PROGRAMS ■ PRACTICES ■ PEOPLE

Job Safety and Health Agencies Cooperate to Increase Efficiency and Effectiveness

■ The two Federal agencies most concerned with assuring a safe and healthful American workplace have announced steps for increasing their efficiency and effectiveness.

The Occupational Safety and Health Administration (OSHA) of the Department of Labor and the National Institute for Occupational Safety and Health (NIOSH) of the Department of Health, Education, and Welfare have entered into an interagency agreement that details moves for working closer together in their respective regulatory and research functions under the Occupational Safety and Health Act of 1970. Notice of the new agreement, which supersedes an OSHA-NIOSH memorandum of understanding of October 23, 1973, was published in the Federal Register of April 17, 1979.

Under the latest agreement:

- The two agencies will establish priorities and set the parameters to be considered in the development of criteria for recommended standards.
- When a decision for rulemaking is made by OSHA, the agency will advise NIOSH of the schedule for establishing or revising a standard and will make all written comments available, while NIOSH will appoint one or more coordinators for technical assistance before and during rulemaking and provide expert technical witnesses for the resulting public hearings.
- Contact representatives will be designated for health hazard evaluation requests in both agencies. Information on the receipt of such requests, the action taken, and the resulting NIOSH reports will be transmitted between the two agencies through these representatives. The two agencies also will coordinate field activities resulting from such requests.
- NIOSH will provide technical assistance and supportive field investigations to OSHA, with such activity coordinated through the offices of the heads of both agencies; OSHA requests will be in writing except in disaster or emergency situations. NIOSH will provide expert witnesses in support of OSHA's court actions, administrative proceedings, and other legal actions.
- OSHA and NIOSH will coordinate training and education to avoid duplication, with OSHA being responsible for training Federal and State compliance personnel and for employer-employee education and NIOSH being concerned with career or technical training.
- Each agency will provide the other with data, services, and products from various information files.
- As part of its testing activities, NIOSH will be responsive to OSHA needs. OSHA will encourage, through its regulations and educational programs, the use of NIOSH's tests and certification of respirators, hazard indicators, air sampling instruments, physical agents' hazard-measuring devices, and personal protective equipment.
- Policy meetings between the OSHA head and the NIOSH director will be held at least quarterly, or more often if needed, and a working group of the agencies' personnel will meet at least bimonthly to address issues selected by the two officials.
- Subagreements will be developed and modified as needed to meet the objectives of the interagency agreement, with any exchange of funds required being made pursuant to specific subagreements.

To Assure the Needy Free or Reduced-Cost Care in Hill-Burton Aided Facilities

■ Regulations that will assure many millions of dollars worth of free or reduced-cost care for needy Americans in hospitals, nursing homes, and other health care facilities throughout the nation have been issued by the Secretary of Health, Education, and Welfare.

The regulations, which significantly strengthen and clarify existing rules, require health facilities built in whole or in part with Federal loans or grants to provide minimum dollar levels of care for indigent patients. The regulations affect 5,284 public and nonprofit facilities nationwide which still have time remaining in their obligation period, generally 20 years from the date of Federal award. Facilities that receive funds under title XVI are obligated in perpetuity.

The regulations implement statutory requirements (in effect since 1946 under title VI of the Public Health Service Act—the Hill-Burton program) that health facilities receiving Federal construction grants or loans must provide a reasonable volume of uncompensated services to people unable to pay and must make their services available to all persons residing in the community. Title XVI, which in 1974 replaced Hill-Burton, made several changes in the assurance program. The new regulations recognize those changes, as well as the decisions from several court cases in which the extremely general compliance provisions of the earlier Hill-Burton regulations were successfully challenged.

The new regulations provide clearer and more easily enforceable compli-

ance standards. They implement 1975 statutory provisions that require the Department of Health, Education, and Welfare to monitor and enforce compliance by health facilities with their obligation to provide uncompensated services and community services. The new regulations place the primary enforcement responsibility directly on DHEW, although States that are willing and able to assist in the enforcement effort will have an opportunity to do so. Thus, these regulations assure that in all States, compliance requirements will be enforced.

The regulations contain the following requirements on free or reduced-charge services:

- All covered facilities must provide specific dollar levels of uncompensated or reduced-charge service. The minimum level of uncompensated or reduced-charge service to be established each year will be the lesser of: an amount equal to 3 percent of the facility's operating costs (less Medicare and Medicaid reimbursement) or 10 percent of the Federal construction aid.

- The base or grant level against which the 10 percent amount is matched will be adjusted annually in line with changes in the Consumer Price Index for medical care.

- Facilities assisted under the old Hill-Burton program that provide less than the required amount of care will be required to make up the difference in future years.

- Facilities will remain obligated to provide free or reduced-charge service for 20 years from the time the Hill-Burton loan or grant was made, but the regulations affect only that portion of the 20-year obligation period which begins in 1979. The obligation period for Hill-Burton facilities would be extended if they failed to meet their annual obligation and shortened if they exceeded the annual obligation.

- Facilities will be required to develop plans for distributing free or reduced-charge services to indigent people and to publish the plans in their service areas. The plans must describe the types of service available, when such services are available, and whether reduced-charge services will be provided in addition to free care. The regulations provide for possible public participation in developing the plans, but facilities have discretion to make final decisions.

- Notice of the program's availability generally must be given to patients beforehand, or in the case of emergency treatment, promptly afterwards.

In terms of community service, the regulations require that:

- All 7,000 facilities that received either Hill-Burton or title XVI funds must make their services available on a nondiscriminatory basis.

- Facilities must guarantee access to Medicaid patients.

- Preadmission deposits cannot be used to refuse admission to persons who can pay the bill but cannot immediately come up with the cash to meet the deposit requirement.

- Facilities that provide emergency services must serve all persons in the community needing emergency treatment, without regard to their capacity to pay.

Because of the potential impact of these regulations on the health care community, the Department will conduct an ongoing re-evaluation of the rules and will complete a reassessment within 3 years.

Physicians Search for Cause of Lyme Arthritis

■ Experts of the Yale General Clinical Research Center (GCRC) in New Haven, Conn., believe they have tracked down a previously unknown disease—Lyme arthritis. The arthritis is so named because dozens of cases have occurred within the adjacent Connecticut townships of Lyme, Old Lyme, and East Haddam.

In 1975, worried mothers of afflicted children in these townships telephoned the Connecticut State Department of Health in Hartford to report an unusually high incidence of a disease diagnosed as juvenile rheumatoid arthritis. Within days, their calls started a detective story of modern medical history. Physicians, teachers, and citizens compiled lists of people, particularly children, who were affected with arthritis, and they were invited to the Yale GCRC to undergo tests. Although the disease was first described as juvenile rheumatoid arthritis, in the initial study conducted in early 1976, the Yale researchers identified 12 adults afflicted with the disease, as well as 39 children.

SEARCH FOR A VECTOR

Since the disease occurred exclusively in summer and early fall, it seemed highly probable to the investigators that an insect was involved. The research team noted that the affected people were clustered in sparsely settled and often wooded areas where vines and shrubs form dense thickets. Then, several patients remembered noticing what seemed to be an insect bite before the onset of their symptoms. "In many cases, the patients reported skin lesions, which were later determined to be the earliest manifestation of the disease," stated Dr. Allen C. Steere, chief investigator. A retrospective study indicated that 25 percent of the people affected remembered that they had had a skin lesion before experiencing arthritis.

That summer, the investigators saw patients for the first time with the tell-tale skin lesions. The lesions begin as a red blotch that expands to form a large red ring with partial central clearing in the center, which typically lasts about 3 weeks. The source of transmission was soon identified as *Ixodes dammini* when one of the patients brought in a tick he had pulled from his body shortly before the lesions appeared.

A search of the literature showed that some 50 years ago physicians in Europe had reported cases of patients with similar lesions believed to have been caused by a tick. Arthritis, however, had not been associated with the lesions. More groundwork was necessary.

Steere discovered that the disease occurred predominantly among people

on the east side of the Connecticut River. In 1977, overall incidence of the illness was 2.8 cases per 1,000 residents on the east side of the river compared with 0.1 cases per 1,000 residents on the west side. Collecting ticks from family members and pets on both side of the river helped verify the species attacking people in the eastern communities. A striking observation was that household animals, particularly cats, which are common hosts for *I. dammini,* seemed to be a significant risk factor in the illness. Patients with the disease noted these ticks on their pets significantly more often than their unaffected neighbors did.

In an in-depth study of *I. dammini,* researchers found that the tick occurred more often on white-footed mice and white-tailed deer in the eastern communities than in the western ones, both in terms of the number of ticks per host and in the percentage of hosts infested. Within the study areas, the numbers of this tick species coincided with the distribution of Lyme arthritis cases. Incidence of the disease was highest in the areas where the *I. dammini* populations were greatest. The team had discovered a major clue. Once again, they returned to study the disease itself.

DISEASE AND TREATMENT

Headache, fever, and stiff neck often accompany the lesion or lesions, continuing for several weeks. These symptoms fade away, the researchers learned, only to be replaced in about 10 percent of the patients by neurological abnormalities. The spinal cord and brain may become inflamed. Cranial nerves of the face, as well as the peripheral nerves that command the legs and arms, may dysfunction, causing paralysis of the limbs and sensory disturbances. Hearing and swallowing may be impaired. These effects may subside after only 2 weeks or may continue for up to a year. "There will be worse weeks and better weeks," Steere says.

About 8 percent of the patients who are spared neurological effects experience heart abnormalities, according to the researchers. Commonly, their heart beat becomes irregular.

Several patients have reported joint pain just weeks after onset, but joint abnormalities most often occur in later stages of the disease. Then the attacks come and go. "Some patients have gone for 2 years without an attack and suddenly it hits again," Steere says.

Unfortunately, there is little but symptomatic therapy that can be offered to patients with Lyme arthritis. Steere recommends aspirin, but that drug rarely produces dramatic results. Since aspirin does not seem to prevent recurrences, it is discontinued during periods of remission. Because the knee is so often affected, injection of corticosteroids is frequently beneficial. Systemic corticosteroids often reduce neurological and cardiac abnormalities.

More specific treatment hinges on isolating the responsible agent. A type of virus is at the top of the list of candidates, but no direct evidence exists to support its involvement. Animals captured and brought in for blood tests have provided no information. "Until there is a specific laboratory test for the disease, identification will depend heavily on recognition of the characteristic skin lesions, since patients may express the various other manifestations of the illness separately or together," Steere says. However, many patients may simply disregard the lesions.

CURRENT RESEARCH

Steere and co-workers are currently trying to define the natural history of Lyme arthritis. Each patient's progress is closely followed at the Yale GCRC, and changes in the patient's condition are carefully noted.

Studies to determine where the disease occurs and who is affected are also underway. In the Lyme area alone, the reported cases have increased every year, from 3 in 1972, to 32 in 1976, and 76 in 1977. In all, according to recent reports, more than 300 cases of Lyme arthritis have occurred in the United States. Most of these cases have been in New England (in Lyme, Old Lyme, and East Haddam and other parts of southeastern Connecticut, in Rhode Island, and in Cape Cod, Mass.), but cases have also been reported in Long Island, N.Y., and in Wisconsin.

For patients currently affected, medication to keep them functioning and the hope that some day the disease will naturally end are all that can be offered. ". . . by and large," Steere says, "our patients are functional, and through medication, they are able to stay that way. The good news is that patients with Lyme arthritis have a good prognosis, and we believe the disease will eventually go away."

Research on Lyme arthritis is supported by the National Institute of Arthritis, Metabolism, and Digestive Diseases, the Connecticut Chapter of the Arthritis Foundation, the KROC Foundation in Atlanta, Ga., and the General Clinical Research Centers Program, Division of Research Resources, National Institutes of Health.

—Staff of Research Resources Information Center, Division of Research Resources, National Institutes of Health.

Health Planning Newsletter for Members of HSA Governing Bodies

■ A new monthly newsletter for people involved in health planning began publishing in August. The Health Planning Newsletter, published by the Health Resources Administration, is designed as an information exchange for participants in the health planning activities authorized by the National Health Planning and Resources Development Act.

Directed mainly at HSAs (health systems agencies), especially the volunteer members of HSA governing bodies, the 8-page newsletter contains bylined articles from local HSAs, opinion pieces, letters, national stories of interest to health planners, news capsules, book reviews, and digests of HEW policy notices. The publication also carries news of the various State planning and development agencies and the statewide health coordinating councils.

The editor welcomes material relating to the planning process. To submit articles or request copies of the newsletter, write to Brent Jaquet, Health Planning Newsletter, Rm. 10-44, Center Bldg., 3700 East-West Highway, Hyattsville, Md. 20782. Copy deadline is the 10th of each month.

Epidemiologic Research Projects Now Included in TOXLINE

■ Computerized descriptions of current epidemiologic research projects supported by U.S. Government and private funds became available for public use in May 1979. The on-line file is sponsored by the Epidemiology Work Group of the Interagency Regulatory Liaison Group, which is comprised of the Consumer Product Safety Commission, Environmental Protection Agency, Food and Drug Administration, Food Safety and Quality Service, and Occupational Safety and Health Administration. Project entries are selected from Smithsonian Science Information Exchange files.

This subfile of TOXLINE, which is accessible under the National Library of Medicine's MEDLARS service, will be updated monthly and will eventually contain information on an estimated 3,000 studies covering (*a*) morbidity and mortality, (*b*) occupational, consumer, and other population exposure to various hazards, (*c*) biological (including genetic), pharmacological, and environmental research on susceptibility to disease, and (*d*) infectious and other diseases related to chemical exposure.

Government agencies will use the information to reduce duplication of research, assess the benefits of rulemaking, fill gaps in knowledge, and facilitate communication. The subfile will be useful for non-Government administrators and researchers concerned with the safety of foods, drugs, cosmetics, and other consumer products and the environment and with the health of consumers and workers.

The entry for each research project will include an abstract and names of the principal investigators, the supporting agency, the researching organization with its address, and the funding level. Indexes by subject area, investigators, organizations, and master grant numbers will also be provided.

Subscribers will also have access to the professional literature of epidemiology and other health sciences through MEDLARS computerized retrieval services. Prospective users who are not MEDLARS subscribers should contact their local regional medical library for application to the system and a 5-day course. Further information about gaining access to the system may be obtained from TOXLINE, Toxicology Information Services, National Library of Medicine, 8600 Rockville Pike, Bethesda, Md. 20209; telephone: (301) 496-1131.

Labels on Foods and Drugs Containing Yellow No. 5 Must Identify This Additive

■ The Food and Drug Administration will require all foods and drugs that contain Yellow No. 5 (tartrazine), the most widely used color additive, to identify the color by name in the ingredient list on the label. This identification will enable people allergic to Yellow No. 5 to avoid it. As many as 100,000 people in the United States may be allergic to Yellow No. 5.

The labeling requirement for foods applies to all products shipped in interstate commerce after July 1, 1981 (uniform date set by FDA for several new food labeling requirements).

Yellow No. 5 must be listed on the label of drugs after June 26, 1980. The color must be listed as both Yellow No. 5 and tartrazine. Drugs containing it that are applied only to the skin are not included. For prescription drugs, the labeling that goes to physicians must indicate that the product contains Yellow No. 5, which could cause allergic reactions in certain people. Since May 1976, FDA has required that this and other colors be identified by name on labels of cosmetic products, but FDA has not previously required that a color be listed by name on food and drug labels. The Agency is requiring this declaration on labels under the section of Federal law permitting it to establish the conditions for safe use of a color additive.

Donald Kennedy, former Commissioner of Food and Drugs, explained: "Yellow No. 5 poses a particular hazard to some people, but it is generally safe for use by the majority of the population. This requirement will enable those who are allergic to Yellow No. 5 to know which products contain it."

Proceedings of Conference on Referral Criteria for X-ray Examinations

■ Proceedings of the National Conference on Referral Criteria for X-ray Examinations, held in October 1978, have been published by the Bureau of Radiological Health. The meeting was convened to explore ways in which the government and the private sector might cooperate to reduce unnecessary X-ray procedures.

Representatives of more than 60 medical specialty groups, State health agencies, third-party medical insurance carriers, the legal profession, and health-related Federal agencies presented papers, conducted a panel discussion, and participated in four concurrent workshops. The reports of the workshops were sent to all organizations represented at the conference to give them an opportunity to reflect on the conference recommendations and to offer their opinions about X-ray overuse and the feasibility of achieving cooperation between the government and the private sector to deal with it. The comments received from the organizations are included in the proceedings.

Steps are now being taken to implement the conference recommendations. Several expert panels of radiologists and other physicians have been convened to develop suggested X-ray referral criteria for specific examinations. Also, the Bureau of Radiological Health is evaluating research grant proposals from clinical investigators in order to delineate suggested criteria for other examinations.

A series of five videocassettes summarizing the conference also has been prepared. Each videotape is about 25 minutes long and consists primarily of "live" footage of the conference with a narrative interspersed to provide continuity.

- *Tape 1. Introduction and background.* Includes opening remarks by former FDA Commissioner Donald Kennedy, Congressman Paul Rogers, and Robert Derzon, then the Administrator of the Health Care Financing Administration, Department of Health, Education, and Welfare.

- *Tape 2. Papers on causes of low-*

yield X-ray examinations. Covers the issue of yield, underlying factors, defensive radiology, and patients' attitudes.

- *Tape 3. Viewpoints on roles in the radiological process.* A series of invited papers presenting viewpoints from the perspectives of several segments of the medical care system—referring physician, consumer-patient, radiologist, hospital, government reimbursement system, private sector third-party carrier, and legal system.

- *Tape 4. Physician panel.* A panel discussion by six physicians who analyze the problem in terms of their own clinical experiences. Also includes a presentation on X-ray referral criteria.

- *Tape 5. Summary of workshop reports.* Covers the areas discussed in the workshops: X-ray referral criteria, defensive radiology, patient-consumer problems, and administrative X-rays.

Each tape contains enough introductory material and continuity to make it suitable for viewing by itself. Tapes 1 and 5 will give an abbreviated overview of the conference. Any or all of the videocassettes may be borrowed without charge from the Training Resources Center (HFX-70), Division of Training and Medical Applications, Bureau of Radiological Health, 5600 Fishers Lane, Rockville, Md. 20857. Tapes may be duplicated if desired.

Proceedings of the National Conference on Referral Criteria for X-Ray Examinations, held in Washington, D.C., October 25-27, 1978. DHEW Publication No. (FDA) 79-8083. Superintendent of Documents, U.S. Government Printing Office (Stock No. 017-012-00279-0), $3.75. The proceedings are also available for sale in microfiche by the National Technical Information Service (NTIS), Springfield, Va. 22161—PB 296173/AS $7.50, MF $3.00.

5-Year Clinical Study of Sickle Cell Disease

■ The Sickle Cell Disease Branch, Division of Blood Diseases and Resources, National Heart, Lung, and Blood Instiute, has initiated a 5-year comprehensive longitudinal, prospective, cooperative study on the clinical course of sickle cell disease. The objective is to determine the natural history of sickle cell disease by clinical evaluation of patients diagnosed as having the disease.

Although sickle cell anemia and related hemoglobinopathies involving sickle hemoglobin have been recognized for many years and numerous clinical and laboratory manifestations have been described, the clinical course of sickle cell disease is poorly documented. Most of the available data are anecdotal and retrospective and lack statistical validity.

Twenty-three hospitals across the United States are participating in the cooperative study. Investigators at these hospitals will recruit 3,500 patients, including newborns, children, adolescents, and adults. Data management and coordination will be centralized through the Statistical Coordinating Center at the University of Illinois, Chicago. Patient entry into the study began in March.

For further information on participating institutions or any other aspects of this study, contact Marilyn Gaston, MD, Sickle Cell Disease Branch, Division of Blood Disease and Resources, National Heart, Lung, and Blood Institute, Bethesda, Md. 20205, or call (301) 496-6931.

Study Shows That Medical Career Choices May Be Predicted

■ Personal qualities and the type of medical school attended are major predictors of physicians' long-range career choices, attitudes, and reward motivations, according to a report on a new study funded by the National Center for Health Services Research. Conducted by the Association of American Medical Colleges (AAMC), the study revealed that the future of medical students is fairly predictable, since they tend to program themselves for certain kinds of careers and values soon after admission to medical school.

For example, researchers discovered "impressive differences" in personal and academic characteristics between the medical school graduates who chose academic careers and those who became practitioners. "Career academicians have different sets of life values (more often theoretical or aesthetic, as against economic), tend to be more achievement oriented and of higher scholastic ability, to go to more select schools, and to have different attitudes toward the governance of their profession and the regulation of professional practice," the researchers reported.

Data for the study were obtained from 1,850 students who graduated in 1960 from 28 different medical schools. The data, which were collected periodically from the time of the students' initial entry into medical school in 1956 to a 1976 survey on the students' practice characteristics, form the bulk of the AAMC's Longitudinal Study Data Bank. This bank was established for researchers interested in physician characteristics as they relate to career decisions. The NCHSR-supported study represents the first time that such a wealth of information has been tapped.

AAMC Longitudinal Study of Medical School Graduates of 1960 by James B. Erdmann, Robert F. Jones, and Xenia Tonesk, assisted by Millicent F. Dudley. DHEW Publication No. (PHS) 79-3225, January 1979. NCHSR Research Digest Series. Single copies are available free from the Office of Health Research, Statistics, and Technology, National Center for Health Services Research/OASH, Rm. 7-44, 3700 East-West Highway, Hyattsville, Md. 20782 (301/436-8970). (The final report on the project is to be published in the fall of 1979 as a supplement to the Journal of Medical Education.)

New Test to Detect Spread of Breast Cancer

■ Investigators at the National Institutes of Health report progress toward devising a diagnostic test that ultimately may help pathologists diagnose the spread of even a few cancer cells from the breast to adjacent lymph nodes. With present methods, differentiating between metastatic and inflamed cells in lymph nodes sometimes is difficult.

The new method, being tested by investigators at the National Institute of Dental Research (NIDR) and the National Cancer Institute (NCI), also may prove useful in determining the source of other types of undifferentiated tumors, because the technique selects out cells originating in the mesenchyma. Since treatment differs for various kinds of cancer, new tools are needed to determine if undifferentiated tumors (whether primary or metastatic) originate in epithelial tissue or in connective tissue.

Knowledge gained by NIDR scientists doing research on collagen, the chief connective tissue protein in the body, is the basis for the new method. Collagen is being studied because it is the principal protein of mineralized tissues, it holds teeth in the jawbone, and it plays a role in wound healing and in craniofacial development. The investigators first performed basic research to identify and purify the several types of collagen. After purifying type IV (basement membrane collagen), which is made by breast cells and other epithelial cells, they obtained antibodies to the collagen by immunizing rabbits with the protein.

When cells are coated with this type of antibody and exposed to certain stains, only normal and cancerous epithelial cells fluoresce or react to the stain by changing color. The NIDR team is continuing to collaborate with Dr. Lance A. Liotta, an NCI investigator, to see if the purified antibodies of type IV collagen can be used to distinguish cancer cells of epithelial origin from tumor cells that are not of epithelial origin (fibrosarcomas and lymphomas, for example). Preliminary evidence suggests that the new method will localize epithelial cells, because only those cells synthesize detectable levels of type IV collagen.

When tissue specimens taken from patients who had undergone diagnostic breast biopsies or mastectomies were stained with antibodies to basement membrane collagen, the results for all 16 breast carcinomas studied were positive for the presence of the basement membrane, type IV collagen. Dr. Jean-Michel Foidart, a visiting associate at the NIDR, reported that all 16 specimens gave the fluorescent reaction to the antibody of type IV collagen. He pointed out that "Tissues usually fluoresced in the cytoplasm, but occasionally fluorescence occurred extracellularly. Breast cancer in situ stained prominently; in lymph node metastases, individual tumor cells or small clusters of such cells could be distinguished clearly from surrounding lymphoid cells."

In contrast, inflammatory cells and macrophages in the lymph nodes (cells that resemble transformed cancerous cells), do not fluoresce when stained for antibody. Therefore, the antibody staining technique may prove useful in diagnosing the spread of breast cancer. Further, breast cancer cells stain only when they are treated with the type IV collagen antibodies and not when they are coated with other substances (such as rabbit anti-type I collagen antibodies, normal rabbit serum, normal goat serum, rabbit anti-ovalbumin antibodies, and rabbit anti-human IGG, IGM Kappa, and Lambda chain antibodies).

education notes

Regional seminar on "Infection Control Today." A seminar in New Orleans, La., October 11–12, 1979, will include lectures and workshops on infection control as it pertains to hospital operating rooms and central services, as well as sessions devoted to more general topics in infection control. The meeting is sponsored by the Greater New Orleans Chapter of the Association for Practitioners in Infection Control (APIC) and cosponsored by Surgicot, Inc. The registration fee is $50. For further information, contact Carol Scioneaux, RN, Infection Control, Touro Infirmary, 1401 Foucher St., New Orleans, La. 70115, telephone 504/879–8688.

National conference on child sexual abuse. The Children's Hospital National Medical Center, Washington, D.C., is sponsoring a conference, "Sexual Victimization of Children: Trauma, Trial, and Treatment," November 29–December 1, 1979. Fees for the conference are $135; after October 31, $155.

For information on reservations write Ms. Barbara Jones or Ms. Linda Jenstrom, Children's Hospital National Medical Center, 111 Michigan Ave., N.W., Washington, D.C. 20010 or call (202) 745- 3028.

publications

FEDERAL

The Impact of Health System Changes on States' Requirements for Registered Nurses in 1985. *Health Manpower References. DHEW Publication No. (HRA) 79–8. December 1978; 112 pages.*

Prediction of Successful Nursing Performance. Part III and Part IV. *Health Manpower References. DHEW Publication No. (HRA) 79–15. 1979; 138 pages.*

Nurse Training Act of 1975. Second Report to the Congress, March 15, 1979. *Revised. DHEW Publication No. (HRA) 79–45. 1979; 187 pages.*

Special Projects for Improvement in Nurse Training. A listing. *Health Manpower References. DHEW Publication No. (HRA) 78–87. August 1978; 167 pages.*

Selected Natality Characteristics for Single Live Births, United States, 1974. *DHEW Publication No. (HSA) 79–5744. 1979.*

Emergency Medical Services System as a Health Services Research Setting. *DHEW Publication No. (PHS) 79–3233. December 1978; 52 pages.*

Costs and Benefits of Electronic Fetal Monitoring: A Review of the Literature. *By H. David Banta and Stephen B. Thacker. DHEW Publication No. (PHS) 79–3245. April 1979; 31 pages.*

Family Out-of-Pocket Expenses, United