Annual report of

- THE UNITED STATES
- NATIONAL COMMITTEE
- ON VITAL AND
- HEALTH STATISTICS
- Fiscal Year 1968

Reproduced and distributed for the Committee by the
NATIONAL CENTER FOR HEALTH STATISTICS

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service
Health Services and Mental Health Administration

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The U.S. National Committee on Vital and Health Statistics, an advisory committee to the Surgeon General of the Public Health Service, was created at the request of the Department of State in accordance with recommendations of the First World Health Assembly. The major objectives of the National Committee are to advise the Surgeon General on matters relating to vital and health statistics and to promote and secure technical developments in the field of vital and health statistics.

Specifically the functions of the National Committee are to:

(a) Delineate statistical problems of public health importance which are of national or international interest;

(b) Stimulate studies of such problems by other organizations and agencies whenever possible, or make investigations of such problems through subcommittees appointed for the purpose;

(c) Review findings submitted by other organizations and agencies, or by its subcommittees, and make recommendations for national and/or international adoption;

(d) Cooperate with and advise other organizations on matters relating to vital and health statistics in the United States especially with reference to definitions, statistical standards, and measurement problems;

(e) Advise the Surgeon General on problems relating to vital and health statistics of national and international concern; and

(f) Cooperate with national committees of other countries, and with the World Health Organization and other international agencies, in the study of problems of mutual interest.

MEMBERS-NATIONAL COMMITTEE ON VITAL AND HEALTH STATISTICS

Robert L. Berg, M.D., Professor and Chairman, Department of Preventive Medicine and Community Health, The University of Rochester, Rochester, N.Y. *Chairman*

I. M. Moriyama, Ph.D., Director, Office of Health Statistics Analysis, National Center for Health Statistics, Public Health Service, Washington, D.C.* *Executive Secretary*

Donald J. Davids, Chief, Records and Statistics Section, Colorado State Department of Public Health, Denver, Colo.

William M. Haenszel, Chief, Biometry Branch, National Cancer Institute, National Institutes of Health, Public Health Service, Bethesda, Md.*

Clyde V. Kiser, Ph.D., Senior Member, Technical Staff, Milbank Memorial Fund, New York, N.Y.

Herbert E. Klarman, Ph.D., Professor, Department of Public Health Administration, School of Hygiene and Public Health, The Johns Hopkins University, Baltimore, Md.

Everett S. Lee, Ph.D., Head of Department of Sociology and Anthropology, University of Massachusetts, Amherst, Mass.

John R. Philp, M.D., Health Officer, County of Orange Health Department, Santa Ana, Calif.

Donovan J. Thompson, Ph.D., Department of Preventive Medicine, School of Medicine, University of Washington, Seattle, Wash.

Theodore D. Woolsey, Director, National Center for Health Statistics, Public Health Service, Washington, D.C.* *Ex officio*

*Department of Health, Education, and Welfare.

Activities during

Fiscal Year 1968

The activities of the U.S. National Committee on Vital and Health Statistics were sharply curtailed during the first half of the fiscal year because of U.S. Government travel restrictions. This resulted in postponements of consideration of several problem areas by subcommittees appointed for the purpose. However, important progress was made on a number of ongoing studies.

The subcommittees which were active during the fiscal year dealt with the following subject areas: needed statistics on Indian health, uses of vital and health records in epidemiologic research, use of hospital data for epidemiologic and medical care research, needed statistics on migration and health, needed data for the study of various components of population change, and needed statistics on health resources and services in the United States.

The Subcommittee on Statistics of Indian Health noted the inadequacy and gaps in the available statistics on Indian health and proposed a population register as the best solution for obtaining improved health statistics for administrative and research purposes. Also, the subcommittee recommended modifications in the 1970 census procedures to provide needed data for the Indian health program. These suggestions included the rearrangement of enumeration districts to fit the boundaries of Indian reservations, changing the census enumeration schedule to identify tribal and reservation affiliation of Indians, and providing a supplemental schedule for the Indian population. Specification of tribal affiliation for the Indian population will be included in the 1970 population census.

The Subcommittee on the Use of Vital and Health Records in Epidemiologic Research prepared a report in which

it examined the needs in epidemiologic research for data from the vital and health statistics systems. In this review it was noted that the emergence of chronic noninfectious diseases as major causes of morbidity and mortality requires new types of data and changes in emphasis in existing data. New measurement problems are often encountered with these diseases where the onset may be insidious, progression slow, and the interval between cause and effect long.

Linkage of various vital and health records is seen as a means of enhancing their separate values, and further exploitation of this device is recommended. It is suggested that the use of some universal identity number for this purpose be explored along with the possibility of assigning such numbers at birth. Of particular importance in the conduct of epidemiologic studies is access to death records. This would be greatly facilitated by the establishment of a National Death Index. The subcommittee points to the urgency of studying the technical problems involved in the establishment of such a resource.

There is also a need for a document on sources of followup, legal bases, procedural methods, and costs of locating individuals in followup studies. This kind of document would be of great assistance to investigators in epidemiologic studies. Other recommendations relate to the possible extension of pathologic conditions recorded on death certificates beyond those contributing to death, and on the extension, improvement, and utilization of information on congenital malformations on vital records, particularly the birth certificate.

The Subcommittee on the Epidemiologic Use of Hospital Data discussed the uses of diagnostic and other data on hospital patients including statistics needed for epidemiologic research, medical care research, studies of current therapeutic practices, and for health surveillance. It was the view of the group that, with the increased standardization of diagnostic tests and criteria, hospital data have become more reliable in recent years. Also, the increased use of

hospital facilities advances the possibility that hospital data will provide a useful indicator of the medical experience of the general population. This opens up the possibility of utilizing diagnostic information in hospital records for purposes other than the treatment of the patient. Chief among these uses are epidemiologic studies to test various hypotheses.

With respect to epidemiologic surveillance, the key appears to be in the development of admission diagnoses or outpatient diagnoses which would provide needed data and, at the same time, overcome the problem of time lag inherent in discharge data. Admission and outpatient diagnoses may be tentative and unconfirmed, but evidence of increase in the number of cases should alert health officials to the need for thorough investigation. It is recognized that reporting of diseases and preliminary diagnoses by one hospital or by a few hospitals in a large metropolitan area would be of limited value. If, however, all hospitals in a metropolitan area or other defined geographic area joined in a common computer service for broad administrative and fiscal purposes, this would make possible the systematic collection of admission diagnoses that would have maximal value for epidemic surveillance.

In the area of medical care research, data may be used to determine: (1) the influence of diagnosis per se on the utilization of hospitals; (2) the influence of organizational structure for providing medical care and type of physician on the use of hospitals; (3) the relationship between the physician's professional characteristics and the use of hospitals; and (4) the effect of various types of case management on subsequent hospitalization or other measures of patient progress.

The Subcommittee on Migration and Health Statistics addressed itself to needs for data and prepared a series of recommendations aimed at producing needed statistics on migration and health. These recommendations include use of comparable definitions, procedures, and tabulations in

order that vital and health statistics can be related to the base population; the collection of data on certain variables such as educational status and legitimacy; integrated reports of infant deaths and births; and queries on health, migration, and mobility as correlated with data on marriage, natality, and mortality for selected standard metropolitan statistical areas.

The Subcommittee on Migration and Health Statistics also proposed a program of research and study of problems of population dynamics for the period around the 1970 census when the maximum amount of demographic information will be available. The proposal was directed to the National Center for Health Statistics and the Bureau of the Census recommending the formulation of plans for a series of studies and monographs to be undertaken by various Federal and State agencies, organizations, universities, and research institutions.

In this period of demographic change, the U.S. National Committee on Vital and Health Statistics recognized the importance of developing additional data to study the problem of population change. A Subcommittee on Population Dynamics was therefore constituted to consider the kinds of data and research studies needed in the field of population dynamics and how such data might best be collected. The Subcommittee reviewed and summarized information available on population changes. The statistics now being produced and those to be secured in line with the recommendations of the Subcommittee on Migration and Health Statistics provide a useful base with respect to marriage, natality, and perinatal mortality rates, and on some of the problems related to migration. Almost entirely missing, however, is information on attitudes, motivation, religion, and family planning as factors influencing population dynamics. A beginning was made in the consideration of statistics needed to measure and assess the various components of population change.

The Subcommittee on Health Resources and Services discussed the various aspects of statistics on health resources and facilities with the view of identifying the major gaps and inadequencies in the available series. Alternate proposals for studying these problems were discussed, and plans were made to undertake study of these problems.

STATISTICAL NEEDS OF THE FUTURE

In viewing the statistical needs of the future, the National Committee on Vital and Health Statistics discussed the issues and problems under four general subject headings, namely, demography, public health, health resources and services, and health economics.

Demography

There are increasing requirements for vital and health statistics because of the marked fall in the birth rate, continuing urbanization, continuing depopulation of rural areas, and intensification of health problems of Negroes and other minority groups. Small-area data are needed for study and planning to solve these problems. Basic problems of underenumeration of the population and incomplete reporting of some vital events (especially marriages and births) remain. Data which cannot be supplied by vital records alone include information on illegitimacy and conception before marriage; on dissolution rates in cohorts of marriages; and on minority groups such as Mexican-American, Puerto Rican, and migrant worker families.

Some progress has been made on needs listed at the Fifteenth Anniversary Conference, including study of internal migration, plans for quinquennial censuses, an increasing role for private research groups in the statistical activities of government, and studies of family planning. Additional data are needed on child spacing, the relationship of socioeconomic status to age at marriage and to

fertility, concentration of aged persons in some geographic areas, disability of the aged, and gross as opposed to net migration.

Public Health

Many of the statistical needs in public health are shared with the fields of demography and economics. Planning must be carried on in small areas and for minority groups as well as for the whole population and at long range. General indexes of health are needed as well as measurements of the effectiveness of specific health programs and methods of relating benefits to costs.

Comprehensive statistics on health hazards in the environment (air pollution, radiation, noise, chemicals) are lacking. Gaps between knowledge and its application are suspected to be wide, but there is little descriptive information available on care actually being provided through private practice and outpatient clinics. There is need to introduce order into the rapid and diverse development of hospital data systems, to improve manpower statistics, to modernize the vital record and statistics system, and to reexamine the roles of the Federal, State, and local statistics programs. Critical needs in methodology include ways of measuring the extent of mental illness, alcoholism, and drug use; and ways of dealing with the "long-range effects" which pervade the epidemiology of chronic diseases.

The several phases of health care and the organization necessary to provide them are being merged. Prevention, detection, care, and rehabilitation may be carried on under the same auspices. Nevertheless, the "service gap" is increasing, due in part to shortages of personnel. Provisions for financing are changing rapidly. Data are needed on the cost and effectiveness of service provided under various arrangements.

The National Committee on Vital and Health Statistics viewed with interest the recent developments in public

health and in the organized delivery of medical care. Because the legislative bases for the comprehensive health planning programs and of the regional medical programs call for facts in the planning and evaluation of these programs, problems are anticipated in satisfying data needs. These programs are still in the early developmental stages, and little information is available on the relationships and roles of the various organizational units in defining needs for statistical information. Much of the present feeling of apprehension among biostatisticians appears to be due to the uncertainties as to how different programs will eventually operate and to the lack of information on the extent of the demands that might be made on the existing statistical system. This poses a problem for the statistical agencies because of the relatively long lead time needed for the establishment of new statistical series.

The National Committee expressed an interest in pursuing the subject of providing adequate statistical bases for the emerging health programs and would like to see some of the important issues clarified to clear the way for the orderly development of needed statistics. There appears to be some urgency about this because there is already evident a proliferation of data collection activities. It seems important to have a coordinated effort in order that comparable data may be collected to serve the needs of the various programs which are being developed by different organizations along different geographic lines.

Health Resources and Services, and Health Economics

There have been major improvements in economic and manpower statistics during the past decade. Data on expenditures are now available on object of expenditure by source of funds. Better data on prices of health care will be available from the Bureau of Labor Statistics this year. Information on manpower in 35 categories of health professions has been published by the National Center for Health

Statistics and the time series on supply of physicians reported by the American Medical Association covers a number of years.

Further improvements can be made when certain difficulties are resolved. Problems in definition include the point at which an individual enters the profession (e.g., before or after graduation; house staff as students or providers of service). The proportion of medical school graduates who enter fields other than the practice of medicine (administration, research, public health, industry) is large; this complicates manpower studies and also suggests that the most efficient use of resources for training physicians for practice is not being made. Vast numbers of trained nurses are either not pursuing their profession due to marriage and family responsibilities or are working in positions where their identification is difficult (e.g., doctor's offices).

Because income of an individual or family is affected by illness, expenditure data would reflect socioeconomic status more accurately than income. Survey sample sizes adequate to permit cross-classification of income and education with health variables would be useful. Subdivisions of the age category 65 years and over are essential in health statistics. Many problems in availability and classifications of expenditure and price data remain to be solved. Useful subnational data are not available.

Judgments on levels of hospital costs cannot be made without measures of quality of care. More generally, estimates of economic benefits are dependent on measures of effect of programs on survival and health. Too frequently the practicing physician does not know whether a patient follows a prescribed regimen, let alone its effect on his health. The economists should deal with marginal costs (the cost of an additional unit), whereas only average cost data are usually available.

In the view of the U.S. National Committee on Vital and Health Statistics, these are some of the important statistical needs in the fields of demography, public health, health re-

sources and services, and health economics. They are presented here for the consideration of research interests of universities, foundations, and public health agencies.

TWENTIETH ANNIVERSARY

It was observed that the U.S. National Committee on Vital and Health Statistics will be going into its 20th year of operation in the next fiscal year. An anniversary meeting of former and present members of the National Committee will be planned for 1969.

Subcommittee - Statistics of Indian Health

Appointed - January 1965

Assignment - To outline the statistics needed to delineate major health problems in the Indian population and to provide effective health service, including medical care, taking into consideration the mobility of the population and its shifting in and out of the Indian health service areas.

Members - Frank R. Lemon, M.D., Associate Professor of Preventive Medicine and Chairman, Department of Preventive Medicine, School of Medicine, Loma Linda University, Loma Linda, Calif. *Chairman*

Robert A. Hackenberg, Ph.D., Associate Professor and Program Director, Institute of Behavioral Science, Department of Anthropology, University of Colorado, Boulder, Colo.

Denis F. Johnston, Ph.D., Division of Population and Labor Force Studies, Bureau of Labor Statistics, Department of Labor, Washington, D.C.

Enrico Leopardi, M.D., Epidemiologist, Indian Health Program Operation SAM, Division of Indian Health, Public Health Service, Tucson, Ariz.*

Leah Resnick, Division of Regional Medical Program, National Institutes of Health, Public Health Service, Bethesda, Md.*

*Department of Health, Education, and Welfare.

Roderick H. Riley, Ph.D., Assistant to the Commissioner and Economic Advisor, Bureau of Indian Affairs, U.S. Department of the Interior, Washington, D.C.

Margaret Shackelford, 4638 Willard Drive, Oklahoma City, Okla.

Cecil Slome, M.B., Ch.B., Dr.P.H., Associate Professor, Department of Epidemiology, School of Public Health, University of North Carolina, Chapel Hill, N.C.

Subcommittee - Use of Vital and Health Statistics in Epidemiologic Research

Appointed - March 1965

Assignment - To study and make recommendations on the utilization of existing sources of vital and health statistics and on the development of new data for epidemiological studies.

Discharged - March 1968

Members - Brian MacMahon, M.D., Professor, Department of Epidemiology, Harvard School of Public Health, Boston, Mass. *Chairman*

John Cassel, M.B., Ch.B., M.P.H., Professor, Department of Epidemiology, University of North Carolina, Chapel Hill, N.C.

Carl L. Erhardt, Sc.D., Director, Health Intelligence Statistics, The City of New York Health Services Administration, New York, N.Y.

Elmer A. Gardner, M.D., Director, Community Mental Health Center, Health Sciences Center, Temple University, Philadelphia, Pa.

Lillian Guralnick, M.Sc., Social Science Research Analyst, Division of Health Insurance Studies, Social Security Administration, Washington, D.C.* *Secretary*

Robert W. Miller, M.D., Chief, Epidemiology Branch, National Cancer Institute, National Institutes of Health, Public Health Service, Bethesda, Md.*

Donald L. Rucknagel, M.D., Department of Human Genetics, University of Michigan Medical School, Ann Arbor, Mich.

Colin White, M.D., Professor of Biometry, Department of Epidemiology and Public Health, School of Medicine, Yale University, New Haven, Conn.

Subcommittee - Epidemiologic Use of Hospital Data

Appointed - May 1965

Assignment - To study and make recommendations on the possible important uses of diagnostic and other data on hospital patients (covering both inpatient and outpatient services) such as statistics needed for epidemiologic research, medical-care research, studies of current therapeutic practices, and health surveillance.

*Department of Health, Education, and Welfare.

Members - Paul M. Densen, Sc.D., Deputy Administrator, The City of New York Health Services Administration, New York, N.Y. *Chairman*

Jacob E. Bearman, Ph.D., Professor, Biometry Division, School of Public Health, College of Medical Sciences, University of Minnesota, Minneapolis, Minn.

Alexander D. Langmuir, M.D., Chief, Epidemiology Branch, National Communicable Disease Center, Bureau of Disease Prevention and Environmental Control, Public Health Service, Atlanta, Ga.*

Alfonse T. Masi, M.D., Dr.P.H., Department of Medicine, The University of Tennessee, Memphis, Tenn.

Robert W. Miller, M.D., Chief, Epidemiology Branch, National Cancer Institute, National Institutes of Health, Public Health Service, Bethesda, Md.*

Robert M. Sigmond, Executive Director, Hospital Planning Association of Allegheny County, Pittsburgh, Pa.

Vergil N. Slee, M.D., Director, Commission on Professional and Hospital Activities, Ann Arbor, Mich.

Paul F. Wehrle, M.D., Chief Physician, Pediatrics and Communicable Disease Services, Los Angeles County General Hospital, Los Angeles, Calif.

**Department of Health, Education, and Welfare.*

Warren Winkelstein, Jr., M.D., Professor, Department of Preventive Medicine, School of Medicine, Health Sciences Center, State University of New York at Buffalo, Buffalo, N.Y. *Secretary*

Subcommittee - Migration and Health Statistics

Appointed - May 1966

Assignment - To study the adequacy of measures of migration, the classification of migrants, and techniques for developing migration histories with recommendations for needed improvements in order to provide data which can best be related to vital and health statistics.

Members - Irene B. Taeuber, Ph.D., Senior Research Demographer, Office of Population Research, Princeton University, Princeton, N.J. *Chairman*

William R. Gaffey, Ph.D., Statistical Consultant, Division of Research, California State Department of Public Health, Berkeley, Calif.

Robert D. Grove, Ph.D., Director, Division of Vital Statistics, National Center for Health Statistics, Public Health Service, Washington, D.C.*

William M. Haenszel, Chief, Biometry Branch, National Cancer Institute, National Institutes of Health, Public Health Service, Bethesda, Md.*

*Department of Health, Education, and Welfare.

Everett S. Lee, Ph.D., Head of the Department of Sociology and Anthropology, University of Massachusetts, Amherst, Mass.

Mindel C. Sheps, M.D., M.P.H., Professor of Biostatistics, School of Public Health and Administrative Medicine of Columbia University, New York, N.Y. *Secretary*

Henry S. Shryock, Jr., Ph.D., Assistant Chief, Population Division, Bureau of the Census, Department of Commerce, Washington, D.C.

Karl E. Taeuber, Ph.D., Professor, Department of Sociology, The University of Wisconsin, Madison, Wis.

Subcommittee - Population Dynamics

Appointed - June 1967

Assignment - To report on types of studies needed in the field of population dynamics, the specific types of data needed to yield such studies, and suggestions as to how such data might best be collected.

Members - Clyde V. Kiser, Ph.D., Senior Member, Technical Staff, Milbank Memorial Fund, New York, N.Y. *Chairman*

Donald J. Bogue, Ph.D., Director, Community and Family Study Center, University of Chicago, Chicago, Ill.

Arthur A. Campbell, Special Assistant for Demographic Research, Division of Vital Statistics, National Center for Health Statistics, Public Health Service, Washington, D.C.* *Secretary*

Leslie Corsa, Jr., M.D., Director, Center for Population Planning, School of Public Health, University of Michigan, Ann Arbor, Mich.

Oscar Harkavy, Ph.D., Director, Population Program, Ford Foundation, New York, N.Y.

I. M. Moriyama, Ph.D., Executive Secretary, National Committee on Vital and Health Statistics, Public Health Service, Washington, D.C.* *Ex officio*

Robert Parke, Jr., Bureau of the Census, Department of Commerce, Washington, D.C.

Robert G. Potter, Jr., Ph.D., Professor, Department of Sociology and Anthropology, Brown University, Providence, R.I.

Subcommittee - Health Resources and Services

Appointed - November 1967

Assignment - To determine needed information on health resources and services on a regional and national basis and recommend continuing and special studies, including those on quality and effectiveness of health care, and methods to be used in conducting these studies.

*Department of Health, Education, and Welfare.

Members - Stephen L. Goerke, M.D., M.S.P.H., Dean, School of Public Health, University of California at Los Angeles, Los Angeles, Calif. *Chairman*

Agnes W. Brewster, 6016 Western Avenue, Chevy Chase, Md.

Madison B. Brown, M.D., Associate Director, American Hospital Association, Chicago, Ill.

Lawrence A. Hill, Director, Bureau of Hospital Administration, School of Public Health, The University of Michigan, Ann Arbor, Mich.

Herbert E. Klarman, Ph.D., Department of Public Health Administration, School of Hygiene and Public Health, The Johns Hopkins University, Baltimore, Md.

Siegfried A. Hoermann, Director, Division of Health Resources Statistics, National Center for Health Statistics, Public Health Service, Washington, D.C.* *Secretary*

I. M. Moriyama, Ph.D., Executive Secretary, National Committee on Vital and Health Statistics, Public Health Service, Washington, D.C. *Ex officio*

Jerome Pollack, Associate Dean for Medical Care Planning and Professor of the Economics of Medicine, Harvard Medical School, Boston, Mass.

*Department of Health, Education, and Welfare.

Herman M. Somers, Ph.D., Professor of Politics and Public Affairs, Woodrow Wilson School of Public and International Affairs, Princeton University, Princeton, N.J.

James G. Zimmer, M.D., Department of Preventive Medicine, University of Rochester, Rochester, N.Y.

Reports of the
UNITED STATES NATIONAL COMMITTEE ON VITAL AND HEALTH STATISTICS

United States National Committee on Vital and Health Statistics, October 1949

International Recommendations on Definitions of Live Birth and Fetal Death, Public Health Service Publication No. 39, 1950

The First Annual Report of the United States National Committee on Vital and Health Statistics, Fiscal Year Ending June 30, 1950, Public Health Service Publication No. 40, 1950

"Statistics Needed Concerning Fertility," National Office of Vital Statistics, *Vital Statistics—Special Reports,* Vol. 33, No. 11, 1952

"Major Problems in Fetal Mortality," National Office of Vital Statistics, *Vital Statistics—Special Reports,* Vol. 33, No. 13, 1952

Proposal for Collection of Data on Illness and Impairments: United States, Public Health Service Publication No. 333, 1953

"Using Hospital Morbidity Data to Study Morbidity in Communities," *Hospitals,* Vol. 27, No. 9, 1953

"Recommendations for the Improvement of Fetal Death Statistics," *Public Health Reports,* Vol. 70, No. 11, 1955

"Progress in Development of Fertility Statistics and Population Estimates," National Office of Vital Statistics, *Vital Statistics—Special Reports,* Vol. 39, No. 8, 1956

"Fertility Studies Based on Data for the 1960 Census Period," National Office of Vital Statistics, *Vital Statistics—Special Reports,* Vol. 47, No. 5, 1959

Medical Certification of Medicolegal Cases, Public Health Service Publication No. 810, 1960

"Improving National Divorce Statistics," National Office of Vital Statistics, *Vital Statistics—Special Reports,* Vol. 47, No. 13, 1962

United States Statistics on Medical Economics, Public Health Service Publication No. 1125, 1964

Fertility Measurement, Public Health Service Publication No. 1000-Series 4-No. 1, September 1965

National Vital Statistics Needs, Public Health Service Publication No. 1000-Series 4-No. 2, September 1965*

Report of the Fifteenth Anniversary Conference of the United States National Committee on Vital and Health Statistics, Public Health Service Publication No. 1000-Series 4-No. 4, June 1966

History of the United States National Committee on Vital and Health Statistics, 1949-1964, Public Health Service Publication No. 1000-Series 4-No. 5, June 1966

Use of Vital and Health Records in Epidemiologic Research, Public Health Service Publication No. 1000-Series 4-No. 7, March 1968

Annual Report of the United States National Committee on Vital and Health Statistics, Fiscal Year Ending June 30

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1957	*1960*	*1963*	*1966*
1958	*1961*	*1964*	*1967*

*Reprint of *Vital Statistics—Special Reports,* Vol. 45, No. 11, July 1957.

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