

Health Survey, additional reports covering these and other topics will be prepared. These reports will give a wealth of new, detailed information relating these health items to various demographic and social variables. In a similar manner, the Health Examination Survey and other special surveys and studies will provide data for future tabulations, which will be published, topic by topic, when available.

References and Notes

1. Authorization for establishment of the U.S. National Health Survey was provided by the National Health Survey Act, Public Law 652, of the 84th Congress.
2. "Voluntary Health Insurance and Medical Care Costs, 1948-56," *Social Security Bull.* (Social Security Administration, December 1957).
3. "Measurement of Levels of Health," *World Health Organization Tech. Rept. Ser. No. 137* (Geneva, Switzerland, 1957).
4. *World Health Organization Tech. Rept. Ser. No. 53, 3rd Rept. of Expert Committee on Health Statistics* (Geneva, Switzerland, 1952).
5. "The National Health Survey 1935-36," *Public Health Bibliography Ser. No. 5* (Federal Security Agency, Washington, D.C., 1951).
6. "The Survey of Sickness 1943 to 1952," *Studies on Medical and Population Subjects No. 12* (General Register Office, London, 1957).
7. A regular program of reinterviews is a part of the plan, but these reinterviews are for control purposes and for the investigation of methodological questions.
8. These data have been published in a series of weekly reports: *Provisional Tabulation from the U.S. National Health Survey, Repts. No. 1-18*.
9. "Preliminary Report on Volume of Physician Visits, July-Sept. 1957," *Health Statistics Ser. B-1* (U.S. National Health Survey, February 1958).

News of Science

Translation Service Started by Special Libraries Center

The Special Libraries Association Translation Center, located at the John Crerar Library in Chicago, has announced that it can now furnish, on a subscription basis, printed catalog cards for current scientific and technical material which has been translated into English from all languages, including Russian. This latest effort of the center to facilitate the exchange and growth of scientific knowledge in the Western World will make available in easy-to-use, up-to-date card form the thousands of citations given in the center's bibliographical journal, *Translation Monthly*. Four types of subscriptions to translation catalog cards are available: (i) full coverage of *Translation Monthly* (approximately 12,000 titles yearly); (ii) coverage of all translations currently received by the center (approximately 6750 titles yearly); (iii) coverage of all Russian translations received by the center (approximately 3100 titles yearly); and (iv) coverage of all titles in specific subject fields.

Partially supported by grants from the National Science Foundation and the National Institutes of Health, the SLA Translation Center is a depository for unpublished scientific material which has been translated into English from all languages. It actively solicits and collects translations from government agencies, industry, technical societies, and educational institutions and makes copies of these translations available to other research groups and individuals. Users

may borrow paper copies of desired translations or may purchase for permanent retention microfilms or photoprints of translations.

The SLA Translation Center was established at the John Crerar Library in October 1953. In less than 5 years the original collection of 932 translations has increased to more than 20,000 items, and approximately 6750 titles are being added annually. At the request of the National Science Foundation, the SLA Translation Center took over, in January 1958, the Russian translations then housed in the Scientific Translations Center at the Library of Congress. This added 4000 Russian items to the collection, and since then Russian material has been received regularly—about 3000 titles a year—as have translations from all other languages. Further information about the SLA Translation Center and its services may be obtained from: SLA Translation Center, John Crerar Library, 86 Randolph St., Chicago 1, Ill.

Science, Technology, and Individual Freedom

Harrison Brown, professor of geochemistry at California Institute of Technology and member of the National Academy of Sciences, was one of the featured speakers at the tenth annual conference of the National Civil Liberties Clearing House that was held recently in Washington. In his talk on "Science, Technology and Individual Freedom," he discussed both the necessity of individual freedom if science and scientists

are to develop their full potential and the effects that science and technology are having on individual freedom. He cited three constraints that present-day society has placed upon the scientist's freedom. One is the sources from which the researcher receives his funds. The second "stems from the fact that scientists are individualists. They cannot work to best advantage in an atmosphere which is filled with FBI investigations, loyalty checks, loyalty oaths, public condemnation of their fellow-scientists, pressures for conformity, and accusations such as those which have been aired from time to time by both state and national investigating committees of various sorts."

The third constraint "involves communication, which is the lifeblood of inquiry." The major factors inhibiting the free exchange of ideas among scientists today are the classification for security reasons of scientific work and the restrictions placed upon their movements. Classification, Brown declared, "greatly impedes work, and in this respect it actually lessens our security." The difficulty some scientists have had in obtaining passports is part of the communications problem; more serious are "our formidable restrictions" on scientists abroad in securing visas for entrance to this country, with the result that "most international conferences of scientists are held abroad." Brown stressed the dangers implicit in our increasingly industrialized society and the need for recognizing and avoiding them.

"As our population grows, as our reserves of high-grade raw materials diminish in abundance, we will be faced with the necessity of bringing ever-higher levels of organization into our lives. There will be less living space and less opportunity for movement. There will be cries for more efficiency. . . . It is amply clear that man can in principle create a wonderful world—a world in which people can lead free and abundant lives. But I fear that so powerful are the forces which operate in favor of increased organization and integration that we ourselves may drift into a form of totalitarianism

without realizing it. We can, if we don't watch ourselves, permit our country to become a glorified ant hill. I do not, however, believe that this end result is inevitable. And here I take refuge in a statement which was once made by the great Disraeli. 'Circumstances,' he said, 'are beyond the control of man. But his conduct is in his own power.'"

Cerebrovascular Disease

The U.S. Public Health Service has announced that all known types of cerebral strokes have been classified and defined for the first time in a study which provides a common language for the exchange of information among researchers throughout the nation. This pioneering classification of cerebrovascular diseases appears in the May issue of *Neurology*, published in Minneapolis for the American Academy of Neurology.

The eight-member committee that conducted the study was appointed by the National Institute of Neurological Diseases and Blindness to explore means of increasing research progress in cerebrovascular diseases. Clark H. Millikan, neurologist of the Mayo Clinic, Rochester, is the committee chairman. He emphasizes that the 2-year study is a first attempt, and many statements will undergo changes as understanding of cerebrovascular disease increases. Copies of the study, *A Classification and Outline of Cerebrovascular Diseases*, may be obtained from the National Institute of Neurological Diseases and Blindness, Bethesda 14, Md.

NSF Grant to Yale to Improve Mathematics Instruction

The National Science Foundation has awarded \$100,000 to Yale University to initiate the work of the School Mathematics Study Group to improve instruction in mathematics in United States secondary schools above the sixth grade, including junior high schools. The study group will consider: preparation of textbook materials, together with teacher's manuals; the training of teachers in the use of such new materials; preparation of monographs designed for better students, secondary-school teachers, and the general educated public; various kinds of teaching aids, including films; experimental programs for gifted children; and psychological studies of concept formation in mathematics and of attitudes toward mathematics, and the like.

The study group, consisting of secondary school teachers and outstanding university mathematicians, will be under the direction of E. G. Begle, of Yale's mathematics department. An interim ad-

visory committee to assist Begle consists of the following: A. A. Albert, University of Chicago; R. L. Wilder, University of Michigan, and S. S. Wilks, Princeton University. An expanded advisory committee will be established by the presidents of the American Mathematical Society, the Mathematical Association of America, and the National Council of Teachers of Mathematics.

As its first activity, the study group is organizing a 4-week session at Yale, 23 June to 29 July, at which college and university mathematicians and high-school teachers, in equal numbers, about 40 in all, will be asked to prepare detailed syllabi for high-school algebra and geometry courses. The study group will cooperate with such organizations as the Commission on Mathematics and the Curriculum Committee of the National Council of Teachers of Mathematics, which have already made large contributions in this area.

In-Service Institutes for High School Teachers

Approximately 3000 high school teachers of science and mathematics will benefit during 1958-59 from 85 in-service teacher-training institutes conducted by United States colleges and universities. The National Science Foundation has announced that grants totaling \$607,250 have been awarded to support these institutes. The funds cover travel expenses, tuition, and fees. Participants in the program must be on the faculties of high schools that are within a radius of about 50 miles of the host institution.

The in-service institutes will offer especially designed work in the subject matter of science and mathematics. Institute meetings will be held outside regularly scheduled school hours so that teachers may attend while still teaching full time in their schools. Inquiries and applications for participation should be addressed to the directors of the individual institutes; these are named in a list that may be obtained from the National Science Foundation, Washington 25, D.C.

Deduction of Educational Expenses from Taxable Income

Many teachers in the United States at all levels—college, high school, and elementary—who have incurred certain educational expenses may be able to recover a part of their income tax payments for the years going back as far as 1955 as the result of U.S. Treasury Regulation TD 6291 announced on 4 April and published in the Federal Register for 5 April. In submitting an amended

return, the taxpayer must use the appropriate income tax form for the year's return which is to be amended. He must write at the top of page 1, "Amended," and must resubmit the return in complete detail. While many aspects of the new ruling remain to be interpreted by the Treasury, the text as it appears in the Federal Register offers nine specific cases as examples.

Experimental Program in Secondary School Science Education

Starting in December 1955, the Research Corporation, New York, undertook an experiment concerned with the teaching of science at the secondary-school level in the state of Connecticut. While the experiment as originally designed is not yet complete, a report on the project to date provides some information that may be of value to those concerned with plans for the betterment of education.

A 3-year program has been established to learn from science teachers themselves their requirements for improving their teaching activities. Under the experimental plan, a representative visits schools throughout the state asking each science teacher what he or she needs to teach more effectively.

The teacher is encouraged to apply for a Research Corporation grant to satisfy his needs. Purposely, no application form is provided, and no particular limitations are specified about the kinds of things for which a grant might be considered or the level in funds that might be appropriate. The teacher's application is expected to take the form of a statement outlining the current situation in science at his school and indicating the improvements that would be possible with the funds requested.

Preparation of such a statement requires a certain amount of self-evaluation and considerable analytical thought. Frequently composing the statement sets off a chain reaction. Starting with an individual teacher, it often involves other science teachers at the school and their administrative superiors, sometimes even including the local board of education.

The program moves slowly. The foundation is at present receiving applications which had their origin in the stimuli applied to teachers a year or more ago. However, meanwhile the attention of individuals, groups, and even communities has been brought to bear constructively on what was needed to improve science teaching in a given school or school system.

In the 2 years that the plan has been in operation, total costs, including all fees and expenses, have amounted to a little less than \$20,000. Forty-eight grants have