CE 32

Statistical Sources for Health Science Librarians

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*Vital Statistics

ABSTRACT
This continuing education course syllabus presents information on the collection of vital and health statistics, lists of agencies or organizations involved in statistical collection and/or dissemination, annotated bibliographies of statistical sources, and guidelines for accessing statistical information. Topics covered include: (1) the reporting system for vital and health statistics (with sample reporting forms provided) and sources of national, international, state, and local health statistics; (2) statistical sources for chronic conditions and special health problems including abortion, accidents, alcoholism, blindness, cancer, diabetes, drug abuse, hypertension, mental health, nutrition, product injury, smoking, and venereal disease; (3) statistics for health care planning and administration including general medical care, health manpower, health facilities and utilization, health care financing, and health education; (4) demographic, socioeconomic, and housing statistics; (5) indexes and abstracts containing sources of statistics and selected journals routinely having statistical articles; (6) acquisitions aids (with addresses provided for obtaining them); (7) a general strategy for accessing statistics; and (8) general bibliographies on or guides to health statistics. A glossary of terms, a core list of the 50 major publications in health statistics, a list of 25 questions intended as classroom exercises, and a suggested course timetable are also provided. (ESR)
This syllabus is not intended to stand alone. It is only one part of an integrated instructional package involving a qualified instructor, the instructional environment, supplementary materials and program evaluation. Continuing Education Units (CEU's) may be granted only by the Medical Library Association in accordance with it's continuing education program.

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AGENDA

CE 32 - Statistical Sources for the Health Sciences Library

9:00 - 9:15  Registration, handouts, etc.
9:15 - 9:30  Introduction
9:30 - 10:30 Reporting System for Vital and Health Statistics
10:30 - 10:45 Break
10:45 - 11:15 Statistical Sources for Chronic Conditions and Special Health Problems
11:15 - 12:15 Statistics for Health Care Planning and Administration
12:15 - 2:00 Lunch and Practical Exercises
2:00 - 2:30 Discussion of Exercises
2:30 - 3:00 General Statistics
3:00 - 3:15 Break
3:15 - 4:00 Indexes and Abstracts
4:00 - 4:30 General Strategy for Locating Information
4:30 - 5:00 Core List
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A. Objectives

At the conclusion of the course, the participant should be able to:

1. Describe the vital and health statistics reporting system of the United States
2. Define terms commonly used in reporting vital and health statistics
3. Identify agencies and organizations which collect and disseminate statistical information in the health field
4. Identify the major publications of health statistics
5. Select and use the proper indexes and abstracts which aid in finding statistical information

B. Course Organization

The course is organized around the major subject categories of health statistics:

1. Vital and Health Statistics
2. General Medical Statistics
3. Health Manpower
4. Health Facilities and Utilization
5. Health Care Financing
6. Health Education
7. General Statistics - Demographic and Socioeconomic

Agencies and organizations that collect and publish in each category are discussed, as well as the major publications that exist in each.

Weak collection areas are pointed out; hints for sources of selection and acquisition are given, and strategies to use in searching for specific statistical information are considered.
I. Introduction

Many health sciences librarians have expressed a need for better knowledge of statistical sources. They are finding statistical questions being asked more frequently by health professionals due to the increased importance given to health planning and health research. Public concern with health related issues has also fostered curiosity in health statistics.

Although more and more health statistics are being gathered, little is being done to make them accessible. Many sources are government publications, local, state, federal, and international, with which health sciences librarians have had little or no contact. Other sources are private health organizations whose publications are largely "fugitive." In addition, many statistical publications are not accessible through the major indexes to health sciences literature. Consequently, reference librarians find themselves in the awkward position of not knowing where to turn for answers to questions of a statistical nature.

The purpose of this continuing education course is to acquaint reference librarians with the vital and health statistics reporting system as well as the major sources of health statistics; to help them analyze statistical questions and formulate search strategies which will enable them to consult the appropriate publications, indexes, or health agencies.
II. The Reporting System for Vital and Health Statistics

A. Reporting System

Major responsibility for compiling vital statistics rests with the National Center for Health Statistics. The country's official vital statistics are published by the Center's Division of Vital Statistics. The division obtains its basic data either directly or indirectly from registration certificates. Each state is a separate jurisdiction, acting under its own laws and standards and is subject only to advice, persuasion and leadership from the federal government.

Reports of births, deaths and occurrence of disease originate with the physician. He or she sends the report to the local health department on the required form. The local health department makes a record of the information received from the physician and uses it as necessary for public health purposes.

The local health department then sends the original report to the state health department for its information, use and permanent recording. The state health department, in turn, transmits summary or duplicate reports to the federal health authority, the Public Health Service of the U.S. Department of Health Education and Welfare. U.S. PHS receives this information from 50 states and tabulates, correlates, and collates this information reporting back to the states at periodic intervals. PHS also passes the information on to the international health authority, the World Health Organization, which similarly tabulates the data and reports it to all of its member countries.

B. Definitions

Vital Statistics:

Describe events related to individuals entering or leaving life or changing their civil status. They come from records of live births, deaths, fetal deaths, marriages, divorces, adoptions, legitimations, annulments, and separations. They provide information on the number and characteristics of vital events that take place during given periods of time.

Natality:

Birth; usually expressed in rates


**General Pattern of Vital Registration and Statistics in the United States**

<table>
<thead>
<tr>
<th>Responsible Reporting Agency</th>
<th>Birth Certificate</th>
<th>Death Certificate</th>
<th>Fetal Death Certificate (Stillbirth)</th>
<th>Reporting Officials</th>
<th>Marriage Record</th>
<th>Divorce or Annulment Record</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician, Other Professional Attendant, or Hospital Authority</td>
<td>1. Completes entry certificate for consultation with attending Physician’s signature required. 2. Fills certificate and local office of district in which birth occurred.</td>
<td>1. Completes medical certificate and signs certificate. 2. Sends certificate to local office of district where death occurred.</td>
<td>1. Completes or reviews medical form and signs certificate. 2. Sends certificate to funeral director. 3. In absence of a funeral director, files certificate.</td>
<td>Clerk of Local Government</td>
<td>1. Receives application for marriage license, and reviews application for completeness, accuracy, and compliance with law. 2. Issues marriage license, and records date. 3. Checks completeness of entries about the marriage ceremony. 4. Sends certified information regarding marriage to State Registrar.</td>
<td></td>
</tr>
<tr>
<td>Local (may be Local Registrar or City or County Health Department)</td>
<td>1. Verifies completeness and accuracy of certificate. 2. Makes copy, ledger entry, or index for local use. 3. Sends certificates to State Registrar.</td>
<td>1. Verifies completeness and accuracy of certificate. 2. Makes copy, ledger entry, or index for local use. 3. Issues death certificate to local office of district where death occurred and obtains burial permit.</td>
<td>1. Verifies completeness of records and issues death certificate. 2. Takes certificate to physician for medical certification. 3. Delivers completed certificate to local office of district where death occurred and obtains burial permit.</td>
<td>Clerk of Court</td>
<td>1. Checks the validity of the marriage license. 2. Performs the marriage ceremony. 3. Certifies to the facts of the marriage ceremony. 4. Returns the record to the Register clerk within the legally prescribed time.</td>
<td></td>
</tr>
<tr>
<td>State Registrar, Bureau of Vital Statistics</td>
<td>1. Queries incomplete or inconsistent information. 2. Validates files for permanent reference and as the source of certified records. 3. Compiles vital statistics for use in planning, evaluating, and administering state and local health activities and for research studies. 4. Compiles health-related statistics for state and civil divisions of state for use of the health department and other agencies and groups interested in the fields of medical science, public health, demography, and social welfare. 5. Prepares copies of birth, death, fetal death, marriages, and divorces or records for transmission to the National Center for Health Statistics.</td>
<td>1. Prepares and publishes national statistics of births, deaths, fetal deaths, marriages, and divorces, and constructs the official U.S. life tables and related national tables. 2. Conducts health and social research studies based on vital records and on sampling surveys linked to records. 3. Conducts special and methodological studies in vital statistics, methods including the technical, administrative, and legal aspects of vital records certification and administration. 4. Maintains a continuing technical assistance program to improve the quality and usefulness of vital statistics.</td>
<td>Attorney for Plaintiff</td>
<td>1. Enters personal characteristics of applicants. 2. Requires production of legal proof.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

City and county health departments use certificates in allo, using medical and nursing services, follow-up on infectious diseases, planning programs, measuring effectiveness of service, and conducting research studies.
Live birth:

Any product of conception which gives signs of life after birth, regardless of the length of pregnancy.¹

Mortality:

Death; usually expressed in rates

Morbidity:

The extent of illness, injury or disability in a defined population; usually expressed in general or specific rates of incidence or prevalence.³

Incidence:

In epidemiology the number of new cases of a specific disease, infection, or some other event having onset during a prescribed period of time in relation to the unit of population in which it occurred.³

Prevalence:

In epidemiology the total number of cases of a disease in existence at a certain time in a designated area.³

Acute disease:

A disease which is characterized by a single episode of a fairly short duration from which the patient returns to his normal or previous state and level of activity.⁴

Chronic disease:

Diseases which have one or more of the following characteristics: are permanent; leave residual disability; are caused by nonreversible pathological alteration; require special training of the patient for rehabilitation; or may be expected to require a long period of supervision, observation, or care.⁴


Notifiable disease:

Reportable infectious diseases, most commonly reported as morbidity statistics (listed below, numbers refer to International Classification of Diseases, 8th ed., 1965)\(^5\)

<table>
<thead>
<tr>
<th>Code</th>
<th>Disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>000</td>
<td>Cholera</td>
</tr>
<tr>
<td>001</td>
<td>Typhoid fever</td>
</tr>
<tr>
<td>002</td>
<td>Paratyphoid fever</td>
</tr>
<tr>
<td>004</td>
<td>Bacillary dysentery</td>
</tr>
<tr>
<td>005</td>
<td>Amoebiasis</td>
</tr>
<tr>
<td>010</td>
<td>Tuberculosis of the respiratory system</td>
</tr>
<tr>
<td>013</td>
<td>Other forms of tuberculosis</td>
</tr>
<tr>
<td>020</td>
<td>Plague</td>
</tr>
<tr>
<td>021</td>
<td>Tularaemia</td>
</tr>
<tr>
<td>022</td>
<td>Anthrax</td>
</tr>
<tr>
<td>023</td>
<td>Brucellosis</td>
</tr>
<tr>
<td>030</td>
<td>Leprosy</td>
</tr>
<tr>
<td>032</td>
<td>Diphtheria</td>
</tr>
<tr>
<td>033</td>
<td>Whooping-cough</td>
</tr>
<tr>
<td>034</td>
<td>Streptococcal sore throat and scarlet fever</td>
</tr>
<tr>
<td>034.1</td>
<td>Scarletina</td>
</tr>
<tr>
<td>088</td>
<td>Relapsing fever</td>
</tr>
<tr>
<td>090</td>
<td>Syphilis and its sequelae</td>
</tr>
<tr>
<td>097</td>
<td>Syphilis and its sequelae</td>
</tr>
<tr>
<td>098</td>
<td>Gonococcal infections</td>
</tr>
</tbody>
</table>

### Confidential Morbidity Report

**State of California**

**Confidential Morbidity Report**

SEND TO LOCAL HEALTH OFFICER

DEPARTMENT OF HEALTH

**Patient's Last Name**

**First Name**

**Middle Initial**

<table>
<thead>
<tr>
<th>Ethnic Origin</th>
<th>Sex</th>
<th>Age</th>
<th>Date of Birth</th>
<th>Social Security Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Present Address</th>
<th>Number</th>
<th>Street</th>
<th>City</th>
<th>County</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Usual Address</th>
<th>Number</th>
<th>Street</th>
<th>City</th>
<th>County</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Disease**

- Viral Hepatitis: Type A, Type B or Unspecified
- Syphilis, Tuberculosis, See Over

**Date of Onset**

**Attending Physician (Name and Address): Hospital, Institution or Other Reporting Agency.**

PM 110 (11-72)

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### Tuberculosis Diagnostic Information

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Reactivation</th>
<th>Sputum</th>
<th>Evidence Supporting Diagnosis</th>
<th>Extent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pulmonary</td>
<td>Yes</td>
<td>Smear:</td>
<td>Pol Pos #: Neg #: Not Done:</td>
<td>Minimal</td>
</tr>
<tr>
<td>Extrapul.</td>
<td>No</td>
<td>culture: Pos #: Neg #: Not Done:</td>
<td>Pol Pos: TB Skin Test:</td>
<td>Moderately Advanced</td>
</tr>
<tr>
<td>HIV:</td>
<td></td>
<td>Bacteriologic: Histo logic:</td>
<td>Pol Pos: 75 Skin Test:</td>
<td>Far Advanced</td>
</tr>
</tbody>
</table>

**Recent Tuberculin Converter Only**

**Recent Tuberculin Test: Yes: No**

**Circle No. of Runyon Group:**

- 1
- 11
- 12
- 14

### Syphilis Diagnostic Information

**Infectious**

- Primary
- Secondary
- Early Latent

**Non-Infectious**

- Late Latent
- Neurosyphilis, Asymptomatic
- Neurosyphilis, Clinical
- Cardiovascular
- Other Late

**Epidemiologic Note:** To minimize spread, prompt control measures are essential.

**Please phone reports for infectious cases.**

### Hepatitis Diagnostic Information

**Association within 6 months prior to onset of hepatitis:**

- Transfusion of Blood
- Self Injection of Drugs
- Blood Products
- Admitted
- Suspected
- Tattoo
- Unknown

**Hepatitis B Antigen Test:** Yes: No

**Date:**

**Remarks:**
Figure 6-8

U.S. STANDARD
CERTIFICATE OF FETAL DEATH

STATE OF NEW YORK
COUNTY OF NEW YORK

UNITED STATES DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
CENTER FOR HEALTH STATISTICS

SECTION 1: NAME

DATE OF BIRTH: 04-04-04
PLACE OF DEATH: NEW YORK, NEW YORK

SECTION 2: SEX

SEX OF FETUS: FEMALE

SECTION 3: AGE

AGE: 9 MONTHS

SECTION 4: PLACE OF CONCEPTION

PLACE OF CONCEPTION: NEW YORK, NEW YORK

SECTION 5: PARENTS

FATHER: JOHNNY SMITH
MOTHER: JANE DOE

SECTION 6: DELIVERY

DATE OF DELIVERY: 04-04-04
PLACE OF DELIVERY: NEW YORK HOSPITAL

SECTION 7: PHYSICAL EXAMINATION

PHYSICAL EXAMINATION: NORMAL

SECTION 8: AUTOPSY

AUTOPSY: PERFORMED

SECTION 9: CAUSE OF DEATH

CAUSE OF DEATH: WATER INGESTION

SECTION 10: MEDICAL DIAGNOSIS

MEDICAL DIAGNOSIS: PREMATURE RADIOLYSIS

SECTION 11: MOTHER'S MEDICAL HISTORY

MOTHER'S MEDICAL HISTORY: NORMAL

SECTION 12: FATHER'S MEDICAL HISTORY

FATHER'S MEDICAL HISTORY: NORMAL

SECTION 13: MATERNAL HISTORY

MATERNAL HISTORY: NORMAL

SECTION 14: FETAL HISTORY

FETAL HISTORY: NORMAL

SECTION 15: PATHOLOGICAL FINDINGS

PATHOLOGICAL FINDINGS: WATER INGESTION

SECTION 16: SURGICAL PROCEDURES

SURGICAL PROCEDURES: NONE

SECTION 17: OBSERVATIONS AT DEATH

OBSERVATIONS AT DEATH: NORMAL

SECTION 18: MEMORIAL SERVICES

MEMORIAL SERVICES: NONE

SECTION 19: NATIONAL INCIDENT REPORTING SYSTEM

NATIONAL INCIDENT REPORTING SYSTEM: YES

SECTION 20: CONFIDENTIAL INFORMATION

CONFIDENTIAL INFORMATION: YES

### U.S. Standard Certificate of Live Birth

**Child:**
- **Name:** [Name]
- **Race:** [Race]
- **Sex:** [Sex]
- **Birth Order:** [Order]
- **Birth Weight:** [Weight]
- **Place of Birth:** [Place]
- **Date of Birth:** [Date]
- **Race of Parent:** [Race of Parent]
- **Parental or Guardian Relation:** [Relation]
- **Parent’s Name:** [Name]
- **Parent’s Address:** [Address]
- **Parent’s Signature:** [Signature]
- **Registrar:** [Registrar]
- **Date Received:** [Date]

**Mother:**
- **Name:** [Name]
- **Age:** [Age]
- **Race:** [Race]
- **Place of Birth:** [Place]
- **Birth Weight:** [Weight]
- **Place of Delivery:** [Place]
- **Date of Delivery:** [Date]
- **Race of Delivery:** [Race of Delivery]
- **Parental or Guardian Relation:** [Relation]
- **Parent’s Name:** [Name]
- **Parent’s Address:** [Address]
- **Parent’s Signature:** [Signature]
- **Registrar:** [Registrar]
- **Date Received:** [Date]

**Father:**
- **Name:** [Name]
- **Age:** [Age]
- **Race:** [Race]
- **Place of Birth:** [Place]
- **Birth Weight:** [Weight]
- **Place of Delivery:** [Place]
- **Date of Delivery:** [Date]
- **Race of Delivery:** [Race of Delivery]
- **Parental or Guardian Relation:** [Relation]
- **Parent’s Name:** [Name]
- **Parent’s Address:** [Address]
- **Parent’s Signature:** [Signature]
- **Registrar:** [Registrar]
- **Date Received:** [Date]

**General Information:**
- **Date Last Prenatal Care Began:** [Date]
- **Month of Pregnancy:** [Month]
- **Prenatal Visits:** [Visits]
- **Length of Gestation (in Weeks):** [Weeks]
- **Body Weight at Birth (in Pounds):** [Weight]
- **Complications Related to Pregnancy:** [Complications]
- **Complications Not Related to Pregnancy:** [Complications]
- **Consequences Malformations or Abnormalities of Child:** [Malformations]

**Medical Information:**
- **Medical History:** [History]
- **Diagnosis:** [Diagnosis]
- **Treatment:** [Treatment]

**Statistical Information:**
- **Number of Births:** [Number]
- **Birth Rate:** [Rate]

D. Agencies

Center for Disease Control (CDC)

Established as an operating health agency of the Public Health Service on July 1, 1973 by the Secretary of HEW, the Center for Disease Control is the "Federal agency charged with protecting the public health of the nation by providing leadership and direction in the prevention and control of diseases and other preventable conditions." Its major divisions are: National Institute for Occupational Safety and Health, Bureau of Epidemiology, Bureau of Health Education, Bureau of Laboratories, Bureau of Smallpox Eradication, Bureau of State Services, Bureau of Training, and Bureau of Tropical Diseases.

CDC administers national programs for the control of such conditions as childhood lead-based paint poisoning and urban rats. Other activities under the Center's jurisdiction include the enforcement of foreign quarantine regulations; the provision of guidance in the quality control of clinical laboratories, along with the evaluation and licensure of same involved in interstate commerce; and the administration of a national program on the subject of smoking and health research, information and education. Not to be forgotten is the Center's National Institute for Occupational Safety and Health's (NIOSH) efforts through research and development of occupational safety and health standards to assure the nation's working people of hazard-free work environments.

CDC's international involvements include participation in national and international agencies concerned with the eradication or control of communicable diseases and other preventable conditions.

The statistical responsibilities of CDC deal with the national surveillance of all diseases and conditions within its jurisdiction. This requires the publication of weekly reports on morbidity and mortality from infectious diseases. Surveillance data on the prevalence and incidence of specific diseases or preventable health conditions are issued periodically. (See Part F of this section for listing.)

National Center for Health Statistics (NCHS)

NCHS, part of the Health Resources Administration of the Public Health Service, Department of HEW, "Designs and maintains national data collection systems, conducts research in statistical survey methodology, and cooperates with other agencies in activities to increase the availability and usefulness of health data. Available data include statistics on

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births, deaths, marriages, and divorces; annual and decennial life tables and related actuarial tables; statistics on illness, injury, impairments, disability, and costs, and utilization of health services, including hospitals and nursing homes; statistics on nutritional status, prevalence of chronic diseases, physiological measurements and patterns of physical and intellectual growth; statistics on the characteristics, supply, and geographic distribution of health manpower and facilities.

**World Health Organization (WHO)**

Established in 1948 as an agency of the United Nations, the World Health Organization functions mainly to assist governments in assuring the health of their people. This involves assistance with national health services programs, efforts towards the elimination of epidemic and endemic diseases, the maintenance of epidemiological and statistical programs, the promotion of maternal and child health services and of improvement in nutrition, housing, sanitation and working conditions, and contributions to the advancement of health professional groups, to name a few of WHO's endeavors. Formal agreements between WHO and Pan American Health Organization (PAHO), the International Labour Organization (ILO), the Food and Agriculture Organization of the United Nations (FAO), the United Nations Educational, Scientific and Cultural Organization (UNESCO), and the International Atomic Energy Agency (IAEA) have been made to help with these efforts. WHO consists of six regional organizations: Eastern Mediterranean Region (Alexandria), African Region (Brazzaville), European Region (Copenhagen), Western Pacific Region (Manila), South-East Asia Region (New Delhi), Region of the Americas (Washington, D.C.).

The publication program of WHO consists of periodicals, technical books and procedures, reference works, reports of advisory groups directed at audiences ranging from the lay public to the health professional and researcher. Statistical publications include the *Weekly Epidemiological Record*, *World Health Statistics Report* and the *World Health Statistics Annual*. (See Section F, International Level.)

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E. Useful Guides to the Major Publication Series

1. U.S. National Center for Health Statistics.

   This publication is an index to health topics covered in the Vital and Health Statistics series and an index to the presentation of data according to demographic and socioeconomic variables. It is in two sections, with some overlapping. Section 1 includes topics and variables related to the health status of people. Section 2 covers characteristics of health facilities and manpower. Index is updated periodically.

2. U.S. National Center for Health Statistics.


   Complete listing and brief description of the publications issued by NCHS, grouped by 15 broad subject categories. The majority of the publications in the Catalogue are part of the Center's Vital and Health Statistics series.


   This new guide lists major sources of statistical information on some major health topics.

   Under each topic the NCHS publications are cited first, followed by other HEW sources, other federal agencies, and by private organizations or associations.

   Very useful for chronic disease statistics as well as other health topics.


F. BIBLIOGRAPHY OF STATISTICAL SOURCES

National Level


2. Great Britain Department of Health and Social Security. 
   Reports on health and social subjects. no.1- , London 1972-

   Health and personal social services statistics for England and Wales. 1972-

4. Grove, Robert D. 

5. U.S. Bureau of the Census. 

   ...Vital statistics rates in the United States, 1900-1940, by E. Lindner ...and Robert D. Grove...Washington, 1943.

   Purpose is to "bring together and summarize past time trends and the present status of important mortality and natality rates." The work was intended as an essential aid and guide for health administrators and social analysts.

7. U.S. Bureau of the Census. 
   Vital Statistics - Special Reports, 1936-59.

   Scope of reports covers trend analyses over period of years, special data on unusual causes of death, tabulations on residence and population. Replaced by U.S. National Health Survey. Health Statistics, Series A-D, Reference no. 18.

8. U.S. Center for Disease Control. 

   Reviews the epidemiology of botulism in the U.S. since 1899, the problems of clinical and laboratory diagnosis, and current concepts of treatment.
9. U.S. Center for Disease Control.
Morbidity and mortality, weekly report. v.1, 1952-
Supersedes National Office of Vital Statistics' weekly mortality index. Statistical summary for U.S. and world of various diseases such as malaria and smallpox. Also cases of specified notifiable diseases for each week for U.S. and each state. Final issue each year is annual supplement: Reported incidence of notifiable diseases. Summarizes the year with final figures. Includes graphs and figures for the last ten years.

10. U.S. Center for Disease Control.
1972-73 tuberculosis statistics: states and cities.

11. U.S. Center for Disease Control.
Surveillance reports on:
Family Planning Services
Foodborne Outbreaks
Hepatitis
Influenza - Respiratory Disease
Leptospirosis
Malaria
Measles
Mumps
Mycoses
National Nosocomial Infections Study
Neurotropic Viral Disease - Annual
Encephalitis Summary
Nutrition
Occupational Health and Safety
Primate Zoonoses
Psittacosis
Rabies
Rh Hemolytic Disease
Salmonella
Shigella
Smoking and Health
Trichinosis Surveillance
Zoonoses

These reports are a summary of information received from state health departments, and sometimes from university investigators, virology laboratories and "other pertinent sources." Much of the information is preliminary. It is intended primarily for the use of those with responsibility for disease control activities. Annual issues although some are quarterly with annual cumulations.
12. U.S. Indian Health Service.
   Illness among Indians, 1965-69.
   Summarizes notifiable disease data for five years. Includes a brief
description of demographic characteristics of Indian and Alaska native
populations.

13. U.S. Indian Health Service.
   Indian health trends and services, 1974 ed.
   Extensive data in the form of charts and tables presenting vital and health
statistics of Indians.

   Indian vital statistics, 1969.
   Tabulations prepared by the Health Program Systems of IHS. Source for data
is from copies of birth certificates of state health departments.

15. U.S. National Center for Health Statistics.
cation no. HRA 74-1300, reissued as HRA 76-1300)
   HMS 73-1306)
   HRA 74-1307)
   Complete listing and brief description of the publications issued by NCHS,
grouped by 15 broad subject categories. The majority of the publications in
the Catalogue are part of the Center's Vital and Health Statistics series
(Reference no. 20).

   Current listing and topical index to the Vital and Health Statistics
   This publication is an index to health topics covered in the Vital and
Health Statistics series and an index to the presentation of data according
to demographic and socioeconomic variables. It is in two sections, with
some overlapping. Section 1 includes topics and variables related to the
health status of people. Section 2 covered characteristics of health
facilities and manpower. Index is updated periodically.

17. U.S. National Center for Health Statistics.
   HRA 74-1222)
"Statistics in this report have been assembled...to answer questions frequently asked about vital and health statistics for the United States."

Useful collection of data. User is referred to primary sources for further information.

18. U.S. National Health Survey.

    Series A: Program descriptions, survey designs, concepts and definitions. 4 nos. 1958-62. (Public Health Service publication no. 584-A)

    Series B: Health interview survey results by topic. 42 nos. 1958-63. (Public Health Service publication no. 584-B)

    Series C: Health interview survey results for population groups. 7 nos. 1959-62. (Public Health Service publication no. 584-C)

    Series D: Development and evaluation reports. 8 nos. 1960-63. (Public Health Service publication no. 584-D)

    Superseded by Reference no. 20.

    Monthly vital statistics report. v.1- , 1952-

    Data is collated for annual publication Vital Statistics of the United States (Reference no. 22).

    Provisional statistics on births, marriages, divorces, and deaths. Tables give data for each month and then same month a year ago, with cumulative totals for each of three years. Time lag is about 13 weeks for mortality data and 8 weeks for other data.


    Data covered by the surveys and studies of the National Center for Health Statistics are compiled and published in this series. The publications are grouped into the following subseries:

    Series 1: Programs and collection procedures. 1963- , no. 1- .
    Reports which describe the general programs of the National Center for Health Statistics.

    Studies of new statistical methodology including: experimental tests of new survey methods, studies of vital statistics collection methods.
Series 3: **Analytical studies. 1964-**, no. 1-.
Comprises reports presenting analytical or interpretive studies based on vital and health statistics.

Series 4: **Documents and committee reports. 1965-**, no. 1-.
Final reports of major committees concerned with vital and health statistics.

Series 10: **Data from the Health interview survey. 1968-**, no. 1-.
Statistics on illness, accidental injuries, disability, use of hospitals, medical, dental, and other services, based on data collected in national household interview survey.

Series 11: **Data from the health examination survey. 1964-**, no. 1-.
No. 1- (1964- ) Relate to adult programs.

Series 12: **Data from the Health records survey. 1965-**, no. 1-.
Reports on the health characteristics of persons in institutions, and on hospital, medical nursing, and personal care received. Discontinued after 1975. Future reports from these surveys will be in Series 13.

Series 13: **Data on Health resources utilization. 1966-**, no. 1-.
Statistics relating to discharged patients in short-stay hospitals, based on a sample of patient records in a national sample of hospitals.

Series 14: **Data on Health resources: Manpower and Facilities. 1968-**, no. 1-.
Statistics on the numbers, geographic distribution, and characteristics of health resources including physicians, dentists, nurses, other health manpower occupations, hospitals, nursing homes, and outpatient and other inpatient facilities.

Series 20: **Mortality data. 1965-**, no. 1-.
Various special reports on mortality giving data on other than that in the annual volume of Vital Statistics Reports. Covers tabulations by cause of death, age, data for geographic areas.

Series 21: **Natality Data. 1964-**, no. 1-.
Data on birth by age of mother, birth order, geographic areas, states, cities, time series of rates.

Series 22: **Data from the National natality and mortality surveys. 1961-**, no. 1-.
Discontinued. Future reports will be included in Series 20 and 21.

Series 23: **Data from the National survey of family growth.**
Superseded by its Vital and health statistics, Reference no. 20.

22. U.S. National Center for Health Statistics.  
Vital statistics of the United States.  Washington. 1937-  
v.1: Natality  v.2: Mortality  v.3: Marriage and divorce  
Continuation of Birth, stillbirth and infant mortality statistics and  
Mortality statistics of the Bureau of the Census.  
Annual collation of Reference no. 19. Official final detailed data. Several  
years old by time of publication.  
Definitive publication of the vital statistics, containing extensive basic  
data and analysis on marriage, divorce, natality, fetal mortality, and  
mortality.

23. U.S. National Center for Health Statistics  
United States Life Tables: 1969-71.  Vol. 1- , No. 1-  
The life tables in this report are current life tables for the  

Vital Statistics Advance Data. No. 1- . October 18, 1976-  
Each issue contains selected findings from health and demographic  
surveys conducted by NCHS.  
It provides a means for early release of data previously issued  
as supplements to the Monthly Vital Statistics Report. MSUR  
Supplements with provisional and final vital statistics will still  
be published.

International Level

   Age-adjusted death rates and age-specific death rates, by Mitsuo Segi  
   [and others]. Tokyo, Kosei Tokei Kyokai, 1966.  
Twenty cases of death are included, with statistical detail for 30 countries.  
The diseases included are those frequently asked for, such as heart disease,  
tuberculosis, neoplasms, accidents, and suicides.
2. Preston, Samuel H.  
"Presents data on mortality from recorded causes of death in 180 populations, with detail provided on age and sex.

3. Quimby, Freeman H.  

Demographic yearbook. N.Y., 1948-.  
World population, births, deaths, life tables, marriages, and divorces. There are no data on morbidity. Each edition is also devoted to a "special topic" such as natality or mortality, and includes in-depth coverage and trends over forty-five years or more. The index is cumulative, covering all editions.


...Weekly epidemiological record. v.5, 1930-.  
Issued by League of Nations Health Organization, 1930-49. First four years (1926-29) were circulated only to certain public health officers.

Prepared for the guidance of health administrators and health authorities. Contains notifications of diseases made under the International Health Regulations. Also contains epidemiological notes on communicable diseases of international importance.

World Health Organization.  
World health statistics report. v.l. 1947-. (Monthly)  
Contains morbidity and mortality statistics on worldwide scales; special statistical compilations are included in each issue.

State and Local--Selected Examples


   California public health statistical report; crippled children services. Berkeley, 1962/63-.


5. California Morbidity. 1923-.  
   Title varies. Weekly reports of selected notifiable diseases which have occurred in the state. It includes comparable statistics for the previous year and cumulative statistics.

   Live births by age of mother, attendance, sex-race, and legitimacy for each community area. 1970-1974.  
   This was made available through the Illinois Department of Public Health. Computer print-out format. Annual.

   Provisional health statistics data, weekly report. 9/19/74-.  
   Weekly compilation of reportable illnesses and leading causes of death in Chicago.

   Resident deaths by sex-race, and 5-year age groups within community areas, 1970-74.

Each issue covers a different topic giving statistics by city or county for such things as marriage, natality, infant mortality. Issued irregularly.

Vital statistics, 1950-. Annual

Natality and mortality by state, county, city, age, race and sex. Includes statistics on venereal disease and deaths by accidents, homicide and suicide.


Morbidity statistics for Illinois, cities and counties for each week.

Monthly report. April 1975-

Supersedes the Weekly report.

13. Los Angeles County Health Department. 
Morbidity and mortality; reportable diseases, County of Los Angeles. 1966-

III. Statistical Sources for Chronic Conditions and Special Health Problems

A. Problems in Collection

With the decrease of acute diseases as causes of sickness and death the importance of chronic and degenerative diseases is increasing. This is partly due to the conquest of many communicable diseases and the greater number of people living to older ages.

Problems in collecting statistics about chronic conditions are due to there not being a reliable, comprehensive method. In general, prevalence data is easier to obtain than incidence data for these conditions. For example, it would be difficult to determine the incidence of alcoholism, while a survey could shed some light on its prevalence.

Generally, since there is no reporting system for most of these conditions (cancer registries being an exception) one must rely on health surveys or on sampling studies.

B. Agencies and Organizations

National Institutes of Health

The National Institutes of Health (NIH) is the main Federal agency for biomedical research concerning the prevention, diagnosis, and treatment of disease. To fulfill their objectives a wide variety of data is needed. Data on the incidence, prevalence, and cost of disease in the country is collected for the efficient use of funds for research. Epidemiological data is also gathered to aid in the testing of hypotheses in the search for the etiology and pathogenesis of diseases.¹

The National Institutes of Health comprise the following units:

National Institute of Aging (formed in 1974) to head research in the biomedical, behavioral and other aspects of aging.

National Institute of Allergy and Infectious Diseases (established in 1955) performs research on all infectious diseases but particularly those of the immune system.

National Institute of Arthritis, Metabolism and Digestive Diseases (established in 1950) is responsible for research in the areas of arthritis, metabolic diseases, endocrine abnormalities, nutrition and digestive diseases, to name a few.

National Cancer Institute (established in 1935) seeks to find the causes, methods of prevention, detection and treatment for the various forms of cancer. It is probably the best known Institute.

National Institute of Child Health and Human Development (established in 1963) focuses on the early phase of human life, including, but not limited to, fertility, child abuse and neglect, sudden infant death syndromes and other aspects of child and maternal health.

National Institute of Dental Research (established in 1948) focuses its research on the causes and control of facial-oral diseases.

National Institute of Environmental Health Sciences (established in 1966) concerns itself with the health effects of chemical, physical, and biological environmental agents.

National Eye Institute (established in 1968) studies problems within the visual system.

National Institute of General Medical Sciences (established in 1963) applies basic research to its mission of understanding molecular, cellular, genetic, and environmental factors in human health and disease.

National Heart, Lung and Blood Institute (established in 1948) is responsible for research into cardiovascular and respiratory problems.

National Institute of Neurological and Communicative Disorders and Stroke (established in 1950) studies the disease entities in its title in addition to nervous system trauma and the fundamental neurosciences.

Alcohol, Drug Abuse and Mental Health Administration (ADAMHA) is composed of three agencies: (1) National Institute of Mental Health (NIMH); (2) National Institute of Alcohol Abuse and Alcoholism (NIAAA); and (3) National Institute of Drug Abuse (NIDA). Each agency conducts statistical activities aimed at identifying the location and characteristics of facilities; at counting the numbers and characteristics of persons served; at determining charges and sources of payment.
for services and at assessing the effectiveness of services provided. Each agency also has an Information Clearinghouse for dissemination of information. (See Section VIII for mailing addresses.)

National Safety Council

The main objective of the National Safety Council is "to reduce the number and severity of all kinds of accidents, by gathering and distributing information about the causes of accidents and ways to prevent them." The Council compiles statistics received from governmental agencies, insurance companies, industries, schools, trade and labor organizations, etc.

Note:

Other private or voluntary health organizations which collect and disseminate statistics on chronic diseases are listed in Facts at Your Fingertips under the appropriate disease.

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2 Ibid, p. 7-8

C. Bibliography of Statistical Sources for Chronic Conditions and Special Health Problems

SOURCES OF A GENERAL NATURE:

1. U.S. National Center for Health Statistics. 
   *Vital and Health Statistics.* Washington, D.C.
   - Series 10: Data from the Health Interview Survey
   - Series 11: Data from the Health Examination Survey
   - Series 12: Data from the Health Records Survey
   - Series 13: Data on Health Resources Utilization

2. U.S. National Center for Health Statistics. 
   This pamphlet includes charts on three areas. First, there are life and death tables such as mortality and life expectancy, major causes of death, and divorce rates. Second, there are health problems and their impact such as chronic conditions, acute conditions, activity limitation and disability. Third, use of health services such as physician and dentist visits, hospital and nursing home care and care at home are included.

   These reports replace *Facts and Figures of Older-Americans.* Series of reports on the socioeconomic conditions of the elderly, including income levels, employment, living arrangements, health care, and population trends. Data are from census reports and other publications.

   Each issue has special topic. Is indexed in *Index Medicus.*

5. National Health Education Committee. 
   The latest available edition is 1976. The fact sheets on 15 major diseases include bibliographies. Charts are included for vital statistics, life expectancy, civilian income and expenditures, and allocations of voluntary health agencies to medical research.
SOURCES ON ABORTION:


SOURCES ON ACCIDENTS, INJURIES, AND OCCUPATIONAL SAFETY:


   Compilation of charts on the occupationally related health and safety of U.S. workers prepared by APHA under contract.


   This survey is required by the Occupational Safety and Health Act of 1970. Every work-related illness and those injuries which involve loss of consciousness, require medical treatment, or prevent an employee from carrying out his regularly assigned duties must be recorded.


   Detailed cause of death analysis (160 cases) is published for each of 194 occupational classes. The occupational mortality findings are compared with those of the one other U.S. study, *Vital statistics special reports*, Vol. 53, No. 3, 1963.

SOURCES ON ALCOHOLISM:

2. U.S. National Clearinghouse on Alcohol Information.
   Selected publications on statistics and demographic research on
   alcohol use and abuse.

   Annotated bibliography of demographic studies of alcohol use
   and abuse. Available free from Clearinghouse.

   First special report to the U.S. Congress on alcohol and health.

   Contains tables throughout the narrative presenting data on: (1)
   alcohol consumption among teenagers, adults, and older persons
   (by state, region, 17 foreign countries, and beverage) by sex;
   (2) economic costs; (3) health effects - statistical correlations
   between alcohol and disease; (4) traffic accidents. Second special
   report issued as ADM 75-212 has similar data.

SOURCES ON BLINDNESS:
1. Kahn, H. A. and Moorhead, H. B.
   Statistics on blindness in the model reporting area, 1968-70.

   The model reporting area consisted of 14 states in which the
   registered blind were reported. Statistics on blindness by
   etiology are given as well as by sex, color, and age variables
   for each state and for the total area. The first MRA statistics
   covered 1966 and 1968. The program has been discontinued.

SOURCES ON CANCER:
1. Doll, Richard.
   Two volumes.

   Data contributed for first volume were from the cancer registries
   in 24 countries; the second volume reports data for 58 populations.
   The volumes bring together available cancer incidence data in one
   place and present the data in the same way so that researchers can
   make whatever comparisons they choose.

   NIH 74-615)

   Presents for each county in the U.S. cancer deaths and age-adjusted
   death rates according to sex and race over a 20-year period.

   Maps are based on a compilation of cancer deaths and age-adjusted
   death rates by sex and race. Data for cancer mortality by the
   five major racial groups: whites, blacks, American Indians,
   Chinese and Japanese are also presented.


   Atlas shows geographic variation in cancer death rates across
   the U.S. for 35 anatomic sites of cancer. The Atlas contains maps
   of 16 common cancer sites on a county-by-county basis. The other
   19 sites are by state economic area (SEA).

   Maps are followed by survivor tables for each cancer site, listing
   a percentile ranking of both mortality rates and numbers of deaths.

5. U.S. National Cancer Institute.
   Cancer rates and risks. 2nd ed. (DHEW publication no. (NIH) 74-
   691).

   The purpose of this report is to present information on the
   measurable aspects of cancer. Variations and trends in cancer
   incidence and mortality are presented, some aspects of diagnosis
   and treatment, survival rates for diagnosed cancer cases and
   prospects for future progress are also given.

   Third national cancer survey - advanced three-year report.

   The principal goal of this survey is to provide incidence data
   for the years 1969 through 1971 for seven metropolitan areas and
   two entire states. The report contains figures for the resident
   cases of cancer newly diagnosed during the three years.

7. U.S. National Cancer Institute.
   Treatment and survival patterns for black and white cancer
   patients, 1955-1964. 1975. (DHEW publication no. (NIH) 75-712)

   This is the first comprehensive report issued by the Biometry
   Branch of the National Cancer Institute which evaluates the end
   results of cancer among black and white patients. Data are
   presented for 28 sites of primary cancer.
8. U.S. National Cancer Institute, End Results Section.
   Cancer Patient Survival, Report No. 5-. 1977-.
   Previous title: End Results in Cancer, Report No. 1-4. 1950-

   A series of comprehensive reports on the survival of cancer
   patients. Data is analyzed with respect to age, race, sex,
   primary site, cell type, extent of disease and treatment.
   No. 5 provides data for the period 1950-1973 from 453,467
   patients. Previous reports provide data from 1940-1950.

SOURCES ON DIABETES:

1. U.S. National Institute of Arthritis, Metabolism and Digestive
   Diseases.
   Diabetes Data. DHEW Publication no. (NIH) 78-1468. Washington, D.C.:

   Compilation of facts ranging from clinical information to the
   socioeconomic impact of the disease. Statistical scope includes
   incidence and prevalence data, morbidity of long- and short-term
   complications, and diabetes mortality.

   Report to the Congress of the United States. Volume III,
   Part 1, Scope and Impact of Diabetes. DHEW Publication no. (NIH)

   The total report contains four volumes. Volume III, Part 1,
   covers the reports of the work groups on epidemiology and morbidity.
   There is extensive data on the incidence and prevalence of
   diabetes by age, geographic, and sex variables. There is also
   data on incidence by weight variables and family income.

SOURCES ON DRUG ABUSE:

1. National Institute on Drug Abuse.
   DAWN city summaries. 1973- (?)

   Annual chartbook on patterns of drug abuse as reported by those
   emergency rooms in 23 SMSA's participating in the Drug Abuse
   Warning Network.

   Heroin indicators trend report. DHEW publication no. (ADM)

   This is an irregular series of reports intended to provide an
   objective assessment of heroin indicator trend data in this
   country. The indicators include: (1) medical examiner reports
on drug-related deaths; (2) emergency room reports on drug-related episodes; (3) hepatitis reports; (4) reports on the drug retail price and purity levels; (5) state and local law enforcement reports on drug law arrests; (6) drug abuse treatment program admission records. The reports focus on patterns of heroin use. Sources are discussed and there is a brief bibliography.

   NIDA statistical series, 1973- .

   The data presented in the reports describe national patterns of drug abuse and treatment, and the characteristics of the client population for all reporting federally-funded treatment programs.

SOURCES ON HYPERTENSION:

1. U.S. National Heart and Lung Institute.
   The public and high blood pressure, 1973.

   A poll conducted by Harris and Associates, Inc. The survey was to provide information on what the public knows about hypertension, what it does about it, and the effects it has had on the lifestyle of individuals. Broken into age, sex and race categories.

SOURCES ON MENTAL HEALTH:

   Mental health statistics series.

   Series A: Mental health facilities reports. Descriptive data on facilities, patients served, staffing and expenditures.

   Series B: Analytical and special study reports.

   Series C: Methodology reports. New statistical methodology, data collection techniques, evaluation of data collection techniques.

   Series D: Conference and committee reports. On subject of general interest to the field.


   The purpose of these notes is to provide brief presentations of data dealing with specific topics such as educational level of admissions to state mental hospitals, accessibility of community mental health centers, length of stay in general hospital psychiatric inpatient units. Content usually includes tabular presentations of data and a brief description of the highlights of the data.
Sources on Nutrition:


   Survey collected five types of data: general demographic, dietary intake, clinical, dental, biochemical, from ten states representative of their geographic region and from New York City.


   Presents preliminary findings on the dietary intake and biochemical levels of various nutrients in a probability sample of U.S. population 1-74 years of age, by age, sex, race, and income level, 1971-72.

Sources on Product Injury and Poisoning:


   Data from the National Electronic Injury Surveillance System. The 119 hospital emergency rooms participating in NEISS comprised a representative sample for the U.S. Data tables are based on the 90 product categories in the Consumer Product Hazard Index.


   This annual report is compiled from the reports of individual cases to the Poison Control Centers. Data describe product type and brand, victims' age and symptoms, and circumstances of the incident.

Sources on Smoking:


   In addition to charts and tables on smoking and health, there are tables on cigarettes and the economy.

   See also: Adult use of tobacco-1975, published jointly by the National Clearinghouse for Smoking and Health and the Prevention Branch, National Cancer Institute. Available from CDC.
2. U.S. National Heart and Lung Institute.

This report describes the general mortality experience as related to tobacco use of almost 300,000 U.S. veterans who held government life insurance policies in 1953 and have been followed for 16 years.

SOURCES ON VENEREAL DISEASE:

1. U.S. Center for Disease Control.
VD fact sheet, 1943-. Atlanta, Georgia.

Annual report summarizing the incidence and prevalence of syphilis and gonorrhea and historical trends. Data are collected by CDC from state and local health departments.
IV. STATISTICS FOR HEALTH CARE PLANNING AND ADMINISTRATION

A. Who needs Statistics for Health Planning?

To plan and develop better health services, to deliver those services and to measure their effectiveness requires data on health status, availability and utilization of health manpower, facilities, and on the costs of health services. Therefore, there are many users of this data. These include public and private agencies, organizations and individuals involved in the planning, provision or evaluation of health services and health resources at the national, state and local levels.

Federal agencies who need this data, and who also collect and analyze it, include the Health Resources Administration, the Health Services Administration, Social Security Administration, and others.

Professional organizations who have a need for this data are, for example, the American Medical Association, the American Hospital Association, and the National League for Nursing. These organizations also collect and publish data.

State and local agencies include health, welfare, and human resources departments; state planning agencies; health systems agencies, and voluntary health agencies.

B. Legislation concerning statistics

The National Health Planning and Resources Development Act of 1974 (PL 93-641)* authorizes the establishment and operation of health planning agencies at the local level. The Act establishes health service areas, each having a geographic region appropriate for the planning and development of health services. Each health service area has a health systems agency (HSA) whose responsibility is to improve the health of the residents in the area.2

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2Ibid, p. 2.

*Note: For an explanation of the various aspects of PL 93-641, see the publication, Health planning and resources development act of 1974. DHEW publication no. (HRA) 75-14015.
The law requires that the HSAs gather and analyze data. However, they are not to duplicate data which have already been collected by other agencies or organizations. This means the HSA must be aware of what is available. Hence, it is extremely important that libraries acquire and make available the existing data publications to those involved in health planning.

C. Agencies and Organizations

The Cooperative Health Statistics System (CHSS)
The purpose of the CHSS is "to assist state and local health agencies and federal agencies ... to establish and maintain a coordinated and uniform data system to guide decision-making regarding health care in the United States." When fully developed, the system will "provide national, state, and local agencies and organizations with comparable data on vital events, health manpower and statistics utilization and financing of health services, and related elements." CHSS is a component of the National Center for Health Statistics.

Commission on Professional Hospital Activities (CPHA)
1968 Green Road, Ann Arbor, Michigan 48105.
"Medical information resource center dedicated to the improvement of hospital and medical care. Conducts the Professional Activity Study, the basic component of a family of computerized medical record information systems developed to produce a display of hospital medical practice. Makes special comparative studies on local, state, regional, national and international levels from records of over 130 million hospitalizations."

The National Center for Education Statistics (NCES)
The NCES, part of the Education Division, DHEW, collects and disseminates statistics related to education. The Center coordinates the information gathering activities for education programs and performs special analyses of and disseminates the statistical data gathered.

National Center for Health Statistics (NCHS)
The NCHS maintains a Master Facilities Inventory which includes hospitals, nursing homes, and other in-patient facilities. Data published in Series 14.

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The NCHS also conducts the Hospital Discharge Survey, a national sample survey on hospital utilization. Data published in Series 13.

The NCHS conducts the National Ambulatory Medical Care Survey. Expansion of this survey is being considered. Data published in Series 13.

National Health Planning Information Center (NHPIC)
The Center was mandated by the National Health Planning and Resources Development Act of 1974 to facilitate the exchange of information needed for health planning.7

The Center acquires, analyzes, and disseminates information on a wide variety of topics. These include health resources, health care costs, utilization of health services, and health education. Much of the information is from state and local agencies.

The Center announces documents in "Weekly Government Abstracts," the series on health planning published by NTIS.

For further information, write or call: NHPIC, P.O. Box 31, Rockville, Maryland 20850. Phone: (301) 881-5075.

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7Brochure - The National Health Planning Information Center. (HRA) 76-14500
D. Bibliography of Sources

The following selected bibliography presents publications containing data in the following subject categories:

General Medical Care
Health Manpower
Health Facilities and Utilization
Health Care Financing
Health Education

Some of the publications overlap in subject matter content. They have been placed into the category for which they contain the most data.

GENERAL MEDICAL CARE:


   Gives a graphic overview of and highlights key facts about several major racial/ethnic minorities in the U.S., particularly health status and needs, utilization of health services, involvement in health resources. Differences in data between these minorities and the white population are shown.

2. Axelrod, S. J.; Donabedian, A; Gentry, D. W.

   This book covers a large range of data topics. Data on a national level from sources which are noted in the book are presented for such areas as population characteristics, mortality and morbidity, receipt of care, costs and expenditures, health personnel, facilities, quality of care, tax-supported medical care programs, and medical care insurance.


   This "authoritative source of fundamental nursing statistics" presents data on nurse distribution, nursing education, and the economic status of registered nurses. Similar data are given for allied nursing personnel (LPN's, aides, orderlies). Other data include health facilities and utilization, expenditures for health care, and a summary of vital statistics of the U.S.
   Chicago.

   This report presents 40 tables and 27 charts on general health services topics. Examples of the data included are characteristics of the United States population (age, sex, race), morbidity and mortality, characteristics of the health services delivery system, and financing mechanisms and characteristics. This profile is re-issued every year.

5. U.S. Bureau of the Census.  

   This volume is designed to bring together historical series of wide general interest and to inform the user where additional data can be found. It is a supplement to the Annual Statistical Abstract of the United States.

   The chapters on Population, and Vital Statistics and Health and Medical Care are excellent in that the sources of the statistics are discussed.


   Provides a comprehensive picture of the health care industry in the United States. Contains narrative as well as statistical data concerning health manpower, income and expenditures; education and licensure, facilities, disease, and the federal government and health.

Data for this study was drawn from various sources including unpublished data from NCHS Health Interim Survey. Tables present data on selected measures of health status, trends in health status, and utilization of health services, all by race.


This is an extensive collection of statistics concerning the health care field. Information includes health services and facilities, health manpower, health insurance, patients, delivery systems of other nations.


This publication consists of reports to the Congress required by the Public Health Service Act. It is an overview of the nation's health and health care system.

The huge volume is divided into several sections. Part A covers financial aspects of the nation's health care. Part B covers health resources, while Parts C and D cover health status and the use of health services.


Collection of statistics to describe social conditions and trends in the U.S. Eight major social areas are examined, of which health is the first. The three concerns examined are life expectancy, disability and access to medical care. Other areas covered are public safety, education, employment, income, housing, leisure and recreation, and population.

HEALTH MANPOWER:

Report is divided into two parts. The first part contains tables with information by racial/ethnic category, while the second part contains tables with information by sex. Each part has data for health occupations for which data are available. These are: medicine, osteopathic medicine, dentistry, optometry, pharmacy, podiatry, veterinary medicine, nursing, allied health, public health (Part II only).

2. Altenfelder, Marion E.

Table presents data about osteopathic physicians by age, sex, year of graduation, federal and non-federal, by specialty, for both the U.S. and individual states.


Third report in a series of manpower studies made by the APA and NIMH. The survey data are organized into five categories starting with Chapter 2: Supply and demographic characteristics of the sample; Chapter 3: Education and training by sex; also data on FMA's; Chapter 4: Professional Activities; Chapter 5: Geographic distribution by state per 100,000 population; Chapter 6: Economic issues, but no discussion of actual incomes.


Includes data on retired dentists, specialists, foreign dentists and women dentists.

5. Hudson, Helen H.

This publication contains historical and current statistics and references on the supply of nursing personnel and potential resources for the nation.


The 1974 edition of Distribution of Physicians has been renamed to include the annual compilation of information and statistics dealing with medical licensure in the U.S. This addition is the 73rd Annual Report of Medical Licensure Statistics which had previously appeared annually in the Journal of the American Medical Association.

The publication provides information on the geographic distribution of medical practice in the United States and Possessions. The tables serve as guides for comparing regions, divisions, states, and counties with respect to their total number of physicians by specialty and professional activity; number of hospitals and hospital beds; number of inhabitants, and some general economic characteristics.

Part 1: Physician Distribution by Regional, State, County, and Metropolitan Areas.

Part 2: 73rd Annual Report of Medical Licensure Statistics

   Reference data on the profile of medical practice 1971-.
   Chicago.

The first section of the book contains papers prepared by the staff on issues of current importance to the practice of medicine.

The second section presents data on physician manpower, utilization of services and physicians' income, expenses and fees. Sources are given.


   Women in health careers. DHEW publication no. (HRA) 76-55.

Covers women in the United States and other selected countries. Emphasis is on the United States.

Tables contain information by sex for medical practitioners; education and enrollments and specialization.
Survey of selected hospital manpower, February 1973, 
Preliminary report. (HRA) 74-26 (Government Document 
HE 20.6102:E)

Tables provide estimates of the numbers employed and the numbers 
of positions vacant for 14 allied health occupations in community 
hospitals for the U.S., four regions, and nine geographic 
divisions.

The supply of health manpower: 1970 profiles and projections 
to 1990. Washington, D.C., 1974. (DHEW publication no. HRA 75-38)

"... provides descriptive profiles of the current and past 
supply of health manpower and projections of manpower supply to 
1990 ... The health manpower occupations covered are the major 
health professional categories, including a number of specialties 
within these categories, and selected groups of allied health 
professions and occupations."

(U.S. Public Health Service publication no. 263)

2. Nursing personnel
3. Medical social workers
4. County data from 1950 census and area analysis
5. Industry and occupation data from 1950 census by state
6. Medical record librarians
7. Dentists
8. Dental hygienists
9. Physicians, dentists, and professional nurses
10. Physicians' age, type of practice, and location
11. Medical school alumni
12. Medical and psychiatric social workers
13. Hospital house staffs
14. Medical specialists
15. Pharmacists
16. Sanitarians
17. Industry and occupation data from the 1960 census by state
18. Manpower in the 1960's
19. Location of manpower health occupations, 1962
20. Manpower supply and educational statistics for selected 
health occupations, 1968.

Planned as a comprehensive source book on health manpower. 
Provides data on health occupations and trends in health manpower. 
Volume 2 (nursing personnel, published originally in 1953) has had 
two revisions, in 1966 and 1969.
13. **U.S. Division of Nursing.**

*Nursing personnel in hospitals: 1970 survey of hospitals registered with the American Hospital Association.* DHEW publication no. (HRA) 75-49. Health Manpower References, Springfield, Va.: NTIS, 1974 (PB 239-723)

This report presents data for nursing personnel employed in hospitals registered with the AHA. Tables present projected data on the number of nursing personnel employed in these hospitals during the period November 1-7, 1970. Each table shows the number of nurses in a particular personnel category by type and ownership of hospital. Tables also show distribution of nursing personnel in hospitals by type, ownership, size, and geographic location of the hospital.

14. **U.S. Division of Nursing.**


This report presents data for nursing personnel employed in hospitals not registered with AHA. The tables present projected data on the number of nursing personnel employed in these hospitals during the period November 5 through November 11, 1972. Each table shows the number of nurses in a particular personnel category by type and ownership of hospital. State summary tables are given. They show distribution of nursing personnel in hospitals by type, ownership, size, and geographic location of the hospital.

15. **U.S. Division of Nursing.**


Conducted by the American Nurses Association and supported by a Division of Nursing grant, this survey presents data on FNG's by state, countries of nursing education, number of FNG's taking and passing SB&PE, those obtaining temporary permits to practice, marital status, type of nursing education, year of graduation, nursing experience, educational differences.

16. **U.S. Division of Nursing.**


Survey presents tables on the characteristics of nurses, employment conditions (income and benefits), activities performed and participation in continuing education.
17. U.S. National Center for Health Statistics.  
Decennial census data for selected health occupations:  

This report considers the following demographic characteristics of 28 categories of health practitioners: sex, ethnic composition; patterns of residence; ratio per 100,000 resident population. Data are presented for the nation, for states, and for 83 SMSA's having a population of 250,000 or more as of April 1, 1970.

18. U.S. National Center for Health Statistics.  

This publication provides counts of professional persons employed in nine health occupations in the nation's counties and metropolitan areas. The nine types of professionals are: (1) dentists; (2) registered occupational therapists; (3) optometrists; (4) physicians, doctors of medicine; (5) physicians, doctors of osteopathy; (6) psychiatrists; (7) registered nurses; (8) pharmacists; (9) veterinarians.

Health resources statistics; health manpower and facilities. Rockville, Md., 1965-.

Intended to provide current and comprehensive statistics on a wide range of health areas as baseline data for the planning, administration and evaluation of health programs.

First part presents statistics for occupations designated as "health occupations, including allied health occupations." Second part presents statistics on facilities designated as "inpatient health facilities." Third part presents statistics on "outpatient and non-patient health services."


(Rainbow Series)

Series 14: Data on health resources: manpower and facilities - "Statistics on the numbers, geographic distribution, and characteristics of health resources including physicians, dentists, nurses, other health occupations, hospitals, nursing homes, and outpatient facilities."
HEALTH FACILITIES AND UTILIZATION

   Annual beginning with 1972. Supersedes Hospitals, Guide issue (in part?), which was issued annually from 1945-1971 as part 2 of the annual Guide issue of hospitals.
   Central reference source for information on health care institutions; on the American Hospital Association; on organizations, agencies, and educational programs in the health field; and on sources of products and services used in hospitals.

   This is a report of survey findings on the use of health services. Regular source of care, physician care, hospital care, surgical procedures, obstetrical care, dental care, Medicaid utilization by state, disability days and physician contacts are tabulated. This information is presented by such variables as age, race, income, residence, and year.

   Data are compiled from individual patient discharge abstracts submitted by hospitals participating in the Professional Activity Study (PAS) of the Commission on Professional and Hospital Activities (CPHA). The length of stay tables show stay distributions for patients discharged during 1975 from short-term non-federal hospitals (2,117 hospitals). A distinction is made between the stay for patients who were operated on as opposed to those who were not. Patients who died, were transferred, or left against medical advice were not included. Other books on length of stay by the CPHA are:
   Length of stay in PAS hospitals, by diagnosis, United States, Southern Region, 1975
   Length of stay in PAS hospitals, by diagnosis, United States, North Central Region, 1975
Length of stay in PAS hospitals, by diagnosis, United States, Northeastern Region, 1975

Length of stay in PAS hospitals, by diagnosis, United States, Western Region, 1975

Length of stay in PAS hospitals, by diagnosis, Canada, 1975.

   Hospital statistics. Chicago, 1972. Issued separately by the American Hospital Association beginning with 1972 (statistics cover 1971). Previously this was part of the annual Guide issue of hospitals.
   Series of tables covering, by various parameters, utilization, finance, personnel, facilities, and services. Updates of many of these tables are published in the bi-monthly issue of Hospitals dated the 16th of each month under the title "Hospital Indicators."

   Data were collected from a national sample of households which reflect overall population characteristics (age, sex, race, income). Tables present data on trends in utilization of services, social and economic variables in the use of services, utilization by type of service (cleaning, filling), effect of symptoms on utilization in conjunction with demographic and socioeconomic variables, and continuity of utilization.
   See also: NCHS Series 10 and 11.

6. Piore, Nora.
   The report provides an overview of the scope and characteristics of hospital based ambulatory care. It describes data presently available and data needed for analysis. The report also sets forth some public policies which would lead to the use of hospital clinics and emergency rooms as a network of comprehensive health care centers.
7. Scitovsky, Anne A. and Neld M. Snyder.  

The purpose of the study is to find information on the use of medical care. The study is an examination of the use of medical care by 500 persons aged 65 and over all of whom have a middle-to upper-middle-class background and access to medical services. The study indicates the demand for medical services that older people might make if they had middle-class standards of medical care and services were provided free of charge. Utilization data is given for physician's services, hospital care, nursing home care, and other medical care services. Expenditures are also compared to the national average. There is a brief bibliography.

Health insurance statistics notes. 1965- (?)

Continuing series of reports on the structure and utilization of medicare insurance programs. Subjects include members, eligibility, and characteristics of enrollees. The reports are issued on a more or less monthly basis.


This report includes hospitals by type, number of beds and staff by state. For SMSA's, beds, average daily census and occupancy are listed. For each county, beds, average daily census and ownership for general and specialty hospitals listed.

Nursing homes - a county and metropolitan area data book. DHEW publication no. (HSM) 73-1215 Section 2. Rockville, Md.

Data is recorded by SMSA and by county for all states in the United States. The number of homes, number of beds, number of residents and personnel and occupancy rate is tabulated. The information on homes providing nursing care is separated from that of homes not providing nursing care.

11. U.S. National Center for Health Statistics.  

Data are taken from the NCHS Health Interview Survey. The estimates are termed "synthetic" because they were not directly
derived from survey results and the results are biased estimates.

Tables present data by geographic (region and state) and socio-economic variables.

The report is "in response to the continually growing demand for state and small area statistics on health-related topics."

Vital and health statistics series. Washington, D.C. 1963-

Series 13: Data on health resources utilization. This series offers statistics on the utilization of health manpower and facilities providing long-term care, ambulatory care, hospital care, and family planning services.

HEALTH CARE FINANCING:

1. Berry, Ralph E.

Book discusses and presents statistics on the economic cost of alcohol abuse. Statistics include the cost of lost production, health care costs, cost of motor vehicle accidents, cost of fires, cost of crime and the cost of "social responses" such as rehabilitation, public assistance, workman's compensation, fire protection and criminal justice.

2. Cooper, Barbara S.

All available data on health expenditures are presented in this compendium. No attempt at analysis is made. Tables present statistics on trends in health expenditures, 1929-74; total national health expenditures; expenditures under public programs; private health insurance; expenditures by age groups. A list of sources is provided.

3. Cooper, Barbara S., and Dorothy P. Rice

This article updates the earlier study by Dorothy P. Rice of the cost of illness (see Rice). For the 16 major diagnostic categories of illnesses, the cost is presented in terms of the
direct costs for prevention, detection and treatment and the indirect costs due to disability and premature death. The categories of disease covered are general, although there is a discussion of the cost of stroke which is not covered in the tables. Diagnostic categories are: infective and parasitic diseases; neoplasms; endocrine, nutritional, and metabolic diseases; diseases of the blood and blood-forming organs; mental disorders; diseases of the nervous system and sense organs; diseases of the circulatory system; diseases of the respiratory system; diseases of the digestive system; diseases of the genitourinary system; complications of pregnancy, childbirth, and the puerperium; diseases of the skin and subcutaneous tissue; diseases of the musculoskeletal system and connective tissue; congenital anomalies; accidents, poisonings, and violence; other.


Volume I - Public funds, 1966 and 1969. Presents personal health care expenditures under public programs. State data are presented for each public program by source of funds and by type of expenditure


Proceedings of a conference in health economics covering papers discussing health costs in Belgium, Canada, Denmark, France, The Netherlands, Romania, Sweden, the United Kingdom, the United States, and West Germany. Each paper presents many tables and charts with data on health expenditures. Comparisons between the U.S. and other countries are made as well.


This handbook provides an overview of the expenditures of the federal government for health related activities for 1969-76. It includes: health research, health manpower training, provision of health services, construction of health facilities,
7. American Council of Life Insurance.  
   *Life insurance fact book.* New York, 1946-

   A statistical portrait of the life insurance business. Tables include information about health insurance benefit payments provided by life insurance companies.


   This subject is covered in a series of articles which are revised for each fiscal year. Tables and charts present statistics on aggregate and per capita national health expenditures; type of expenditures and source of funds; personal health care expenditures by type of expenditure; expenditures for health services by public program and source of funds; trends for 1929-1976 are also given.


   Volume III, Part 2 covers the reports of the work groups on mortality and economic impact.

   The report on morbidity covers diseases associated with diabetes, such as ocular and renal disease, coronary heart disease, neuropathy and coma. Some statistics are presented in the discussion, although there are no extensive tables.

   The report of the work group on economic impact presents extensive data on the cost of diabetes including direct, indirect, and costs of complications.

10. Rice, Dorothy P.  

    This [three-part] study presents a framework for calculating the economic costs of illness, disability and death and performs the calculations. Part I discusses the problems involved in measuring annual direct costs of illness, describes the procedures adopted, and presents data for selected types of health expenditures in 1963 by diagnosis. The second part deals with the annual indirect losses associated with illness, disability
and death. Included are the economic concepts, estimating procedures and estimates of the total man-years lost and productivity losses resulting from morbidity and mortality in 1963 for each diagnostic category. The third part presents the methodology and resulting estimates of the present value of the future earnings for those people who died in 1963.

11. Rufener, Brent L. et al. 


12. Scitovsky, Anne A. and Nelda McCall.

The purpose of the study was to determine what light the data would shed on the Bureau of Labor Statistics medical care price index for the period 1964-1971 and to analyze the effects of changes in treatment on costs. Tables show average costs for selected illnesses and the percentage change in average cost 1951-64 and 1964-71. In addition, the number of diagnostic and other services per care; and the average number of physician visits and average length of hospital stay per case, 1951, 1964 and 1971 are detailed. Illnesses examined are: otitis media in children, acute appendicitis, maternity, breast cancer, forearm fractures in children, pneumonia, duodenal ulcer, and myocardial infarction.


Annual report on social security funds, coverage, benefits, and beneficiaries. Presents detailed breakdown of OASDHI coverage and benefits by age, sex, and race. Also a summary of black lung and public assistance programs.

Sourcebook of health insurance data, 1959-. New York.

Provides the latest available data for the year published on the major forms of health insurance as well as medical care costs. Data on medical care costs include: personal and national expenditures, consumer price index, hospital charges and costs. Also some data on morbidity trends.
15. U.S. Congress. Congressional Budget Office.  

    Presents detailed information on the demand for long-term health and social services, the existing supply of those services, and the cost for increasing them.

    Tables include: sources and uses of funds; estimated spending FY 1977-1985; estimated effect on spending for home health services FY 1979-1985.


    Expenditures for physician services is examined over time, 1948-68 and across states, 1966. The data is broken down by such items as quantity of services, source of payment, per capita income, age, sex and state.


    This report presents data from the first major study undertaken by the National Cancer Institute which directly measured hospitalizations for specific cancer patients.

    The costs were correlated with a variety of factors including age at time of diagnosis, survival, site of cancer, extent of disease, medical procedure, admission sequence and source and number of payers.

    It also provides a complete history of payments to hospitals for inpatient care over a two-year follow-up period.


    A small pamphlet that presents a table of neurological and sensory disorders, and the mortality, estimated total cases, and estimated annual cost of care. Some estimated cases were obtained from voluntary organizations.
**Health insurance for the aged: annual program data.**

The official statistical record of the Medicare program compiled and analyzed for each year. Designed to cover all areas of the Medicare program, the releases include:


Section 3 - Participating providers of service. Presents data on such providers of service under Medicare as hospitals, home health agencies, independent laboratories, and skilled nursing facilities. Data published for 1969, 1970, 1971 and 1972-74.


Length of stay by diagnosis. National and regional data on the number of Medicare discharges from short-stay hospitals, the mean and median length of stay and percentile distribution of days of care for selected diagnoses. For each diagnosis data are presented for patient age, presence of secondary or complicating conditions, and whether or not surgery was performed. Data published for 1969, 1970 and 1971.


Comprehensive data on the costs and prices of hospital care, physicians' and dentists' services, and on significant trends in these expenses.
   Research and statistics note, 1965-(?)

Continuing series of reports on various aspects of social security programs. Subjects include health expenditures, hospital and medical care costs, veterans programs, workman's compensation. The bulletins are issued on a more or less monthly basis.

   Size and shape of the medical care dollar: chartbook 1975. 

Charts present facts about the medical dollar - who pays, what and how much is bought, for whom it is spent.

Shows trends in medical care outlays, the causes of rising hospital costs, and roles of private and public financing.

HEALTH EDUCATION:


Report contains information on dental schools, admissions, enrollment (by sex), graduates (sex and state), student educational expenses and faculty positions.

Supplements to this report present additional information, such as auxiliary dental education.


Although designed as a source of information for prospective minority medical students and their advisors, this book provides minority application and enrollment statistics as well for 108 of the 114 medical schools in the U.S. Statistics include: number of minority students who applied, number accepted for admission, number who matriculated, and total number of minority students.


This is an analysis of the demand for physicians and the ability of the educational system to respond to it. The appendix is the
statistical background for the report and many tables on both the supply of physicians and enrollments in medical schools. Foreign medical graduates are also taken into account. The bibliography is quite extensive and lists the sources for all statistics cited.

4. Institute of Medicine.

5. Larson, Thomas A. and Coralie Farlee, Ph.D.

   Data were gathered from three sources: the AAMC-AMA Liaison Committee on Medical Education, the annual AAMC Salary Survey, and the AAMC Faculty Roster System.

   The computer-generated reports display annually for the period 1970-1975 faculty counts by rank and degree, department, or specialty.

   National estimates of annual faculty appointment, turnover, and promotion have been generated.


   The first report on medical education in the United States was published in 1901 in JAMA.

   The current volume presents information in seven sections, some narrative and some statistical:

   Section 1: financial information
   Section 2: student enrollment, faculty, curriculum
   Section 3: graduate medical education
   Section 4: continuing medical education
   Section 5: allied medical education
   Section 6: programs sponsored by government agencies
   Section 7: public health education

7. Ott, Mary D.
Report on the number of women enrolled and receiving degrees in first professional degree programs in four disciplines, school years 1969-70/1974-75. Data are from NCES surveys and professional associations.


This is a supplement to the data published annually in *Nursing Outlook* and to statistical summaries published in the 1976 edition of *State-approved Schools of Nursing*.

Statistics for enrollments and graduations of nurses in Doctoral, Master’s, and Baccalaureate programs are given. Totals are 1965-75.

Financial assistance statistics are also given.

Statistics are broken down by geographic region and functional area of study.


"The purpose of this report is to provide enrollment data for each school of medicine, osteopathy, and dentistry and each school of optometry, podiatry, and veterinary medicine for the period academic years 1970-71 through 1977-78."


Updated annually in the Datagram section of the *Journal* in the early part of the year.

Tables present information about first-year U.S. medical school enrollments by sex, minority group and foreign student variables.

Tables present information for total U.S. medical school enrollments by the same variables.
V. PRACTICAL EXERCISES

The questions below are actual questions as received by reference librarians in several libraries. They are meant to challenge your powers of reasoning (as they did the original librarians!). Naturally an exercise of this kind is ideally conducted with the reference collection at hand. It would be cumbersome at best to move a collection into this classroom so you are asked to follow these directions instead.

Directions

For each question answer the following:

A. Which source would you consult first and why?
B. Tell one or two alternate sources in case the first fails.

Questions

1. What is the mortality rate for cirrhosis in the U.S.? Has it increased or decreased in the last 20 years?

2. I'm trying to find out the average longevity of physicians. Is it longer than other people's?

3. I would like to get a measure of infant deaths in Southern counties of the U.S. for 1940, to compare with current figures.

4. Can you tell me how many quadruplet births occurred last year?

5. I need national statistics on the number of children who were poisoned last year (1976) or the most recent year.

6. I would like to get an overview of the incidence and prevalence of such diseases as heart disease, diabetes, and intestinal problems for the most recent year possible.

7. What is the incidence rate of cystic fibrosis by race, sex, and community and state?

8. I need to know the number of people who are blind in this country, totally blind.

9. Do you have any statistics on oral contraceptive use?

10. Can you supply any figures on the cost of treating cancer, diabetes and hypertension?

11. What is the average total medical cost for a family or single person per year?
12. What is the average income of psychiatrists?

13. Do you have any figures on the average hospital charges to the patient per patient day by state?

14. What is the life expectancy for black males today as compared to 1900?

15. I'd like to know the number of pharmacists in the U.S. and how they are distributed.

16. How many black women have hypertension as opposed to white women?

17. Can you tell me where I can find information on the number of tooth extractions done annually?

18. I need data on the effects of smoking and life expectancy.

19. What is the suicide rate in Sweden?

20. What was the number of patient visits to physicians in 1976 (in the U.S.)?

21. What were national health expenditures (both public and private) last year?

22. A student would like statistics on the incidence of alcoholism and drug abuse for a general health survey.

23. What was the number of legal abortions in Utah in 1975?

24. How many homosexuals are there in the U.S.?

25. What is the percentage of women in the various medical specialties?
VI. GENERAL STATISTICS

A. Demographic and Socioeconomic Statistics

The data which describes the population in a given area is of great importance to those who use health statistics because it forms the basis for analyzing the health data. Data on health services or utilization have no meaning unless they can be related to a specific population. It is important to know the age, sex, ethnic group, occupation, marital status, and even the physical environment of the group to be able to analyze what the morbidity and mortality figures really mean.

The characteristics of a population, or the population profile, include:

1) Demographic characteristics such as age, race, sex, marital status

2) Housing statistics

3) Socioeconomic characteristics such as income, poverty status, education, occupation

B. Agencies

Bureau of the Census

One of the principal functions of the Bureau is the decennial census of population and housing. In addition, the Bureau publishes estimates and projections of the population and provides current data on population and housing characteristics. It produces statistical compendia, catalogs, guides, and directories to help locate information.

Bureau of Labor Statistics (BLS)

The BLS has responsibility for the Department of Labor's economic and statistical research activities. The Bureau is the Government's principal factfinding agency in the field of labor economics, with respect to collection and analysis of data on manpower, occupation safety and health and other related socioeconomic issues.


C. BIBLIOGRAPHY

DEMOGRAPHIC STATISTICS

   Current population reports, population characteristics. 

   Latest national data on specified characteristics of the population.

2. Bureau of the Census. 
   Current population reports, population estimates and projections: 
   1973 population estimates for counties, incorporated places and 
   and selected minor civil divisions. Series P-25. Washington, D.C.: 
   Government Printing Office. No. 1-. 1947-. 

   Current population reports, federal-state cooperative program 
   Government Printing Office. No. 1-. 1969-. 

   Data for states, counties, SMSA's on the total population and 
   components of change (births, deaths, migration).

   Detailed characteristics, final report. 
   Series PC(1) D1--PC(1) D52. 

   Data for states, cities, SMSA's by age, race, state or country of 
   birth, parentage, residence, education, number of children, 
   veteran status, place of work, occupation, income.


   Contains population and housing data from the 1970 Census broken 
   down geographically by city and county.

   Data elements included: population by age, race, sex, education, 
   income, labor force status, occupation, industry and living 
   arrangements, areas by land, birth and death rates, housing 
   characteristics, public assistance, hospital characteristics.

   Congressional district data book. Washington, D.C.: 

   Contains population and housing data from the 1970 Census 
   broken down geographically by congressional district.

Charts on migration and population, employment, income, poverty, family, vital statistics and health, housing, crime and citizenship for black people are presented.


Annual publication with data by states, county, and region.

Socioeconomic and Housing Statistics


Data on reportable earnings, characteristics of workers, and other data for U.S. regions, states, metropolitan areas, non-metropolitan areas and SMSA's.


Covers 60 urban areas and 7 rural areas. Data on the labor force, employment status, occupation and industry.


Covers 60 largest cities with data on selected demographic characteristics, socioeconomic and housing characteristics with emphasis on income levels.


Second annual comprehensive compilation of statistics on criminal justice and related matters. Includes reported
marijuana use among the general population by demographic characteristics among the adult and youth population.

Also forcible rapes: characteristics of the victim and offender by sex, race, and age.

   Monthly chartbook portraying current and trend data on social and economic conditions in the U.S. Data compiled from publications of all major statistics-producing federal agencies.

   This is a collection of statistics to describe social conditions and trends in the U.S. Eight major social areas are examined of which health is the first. The three concerns examined are life expectancy, disability and access to medical care. Other areas covered are public safety, education, employment, income, housing, leisure and recreation, and population.


   The annual edition of the Handbook makes available in one volume the majority of data collected by BLS. Each table is complete historically, beginning with the earliest reliable and consistent data. The data are grouped under economic subject headings.

   A compilation of data on women workers, including labor force participation, patterns of employment, earnings, and education. Statistics are arranged according to age, marital and family status, educational attainment, and race. Data are presented for the period 1972-1974, with selected trends from 1940 to the present.


This report presents a statistical portrait showing "the role of women in the United States during the 20th century." Data are from government sources: surveys, decennial censuses, vital statistics, and administrative records. Selected data are provided in a historical framework, beginning in 1950, or earlier if statistics are available. The analyses trace trends among women in the areas of population growth and composition, longevity, mortality and health, residence and migration, marital and family status, fertility, education, labor force participation, occupation and industry, work experience, income and poverty status, voting and public office holding, and crime and victimization. Comparisons of black and white women are discussed separately, and recent data are included for women of Spanish origin.
VII. SOURCES FOR LOCATING ARTICLES OR BOOKS CONTAINING STATISTICAL INFORMATION

A. Indexes and Abstracts

1. American Medical Association
   Medical socioeconomic research sources. Aspen Systems
   Corporation. Vol. 1-. 1971-. (Published quarterly and
   cumulated annually.)

   "Medical Socioeconomic Research Sources (MEDSOC) is a guide to
   publications in the sociology and economics of medicine in the
   English language." All types of sources are covered including
   journal articles, newspapers, legislation, books and pamphlets.
   A list of serials which is included in the annual cumulation
   reveals that there are indeed some services not covered by
   Index Medicus. A separate list of books is also added.

   Subject headings, although based on MESH, reflect the slant of
   the index. Subject headings of interest include: population,
   poverty, demography, social conditions.

2. Congressional Information Service.
   American statistics index: a comprehensive guide and index
   to the statistical publications of the U.S. Government.
   Washington, D.C. (Annual, with monthly supplements.)
   Volume 1-. 1973-.

   The purpose of ASI is to identify all statistical data published
   by the federal government, to catalog publications in which data
   appear, to describe the contents, to index in full subject
detail, and to micro-publish the publications indexed.

   Index is by subject, names, and title.

   Monthly. Washington, D.C.

   Provides a comprehensive index to current periodical literature
   in epidemiology, preventive medicine and public health.

   Publication was discontinued after the December 1977 issue.


   There are 42 sections to this abstracting service. While all
   sections are likely to contain references to works of a
   statistical nature, the two sections, Health Economics and
   Hospital Management; and Public Health, Social Medicine and
   Hygiene are good places to look for statistics in these areas.
Each section is arranged according to a specially designed classification system. In addition there are author and subject indexes in the back which refer to an abstract number. When you turn to the abstract number in the main section each citation is given with the following information: the title of the article in English (followed by the title in the original language when appropriate), the author's name and address, abbreviated journal title, year of publication, volume and issue numbers and pages followed by the abstract. This tool is especially good for foreign material.

   Index Medicus, Its Predecessors and MEDLINE. Washington, D.C.

This publication currently indexes approximately 3000 of the world's biomedical journals. Original articles are indexed as well as letters, editorials and biographies which have substantive contents. Recent monographs (published proceedings, symposia and selected multi-authored works) have been included. The Index is divided into author and subject sections. The subject section is further broken down into subheadings. Statistical papers are often found by looking under the relevant main heading with one of the following subheadings: complications, etiology, manpower, occurrence, supply and distribution. Thus if information is desired on the incidence of endometriosis in a particular group of women you would look under ENDOMETRIOSIS with the subheading occurrence.


Published quarterly.

This index covers international demographic research, but there is a geographic index for the U.S. Subject headings include: general population studies and theory, trends in population size, spatial distribution, fertility, demographic and economic interpretations.

It also lists official statistical publications of foreign countries, the U.S., states of the U.S., and bibliographies.

7. U.S. National Center for Health Statistics. Clearinghouse on Health Indexes. 
   Bibliography on Health Indexes. No. 1- . 1974-

The Clearinghouse has been established to provide information which will be helpful in developing composite health measures. Accordingly, the following definition of health index has been adopted: "A health index is a measure which purports to reflect the health status of an individual or defined groups."
The selection of documents in the Clearinghouse file and this annotated quarterly Bibliography on Health Indexes includes journal articles, books, conference proceedings, government publications, and reports on grants and contracts.


This volume is designed to bring together historical series of wide general interest and to inform the user where additional data can be found. It is a supplement to the annual Statistical Abstract of the United States.

The chapters on Population, and Vital Statistics and Health and Medical Care are excellent in that the sources of the statistics are discussed.


This annual standard summary of statistics on the social, political, and economic organization of the United States is designed to serve as a convenient volume for statistical reference and a guide to other statistical publications and sources. Major sections of interest include: population, vital statistics, education, income, labor force.

B. Selected List of Journals Routinely Having Statistical Articles

1. American Journal of Epidemiology
2. American Journal of Public Health
3. American Journal of Tropical Medicine and Hygiene
4. Archives of Environmental Health
6. International Journal of Epidemiology
7. International Journal of Health Services
8. Inquiry
10. Medical Care
11. Medical Economics
12. Metropolitan Life Insurance Company Statistical Bulletin
13. Milbank Memorial Fund Quarterly
14. PAS Reporter
15. Preventive Medicine
16. Public Health Reports
17. Social Security Bulletin
18. WHO Technical Report Series
19. WHO Statistics Report
VIII. ACQUISITION AIDS

A. PUBLICATIONS AND ADDRESSES

1. Parklawn Health Library
   Lists recent acquisitions of the Parklawn Health Library in three parts. Part I: New books, subject heading arrangement; Part II: Publications from the KWIC Index (a keyword in context list of publications of HRA, HSA. CDC, and other public health reports); Part III: Highlights of journal literature.

2. U.S. Department of Commerce, National Technical Information Service
   Health planning [Washington]. 197?- Weekly. $50.00 (U.S.) $65.00 (foreign) paper. Other title: Weekly government abstracts: Health planning
   "Included in this series are documents relating to health services and health needs; health services and facilities utilization; health manpower requirements, utilization and education; health related costs; methods of health services funding; and government and private agency activities relating to health planning and resources development."
   Final issue is annual subject index.
   National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161

   Bureau of the Census Catalog; 1946-. Washington, D.C.
   Cumulates quarterly-to-annual with monthly supplements. $14.40 (U.S., 4 consecutive issues and 12 monthly supplements); $18.00 (foreign)
   U.S. Bureau of the Census, Subscriber Services Section (Publications), Washington, D.C. 20233

4. U.S. Bureau of the Census
5. U.S. Health Resources Administration
   Catalog of publications. Rockville, Md., 1977 (DHEW publication
   no. (HRA) 77-615)

   Lists most publications since 1974 of HRA units (National Center
   for Health Statistics, National Center for Health Services Research,
   Bureau of Health Manpower, Bureau of Health Planning and Resources
   Development), giving a brief description of each and availability
   statement "where necessary."

   Request copies from: 5600 Fishers Lane, Rockville, MD 20857

   Research publications. Quarterly.

   Catalog which identifies and annotates research publications
   produced by the SSA, Office of Research and Statistics (ORS).
   Tells availability, source, and price.

   Free - write to ORS, Social Security Administration, 1875
   Connecticut Avenue, N.W., Washington, D.C. 20009

7. U.S. National Center for Health Statistics.
   News of the Cooperative Health Statistics System. No. 1- ,

   Newsletter to provide information exchange between NCHS and state
   agencies collecting vital and health statistics. Each issue lists
   new publications of NCHS.

   Free - write to the National Center for Health Statistics, HRA,
   Center Building, 3700 East-West Highway, Hyattsville, MD 20782

   Note: NCHS can be called for a publication on their hot-line:
   (301) 436-8500.

8. R. R. Bowker
   International bibliography information documentation (IBID).

   Provides bibliographic information on the current publications of
   the U.N. organizations: FAO, ILO, PABO, UNESCO, WHO

   Includes books, periodicals, microforms.

   Information on how to acquire material and a list of national
   distributors is given.
9. Eccles Medical Sciences Library, University of Utah.
   MEDOC: A computerized index to U.S. government documents in
   Salt Lake City.

   Covers a selection of relevant documents giving SuDoc number,
   title, subject, series, and agency. Other information tells
   whether it is a pamphlet, price.

   Eccles is a depository library.

USEFUL ADDRESSES:

National Clearinghouse for Alcohol Information
Box 2345
Rockville, MD 20852
Phone: (301) 948-4450

National Clearinghouse for Drug Abuse Information
712 Jackson Place, N.W.
Washington, D. C. 20506

National Clearinghouse for Mental Health Information
NIMH
5600 Fishers Lane
Rockville, MD 20857
Phone: (301) 443-4517

National Clearinghouse for Smoking and Health
Center for Disease Control
Atlanta, GA 30333
Phone: (404) 633-3311

Cancer Clearinghouse
7910 Woodmont Avenue
Bethesda, MD 20014
Phone: (301) 496-4070
IX. GENERAL STRATEGY FOR ACCESSING STATISTICS

There is no sure, fool-proof, no-fail, way to find statistics in the health field. Someone will add a little twist or an extra variable to his or her request that will boggle the best of detective minds in trying to find an answer.

However, there are a few questions to keep in mind when looking for answers to statistics questions.

1. What is the subject of the question?
2. Is this an area in which statistics are regularly collected? If so, in which publication do they appear?
3. If the question involves morbidity, ask yourself whether it is a notifiable disease or a chronic one.
4. Do the variables asked for make sense?
5. Which index is best to consult for this subject?
6. Which agency, public or private, would be likely to have information?
7. Is it a likely topic for a journal article and can be searched on MEDLINE?
8. Is it possible that no statistics exist to answer this request?

Aids in teaching how to answer statistical reference questions are as follows:


X. FOR FURTHER STUDY

A. General Bibliographies or Guides

   A bibliography of the socioeconomic aspects of medicine.

   The materials selected for this bibliography include those that
   have social, political, and economic implications. The bibliog-
   raphy is limited to English language materials. Included are
   reference books and monographs, a few pamphlets, and annuals are
   listed.

2. Jensen, Marilyn Anne.
   "Selected sources of current population, vital, and health

   Covers local and state publications for California as well as
   major federal and international publications.

3. Lufburrow, Nancy C.
   "Social indicators; or selected federal social statistical

   Describes some of the newer federal statistical series. Has an
   excellent bibliography. 55 references.

4. Silberg, Nancy.
   Data for health planning: a selected annotated bibliography.

   This is a selected bibliography of books, pamphlets and articles
   which contain data useful for health planning. One section deals
   with services of data, another lists services of data by
   subject such as demographic, health services, and vital
   statistics.

5. U.S. Bureau of the Census.

   A one-volume comprehensive historical bibliography of sources for
   Bureau of the Census statistics from 1790 to 1972 comprised of two
   catalogs: (1) the Catalog of U.S. census publications, 1790-1945,
   lists all materials issued by the Census Bureau and its predecessor
   organizations starting with the first census report of 1790.
   (2) the Census catalog of publications 1947-1972 updates the
   historical publication and describes the reports issued 1945-72.

   "The publications listed relate largely to health manpower supply and requirements and are designed to contribute to a better understanding of health manpower issues, developments, trends and projections." Availability and price given for each item.

   Bibliography free from BHM, Manpower Analysis Branch.

   Directory of data sources on racial and ethnic minorities.  

   This BLS bulletin provides users of statistics on racial and ethnic minority groups with annotated references to sources of data published by the federal government.

   Data sources include publications presenting social and economic characteristics of minority groups for the nation and selected areas based primarily on household surveys. Data sources not covered include vital and health statistics, and arrest and prison population statistics.

   There are four major sections of this directory: blacks, persons of Spanish ancestry, other races, and other ethnic groups.

8. U.S. National Center for Health Statistics.  

   This is an index to health topics covered in the Vital and health statistics series according to demographic and socioeconomic variables. Section I deals with topics related to health status of people. Section II deals with health resources topics. The last section is a listing of each title in each series.


   The report updates and expands an earlier source book, Selected data sets for health planners, Volume I. Information for each data source includes publishing agency, data and periodicity, geographic area covered, population covered, and data elements. Both publications and data tapes are covered.
This report was designed to meet the needs of state and local health planners, particularly the health system agencies and the state health planning and resources development agencies established under Public Law 93-641, the Health Planning and Resources Development Act of 1974.

Sources are organized under the subject areas of general health statistics, health status and problems, health care resources, national health care programs, health economics, and demographic data sources. Sections concerning environmental and occupational health will be added in the future.


This publication describes 80 micro-data tapes which are available for purchase from the National Center for Health Statistics in 1976. The tapes are meant to fill the need of consumers who require data in a format or detail not provided in the Center's publications.

The content of each data set is described in detail. Purchase price includes costs of the magnetic tape volumes, the printed materials explaining tape content, and the documentation necessary to utilize the files.

11. Weise, Frieda.

3. Information on the Collection and Use of Health Statistics.


2. Freeman, Howard E.


Discussion of social factors in chronic illnesses; addiction as a socioenvironmental health problem and the sociology of mental disorders.
3. Friedman, Gary D.  
   Good explanation of what epidemiology is all about.  
   Epidemiological concepts are clearly explained as are the uses of  
   epidemiological studies.

   *Differential mortality in the U.S.: a study in socioeconomic  

5. Kosa, John and Irving Kenneth Zola, eds.  
   *Poverty and health.* Rev. ed. Cambridge, Mass.: Harvard  

6. Lilienfeld, Abraham M.  
   *Foundations of epidemiology.* New York: Oxford University  
   This book presents the concepts and methods of epidemiology as  
   they apply to disease problems. It is designed as an introductory  
   text.


7. Marier, Robert.  
   "The reporting of communicable diseases." *American Journal of  

8. U.S. National Center for Health Statistics.  
   *News of the cooperative health statistics system,* No. 1-  
   1974-. Free.  
   A bimonthly newsletter to provide information exchange between  
   NCHS and state agencies collecting vital and health statistics.  
   Publication replaces the Registrar and Statistician.

   Lists new publications of NCHS in each issue.

   *Statistical notes for health planners.* No. 1-  
   July 1976-.  
   This publication is issued irregularly as a guide for health  
   planners and others in the use of appropriate methodology for the  
   collection and analysis of vital and health statistics. Each  
   issue is devoted to discussion of a single topic with emphasis on  
   existing data, for example, Infant mortality (No. 2, 1976).

    *Health statistics plan, Fiscal years 1976-1977.* Washington,  
This plan is a report from the Health Data Policy Committee to the Assistant Secretary for Health and the Secretary for the Department of Health, Education and Welfare.

The plan presents the Department's current health statistics activities, with emphasis on those needing attention. A two-year action plan summarizes actions proposed for the two-year period beginning July 1, 1975.

The appendix is extensive, listing the health data activities in the Department with a brief description of each project. Included in the description is a telephone number to contact. In some cases availability of data is cited, published or otherwise.


An explanation of the major provisions of the Act, PL 93-641.


In addition to the CHSS, data needs and sources are discussed. Gives a good overview of future plans.
GLOSSARY

I. Terms Related to Vital Statistics

**Vital statistics:** Statistics pertaining to births, deaths, fetal deaths, marriage and divorce.

**Mortality:** Death; usually expressed in rates.

**Crude death rate:** The number of deaths reported in a calendar year per 1,000 population.

**Cause specific death rate:** The number of deaths from a specific cause in a calendar year per 1,000 population.

**Age specific death rate:** The number of deaths reported in a selected age group per 1,000 population in that same age group.

**Maternal mortality rate:** The number of maternal deaths attributed to puerperal causes per 1,000 live births.

**Infant mortality rate:** The number of deaths of infants under one year of age during a calendar year per 1,000 live births.

**Neonatal mortality rate:** Deaths under 28 days of age per 1,000 population.

**Postneonatal mortality rate:** The number of deaths which occur between the ages of 28 days and 1 year of age per 1,000 total live births.

**Perinatal mortality rate:** The number of still births plus neonatal deaths per 1,000 total births.

**Natality:** Birth; usually expressed in rates.

**Crude birth rate:** The number of live births in a calendar year per 1,000 population.

**Age specific birth rate:** The number of live births to women in a selected age group per 1,000 women in that same age group.

**General fertility rate:** Number of births per 1,000 women 15-44 years of age.

II. Terms Related to Health Statistics

**Communicable disease:** Infectious diseases. These are the diseases generally reported as mortality statistics in the U.S. and elsewhere.

**Chronic disease:** Diseases which have one or more of the following characteristics:

1. are permanent
2. leave a disability
3. are caused by nonreversible pathological alteration
4. require special training of the patient for rehabilitation
5. may be expected to require a long period of supervision, observation or care
Morbidity: The extent of illness, injury or disability in a defined population. This is usually expressed in incidence or prevalence rates.

Incidence rate: The number of new cases of disease which occur during a particular time period in a particular population.

Prevalence rate: The number of cases of a given illness at a particular time per 100,000 population.

III. General Terms

Age - adjusted rate: Used to compare two population groups in which the age distribution differs. To compare the two populations, the age specific rates for each population are applied to a selected standard population.

Cohort study: An inquiry in which a group (the cohort) is chosen for the presence of a specific characteristic at a specified time and followed over a period of time for the appearance of related characteristics. e.g. a group of diabetics followed to check the appearance of heart or renal disease.

Demography: The study of human populations including:
   a. change in population size
   b. composition of the population
   c. the geographic distribution of population

Health status: The state of health of a specified individual, group or population. It is difficult to determine since it may be measured by the people's subjective assessment of their health. One common measure of health status is the infant mortality rate.

Life table: A mathematical model that portrays mortality conditions among a population and provides a basis for measuring longevity. With a life table one can determine:
   a. the probability of dying within one year of a person's life at each age
   b. the average number of years a newborn can expect to live
   c. the average number of years remaining to a person at any age
   d. the probability of surviving from one age to another
   e. the probability of surviving for any given number of years for a person at any age

National Health Survey: Authorized by law in 1956, this program has 4 parts: 1) health interview sample of households 2) a health examination survey 3) health resources surveys 4) surveys of vital records related to births and deaths. The program is currently under the auspices of the National Center for Health Statistics. The results of the surveys appear in the Vital and Health Statistics series.

Population at risk: A particular group who because of its characteristics is particularly vulnerable to a certain illness. For example, those who smoke, have hypertension, are overweight can be considered a population at risk for developing heart disease.

SMSA (Standard Metropolitan Statistical Area): A county or group of contiguous counties which contain at least one city of 50,000 population or more.
# Core List

The following 50 titles are the major publications in health statistics. The page number for the full citation and annotation in the syllabus is given for each one.

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