSIS COMPONENT OF AN INTERACTIVE SHORING DESIGN PROGRAM FOR IBM-COMPATIBLE SYSTEMS

PROGRAM AREA: OCCUPATIONAL CARDIOVASCULAR DISEASES

TITLE: CELLULAR AND MOLECULAR CARDIAC TOXICOLOGY

BEGIN DATE: 10/86 END DATE: 09/89 DIV: DBBS

CAN: 285 PROJECT OFFICER: TORAASON, MARK

PURPOSE: THIS PROJECT WILL DEVELOP AND TEST IN VITRO METHODS AS ALTERNATIVES TO USING WHOLE ANIMALS FOR SCREENING POTENTIAL CARDIOTOXINS, AND FOR EVALUATING MECHANISMS OF ACTION OF KNOWN CARDIOTOXINS. METHODS DEVELOPED WILL BE SUITABLE FOR ASSESSING HEART FUNCTION IN ADULT AS WELL AS FETAL AND NEONATAL CARDIAC TISSUE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DEVELOP METHODS FOR ASSESSING CARDIAC FUNCTION IN CULTURED HEART CELLS, AND FOR MEASURING ELECTRON TRANSPORT AND OXIDATIVE PHOSPHORYLATION IN HEART MITOCHONDRIA.

TITLE: LABORATORY COMPARISON OF HEAT STRESS DOSIMETER

BEGIN DATE: 10/85 END DATE: 09/87 DIV: DBBS

CAN: 304 PROJECT OFFICER: BROWN, WILLIAM D

PURPOSE: THIS PROJECT WILL DEVELOP A PERSONAL HEAT STRESS DOSIMETER WHICH PROVIDES ACCURATE DATA ON HEAT LOAD AND PHYSIOLOGICAL STRAIN TO USE AS A TOOL FOR THE STUDY OF THE RELATIONSHIP BETWEEN HEAT STRESS AND CARDIOVASCULAR DISEASE AND FOR THE STUDY OF METHODS OF PREVENTING CARDIOVASCULAR DISEASE DUE TO HEAT STRESS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE SUBJECT SELECTION AND TESTING, COMPARE DATA COLLECTED WITH DOSIMETER TO THAT COLLECTED WITH OTHER INSTRUMENTS, AND SUBMIT REPORT OF FINDINGS.

PROGRAM AREA: OCCUPATIONAL CARDIOVASCULAR DISEASES

TITLE: OCCUPATIONAL CARDIAC TOXICITY

BEGIN DATE: 10/80 END DATE: 09/87 DIV: DBBS

CAN: 339 PROJECT OFFICER: LYNCH, DENNIS W

PURPOSE: THIS PROJECT WILL INVESTIGATE ETIOPATHOGENIC MECHANISMS OF CHEMICALLY-INDUCED CARDIOVASCULAR DISEASE WHICH NEED TO BE UNDERSTOOD TO DEVELOP EFFECTIVE INTERVENTION STRATEGIES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
ANIMAL EXPOSURES TO ALLYLAMINE AND ACROLEIN WILL BE COMPLETED. CS 2 DATA ANALYSIS WILL BE COMPLETED AND A MANUSCRIPT PREPARED. THE DEVELOPMENTAL CARDIAC HYPERSENSITIVITY STUDY WILL BE COMPLETED.

TITLE: CASE-CONTROL MORTALITY STUDY OF NITROGLYCERIN-EXPOSED WORKERS

BEGIN DATE: 10/84 END DATE: 09/89 DIV: DSHEFS

CAN: 577 PROJECT OFFICER: STAYNER, LESLIE T

PURPOSE: THIS EPIDEMIOLOGIC STUDY WILL ASSESS THE ASSOCIATION BETWEEN EXPOSURE TO NITROGLYCERIN AND THE RISK OF DEVELOPING CARDIOVASCULAR DISEASE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE THE DRAFT FINAL REPORT OF THE COHORT MORTALITY STUDY AND THE DRAFT EXPOSURE MATRIX.

PROGRAM AREA: OCCUPATIONAL CARDIOVASCULAR DISEASES

TITLE: MORTALITY SURVEILLANCE OF OCCUPATION AND INDUSTRY

BEGIN DATE: 10/80 END DATE: C DIV: DSHEFS

CAN: 633 PROJECT OFFICER: BURNETT, CAROL A

PURPOSE: BY THE LATTER PART OF THIS DECADE, OCCUPATIONAL HEALTH RESEARCHERS WILL HAVE THE DATA RESOURCES NECESSARY TO MONITOR U.S. OCCUPATIONAL AND INDUSTRIAL MORTALITY DIFFERENTIALS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE MONTHLY VITAL STATISTICS REPORT AND CONDUCT I/O CODER TRAINING.

PROGRAM AREA: DISORDERS OF REPRODUCTION

TITLE: BEHAVIORAL TERATOLOGY OF ALCOHOL SOLVENTS

BEGIN DATE: 10/82 END DATE: 09/88 DIV: DBBS

CAN: 276 PROJECT OFFICER: BRIGHTWELL, W S

PURPOSE: THIS PROJECT WILL EVALUATE REPRODUCTIVE HAZARDS OF ALCOHOL SOLVENTS USING STANDARD TERATOLOGICAL TECHNIQUES AND NEUROBEHAVIORAL INDICES OF TOXICITY, AND RELATE EFFECTS TO CHAIN-LENGTH FEATURES OF THE CHEMICALS UNDER TEST.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE TESTING OF FINAL TWO ALCOHOLS FOR MORPHOLOGICAL TERATOGENICITY, INITIATE TESTING OF THE FINAL ALCOHOL FOR BEHAVIORAL TERATOGENICITY, AND REPORT ON RESULTS OF PREVIOUSLY TESTED ALCOHOLS.

TITLE: SEMEN ANALYSIS IN ANIMAL, LONGITUDINAL AND FIELD STUDIES

BEGIN DATE: 10/84 END DATE: 09/88 DIV: DBBS

CAN: 307 PROJECT OFFICER: SCHRADER, STEVEN M

PURPOSE: THIS PROJECT WILL EVALUATE THE INTRA- AND INTERVARIATION OF SEMEN CHARACTERISTICS USING THE LONGITUDINAL STUDY OF HUMAN SEMEN CHARACTERISTICS. METHODS OF ANALYSIS OF SEMINAL PARAMETERS ARE BEING DEVELOPED SUCH AS OSMOLARITY, VISCOSITY, AND BIOCHEMICAL MARKERS. OCCUAPTIONAL FIELD STUDIES WILL EVALUATE POTENTIAL OF MALE REPRODUCTIVE HAZARDS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
EVALUATE THE DATA FROM THE LONGITUDINAL STUDY OF HUMAN SEMEN. PARTICIPATE IN FIELD SURVEYS APPLYING SEMEN ANALYSIS METHODS. INVESTIGATE CORRELATIONS BETWEEN BIOCHEMICAL MARKERS AND SEMEN QUALITY.

PROGRAM AREA: DISORDERS OF REPRODUCTION

TITLE: INHALATION REPRODUCTIVE AND DEVELOPMENTAL TOXICITY TESTING

BEGIN DATE: 10/84 END DATE: 09/89 DIV: DBBS

CAN: 308 PROJECT OFFICER: SCHRADER, STEVEN M

PURPOSE: THIS PROJECT PERMITS EVALUATION OF REPRODUCTIVE AND DEVELOPMENTAL TOXICITY OF SIGNIFICANT INDUSTRIAL CHEMICALS USING AN OCCUPATIONALLY RELEVANT ROUTE OF EXPOSURE AND WILL PROVIDE RESPONSE DATA OVER A RANGE OF CONCENTRATIONS FROM NONTOXIC TO TOXIC FOR THE EXPOSED ADULT ANIMALS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
USING THREE CONCENTRATIONS PER CHEMICAL, COMPLETE REPRODUCTIVE/ DEVELOPMENTAL TOXICITY ASSAYS FOR THREE CHEMICALS TO ASSIST IN RISK ASSESSMENT.

TITLE: METABOLISM AND EXCRETION STUDIES OF BIS(2-METHOXYETHYL)ETHER

BEGIN DATE: 10/84 END DATE: 09/87 DIV: DBBS

CAN: 312 PROJECT OFFICER: RICHARDS, DONALD E

PURPOSE: THIS PROJECT STUDIES THE METABOLISM OF BIS(2-METHOXYETHYL)ETHER, AN APROTIC GLYCOL ETHER, TO DETERMINE THE MECHANISM OF ACTION OF THIS COMPOUND AND OF SIMILAR COMPOUNDS WHICH EXERT TESTICULAR AND EMBRYONIC TOXICITY.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE EVALUATION OF ENZYME INDUCTION AND INHIBITION EFFECTS ON THE LEVEL OF METHOXYACETIC ACID, THE REPRODUCTIVE TOXIN, FORMED AS A BIOTRANSFORMATION PRODUCT OF DIGLYME.

PROGRAM AREA: DISORDERS OF REPRODUCTION

TITLE: PRIORITIZING CHEMICALS FOR REPRODUCTIVE TOXICITY TESTING

BEGIN DATE: 10/80 END DATE: 09/87 DIV: DBBS

CAN: 340 PROJECT OFFICER: SCHRADER, STEVEN M

PURPOSE: THIS PROJECT PROVIDES INITIAL DATA FOR OTHERWISE UNTESTED CHEMICALS WHICH CAN BE USED TO ESTABLISH PRIORITIES WARRANTED FOR CONVENTIONAL REPRODUCTIVE OR DEVELOPMENTAL TOXICITY TESTING. IT ALSO PROVIDES A MECHANISM FOR INEXPENSIVELY PERFORMING COMPARATIVE STUDIES OF MEMBERS OF A CHEMICAL CLASS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PUBLISH PAPERS FROM THE WORKSHOP ON THE CHERNOFF/KAVLOCK TEST HELD AT TAFT LABORATORIES ON MAY 20-21, 1986, AND PRESENT AN EVALUATION OF THE TEST TO THE NTP BOARD OF SCIENTIFIC COUNSELORS.

TITLE: EVALUATION OF DROSOPHILA FOR TERATOGEN SCREENING

BEGIN DATE: 10/81 END DATE: 03/88 DIV: DBBS

CAN: 344 PROJECT OFFICER: LYNCH, DENNIS W

PURPOSE: THIS PROJECT WILL RESULT IN THE DEVELOPMENT AND EVALUATION OF A TEST SYSTEM USING DROSOPHILA MELANOGASTER TO SCREEN CHEMICALS FOR POTENTIAL AS MAMMALIAN TERATOGENS; A TOTAL OF 90 CHEMICALS WILL BE USED IN THE STUDY.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE 75 TO 90 SCHEDULED TESTS. EACH TEST WILL PROVIDE DATA ON 200+ FLIES FOR EACH OF SIX CONCENTRATIONS OF TEST CHEMICAL.

PROGRAM AREA: DISORDERS OF REPRODUCTION

TITLE: EPIDEMIOLOGIC STUDY OF RADIOFREQUENCY HEATER OPERATORS

BEGIN DATE: 10/84 END DATE: 09/90 DIV: DBBS

CAN: 358 PROJECT OFFICER: COX, CLINTON

PURPOSE: THIS PROJECT WILL DETERMINE IF AN ASSOCIATION BETWEEN RADIOFREQUENCY RADIATION AND ADVERSE REPRODUCTIVE OUTCOMES AND REDUCED SEMEN QUALITY IN FEMALE AND MALE OPERATORS, RESPECTIVELY, EXIST AND, IF SO, TO WHAT DEGREE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE DATA COLLECTION FOR MALE STUDY; CONDUCT FIELD SURVEYS AT TWO PLANTS FOR FEMALE STUDY.

TITLE: EVALUATION OF BODY CURRENTS AND ABSORBED POWER FROM RF FIELDS

BEGIN DATE: 10/86 END DATE: 09/87 DIV: DBBS

CAN: 363 PROJECT OFFICER: MOSS, C E

PURPOSE: THIS PROJECT WILL DEVELOP INSTRUMENTATION AND MEASUREMENT TECHNIQUES TO QUANTIFY BODY CURRENTS INDUCED IN WORKERS EXPOSED TO LOW FREQUENCY RF SOURCES. THE BODY CURRENT MEASUREMENTS WILL THEN BE RELATED TO ABSORBED ENERGY RATES, INCIDENT FIELDS AND POTENTIAL ADVERSE HEALTH EFFECTS IN EXPOSED WORKERS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DEVELOP PROTOTYPE INSTRUMENT TO MEASURE BODY CURRENTS INDUCED BY LOW FREQUENCY RF SOURCES; DETERMINE RELATIONSHIP BETWEEN REACTIVE AND RADIATED FIELDS, BODY CURRENTS AND ABSORBED ENERGY RATE.

PROGRAM AREA: DISORDERS OF REPRODUCTION

TITLE: REPRODUCTIVE EFFECTS OF LOW FREQUENCY RF RADIATION IN RATS

BEGIN DATE: 10/83 END DATE: 09/91 DIV: DBBS

CAN: 368 PROJECT OFFICER: LARY, JOSEPH M

PURPOSE: THIS PROJECT WILL EVALUATE THE RISK OF EXPOSURE TO LOW FREQUENCY RF RADIATION AND CONTRIBUTE TO A DETERMINATION OF SAFE CONDITIONS FOR OCCUPATIONAL EXPOSURE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE DEVELOPMENTAL STUDY TO DETERMINE PROCEDURE FOR MEASURING ANIMAL TEMPERATURES AND SPECIFY EXPOSURE CONDITIONS FOR THE FEMALE AND MALE STUDIES.

TITLE: CONTROL OF ANESTHETIC GASES IN DENTAL OPERATORIES

BEGIN DATE: 10/86 END DATE: 03/89 DIV: DPSE

CAN: 405 PROJECT OFFICER: MCGLOTHLIN, JAMES D

PURPOSE: THE PROJECT WILL DEVELOP/RECOMMEND CONTROLS FOR REDUCING THE CONSISTENT OVER EXPOSURES TO ANESTHETIC GASES WHICH HETAB HAS OBSERVED IN DENTAL OPERATORIES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
IDENTIFY EXISTING CONTROL DESIGNS AND HOLD PEER REVIEW.

PROGRAM AREA: DISORDERS OF REPRODUCTION

TITLE: MONITORING REPRODUCTIVE OUTCOMES

BEGIN DATE: 10/83 END DATE: 09/88 DIV: DSHEFS

CAN: 506 PROJECT OFFICER: SALG, JOYCE A

PURPOSE: THIS PROJECT WILL ESTABLISH A LIMITED FLOW OF BIRTH AND FETAL DEATH DATA TO DSHEFS. THESE DATA WILL BE USED TO SUPPORT THE MEASUREMENT OF SELECTED REPRODUCTIVE OUTCOMES AND THE SETTING OF PRIORITIES FOR NIOSH RESEARCH.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE REPORTS ANALYZING THE RELATIONSHIP BETWEEN (1) PATERNAL EMPLOYMENT AND CONGENITAL MALFORMATIONS AND (2) MATERNAL EMPLOYMENT AND LOW BIRTH WEIGHT.

TITLE: REPRODUCTIVE STUDY OF FEMALE VIDEO DISPLAY TERMINAL (VDT) OPERATORS

BEGIN DATE: 10/84 END DATE: 09/89 DIV: DSHEFS

CAN: 687 PROJECT OFFICER: SCHNORR, TERESA M

PURPOSE: THIS EPIDEMIOLOGIC STUDY WILL ASSESS THE ASSOCIATION BETWEEN WORKING WITH VIDEO DISPLAY TERMINALS AND THE RISK OF DEVELOPING ADVERSE REPRODUCTIVE OUTCOMES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
AWARD CONTRACT FOR DATA COLLECTION AND COMPLETE TWO-THIRDS OF THE STUDY INTERVIEWS.

PROGRAM AREA: NEUROTOXIC DISORDERS

TITLE: NEUROTOXICITY OF ALIPHATIC CARBON SOLVENTS

BEGIN DATE: 10/83 END DATE: 09/88 DIV: DBBS

CAN: 247 PROJECT OFFICER: RUSSO, JOHN M

PURPOSE: THIS PROJECT EXAMINES RELATION OF ALIPHATIC HYDROCARBON CHAIN LENGTH TO SEVERITY OF BEHAVIORAL EFFECT IN TERMS OF RATING POTENTIAL NEUROTOXIC HAZARDS OF THIS CHEMICAL CLASS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE BEHAVIORAL (STARTLE AND ACTIVITY) TESTING OF ANIMAL GROUPS, AND SUBMIT REPORT ON TWO SOLVENTS IN TWO SPECIES.

TITLE: METHODOLOGIES FOR WORKSITE NEUROTOXICITY EVALUATIONS

BEGIN DATE: 10/83 END DATE: 09/88 DIV: DBBS

CAN: 248 PROJECT OFFICER: ANGER, W K

PURPOSE: THIS PROJECT PROVIDES AN ASSESSMENT OF SCREENING, DIAGNOSTIC, AND MONITORING TESTS FOR BEHAVIORAL/NEUROLOGICAL DYSFUNCTION TO BE USED IN WORKSITE RESEARCH AND HAZARD ASSESSMENT.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
FINALIZE PROTOCOL FOR OBTAINING RELIABILITY AND VALIDITY TEST MEASURES FOR COMPUTER-BASED AND OTHER NEUROBEHAVIORAL SCREENING/DIAGNOSTIC/MONITORING TEST BATTERIES, AND PARTICIPATE IN INTL. RELIABILITY TESTS.

PROGRAM AREA: NEUROTOXIC DISORDERS

TITLE: NEUROTOXICITY FROM EXPOSURES TO HEAVY METALS

BEGIN DATE: 10/83 END DATE: 12/89 DIV: DBBS

CAN: 249 PROJECT OFFICER: ANGER, W K

PURPOSE: THIS PROJECT PROVIDES NEUROBEHAVIORAL ASSESSMENT OF WORKERS IN OCCUPATIONS OR INDUSTRIES WITH CHRONIC EXPOSURES TO SELECT HEAVY METALS WITH KNOWN NEUROTOXIC PROPERTIES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
OBTAIN PROTOCOL APPROVALS, AND FORMULATE OPTIONS FOR REALIZING PROJECT OBJECTIVES, AND CONSIDER VIABILITY OF PROJECT IN LIGHT OF PROGRAM PRIORITIES.

TITLE: NEUROBEHAVIORAL EFFECTS FROM SINGLE/MIXED SPRAY PAINT AGENTS

BEGIN DATE: 10/78 END DATE: 06/88 DIV: DBBS

CAN: 272 PROJECT OFFICER: DICK, ROBERT B

PURPOSE: THIS PROJECT INVESTIGATES NEUROBEHAVIORAL EFFECTS OF ACUTE EXPOSURES TO KETONE SOLVENTS IN HUMAN SUBJECTS AND RELATES RESULTS TO ADEQUACY OF PELS AND FORMULAE FOR RATING COMBINATION EXPOSURES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE SUBJECT TESTING OF MIBK/MEK EXPOSURES; INITIATE DATA ANALYSIS; AND REPORT RESULTS OF ACETONE/MEK EXPOSURES.

PROGRAM AREA: NEUROTOXIC DISORDERS

TITLE: NEUROTOXICITY OF ETHYLENE AND PROPYLENE OXIDE (TERMINATION)

BEGIN DATE: 10/86 END DATE: 09/88 DIV: DBBS.

CAN: 277 PROJECT OFFICER: SETZER, JAMES V

PURPOSE: PRIMATES, PREVIOUSLY EXPOSED TO ETHYLENE OXIDE OR PROPYLENE OXIDE AND SERIALLY TESTED FOR NEUROFUNCTIONAL DEFICITS, WILL BE FURTHER EVALUATED FOR DELAYED NERVOUS SYSTEM IMPAIRMENT/RECOVERY USING CORRELATIVE NEURODIAGNOSTIC AND NEUROHISTOLOGICAL TECHNIQUES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
CONDUCT NEURODIAGNOSTIC TESTING AND PREPARE ANIMALS FOR NEUROHISTOLOGICAL EVALUATION.

TITLE: AN ASSESSMENT OF THE EFFECTIVENESS OF OSHA'S LEAD STANDARD

BEGIN DATE: 10/86 END DATE: 09/87 DIV: DSHEFS

CAN: 515 PROJECT OFFICER: SELIGMAN, PAUL J

PURPOSE: THIS PROJECT SEEKS TO EVALUATE THE EFFECTIVENESS OF THE OSHA LEAD STANDARD. DATA WILL BE OBTAINED TO INDICATE WHETHER REGULATION AND ITS SUPPORTING ACTIVITIES HAVE BEEN SUCCESSFUL IN CONTROLLING, REDUCING, AND OR ELIMINATING OCCUPATIONAL LEAD EXPOSURES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
TO ASSESS THE IMPACT OF THE OSHA LEAD STANDARD SINCE IT BECAME LAW.

PROGRAM AREA: NEUROTOXIC DISORDERS

TITLE: DIOXIN MORBIDITY AND REPRODUCTIVE STUDY OF U.S. CHEMICAL WORKERS

BEGIN DATE: 10/84 END DATE: 09/90 DIV: DSHEFS

CAN: 686 PROJECT OFFICER: SWEENEY, MARIE HARING L

PURPOSE: THIS EPIDEMIOLOGIC STUDY WILL ASSESS THE ASSOCIATION BETWEEN EXPOSURE TO DIOXIN AND THE RISK OF DEVELOPING DISEASE, INCLUDING NEUROLOGIC DISEASE, REPRODUCTIVE DISORDERS, AND OTHERS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE INTERVIEWS AND EXAMINATIONS FOR PHASE I AND SUBMIT OMB PACKAGE FOR REVIEW.

PROGRAM AREA: NOISE-INDUCED HEARING LOSS

TITLE: MONITORING OF INDUSTRIAL HEARING LOSS

BEGIN DATE: 10/86 END DATE: 09/88 DIV: DBBS

CAN: 352 PROJECT OFFICER: DUNN, DEREK E

PURPOSE: THIS PROJECT WILL PROVIDE AN ESTIMATE OF THE AMOUNT OF HEARING LOSS IN GEOGRAPHICALLY DISTINCT POPULATIONS BOTH WITH AND WITHOUT INDUSTRIAL NOISE EXPOSURE. IT WILL ALSO PROVIDE A DATABASE TO EVALUATE PREDICTORS OF HEARING CONSERVATION PROGRAM EFFECTIVENESS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
ASSIST NCHS IN ESTABLISHING PROTOCOL FOR AUDIOMETRIC TESTING AND ANALYSES OF OCCUPATIONAL DATA IN HANES III. REVIEW AND EDIT WHO DOCUMENT ON NOISE AND VIBRATION.

TITLE: CONSTANT NOISE POWER SPECTRUM: AUDITORY EFFECTS

BEGIN DATE: 09/85 END DATE: 09/87 DIV: DBBS

CAN: 353 PROJECT OFFICER: DUNN, DEREK E

PURPOSE: THIS PROJECT WILL EVALUATE THE HAZARDOUS EFFECTS OF IMPULSE NOISE RELATIVE TO CONTINUOUS NOISE OF THE SAME POWER SPECTRUM. THIS WILL PERMIT DETERMINING WHETHER THE TEMPORAL CHARACTERISTICS OF IMPULSE NOISE REQUIRE EXTRA PRECAUTIONS WHEN PROTECTING THE EAR FROM NOISE-INDUCED HEARING LOSS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COLLECT AND ANALYZE HEARING DATA OBTAINED FROM NOISE EXPOSED CHINCHILLAS. SUBMIT REPORT FOR REVIEW.

PROGRAM AREA: NOISE-INDUCED HEARING LOSS

TITLE: HEARING PROTECTOR EFFECTS ON COMMUNICATION

BEGIN DATE: 09/86 END DATE: 09/88 DIV: DBBS

CAN: 362 PROJECT OFFICER: LEMPERT, BARRY L

PURPOSE: THIS PROJECT WILL PROVIDE SPEECH TEST RESULTS WHICH INDICATE THE EFFECT OF HEARING PROTECTORS ON SPEECH DISCRIMINATION FOR INDUSTRIAL WORKERS EXPOSED TO HIGH LEVELS OF NOISE. THESE RESULTS WILL ASSIST IN THE DETERMINATION OF APPROPRIATE HEARING PROTECTORS FOR INDUSTRIAL WORKERS SO THAT USE OF THE DEVICES WILL BE MORE ACCEPTABLE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DEVELOP PROTOCOL TO STUDY EFFECTS OF HEARING PROTECTORS ON COMMUNICATION AND CONDUCT PROJECT PEER REVIEW.

PROGRAM AREA: DERMATOLOGICAL CONDITIONS

TITLE: MOUSE EPIDERMAL CELLS FOR DETECTING CONTACT ALLERGENS

BEGIN DATE: 10/86 END DATE: 10/89 DIV: DBBS

CAN: 289 PROJECT OFFICER: SUSTEN, ALLAN S

PURPOSE: THIS PROJECT WILL EVALUATE THE FEASIBILITY OF A MOUSE MODEL TO IDENTIFY CONTACT ALLERGENS AND COMPOUNDS WHICH MODULATE THE IMMUNE RESPONSE. IT WILL PROVIDE BETTER INSIGHTS INTO UNDERSTANDING IMMUNE REGULATION.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE PROJECT PROTOCOL AND SOPS. SELECT PEER REVIEW PANEL.

TITLE: PERCUTANEOUS ABSORPTION CHARACTERISTICS OF OCCUPATIONAL CHEMICALS

BEGIN DATE: 10/84 END DATE: 10/88 DIV: DBBS

CAN: 309 PROJECT OFFICER: SUSTEN, ALLAN S

PURPOSE: THIS PROJECT WILL PROVIDE IMPROVED METHODOLOGIES FOR STUDYING PERCUTANEOUS ABSORPTION OF VOLATILE CHEMICALS AND FOR EVALUATING HEALTH RISKS FROM THIS ROUTE OF ENTRY. THE PLANNED SYMPOSIUM WILL ADDRESS JOB-RELATED AND CHEMICAL FACTORS AFFECTING DERMAL ABSORPTION AND REVIEW THE BENEFITS OF PROPOSED AND EXISTING INTERVENTION STRATEGIES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
SUBMIT REPORT TO O.D., DBBS, SUMMARIZING RESULTS OF MDEET AND BENZENE STUDIES. SUBMIT REPORT TO O.D. SUMMARIZING STATUS OF PLANNED SYMPOSIUM.

PROGRAM AREA: DERMATOLOGICAL CONDITIONS

TITLE: SAMPLING AND ANALYSIS FOR ALDEHYDES

BEGIN DATE: 10/82 END DATE: 12/86 DIV: DPSE

CAN: 430 PROJECT OFFICER: KENNEDY, EUGENE R

PURPOSE: THIS PROJECT WILL DEVELOP AIR-MONITORING METHODS FOR SPECIFIC ALDEHYDES USING THE CHEMISTRY OF THEIR CONVERSION TO OXAZOLIDINES FOR SPECIATION AND QUANTITATION.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE REPORT ON ALDEHYDE RESEARCH METHODS RESEARCH.

TITLE: CPC INFORMATION COLLECTION/DISSEMINATION

BEGIN DATE: 10/84 END DATE: 09/87 DIV: DSR

CAN: 774 PROJECT OFFICER: RODER, MICHAEL M

PURPOSE: THIS PROJECT WILL ESTABLISH A CPC PERMEATION DATABASE ON AN IBM PC AT USING DBASE III. DATA WILL BE MADE AVAILABLE ELECTRONICALLY FOR DIRECT ACCESS BY OUTSIDE SOURCES OR BY IN-HOUSE SEARCH TO ANSWER INQUIRIES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE CHEMICAL PROTECTIVE CLOTHING (CPC) DATABASE AND EVALUATE DISSEMINATION OPTIONS; PUBLISH CPC DECISION LOGIC AND TRANSMIT TO OSHA, EPA, ASTM, CEH, ATSDR, AND NTIS.

PROGRAM AREA: DERMATOLOGICAL CONDITIONS

TITLE: DECONTAMINATION AND REUSE OF CPC

BEGIN DATE: 10/85 END DATE: 03/87 DIV: DSR

CAN: 788 PROJECT OFFICER: BERARDINELLI, STEPHEN P

PURPOSE: THIS PROJECT WILL DEVELOP METHODS FOR LIQUID DECONTAMINATION AND APPLY THESE METHODS TO DECONTAMINATION EFFECTIVENESS EVALUATIONS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DURING FY86, EXPERIMENTAL WORK, STATISTICAL ANALYSIS OF THE DATA, AND FINAL REPORT WERE ALL COMPLETED. A FINAL DECON AND REUSE REPORT WILL BE WRITTEN, PEER REVIEWED, THEN SUBMITTED FOR PUBLICATION IN FY87.

TITLE: SIMPLE BREAKTHROUGH TEST EVALUATION

BEGIN DATE: 10/86 END DATE: 09/88 DIV: DSR

CAN: 813 PROJECT OFFICER: RODER, MICHAEL M

PURPOSE: THIS PROJECT WILL DEVELOP A METHOD TO EASILY OBTAIN THE BREAKTHROUGH TIME OF CHEMICALS THROUGH PROTECTIVE CLOTHING WITHOUT REQUIRING SOPHISTICATED ANALYTICAL EQUIPMENT AND EXPERTISE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
INVESTIGATE COLORIMETRIC METHOD ACCURACY. EVALUATE FEASIBILITY OF EASILY CALIBRATED NON-CHEMICAL SENSORS TO MEASURE BREAKTHROUGH.

PROGRAM AREA: DERMATOLOGICAL CONDITIONS

TITLE: CPC IN OCCUPATIONAL HEALTH

BEGIN DATE: 10/86 END DATE: 09/87 DIV: DSR

CAN: 816 PROJECT OFFICER: BERARDINELLI, STEPHEN P

PURPOSE: THIS PROJECT WILL DISSEMINATE INFORMATION ON CPC AT NATIONAL AND INTERNATIONAL MEETINGS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PRESENT TECHNICAL INFORMATION TO SAFETY/HEALTH PROFESSIONS AT CONFERENCES/MEETINGS. PUBLICATION OF 1 CONFERENCE MEETING PRESENTATION IS ANTICIPATED. FIVE PRESENTATIONS ARE PLANNED.

TITLE: SEMI-AUTOMATIC VAPOR PERMEATION TEST SYSTEM

BEGIN DATE: 10/86 END DATE: 09/89 DIV: DSR

CAN: 823 PROJECT OFFICER: BERARDINELLI, STEPHEN P

PURPOSE: PROJECT WILL PERMIT CONSTRUCTION AND PRELIMINARY EVALUATION OF A SEMI-AUTOMATED SYSTEM TO MONITOR AND EVALUATE VAPOR PERMEATION THROUGH CPC.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
THE TEST SYSTEM WILL BE CONSTRUCTED IN FY 87 AND INITIALLY EVALUATED.

PROGRAM AREA: PSYCHOLOGICAL DISORDERS

TITLE: OCCUPATIONAL INCIDENCE OF STRESS DISORDERS

BEGIN DATE: 10/83 END DATE: 09/89 DIV: DBBS

CAN: 240 PROJECT OFFICER: MURPHY, LAWRENCE R

PURPOSE: THIS PROJECT WILL IDENTIFY JOB CHARACTERISTICS AND OCCUPATIONS WITH A HIGHER THAN EXPECTED RISK FOR DISABILITY DUE TO CHRONIC MENTAL OR CIRCULATORY DISORDERS USING SOCIAL SECURITY ADMINISTRATION (SSA) DISABILITY DATABASES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
A DATABASE CONTAINING EXPERT RATINGS OF JOB DIMENSIONS WILL BE MERGED WITH THE SSA 1978 DISABILITY SURVEY TO IDENTIFY JOB RISK FACTORS FOR MENTAL AND CIRCULATORY DISORDERS.

TITLE: METHODS FOR RATING JOB STRESS/STRAIN

BEGIN DATE: 10/83 END DATE: 09/88 DIV: DBBS

CAN: 242 PROJECT OFFICER: HURRELL, JOSEPH J

PURPOSE: THIS PROJECT WILL LEAD TO IMPROVED METHODS FOR ASSESSING STRESS FACTORS FOR PURPOSES OF DETECTING STRESSFUL JOB CONDITIONS AND PROMOTING MORE UNIFORM APPROACHES TO MEASURING JOB STRESS AND STRAIN.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PEER REVIEW WILL BE HELD AND DATA COLLECTED AND ANALYZED FOR FIRST METHOD VALIDATION. CONTRACT WILL BE AWARDED TO STUDY JOB STRESS EFFECTS ON IMMUNE SYSTEM FUNCTION.

PROGRAM AREA: PSYCHOLOGICAL DISORDERS

TITLE: STRESS CONTROL STRATEGIES IN COMPUTER-MEDIATED WORK

BEGIN DATE: 10/85 END DATE: 09/88 DIV: DBBS

CAN: 256 PROJECT OFFICER: SAUTER, STEVEN L

PURPOSE: THIS PROJECT WILL TEST WORKER AND WORK DESIGN FOCUSSED METHODS FOR PREVENTING/REDUCING STRESS IN COMPUTER-MEDIATED WORK. FINDINGS CAN PROVIDE AN EMPIRICAL BASIS FOR NIOSH DECISIONS ON RECOMMENDATIONS OF SUCH METHODS, AND FOR MANAGEMENT/WORKER DECISIONS ON THEIR IMPLEMENTATION IN THE WORKPLACE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
FINALIZE AND CONDUCT PEER REVIEW OF LAB RESEARCH PROTOCOL FOR TESTING VARIABLE REST BREAK CONDITIONS. INSTRUMENT LABORATORY AND INITIATE EXPERIMENTATION.

TITLE: JOB STRESS IN VDT WORK

BEGIN DATE: 10/78 END DATE: 09/87 DIV: DBBS

CAN: 267 PROJECT OFFICER: SCHLEIFER, LAWRENCE M

PURPOSE: THIS PROJECT WILL ENSURE THAT JOB DESIGN AND ERGONOMIC STRESSORS IN VDT/COMPUTER-MEDIATED WORK BE INVESTIGATED AND CONTROL MEASURES ADDRESSING PROBLEMATIC FACTORS BE FORMULATED.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE LAB TESTING AND WRITE-UP OF STUDY ON STRESS AND PERFORMANCE EFFECTS OF COMPUTER PERFORMANCE MONITORING/FEEDBACK. PREPARE FINAL PROJECT REPORT AND SUBMIT TO DIRECTOR, DBBS AND DIRECTOR, NIOSH.

PROGRAM AREA: PSYCHOLOGICAL DISORDERS

TITLE: WORKER CONTROL AND JOB STRESS

BEGIN DATE: 10/86 END DATE: 09/87 DIV: DBBS

CAN: 279 PROJECT OFFICER: SAUTER, STEVEN L

PURPOSE: THE PROJECT WILL ASSESS THE ROLE OF WORKER CONTROL IN THE ETIOLOGY OF JOB STRESS BASED ON THE AVAILABLE SCIENTIFIC LITERATURE, AND DEFINE NEEDS FOR FURTHER RESEARCH.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
SCIENTIFIC REPORTS AND CRITIQUES WILL BE OBTAINED FROM STRESS EXPERTS WHO WILL TAKE PART IN A WORKSHOP TO ASSESS THE STRESS EFFECTS OF WORKER CONTROL. A SUMMARY REPORT WILL BE PREPARED.

TITLE: JOB STRESS IN SECRETARIAL/CLERICAL WORKERS

BEGIN DATE: 10/80 END DATE: 10/87 DIV: DBBS

CAN: 286 PROJECT OFFICER: COHEN, BARBARA G

PURPOSE: THIS PROJECT SEEKS TO PROVIDE COMPREHENSIVE INFORMATION ON STRESS FACTOR COPING MEASURES, AND HEALTH EFFECTS IN OFFICE WORK, PARTICULARLY AS RELATED TO TECHNOLOGICAL INNOVATION INVOLVING OFFICE AUTOMATION.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PREPARE REPORTS OF STRESS FACTORS AND STRESS EFFECTS AMONG SECRETARIAL/CLERICAL OFFICE WORKERS BASED ON INTEGRATED ANALYSIS AND EVALUATION OF QUESTIONNAIRE, INTERVIEW AND ERGONOMIC DATA.

PROGRAM AREA: PSYCHOLOGICAL DISORDERS

TITLE: STRESS IN INFORMATION PROCESSING

BEGIN DATE: 10/81 END DATE: 06/88 DIV: DBBS

CAN: 288 PROJECT OFFICER: HURRELL, JOSEPH J

PURPOSE: THIS PROJECT WILL PROVIDE THE BASIS FOR ASSESSING COGNITIVE TASK DEMANDS AS A STRESS FACTOR IN INFORMATION PROCESSING WORK.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
ANALYZE PSYCHOMETRIC AND PSYCHOPHYSIOLOGICAL VALIDATION DATA TO ESTABLISH CONTENT AND CONDUCT VALIDITY OF COGNITIVE LOAD PSYCHOMETRIC INSTRUMENT. SUPPORT WORKSHOP ON STRESS IN INFORMATION PROCESSING.

PROGRAM AREA: ASSISTANCE REQUESTS

TITLE: BEHAVIORAL-ERGONOMIC EVALUATIONS RE HHES, TAS, CTAS

BEGIN DATE: 10/80 END DATE: C DIV: DBBS

CAN: 273 PROJECT OFFICER: COHEN, ALEXANDER L

PURPOSE: THIS PROJECT FURNISHES TECHNICAL SUPPORT TO THE NIOSH HEALTH HAZARD EVALUATIONS/TECHNICAL ASSISTANCE PROGRAM WHERE RISK FACTORS OF A NEUROTOXIC, MUSCULOSKELETAL OR PSYCHOLOGICAL STRESS NATURE ARE INVOLVED, AND ERGONOMIC INPUT INTO CONTROL TECHNOLOGY ASSESSMENTS OF SELECT INDUSTRIAL PROCESSES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PROVIDE CONSULTATION AND COLLECT WORKSITE DATA WITH RESPECT TO THREE NEW HAZARD EVALUATIONS AND FURNISH REPORTS ON 4 HOLD OVER/NEW EFFORTS. REFINE ERGONOMIC CHECKLIST FOR USE IN CONTROL TECHNOLOGY ASSESSMENTS.

TITLE: TOXICOLOGY, TECHNICAL ASSISTANCE, AND CONSULTATION

BEGIN DATE: 10/86 END DATE: C DIV: DBBS

CAN: 348 PROJECT OFFICER: LEWIS, TRENT R

PURPOSE: THIS PROJECT PROVIDES MEANS FOR THE EXPERIMENTAL TOXICOLOGY BRANCH TO ADDRESS INTERACTIVE AND LIAISON FUNCTIONS IN SIX DBBS PROGRAMMATIC AREAS, AND FULFILL ITS ROLE AS A TECHNICAL AND CONSULTATIVE RESOURCE TO THE PUBLIC AND PRIVATE SECTORS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
MANAGE BRANCH RESOURCES, EXECUTE LIAISON ROLES; MAINTAIN NCI AND NTP COLLABORATIVE RESEARCH PLANNING AND EXECUTION; PARTICIPATE IN INTERDIVISIONAL ACTIVITIES ON NIOSH'S 10 LEADING HEALTH PROBLEMS.

PROGRAM AREA: ASSISTANCE REQUESTS

TITLE: HEALTH HAZARD EVALUATIONS OF PHYSICAL AGENTS

BEGIN DATE: 10/80 END DATE: C DIV: DBBS

CAN: 354 PROJECT OFFICER: MURRAY, WILLIAM E

PURPOSE: THIS PROJECT MAINTAINS BRANCH INSTRUMENTATION AND TECHNICAL EXPERTISE TO RESPOND TO REQUESTS RECEIVED UNDER THE HETA PROGRAM TO EVALUATE WORKER EXPOSURE TO PHYSICAL AGENT HAZARDS. RESEARCH NEEDS ARE ALSO IDENTIFIED FROM THIS PRACTICAL WORKPLACE EXPERIENCE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
TWO NEW HETA REQUESTS WILL BE ACCEPTED. WORK ON SIX CARRYOVER REQUESTS WILL CONTINUE. FOUR REQUESTS WILL BE COMPLETED.

TITLE: QUALITY ASSURANCE OF ANALYTICAL MEASUREMENTS

BEGIN DATE: 10/85 END DATE: C DIV: DPSE

CAN: 420 PROJECT OFFICER: ELLER, PETER M

PURPOSE: THIS PROJECT WILL EXPAND THE INTERNAL QUALITY ASSURANCE PROGRAM TO INSURE THE QUALITY OF ANALYTICAL DATA GENERATED INTERNALLY AND BY MRSB CONTRACT LABORATORIES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
EXTEND QUALITY CONTROL EFFORTS TO THE INDUSTRIAL HYGIENE SAMPLING PROCESS.

PROGRAM AREA: ASSISTANCE REQUESTS

TITLE: HHE ANALYTICAL CHEMISTRY SUPPORT

BEGIN DATE: 10/85 END DATE: C DIV: DPSE

CAN: 425 PROJECT OFFICER: HOLTZ, JOHN L

PURPOSE: PROVIDES TIMELY ANALYTICAL CHEMISTRY SERVICES TO THE HHE PROGRAM BY ASSURING RAPID TURNAROUND OF REQUESTS FOR SAMPLE ANALYSES AND METHOD DEVELOPMENT. IT IS PROJECTED THAT 7200 HHE FIELD SAMPLES WILL BE ANALYZED AND 4 SAMPLING/ANALYTICAL METHODS WILL BE DEVELOPED OR MODIFIED UNDER THIS PROJECT DURING FY87.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
ANALYZE 7200 HHE SAMPLES AND DEVELOP 4 METHODS.

TITLE: COMPREHENSIVE ANALYTICAL CHEMISTRY SERVICES

BEGIN DATE: 10/83 END DATE: 09/87 DIV: DPSE

CAN: 482 PROJECT OFFICER: DOLLBERG, DONALD D

PURPOSE: THIS PROJECT COORDINATES REQUESTS FROM NIOSH RESEARCHERS FOR ANALYTICAL CHEMISTRY SUPPORT FOR ALL NIOSH PROJECTS WHICH REQUIRE CHEMICAL ANALYSES. THE PROJECT ALSO PROVIDES OVERALL LABORATORY ADMINISTRATION OF SAMPLE ANALYSES PERFORMED EITHER ON CONTRACT OR IN THE NIOSH LABORATORIES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COORDINATE 400 REQUESTS FOR ANALYTICAL SUPPORT AND ANALYZE 10,000 SAMPLES BY CONTRACT AND IN THE NIOSH LABORATORY. MONITOR THE COMPREHENSIVE ANALYTICAL SUPPORT CONTRACT AND CONDUCT AWARD FEE MEETING.

PROGRAM AREA: ASSISTANCE REQUESTS

TITLE: MINING HEALTH HAZARD EVALUATION AND TECHNICAL ASSISTANCE

BEGIN DATE: 10/86 END DATE: 09/87 DIV: DRDS

CAN: 153 PROJECT OFFICER: HANKINSON, JOHN L

PURPOSE: THIS PROGRAM RESPONDS TO HEALTH CONCERNS OF MINERS IN COAL, METAL AND NON-METAL MINES. THIS PROJECT WILL ADDRESS THE DIVISION OBJECTIVE TO INCREASE THE NUMBER OF COMPLETED HHE/TA'S BY EFFECTIVELY RESPONDING TO REQUESTS FOR HEALTH HAZARD EVALUATIONS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
RESPOND TO ALL REQUESTS FOR HEALTH HAZARD EVALUATION AND TECHNICAL ASSISTANCE.

TITLE: HEALTH HAZARD EVALUATIONS AND TECHNICAL ASSISTANCE

BEGIN DATE: 10/80 END DATE: C DIV: DSHEFS

CAN: 688 PROJECT OFFICER: BAINBRIDGE, JOHN K

PURPOSE: DURING FY 1987 THIS PROGRAM WILL RESPOND TO APPROXIMATELY 525-550 HEALTH HAZARD EVALUATION REQUESTS. WE WILL WORK CLOSELY WITH STATE HEALTH DEPARTMENTS AND OTHER NIOSH AND CDC PROGRAMS AND WILL INCREASE THE DISSEMINATION OF SURVEY RESULTS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DURING FY'87, WE WILL RESPOND TO 525-550 REQUESTS FOR ASSISTANCE INCLUDING 80 FROM STATE HEALTH DEPARTMENTS. WE WILL SUBMIT FOR PUBLICATION AT LEAST 14 MMWR ARTICLES AND 12 JOURNAL ARTICLES

PROGRAM AREA: ADMINISTRATION

TITLE: BRANCH ADMINISTRATION AND CONSULTATION

BEGIN DATE: 10/80 END DATE: C DIV: DBBS

CAN: 284 PROJECT OFFICER: COHEN, ALEXANDER L

PURPOSE: THIS PROJECT ASSURES PROGRAM PLANNING, BUDGET MANAGEMENT, STAFF DEVELOPMENT IN MOUNTING NEEDED RESEARCH ACTIVITIES ADDRESSING WORK-RELATED NEUROTOXICITY, STRESS, ERGONOMICS, AND HEALTH MOTIVATION ISSUES OFFERS TECHNICAL ASSISTANCE ON SUCH MATTERS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
ASSESS STRATEGIES FOR PREVENTING NEUROTOXIC ILLNESS AND PSYCHOLOGICAL DISORDERS. UPDATE DBBS/DSR PROGRAM ON MUSCULOSKELETAL DISORDERS. CULTIVATE JOINT ERGONOMICS WORK WITH BOM. SUPPORT NEW NRC ASSOCIATE.

TITLE: DBBS ADMINISTRATION

BEGIN DATE: 10/76 END DATE: C DIV: DBBS

CAN: 303 PROJECT OFFICER: HAARTZ, JANET C

PURPOSE: PROJECT WILL PROVIDE EXPEDITION, INTERVENTION, OR REALLOCATION OF EXPENDITURES BY FOUR BRANCHES. PERSONNEL UTILIZATION WILL BE EVALUATED AND CONSIDERED WHEN ASSIGNING SPECIAL TASKS AND ALLOCATING POSITIONS. RESPONSES TO REQUESTS FOR TECHNICAL ASSISTANCE WILL BE ASSIGNED TO AVAILABLE PERSONNEL AND EXPEDITED THROUGH A TRACKING SYSTEM.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COORDINATE AND CONTINUE INSTITUTION OF NTP AND NRC PROGRAMS. REVIEW RESEARCH, CONTINUE Q.A. PROGRAM, AND MONITOR UTILIZATION OF PERSONNEL AND DISCRETIONARY FUNDS TO ASSURE 100% UTILIZATION.

PROGRAM AREA: ADMINISTRATION

TITLE: STATISTICAL SUPPORT TO DBBS

BEGIN DATE: 10/85 END DATE: C DIV: DBBS

CAN: 305 PROJECT OFFICER: BURG, JEANNE

PURPOSE: THIS PROJECT PROVIDES THE MEANS THROUGH SUPPORT PERSONNEL, EQUIPMENT, AND TRAINING TO INCREASE THE QUALITY AND QUANTITY OF SUPPORT GIVEN TO DIVISION PROJECT OFFICERS IN DESIGN, IMPLEMENTATION, AND ANALYSES OF PLANNED PROJECTS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
THE STATISTICS UNIT WILL BE INVOLVED TO A VARYING DEGREE WITH EACH DIVISION PROJECT AT THE LEVEL APPROPRIATE TO THE PROJECT PHASE OF PLANNING OR EXECUTION.

TITLE: BRANCH ADMINISTRATION AND CONSULTATION

BEGIN DATE: 10/83 END DATE: C DIV: DBBS

CAN: 374 PROJECT OFFICER: SMITH, JAMES M

PURPOSE: THIS PROJECT WILL PROVIDE PROGRAM PLANNING AND DEVELOPMENT, TECHNICAL ASSISTANCE, BUDGET MANAGEMENT, AND PERSONNEL DEVELOPMENT IN RESEARCH ACTIVITIES ADDRESSING NOISE-INDUCED LOSS OF HEARING, MUSCULOSKELETAL INJURIES, AND REPRODUCTIVE DISORDERS AMONG OTHER NIOSH INITIATIVES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
THE FY87 PHYSICAL AGENTS EFFECTS PROGRAM WILL BE CONDUCTED; TIMELY TECHNICAL CONSULTATION WILL BE PROVIDED TO THE DIVISION/INSTITUTE; AND FY88 PROGRAM/PROJECT PLANS WILL BE SUBMITTED.

PROGRAM AREA: ADMINISTRATION

TITLE: INHALATION TOXICOLOGY EXPOSURE GENERATION AND CHARACTERIZATION

BEGIN DATE: 10/85 END DATE: C DIV: DBBS

CAN: 377 PROJECT OFFICER: HULL, ROBERT D

PURPOSE: THIS PROJECT WILL MANAGE RESOURCES TO DEVELOP GENERATION TECHNIQUES AND MEASUREMENT METHODS FOR INHALATION CHAMBER EXPOSURE ATMOSPHERES FOR DBBS INHALATION TOXICOLOGY RESEARCH. RESOURCES WILL ALSO BE UTILIZED FOR QUALITY CONTROL OF EXPOSURE CHAMBER ANALYTE CONCENTRATION DETERMINATIONS AND TECHNICAL CONSULTATIONS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DEVELOP AND IMPLEMENT GENERATION AND MONITORING METHODS FOR ETHYLENE OXIDE, PHTHALLIC ANHYDRIDE, AND VARIOUS ALCOHOLS.

TITLE: INHALATION TOXICOLOGY RESEARCH SUPPORT

BEGIN DATE: 10/80 END DATE: C DIV: DBBS

CAN: 379 PROJECT OFFICER: KHAN, AMIR

PURPOSE: THIS PROJECT WILL MANAGE AND UTILIZE RESOURCES TO CONDUCT ALL INHALATION EXPOSURES REQUIRED FOR THE INHALATION TOXICOLOGY RESEARCH CONDUCTED WITHIN DBBS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PILOT AND EXPOSURE INHALATION STUDIES FOR SELECTED HYDROCARBON SOLVENTS AND ALCOHOLS, VANADIUM PENTOXIDE AND ETHYLENE OXIDE WILL BE COMPLETED.

PROGRAM AREA: ADMINISTRATION

TITLE: ANIMAL HUSBANDRY SERVICES

BEGIN DATE: 10/76 END DATE: C DIV: DBBS

CAN: 385 PROJECT OFFICER: LAL, JAG B

PURPOSE: THIS PROJECT WILL MANAGE AND UTILIZE RESOURCES TO PROVIDE EFFICIENT ANIMAL HUSBANDRY AND HEALTH SURVEILLANCE FOR EXPERIMENTAL ANIMALS USED FOR DBBS RESEARCH PROGRAMS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
ESTABLISH AN ANIMAL HEALTH SERVICES SELF INSPECTION PROGRAM AND AN ANIMAL SURGERY CAPABILITY. PROVIDE A DISEASE-FREE ANIMAL POPULATION FOR THE DBBS RESEARCH PROGRAM.

TITLE: DIAGNOSTIC AND RESEARCH PATHOLOGY

BEGIN DATE: 10/76 END DATE: C DIV: DBBS

CAN: 386 PROJECT OFFICER: CAROLAN, ROBERT J

PURPOSE: THIS PROJECT WILL PROVIDE GROSS AND MICROSCOPIC EXAMINATION/DIAGNOSES FOR EXPERIMENTAL ANIMAL TISSUES AND CONSULTATIVE PATHOLOGY SERVICES FOR NIOSH RESEARCH PROGRAMS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PROVIDE A COMPREHENSIVE PATHOLOGY SERVICE THAT ACCURATELY REPORTS PATHOLOGY DATA FOR IN-HOUSE ANIMAL STUDIES IN A THOROUGH AND TIMELY MANNER.

PROGRAM AREA: ADMINISTRATION

TITLE: CONSULTATION AND BRANCH ADMINISTRATION

BEGIN DATE: 10/80 END DATE: C DIV: DBBS

CAN: 390 PROJECT OFFICER: STETTLER, LLOYD E

PURPOSE: THIS PROJECT PROVIDES TECHNICAL ASSISTANCE AND ASSURES PROGRAM PLANNING, BUDGET MANAGEMENT, AND STAFF DEVELOPMENT IN MOUNTING NEEDED RESEARCH AND SUPPORT ACTIVITIES ADDRESSING WORK RELATED LUNG DISEASE, CARCINOGENICITY, REPRODUCTIVE DISORDERS, NEUROTOXICITY, AND CARDIOTOXICITY ISSUES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE FINAL REPORTS/MANUSCRIPTS AND PROTOCOL/PEER REVIEWS FOR BRANCH PROJECTS, ASSURING APPROPRIATE PERSONNEL STAFFING AND COMPLETION OF TRAINING NEEDS AND PERFORMANCE EVALUATIONS.

TITLE: ADMINISTRATIVE SUPPORT FOR DPSE RESEARCH

BEGIN DATE: 10/85 END DATE: C DIV: DPSE

CAN: 402 PROJECT OFFICER: BIERBAUM, PHILIP J

PURPOSE: THE PROGRAM DEVELOPS CRITERIA FOR MONITORING, AND ASSESSES CONTROL TECHNOLOGY THROUGH RESEARCH AND DEVELOPMENT. PROVIDES FOR THE INSTITUTE'S CHEMICAL ANALYSIS NEEDS AND OPERATES A QUALITY CONTROL REFERENCE PROGRAM FOR ANALYTICAL LABORATORIES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
TO MANAGE DPSE PROGRAM, FUNDS, AND PERSONNEL TO ACCOMPLISH FY87 GOALS.

PROGRAM AREA: ADMINISTRATION

TITLE: OFFICE OF THE DIRECTOR - DIVISION MANAGEMENT

BEGIN DATE: 10/86 END DATE: C DIV: DRDS

CAN: 103 PROJECT OFFICER: GLENN, ROBERT E

PURPOSE: MONITORS, CONTROLS, DIRECTS AND SUPPORTS DIVISION RESOURCE MANAGEMENT, PROGRAMMATIC PLANNING, RESEARCH AND RESEARCH PROGRESS EVALUATIONS, SPECIAL ACTIVITIES, AND RESEARCH DISSEMINATION. COORDINATES INTERNATIONAL, GRANT AND REVIEW ACTIVITIES, AND DIRECTS PROCUREMENT AND PERSONNEL ACTIVITIES OF THE DIVISION.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
RECEIVE COMPLETED AND REVIEWED FINAL REPORTS, PRESENT SIGNIFICANT FINDINGS TO APPROPRIATE FORUM, AND DEVELOP CONTINUATION RESEARCH PLANNING.

TITLE: NATIONAL COAL WORKERS AUTOPSY STUDY

BEGIN DATE: 05/71 END DATE: C DIV: DRDS

CAN: 233 PROJECT OFFICER: MARTIN, MITZIE L

PURPOSE: THIS PROJECT WILL PROVIDE DATA FOR ASSESSMENT OF EFFECTIVENESS OF THE COAL MINE DUST STANDARD.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DETERMINE PREVALENCE OF PNEUMOCONIOSIS IN COAL WORKERS FROM AUTOPSY DATA. ANNUALLY ADMINISTER THE NATIONAL COAL WORKERS AUTOPSY STUDY.

PROGRAM AREA: ADMINISTRATION

TITLE: TECHNICAL MANAGEMENT - DSHEFS (OD)

BEGIN DATE: 10/80 END DATE: C DIV: DSHEFS

CAN: 522 PROJECT OFFICER: MELIUS, JAMES M

PURPOSE: THIS IS THE OFFICE OF THE DIRECTOR ADMINISTRATIVE PROJECT THAT ADDRESSES ALL DSHEFS GOALS AND OBJECTIVES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
TO SATISFACTORILY GUIDE THE DIVISION TOWARDS MEETING ALL OF ITS GOALS AND OBJECTIVES.

TITLE: TECHNICAL MANAGEMENT - SSB

BEGIN DATE: 10/83 END DATE: C DIV: DSHEFS

CAN: 680 PROJECT OFFICER: CATLETT, LAWRENCE R

PURPOSE: THIS PROJECT PROVIDES SUPPORT FOR THE MEDICAL TECHNOLOGY, STATISTICAL, AND DATA PROCESSING ASPECTS OF DSHEFS' INDUSTRYWIDE STUDIES, HEALTH HAZARD EVALUATIONS, AND SURVEILLANCE ACTIVITIES. IT ALSO PROVIDES BIOMEDICAL INSTRUMENTATION SUPPORT TO ALL CINCINNATI NIOSH OPERATIONS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PROVIDE STATISTICAL AND BIOMEDICAL INSTRUMENTATION SUPPORT FOR DIVISION NEEDS. PROVIDE IN-HOUSE COMPUTER PROGRAMMING TO MEET 80% OF DIVISION NEEDS. ACQUIRE ADDITIONAL ADP NEEDS VIA CONTRACT.

PROGRAM AREA: ADMINISTRATION

TITLE: INFORMATION SYSTEMS DEVELOPMENT

BEGIN DATE: 10/86 END DATE: 01/88 DIV: DSR

CAN: 692 PROJECT OFFICER: LINN, HERBERT I

PURPOSE: THIS PROJECT WILL UTILIZE THE AUTOMATED INFORMATION REPOSITORY TO ALLOW DIVISION STAFF TO EFFICIENTLY LOCATE AND FORMAT INFORMATION TO FULFILL IN-HOUSE RESEARCH NEEDS, INTERNAL TRACKING AND REPORTING REQUIREMENTS, AND EXTERNAL REQUESTS FOR INFORMATION; THE SLIDE PRESENTATION WILL PROVIDE AN OVERVIEW OF DSR ACTIVITIES FOR GOVERNMENT AND PUBLIC AUDIENCES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
TEXT AND GRAPHIC INFORMATION STORAGE AND RETRIEVAL SYSTEM WILL BE AUTOMATED WITH CORRESPONDING HARD COPY FILE; SLIDE PRESENTATION ON OVERVIEW OF DSR PROGRAM WILL BE COMPLETED.

TITLE: INJURY PREVENTION RESEARCH BRANCH MANAGEMENT

BEGIN DATE: 10/85 END DATE: C DIV: DSR

CAN: 785 PROJECT OFFICER: REED, LAURENCE D

PURPOSE: THIS PROJECT WILL PROVIDE GUIDANCE, DIRECTION, AND MANAGEMENT FOR THE RESPIRATOR, CPC, AND OTHER PPE RESEARCH AREAS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COORDINATE BRANCH ACTIVITIES. ASSURE INTRA AND INTERDIVISIONAL PROGRAM COORDINATION.

PROGRAM AREA: ADMINISTRATION

TITLE: SAFETY DIVISION MANAGEMENT

BEGIN DATE: 06/77 END DATE: C DIV: DSR

CAN: 802 PROJECT OFFICER: MORAN, JOHN B

PURPOSE: THIS PROJECT WILL PROVIDE DIRECTION AND MANAGEMENT OF DSR PROGRAMS AND RESOURCES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
MANAGE DSR RESOURCES TO ACHIEVE DSR FY87 GOALS AND OBJECTIVES WITHIN RESOURCE ALLOCATION.

TITLE: PROMULGATION OF REVISED 30 CFR PART 11

BEGIN DATE: 01/87 END DATE: 09/88 DIV: DSR

CAN: 839 PROJECT OFFICER: BOLLINGER, NANCY J

PURPOSE: THIS PROJECT WILL HOLD A PUBLIC HEARING TO RECEIVE PUBLIC COMMENTS ON THE PROPOSED REVISION TO 30 CFR PART 11. THE COMMENTS RECEIVED WILL BE CONSIDERED IN REGARD TO IMPROVING BOTH CERTIFICATION PROCEDURES AND RESPIRATORY PROTECTION. A FINAL REGULATION WILL THEN BE DRAFTED.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PUBLIC COMMENTS WILL BE RECEIVED AND A PUBLIC HEARING WILL BE CONDUCTED.

PROGRAM AREA: ADMINISTRATION

TITLE: INJURY SURVEILLANCE BRANCH MANAGEMENT

BEGIN DATE: 10/85 END DATE: C DIV: DSR

CAN: 847 PROJECT OFFICER: REESE, CHARLES D

PURPOSE: THIS MANAGEMENT PROJECT WILL ASSURE INTRABRANCH, INTRADIVISION, AND INTERDIVISION COORDINATION OF MULTIPLE FACETS OF THE MUSCULOSKELETAL AND TRAUMA PROGRAMS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COORDINATION OF ISB PROJECTS WITHIN BRANCH, DIVISION, AND INSTITUTE.

TITLE: EVALUATION, CERTIFICATION, AND COORDINATION ACTIVITIES

BEGIN DATE: 05/72 END DATE: C DIV: DSR

CAN: 852 PROJECT OFFICER: BOLLINGER, NANCY J

PURPOSE: THIS PROJECT WILL ENSURE AVAILABILITY OF IMPROVED AND CERTIFIED RESPIRATORY PROTECTIVE DEVICES AND COAL MINE DUST COMPLIANCE MONITORING INSTRUMENTS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
CONTINUE CERTIFICATION OF RESPIRATORS AND CMDPSU IN ACCORDANCE WITH 30 CFR 11 AND 30 CFR 74.

PROGRAM AREA: ADMINISTRATION

TITLE: AIR PURIFYING RESPIRATOR TESTING

BEGIN DATE: 05/72 END DATE: C DIV: DSR

CAN: 853 PROJECT OFFICER: COFFEY, CHRISTOPHER C

PURPOSE: THIS PROJECT INVOLVES TESTING AND CERTIFICATION OF AIR-PURIFYING RESPIRATORS IN ACCORDANCE WITH 30 CFR 11, INCLUDING AUDITS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
CONTINUE CERTIFICATION IN ACCORDANCE WITH 30 CFR 11.

TITLE: ATMOSPHERE SUPPLIED RESPIRATOR TESTING

BEGIN DATE: 05/72 END DATE: C DIV: DSR

CAN: 854 PROJECT OFFICER: TERRY, SAMUEL L

PURPOSE: THIS PROJECT INVOLVES TESTING AND CERTIFICATION OF ATMOSPHERE SUPPLYING RESPIRATORS IN ACCORDANCE WITH 30 CFR 11, INCLUDING AUDITS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
CONTINUE CERTIFICATION IN ACCORDANCE WITH 30 CFR 11.

PROGRAM AREA: ADMINISTRATION

TITLE: QUALITY ASSURANCE DOCUMENTATION CONTROL

BEGIN DATE: 05/72 END DATE: C DIV: DSR

CAN: 857 PROJECT OFFICER: JUSTISS, JR., ROBERT G

PURPOSE: THIS PROJECT PROVIDES A TESTING AND CERTIFICATION QUALITY ASSURANCE PROGRAM IN ACCORDANCE WITH 30 CFR 11, INCLUDING AUDITS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
CONTINUE CERTIFICATION IN ACCORDANCE WITH 30 CFR 11.

TITLE: DIVISION MANAGEMENT

BEGIN DATE: 10/70 END DATE: C DIV: DSDTT

CAN: 082 PROJECT OFFICER: LEMEN, RICHARD A

PURPOSE: THIS PROJECT IS PRIMARILY DIRECTED TOWARD INCREASING THE NUMBER AND QUALITY OF DOCUMENTS AND OTHER NIOSH POLICY STATEMENTS PRODUCED ANNUALLY THROUGH MANAGEMENT OF RESOURCES, SUPPORTING PROJECTS TO ESTABLISH PRIORITIES, AND DISSEMINATING INFORMATION.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE 11 POLICY DOCUMENTS, RESPOND TO 8-10 OSHA/MSHA RULES, AND ANSWER 4,000 INFORMATION REQUESTS IN FY 87.

PROGRAM AREA: ADMINISTRATION

TITLE: CONSULTATION AND BRANCH ADMINISTRATION: DOCUMENT DEVELOPMENT BRANCH

BEGIN DATE: 10/84 END DATE: C DIV: DSDTT

CAN: 094 PROJECT OFFICER: WAGNER, WILLIAM D

PURPOSE: THIS PROJECT PROVIDES ADMINISTRATIVE, CONSULTATIVE, STATISTICAL, AND TECHNICAL ASSISTANCE FROM A VARIETY OF DISCIPLINES TO ASSURE QUALITY AND TIMELY DOCUMENT PRODUCTION.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
IN ADDITION TO THE REVIEWS OF DOCUMENTS, 3-5 MMWR ARTICLES, 2-3 PRESENTATIONS AT PROFESSIONAL MEETINGS, AND 20 STATISTICAL CONSULTATIONS WILL BE COMPLETED.

TITLE: PROGRAM MANAGEMENT AND SUPPORT

BEGIN DATE: 10/85 END DATE: C DIV: DTMD

CAN: 763 PROJECT OFFICER: PURCELL, THOMAS C

PURPOSE: PROGRAM/PROJECT PLANNING INVOLVING BRANCH MANAGERS AND PROJECT STAFF ENSURES THAT MILESTONES ARE SIGNIFICANT, ACHIEVABLE, AND SUPPORTABLE. IMPORTANT OUTSIDE CONSTITUENCIES ARE DEVELOPED AND CULTIVATED. COLLABORATIVE ARRANGEMENTS WITH ALL NIOSH OFFICES AND DIVISIONS ARE ESTABLISHED.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DIVISION PROGRAM/PROJECT PLANS WILL BE ACCOMPLISHED WITH TOTAL FUNDING OF $1,477,000 AND 27.1 FTE'S.

PROGRAM AREA: OTHER

TITLE: ARYL AMINE ADDUCTS IN BLOOD AS INDICATORS OF EXPOSURE

BEGIN DATE: 10/85 END DATE: 09/88 DIV: DBBS

CAN: 314 PROJECT OFFICER: CHEEVER, KENNETH L

PURPOSE: THIS PROJECT WILL INVESTIGATE THE FEASIBILITY OF USING URINARY METABOLITES AND HEMOGLOBIN ADDUCTS AS QUANTITATIVE, INTEGRAL EXPOSURE METHODS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
CHARACTERIZE URINARY METABOLITES OF (METHYLENE- 14 C) 4,4'-METHYLENE BIS(2-CHLOROANILINE), A MODEL AROMATIC AMINE, FOR POSSIBLE USE IN BIOLOGICAL MONITORING.

TITLE: FACTORS AFFECTING SKIN PENETRATION OF M-DET

BEGIN DATE: 10/86 END DATE: 09/88 DIV: DBBS

CAN: 347 PROJECT OFFICER: SMALLWOOD, ANTHONY W

PURPOSE: THIS PROJECT WILL DEVELOP AND VALIDATE QUANTITATIVE PROCEDURES WHICH WILL DETERMINE M-DET VALUES IN BLOOD AND URINE. HUMAN SUBJECTS WILL BE EXPOSED TO INSECT REPELLENTS CONTAINING M-DET UNDER VARYING CONDITIONS. FACTORS AFFECTING M-DET ABSORPTION WILL BE EVALUATED BY MEASUREMENT OF M-DET IN BLOOD AND URINE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
HAVE A PROJECT PEER REVIEW; OBTAIN HSRB APPROVAL FOR THE PROJECT, AND DEVELOP STATISTICALLY VALIDATED QUANTITATIVE PROCEDURES WHICH WILL DETERMINE M-DET VALUES IN BLOOD AND URINE.

PROGRAM AREA: OTHER

TITLE: BIOLOGICAL MONITORING METHODS EVALUATION AND SUPPORT

BEGIN DATE: 10/80 END DATE: C DIV: DBBS

CAN: 378 PROJECT OFFICER: LOWRY, LARRY K

PURPOSE: THIS PROJECT WILL SUPPLY BIOLOGICAL MONITORING AND CLINICAL LABORATORY SUPPORT TO DSHEFS AND TO DBBS RESEARCH STUDIES. THE EFFECTIVENESS OF BIOLOGICAL MONITORING METHODS WILL BE EVALUATED IN THE FIELD, IN COOPERATION WITH DSHEFS. PILOT STUDIES WILL BE CONDUCTED TO IDENTIFY NEW METHODS FOR BIOLOGICAL MONITORING.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
SUBMIT MANUSCRIPTS ON EVALUATION OF MBOCA AND 2-ETHOXYETHYL ACETIC ACID METHODS AND SUMMARY OF ANNUAL CLINICAL AND BIOLOGICAL MONITORING SUPPORT.

TITLE: DEVELOPMENT AND EVALUATION OF BIOMONITORING METHODS FOR MEK

BEGIN DATE: 10/85 END DATE: 09/87 DIV: DBBS

CAN: 388 PROJECT OFFICER: PHIPPS, FREDERICK C

PURPOSE: THIS PROJECT WILL IDENTIFY THE MAJOR URINARY METABOLITES OF MEK AND ESTABLISH HOW URINARY LEVELS OF THESE METABOLITES RELATE TO ENVIRONMENTAL LEVELS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
THE URINE SAMPLES COLLECTED FROM HUMAN SUBJECTS EXPOSED TO MEK WILL BE ANALYZED. RELATIONSHIPS BETWEEN METABOLITE AND EXPOSURE LEVELS WILL BE EXAMINED, AND A FINAL PROJECT REPORT WILL BE SUBMITTED TO OD, DBBS.

PROGRAM AREA: OTHER

TITLE: BIOMONITORING OF EXPOSURE TO COAL TAR PITCH

BEGIN DATE: 10/84 END DATE: 09/88 DIV: DBBS

CAN: 392 PROJECT OFFICER: TOLOS, WILLIAM P

PURPOSE: THIS PROJECT WILL ASSESS EXPOSURE TO COAL TAR PITCH, A COMPLEX MIXTURE WHICH IS KNOWN TO CONTAIN CARCINOGENIC MATERIALS, USING THE BIOMONITORING METHOD DEVELOPED.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE FIELD STUDIES EVALUATION OF THE BIOMONITORING METHOD TO ASSESS WORKERS EXPOSED TO COAL TAR PITCH AND SUBMIT THE FINAL PROJECT REPORT TO OD, DBBS.

TITLE: STATISTICAL SUPPORT FOR DPSE RESEARCH

BEGIN DATE: 10/85 END DATE: C DIV: DPSE

CAN: 407 PROJECT OFFICER: SHULMAN, STANLEY A

PURPOSE: EXPERIMENTS WILL BE DESIGNED AND DATA WILL BE ANALYZED.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
CONTINUED PLANNING OF EXPERIMENTS AND ANALYSIS OF DATA. IMPLEMENTATION OF SURVEY RESULTS VIA PRESENTATION OF COURSES.

PROGRAM AREA: OTHER

TITLE: ANALYTICAL CHEMISTRY SUPPORT TO DPSE RESEARCH

BEGIN DATE: 10/85 END DATE: C DIV: DPSE

CAN: 484 PROJECT OFFICER: GERACI, CHARLES

PURPOSE: THIS PROJECT PROVIDES FOR CHEMISTRY SUPPORT TO DPSE RESEARCH ACTIVITIES. SAMPLING AND ANALYTICAL SUPPORT WILL BE GIVEN TO THE CONTROL TECHNOLOGY PROGRAM'S ATTEMPTS TO PREVENT THE EXPOSURE OF WORKERS TO HAZARDOUS LEVELS OF CHEMICAL AGENTS. NEW MEASUREMENT METHODS FOR ASBESTOS WILL ALSO BE IMPLEMENTED.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DEVELOP THREE NEW METHODS REQUIRED FOR THE ANALYSIS OF NEW OR UNUSUAL CHEMICALS FROM CONTROL TECHNOLOGY LIQUID/SOLID SEPARATION STUDY.

TITLE: CASE CONTROL STUDY OF RENAL DISEASE AND OCCUPATIONAL EXPOSURE

BEGIN DATE: 02/83 END DATE: 09/88 DIV: DSHEFS

CAN: 524 PROJECT OFFICER: STEENLAND, NELSON K

PURPOSE: IN THIS STUDY, FACTORS CONTRIBUTING TO END-STAGE RENAL DISEASE ARE BEING EXPLORED. OCCUPATIONAL AS WELL AS LIFE STYLE FACTORS ARE BEING EXAMINED.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE 100% OF ALL INTERVIEWS AND THE PRELIMINARY ANALYSIS TO ASSESS WHETHER MATCHING SEQUENCE CAN BE BROKEN.

PROGRAM AREA: OTHER

TITLE: PHYSIOLOGICAL RESPONSES TO THE WEARING OF DISPOSABLE COVERALLS

BEGIN DATE: 10/86 END DATE: C DIV: DSR

CAN: 812 PROJECT OFFICER: WHITE, MARY K

PURPOSE: THE PROJECT WILL INVOLVE HUMAN SUBJECT STUDIES IN THE LABORATORY UNDER CONTROLLED CONDITIONS. PHYSIOLOGICAL RESPONSES WILL BE MEASURED AND ANALYZED. SAFE WORK PRACTICES WILL BE DEVELOPED FROM THE DATA FOR USE IN EDUCATING CPC AND RESPIRATOR USERS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COMPLETE LABORATORY TESTS, ANALYZE DATA, AND PREPARE FINAL REPORT.

TITLE: PHYSICIAN WORK HISTORY

BEGIN DATE: 10/86 END DATE: 09/87 DIV: DSR

CAN: 867 PROJECT OFFICER: MIDDLETON, DAN C

PURPOSE: THIS PROJECT WILL UTILIZE THE STANDARDIZED PHYSICIANS WORK HISTORY FORMAT TO PERMIT NON-OCCUPATIONAL PHYSICIANS TO BETTER UNDERSTAND THEIR WORKING PATIENTS AND THE IMPACT THAT WORKPLACE EXPOSURE TO HAZARDOUS MATERIALS HAS ON THEIR HEALTH.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
A COMPUTER PROGRAM WILL BE DEVELOPED THAT WILL STANDARDIZE PHYSICIANS' WORK HISTORIES OF THEIR PATIENTS.

PROGRAM AREA: OTHER

TITLE: LIBRARY SERVICES

BEGIN DATE: 10/83 END DATE: C DIV: DSDTT

CAN: 083 PROJECT OFFICER: FOSTER, LARRY Q

PURPOSE: THIS PROJECT PROVIDES MANY LIBRARY AND INFORMATION SERVICES INCLUDING INTERLIBRARY LOANS, BOOK/SERIAL PROCESSING, RESPONSES TO REQUESTS FOR SCIENTIFIC/TECHNICAL LITERATURE, COLLECTION BUILDING, AND TRANSLATION SERVICES TO NIOSH STAFF AND EXTERNAL OCCUPATIONAL SAFETY AND HEALTH RESEARCHERS AS WELL.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
DEVELOP PROCEDURES MANUAL FOR THE RIDGE LIBRARY.

TITLE: TECHNOLOGY TRANSFER

BEGIN DATE: 10/83 END DATE: C DIV: DSDTT

CAN: 084 PROJECT OFFICER: MORGAN, VIVIAN K

PURPOSE: THIS PROJECT ADDRESSES THE GOAL BY EXTENDING ACCESS TO NIOSH DEVELOPED DATA BASES WORLDWIDE AND BY OBTAINING AND CATALOGING FOREIGN OCCUPATIONAL SAFETY AND HEALTH STANDARDS. IN ADDITION, NIOSH-DEVELOPED TECHNOLOGIES WILL BE PRESENTED THROUGH THE EXHIBIT PROGRAM WHICH WILL BE CONDUCTED IN AT LEAST 8 SITES DURING FY 87.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
COOPERATIVE EXCHANGE AGREEMENTS WILL BE COMPLETED WITH NATIONAL OCCUPATIONAL SAFETY & HEALTH CENTERS FOR PUBLICATION, RESEARCH IN PROGRESS, AND TRANSLATIONS.

PROGRAM AREA: OTHER

TITLE: DOCUMENT DEVELOPMENT I

BEGIN DATE: 10/86 END DATE: C DIV: DSDTT

CAN: 086 PROJECT OFFICER: COOPER, BURT J

PURPOSE: CRITICAL EVALUATIONS OF INFORMATION ARE DEVELOPED THROUGH CRITERIA DOCUMENTS, CURRENT INTELLIGENCE BULLETINS, AND APPROPRIATE NIOSH POLICY STATEMENTS; OCCUPATIONAL STANDARDS CRITERIA ARE DEVELOPED; AND RECOMMENDATIONS FOR CONTROL OF OCCUPATIONAL SAFETY AND HEALTH HAZARDS ARE MADE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
FOUR NEW POLICY DOCUMENTS WILL BE SUBMITTED TO THE DIRECTOR, NIOSH.

TITLE: DOL (OSHA/MSHA) REGULATORY RESPONSES

BEGIN DATE: 10/83 END DATE: C DIV: DSDTT

CAN: 087 PROJECT OFFICER: MAZZUCKELLI, LAWRENCE F

PURPOSE: THIS PROJECT PROVIDES FOR COORDINATION OF ACTIVITIES BY NIOSH AND DOL STANDARDS DEVELOPMENT STAFF IN MAKING RECOMMENDATIONS FOR WORKPLACE STANDARDS THROUGH THE DOL RULEMAKING PROCESS. TO DO THIS, THE MOST CURRENT INFORMATION DEVELOPED BY OR AVAILABLE TO NIOSH IS USED TO DEVELOP PUBLIC TESTIMONY AND MAKE RECOMMENDATIONS TO DOL.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PRODUCTS OF THIS PROJECT WILL CONSIST OF WRITTEN COMMENTS ON 8-10 PROPOSED DOL RULES, AND NIOSH TESTIMONY AT 4 OSHA/MSHA HEARINGS.

PROGRAM AREA: OTHER

TITLE: DOCUMENT DEVELOPMENT II

BEGIN DATE: 10/86 END DATE: C DIV: DSDTT

CAN: 088 PROJECT OFFICER: LUDWIG, HOWARD R

PURPOSE: CRITICAL EVALUATIONS OF INFORMATION ARE DEVELOPED THROUGH CRITERIA DOCUMENTS, CURRENT INTELLIGENCE BULLETINS, AND APPROPRIATE NIOSH POLICY STATEMENTS; OCCUPATIONAL STANDARDS CRITERIA ARE DEVELOPED; AND RECOMMENDATIONS FOR CONTROL OF OCCUPATIONAL SAFETY AND HEALTH HAZARDS ARE MADE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
FOUR NEW POLICY DOCUMENTS WILL BE SUBMITTED TO THE DIRECTOR, NIOSH.

TITLE: DOCUMENT DEVELOPMENT III

BEGIN DATE: 10/70 END DATE: C DIV: DSDTT

CAN: 089 PROJECT OFFICER: SUSTEN, SANDRA

PURPOSE: CRITICAL EVALUATIONS OF INFORMATION ARE DEVELOPED THROUGH CRITERIA DOCUMENTS, CURRENT INTELLIGENCE BULLETINS, AND APPROPRIATE NIOSH POLICY STATEMENTS; OCCUPATIONAL STANDARDS CRITERIA ARE DEVELOPED; AND RECOMMENDATIONS FOR CONTROL OF OCCUPATIONAL SAFETY AND HEALTH HAZARDS ARE MADE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
THREE NEW POLICY DOCUMENTS WILL BE SUBMITTED TO THE DIRECTOR, NIOSH.

PROGRAM AREA: OTHER

TITLE: PRIORITIES DEVELOPMENT

BEGIN DATE: 10/70 END DATE: C DIV: DSDTT

CAN: 092 PROJECT OFFICER: MAHAFFEY, KATHRYN R

PURPOSE: BY PROVIDING A SCIENTIFIC BASIS FOR INSTITUTE PRIORITIES, THE PROJECT ENHANCES THE RELEVANCE, FOCUS, AND EFFICIENCY OF INSTITUTE PROGRAM PLANNING. EVALUATION WILL BE MADE OF METHODS TO IMPROVE PRIORITY SELECTIONS INCLUDING YEAR-TO-YEAR ASSESSMENT OF USE OF RECOMMENDATIONS BY RESEARCH DIVISIONS.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
FY 87 ACCOMPLISHMENTS INCLUDE RECOMMENDATIONS FOR 10-15 DOCUMENTS; NOMINATION OF 4 CHEMICALS FOR TESTING TO THE NATIONAL TOXICOLOGY PROGRAM; SPECIAL RESPONSES TO HEADQUARTERS AND DIVISION DIRECTORS.

TITLE: NIOSH INFORMATION SYSTEMS

BEGIN DATE: 10/70 END DATE: C DIV: DSDTT

CAN: 095 PROJECT OFFICER: LEWIS, RICHARD J

PURPOSE: UNDER THIS PROJECT, CURRENT COMPUTERIZED DATABASES ARE MADE AVAILABLE TO NIOSH PERSONNEL AND THE OCCUPATIONAL SAFETY AND HEALTH COMMUNITY. THESE SYSTEMS ARE THE CURRENT RESEARCH FILE (CRF), THE DOCUMENT INFORMATION DIRECTORY SYSTEM (DIDS), AND THE TRANSLATION INFORMATION SYSTEM (TRAINS).

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
ON-LINE SEARCHABLE DATABASES FOR CRF, DIDS, AND TRAINS WILL BE EXPANDED BY 5%; CONSULTATION ON COMPUTER USE WILL BE PROVIDED.

PROGRAM AREA: OTHER

TITLE: REGISTRY OF TOXIC EFFECTS OF CHEMICAL SUBSTANCES (RTECS)

BEGIN DATE: 10/70 END DATE: C DIV: DSDTT

CAN: 096 PROJECT OFFICER: SWEET, DORIS V

PURPOSE: THIS PROJECT IS DESIGNED TO DELIVER TOXICOLOGICAL DATA TO SERVE THE INFORMATION NEEDS OF THE OCCUPATIONAL SAFETY AND HEALTH COMMUNITY AND TO PRODUCE INNOVATIVE CHANGES IN PUBLICATION FORMATS TO REACH A WIDER AUDIENCE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PUBLISH RTECS IN BOOK FORM, PUBLISH QUARTERLY MICROFICHE, AND UPDATE COMPUTER TAPE QUARTERLY.

TITLE: NIOSHTIC

BEGIN DATE: 10/70 END DATE: C DIV: DSDTT

CAN: 097 PROJECT OFFICER: BENNETT, WILLIAM D

PURPOSE: THE NIOSHTIC COMPUTERIZED INFORMATION RETRIEVAL SYSTEM IS DESIGNED TO ASSIST THE RESEARCH AND TECHNICAL ASSISTANCE ACTIVITIES OF NIOSH AND THE OCCUPATIONAL SAFETY AND HEALTH COMMUNITY AS A WHOLE. THIS SYSTEM CURRENTLY CONTAINS OVER 130,000 CITATIONS DERIVED FROM THE WORLD'S OCCUPATIONAL SAFETY AND HEALTH LITERATURE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
THE ON-LINE FULL TEXT SEARCHABLE BIBLIOGRAPHIC DATABASE WILL INCREASE FROM 130,000 TO 142,000 CITATIONS.

PROGRAM AREA: OTHER

TITLE: PUBLICATION AND DISSEMINATION OF NIOSH PUBLICATIONS

BEGIN DATE: 10/83 END DATE: C DIV: DSDTT

CAN: 098 PROJECT OFFICER: MALONEY, CHARLENE C

PURPOSE: THIS PROJECT ADDRESSES THE GOAL BY PROVIDING FOR DISSEMINATION OF OCCUPATIONAL SAFETY AND HEALTH INFORMATION IN SUPPORT OF NIOSH RESEARCH AND IN RESPONSE TO PUBLIC INQUIRIES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
APPROXIMATELY 30,000 REQUESTS FOR NIOSH PUBLICATIONS WILL BE SATISFIED.

TITLE: INFORMATION RETRIEVAL AND ANALYSIS

BEGIN DATE: 10/70 END DATE: C DIV: DSDTT

CAN: 099 PROJECT OFFICER: TATKEN, RODGER L

PURPOSE: THIS PROJECT PROVIDES TECHNICAL INFORMATION SERVICES TO INSTITUTE PERSONNEL IN SUPPORT OF RESEARCH AND PUBLIC HEARINGS, AND TO THE PUBLIC REQUESTING INFORMATION ON OCCUPATIONAL SAFETY AND HEALTH PROBLEMS. IT PROVIDES FOR DEVELOPMENT OF CHEMICAL AND PROCESS SPECIFIC INFORMATION PROFILES IN SUPPORT OF INSTITUTE PRIORITY SETTING ACTIVITIES.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
ABOUT 4,000 RESPONSES FOR NIOSH STAFF, OTHER GOVERNMENT AGENCIES, INDUSTRY, LABOR ORGANIZATIONS, OSHA PROFESSIONALS, AND THE PUBLIC WILL BE COMPLETED.

PROGRAM AREA: OTHER

TITLE: TECHNICAL INFORMATION (HAZARDOUS WASTE)

BEGIN DATE: 10/83 END DATE: C DIV: DSDTT

CAN: 671 PROJECT OFFICER: MAZZUCKELLI, LAWRENCE F

PURPOSE: THIS PROJECT PROVIDES INFORMATION IN SUPPORT OF NIOSH REIMBURSABLE ACTIVITIES UNDER EPA'S HAZARDOUS WASTE DISPOSAL SUPERFUND. IT INCLUDES FUNDING FOR NIOSHTIC AND HAZARDOUS EXHIBIT PROGRAMS. BECAUSE THE REIMBURSABLE FUNDS WILL COVER MANY DIFFERENT TECHNICAL INFORMATION PROJECTS, THIS PROJECT AGGREGATES ALL DSDTT SUPPORT FOR SUPERFUND ACTIVITY.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
APPROXIMATELY 2,500 CITATIONS WILL BE INPUT TO NIOSHTIC. TWO HAZARDOUS WASTE EXHIBITS WILL BE UNDERTAKEN TO PROMOTE THE COMPREHENSIVE GUIDANCE MANUAL.

TITLE: EDUCATIONAL RESOURCE DEVELOPMENT

BEGIN DATE: 10/77 END DATE: C DIV: DTMD

CAN: 764 PROJECT OFFICER: PURCELL, THOMAS C

PURPOSE: THIS PROJECT SPECIFICALLY ADDRESSES SECTION 21 OF THE OSH ACT WHICH CALLS FOR AN ADEQUATE SUPPLY OF QUALIFIED PERSONNEL TO CARRY OUT THE PURPOSES OF THE ACT BY SUPPORTING ACADEMIC PROGRAMS TO BUILD THE OSH PROFESSIONAL WORK FORCE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
TO TRAIN 900 F.T., 300 P.T. AND 2000 OTHER STUDENTS AND TO PRODUCE 400 OSH GRADUATES. TO IMPLEMENT PROJECT SHAPE IN 2 SCHOOLS OF ENGINEERING AND PROJECT MINERVA IN 10 SCHOOLS OF BUSINESS.

PROGRAM AREA: OTHER

TITLE: CURRICULUM DEVELOPMENT

BEGIN DATE: 10/77 END DATE: C DIV: DTMD

CAN: 765 PROJECT OFFICER: BERBERICH, NORBERT J

PURPOSE: ALL OF THE TRAINING MATERIALS DEVELOPED WILL BE DISSEMINATED THROUGH THE VARIOUS EDUCATIONAL NETWORKS TO THE OSH PRACTITIONER AND OTHER USERS IN A RELATIVE SHORT TIME-FRAME SO THAT THE INFORMATION IS CURRENT AND REFLECTS STATE-OF-THE-ART SKILL AND KNOWLEDGE.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PROJECT OUTPUTS INCLUDE REVISED LECTURE MODULES ON CAUSES OF OCCUPATIONAL INJURY AND ILLNESS, NIOSH SYLLABUS, COMPLETED NURSING COURSE AND NIOSH COURSE CATALOGUE, AND TWO UPDATED NIOSH COURSES.

TITLE: CONTINUING EDUCATION

BEGIN DATE: 10/77 END DATE: C DIV: DTMD

CAN: 766 PROJECT OFFICER: LEININGER, EDWARD D

PURPOSE: THIS PROJECT SPECIFICALLY ADDRESSES SECTION 21 OF THE OCCUPATIONAL SAFETY AND HEALTH ACT WHICH REQUIRES THAT EDUCATIONAL/INFORMATION PROGRAMS BE MADE AVAILABLE TO PRACTITIONERS IN THE FIELD.

FY 1987 PLANNED LEVEL OF ACCOMPLISHMENT:
PROVIDE FOR TRAINING OF 18,000 STUDENTS DIRECTLY AND THROUGH EDUCATIONAL RESOURCE CENTERS.

NIOSH

Projects

By

Division

*** DIVISION OF BIOMEDICAL AND BEHAVIORAL SCIENCE ***

*** DIVISION OF BIOMEDICAL AND BEHAVIORAL SCIENCE (continued) ***

*** DIVISION OF BIOMEDICAL AND BEHAVIORAL SCIENCE (continued) ***

*** DIVISION OF BIOMEDICAL AND BEHAVIORAL SCIENCE (continued) ***

*** DIVISION OF BIOMEDICAL AND BEHAVIORAL SCIENCE (continued) ***

*** DIVISION OF PHYSICAL SCIENCES AND ENGINEERING ***

OCCUPATIONAL LUNG DISEASES

*** DIVISION OF PHYSICAL SCIENCES AND ENGINEERING (continued) ***

*** DIVISION OF PHYSICAL SCIENCES AND ENGINEERING (continued) ***

*** DIVISION OF RESPIRATORY DISEASE STUDIES ***

OCCUPATIONAL LUNG DISEASES

*** DIVISION OF RESPIRATORY DISEASE STUDIES (continued) ***

*** DIVISION OF RESPIRATORY DISEASE STUDIES (continued) ***

*** DIVISION OF RESPIRATORY DISEASE STUDIES (continued) ***

*** DIVISION OF SURVEILLANCE, HAZARD EVALUATIONS, AND FIELD STUDIES ***

*** DIVISION OF SURVEILLANCE, HAZARD EVALUATIONS, AND FIELD STUDIES (continued) ***

OCCUPATIONAL CANCERS

*** DIVISION OF SURVEILLANCE, HAZARD EVALUATIONS, AND FIELD STUDIES (continued) ***

*** DIVISION OF SURVEILLANCE, HAZARD EVALUATIONS, AND FIELD STUDIES (continued) ***

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*** DIVISION OF STANDARDS DEVELOPMENT AND TECHNOLOGY TRANSFER ***

*** DIVISION OF STANDARDS DEVELOPMENT AND TECHNOLOGY TRANSFER ***

*** DIVISION OF TRAINING AND MANPOWER DEVELOPMENT ***

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