HEW Safety Standards On Chemical Carcinogens To Be Issued in Manual

The final draft of safety standards for laboratory research involving cancer-causing chemicals has been developed by the Subcommittee for Carcinogen Standards of the DHEW Committee to Coordinate Toxicology and Related Programs.

The standards document, which will set mandatory safety practices for chemical carcinogens for all HEW laboratories, will be issued by the HEW Director of Safety as part of the Department's Safety Management Manual.

Based on NCI Guidelines

These standards are based on minimum safety guidelines for research in cancer developed by the Cancer Research Safety Committee of NCI, headed by Dr. W. Emmit Barkley.

The subcommittee also heard testimony from approximately 45 representatives from government, industry, and academia on their experiences in controlling exposure to carcinogens. More than 100 other scientists and safety professionals participated in the study conducted by the National Institute of Dental Research.

These ulcers occur inside the mouth as distinguished from "fever blisters," caused by herpes simplex virus, which occur outside on the lip margins.

Only those individuals with frequent attacks (at least twice a month) will be accepted for study. For more information and a possible appointment, call Dr. Edward A. Graykowski on Ext. 61571.

Communications Analyst Named Deputy Director of Lister Hill Center

Mr. Erdman, who taught electrical engineering at Northeastern University, helped in setting up communications facilities for the White House Situation Room and the Executive Office of the White House.

Ben Erdman has been named deputy director of the Lister Hill National Center for Biomedical Communications. He will assist Dr. Robert M. Bird, Director of the Lister Hill Center, in planning, developing, and executing scientific and technical research and development programs in biomedical communications.

Mr. Erdman received a B.S. degree in electrical engineering from Northeastern University in Boston — he is native of that city. After graduation he spent several years studying at the Massachusetts Institute of Technology, and later accepted a teaching assistantship there. Following this assignment, he became a full time instructor in electrical engineering at Northeastern University.

Mr. Erdman's Federal career began in 1964 when he joined the Department of Defense as a computer systems analyst in the Defense Communications Agency. He came to NLM from that agency; his last position there was program manager and technical director.

Mr. Erdman helped provide improved information handling and communications facilities for the White House Situation Room, National Security Council Staff, and the Executive Office of the President.

Supreme Court Action Affirms Decision, Permits Photocopying for Library Loan

Almost 7 years to the day after a petition against the Federal government was filed, the U.S. Supreme Court affirmed a decision that photocopying by the National Library of Medicine and the NIH Library of copyrighted journal articles for interlibrary loan is not a copyright violation.

Justice Blackmun abstained from voting.

Commenting on the case, Dr. Martin M. Cammenga, NLM Director, noted that users of published health information owe a debt of gratitude to the many organizations that supported the Library's position.

The lengthy legal proceedings started on Feb. 27, 1968, when the Baltimore medical publishing firm filed a suit charging that the NLM and NIH, by providing health professionals with single photocopies of journal articles, had infringed the publisher's copyright.

The Government argued that such copying for interlibrary loan was within the definition of "fair use," and that such reproduction was necessary to insure the dissemination of published research results.

Previous Actions Reviewed

On Feb. 16, 1972, Commissioner James F. Davis of the U.S. Court of Claims, where the case was first heard, announced that the full Court of Claims found in favor of the plaintiff.

Government attorneys filed an exception to the report and, on Nov. 27, 1973, by a vote of four to three, the full Court of Claims found in favor of the Government.

That decision was appealed to the U.S. Supreme Court by Williams & Wilkins, and the final ruling was announced on Feb. 25.

Explains Primary Function

The primary function of the respiratory chain of electron-transfer compounds is to accomplish translocation within the mitochondria, subcellular organelles. A proton "pump" (a complex structure of several proteins) reverses the flow of protons and in doing so causes the formation of ATP.

Dr. Racker and his colleagues have reconstituted the calcium ion and sodium-potassium ion pumps.
Photos Depicting History of NIH Requested by NLM

Requests for photographs depicting events at NIH that may be of historical interest have been made by the History of Medicine Division, National Library of Medicine. Dr. Peter D. Olch is deputy chief of the Division.

He stated that the public information offices at NIH and the staffs of other offices here have been asked to search their files for such material. NIH alumni are also requested to send such photos to Dr. Olch at NLM.

The photos may be candid shots taken in laboratories, the Clinical Center, on medical rounds, or in operating rooms.

The History of Medicine Division has been chosen as the repository for such photos. That office will organize, catalog, and make the material available to those with valid interests.

If requested, photographs that are not selected for the collection will be returned to the sender. All photographs—groups, lab scenes, instruments and other equipment—must be dated and fully identified, if possible.

Send dated and identified photographs to Dr. Peter D. Olch, History of Medicine Division, NLM, 8600 Rockville Pike, Bethesda, Md. 20014.

Research Awards Prog. Unified

The consolidation of research training and fellowship authorities of the various components of NIH and the Alcohol, Drug Abuse, and Mental Health Administration into a unified National Research Service Awards Program was recently announced by Caspar W. Weinberger, HEW Secretary.

The proposed regulations governing the new program have been published in the Federal Register.

Safety Tips for NIH

A. Lab coats protect the clothing and bodys of laboratory personnel from chemical or biological research materials. They are not all-weather coats or lounging jackets. Call the Environmental Services Branch, Ext. 66034, for information on the use of laboratory clothing.

B. Correct answer: A.
Mr. Moore received his undergraduate degree from Princeton University and his M.A. from the U. of Minnesota. He has also worked in private industry as a management consultant.

University for about 11 years. He was past national president of American Youth Hostels and received that organization's National Award for Distinguished Service to Hosteling. This past Friday (March 7) co-workers and colleagues gave a farewell party for Mr. Moore in Wilson Hall.

Lyman Moore Retires; In Gov't Three Decades

Lyman Moore, executive officer of the National Heart and Lung Institute, has retired after more than 39 years of Federal service. He has been with the Institute since 1970.

Mr. Moore started his Government career in 1940 with the Bureau of the Budget. His other Federal posts include serving as assistant executive officer of PHS, and as executive officer of NIMH, the Bureau of State Services Environmental Health Program, and the Bureau of Disease Prevention and Environmental Control.

Lectured at American U.

From 1968 until he joined NHLI, he served in several executive positions at IISIma.

During his Federal career, Mr. Moore had lectured at American University for about 11 years. He was past national president of American Youth Hostels and received that organization's National Award for Distinguished Service to Hosteling.

This past Friday (March 7) co-workers and colleagues gave a farewell party for Mr. Moore in Wilson Hall.

Volunteer Linguist 'Bank' Sought for Bicentennial

During the Bicentennial year, many foreign visitors will come to the Washington area. Anticipating that some may not speak English or may be more comfortable speaking their native language, the District of Columbia is establishing a "language bank."

The PHS Office of Public Affairs recently distributed a memorandum giving PHS employees an opportunity to volunteer for this service between May and September of the 1776 Bicentennial year.

Employees or other persons may obtain further information and language bank application blanks by contacting Joseph Yakaitis, Room 17-35, NIH, 36, Rm. 5B16.

Dr. Danon's lab has conducted extensive studies on the biological aspects of red blood cell aging over the past 15 years. He heads the Biological Ultrastructure Section of the Weizmann Institute of Science, Rehovot, Israel.

An internationally recognized electron microscopist and expert on red blood cells, Dr. Danon is President of the 10th International Congress of Gerontology to be held in Jerusalem, June 22-27.

In their research, the Israeli scientists assumed that the macrophage does not recognize enzymatic activity levels within a red blood cell as the signal to remove it from circulation after its 120-day useful life span.

Studies Explained

They studied these points to the signs called "read" by the macrophage as either a diminished ability of the cell to change form and return to its original shape without breaking (reversible deformability), or a reduced surface charge on the old cell.

Data collected in Dr. Danon's laboratory favor the reduced surface charge on the old cell membrane. Therefore, he said, the reduced surface charge may help the macrophage get closer to the cell membrane where it recognizes the surface antigens newly available for interaction.

Workers' Compensation Law Changes Outlined

Significant changes have recently been made to the Federal Workers' Compensation Program administered by the Office of Workers' Compensation Programs, U.S. Department of Labor.

The changes are summarized below:

• An employee who sustains a disabling, traumatic, job-related injury on or after Nov. 5, 1974, must be continued in a pay status for up to 45 days unless the employee elects to use sick or annual leave.

Medical care during this period will also be covered.

Further Summaries

• A traumatic injury is one caused by an external force or strain identifiable as a single incident or series of incidents within a single day or work shift.

• An employee who recovers from an injury within one year is entitled to be restored to the same position, or its equivalent, held at the time of the injury.

• If recovery occurs after more than one year, the employee is entitled to priority placement in the same or equivalent job.

• Time "lost" while receiving compensation will be fully creditable for within-grade increases and other benefits related to length of service.

NIH Visiting Scientists Program Participants

1/19-Dr. Georges R. Mohn, Germany, Environmental Mutagenesis Branch. Sponsor: Dr. Frederick de Serres, NIEHS, Research Triangle Park, N.C.

2/1-Dr. Dulal C. Chatterji, India, Pharmacy Department. Sponsor: Dr. Joseph Galilei, CO, BG. 10, Rm. 1N237.

2/2-Dr. Guido Forni, Italy, Laboratory of Immunology. Sponsor: Dr. Ira Green, NIH, 10, Rm. 11N315.

2/2-Dr. Michael P. Alpers, Australia, Laboratory of Central Nervous System Studies. Sponsor: Dr. Carlstone Gajdusek, NINDS, Rm. 36, Rm. 5B16.

2/3-Dr. Reinaldo D. Chacon, Argentina, Medical Oncology. Sponsor: Dr. Robert Young, NIH, 10, Rm. 1N236.

2/2-Dr. Satoshi Kurosawa, Japan, Laboratory of Preclinical Pharmacology. Sponsor: Dr. Erminia Costa, NIH, Rm. A. White Rd., St. Elizabeths Hospital.

2/5-Dr. Sang S. Park, Korea, Viral Pathology Section. Sponsor: Dr. Adi Gazdar, NIH, Rm. 41, Rm. 200.

2/9-Dr. Sol Kugelmass, U.S.A., Laboratory of Psychology. Sponsor: Dr. David Rosenthal, NIMH, Rm. 10, Rm. 2N252.
Freezing and Birth of Rabbit Embryos Called Significant Aid to Research

A significant advance in cryobiological investigations—the successful freezing and birth of rabbit embryos—has been reported in a recent issue of Experimental Cell Research, a Swedish publication.

The article, entitled Survival of Frozen Rabbit Embryos, was written by Dr. Harvey Bank, assistant professor of pathology at the Medical University of South Carolina, and Dr. Ralph R. Mauer of the Environmental Toxicology Branch, National Institute of Environmental Health Sciences. Previously, with the exception of mouse embryos, only single cells had been frozen. The rabbit embryo used in Drs. Bank's and Mauer's research are considerably larger and more sensitive to change than their mouse counterparts, representing a cryobiological advance toward more complex systems.

Multicellular systems are more difficult to work with since these more complex systems differ from aneuploidy in their response to freezing. New procedures were needed for successful freezing and survival of frozen rabbit embryos. The effect of various cooling and warming rates, thawing procedures, and other variables on the survival of Dutch-belted rabbit embryos was determined. When most favorable factors were reached, 65 percent of the frozen embryos developed in culture.

Some of these fetuses developed into live offspring when reimplanted to a foster mother. These baby rabbits were normal in every way, and eventually gave birth to live offspring of their own. Results should be valuable in many ways, according to Drs. Maurer and Bank.

"Preservation of these embryos facilitates transfer of specific strains of experimental animals between laboratories and makes available large numbers of embryos for simultaneous experiments in different laboratories," they suggest.

Other Advantages Cited

The response of embryos to freeze could aid understanding of the responses of complex tissues to freezing.

"The relative sterility of early embryos may eliminate quarantine requirements or might serve to introduce specific strains into a sterile environment," they concluded.

Drs. Bank and Mauer recently reported these findings with rabbit embryos to a workshop in Bar Harbor, Me., sponsored by several international research organizations including UNESCO.

In further studies, Drs. Maurer and J. K. Haseman, Environmental Biometry Branch, NIEHS, using an optimization procedure and morula staged embryos, reported in vitro development of 83 percent for frozen and thawed rabbit embryos.

At the Seventh Annual Meeting of the Society for the Study of Reproduction held in Ottawa, Canada, they reported these results and the fact that one-fourth of the frozen embryos developed to full-term fetuses.

New Technique to Gauge Pain Perception in Teeth May Aid in Other Areas

An objective way to measure and record brain responses to specific, painful electric stimulation of the pulp of human teeth has been reported by National Institute of Dental Research grantees.

Previously, it was impossible to measure pain perception objectively, and difficult to compare pain messages to the brain from such other sensations as pressure or temperature.

Now, Dr. Gian Emilio Chatrani and his associates at the University of Washington, Seattle, have added to other studies which have shown that the small nerve fibers in tooth pulp function almost exclusively in conducting painful stimuli to the brain.

Method Described

The researchers have developed a method of delivering electrical impulses of a known strength, duration, and wave form to selected teeth.

To accommodate the electrodes they drill two holes into the dentin where minute tubules give the current access to the pulp. After completion of the tests, the holes are filled.

The investigators then place electrodes at various positions on the surface of the head to pick up those brain waves that occur in response to series of short, moderately painful impulses to the teeth.

Use Computer

The scientists use a computer to extract these wave patterns and distinguish them from other coincidental electrical activities of the brain which tend to mask them. The cleared pain patterns emerge from electrodes placed at the top and at the center of both sides of the head.

The scientists recorded consistent and reproducible pain patterns among themselves and normal volunteers.

Explore Pain Patterns

In one instance they found no patterns when they stimulated a tooth from which the pulp had been removed. Another viable tooth in the same person gave normal pain patterns.

A man, who had never felt pain of any kind because of a defect in his nervous system, gave a flat, waveless, response to electrical stimulation similar to that from the dead tooth. This is believed to be due to the congenital absence of small, pain-carrying nerve fibers. Autopsy of the man's deceased wife who also felt no pain, revealed such a lack.

In normal volunteers, the anesthetic meperidine also abolished the brain wave responses to pain.

In other parts of the body, pain messages cannot be separated from other types of information to the brain as clearly as in tooth pulp because they contain a mixture of fibers that carry a wide variety of sensations.

Technique is Bo Planned

Therefore, the scientists plan to use the technique described to study the effectiveness of various pain-relieving drugs as well as other procedures said to alleviate pain such as acupuncture, hypnosis, and stimulation of peripheral nerves.

This research has been reported by Dr. Chatrani, Dr. Robert C. Canfield, Ersore Letthich, and Dr. Richard G. Black in a recent issue of the Journal of Dental Research.
CARCINOGEN (Continued from Page 1)

The standards document will comprise two parts. Part I, Carcino­
gen Safety Standards, will set general safety principles for the handling, storage, transport, and disposal of chemical carcino­genes. This section assigns responsibility for safety practices at agency, supervisory, and lab worker levels; sets standards for medical sur­veillance and housekeeping in specialized laboratory areas; and spells out requirements for personnel practices.

Part II, a series of Carcino­gen Safety Monographs, provides specific technical and safety information for each chemical carcino­gene.

Chemicals Listed

The chemicals regulated initially by the HEW standards will be those now regulated by OSHA standards. Other chemicals will be added by the subcommittee as determined by the following criteria for conclusive demonstration of carcino­gene:

- Statistical significance of tumor incidence in mammalian spe­cies with respect to controls;
- Reproducibility (or confirmation in another species);
- Adequacy of experimental design, such as pathological evalua­tion and appropriateness of the route of exposure.

Dr. Myron Mehlman, of the Office of the Assistant Secretary for Health, chaired the Subcommittee for Carcino­gen Standards.

Other members are: Dr. W. Emmett Barkley, NCI; Dr. Morris F. Cramer, NCTR; Dr. Gary Flamm, NCI; Dr. Robert H. Huffaker, CDC; Dr. James A. Johnson, NHEW, and Dr. Herman F. Krav­bill, NCI.

Also, Dr. John A. Moore, NIEHS; Dr. David P. Reall, NIEHS; Dr. Lester D. Scheel, NIOSH; Dr. Harry S. Steinman, NCI; Dr. Lloyd B. Tepper, FDA, and Dr. Larry Fish­bica, NCTR.

Three New Members Join Advisory Council of NIEHS

Three new members have been appointed to the National Ad­visory Environmental Health Sciences Council: Dr. Harold H. Henry, John C. Sackett, and Dr. Paul F. Wehrle.

Dr. Henry is professor and head of the department of civil and min­eral engineering at the University of Alabama.

Mr. Sackett, president of Doyon Limited in Fairbanks, is a member of the Alaska State Senate.

Dr. Wehrle is director of professional services for the Pediatric Pavilion at the Los Angeles County-USC Medical Center.

NIH Toastmasters Elect Rhoda Yarkin President

Rhoda Yarkin, microbiologist at the Laboratory of General and Comparative Biochemistry, Nation­al Institute of Mental Health, has been elected president of the NIH Toastmasters Club.

She is the first woman elected to head the speech-improvement organization which was chartered at NIH in 1969.

Other officers elected for the first 6 months of 1975 are: Jasper Cummings, educational vice pres­i­dent; Dr. Joseph Kadish, adminis­trative vice president; Reginald Russell, secretary; George Mook, treasurer, and James Pomeroy, ser­geant at arms.

Edward Nicholas, Jr., Director, Division of Personnel Management, in a recent memo sent to the club praised the NIH Toastmasters Club as a leadership and speech-improvement activity.

He noted that the official per­sonnel folder of each toastmaster takes note of participation in the Communication and Leadership Program. This record of supplement­al experience may later be taken into account by groups such as Qualifications Review Boards.

The NIH Toastmasters Club has a current roster of 27 members and is open to anyone interested in self improvement in speech communication.

Meetings are held every Thurs­day in the Bldg. 10 Cafeteria, Din­ning Room #2, from noon to 1 p.m.

Survival of Baby With Usually Fatal Genetic Disease Suggests Early Therapy

By Kludie M. Cox

Twenty-month-old Jimmy is responding so well to copper treatments for Menkes' Kinky Hair Syndrome—a usually fatal genetic disorder—that he recently went home for the first time in his life.

His doctors at the General Clinical Research Center of St. Christopher's Hospital for Children, Philadelphia, believe that early diagnosis and treatment is responsible for the baby's improved developmental abilities.

The research center is supported by the Division of Research Re­sources.

The disorder, caused by a rare inherited trait affecting only boys, is characterized by severe mental retardation, deteriora­tion of muscular control, and failure to gain weight.

Early Symptoms Noted

Other symptoms include seizures, low or absent copper levels in blood plasma, and increased susceptibil­ity to infection. Progressive brain deterioration often reduces the child to a vegetative state prior to his death within the first 3 years of life.

Named for John H. Menkes, who described this genetic affliction in 1962, the kinky appearance of the victim's white, coarse hair is caused by twisted hair shafts which vary in diameter; these also break spontaneously at irregular inter­vals.

Menkes' Kinky Hair Syndrome is associated with a defect in the passage of copper from the stom­ach and intestinal tract into the blood. The consequent copper defi­ciency seems to cause the disorder's characteristics.

Copper is an essential element in the function of many enzymes. These complex organic substances activate specific chemical transforma­tions in the body.

Copper-dependent enzymes affect energy production, brain activity, and physical growth, in addition to other body processes.

Doctors now believe that deterioration of the body processes from Menkes' Syndrome may begin before birth since some infants die within the first weeks of life.

Previous attempts at treating children as young as 3 months old have been unsuccessful. According to physicians, death may have re­sulted from the late stage of the disease when treatment began.

Jimmy began to receive copper at the age of 28 days.

Physicians at the NIH-support­ed clinical research center have changed Jimmy's outpatient treat­ment from intravenous to oral dos­es of copper with a chelating agent.

This substance helps the copper pass through the stomach and in­testinal tract into the blood. It is hoped that this change will allow further improvements in the boy's development.

A toastmaster for more than 2 years, Mrs. Yarkin served as educational vice president before being elected president of the group.

Doctors hope that Jimmy's response to treatment beginning at the age of 28 days will lead to earlier diagnosis and more effective treatment for other victims of Menkes' Kinky Hair Syndrome.

PHS Grants and Awards

Of 6 Agencies Listed

Part I of the five-part series, Public Health Service Grants and Awards, Fiscal Year 1974 Funds and Fiscal Year 1973 Released Funds, was recently published.

Part I presents tabulations of 17,327 research grants and awards made by six PHS agencies from FY 1973/74 released funds, and from FY 1974 funds. Included in this total are 14,372 research grants and awards from NIH.

Research grants are listed by principal investigator, and by the state and city of the organization having professional responsibility for the work.

Awards Cross-indexed

Research career program awards, recently designated as a research rather than a training activity, are shown by area, organization, and awardee. A summary indicates the extent of financial support.

The remaining volumes, soon to be released, index all current PHS support to medical research train­ees, health manpower education training, construction of research facili­ties, and research resources.

Single copies of Part I (DHHS Publication No, (NIH) 75-494) are available free of charge from the Division of Research Grants.

Multiple copies may be pur­chased at $1 from the Super­intendent of Documents, U.S. Govern­ment Printing Office, Washington, D.C. 20402.
Nitroglycerin May Cut Heart Muscle Damage, NHLI Scientists Report

A group of researchers from the National Heart and Lung Institute have found that nitroglycerin, a drug used for more than a century to relieve angina pectoris chest pains may also be effective in reducing heart muscle damage resulting from acute attacks and in reducing the threat of heart rhythm disturbances that are a frequent, and sometimes lethal consequence of such attacks.

These findings, from a series of studies in animals subjected to coronary artery occlusion, were reported in a recent issue of The New England Journal of Medicine by Drs. Stephen E. Epstein, Kenneth M. Kent, Robert E. Goldstein, Jeffrey S. Borer, and David E. Redwood, of NHLI's Cardiology Branch.

Most heart attacks result from obstructions in one or more of the coronary branches that supply blood to the heart muscle itself. The heart tissues normally receiving oxygen and essential nutrients via the obstructed vessel may suffer varying degrees of damage, depending upon the severity and duration of blood deprivation (ischemia).

Damage Is Critical

Because this damage is often a critical factor affecting survival and also the degree of permanent disability following recovery from the acute heart attack, scientists have been seeking means of minimizing the consequences of blood deprivation in order to limit the harm done to the heart muscle.

Nitroglycerin had previously been thought unsuitable for this purpose. The drug reduces the oxygen needs of the heart and may improve coronary blood flow by dilating collateral blood channels in heart muscle—both beneficial to the ischemic heart.

But it also reduces arterial blood pressure and triggers a reflex increase in heart rate—both of which tend to increase, rather than reduce, the area of ischemic heart damage.

In animals subjected to coronary occlusion, Dr. Epstein and co-workers report, nitroglycerin reduced mean arterial pressure by 14 mm of mercury and increased heart rate by an average of 21 beats per minute.

But while these factors opposed the beneficial actions of the drug, they did not negate them. The nitroglycerin-treated animals sustained less ischemic heart damage than did the untreated controls.

Moreover, the drop in arterial pressure plus the increase in heart rate usually elicited by nitroglycerin could be prevented by giving the drug in combination with methoxamine, an agent that countered these two effects of nitroglycerin apparently without impeding the drug's beneficial actions in heart muscle.

Nitroglycerin plus methoxamine provided substantially greater protection against ischemic heart damage than had nitroglycerin alone, according to Dr. Epstein. In ECG recordings, gross pathological evaluation of affected areas of heart muscle, and biochemical determinations.

In experiments, the investigators found that nitroglycerin also improves the electrical stability of ischemic heart muscle, making the heart less susceptible to the arrhythmias that may result from heart muscle damage. These life-threatening complications may result from acteqte heart attacks. Because this damage is often a critical factor affecting survival and also the degree of permanent disability following recovery from the acute heart attack, scientists have been seeking means of minimizing the consequences of blood deprivation in order to limit the harm done to the heart muscle.

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Seven Institute Directors Are Among 17-Member Commission on Diabetes

Six medical scientists and four laymen have been named to the newly created 17-member National Commission on Diabetes. The other seven members are NIH Directors whose Institutes are involved in various aspects of diabetes research.

The Commission was established by the National Diabetes Mellitus Research and Education Act which was enacted by Congress in July 1974.

Diabetes is the fifth leading cause of death in the United States and ranks second among primary causes of new cases of blindness. In addition, the complications of diabetes, particularly cardiovascular degeneration, have led to many other serious health problems.

The mandate of the Commission includes preparing for Congress a plan for a coordinated NIH research program with such aims as expanding the national research effort against diabetes mellitus.

This will include studies of the biological phenomena underlying the many severe complications of the disease.

The program would also educate and alert people to the early indications of diabetes mellitus and to the best methods of treatment and control. The plan is to be forwarded to Congress within 9 months after the Commission begins its work.

The Institutes involved are: the National Institute of Arthritis, Metabolism, and Digestive Diseases, the National Eye Institute, and the National Institute of Neurological Diseases and Stroke.

Also, the National Heart and Lung Institute, the National Institute of General Medical Sciences, the National Institute of Child Health and Human Development, NCI Program Stimulates Innovative Teaching for Clin. Cancer Education

The National Cancer Institute has announced a $4 million Clinical Cancer Education Program of grants to stimulate development of more innovative teaching methods in cancer prevention, diagnosis, treatment and rehabilitation.

Eligible institutions include schools of medicine, dentistry, osteopathy, and public health; affiliated hospitals, and cancer institutions.

NCI will fund carefully designed, multidisciplinary cancer instruction supplementary to the existing curriculum. Awards will not include fellowships or other individual stipends.

The program is intended to augment and coordinate undergraduate and graduate medical study of cancer chemotherapy and radiation therapy, special diagnostic techniques, cancer epidemiology and biostatistics, clinical research, community clinic work, and organization of cancer conferences and seminars.

In dental schools the focus will be on oral diagnosis, pathology, surgery, and prosthesis as they relate to cancer. Students may participate in community programs such as oral cancer screening.

The program will also support planning, development, and testing of new teaching techniques.

For further information contact: Education Branch, Division of Cancer Research Resources and Centers, NCI, Westwood Bldg., Rm. 10-A-07, and the National Institute of Dental Research.

The Commission will also make recommendations on the establishment of NIH programs to conduct and support field studies, large-scale testing and evaluation, and demonstration of preventive diagnostic, therapeutic, rehabilitative, and control approaches to the disease.

Sickle Cell Disease Program Reports to Congress

The National Sickle Cell Disease Program has sent its annual report to Congress. The report describes the status of program components and activities and outlines eight program goals and needs for the next 5 years.

Among them are the need to expand efforts to develop quicker, cheaper, and more accurate methods for detecting abnormal hemoglobin and expanding investigations into the mechanisms responsible for changing the production of hemoglobin from fetal to adult.

The program conducts and supports research on sickle cell anemia and carries out demonstration and education projects concerned with diagnosis, control, and treatment of this disorder, which afflicts an estimated 50,000 Americans, most of them blacks.

Program components described in the report include Comprehensive Sickle Cell Centers, Screening and Education Clinics, Mission Oriented Research and Development Programs, a Biomedical Research Program, an Education Program, and a Hemoglobinopathy Detection Training Program.

These activities are supported through several mechanisms including grants, contracts, cooperative agreements and inter-agency agreements.

In addition to the National Heart and Lung Institute and the Health Services Administration, other agencies engaged in sickle cell activities include the Center for Disease Control, the Department of Defense, and the Veterans Administration.

Project ACORDE Films Dental Instruction Aids

A self-instructional course on Restoration of Carious Preparations with Amalgam and Tooth-colored Materials, the first product of Project ACORDE (A Consortium on Restorative Dentistry Education), is now available for purchase from the National Audiovisual Center.

The 15 modules in the course are designed to teach dental students the skills for placing 11 different types of restorations.

The course includes a student syllabus with detailed descriptions of procedures, study questions, practice exercises, and an evaluation system; 14 films of procedures; a manikin head that simulates a patient; models of correctly and incorrectly completed restorations, and an instructor's syllabus.

Supplies, equipment, and tooth models must be provided by the schools. A list of supplies and equipment, as well as photographs of the study models, are provided in the appendix of the instructor's syllabus.

Teaching Time Explained

Course teaching time should extend over one semester, with an average of 9 hours of class time devoted to each module.

Project ACORDE was developed under the Division of Dentistry, Health Resources Administration, the National Library of Medicine's National Medical Audiovisual Center, and supported the production of motion pictures, still photographs, and manuals.

The schools of dentistry at the University of California at Los Angeles, the State University of New York at Buffalo, and the University of Florida cooperated in the development and testing of materials.

The Far West Laboratory for A close-up reveals the instructor and student at work on the "dental patient"—a manikin filmed at eye level over the student's right shoulder.

Educational Research and Development, San Francisco, assisted in field evaluation and in preparing the manuals.

The audiovisual part of the course is priced at $69.50 (16 mm film) and at $505 (3/4-inch videotape). The student syllabus is $15; the instructor's syllabus, including material in the student syllabus, is $25.

Course materials are available for purchase from the Sales Branch, National Audiovisual Center (GSA), Washington, D.C. 20409.

Doull Serves on NIEHS Council

Dr. John Doull, professor of pharmacology and toxicology at the University of Kansas Medical Center, has been appointed to a term on the National Advisory Environmental Health Sciences Council ending Sept. 30, 1976.

He has published on pesticides, hibernation, biological aspects of ionizing radiation, and toxicology.
Speakers, Discussion
In First STEP Module
Scheduled Tomorrow

Module 1 of the 1975 STEP Committee Continuing Education Program will begin tomorrow (Wednesday, March 12) at 1:30 p.m. in Wilson Hall, Bldg. 1.

The module, Interagency Orientation, will explore ways issues are faced by programs at NIH and other Government agencies.

The topic is designed to add to participants’ appreciation of the effect that these situations may have on achieving program goals.

Programs Described

At the first session, on Program Development, speakers will include: Dr. Diane Fink, NCI; Robert Allnut, Senate Committee on Aeronautical and Space Sciences; Dr. Charles Eldington, ERDA, and Dr. Joel Snow, NSF.

The panel will describe factors leading to initiation and development of their programs and techniques they have found effective. Discussion will follow.

All NIH employees, as well as module participants whose applications were reviewed by the STEP Committee, are welcome for the entire session, which will be held on the second floor of the building each month through July.

Information Available

For further information, contact Dr. William H. Goldwater, Module I Director, Bldg. 1, Room 237, Ext. 62341, or Dr. Zora Grifo, STEP Coordinator for the Continuing Education Program, Bldg. 1, Room 911, Ext. 65566.

Via 2-Way Phone, Science Writers in Bldg. 31 Briefed On Allergy Research by Investigators Out West

A briefing—using a two-way conference telephone on developments in allergy research was recently arranged by the National Institute of Allergy and Infectious Diseases with Washington science writers in Bldg. 31 and scientists attending the annual meeting of the American Academy of Allergy in San Diego.

The telephone set-up, used by NIAID for the last 3 years, allows reporters to question investigators directly about their research findings.

Among the several research topics discussed were reports on the development of cataracts in asthmatic children on steroid therapy; the use of insect venoms for diagnosis and treatment of insect sting allergies; new drugs for treating asthma and hay fever, and a relatively new occupational disease—"meat-wrappers' asthma." Dr. Rudi Andrasci, University of Oregon, reported on "meat-wrappers' asthma," a complex of respiratory symptoms marked by cough, bronchospasm, headaches, and nausea.

Adhesive Is Responsible

Dr. Andrasci found that the heat-activated isocyanate compounds in the adhesive backing of price labels were responsible for the more severe symptoms of this asthma.

The syndrome was also partially caused by the polyvinyl chloride fumes produced by heat-sealed plastic wrap used to cover meat.

Dr. Hyman Chai described a study of 92 asthmatic children examined at Children's Asthma Research Institute and Hospital in Denver, which is one of NIAID's 17 Asthma and Allergic Disease Centers.

All except one of the children had been on corticosteroid therapy for at least 3 years.

Cataracts Found

Dr. Chai found that a significant number of these children had developed signs of cataracts, although only one child in a large group studied several years ago was found to have cataracts. He said that the type of steroid drug and dosage used may be responsible for the increase. Other factors may also be involved.

Results of trials of a new drug for treatment of asthma—becloethasone diproponate—were reported by Dr. Norbert Gilmore, Royal Victoria Hospital, Montreal.

The Canadian group substituted the drug for systemic steroids in the treatment of asthma patients and concluded that it was safe and effective for the last 3 years.

The drug, known by the brand name Beclostatide outside the U.S., is administered by aerosol spray and was tested in a double-blind study comparing the drug with the aerosol spray alone.

Dr. Paul C. Turkelbaum, Johns Hopkins University, and Dr. K. Kammermyer, University Hospital, Iowa City, described their studies on Flunisolide—a new synthetic corticosteroid drug for the treatment of allergic rhinitis, or hay fever.

Symptoms Reduced

They found that it significantly reduced the number and severity of symptoms. Also, their tests showed that Flunisolide did not suppress adrenal function which may cause serious side-effects in long-term treatment with corticosteroids.

Insect sting allergies—the cause of approximately 40 deaths a year—were the subject of two papers presented by NIAID-supported scientists, Drs. Martin D. Valentine and Kevin J. Hunt of Johns Hopkins University.

These investigators developed skin tests using pure venom from the honey bee, yellow jacket, white-faced hornet, and other stinging insects.

Drs. Valentine and Hunt found the tests clearly differentiate highly sensitive individuals from normal people. Skin tests using whole body extracts of the insects failed to distinguish between the allergic and the normal individuals.

Venes Immunizes

Also using pure venom, Dr. Valentine successfully immunized very sensitive patients against yellowjackets and other stinging insects. A high sensitivity to insect stings often causes systemic reactions to a sting, resulting in anaphylactic shock.

Immunization with single or mixed venoms was carried out on those who had not responded to conventional therapy with whole insect body extracts.

One such patient, after several months of therapy, was deliberately stung with a yellow jacket. Only a small localized wheal appeared. There was no systemic reaction.

LAW CHANGES

(Continued from Page 8)

- An injured employee now has a free choice of initial treatment by a U.S. medical officer or hospital or by any private physician within a reasonable distance who agrees to accept the employee for immediate treatment.

- "Physician" now includes dentists, podiatrists, optometrists, clinical psychologists, and chiropractors—the last under very limited conditions.

- The statutory time limit for giving notice of injury to the immediate supervisor for compensation purposes is now 30 days from the date of injury; in practice, notice should continue to be given as soon as possible.

- An employee or survivor can continue to receive VA benefits while receiving benefits from OWCP as long as the benefits are not for the same injury or death.

For more specific information, contact the appropriate personnel office.