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**INDIAN
HEALTH
SERVICE**

CHART SERIES BOOK

APRIL 1988

**U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
INDIAN HEALTH SERVICE**

D Susie John

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INDIAN HEALTH SERVICE

CHART SERIES BOOK

APRIL 1988

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
INDIAN HEALTH SERVICE
OFFICE OF PLANNING, EVALUATION AND LEGISLATION
DIVISION OF PROGRAM STATISTICS

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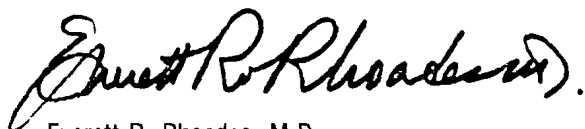
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PREFACE

Since 1955, the U.S. Public Health Service, through its Indian Health Service (IHS) component, has had the responsibility for providing comprehensive health services to American Indian and Alaska Native people in order to elevate their health status to the highest possible level. The mission of the IHS is to ensure the equity, availability and accessibility of a comprehensive high quality health care delivery system providing maximum involvement of American Indians and Alaska Natives in defining their health needs, setting priorities for their local areas, and managing and controlling their health program.

This publication presents tables and charts that describe the IHS program, and the health status of American Indians and Alaska Natives. Information pertaining to the IHS structure, American Indian and Alaska Native demography, patient care, and community health are included. Current and trend information are presented, and comparisons to other population groups are made, when appropriate.



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OVERVIEW OF THE INDIAN HEALTH SERVICE PROGRAM

The Department of Health and Human Services (DHHS), primarily through the Indian Health Service (IHS) of the Public Health Service (PHS), is responsible for providing Federal health services to American Indians and Alaska Natives. Federal Indian health services are based on the laws which the Congress has passed pursuant to its authority to regulate commerce with the Indian Nations as explicitly specified in the Constitution and in other pertinent authorities.

The Indian Health program became a primary responsibility of the PHS under P.L. 83-568, the Transfer Act, on August 5, 1954. This Act provides "that all functions, responsibilities, authorities, and duties ... relating to the maintenance and operation of hospital and health facilities for Indians, and the conservation of Indian health ... shall be administered by the Surgeon General of the United States Public Health Service." The IHS goal is to elevate the health status of American Indians and Alaska Natives to the highest level possible. The mission is to ensure equity, availability and accessibility of a comprehensive high quality health care delivery system providing maximum involvement of American Indians and Alaska Natives in defining their health needs, setting health priorities for their local areas, and managing and controlling their health program. The IHS also acts as the principal Federal health advocate for Indian people by assuring they have knowledge of and access to all Federal, State, and local health programs they are entitled to as American citizens. It is also the responsibility of the IHS to work with these programs so they will be cognizant of entitlements of Indian people.

The IHS has carried out its responsibilities through developing and operating a health services delivery system designed to provide a broad-spectrum program of preventive, curative, rehabilitative and environmental services. This system integrates health services delivered directly through IHS facilities and staff on the one hand, with those purchased by IHS through contractual arrangements on the other, taking into account other health resources to which the Indians have access. Tribes are also actively involved in program implementation.

P.L. 93-638, the Indian Self-Determination Act, enacted on January 4, 1975, builds upon IHS policy by giving Tribes the option of manning and managing IHS programs in their communities, and provides for funding for improvement of Tribal capability to contract under the Act. The Indian Health Care Improvement Act, P.L. 94-437, passed in 1976, as amended by P.L. 96-537 in 1980, was intended to elevate the health status of American Indians and Alaska Natives to a level equal to that of the general population through a 7-year program of authorized higher resource levels in the IHS budget. Appropriated resources were used to expand health services, build and renovate medical facilities, and step up the construction of safe drinking water and sanitary disposal facilities. It also established programs designed to increase the number of Indian health professionals for Indian needs and to improve health care access for Indian people living in urban areas.

The operation of the IHS health services delivery system is managed through local administrative units called Service Units. A service unit is the basic health organization for a geographic area served by the IHS program, just as a county or city health department is the basic health organization in a State health department. These are defined areas, usually centered around a single federal reservation in the continental United States, or a population concentration in Alaska.

A few service units cover a number of small reservations; some large reservations are divided into a number of service units. The service units are grouped into larger cultural-demographic-geographic management jurisdictions which are administered by Area Offices.

PURPOSE AND DESCRIPTION OF THE CHART SERIES BOOK

The IHS Chart Series Book attempts to fulfill the basic statistical information requirements of parties that are interested in the IHS, and its relationship with the American Indian and Alaska Native people. The tables and charts contained in the IHS Chart Series Book describe the IHS program, and the health status of American Indians

and Alaska Natives. Information pertaining to the IHS structure, American Indian and Alaska Native demography, patient care, and community health are included. Historical trends are depicted, and comparisons to other population groups are made, when appropriate.

The tables and charts are grouped into six major categories: 1) IHS Structure, 2) Population Statistics, 3) Natality and Infant/Maternal Mortality Statistics, 4) General Mortality Statistics, 5) Patient Care Statistics, and 6) Community Health Statistics. The tables provide detailed data, while the charts show significant relationships. A table and its corresponding chart appear next to each other. However, some charts that are self-explanatory do not have a corresponding table. Also, a few tables have more than one chart associated with them.

SUMMARY OF DATA SHOWN

The IHS is comprised of 11 regional administrative units called Area Offices. There is also an IHS Headquarters Office located in Tucson, the Office of Health Program Development, which is responsible for administering health services delivery. For the present statistical purposes, the Tucson Office is also considered an Area Office, thereby making 12 in total. As of October 1, 1987, the Area Offices consisted of 127 basic administrative units called Service Units. Of the 127 service units, 49 were operated by Tribes. The IHS operated 45 hospitals, 65 health centers, 6 school health centers, 66 health stations, and 201 other treatment locations; while Tribes operated 6 hospitals, 70 health centers, 1 school health center, 231 health stations and Alaska Village Clinics, and 31 other treatment locations. There were 33 Urban Projects consisting of 28 health clinics, and 5 facilities providing community services.

In Fiscal Year 1987, the IHS service population (count of those American Indians and Alaska Natives who are eligible for IHS services) was approximately 1,017,000. The IHS service population is increasing at a rate of about 2.8 percent per year. The Indian population residing in the 32 Reservation States (the States in which IHS has responsibilities) is younger than the U.S. All Races population, based on the 1980 Census. For Indians, 32 percent of the population was younger than 15 years, and 5 percent was older than 64 years. For the U.S. All Races population, the corresponding values were 23 and 11 percents respectively. The Indian median age was 22.6 years compared to 30.0 years for U.S. All Races.

The birth rate for American Indians and Alaska Natives residing in the Reservation States was 28.4 (rate per 1,000 population) in 1983-1985. It is 83 percent greater than the 1984 birth rate of 15.5 for the U.S. All Races population. The maternal mortality rate for American Indians and Alaska Natives residing in the Reservation States dropped from 82.6 (rate per 100,000 live births) in 1957-1959 to 10.8 in 1983-1985, a decrease of 87 percent. The rate is 38 percent greater than the U.S. All Races rate for 1984 of 7.8. The infant mortality rate for American Indians and Alaska Natives residing in the Reservation States dropped from 62.7 (rate per 1,000 live births) in 1954-1956 to 9.8 in 1983-1985, a decrease of 84 percent. The rate is currently 9 percent lower than the U.S. All Races rate for 1984, which is 10.8.

The leading cause of death for American Indians and Alaska Natives residing in the Reservation States (1983-1985) was "diseases of the heart" followed by "accidents." However, the cause of death rankings differ by sex. For Indian males, the top two causes were also "diseases of the heart" and "accidents." For Indian females, the top two causes were "diseases of the heart" and "malignant neoplasms" (the same as for the total U.S. All Races population in 1984).

In 1985, the Indian (Reservation State) age-adjusted mortality rates for the following causes were considerably higher than those for the U.S. All Races population:

- 1) alcoholism—321 percent greater,
- 2) tuberculosis—220 percent greater,

Indian Health Service Structure

Population Statistics

Natality and Infant/Maternal Mortality Statistics

General Mortality Statistics

1983 are for 31 Reservation States, and for 1984 are for 32 Reservation States. IHS also prepares vital event statistics for the IHS service population, starting with data for calendar year 1972.

Population-based Indian rates cited in this publication that involve the years 1971-1979 are different than those provided in the June 1984 edition in this series. The population estimates for the years 1971-1979 were revised upward by IHS, as a result of 1980 Census findings. This is explained in the previous discussion pertaining to "population statistics." Increased population bases resulted in the calculation of lower rates for these years.

The age-adjusted mortality rates presented in this publication were computed by the direct method, that is, by applying the age-specific death rate for a given cause of death to the standard population distributed by age. The total population as enumerated in 1940 was selected as the standard. The rates for the total population and for each race-sex group were adjusted separately, by using the same standard population. The age-adjusted rates were based on 10-year age groups. It is important not to compare age-adjusted death rates with crude rates.

Patient care statistics are derived from IHS reporting systems. There are three main patient care reporting systems. The Monthly Inpatient Services Report is a patient census report which is prepared by each IHS hospital. It indicates the number of discharges and days by type of service (e.g., adult, pediatric, obstetric, newborn), and is used for the inpatient workload statistics. The Inpatient Care System is the source of IHS and contract hospital inpatient data pertaining to various patient characteristics (age, sex, principal diagnoses, other diagnoses, community of residence, etc.). The data are collected daily, one record per discharge.

The Ambulatory Patient Care System is the source of data pertaining to the number of outpatient visits at IHS facilities by various patient characteristics (age, sex, clinical impression, community of residence, etc.). The data are collected daily, one record per outpatient visit.

The data from all three systems are subject to recording and keying errors. However, the IHS Division of Program Statistics monitors the reporting systems, and each one has a computer edit. In these ways, errors are kept to an acceptable level.

There are four other information systems that provide data, presented in this report, pertaining to patient care. The TRAIS Contracts Data Base is the source for Tribal health contract and grant obligations information. The Urban Projects Reporting System is the source for workload data for the Urban Projects. The Dental Data System is the source for dental services data. The Fluoridation Data System, managed by the IHS Dental Services Branch, is the source for fluoridation systems information. The Urban Projects Reporting System is a manual system, the others are automated. The systems are monitored by IHS Headquarters personnel.

The source of the IHS alcoholism and substance abuse workload figures is the IHS Alcoholism Treatment and Guidance System (ATGS). This is an automated system, with computer edits, that is monitored by IHS Headquarters personnel. The information regarding community and school based alcoholism and substance abuse activities was obtained through the IHS alcoholism and substance abuse treatment programs.

The data on the IHS Community Injury Control (CIC) program were obtained from a telephone survey conducted by the IHS CIC Manager to each IHS Area CIC Coordinator. The injury intervention projects data do not necessarily indicate uniform project activity in one Area or the entire IHS, but account for significant program emphasis in the Area.

The nutrition and dietetics statistics are derived from the IHS Nutrition and Dietetics Program Activity Report (NDPARS). This is an automated system, with computer edits, that is monitored by IHS Headquarters personnel.

The public health nursing data are collected through the IHS Public Health Nursing Data System. This is an automated system, with computer edits, that is monitored by IHS Headquarters personnel.

Patient Care Statistics

Community Health Statistics

North Dakota	Texas
Oklahoma	Utah
Oregon	Washington
Pennsylvania	Wisconsin
Rhode Island	Wyoming

Indian populations beyond the Census year are projected by the Indian Health Service through linear regression techniques, using 10 years of Indian birth and death data provided by the National Center for Health Statistics. The natural change (estimated number of births minus estimated number of deaths) is applied to the 1980 Census enumeration. Prior to FY 1980, the IHS used somewhat different forecasting techniques.

The IHS does not currently forecast changes in the American Indian and Alaska Native population distribution by age and sex. Rather, appropriate Indian age and sex distributions from Census years are applied to population estimates for intercensal years. However, IHS is currently developing revisions to its population forecasting techniques to provide more precise age and sex distribution estimates.

The American Indian and Alaska Native service population enumerated in 1980 was approximately 13 percent higher than that estimated by IHS for 1979. The 1980 Census was probably more reliable with respect to Indian data than the 1970 Census. The Census Bureau made a concerted effort to increase the participation of American Indians and Alaska Natives through publicity campaigns, direct involvement with Tribal groups, and increased concentration on Indian geographic areas. The IHS smoothed the population estimates for 1971-1979 in order to show a more gradual transition to the population enumerated during the 1980 Census. These revised population figures were used for the first time in the April 1985 edition in this series.

American Indian and Alaska Native vital event statistics are derived from data furnished annually to the IHS by the National Center for Health Statistics (NCHS). Vital event statistics for the U.S. population were derived from data appearing in various NCHS publications, as well as from some unpublished data from NCHS. NCHS obtains birth and death records for all U.S. residents from the State departments of health, based on information reported on official State birth and death certificates. Those records identified as pertaining to American Indians and Alaska Natives are provided to IHS. The IHS records contain the same basic demographic items as the vital event records maintained by NCHS for all U.S. residents, but with names, addresses and record identification numbers deleted. It should be noted that Tribal identity is not recorded on these records.

The data are subject to the degree of accuracy of reporting by the States to NCHS. NCHS does perform numerous edit checks, and imputes values for non-responses. The accuracy of the reporting of race, age at death, and place of residence on State death certificates will be evaluated based on the results of the 1986 Mortality Follow-Back Survey conducted by NCHS. The IHS funded an oversampling of American Indians and Alaska Natives in that survey, to evaluate the accuracy of reporting of various demographic items on Indian death certificates.

Natality statistics for 1956 through 1970, excluding 1967, are based on 50 percent samples of all registered births occurring in the U.S. each year. Those for 1967 are based on a combination of 50 percent and 20 percent samples.

Natality statistics for 1955 and 1971 forward are based on the total file of birth records. Mortality statistics are based on the total file of registered deaths occurring in the U.S. each year. Tabulations of vital events for States and other areas within the U.S. are by place of residence.

The vital event statistics in this publication pertain to all American Indians and Alaska Natives residing in the Reservation States. Therefore data are included for Indians residing outside the geographic areas for which IHS has responsibility. This is done in order to show trends starting in FY 1955, to correspond with the inception of the Indian Health Service (IHS) program. In the early years, only total Reservation State data are available. It should be noted that vital event data for 1955 to 1978 are for 25 Reservation States, for 1979 to 1982 are for 28 Reservation States, for

Vital Event Statistics

SUMMARY OF DATA SHOWN

with the others taking place in the home (25 percent), and hospitals and clinics (23 percent). Approximately 45 percent of these contacts dealt with problem assessment, therapeutic and follow-up services. Another 23 percent of the contacts were related to the resolution of physical, economic and cultural barriers to health care.

Since 1960, nearly 160,000 Indian homes were funded by IHS for the provision of sanitation facilities. These services included water and sewerage facilities, solid waste disposal systems and technical assistance to establish and equip operation and maintenance organizations for new, rehabilitated and existing homes. Contributions to IHS sanitation facilities projects are received from numerous sources. Once again in FY 1987, the Tribes ranked very high as contributors to these cooperative projects.

The current FY 1987 unmet need of \$608.7 million to serve existing American Indian and Alaska Native homes and communities represents the cost to provide first service sanitation facilities to approximately 21,500 homes, to upgrade existing facilities, to provide solid waste facilities and to provide assistance to operation and maintenance organizations. Based on IHS data, approximately 14 percent of the total number of existing American Indian and Alaska Native housing units have not received first service water from the IHS and approximately 16 percent have not received first service sewerage.

Eighty-two percent of the community water systems serving over five American Indian and Alaska Native homes provided water that complied with the bacteriological requirements of the Safe Drinking Water Act (SDWA) in FY 1987. These systems are comparable in size to the Nation's very small community water systems that had 88 percent of the systems in compliance with the SDWA in 1986.

SOURCES AND LIMITATIONS OF DATA

Population counts are based on official U.S. Census Bureau county data. The Census Bureau enumerates those individuals who identify themselves as being American Indian, Eskimo or Aleut. The Census Bureau does not publish data on a Tribal basis. The IHS service population (eligible population) is estimated by counting those American Indians, Eskimos and Aleuts (as identified in the Census) who reside in the geographic areas in which IHS has responsibilities ("on or near" reservations, i.e., contract health service delivery areas (CHSDAs)). These people may or may not use IHS services.

A State is considered a "Reservation State" if IHS has responsibilities within the State. For certain statistical calculations (e.g., mortality rates for Reservation States), the total American Indian and Alaska Native population residing in a Reservation State is used. In this case, the non-service population (those Indians who do not reside in the geographic areas in which IHS has responsibilities) is considered in addition to the service population.

There were 32 Reservation States as of October 1, 1987. Maine, Pennsylvania, and New York were added as Reservation States in 1979; Connecticut, Rhode Island, and Texas were added in 1983; and Alabama was added in 1984. The 32 Reservation States are:

Alabama	Connecticut
Alaska	Florida
Arizona	Idaho
California	Iowa
Colorado	Kansas
Louisiana	Montana
Maine	Nebraska
Michigan	Nevada
Minnesota	New Mexico
Mississippi	New York
North Carolina	South Dakota

Population Statistics

SUMMARY OF DATA SHOWN

- 3) diabetes mellitus—139 percent greater,
- 4) accidents—124 percent greater,
- 5) homicide—72 percent greater,
- 6) pneumonia and influenza—34 percent greater.

For the period 1979-1981, the life expectancy at birth for American Indians and Alaska Natives residing in the Reservation States was 71.1 years (67.1 years for males, 75.1 years for females), up 6.0 years from 1969-71. Despite these gains, life expectancy at birth for Indians lagged behind that for the U.S. White population in 1980 (74.4 years for both sexes, 70.7 years for males, and 78.1 years for females).

In FY 1987, there were 108,000 admissions to IHS and Tribal direct and contract hospitals. The leading cause of hospitalization in IHS and contract general hospitals was "obstetric deliveries and complications of puerperium and pregnancy." The total number of outpatient visits (IHS and Tribal direct and contract facilities) was over 4.9 million in FY 1987, an increase of 978 percent since FY 1955. The leading diagnosis for outpatient visits in IHS facilities was "upper respiratory infection, common cold." The number of direct and contract dental services provided (IHS, Tribal, and Urban) increased 1,084 percent (from under 0.2 million in FY 1955 to over 2.1 million in FY 1987).

The number of clients treated on an inpatient and/or outpatient basis by IHS alcoholism and substance abuse treatment programs dropped from approximately 21,000 in FY 1984 to less than 20,000 in FY 1987. During this same time period, inpatient days decreased from 205,000 to 186,000, while outpatient visits increased from 336,000 to 364,000.

Five key program activities have been identified by IHS that form a firm foundation for the Community Injury Control (CIC) program:

- 1) *Awareness* of the injury problem is achieved through the Annual Indian Safety Campaign;
- 2) *Technical Direction* skills are accomplished in the new IHS CIC initiative called the Injury Control Specialist Fellowship Program;
- 3) *Epidemiology* of severe injuries is developed through the use of the Severe Injury Surveillance System;
- 4) *Training* for IHS and Tribal personnel in control of traumatic injury is provided in national and Area CIC workshops;
- 5) *Coordination* at the Area levels is directed by Area CIC Coordinators.

Generally speaking, motor vehicle trauma is the most devastating of severe injuries. Consequently, various intervention programs are being developed and implemented at Area and service units to counter the harm to Indian people. Exemplary programs in place are: child passenger protection, roadway/roadside hazard identification, safety belt use promotion, deterring drinking and driving, and reduction in pedestrian motor vehicular collisions.

The nutrition and dietetics program made over 230,000 patient/client contacts during FY 1987. The majority of the contacts were in the hospital (37 percent) and the community (34 percent). Over half (51 percent) of the contacts were for clinical nutrition counseling and nearly a third (32 percent) were for health promotion. Of the clinical nutrition counseling contacts, the majority were for diabetes (28 percent) and maternal/child (24 percent) nutrition counseling. First visits and follow-up accounted for 42 percent of the encounters, ongoing counseling accounted for 41 percent of the encounters, and series of classes accounted for 17 percent of the encounters.

There were nearly 313,000 public health nursing visits in FY 1987. The most frequent program areas dealt with during these visits were morbidity (44 percent of the visits) and child health (16 percent). The ratio of female visits to male visits was 1.7. Twenty-five (25) percent of all visits pertained to children under 5 years of age while 21 percent pertained to adults over the age of 64.

The community health representative program made nearly 3.5 million client contacts in FY 1987. Most of these contacts took place in the community (52 percent),

Patient Care Statistics

Community Health Statistics

SOURCES AND LIMITATIONS OF DATA

The data on the IHS community health representative program were obtained from the IHS Community Health Representative Information System (CHRIS). This is an automated system, with computer edits, that is monitored by IHS Headquarters personnel.

The environmental health statistics are derived from IHS reporting systems and financial systems. The IHS reporting systems are the Project Data System and the Sanitation Facility Data System. The Project Data System is the source of detailed data on P.L. 86-121 construction projects that provide water supplies and sewerage and waste disposal facilities to American Indians and Alaska Natives. It includes such data as community name, type and number of homes provided with services, the funds allocated and funds expended, completion dates and accomplishments. Data are collected quarterly. The Sanitation Facility Data System is the source of additional data on sanitation facilities serving American Indians and Alaska Natives. It includes such data as the number of homes served, water rates, fluoridation information, Safe Drinking Water Act Compliance, system reliability, and the unmet need for new or upgraded facilities. Data are collected annually. The systems are monitored by IHS Headquarters personnel.

CREDIT TO PREPARERS

This publication was prepared by the staff of the IHS Division of Program Statistics under the direction of its Director, Mr. Anthony J. D'Angelo. Specific responsibilities are as follows:

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Population Statistics

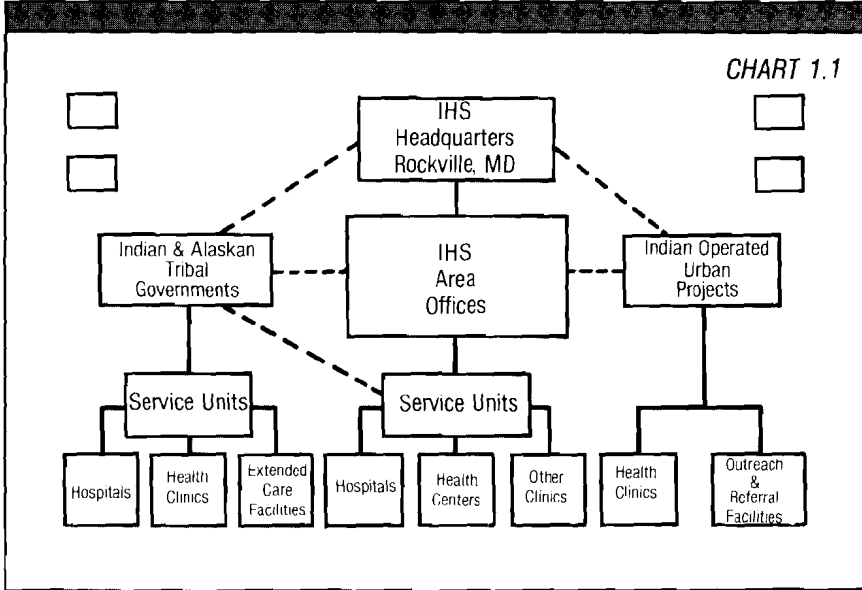
- Thomas E. Berry, Chief, Population Statistics Staff

Ms. Mary Thiede and Ms. Priscilla Sandoval, Division Secretaries, were responsible for the expert typing and table design. Further information concerning these subject areas can be obtained by contacting the appropriate Division personnel.

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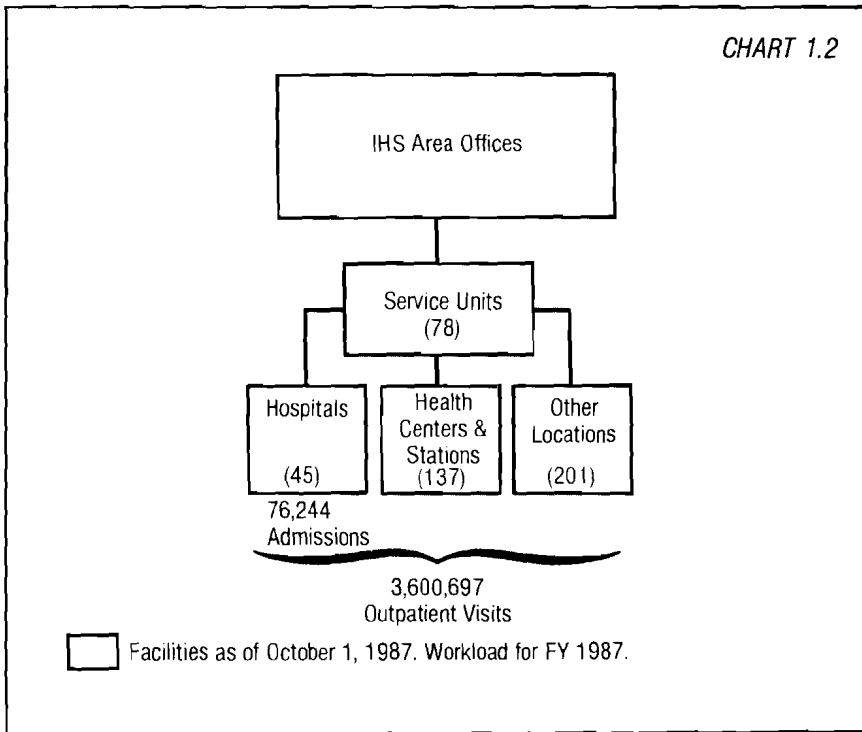
Special thanks are extended to Mr. James L. Walker, Chief, Graphics Arts Branch, Health Resources and Services Administration, and his staff for the graphic artwork on the charts. Mr. Walker's staff includes Mr. Frank Harding, Ms. Kim Dickerson, and Ms. Sandra Rogers. Mr. Walker and Mr. Harding were also responsible for the organization of this publication, and thereby greatly contributed to its readability.

PART 1 — INDIAN HEALTH SERVICE STRUCTURE



INDIAN HEALTH SERVICE

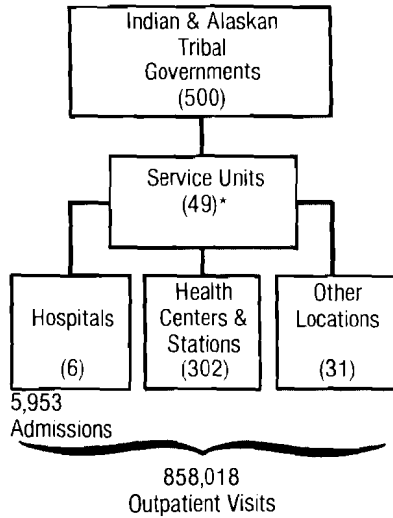
The Indian Health Service is comprised of 12 regional administrative units called Area Offices. Some of the health programs are operated by Tribes, and there are a limited number of projects to serve Indians living in urban areas.



**INDIAN HEALTH SERVICE
AREA OFFICES**

There were 78 Indian Health Service operated service units that administered 45 hospitals, 137 health centers and health stations, and 201 other treatment locations, as of October 1, 1987.

CHART 1.3

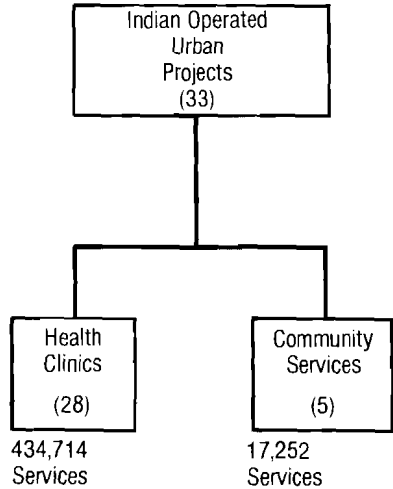


Facilities as of October 1, 1987. Workload for FY 1987.
 *Includes California Projects.

INDIAN AND ALASKA NATIVE TRIBAL GOVERNMENTS

There were 49 Tribally operated service units that administered 6 hospitals, 302 health centers, health stations, and Alaska Village Clinics, and 31 other treatment locations, as of October 1, 1987.

CHART 1.4



Facilities as of October 1, 1987. Workload for FY 1987.

INDIAN OPERATED URBAN PROJECTS

There were 33 Indian operated Urban Projects consisting of 28 health clinics, and 5 facilities providing community services, as of October 1, 1987.

PART 1 — INDIAN HEALTH SERVICE STRUCTURE

CHART 1.5

TYPE OF FACILITY	IHS	TRIBAL
● Hospitals	45	6
● Outpatient Facilities	137	302
● Health Centers	65	70
● School Health Centers	6	1
● Health Stations	66	58
● Alaska Village Clinics	—	173
● Treatment Locations	201	31

NUMBER OF FACILITIES OPERATED BY INDIAN HEALTH SERVICE AND TRIBES AS OF OCTOBER 1, 1987

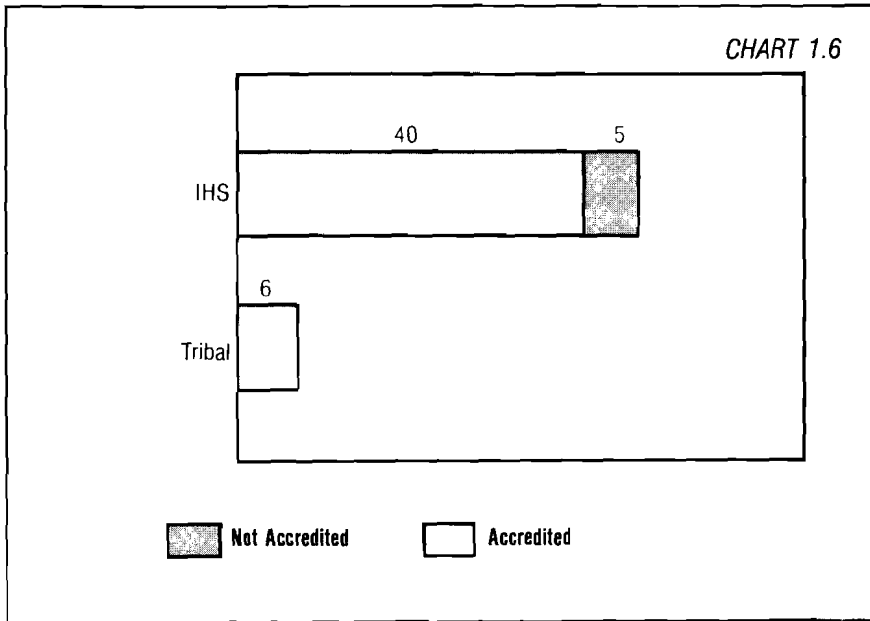
Indian Health Service operated 137 outpatient facilities consisting of 65 health centers, 6 school health centers, and 66 health stations, as of October 1, 1987. Tribes operated 302 outpatient facilities consisting of 70 health centers, 1 school health center, 58 health stations, and 173 Alaska Village Clinics, as of October 1, 1987.

TABLE 1.5

Type of Facility	I H S	Tribal
Hospitals	45	6
Outpatient Facilities	137	302
Health Centers	65	70
School Health Centers	6	1
Health Stations	66	58
Alaska Village Clinics		173
Treatment Locations ¹	201	31

¹ A community where clinical services are provided but where no fixed IHS or Tribal health care facility is available.

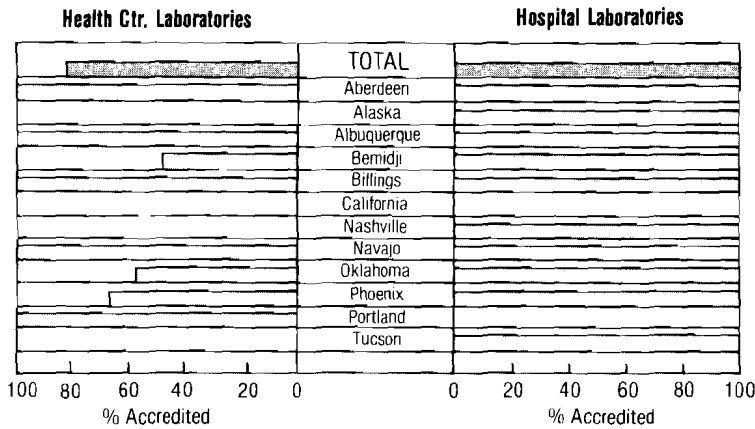
NUMBER OF FACILITIES OPERATED BY IHS AND TRIBES AS OF OCTOBER 1, 1987



ACCREDITATION STATUS OF INDIAN HEALTH SERVICE AND TRIBALLY MANAGED HOSPITALS, FEBRUARY 1, 1988

As of February 1, 1988, 40 of 45 Indian Health Service operated hospitals and all 6 Tribally operated hospitals were accredited by JCAH.

CHART 1.8



ACCREDITATION STATUS OF INDIAN HEALTH SERVICE LABORATORIES

83 percent of health center laboratories and 100 percent of hospital laboratories operated by the Indian Health Service were accredited as of November 1987.

TABLE 1.8

IHS HOSPITAL LABORATORIES ²				
Area Office	Total	Accredited	Not Accredited	Accredited As a Percent of Total
IHS Total	45	45	—	100%
Aberdeen	9	9	—	100%
Alaska	4	4	—	100%
Albuquerque	5	5	—	100%
Bemidji	2	2	—	100%
Billings	3	3	—	100%
California	—	—	—	—
Nashville	1	1	—	100%
Navajo	6	6	—	100%
Oklahoma	5	5	—	100%
Phoenix	9	9	—	100%
Portland	—	—	—	—
Tucson	1	1	—	100%

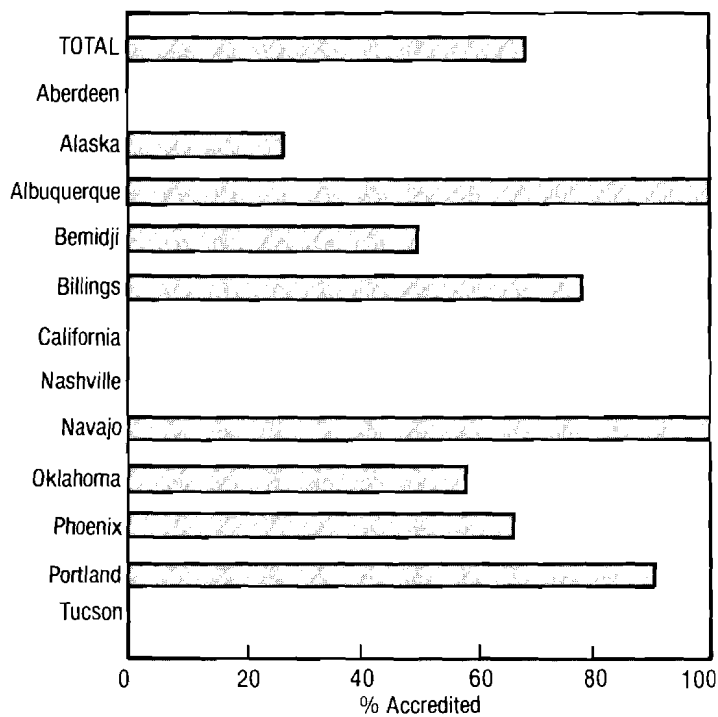
IHS HEALTH CENTER LABORATORIES ²				
Area Office	Total	Accredited	Not Accredited	Accredited As a Percent of Total
IHS Total	46	38	8	83%
Aberdeen	4	4	0	100%
Alaska	—	—	—	—
Albuquerque	4	4	0	100%
Bemidji	2	1	1	50%
Billings	6	6	0	100%
California	—	—	—	—
Nashville	—	—	—	—
Navajo	3	3	0	100%
Oklahoma	12	7	5	58%
Phoenix	3	2	1	67%
Portland	11	11	0	100%
Tucson	1	—	1	0%

¹ Laboratories accredited by the College of American Pathologists, the Joint Commission on the Accreditation of Hospitals and the Health Care Financing Administration, DHHS.

² Excludes laboratories under Tribal management pursuant to P.L. 93-638.

INDIAN HEALTH SERVICE LABORATORY ACCREDITATION¹ STATUS November 1987

CHART 1.7



ACCREDITATION STATUS OF INDIAN HEALTH SERVICE HEALTH CENTERS, JANUARY 1, 1988

68 percent of health centers operated by the Indian Health Service were accredited as of January 1, 1988.

TABLE 1.7

Area Office	IHS HEALTH CENTERS ²			Accredited as a Percent of Total
	Total	Accredited	Not Accredited	
IHS Total	65	44	21	68%
Aberdeen	6	—	6	0%
Alaska	4	1	3	25%
Albuquerque	8	8	—	100%
Bemidji	2	1	1	50%
Billings	9	7	2	78%
California	—	—	—	—
Nashville	—	—	—	—
Navajo	7	7	—	100%
Oklahoma	12	7	5	58%
Phoenix	3	2	1	67%
Portland	12	11	1	92%
Tucson	2	—	2	0%

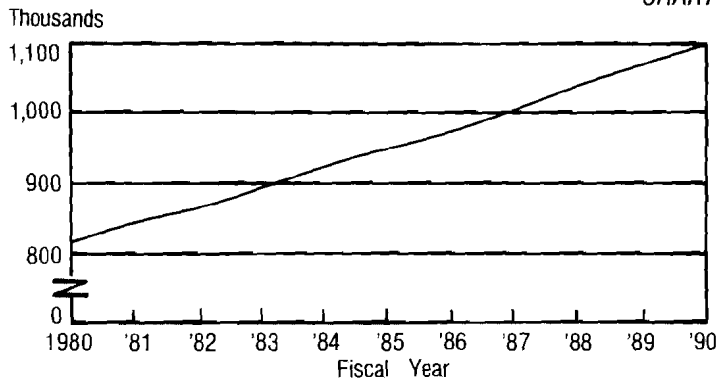
¹ Health Centers accredited by the Joint Commission on the Accreditation of Healthcare Organizations.

² Excludes health centers under Tribal management pursuant to P.L. 93-638.

INDIAN HEALTH SERVICE HEALTH CENTER ACCREDITATION¹ STATUS January 1, 1988

PART 2 — POPULATION STATISTICS

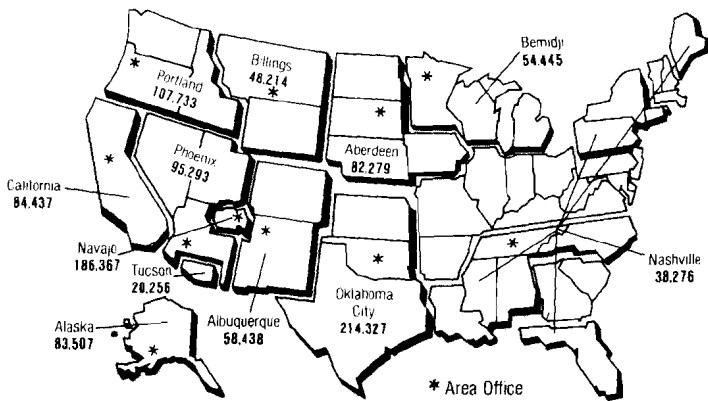
CHART 2.1



**INDIAN HEALTH SERVICE—
SERVICE POPULATION**

The IHS service population is increasing at a rate of about 2.8 percent per year, and is estimated to have exceeded 1 million in FY 1987.

CHART 2.2



**INDIAN HEALTH SERVICE—
SERVICE POPULATION BY AREA**

FY '89 TOTAL SERVICE POPULATION: 1,073,572

The largest percentage of the service population, 20.0 percent, is located in the Oklahoma City Area followed by the Navajo Area with 17.4 percent. The Tucson Program has the smallest percentage, 1.9 percent.

TABLE 2.1

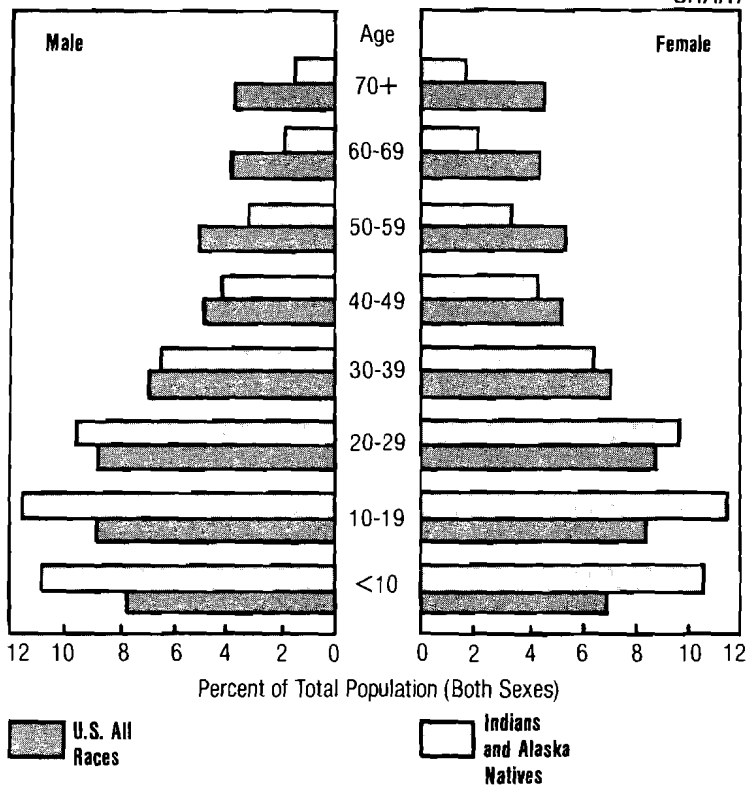
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
All Areas	828,609	849,388	871,215	903,458	938,273	963,646	989,251	1,016,815	1,044,659	1,073,572	1,103,608
(Growth Factor)	—	(2.51)	(2.57)	(3.70)	(3.85)	(2.70)	(2.86)	(2.79)	(2.74)	(2.77)	(2.80)
Aberdeen	63,253	64,968	66,760	68,624	70,551	73,458	75,548	77,720	79,967	82,279	84,672
Alaska	64,047	65,767	67,596	69,536	71,587	73,751	76,024	78,407	80,901	83,507	86,223
Albuquerque	46,610	47,707	48,855	50,061	51,319	52,635	54,002	55,426	56,904	58,438	60,022
Bemidji	42,686	43,653	44,676	45,768	46,916	48,128	49,395	51,559	52,979	54,445	55,980
Billings	35,708	37,158	38,643	40,167	41,723	42,929	44,182	45,482	46,824	48,214	49,648
California	65,757	67,113	68,655	70,367	72,262	74,338	76,593	79,026	81,644	84,437	87,411
Nashville	26,731	27,171	28,112	30,609	35,743	35,880	36,447	37,039	37,647	38,276	38,927
Navajo	145,162	149,229	153,427	157,753	162,202	166,780	171,486	176,321	181,282	186,367	191,582
Oklahoma City	172,636	176,359	180,278	185,167	189,510	194,068	198,815	203,784	208,953	214,327	219,916
Phoenix	74,020	76,318	78,243	80,295	82,476	84,787	87,223	89,791	92,476	95,293	98,240
Portland	75,769	77,373	79,031	81,776	84,629	87,690	90,961	94,379	97,953	101,683	105,567
Tucson	16,230	16,572	16,939	17,335	17,755	18,202	18,675	19,176	19,703	20,256	20,835

NOTE: The IHS service population included the reservation states of Connecticut, Rhode Island, and Texas in 1983 and Alabama in 1984.

SOURCE: Estimated Indian and Alaska Native Service Population by Area based on 1975-1985 vital events.

**IHS SERVICE POPULATION
BY AREA 1980—1990**

CHART 2.3



POPULATION BY AGE AND SEX, 1980 CENSUS

The Indian male and female populations are younger than the corresponding male and female populations for the U.S. All Races.

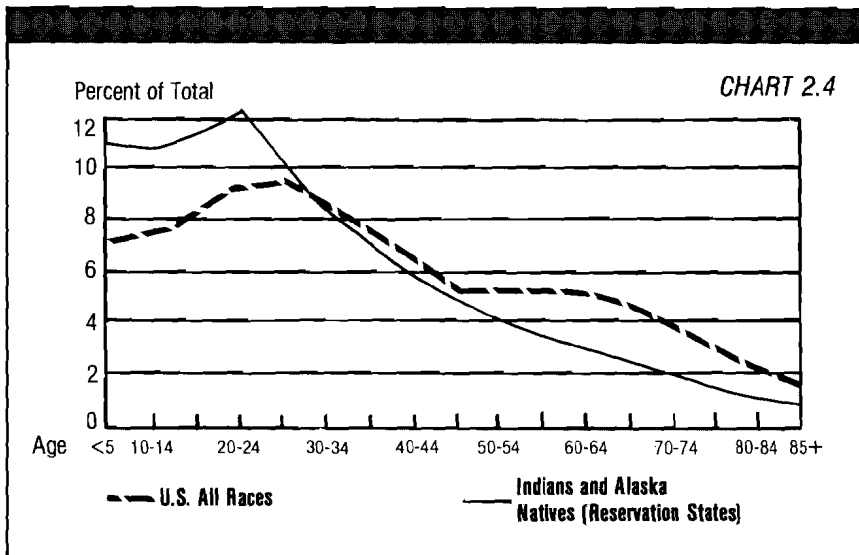
TABLE 2.3

	American Indian & Alaska Native		U.S. All Races	
	Male	Female	Male	Female
Total †	49.326	50.674	48.578	51.422
Under 10 years	10.779	10.518	7.460	7.127
10-19 years	11.772	11.512	8.859	8.537
20-29 years	9.447	9.642	8.990	9.036
30-39 years	6.438	6.771	6.859	7.057
40-49 years	4.245	4.564	4.898	5.148
50-59 years	3.202	3.485	4.901	5.396
60-69 years	2.023	2.340	3.784	4.545
70 years and over	1.419	1.842	2.826	4.575

† Percentages may not add to the totals due to rounding.

AGE AND SEX PERCENT DISTRIBUTION

American Indians and Alaska Natives in Reservation States and U.S. All Races, 1980 Census Data



POPULATION BY AGE, 1980

For Indians, 32 percent of the population was younger than 15 years, and 5 percent was older than 64 years. For the U.S. All Races population, the corresponding values were 23 and 11 percents, respectively.

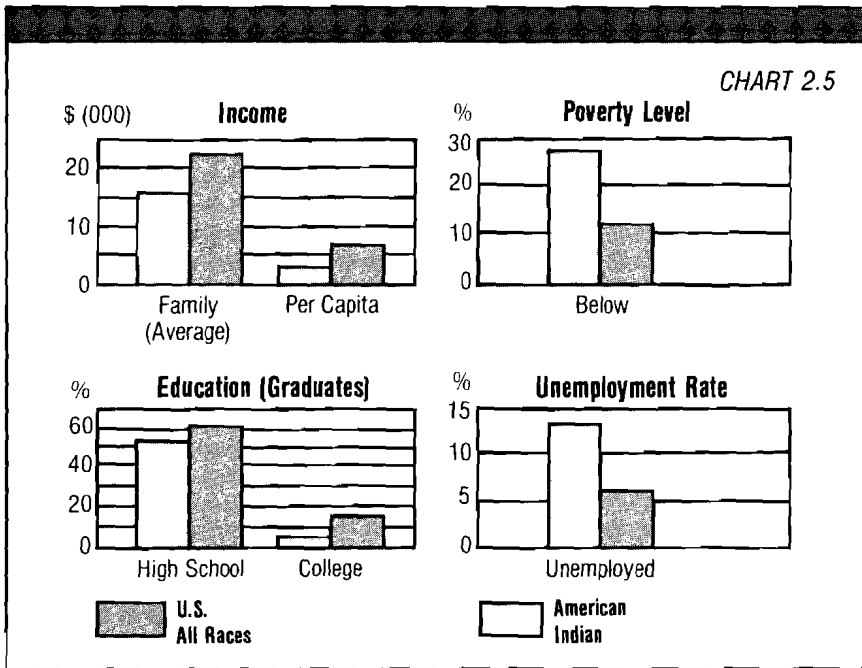
TABLE 2.4

Total	American Indian & Alaska Native		U.S. All Races	
	Number 1,295,450	Percent ¹ 100.000	Number 226,504,825	Percent ¹ 100.000
Under 5 years	139,529	10.771	16,344,407	7.216
5 to 9 years	136,361	10.526	16,697,134	7.372
10 to 14 years	144,882	11.184	18,240,919	8.053
15 to 19 years	156,749	12.100	21,161,667	9.343
20 to 24 years ¹	34,769	10.403	21,312,557	9.409
25 to 29 years	112,519	8.686	19,517,672	8.617
30 to 34 years	95,949	7.407	17,557,957	7.752
35 to 39 years	75,169	5.803	13,963,008	6.165
40 to 44 years	61,983	4.785	11,668,239	5.151
45 to 49 years	52,134	4.024	11,088,383	4.895
50 to 54 years	46,307	3.575	11,708,984	5.169
55 to 59 years	40,313	3.112	11,614,054	5.128
60 to 64 years	30,711	2.371	10,085,711	4.453
65 to 69 years	25,817	1.993	8,780,844	3.877
70 to 74 years	18,076	1.395	6,796,742	3.001
75 to 79 years	12,476	0.963	4,792,597	2.116
80 to 84 years	6,367	0.491	2,934,229	1.295
85 years & over	5,339	0.412	2,239,721	0.989
Median Age		22.6		30.0

¹ Percentages may not add to the totals due to rounding.

NUMBER AND PERCENT AGE DISTRIBUTION

American Indians and Alaska Natives in Reservation States and U.S. All Races, 1980 Census Data



SOCIAL AND ECONOMIC CHARACTERISTICS

AMERICAN INDIANS AND U.S. ALL RACES—1980 CENSUS

The Indian population lags behind the U.S. All Races population with respect to various income, education and employment characteristics.

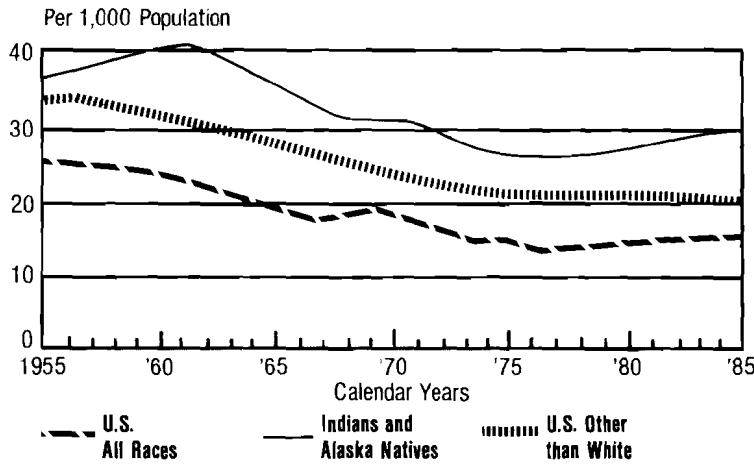
TABLE 2.5

	American Indians, Eskimos & Aleuts	U.S. All Races
Median Age	22.6	30.0
Percent Female	50.7%	51.4%
Percent Male	49.3%	48.6%
Average Number of Persons per Family	4.6	3.8
Median Family Income	\$13,700	\$19,900
Average Family Income	\$16,500	\$23,100
Per Capita Income	\$ 3,600	\$ 7,300
Percent of All persons, Below Poverty Level	28.2%	12.4%
Percent High School Graduates	55.3%	66.5%
Percent College Graduates	7.4%	16.2%
Percent in Labor Force, 16 years old and over	57.8%	62.0%
Female, 16 years old and over	47.4%	49.9%
Male, 16 years old and over	68.5%	75.1%
Percent of Civilian Labor Force Unemployed	13.3%	6.5%
Female, 16 years old and over	11.9%	6.5%
Male, 16 years old and over	14.5%	6.5%

NOTE: There were 28 Reservation States in 1980, 31 in 1983 and 32 in 1984 and later years.

SOCIAL AND ECONOMIC CHARACTERISTICS

CHART 3.1



BIRTH RATES

The American Indian and Alaska Native birth rate for 1983-1985 of 28.4 births per 1,000 population was 83 percent greater than the U.S. All Races birth rate for 1984 of 15.5.

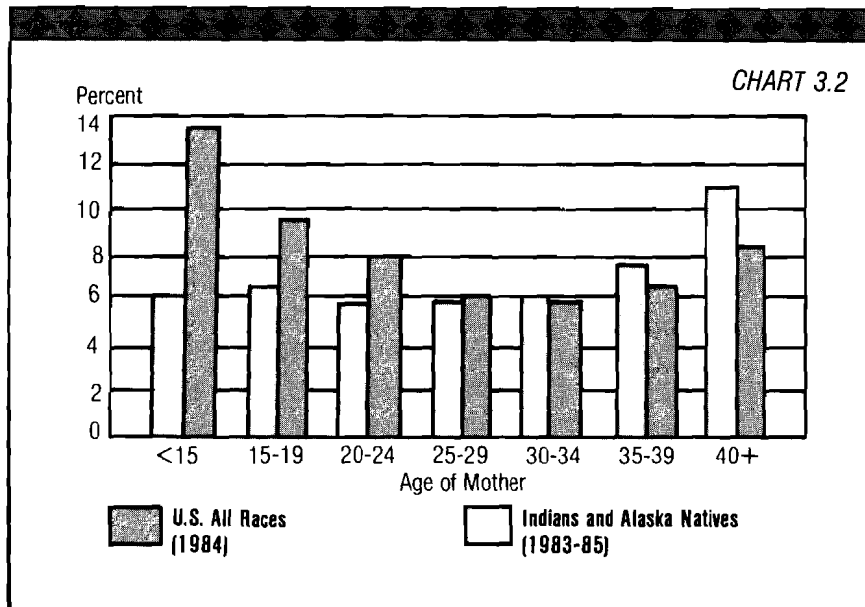
TABLE 3.1

Calendar Year	American Indian & Alaska Native		American Indian (Reserv. States)		Alaska Native		U.S. All Races		U.S. Other than White
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Rate
1985	41,155		38,395		2,760				
1984	39,679	28.4	37,050	27.9	2,629	37.6	3,669,141	15.5	21.2
1983	39,521	28.8	36,839	28.4	2,682	37.2	3,638,933	15.5	21.3
1982	38,560	28.5	36,099	28.1	2,461	36.3	3,680,537	15.9	21.9
1981	34,205	28.0	31,975	27.7	2,230	34.9	3,629,238	15.8	22.0
1980	33,937	27.0	31,742	26.7	2,195	33.7	3,612,258	15.9	22.5
1979	31,843	27.2	29,803	26.8	2,040	33.0	3,494,398	15.6	22.2
1978	29,857	27.0	27,922	26.7	1,935	32.0	3,333,279	15.0	21.6
1977	28,198	27.1	26,325	26.8	1,873	31.1	3,326,632	15.1	21.6
1976	26,748	26.9	24,989	26.7	1,759	30.8	3,167,788	14.6	20.8
1975	25,457	26.9	23,695	26.7	1,762	30.2	3,144,198	14.6	21.0
1974	24,301	27.3	22,653	27.0	1,648	30.4	3,159,958	14.8	21.2
1973	23,757	28.1	22,087	28.0	1,670	30.1	3,136,965	14.8	21.7
1972	23,752	29.7	22,154	29.6	1,598	31.2	3,258,411	15.6	22.8
1971	23,806	31.2	22,092	31.1	1,714	31.8	3,555,970	17.2	24.6
1970	22,746	32.0	21,100	32.0	1,646	32.0	3,731,386	18.4	25.1
1969	21,593	32.3	20,074	32.3	1,519	31.4	3,600,206	17.9	24.5
1968	21,802	32.2	20,066	32.2	1,536	32.3	3,501,564	17.6	24.5
1967	20,858	33.0	18,948	32.8	1,710	35.8	3,520,959	17.8	25.0
1966	21,100	34.5	19,154	34.1	1,946	39.7	3,606,274	18.4	26.1
1965	22,370	36.4	20,352	36.0	2,018	42.3	3,760,358	19.4	27.6
1964	22,782	38.4	20,794	37.9	1,988	44.4	4,027,490	21.1	29.2
1963	22,274	39.5	20,142	38.9	2,132	45.7	4,098,020	21.7	29.7
1962	21,866	40.8	19,770	40.2	2,096	47.2	4,167,362	22.4	30.5
1961	21,664	41.7	19,570	41.2	2,094	46.8	4,268,326	23.3	31.6
1960	21,154	42.1	19,188	41.7	1,966	46.4	4,257,850	23.7	32.1
1959	20,520	41.4	18,616	40.9	1,904	46.7	4,244,796	24.0	32.9
1958	19,371	40.3	17,428	39.7	1,943	47.4	4,203,812	24.3	33.0
1957	18,814	39.1	16,982	38.2	1,832	49.3	4,254,784	25.0	33.9
1956	17,947	38.2	21,604	37.2	1,907	49.5	4,168,090	24.9	33.9
1955	17,028	37.5	15,304	36.5	1,724	49.5	4,047,295	24.6	33.1
1954	16,691		15,042		1,649				

NOTE: American Indian and Alaska Native rates are 3-year rates centered in the year specified. All other rates are based on single year data. Maine, New York and Pennsylvania became reservation states in 1979, Connecticut, Rhode Island and Texas in 1983 and Alabama in 1984.

NUMBER AND RATE OF LIVE BIRTHS

American Indians and Alaska Natives in Reservation States, U.S. All Races and Other than White Race, Rates per 1,000 Population



BIRTHS OF LOW WEIGHT (UNDER 2500 GRAMS) AS A PERCENT OF TOTAL LIVE BIRTHS

6.1 percent of reported American Indian and Alaska Native live births in 1983-1985 were of low birth weight, compared with 6.7 percent for the U.S. All Races population in 1984. For age groups under 25 years, there was a higher percentage of low birth weight babies for the U.S. All Races population; whereas for age groups 30 years and older, the Indian percentage was greater.

TABLE 3.2

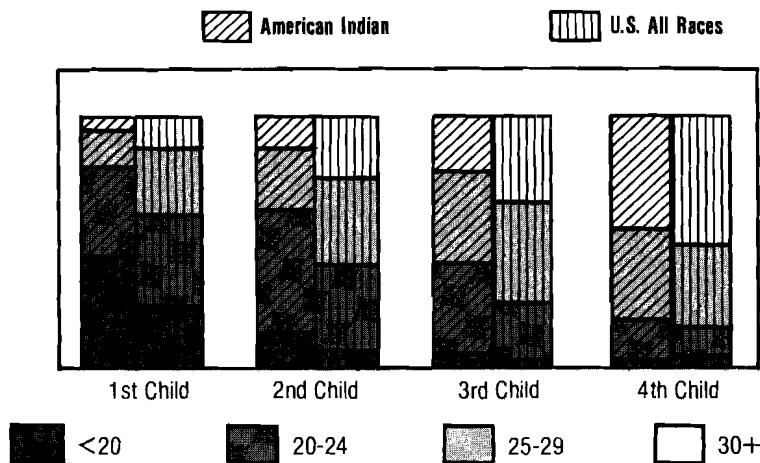
Age of Mother	Indians & Alaska Natives, 1983-1985			U.S. All Races, 1984		
	Total Live Births	Number Low Weight	Percent Low Weight	Total Live Births	Number Low Weight	Percent Low Weight
All Ages	120,110 ¹	7,381	6.1	3,664,097 ¹	246,105	6.7
Under 20 years	24,088	1,548	6.4	478,966	45,167	9.4
Under 15 years	452	27	6.0	9,949	1,350	13.6
15-19 years	23,636	1,521	6.4	469,017	43,817	9.3
20-24 years	44,232	2,623	5.9	1,140,076	78,444	6.9
25-29 years	30,131	1,771	5.9	1,164,174	68,224	5.9
30-34 years	15,221	922	6.1	657,529	38,762	5.9
35-39 years	5,436	405	7.5	195,443	13,180	6.7
40 years & over	1,002	112	11.2	27,909	2,328	8.3

¹ Excludes 245 American Indian and Alaska Native live births and 5,044 U.S. All Races live births with birth weight not stated.
NOTE: Connecticut, Rhode Island and Texas became reservation states in 1983, and Alabama in 1984.

BIRTHS OF LOW BIRTH WEIGHT BY AGE OF MOTHER

American Indians and Alaska Natives in Reservation States and U.S. All Races, Under 2,500 Grams

CHART 3.3



BIRTH ORDER BY AGE OF MOTHER

For the Indian population, 42 percent of mothers were under age 20 when they had their first child. This compared to 24 percent for the U.S. All Races population.

TABLE 3.3a

	Total Live Births ¹	LIVE BIRTH ORDER					
		1st Child	2nd Child	3rd Child	4th Child	5th Child	6th + Child
ALL AGES	120,025	42,340	34,477	21,428	11,221	5,364	5,195
PERCENT OF ALL BIRTHS							
All ages	100.0	35.3	28.7	17.9	9.3	4.5	4.3
Under 20 years	20.0	14.9	4.3	0.7	0.1	0.0	0.0
20 to 24 years	36.8	13.7	13.6	6.6	2.2	0.6	0.1
25 to 29 years	25.1	4.8	7.4	6.5	3.7	1.6	1.0
30 to 34 years	12.7	1.5	2.7	3.1	2.3	1.5	1.6
35 to 39 years	4.5	0.4	0.7	0.9	0.9	0.6	1.2
40 years +	0.8	0.0	0.1	0.1	0.1	0.1	0.4
PERCENT WITHIN AGE OF MOTHER							
All ages	100.0	35.3	28.7	17.9	9.3	4.5	4.3
Under 20 years	100.0	74.5	21.3	3.7	0.5	0.1	0.0
20 to 24 years	100.0	37.1	36.9	17.9	6.1	1.6	0.4
25 to 29 years	100.0	19.2	29.7	25.7	14.8	6.6	4.1
30 to 34 years	100.0	11.7	21.4	24.4	18.3	11.7	12.6
35 to 39 years	100.0	7.8	14.4	19.1	19.0	13.8	25.8
40 years +	100.0	5.9	9.3	12.4	14.1	12.8	45.4
PERCENT WITHIN BIRTH ORDER							
All ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 20 years	20.0	42.3	14.8	4.2	1.0	0.2	0.0
20 to 24 years	36.8	38.7	47.3	36.9	24.0	13.5	3.4
25 to 29 years	25.1	13.6	25.9	36.1	39.7	36.8	23.8
30 to 34 years	12.7	4.2	9.4	17.3	24.8	33.0	36.9
35 to 39 years	4.5	1.0	2.3	4.8	9.2	14.0	27.0
40 years +	0.8	0.1	0.3	0.6	1.3	2.4	8.8

¹ Excludes 330 American Indian and Alaska Native births (0.3 percent) with live birth order not reported. Percentages may not sum to totals due to rounding. 0.0 rounds to zero.

INDIAN LIVE BIRTHS BY AGE OF MOTHER AND BIRTH ORDER

American Indians and Alaska Natives in Reservation States, 1983-1985

TABLE 3.3b

	Total Live Births ¹	LIVE BIRTH ORDER					
		1st Child	2nd Child	3rd Child	4th Child	5th Child	6th + Child
ALL AGES	3,651,384	1,529,905	1,209,567	563,133	207,393	76,857	64,529
PERCENT OF ALL BIRTHS							
All years	100.0	41.9	33.1	15.4	5.7	2.1	1.8
Under 20 years	13.1	10.2	2.4	0.4	0.1	0.0	0.0
20 to 24 years	31.1	15.2	10.8	3.8	1.0	0.2	0.1
25 to 29 years	31.8	11.1	11.9	5.8	2.0	0.7	0.4
30 to 34 years	17.9	4.4	6.4	4.1	1.8	0.7	6.0
35 to 39 years	5.3	1.0	1.5	1.2	0.7	0.4	0.4
40 years +	0.8	0.1	0.1	0.1	0.1	0.1	0.2
PERCENT WITHIN AGE OF MOTHER							
All Ages	100.0	41.9	33.1	15.4	5.7	2.1	1.8
Under 20 years	100.0	77.8	18.5	3.2	0.4	0.1	0.0
20 to 24 years	100.0	48.8	34.8	12.1	3.2	0.8	0.2
25 to 29 years	100.0	35.0	37.3	18.2	6.3	2.1	1.1
30 to 34 years	100.0	24.3	35.7	22.8	9.8	4.0	3.3
35 to 39 years	100.0	17.9	27.6	23.2	13.9	7.3	7.5
40 years +	100.0	12.2	16.2	17.7	14.9	11.5	27.4
PERCENT WITHIN BIRTH ORDER							
All Ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Under 20 years	13.1	24.3	7.3	2.7	1.0	0.3	0.1
20 to 24 years	31.1	36.3	32.7	24.5	17.6	11.3	4.2
25 to 29 years	31.8	26.6	35.8	37.4	35.3	31.2	20.0
30 to 34 years	17.9	10.4	19.4	26.5	31.0	34.4	33.8
35 to 39 years	5.3	2.2	4.4	8.0	13.1	18.6	22.7
40 years +	0.8	0.2	0.4	0.9	2.0	4.2	11.8

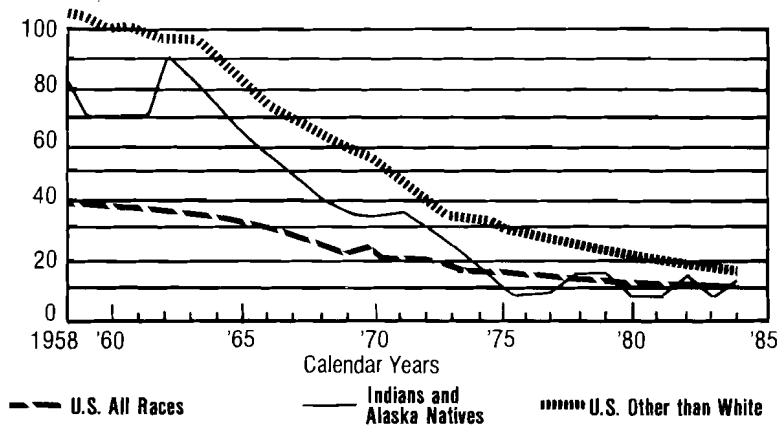
¹ Excludes 17,757 U.S. All Races births (0.5 percent) with birth order not reported. Percentages may not sum to totals due to rounding. 0.0 rounds to zero.

U.S. LIVE BIRTHS BY AGE OF MOTHER AND BIRTH ORDER

United States All Races, 1984

Per 100,000 Live Births

CHART 3.4



MATERNAL DEATH RATES

The maternal death rate for American Indians and Alaska Natives dropped from 82.6 maternal deaths per 100,000 live births in 1957-1959 to 10.8 in 1983-1985, a decrease of 87 percent. The rate is 38 percent greater than the U.S. All Races rate of 7.8 for 1984.

TABLE 3.4

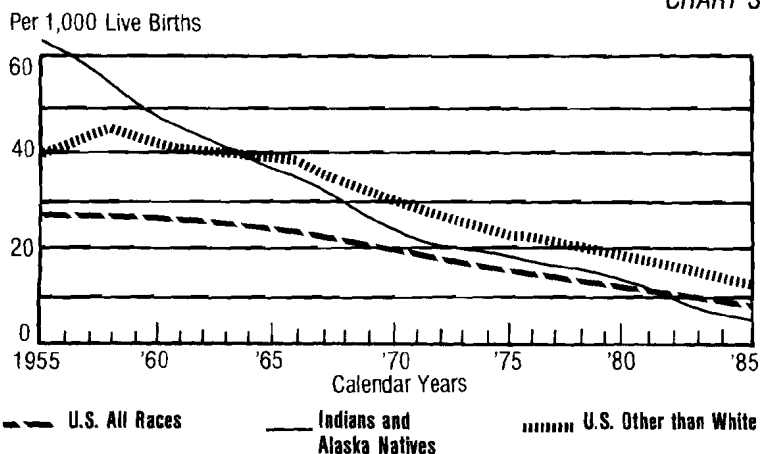
Calendar Year	Number		Rate ¹ Per 100,000 Live Births			Ratio of Indian to:	
	Indians & Alaska Natives	U.S. All Races	Indians & Alaska Natives	U.S. All Races	U.S. Other than White	U.S. All Races	U.S. Other than White
1985	7						
1984	1	285	10.8	7.8	16.9	1.4	0.6
1983	5	290	7.6	8.0	16.3	1.0	0.5
1982	3	292	8.9	7.9	16.4	1.1	0.5
1981	2	309	7.5	8.5	17.3	0.9	0.4
1980	3	334	9.0	9.2	19.8	1.0	0.5
1979	4	336	11.4	9.6	22.7	1.2	0.5
1978	4	321	11.1	9.6	23.0	1.2	0.5
1977	2	373	8.3	11.2	26.0	0.7	0.3
1976	1	390	8.7	12.3	26.5	0.7	0.3
1975	4	340	11.8	12.8	29.0	0.9	0.4
1974	4	462	16.3	14.6	35.1	1.1	0.5
1973	4	477	23.7	15.2	34.6	1.6	0.7
1972	9	612	30.8	18.8	38.5	1.6	0.8
1971	9	668	35.0	18.8	45.3	1.9	0.8
1970	7	803	32.3	21.5	55.9	1.5	0.6
1969	6	801	32.8	22.2	55.7	1.5	0.6
1968	9	859	37.0	24.5	63.6	1.5	0.6
1967	7	987	49.1	28.0	69.5	1.8	0.7
1966	16	1,049	54.6	29.1	72.4	1.9	0.8
1965	12	1,189	63.4	31.6	83.7	2.0	0.8
1964	14	1,343	74.2	33.3	89.9	2.2	0.8
1963	24	1,466	83.7	35.8	96.9	2.3	0.8
1962	18	1,465	89.7	35.2	95.9	2.5	0.9
1961	17	1,573	66.5	36.9	101.3	1.8	0.7
1960	8	1,579	67.9	37.1	97.9	1.8	0.7
1959	18	1,588	68.8	37.4	102.1	1.8	0.7
1958	16	1,581	82.6	37.6	101.8	2.2	0.8

¹ Indian and Alaska Native rates are 3-year rates centered in the year specified. All other rates are for the year specified.

MATERNAL DEATHS AND DEATH RATES

American Indians and Alaska Natives in Reservation States and U.S. All Races

CHART 3.5



INFANT MORTALITY RATES

The infant mortality rate for American Indians and Alaska Natives dropped from 62.7 infant deaths per 1,000 live births in 1954-1956 to 9.8 in 1983-1985, a decrease of 84 percent. The rate is currently 9 percent lower than the U.S. All Races rate for 1984, which is 10.8.

PART 3 — NATALITY AND INFANT/MATERNAL MORTALITY STATISTICS

TABLE 3.5

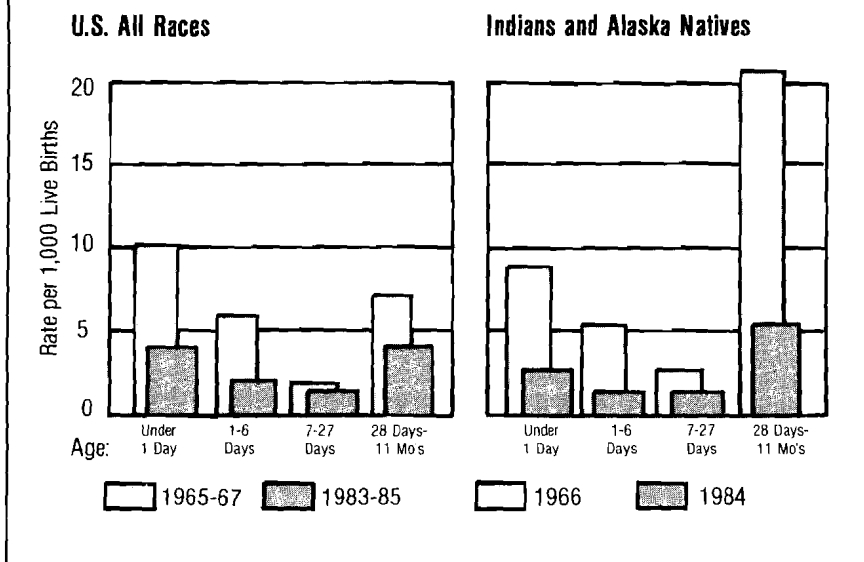
Calendar Year	American Indian and Alaska Native	American Indian	Alaska Native	U.S. All Races	U.S. Other than White	U.S. Black	Ratio of Indian to:		
							U.S. All Races	U.S. Other than White	U.S. Black
1984	9.8	9.4	16.0	10.8	16.1	18.4	0.9	0.3	0.5
1983	10.2	9.7	17.0	11.2	16.8	19.2	0.9	0.6	0.5
1982	11.0	10.6	16.3	11.5	17.3	19.6	1.0	0.6	0.6
1981	11.9	11.6	17.3	11.9	17.8	20.0	1.0	0.7	0.6
1980	13.8	13.4	20.4	12.6	19.1	21.4	1.1	0.7	0.6
1979	14.6	14.1	21.4	13.1	19.8	21.8	1.1	0.7	0.7
1978	15.5	15.1	20.5	13.8	21.1	23.1	1.1	0.7	0.7
1977	16.4	16.1	21.4	14.1	21.7	23.6	1.2	0.8	0.7
1976	17.7	17.4	21.9	15.2	23.5	25.5	1.2	0.8	0.7
1975	18.7	18.2	25.3	16.1	24.2	26.2	1.2	0.8	0.8
1974	18.8	18.4	24.0	16.7	24.9	26.8	1.1	0.8	0.7
1973	19.7	19.4	24.2	17.7	26.2	28.1	1.1	0.8	0.7
1972	21.3	21.1	24.1	18.5	27.7	29.6	1.2	0.8	0.7
1971	22.7	22.5	24.6	19.1	28.5	30.3	1.2	0.8	0.7
1970	24.6	24.3	28.1	20.0	30.9	32.6	1.2	0.8	0.8
1969	27.1	26.6	32.2	20.9	32.9	34.8	1.3	0.8	0.8
1968	30.0	28.9	42.6	21.8	34.5	36.2	1.4	0.9	0.8
1967	34.0	32.6	49.5	22.4	35.9	37.5	1.5	0.9	0.9
1966	36.8	38.4	57.6	23.7	38.8	40.2	1.6	0.9	0.9
1965	38.5	40.2	57.3	24.7	40.3	41.7	1.6	1.0	0.9
1964	40.0	38.4	56.9	24.8	41.1	42.3	1.6	1.0	0.9
1963	41.8	40.2	57.4	25.2	41.5	42.8	1.7	1.0	1.0
1962	44.1	42.3	60.4	25.3	41.4	42.6	1.7	1.1	1.0
1961	46.3	43.9	68.9	25.3	40.7	41.8	1.8	1.1	1.1
1960	48.0	45.5	72.1	26.0	43.2	44.3	1.8	1.1	1.1
1959	52.5	50.2	74.0	26.4	44.0	44.8	2.0	1.2	1.2
1958	55.8	53.7	75.2	27.1	45.7	46.3	2.0	1.2	1.2
1957	59.2	57.0	78.7	26.3	43.7	44.2	2.3	1.4	1.3
1956	60.7	58.5	80.9	26.0	42.1	42.4	2.3	1.4	1.4
1955	62.7	60.9	79.5	26.4	42.8	43.1	2.4	1.5	1.5

NOTE: Indian and Alaska Native rates are 3-year rates centered in the year specified. All other rates are for the year specified.

INFANT MORTALITY RATES

American Indians and Alaska Natives and Selected U.S. Populations, Rates per 1,000 Live Births

CHART 3.6



INFANT MORTALITY RATES BY AGE

The neonatal mortality rate for American Indians and Alaska Natives in 1983-1985 was 0.7 times that of the U.S. All Races rate for 1984. On the contrary, the postneonatal rate for Indians was 1.4 times the U.S. All Races rate. The ratio between the two rates however is improving.

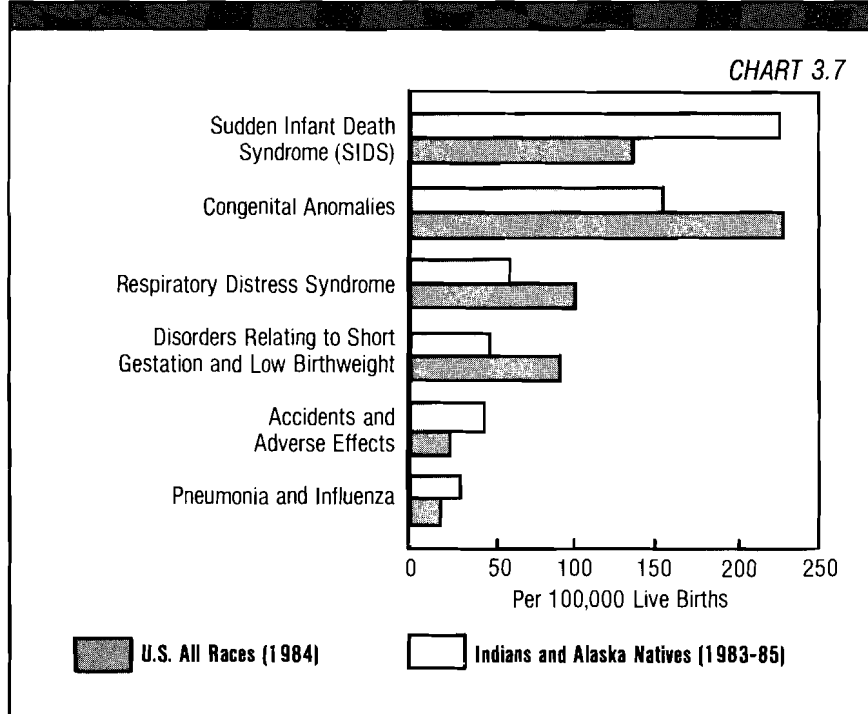
TABLE 3.6

Calendar Year	Infant Mortality Rate	Neonatal			Postneonatal	
		Total	Under 1 Day	1-6 Days	7-27 Days	28 Days-11 Months
Indians and Alaska Natives						
1983-1985	9.8	4.6	2.4	1.2	1.0	5.3
1982-1984	10.2	4.6	2.4	1.2	1.0	5.6
1981-1983	11.0	5.0	2.5	1.3	1.1	6.1
1980-1982	11.9	5.5	2.8	1.6	1.1	6.5
1979-1981	13.8	6.6	3.3	2.0	1.3	7.2
1978-1980	14.6	7.3	3.7	2.3	1.3	7.2
1977-1979	15.5	7.8	3.9	2.5	1.3	7.6
1976-1978	16.4	8.2	4.4	2.5	1.3	8.2
1975-1977	17.7	8.8	4.8	2.7	1.3	8.9
1974-1976	18.7	9.2	5.1	2.8	1.3	9.5
1973-1975	18.8	9.2	4.8	3.0	1.4	9.6
1972-1974	19.7	9.3	5.0	2.9	1.4	10.4
1971-1973	21.3	10.3	5.8	3.0	1.4	11.0
1970-1972	22.7	11.0	6.5	2.9	1.6	11.6
1969-1971	24.6	12.2	6.8	3.6	1.8	12.3
1968-1970	27.1	12.9	7.0	3.9	2.0	14.1
1967-1969	30.0	14.3	7.8	4.5	2.0	15.7
1966-1968	34.0	15.7	8.4	4.9	2.3	18.4
1965-1967	36.8	16.1	8.6	5.1	2.4	20.7
U.S. All Races						
1984	10.8	7.0	4.1	1.8	1.1	3.8
1983	11.2	7.3	4.3	1.9	1.2	3.9
1982	11.5	7.7	4.4	2.0	1.3	3.8
1981	11.9	8.0	4.5	2.3	1.3	3.9
1980	12.6	8.5	4.6	2.4	1.4	4.1
1979	13.1	8.9	4.8	2.7	1.4	4.2
1978	13.8	9.5	5.1	2.9	1.5	4.3
1977	14.1	9.9	5.3	3.1	1.5	4.2
1976	15.2	10.9	5.9	3.1	1.6	4.3
1975	16.1	11.6	6.3	3.7	1.6	4.5
1974	16.7	12.3	6.7	3.7	1.6	4.4
1973	17.7	13.0	7.2	4.2	1.5	4.7
1972	18.5	13.7	8.1	4.3	1.3	4.8
1971	19.1	14.2	8.2	4.6	1.4	4.9
1970	20.0	15.1	8.8	4.8	1.5	4.9
1969	20.9	15.6	9.2	4.9	1.5	5.3
1968	21.8	16.1	9.5	5.1	1.5	5.7
1967	22.4	16.5	9.6	5.3	1.6	5.9
1966	23.7	17.2	10.0	5.6	1.6	6.5

Source of U.S. All Races Data: Monthly Vital Statistics Report, NCHS, Vol. 35, No. 6, Supplement (2), September 26, 1986, and neonatal by age—unpublished from NCHS.

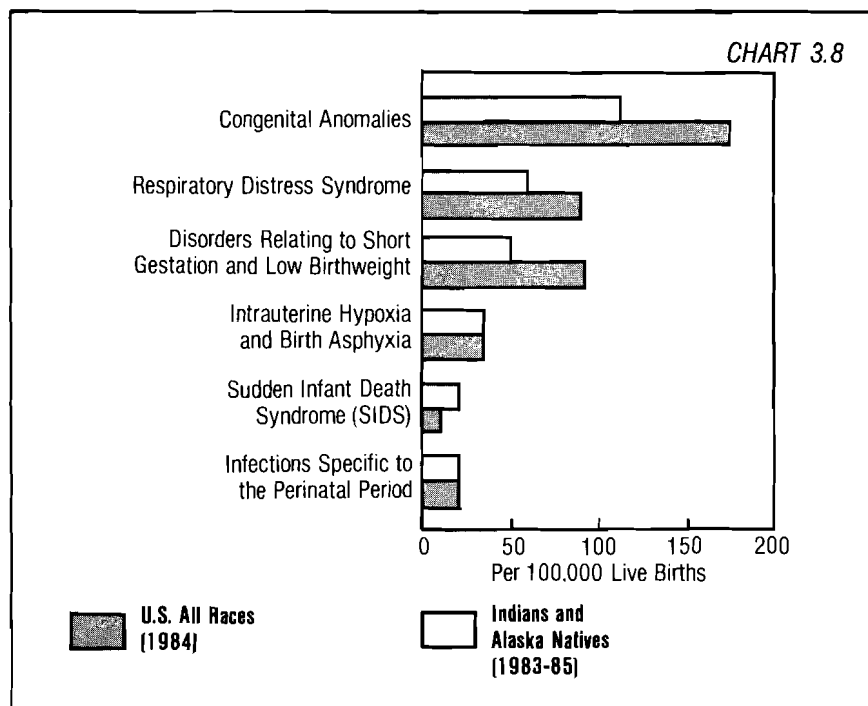
INFANT MORTALITY RATES BY AGE

American Indians and Alaska Natives and U.S. All Races, Rates per 1,000 Live Births



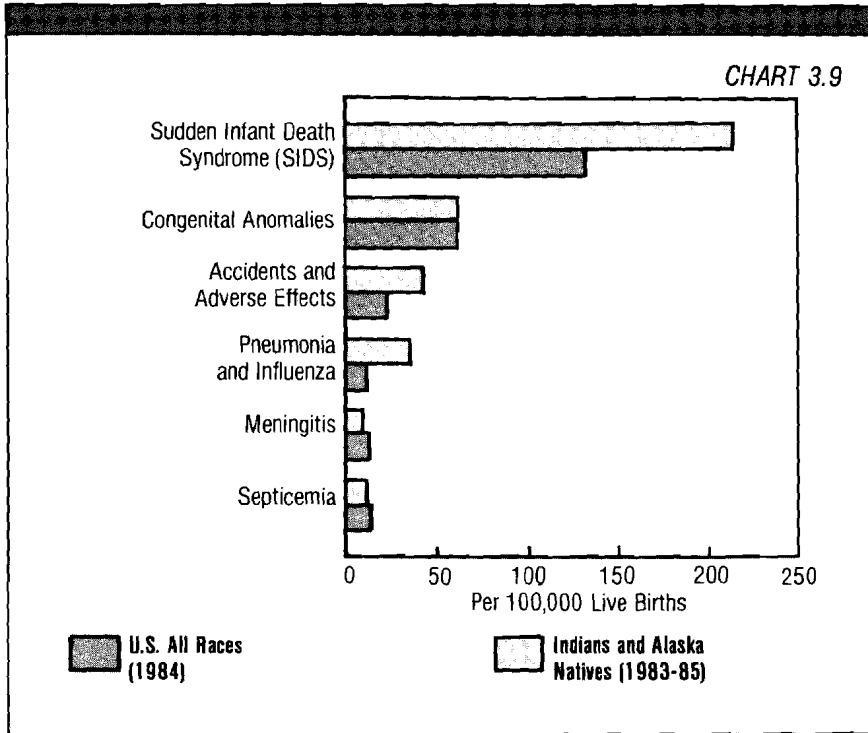
LEADING CAUSES OF INFANT DEATHS
(BIRTH TO UNDER 1 YEAR)

The two leading causes of infant deaths for American Indians and Alaska Natives (1983-1985) were sudden infant death syndrome (SIDS) and congenital anomalies. For the U.S. All Races (1984), the order was reversed.



LEADING CAUSES OF NEONATAL DEATHS
(UNDER 28 DAYS)

The two leading causes of neonatal deaths for both American Indians and Alaska Natives (1983-1985) and the U.S. All Races (1984) were congenital anomalies and respiratory distress syndrome. For the U.S. All Races, disorders relating to short gestation and low birth weight was tied for second.



LEADING CAUSES OF POSTNEONATAL DEATHS

(28 DAYS TO UNDER 1 YEAR)

The two leading causes of postneonatal deaths for both American Indians and Alaska Natives (1983-1985) and the U.S. All Races (1984) were sudden infant death syndrome (SIDS) and congenital anomalies.

TABLE 3.7

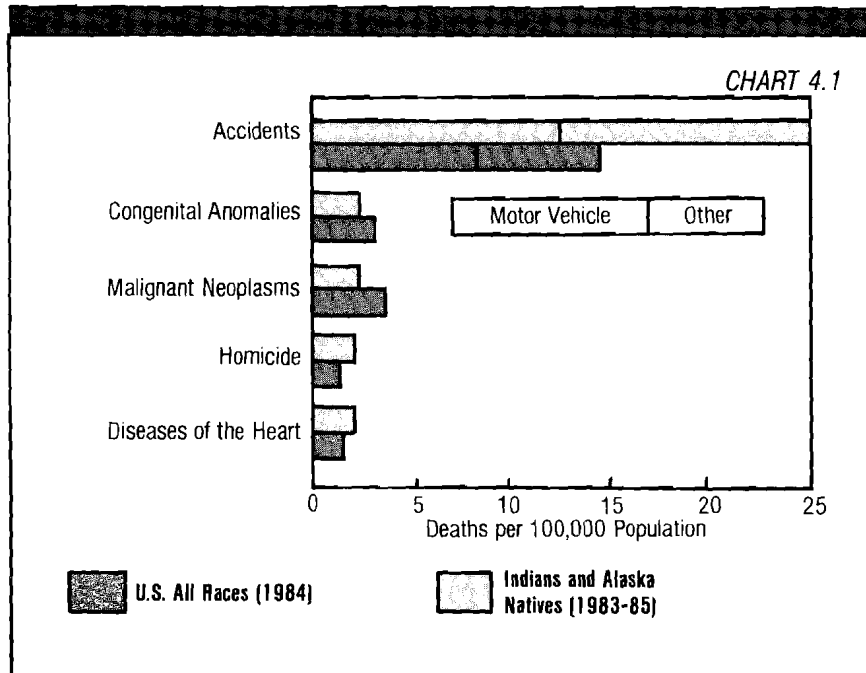
	American Indians & Alaska Natives		U.S. All Races	U.S. Other Than White	Ratio of Indian to:	
	Number	Rate	Rate	Rate	U.S. All Races	U.S. Other Than White
TOTAL INFANT DEATHS—						
All Causes	1,182	9.8	10.8	16.1	0.9	0.6
Sudden infant death syndrome	280	2.3	1.4	2.1	1.6	1.1
Congenital anomalies	198	1.6	2.3	2.2	0.7	0.7
Respiratory distress syndrome	70	0.6	1.0	1.3	0.6	0.5
Disorders relating to short gestation and low birthweight	64	0.5	0.9	1.8	0.6	0.3
Accidents	47	0.4	0.2	0.3	2.0	1.3
Pneumonia and influenza	40	0.3	0.2	0.3	1.5	1.0
Intrauterine hypoxia and birth asphyxia	37	0.3	0.3	0.5	1.0	0.6
Infections specific to the perinatal period	23	0.2	0.2	0.3	1.0	0.7
Newborn affected by maternal complications of pregnancy	22	0.2	0.4	0.6	0.5	0.3
Meningitis	20	0.2	0.1	0.1	2.0	2.0
All other causes	381					
NEONATAL DEATHS—All Causes	550	4.6	7.0	10.2	0.7	0.5
Congenital anomalies	130	1.1	1.7	1.6	0.6	0.7
Respiratory distress syndrome	67	0.6	0.9	1.1	0.7	0.5
Disorders relating to short gestation and low birthweight	64	0.5	0.9	1.8	0.6	0.3
Intrauterine hypoxia and birth asphyxia	33	0.3	0.3	0.5	1.0	0.4
Sudden infant death syndrome	26	0.2	0.1	0.2	2.0	1.0
Infections specific to the perinatal period	22	0.2	0.2	0.3	1.0	0.7
Newborn affected by maternal complications of pregnancy	19	0.2	0.4	0.6	0.5	0.3
Newborn affected by complications of placenta, cord, and membranes	14	0.1	0.2	0.3	0.5	0.3
All other causes	175					
POSTNEONATAL DEATHS—All Causes	632	5.3	3.8	5.8	1.4	0.9
Sudden infant death syndrome	254	2.1	1.3	2.0	1.6	1.1
Congenital anomalies	68	0.6	0.6	0.7	1.0	0.9
Accidents	45	0.4	0.2	0.3	2.0	1.3
Pneumonia and influenza	34	0.3	0.1	0.3	3.0	1.0
Meningitis	18	0.1	0.1	0.1	1.0	1.0
Septicemia	16	0.1	0.1	0.2	1.0	0.5
Gastritis, duodenitis, and non-infective enteritis and colitis	11	0.1	0.0	0.1	—	1.0
Homicide	5	0.0	0.1	0.1	—	—
All other causes	181					

NOTE: Connecticut, Rhode Island and Texas included as reservation states beginning in 1983, and Alabama beginning in 1984.

SOURCE: National Center for Health Statistics (NCHS), U.S. infant mortality rates (all ages)—Monthly Vital Statistics Report, Vol., 35 No., 6, Supplement (2), September 26, 1986, Table 14: Infant mortality rates by age are unpublished data from NCHS.

LEADING CAUSES OF INFANT DEATHS BY AGE

American Indians and Alaska Natives in Reservation States, 1983-1985, U.S. All Races and Other than White Race, 1984, Rate per 1,000 Live Births



MORTALITY RATES, LEADING CAUSES: AGES 1 TO 14 YEARS

The two leading causes of death for American Indians and Alaska Natives ages 1 to 14 (1983-1985) were accidents and congenital anomalies. For the U.S. All Races (1984), they were accidents and malignant neoplasms.

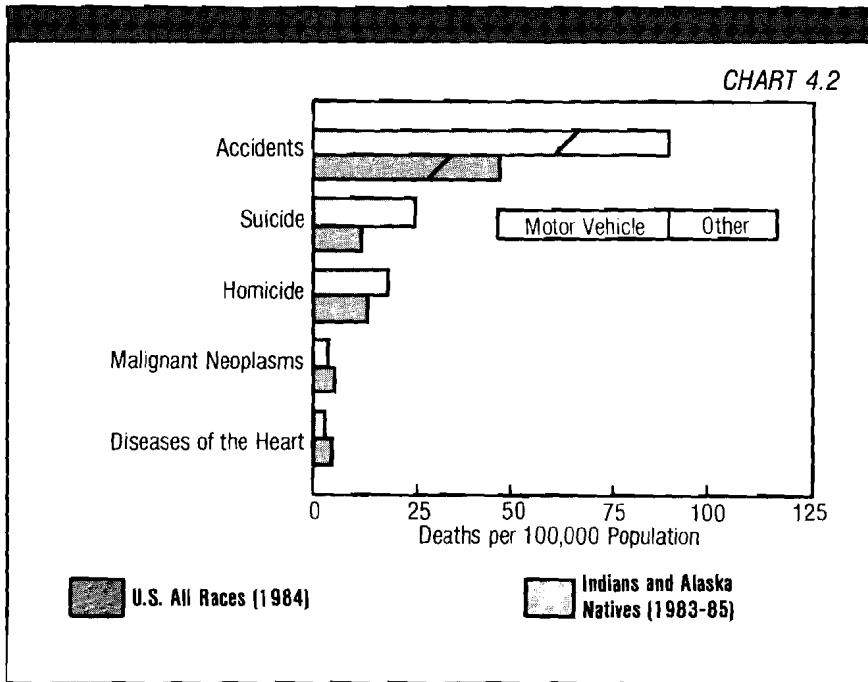
TABLE 4.1

Cause of Death	American Indians and Alaska Natives		U.S. All Races	Ratio: Indian to U.S. All Races
	Number	Mortality Rate	Mortality Rate	
Total 1 to 14 Years	599	46.9	34.1	1.4
Accidents	327	25.6	14.6	1.8
Motor vehicle	158	12.4	6.7	1.9
Other accidents	169	13.2	7.8	1.7
Congenital anomalies	31	2.4	3.0	0.8
Malignant neoplasms	28	2.2	3.7	0.6
Homicide	26	2.0	1.2	1.7
Diseases of the heart	23	1.8	1.4	1.3
Suicide	15	1.2	0.5	2.4
Pneumonia and influenza	13	1.0	0.8	1.3
Certain cond. originating in the perinatal period	7	0.5	0.4	1.3
Meningitis	7	0.5	0.5	1.0
Benign neoplasms	6	0.5	0.3	1.7
All other causes	116	-	-	-

NOTE: Connecticut, Rhode Island and Texas included as reservation states beginning in 1983, and Alabama in 1984.

TEN LEADING CAUSES OF DEATH FOR DECEDENTS 1 TO 14 YEARS OF AGE

American Indians and Alaska Natives in Reservation States, 1983-1985, Comparable U.S. All Races Rates, 1984, Mortality Rates per 100,000 Population



MORTALITY RATES, LEADING CAUSES: AGES 15 TO 24 YEARS

The two leading causes of death for American Indians and Alaska Natives ages 15 to 24 years (1983-1985) were accidents and suicide. For the U.S. All Races (1984), they were accidents and homicide.

TABLE 4.2

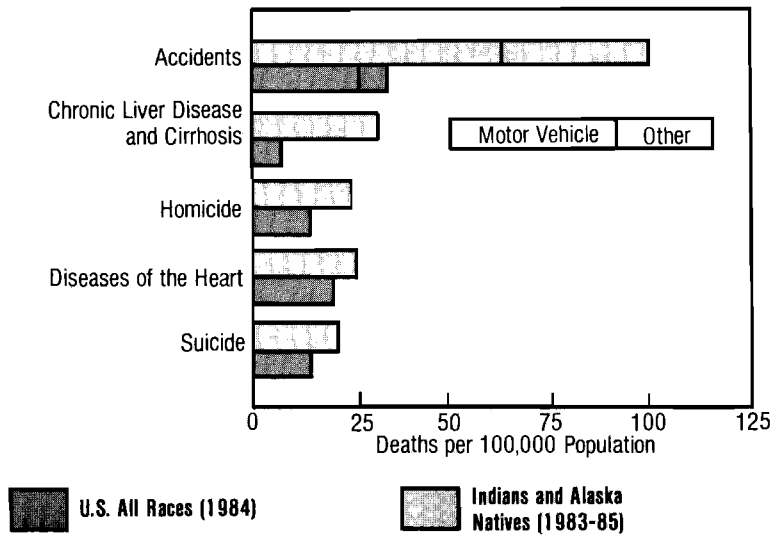
Cause of Death	American Indians and Alaska Natives		U.S. All Races	Ratio: Indian to U.S. All Races
	Number	Mortality Rate	Mortality Rate	
Total 15 to 24 Years	1,556	163.0	96.8	1.7
Accidents	874	91.5	49.4	1.9
Motor vehicle	572	59.9	36.7	1.6
Other accidents	302	31.6	12.6	2.5
Suicide	256	26.8	12.5	2.1
Homicide	171	17.9	12.0	1.5
Malignant neoplasms	46	4.8	5.5	0.9
Diseases of the heart	20	2.1	2.7	0.8
Congenital anomalies	11	1.2	1.3	0.9
Cerebrovascular diseases	10	1.0	0.8	1.3
Pneumonia and influenza	6	0.6	0.6	1.0
Chronic liver disease and cirrhosis	6	0.6	0.2	3.0
Complications of pregnancy, childbirth & puerperium	5	0.5	0.2	2.5
All other causes	151			

NOTE: Connecticut, Rhode Island and Texas included as reservation states beginning in 1983, and Alabama in 1984.

TEN LEADING CAUSES OF DEATH FOR DECEDENTS 15 TO 24 YEARS OF AGE

American Indians and Alaska Natives in Reservation States, 1983-1985, Comparable U.S. All Races Rates, 1984, Mortality Rates per 100,000 Population

CHART 4.3



MORTALITY RATES, LEADING CAUSES: AGES 25 TO 44 YEARS

The two leading causes of death for American Indians and Alaska Natives ages 25 to 44 years (1983-1985) were accidents and chronic liver disease and cirrhosis. For the U.S. All Races (1984), they were accidents and malignant neoplasms.

TABLE 4.3

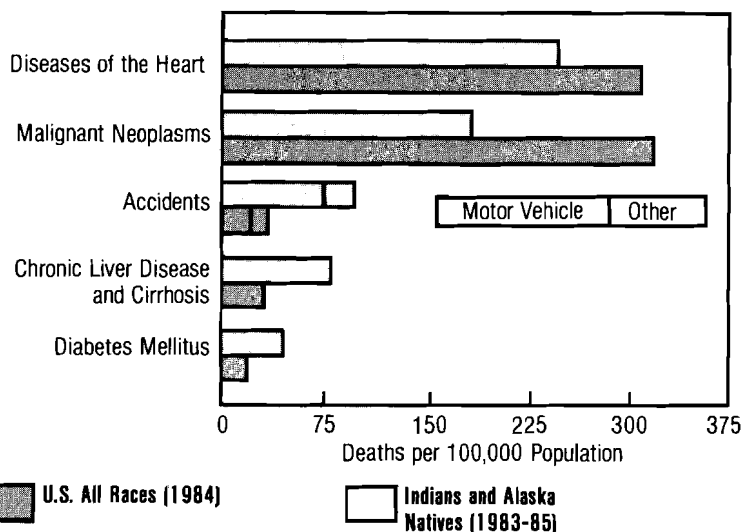
Cause of Death	American Indians and Alaska Natives		U.S. All Races	Ratio: Indian to U.S. All Races
	Number	Mortality Rate	Mortality Rate	
Total 25 to 44 Years	3,260	288.0	156.7	1.8
Accidents	1,145	101.2	35.5	2.9
Motor vehicle	677	59.8	20.9	2.9
Other accidents	468	41.3	14.6	2.8
Chronic liver disease and cirrhosis	358	31.6	5.9	5.4
Homicide	277	24.5	13.3	1.8
Diseases of the heart	274	24.2	21.1	1.1
Suicide	241	21.3	15.3	1.4
Malignant neoplasms	186	16.4	27.3	0.6
Cerebrovascular diseases	63	5.6	4.5	1.2
Pneumonia and influenza	62	5.5	2.2	2.5
Diabetes mellitus	35	3.1	2.3	1.3
Septicemia	21	1.9	0.8	2.4
All other causes	598			

NOTE: Connecticut, Rhode Island and Texas included as reservation states beginning in 1983, and Alabama in 1984.

TEN LEADING CAUSES OF DEATH FOR DECEDENTS 25 TO 44 YEARS OF AGE

American Indians and Alaska Natives in Reservation States, 1983-1985, Comparable U.S. All Races Rates, 1984, Mortality Rates per 100,000 Population

CHART 4.4



MORTALITY RATES, LEADING CAUSES: AGES 45 TO 64 YEARS

The two leading causes of death for American Indians and Alaska Natives ages 45 to 64 years (1983-1985) were diseases of the heart and malignant neoplasms. For the U.S. All Races (1984), they were malignant neoplasms and diseases of the heart.

TABLE 4.4

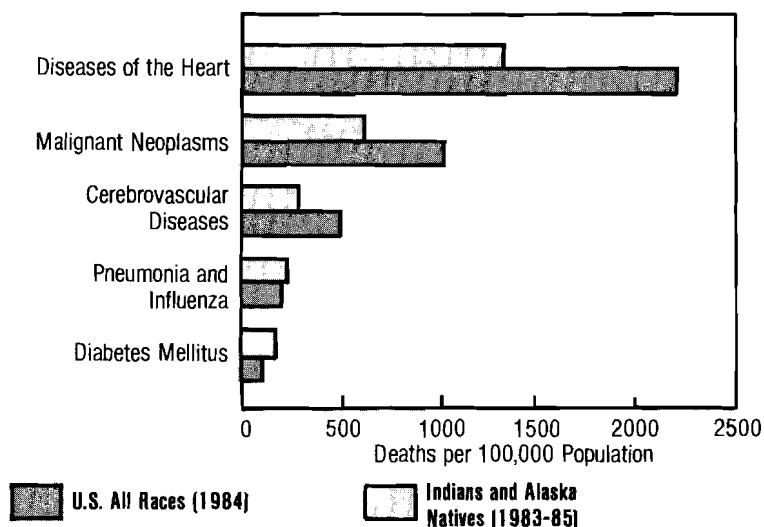
Cause of Death	American Indians and Alaska Natives Mortality		U.S. All Races Mortality Rate	Ratio: Indian to U.S. All Races
	Number	Rate		
Total 45 to 64 Years	5,016	903.8	902.8	1.0
Diseases of the heart	1,321	238.0	302.9	0.8
Malignant neoplasms	996	179.5	308.9	0.6
Accidents	517	93.2	34.1	2.7
Motor vehicle	245	44.1	15.5	2.8
Other accidents	272	49.0	18.6	2.6
Chronic liver disease and cirrhosis	432	77.8	29.1	2.7
Diabetes mellitus	253	45.6	16.7	2.7
Cerebrovascular diseases	205	36.9	39.1	0.9
Pneumonia and influenza	114	20.5	11.7	1.8
Chronic obstructive pulmonary diseases and allied cond.	94	16.9	27.7	0.6
Homicide	92	16.6	7.2	2.3
Nephritis, nephrotic syndrome and nephrosis	89	16.0	6.2	2.6
All other causes	903			

NOTE: Connecticut, Rhode Island and Texas included as reservation states beginning in 1983, and Alabama in 1984.

TEN LEADING CAUSES OF DEATH FOR DECEDENTS 45 TO 64 YEARS OF AGE

American Indians and Alaska Natives in Reservation Rates, 1983-1985, Comparable U.S. All Races Rates, 1984, Mortality Rates per 100,000 Population

CHART 4.5



MORTALITY RATES, LEADING CAUSES: AGES 65 + YEARS

The two leading causes of death for American Indians and Alaska Natives, age 65 and over (1983-1985) were diseases of the heart and malignant neoplasms. For the U.S. All Races (1984), they were also diseases of the heart and malignant neoplasms.

TABLE 4.5

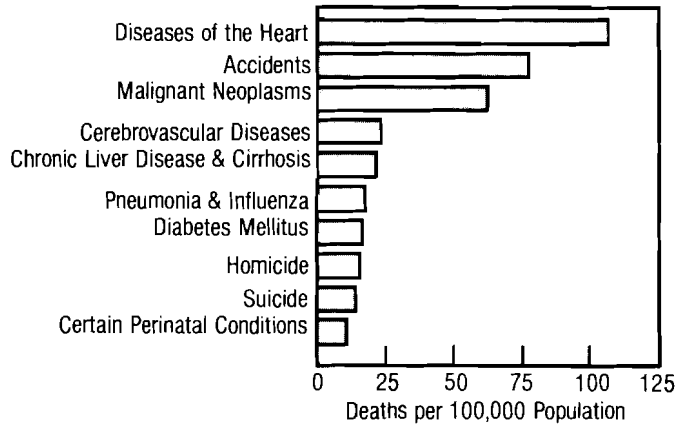
Cause of Death	American Indians and Alaska Natives		U.S. All Races Mortality Rate	Ratio: Indian to U.S. All Races
	Number	Mortality Rate		
Total 65 Years +	8,482	3,805.3	5,101.2	0.7
Diseases of the heart	3,019	1,354.4	2,185.7	0.6
Malignant neoplasms	1,465	657.3	1,041.6	0.6
Cerebrovascular diseases	689	309.1	475.3	0.7
Pneumonia and influenza	447	200.5	181.4	1.1
Diabetes mellitus	383	171.8	94.7	1.8
Accidents	303	135.9	87.2	1.6
Motor vehicle	84	37.7	21.8	1.7
Other accidents	219	98.3	65.4	1.5
Chronic obstructive pulmonary diseases and allied cond.	261	117.1	198.8	0.6
Nephritis, nephrotic syndrome and nephrosis	162	72.7	58.3	1.2
Chronic liver disease and cirrhosis	126	56.5	35.5	1.6
Atherosclerosis	99	44.4	83.4	0.5
All other causes	1,528			

NOTE: Connecticut, Rhode Island and Texas included as reservation states beginning in 1983, and Alabama in 1984.

TEN LEADING CAUSES OF DEATH FOR DECEDENTS 65 YEARS OLD AND OLDER

American Indians and Alaska Natives in Reservation States, 1983-1985, Comparable U.S. All Races Rates, 1984, Mortality Rates per 100,000 Population

CHART 4.6



MORTALITY RATES FOR LEADING CAUSES

INDIANS AND ALASKA NATIVES (1983-85)

The leading cause of death for both American Indians and Alaska Natives (1983-1985) and the U.S. All Races (1984) was "diseases of the heart." The second leading cause for Indians was "accidents," and for the U.S. All Races was "malignant neoplasms."

TABLE 4.6

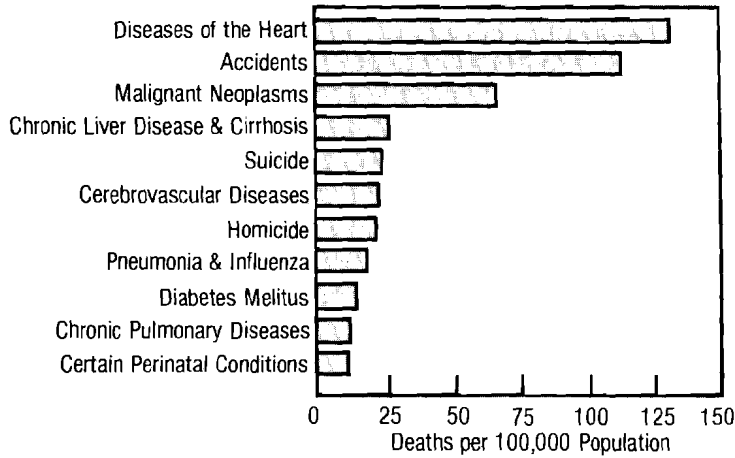
	Number	Mortality Rate
All Causes	20,110	474.0
Diseases of the heart	4,685	110.4
Accidents	3,218	75.9
Motor vehicle	1,753	41.3
Other accidents	1,465	34.5
Malignant neoplasms	2,725	64.2
Cerebrovascular diseases	969	22.8
Chronic liver disease and cirrhosis	924	21.8
Pneumonia and influenza	682	16.1
Diabetes mellitus	676	15.9
Homicide	597	14.1
Suicide	581	13.7
Certain conditions originating in the perinatal period	387	9.1
All other	4,666	

NOTE: Connecticut, Rhode Island and Texas included as reservation states beginning in 1983, and Alabama in 1984. Includes 17 deaths with age not reported.

TEN LEADING CAUSES OF DEATH FOR DECEDENTS OF ALL AGES

American Indians and Alaska Natives in Reservation States, 1983-1985, Mortality Rates per 100,000 Population

CHART 4.7

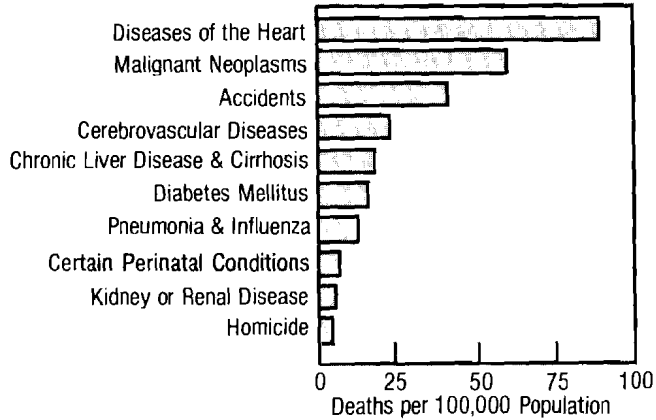


MORTALITY RATES, LEADING CAUSES: MALES

INDIANS AND ALASKA NATIVES (1983-85)

The leading cause of death for Indian males (1983-1985) was "diseases of the heart" followed by "accidents."

CHART 4.8



MORTALITY RATES, LEADING CAUSES: FEMALES

INDIANS AND ALASKA NATIVES (1983-85)

The leading cause of death for Indian females (1983-1985) was "diseases of the heart" followed by "malignant neoplasms."

TABLE 4.7

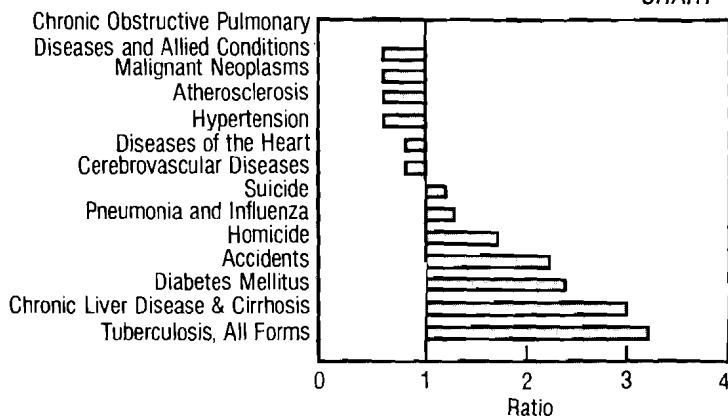
MALES			FEMALES		
Causes of Death	Number	Mortality Rate	Causes of Death	Number	Mortality Rate
All Causes	11,894	568.4	All Causes	8,216	382.2
Diseases of the heart	2,727	130.3	Diseases of the heart	1,958	91.1
Accidents	2,385	114.0	Malignant neoplasms	1,301	60.5
Motor vehicle	1,263	60.4	Accidents	833	38.7
Other accidents	1,122	53.6	Motor vehicle	490	22.8
Malignant neoplasms	1,424	68.0	Other accidents	343	16.0
Chronic liver disease & cirrhosis	520	24.8	Cerebrovascular diseases	513	23.9
Suicide	485	23.2	Chronic liver disease & cirrhosis	404	18.8
Cerebrovascular diseases	456	21.8	Diabetes mellitus	392	18.2
Homicide	453	21.6	Pneumonia & influenza	295	13.7
Pneumonia & influenza	387	18.5	Certain conditions originating in the perinatal period	171	8.0
Diabetes mellitus	284	13.6	Nephritis, nephrotic and nephrosis	151	7.0
Chronic obstructive pulmonary disease and allied conditions	254	12.1	Homicide	144	6.7
Certain conditions originating in the perinatal period	216	10.3	All other causes	2,054	
All other causes	2,303				

NOTE: Connecticut, Rhode Island and Texas included as reservation states beginning in 1983, and Alabama in 1984.

LEADING CAUSES OF DEATH BY SEX

American Indians and Alaska Natives, 1983-1985, Mortality Rates per 100,000 Population

CHART 4.9



SELECTED AGE-ADJUSTED DEATH RATES

RATIO OF INDIANS AND ALASKA NATIVES TO U.S. ALL RACES (CY '85)

The American Indian and Alaska Native age-adjusted mortality rates for 1985 were above those of the U.S. All Races for tuberculosis, chronic liver disease and cirrhosis, diabetes mellitus, accidents, homicide, pneumonia and influenza, and suicide. Indian rates were below those of the U.S. All Races for chronic obstructive pulmonary diseases, malignant neoplasms, atherosclerosis, hypertension, diseases of the heart, and cerebrovascular diseases.

TABLE 4.9

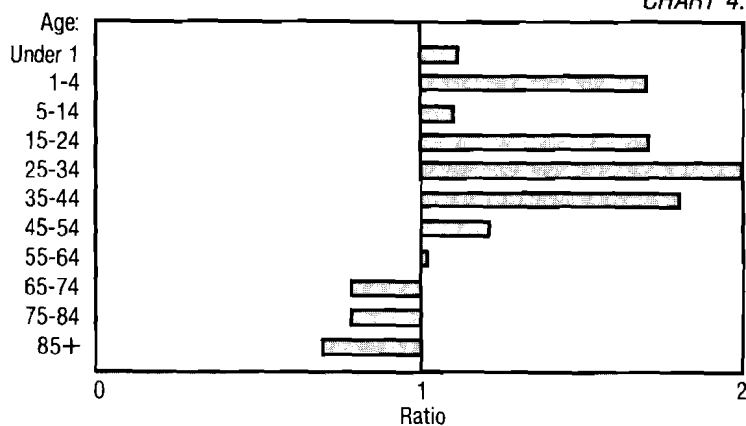
	Indians and Alaska Natives	United States			Ratio of Indians to U.S. All Races
		All Races	White	All Other	
All Causes	542.7	546.1	523.1	697.8	1.0
Major cardiovas. disease	174.6	224.0	216.9	273.4	0.8
Diseases of heart	141.6	180.5	176.1	210.4	0.8
Cerebrovascular diseases	26.8	32.3	30.1	49.4	0.8
Atherosclerosis	2.5	4.0	4.0	3.9	0.6
Hypertension	1.0	1.8	1.4	4.7	0.6
Malignant neoplasms	84.9	133.6	130.7	155.7	0.6
Accidents	77.7	34.7	34.1	39.7	2.2
Motor vehicle	42.6	18.8	19.1	17.4	2.3
All other	35.1	16.0	15.0	22.3	2.2
Chronic liver disease and cirrhosis	29.2	9.6	8.9	14.4	3.0
Diabetes mellitus	22.9	9.6	8.6	17.7	2.4
Pneumonia and influenza	17.9	13.4	12.8	16.8	1.3
Homicide	14.3	8.3	5.4	24.4	1.7
Suicide	14.1	11.5	12.3	6.7	1.2
Chronic obstructive pulmonary diseases and allied conditions	11.5	18.7	19.2	13.8	0.6
Tuberculosis, all forms	1.6	0.5	0.3	1.8	3.2

Source of U.S. Mortality Rates: Monthly Vital Statistics Report, NCHS, DHHS Pub. No. (PHS) 87-1120, Vol. 36, No. 5, Supplement.

AGE-ADJUSTED MORTALITY RATES

American Indians and Alaska Natives in Reservation States, Selected U.S. Populations by Race, Mortality Rates Per 100,000 Population, 1985

CHART 4.10



AGE-SPECIFIC DEATH RATES—RATIO OF INDIANS AND ALASKA NATIVES ('83-'85) TO U.S. ALL RACES ('84)

The age-specific death rate for American Indians and Alaska Natives (1983-1985) was approximately 2 times the U.S. All Races rate (1984) for age groups 25 through 44. The Indian rate was less than the U.S. All Races rate for age groups over 64.

TABLE 4.10

Age	American Indian and Alaska Native, 1983-1985		U.S. Mortality Rate, 1984			Ratio of Rates: Indians and Alaska Natives to U.S. All Races
	Number of Deaths	Mortality Rate	All Races	White	All Other	
Under 1	1,182	1,165.3	1,085.6	937.8	1,778.9	1.1
1-4	321	90.3	51.9	46.9	73.5	1.7
5-14	278	30.2	26.7	25.4	32.4	1.1
15-24	1,556	163.0	96.8	94.7	106.7	1.7
25-34	1,619	237.1	121.1	107.2	197.3	2.0
35-44	1,641	365.4	204.8	179.1	368.9	1.8
45-54	2,070	642.0	521.1	477.1	811.2	1.2
55-64	2,944	1,265.8	1,287.8	1,223.7	1,797.7	1.0
65-74	3,475	2,417.6	2,848.1	2,783.8	3,404.2	0.8
75-84	3,177	5,150.5	6,399.3	6,366.4	6,721.9	0.8
85 +	1,830	10,469.7	15,223.6	15,521.2	12,103.6	0.7

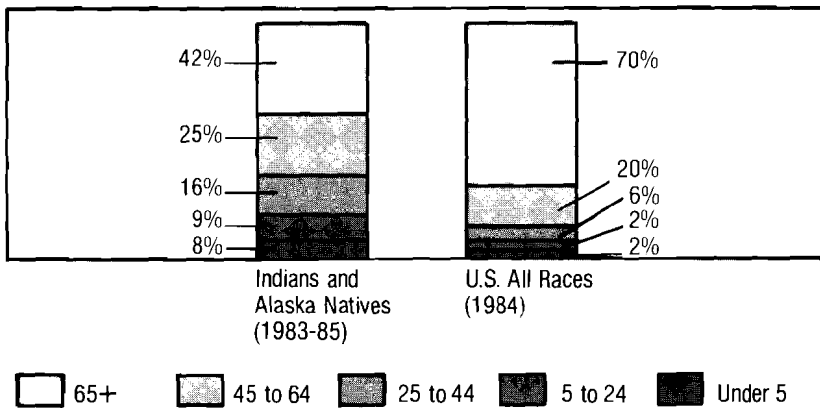
SOURCE: U.S. Data by Race: National Center for Health Statistics, HHS, Monthly Vital Statistics Report, Vol. 35, No. 6, Supplement (2) Advance Report-Final Mortality Statistics, 1984, and unpublished data from NCHS.

AGE-SPECIFIC MORTALITY RATES

Mortality Rates per 100,000 Population

CHART 4.11

Percent Distribution

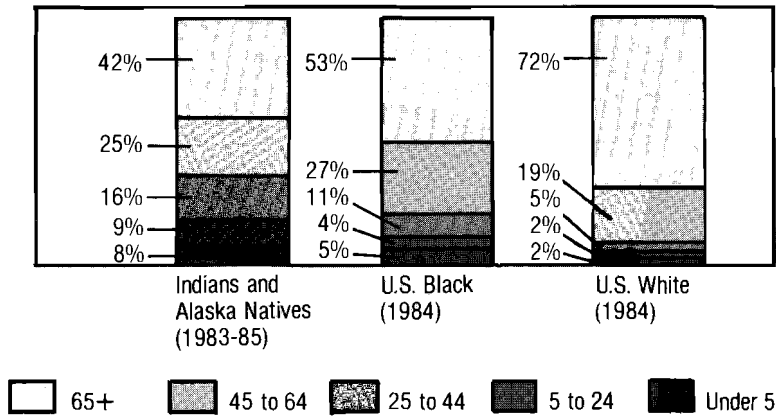


DEATHS BY AGE

Of all American Indian and Alaska Native people who died during 1983-1985, 33 percent were under 45 years of age. This compared to 10 percent for the U.S. All Races population (1984).

CHART 4.12

Percent Distribution

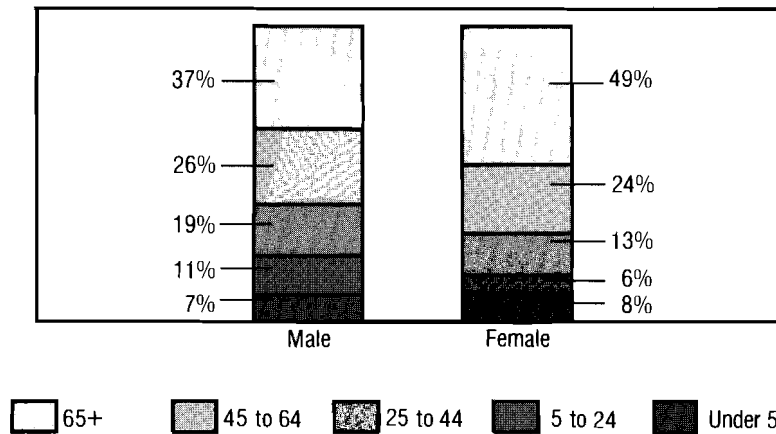


DEATHS BY AGE AND RACE

20 percent of Black decedents and 9 percent of White decedents in 1984 were under 45 years of age.

CHART 4.13

Percent Distribution



DEATHS BY AGE AND SEX

INDIANS AND ALASKA NATIVES (1983-85)

37 percent of Indian male deaths (1983-1985) pertained to ages under 45. This compared to 27 percent for Indian female deaths.

TABLE 4.11

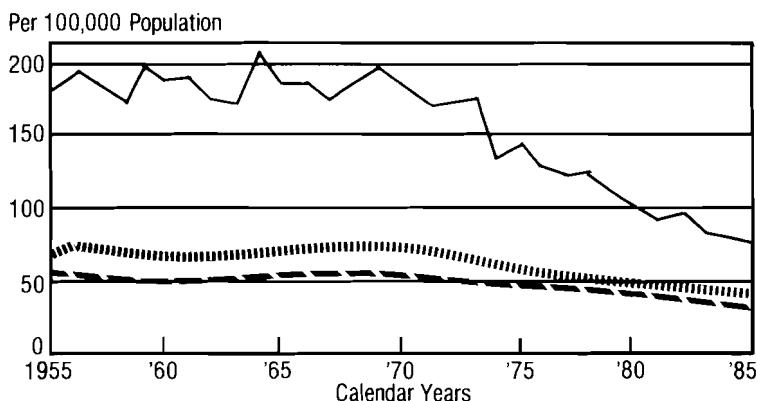
Age Group	American Indians and Alaska Natives 1983-1985					
	Both Sexes		Male		Female	
	Number	Percent	Number	Percent	Number	Percent
All Ages	20,110	100.0	11,894	100.0	8,216	100.0
Under 1	1,182	5.9	641	5.4	541	6.6
1 to 4	321	1.6	198	1.7	123	1.5
5 to 14	278	1.4	171	1.4	107	1.3
15 to 24	1,556	7.7	1,181	9.9	375	4.6
25 to 34	1,619	8.1	1,161	9.8	458	5.6
35 to 44	1,641	8.2	1,058	8.9	583	7.1
45 to 54	2,070	10.3	1,298	10.9	772	9.4
55 to 64	2,944	14.6	1,73	14.6	1,213	14.8
65 to 74	3,475	17.3	1,984	16.7	1,491	18.1
75 to 84	3,177	15.8	1,693	14.2	1,484	18.1
85 and over	1,830	9.1	768	6.5	1,062	12.9
Age Not Stated	17	0.1	10	0.1	7	0.1

	U.S. Population by Race 1984		
	All Races	White	Black
Number of Deaths			
All Ages	2,039,369	1,781,897	235,884
Percent Distribution			
All Ages	100.0	100.0	100.0
Under 1	1.9	1.5	4.6
1 to 4	0.4	0.3	0.7
5 to 14	0.4	0.4	0.8
15 to 24	1.9	1.8	2.7
25 to 34	2.4	2.1	4.8
35 to 44	3.1	2.7	5.9
45 to 54	5.7	5.2	9.4
55 to 64	14.1	13.6	17.6
65 to 74	23.4	23.5	22.8
75 to 84	27.0	28.0	20.3
85 and over	19.6	20.9	10.4
Age Not Stated	0.0	0.0	0.1

NUMBER AND PERCENT DISTRIBUTION OF DEATHS BY AGE AND SEX

American Indians and Alaska Natives In Reservation States, 1983-1985, U.S. Population by Race, 1984

CHART 4.14



AGE-ADJUSTED ACCIDENT DEATH RATES

The age-adjusted accident death rate for American Indians and Alaska Natives dropped from 184.0 in 1955 to 77.7 in 1985, a decrease of 58 percent. However, the rate is 124 percent higher than the U.S. All Races rate of 34.7 for 1985.

TABLE 4.14

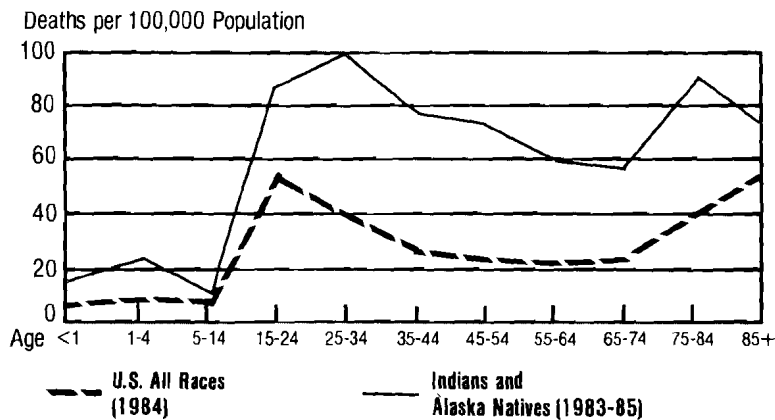
Calendar Year	American Indians and Alaska Natives				U.S. All Races			U.S. Other Than White		
	Total Deaths	All Accidents	Motor Vehicle	Other	All Accidents	Motor Vehicle	Other	All Accidents	Motor Vehicle	Other
1985	1,075	77.7	42.6	35.1	34.7	18.8	16.0	39.7	17.4	22.3
1984	1,078	81.2	41.9	39.3	35.0	19.1	15.9	38.5	16.6	21.9
1983	1,065	83.0	44.6	38.3	35.3	18.5	16.8	40.2	16.4	23.7
1982	1,135	94.7	49.9	44.8	36.6	19.3	17.3	40.8	16.8	23.9
1981	1,124	92.8	54.1	38.7	39.8	21.8	18.0	44.0	18.6	25.4
1980	1,255	107.3	61.3	46.0	42.3	22.9	19.5	49.5	20.3	29.3
1979	1,248	109.3	60.2	49.1	43.7	23.7	20.0	50.5	21.5	29.0
1978	1,302	127.4	71.5	55.9	44.3	23.4	20.9	52.6	22.4	30.1
1977	1,226	125.5	71.8	53.7	43.8	22.4	21.4	53.1	21.9	31.2
1976	1,215	131.9	74.5	57.4	43.2	21.5	21.7	53.2	21.9	31.3
1975	1,256	143.6	78.5	65.1	44.8	21.3	23.5	56.9	22.5	34.4
1974	1,110	138.7	72.9	65.7	46.0	21.8	24.2	58.5	23.2	35.3
1973	1,341	175.5	101.8	73.7	51.7	26.4	25.3	67.5	30.0	37.6
1972	1,254	173.2	99.7	73.5	52.0	27.0	25.0	68.8	30.6	38.1
1971	1,134	170.3	89.6	80.7	52.0	26.6	25.3	71.6	31.3	40.4
1970	1,107	181.8	98.5	83.3	53.7	27.4	26.3	72.8	30.9	41.9
1969	1,139	194.4	99.1	95.3	55.3	28.5	26.8	75.5	33.7	41.8
1968	1,051	183.0	94.5	88.5	55.1	28.4	26.7	77.0	33.3	43.7
1967	1,000	178.9	95.5	83.4	54.8	27.8	27.0	73.2	31.1	42.1
1966	1,003	185.2	92.4	92.8	55.6	28.3	27.3	75.8	31.6	44.1
1965	951	186.7	91.9	94.8	53.4	26.6	26.8	70.8	29.2	41.5
1964	912	208.5	97.3	111.1	52.0	25.7	26.3	68.4	27.5	40.8
1963	835	172.5	78.0	94.5	50.9	24.3	26.6	68.2	26.5	41.7
1962	744	176.2	87.6	88.6	49.7	23.1	26.6	66.5	25.2	41.3
1961	822	188.8	91.5	97.4	48.1	22.1	26.1	63.3	23.9	39.4
1960	773	186.1	91.9	94.6	49.9	22.5	27.4	67.3	24.4	42.9
1959	794	197.4	98.3	99.1	49.9	22.8	27.1	66.1	25.0	41.1
1958	709	172.3	87.4	84.9	49.8	22.5	27.3	66.7	24.7	42.0
1957	743	185.1	94.9	90.0	53.4	24.1	29.3	71.0	27.3	43.7
1956	794	195.5	106.2	89.4	54.4	25.2	29.2	72.0	29.5	42.5
1955	714	184.0	97.6	90.3	54.3	24.6	29.7	71.1	28.1	43.0

NOTE: Estimated population methodology for the Indian population revised in 1976. Maine, New York and Pennsylvania included as reservation states beginning in 1979, Connecticut, Rhode Island and Texas in 1983 and Alabama in 1984. Decennial Census population counts used for 1960, 1970 and 1980.

ACCIDENT DEATHS AND MORTALITY RATES

American Indians and Alaska Natives in Reservation States, U.S. All Races and Other than White Race, Age-Adjusted Rates per 100,000 Population, 1955-1985

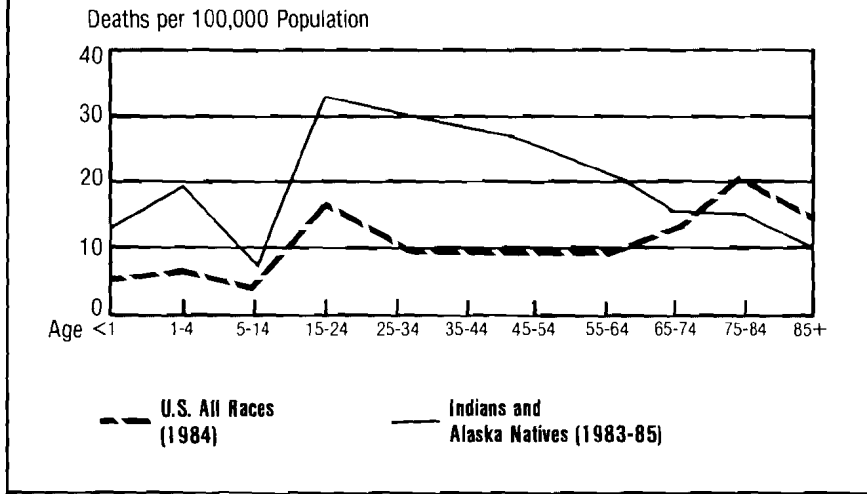
CHART 4.15



MOTOR VEHICLE ACCIDENTS: MALE

The age-specific death rate for motor vehicle accidents for Indian males (1983-1985) was higher for all age groups in comparison to U.S. All Races males (1984). The Indian male rate was over 2.5 times the U.S. All Races male rate for age groups under 5 and 25 through 64.

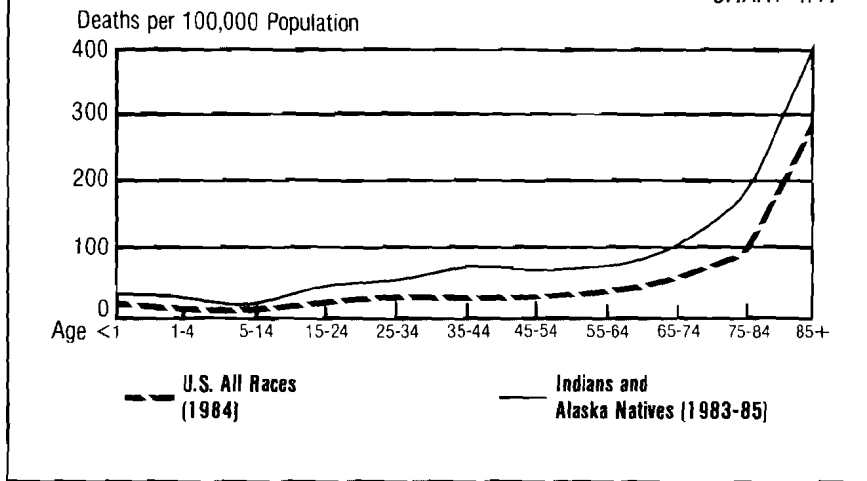
CHART 4.16



MOTOR VEHICLE ACCIDENTS: FEMALE

The age-specific death rate for motor vehicle accidents for Indian females (1983-1985) was higher for all age groups through age 74 in comparison to U.S. All Races females (1984). The Indian female rate was over 2.5 times the U.S. All Races female rate for age groups under 5 and 25 through 54.

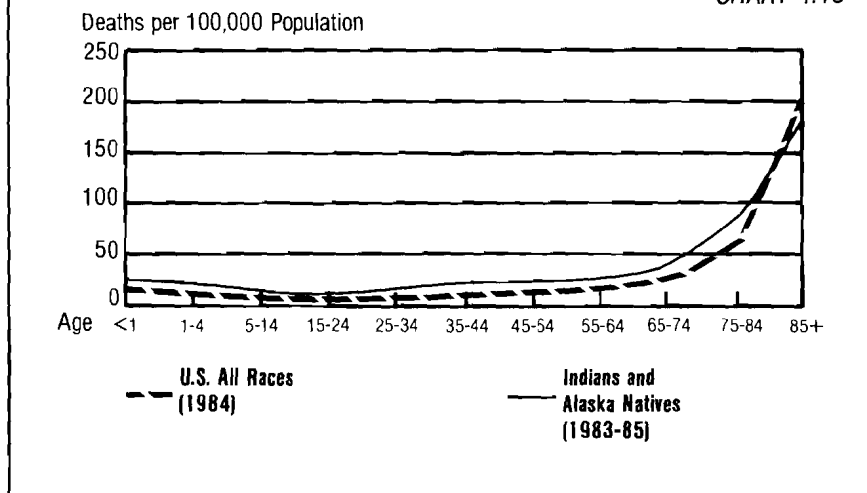
CHART 4.17



OTHER ACCIDENTS: MALE

The age-specific death rate for other accidents for Indian males (1983-1985) was higher for all age groups in comparison to U.S. All Races males (1984). The Indian male rate was over 2.5 times the U.S. All Races male rate for age groups 35 through 64.

CHART 4.18



OTHER ACCIDENTS: FEMALE

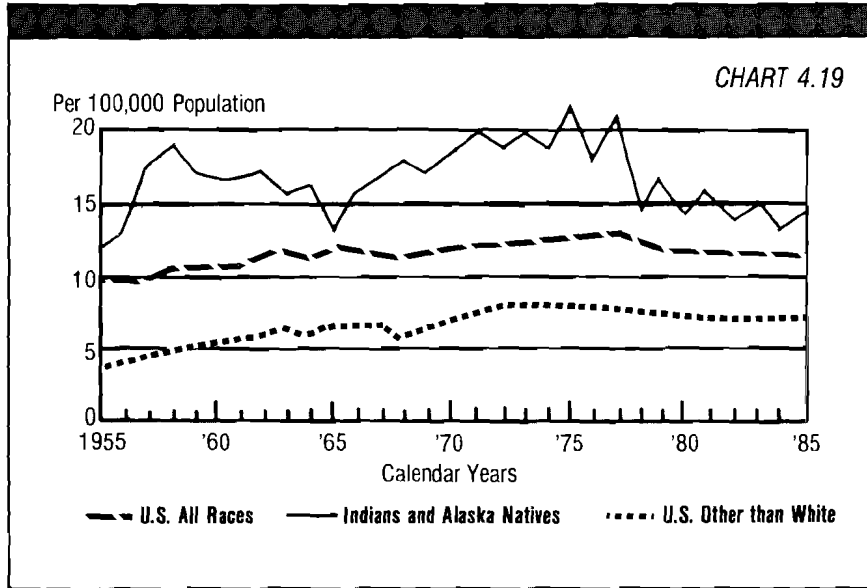
The age-specific death rate for other accidents for Indian females (1983-1985) was higher for all age groups through age 84 in comparison to U.S. All Races females (1984). The Indian female rate was over 2.5 times the U.S. All Races female rate for age groups 15 through 54.

TABLE 4.15

	M A L E				F E M A L E			
	American Indian and Alaska Native (1983-1985)		U.S. All Races (1984)	Ratio Indian to U.S. All Races	American Indian and Alaska Native (1983-1985)		U.S. All Races (1984)	Ratio Indian to U.S. All Races
	Number	Rate	Rate	Rate	Number	Rate	Rate	Rate
Motor Vehicle Accidents								
Under 1 year	10	19.5	4.3	4.5	6	12.0	4.6	2.6
1 to 4 years	43	23.8	8.0	3.0	33	18.8	5.7	3.3
5 to 14 years	46	9.9	8.3	1.2	36	7.9	4.9	1.6
15 to 24 years	420	87.7	54.9	1.6	152	31.9	18.3	1.7
25 to 34 years	331	99.1	37.0	2.7	107	30.7	10.7	2.9
35 to 44 years	171	78.4	25.2	3.1	68	29.4	9.2	3.2
45 to 54 years	110	71.0	22.4	3.2	43	25.7	8.8	2.9
55 to 64 years	65	59.0	21.9	2.7	27	22.1	10.1	2.2
65 to 74 years	37	57.0	24.9	2.3	12	15.2	12.7	1.2
75 to 84 years	24	89.4	42.0	2.1	5	14.4	20.0	0.7
85 years and over	5	71.9	53.3	1.3	1	9.5	13.5	0.7
Other Accidents								
Under 1 year	19	37.0	20.0	1.9	12	24.0	17.4	1.4
1 to 4 years	67	37.1	15.9	2.3	29	16.6	9.8	1.7
5 to 14 years	52	11.2	8.2	1.4	21	4.6	3.0	1.5
15 to 24 years	247	51.6	20.9	2.5	55	11.6	4.2	2.8
25 to 34 years	203	60.8	24.9	2.4	54	15.5	5.0	3.1
35 to 44 years	180	82.5	23.4	3.5	31	13.4	5.2	2.6
45 to 54 years	119	76.8	26.3	2.9	36	21.5	7.9	2.7
55 to 64 years	87	79.0	31.2	2.5	30	24.5	10.6	2.3
65 to 74 years	168	104.8	46.6	2.2	25	31.7	21.1	1.5
75 to 84 years	47	175.0	105.5	1.7	29	83.3	63.2	1.3
85 years and over	29	416.8	303.6	1.4	21	199.6	202.9	1.0

ACCIDENT DEATHS BY CAUSE, AGE AND SEX

American Indians and Alaska Natives in Reservation States, 1983-1985, U.S. All Races, 1984, Mortality Rates per 100,000 Population



AGE-ADJUSTED SUICIDE DEATH RATES

The age-adjusted suicide death rate for American Indians and Alaska Natives has decreased 33 percent since its peak in 1975 of 21.2 deaths per 100,000 population. The Indian rate for 1985 was 14.1 compared to the U.S. All Races rate of 11.5.

TABLE 4.19

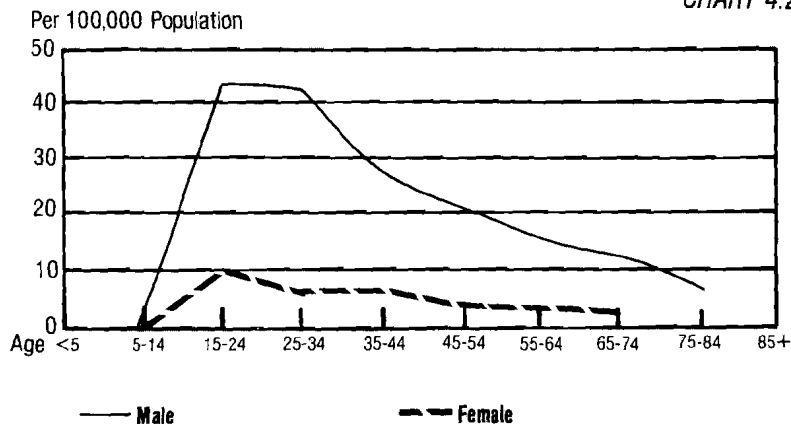
Calendar Year	Number of Deaths		Age-Adjusted Rates and Their Ratio			Ratio of Indian to:	
	American Indian and Alaska Native	U.S. All Races	American Indian and Alaska Native	U.S. All Races	U.S. Other than White	U.S. All Races	U.S. Other than White
1985	204	29,453	14.1	11.5	6.7	1.2	2.1
1984	181	29,286	12.9	11.6	6.6	1.1	2.0
1983	196	28,295	14.7	11.4	6.4	1.3	2.3
1982	178	28,242	13.6	11.6	6.4	1.2	2.1
1981	191	27,596	15.5	11.5	6.8	1.3	2.3
1980	173	26,869	14.1	11.4	6.7	1.2	2.1
1979	188	27,204	16.1	11.7	7.9	1.4	2.0
1978	150	27,294	14.0	12.0	7.4	1.2	1.9
1977	199	28,681	20.5	12.9	7.8	1.6	2.6
1976	168	26,832	17.9	12.3	7.6	1.5	2.4
1975	180	27,063	21.2	12.6	7.5	1.7	2.8
1974	148	25,683	18.0	12.2	7.2	1.5	2.5
1973	149	25,118	19.8	12.0	7.2	1.7	2.8
1972	138	25,004	18.5	12.1	7.5	1.5	2.5
1971	135	24,092	19.9	11.9	7.0	1.7	2.8
1970	105	22,630	17.9	11.8	6.5	1.5	2.8
1969	94	22,364	16.8	11.3	6.3	1.5	2.7
1968	90	21,372	17.5	11.0	5.7	1.6	3.1
1967	94	21,325	16.2	11.1	6.1	1.5	2.7
1966	64	21,281	15.2	11.2	6.1	1.4	2.5
1965	65	21,507	12.9	11.4	6.1	1.1	2.1
1964	52	20,588	15.8	11.0	5.6	1.4	2.8
1963	66	20,825	15.6	11.3	6.0	1.4	2.6
1962	59	20,207	16.9	11.1	5.6	1.5	3.0
1961	61	18,999	16.7	10.5	5.6	1.6	3.0
1960	57	19,041	16.8	10.6	5.4	1.6	3.1
1959	57	18,633	17.0	10.6	5.5	1.6	3.1
1958	61	18,519	18.7	10.5	5.1	1.8	3.7
1957	58	16,632	17.6	9.6	4.7	1.8	3.7
1956	45	16,727	12.5	9.7	4.4	1.3	2.8
1955	39	16,760	11.9	9.9	4.3	1.2	2.8

NOTE: Estimated population methodology for the Indian population revised in 1976. Maine, New York and Pennsylvania included as reservation states beginning in 1979, Connecticut, Rhode Island and Texas in 1983 and Alabama in 1984. Decennial Census population counts used for 1960, 1970 and 1980.

SUICIDE DEATHS AND MORTALITY RATES

American Indians and Alaska Natives in Reservation States, U.S. All Races and Other than White Race, Age-Adjusted Rates per 100,000 Population, 1955-1985

CHART 4.20



SUICIDE DEATH RATES BY AGE AND SEX
INDIANS AND ALASKA NATIVES
 (1983-85)

The age-specific suicide death rate (1983-1985) for Indian males was higher for all age groups in comparison to Indian females. The Indian male rate exceeded 40.0 deaths per 100,000 population for age groups 15 through 34.

TABLE 4.20

American Indians and Alaska Natives, 1983-1985			
	Both Sexes	Male	Female
Under 5 years	—	—	—
5-14 years	1.6	1.7	1.5
15-24 years	26.8	45.1	8.4
25-34 years	23.9	42.5	6.0
35-44 years	17.4	28.4	6.9
45-54 years	11.2	20.0	3.0
55-64 years	9.5	15.4	4.1
65-74 years	7.0	12.3	2.5
75-84 years	1.6	3.7	—
85 years +	—	—	—

U.S. All Races, 1984			
	Both Sexes	Male	Female
Under 5 years	—	—	—
5-14 years	0.7	0.9	0.3
15-24 years	12.5	19.7	4.4
25-34 years	15.5	24.4	6.1
35-44 years	15.1	21.1	7.7
45-54 years	16.2	23.7	9.2
55-64 years	17.3	25.6	8.5
65-74 years	18.8	30.7	7.3
75-84 years	22.0	47.9	6.3
85 years +	18.4	52.5	4.9

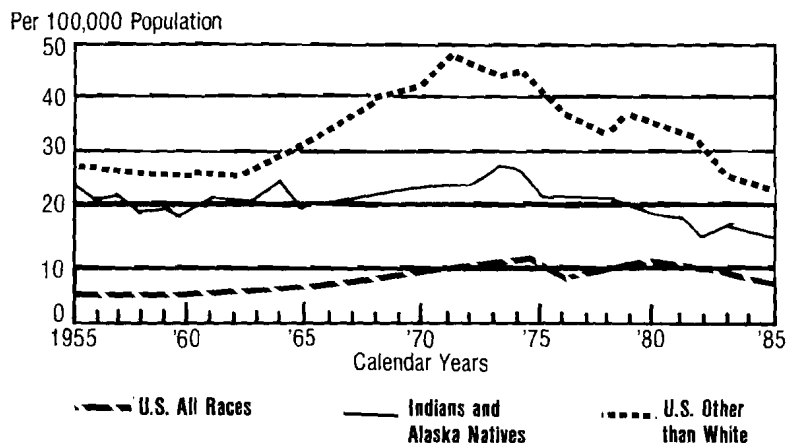
U.S. Other than White Race, 1984			
	Both Sexes	Male	Female
Under 5 years	—	—	—
5-14 years	0.4	0.6	0.3
15-24 years	7.8	12.8	2.9
25-34 years	11.2	19.6	3.7
35-44 years	9.0	15.3	3.6
45-54 years	7.7	11.7	4.3
55-64 years	8.0	13.3	3.7
65-74 years	7.9	14.1	3.2
75-84 years	6.9	15.7	1.3
85 years +	6.7	13.5	3.3

— Represents zero.

SUICIDE MORTALITY RATES BY AGE AND SEX

American Indians and Alaska Natives in Reservation States, 1983-1985, U.S. All Races and Other than White Race, 1984, Rates per 100,000 Population in Age/Sex Groups Specified

CHART 4.21



AGE-ADJUSTED HOMICIDE DEATH RATES

The age-adjusted homicide death rate for American Indians and Alaska Natives falls between the rates for the U.S. Other than White and U.S. All Races populations. In 1985, the Indian rate was 14.3 deaths per 100,000 population compared to 24.4 for the U.S. Other than White and 8.3 for the U.S. All Races populations.

TABLE 4.21

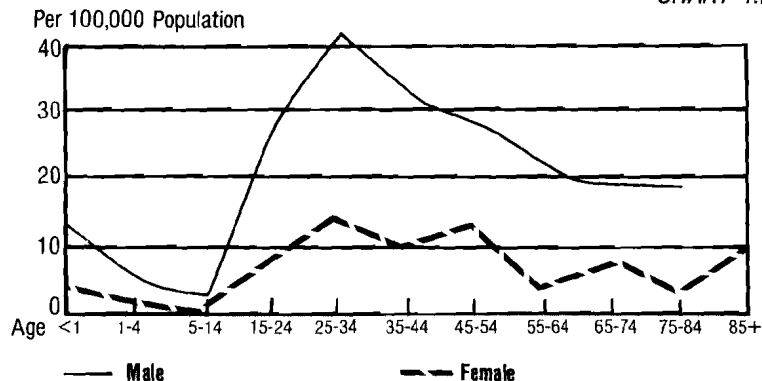
Calendar Year	Number of Deaths		Age-Adjusted Rates and Their Ratio				
	American Indian and Alaska Native	U.S. All Races	American Indian and Alaska Native	U.S. All Races	U.S. Other than White	Ratio of Indian to: U.S. All Races	U.S. Other than White
1985	191	19,893	14.3	8.3	24.4	1.7	0.6
1984	189	19,796	14.5	8.4	24.9	1.7	0.6
1983	217	20,191	16.4	8.6	26.4	1.9	0.6
1982	188	22,358	14.9	9.7	30.0	1.5	0.5
1981	207	23,646	17.9	10.4	33.3	1.7	0.5
1980	212	24,278	18.1	10.8	35.0	1.7	0.5
1979	209	22,550	18.9	10.4	36.0	1.8	0.5
1978	218	20,432	21.2	9.6	33.4	2.2	0.6
1977	197	19,968	20.9	9.6	34.5	2.2	0.6
1976	185	19,554	21.6	9.5	36.4	2.3	0.6
1975	185	21,310	21.9	10.5	41.1	2.1	0.5
1974	203	21,465	26.4	10.8	44.5	2.4	0.6
1973	196	20,465	27.2	10.5	44.4	2.6	0.6
1972	159	19,638	23.2	10.3	46.6	2.3	0.5
1971	149	18,787	24.5	10.0	46.8	2.5	0.5
1970	125	16,848	23.8	9.1	41.3	2.6	0.6
1969	132	15,477	22.5	8.6	40.5	2.6	0.6
1968	116	14,686	22.2	8.2	38.8	2.7	0.6
1967	110	13,425	20.3	7.7	36.3	2.6	0.6
1966	79	11,606	20.3	6.7	31.9	3.0	0.6
1965	102	10,712	19.7	6.3	29.8	3.1	0.7
1964	84	9,814	23.6	5.8	27.6	4.1	0.9
1963	85	9,225	22.3	5.5	26.6	4.1	0.8
1962	80	9,013	21.0	5.5	26.3	3.8	0.8
1961	63	8,578	20.9	5.3	24.9	3.9	0.8
1960	80	8,464	19.5	5.3	25.8	3.7	0.8
1959	62	8,159	20.5	5.1	25.8	4.0	0.8
1958	69	7,815	20.4	4.9	25.3	4.2	0.8
1957	73	7,641	21.8	4.9	25.9	4.4	0.8
1956	76	7,629	21.7	5.0	26.5	4.3	0.8
1955	77	7,418	23.8	4.8	25.7	5.0	0.9

NOTE: Estimated population methodology for the Indian population revised in 1976. Maine, New York and Pennsylvania included as reservation states beginning in 1979, Connecticut, Rhode Island and Texas in 1983 and Alabama in 1984. Decennial Census population counts used for 1960, 1970 and 1980.

HOMICIDE DEATHS AND MORTALITY RATES

American Indians and Alaska Natives in Reservation States, U.S. All Races and Other than White Race, Age-Adjusted Rates per 100,000 Population, 1955-1985

CHART 4.22



HOMICIDE DEATH RATES BY AGE AND SEX

INDIANS AND ALASKA NATIVES (1983-85)

The age-specific homicide death rate (1983-1985) for Indian males was higher for all age groups through age 84 in comparison to Indian females. The Indian male rate exceeded 25.0 deaths per 100,000 population for age groups 15 through 54.

TABLE 4.22

	American Indians and Alaska Natives, 1983-1985		
	Both Sexes	Male	Female
Under 1 year	7.9	11.7	4.0
1— 4 years	3.7	5.5	1.7
5—14 years	1.4	1.9	0.9
15—24 years	17.9	28.2	7.6
25—34 years	27.0	41.3	13.2
35—44 years	20.7	32.6	9.5
45—54 years	19.8	27.8	12.5
55—64 years	12.0	20.9	4.1
65—74 years	9.7	18.5	6.9
75—84 years	9.7	18.6	2.9
85 years +	5.7	—	9.5

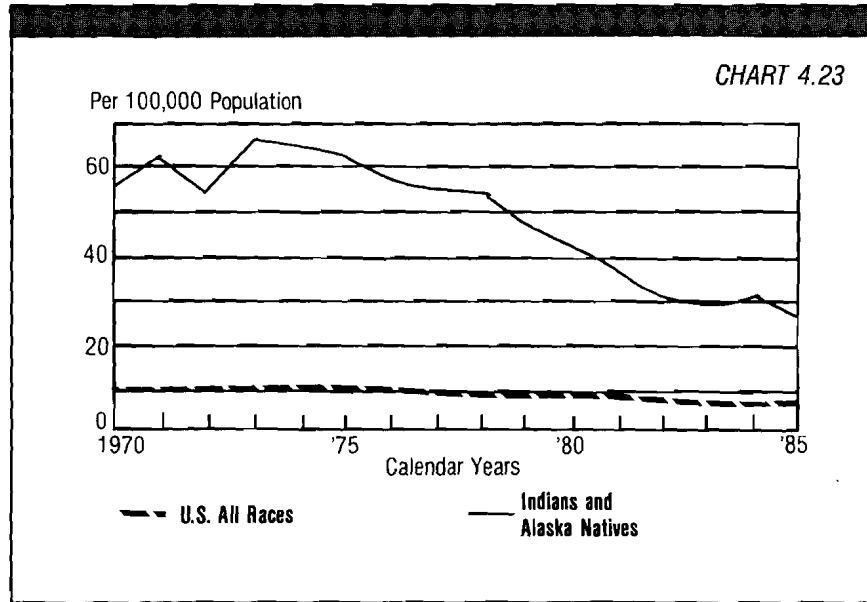
	U.S. All Races, 1984		
	Both Sexes	Male	Female
Under 1 year	6.5	7.2	5.8
1— 4 years	2.4	2.4	2.4
5—14 years	1.3	1.3	1.3
15—24 years	12.0	18.1	5.8
25—34 years	14.7	23.5	5.9
35—44 years	11.3	18.2	4.7
45—54 years	8.5	14.1	3.3
55—64 years	5.8	9.4	2.6
65—74 years	4.2	6.5	2.3
75—84 years	4.4	6.2	3.4
85 years +	4.3	7.3	3.1

	U.S. Other than White Race, 1984		
	Both Sexes	Male	Female
Under 1 year	15.5	17.4	13.5
1—4 years	5.0	4.3	5.7
5—14 years	2.8	2.9	2.7
15—24 years	32.7	52.7	13.1
25—34 years	45.7	78.4	16.4
35—44 years	35.6	62.8	12.4
45—54 years	25.4	47.4	7.2
55—64 years	19.1	35.0	6.0
65—74 years	14.9	26.6	6.1
75—84 years	14.9	24.9	8.5
85 years +	14.3	25.7	8.7

— Represents zero.

HOMICIDE MORTALITY RATES BY AGE AND SEX

American Indians and Alaska Natives in Reservation States, 1983-1985, U.S. All Races and Other than White Race, 1984, Rates per 100,000 Population in Age/Sex Groups Specified



AGE-ADJUSTED ALCOHOLISM DEATH RATES

The age-adjusted alcoholism death rate for American Indians and Alaska Natives has decreased 61 percent since its peak in 1973 of 66.1 deaths per 100,000 population. In 1985, the Indian rate was still 4.2 times the rate for U.S. All Races, 26.1 compared to 6.2.

TABLE 4.23

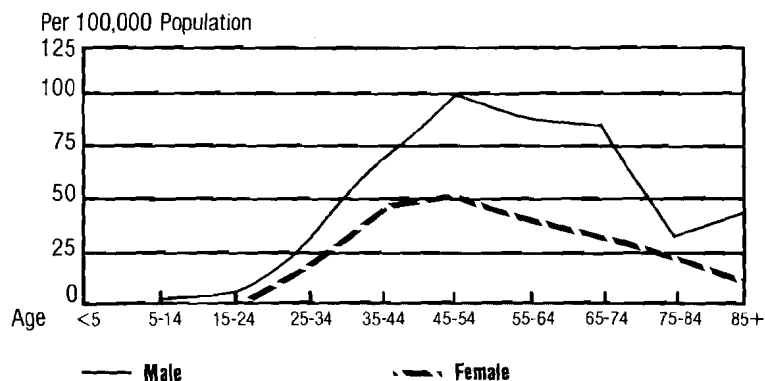
Calendar Year	Number of Deaths		Age-Adjusted Rates and Their Ratio		
	American Indian and Alaska Native	U.S. All Races	American Indian and Alaska Native	U.S. All Races	Ratio of Indian to: U.S. All Races
1985	281	15,844	26.1	6.2	4.2
1984	316	15,706	30.0	6.2	4.8
1983	293	15,424	28.9	6.1	4.7
1982	298	15,596	30.7	6.4	4.8
1981	338	16,745	35.8	7.0	5.2
1980	382	17,742	41.3	7.5	5.5
1979	398	17,064	45.1	7.4	6.1
1978	437	18,490	54.5	8.1	6.7
1977	429	18,437	55.5	8.3	6.7
1976	425	18,484	58.2	8.6	6.8
1975	403	18,190	62.2	8.6	7.2
1974	417	18,530	64.2	8.6	7.5
1973	399	17,791	66.1	8.6	7.7
1972	315	17,484	55.0	8.6	6.4
1971	334	16,891	62.9	8.4	7.5
1970	272	16,130	56.2	8.1	6.9
1969	267	15,138	56.6	7.7	7.4

NOTE: For 1969-1978 includes deaths due to alcoholism, alcoholic psychoses and cirrhosis of the liver with mention of alcoholism. For 1979 and after includes deaths due to alcohol dependence syndrome, alcoholic psychoses and chronic liver disease and cirrhosis, specified as alcoholic. Population estimation methodology for the American Indian and Alaska Native population revised in 1976. Maine, New York and Pennsylvania included as Reservation States beginning in 1979, Connecticut, Rhode Island and Texas in 1983 and Alabama in 1984. Decennial Census population counts used for 1970 and 1980.

ALCOHOLISM DEATHS AND MORTALITY RATES

American Indians and Alaska Natives in Reservation States and U.S. All Races, Age-Adjusted Rates per 100,000 Population, 1969-1985

CHART 4.24



ALCOHOLISM DEATH RATES BY AGE AND SEX

INDIANS AND ALASKA NATIVES (1983-85)

The age-specific alcoholism death rate (1983-1985) for Indian males was higher for all age groups in comparison to Indian females. The Indian male rate ranged from 66.9 to 96.8 deaths per 100,000 population for age groups 35 through 74.

TABLE 4.24

	American Indians and Alaska Natives, 1983-1985		
	Both Sexes	Male	Female
Under 5 years	—	—	—
5—14 years	0.1	0.2	—
15—24 years	1.0	1.5	0.6
25—34 years	22.4	28.4	16.6
35—44 years	54.3	66.9	42.4
45—54 years	71.6	96.8	48.3
55—64 years	63.6	88.1	41.7
65—74 years	59.8	84.8	39.3
75—84 years	21.1	29.8	14.4
85 years +	22.9	43.1	9.5

	U.S. All Races, 1984		
	Both Sexes	Male	Female
Under 5 years	0.0	0.0	0.0
5—14 years	0.0	0.0	—
15—24 years	0.1	0.2	0.1
25—34 years	2.2	3.1	1.3
35—44 years	8.2	12.3	4.3
45—54 years	16.2	24.4	8.4
55—64 years	21.4	33.5	10.7
65—74 years	17.7	29.1	8.7
75—84 years	9.0	17.6	3.8
85 years +	2.7	7.0	1.0

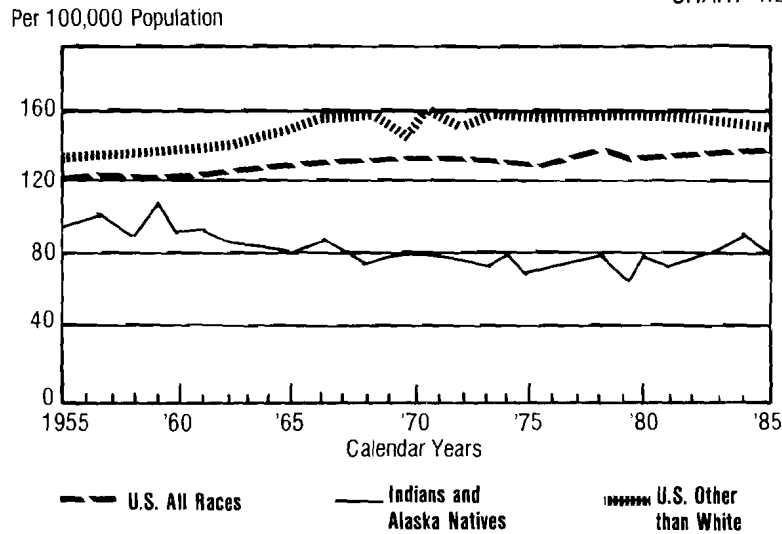
	U.S. Other than White Race, 1984		
	Both Sexes	Male	Female
Under 5 years	0.0	0.1	—
5—14 years	0.0	0.0	—
15—24 years	0.3	0.3	0.2
25—34 years	6.4	8.2	4.7
35—44 years	22.3	33.8	12.5
45—54 years	31.3	51.1	14.9
55—64 years	35.4	55.5	18.9
65—74 years	22.7	36.4	12.5
75—84 years	10.8	20.7	4.4
85 years +	4.0	9.5	1.3

— Represents zero.
0.0 Rounds to zero.

ALCOHOLISM MORTALITY RATES BY AGE AND SEX

American Indians and Alaska Natives in Reservation States, 1983-1985, U.S. All Races and Other than White Race, 1984, Rates per 100,000 Population in Age/Sex Groups Specified

CHART 4.25



AGE-ADJUSTED MALIGNANT NEOPLASM DEATH RATES

The age-adjusted malignant neoplasm death rate for American Indians and Alaska Natives has increased 29 percent since its low in 1979 of 65.8 deaths per 100,000 population. In 1985, the Indian rate was still 64 percent of the U.S. All Races rate, 84.9 compared to 133.6.

TABLE 4.25

Calendar Year	Number of Deaths		Age-Adjusted Rates and Their Ratio				
	American Indian and Alaska Native	U.S. All Races	American Indian and Alaska Native	U.S. All Races	U.S. Other than White	Ratio of Indian to: U.S. All Races	U.S. Other than White
1985	931	461,563	84.9	133.6	155.7	0.6	0.5
1984	941	453,492	88.4	133.5	157.8	0.7	0.6
1983	853	442,986	81.5	132.6	156.8	0.6	0.5
1982	780	433,795	80.3	132.5	157.0	0.6	0.5
1981	707	422,094	74.0	131.6	156.7	0.6	0.5
1980	720	416,509	76.4	132.8	158.2	0.6	0.5
1979	592	403,395	65.8	130.8	159.0	0.5	0.4
1978	646	396,992	77.0	133.8	159.1	0.6	0.5
1974	526	360,472	77.7	131.8	156.6	0.6	0.5
1973	477	351,055	73.4	130.7	156.4	0.6	0.5
1972	461	345,618	76.1	130.7	152.2	0.6	0.5
1971	451	337,398	80.0	130.7	160.8	0.6	0.5
1970	421	330,730	80.5	129.9	148.3	0.6	0.5
1969	407	323,092	78.4	129.7	158.6	0.6	0.5
1968	383	318,547	75.7	130.2	158.3	0.6	0.5
1967	392	310,983	80.8	129.1	154.3	0.6	0.5
1966	386	303,736	83.0	128.4	152.7	0.6	0.5
1965	362	297,588	80.1	127.0	147.7	0.6	0.5
1964	376	289,577	83.5	126.6	145.6	0.7	0.6
1963	342	285,362	86.3	126.6	145.2	0.7	0.6
1962	330	278,562	86.1	125.6	140.9	0.7	0.6
1961	347	273,502	94.3	125.4	140.4	0.8	0.7
1960	325	267,627	91.1	125.8	139.3	0.7	0.7
1959	359	260,047	109.3	124.5	136.2	0.9	0.8
1958	293	254,426	89.9	124.6	135.3	0.7	0.7
1957	333	253,183	105.2	126.4	136.7	0.8	0.8
1956	333	247,357	104.5	126.3	136.2	0.8	0.8
1955	296	240,681	95.0	125.8	131.5	0.8	0.7

NOTE: Estimated population methodology for the American Indian and Alaska Native population revised in 1976. Maine, New York and Pennsylvania included as reservation states beginning in 1979, Connecticut, Rhode Island and Texas in 1983 and Alabama in 1984. Decennial Census population counts used for 1960, 1970, and 1980.

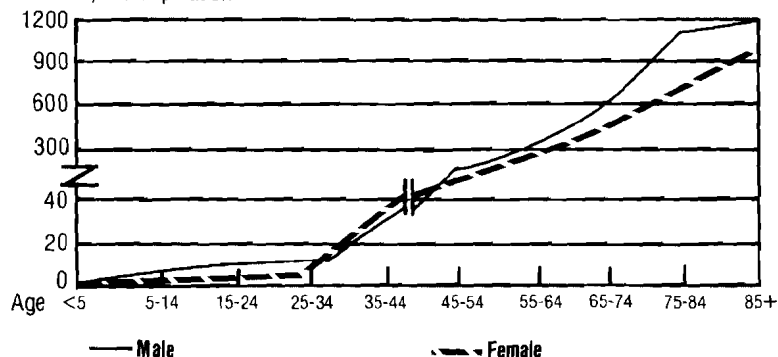
MALIGNANT NEOPLASM DEATHS AND MORTALITY RATES

American Indians and Alaska Natives in Reservation States, U.S. All Races and Other than White Race, Age-Adjusted Rates per 100,000 Population, 1955-1985

Indians and Alaska Natives (1983-85)

CHART 4.26

Per 100,000 Population



MALIGNANT NEOPLASM DEATH RATES BY AGE AND SEX

The age-specific malignant neoplasm death rate (1983-1985) for Indian males was higher for all age groups, except 25 through 44 years, in comparison to Indian females. The rates for Indian males and females increased with age.

TABLE 4.26

American Indians and Alaska Natives, 1983-1985

	Both Sexes	Male	Female
Under 5 years	0.7	0.9	0.4
5-14 years	1.0	1.3	0.7
15-24 years	4.8	6.7	2.9
25-34 years	7.2	6.9	7.5
35-44 years	30.5	24.8	35.9
45-54 years	107.6	110.4	105.1
55-64 years	279.1	311.4	249.4
65-74 years	512.7	613.6	429.8
75-84 years	880.3	1,098.5	712.1
85 years +	1,058.4	1,207.4	959.9

U.S. All Races, 1984

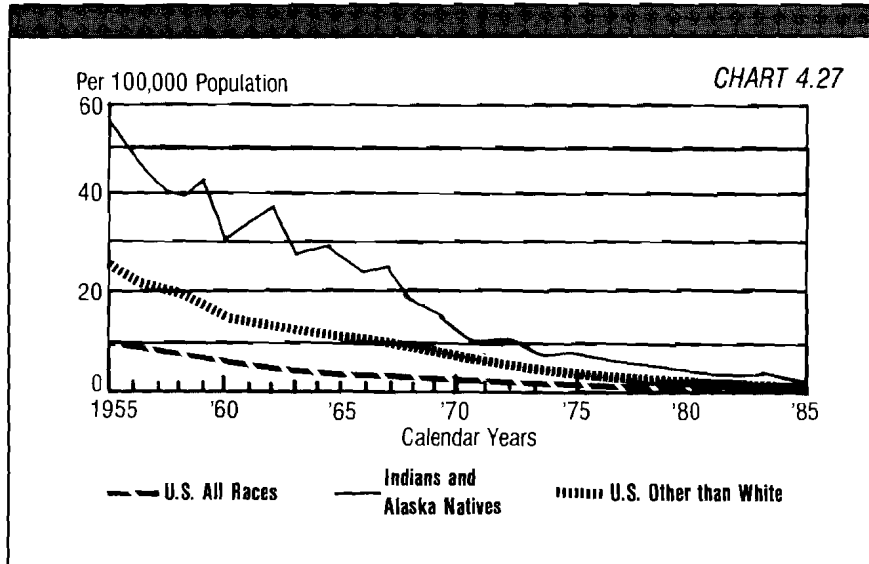
	Both Sexes	Male	Female
Under 5 years	3.8	4.1	3.5
5-14 years	3.6	4.0	3.0
15-24 years	5.5	6.7	4.2
25-34 years	13.0	12.8	13.1
35-44 years	46.6	41.7	51.4
45-54 years	170.5	177.0	164.4
55-64 years	448.4	530.7	375.5
65-74 years	834.8	1,087.5	638.0
75-84 years	1,272.1	1,825.5	944.2
85 years +	1,604.0	2,423.9	1,272.2

U.S. Other than White Race, 1984

	Both Sexes	Male	Female
Under 5 years	3.6	4.3	3.0
5-14 years	3.3	3.6	3.1
15-24 years	5.1	6.2	4.0
25-34 years	14.8	14.5	15.0
35-44 years	64.6	63.3	65.7
45-54 years	227.2	270.1	191.6
55-64 years	567.0	748.9	418.1
65-74 years	919.5	1,303.6	633.8
75-84 years	1,363.9	2,014.1	944.6
85 years +	1,525.4	2,321.6	1,132.7

MALIGNANT NEOPLASM MORTALITY RATES BY AGE AND SEX

American Indians and Alaska Natives in Reservation States, 1983-1985, U.S. All Races and Other than White Race, 1984, Rates per 100,000 Population for Age/Sex Groups Specified



AGE-ADJUSTED TUBERCULOSIS DEATH RATES

The age-adjusted tuberculosis death rate for American Indians and Alaska Natives has dropped from 57.9 deaths per 100,000 population in 1955 to 1.6 in 1985, a decrease of 97 percent. The Indian rate is still 3.2 times the U.S. All Races rate of 0.5 for 1985.

TABLE 4.27

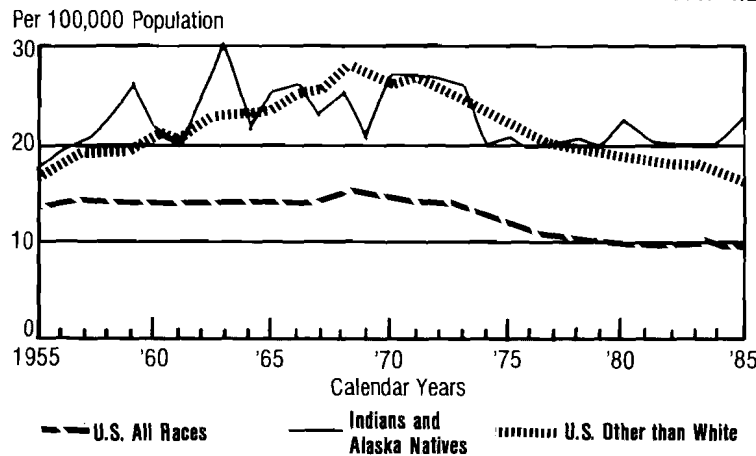
Calendar Year	Number of Deaths		Age-Adjusted Rates and Their Ratio				
	American Indian and Alaska Native	U.S. All Races	American Indian and Alaska Native	U.S. All Races	U.S. Other than White	Ratio of Indian to: U.S. All Races	U.S. Other than White
1985	20	1,752	1.6	0.5	1.8	3.2	0.9
1984	20	1,729	1.8	0.5	2.0	3.6	0.9
1983	36	1,779	3.3	0.5	1.9	6.6	1.7
1982	22	1,807	2.0	0.6	2.0	3.3	1.0
1981	31	1,937	3.2	0.6	2.3	5.3	1.4
1980	36	1,978	3.6	0.6	2.4	6.0	1.5
1979	35	2,007	3.7	0.7	2.5	5.3	1.5
1978	43	2,914	5.2	1.0	3.1	5.2	1.7
1977	40	2,968	5.2	1.0	3.5	5.2	1.5
1976	55	3,130	7.3	1.1	3.8	6.6	1.9
1975	64	3,333	8.6	1.2	4.0	7.2	2.2
1974	59	3,513	8.5	1.3	4.6	6.5	1.8
1973	52	3,875	8.1	1.5	5.2	5.4	1.6
1972	61	4,376	9.9	1.7	5.9	5.8	1.7
1971	56	4,501	10.0	1.8	6.6	5.6	1.5
1970	63	5,217	11.4	2.2	6.8	5.2	1.7
1969	86	5,567	16.1	2.3	8.0	7.0	2.0
1968	78	6,292	16.5	2.7	9.4	6.1	1.8
1967	90	6,901	24.3	3.0	10.1	8.1	2.4
1966	91	7,625	23.7	3.4	10.8	7.0	2.2
1965	104	7,934	27.3	3.6	10.9	7.6	2.5
1964	111	8,303	29.5	3.8	11.5	7.8	2.6
1963	130	9,311	28.9	4.3	12.8	6.7	2.3
1962	150	9,506	37.2	4.5	13.4	8.3	2.8
1961	120	10,470	35.2	4.8	14.0	7.3	2.5
1960	115	10,866	32.3	5.4	15.1	6.0	2.1
1959	163	11,456	43.0	5.8	16.6	7.4	2.6
1958	150	12,361	39.6	6.5	19.0	6.1	2.1
1957	186	13,324	41.0	7.1	20.0	5.8	2.1
1956	212	14,061	47.6	7.7	22.0	6.2	2.2
1955	253	14,940	57.9	8.4	24.1	6.9	2.4

NOTE: Estimated population methodology revised in 1976. Maine, New York and Pennsylvania included as reservation states beginning in 1979, Connecticut, Rhode Island and Texas in 1983 and Alabama in 1984. Decennial Census population counts used for 1960, 1970 and 1980.

TUBERCULOSIS DEATHS AND MORTALITY RATES

American Indians and Alaska Natives in Reservation States, U.S. All Races and Other than White Race, Age-Adjusted Rates per 100,000 Population, 1955-1985

CHART 4.28



AGE-ADJUSTED DIABETES MELLITUS DEATH RATES

The age-adjusted diabetes mellitus death rate for American Indians and Alaska Natives has varied within a range of 19.0 to 23.0 deaths per 100,000 population, since 1974. In 1985, the Indian rate of 22.9 was 2.4 times the U.S. All Races rate of 9.6.

TABLE 4.28

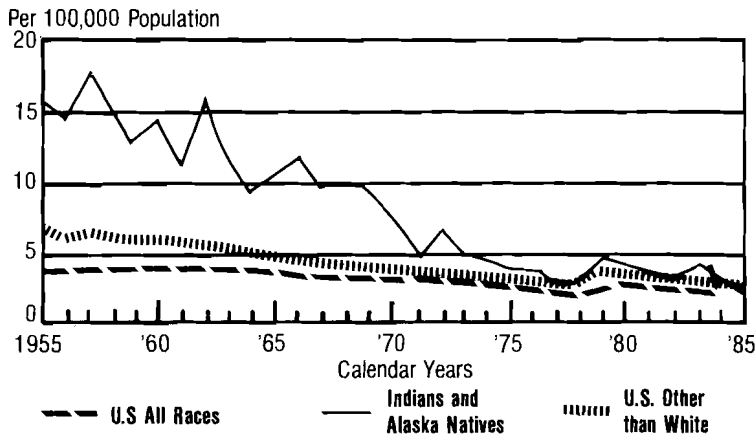
Calendar Year	Number of Deaths		Age-Adjusted Rates and Their Ratio				
	American Indian and Alaska Native	U.S. All Races	American Indian and Alaska Native	U.S. All Races	U.S. Other Than White	Ratio of Indian to:	
						U.S. All Races	U.S. Other Than White
1985	247	36,969	22.9	9.6	16.1	2.4	1.4
1984	219	35,787	20.6	9.5	17.4	2.2	1.2
1983	210	36,246	20.5	9.9	17.8	2.1	1.2
1982	193	34,583	20.2	9.6	16.7	2.1	1.2
1981	191	34,642	20.8	9.8	17.9	2.1	1.2
1980	204	34,851	22.6	10.1	18.8	2.2	1.2
1979	170	33,192	19.2	10.0	18.5	1.9	1.0
1978	183	33,841	22.6	10.4	19.0	2.2	1.2
1977	161	32,989	21.1	10.4	19.5	2.0	1.1
1976	149	34,508	20.2	11.1	21.0	1.8	1.0
1975	145	35,230	20.8	11.6	21.7	1.8	1.0
1974	139	37,329	21.4	12.5	23.4	1.7	0.9
1973	157	38,208	25.6	13.2	25.3	1.9	1.0
1972	158	38,674	27.3	13.6	26.0	2.0	1.1
1971	166	38,256	30.1	13.8	27.5	2.2	1.1
1970	143	38,324	27.1	14.1	25.2	1.9	1.1
1969	127	38,541	21.1	14.5	27.7	1.5	0.8
1968	141	38,352	25.6	14.7	28.0	1.7	0.9
1967	107	35,049	23.3	13.7	24.5	1.7	1.0
1966	115	34,597	25.7	13.9	24.8	1.8	1.0
1965	110	33,174	25.4	13.5	23.6	1.9	1.1
1964	95	32,279	22.0	13.5	23.6	1.6	0.9
1963	11	532,465	29.9	13.8	23.1	2.2	1.3
1962	89	31,222	23.9	13.5	21.8	1.8	1.1
1961	70	30,098	19.6	13.3	21.0	1.5	0.9
1960	71	29,971	20.3	13.6	21.6	1.5	0.9
1959	82	28,080	26.1	13.4	19.4	1.9	1.3
1958	65	27,501	20.8	13.0	18.8	1.6	1.1
1957	62	27,180	19.6	13.5	18.2	1.5	1.1
1956	79	26,184	20.2	13.0	17.1	1.6	1.2
1955	64	25,488	17.0	13.0	16.5	1.3	1.0

NOTE: Estimated population methodology for the American Indian and Alaska Native population revised in 1976. Maine, New York and Pennsylvania included as reservation states beginning in 1979, Connecticut, Rhode Island and Texas in 1983 and Alabama in 1984. Decennial Census population counts used for 1960, 1970, and 1980.

DIABETES MELLITUS DEATHS AND MORTALITY RATES

American Indians and Alaska Natives in Reservation States, U.S. All Races and Other than White Race, Age-Adjusted Rates per 100,000 Population, 1955-1985

CHART 4.29



AGE-ADJUSTED GASTROINTESTINAL DISEASE DEATH RATES

The age-adjusted gastrointestinal disease death rate for American Indians and Alaska Natives has decreased 86 percent since the 1955 rate of 15.4 deaths per 100,000 population. In 1985, the Indian rate (2.2) was lower than the U.S. All Races rate (2.7) for the first time.

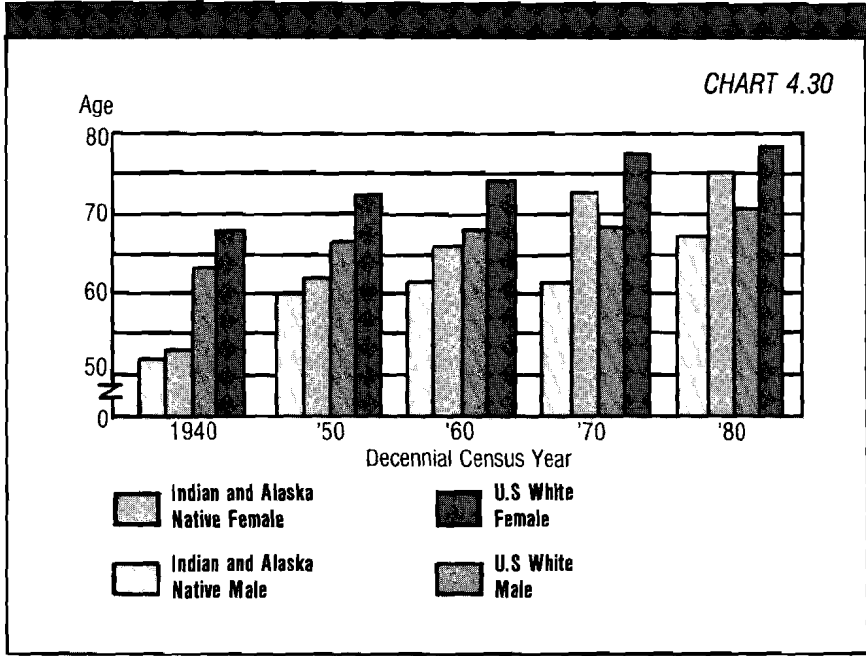
TABLE 4.29

Calendar Year	Number of Deaths		Age-Adjusted Rates and Their Ratio				
	Indian & Alaska Native	U.S. All Races	Indian & Alaska Native	U.S. All Races	U.S. Other Than White	Ratio of Indian to:	
						U.S. All Races	U.S. Other Than White
1985	32	11,523	2.2	2.7	2.8	0.8	0.8
1984	45	11,425	3.7	2.8	3.0	1.3	1.2
1983	48	11,271	4.3	2.8	2.9	1.5	1.5
1982	35	11,040	3.2	2.8	2.7	1.1	1.2
1981	36	10,900	3.3	2.8	2.9	1.2	1.1
1980	46	11,004	4.2	3.0	3.2	1.4	1.3
1979	51	10,390	4.7	2.9	3.2	1.6	1.5
1978	34	6,201	2.7	1.9	2.5	1.4	1.1
1977	32	6,156	2.6	2.0	2.5	1.3	1.0
1976	43	6,261	3.9	2.1	2.7	1.9	1.4
1975	41	6,558	3.7	2.2	3.0	1.7	1.2
1974	52	7,066	4.9	2.4	3.0	2.0	1.6
1973	42	7,371	4.8	2.6	3.2	1.8	1.5
1972	56	7,502	6.4	2.7	3.3	2.4	1.9
1971	45	7,699	5.1	2.8	3.5	1.8	1.5
1970	66	7,554	7.8	2.9	3.5	2.7	2.2
1969	82	7,833	9.8	3.0	4.0	2.5	2.5
1968	104	8,070	9.9	3.1	4.0	3.2	2.5
1967	80	7,504	9.8	3.0	3.9	3.3	2.5
1966	107	7,552	11.6	3.0	4.4	3.9	2.6
1965	111	7,899	10.9	3.2	4.9	3.4	2.2
1964	100	8,178	9.6	3.3	5.3	2.9	1.8
1963	110	8,246	11.3	3.4	5.3	3.3	2.1
1962	155	8,194	16.2	3.4	5.6	4.8	2.9
1961	119	7,820	11.1	3.3	5.4	3.4	2.1
1960	152	7,932	14.2	3.4	6.1	4.2	2.3
1959	124	7,758	13.0	3.3	5.9	3.9	2.2
1958	159	7,838	15.4	3.5	5.9	4.4	2.6
1957	198	7,971	18.0	3.5	6.6	5.1	2.7
1956	137	7,508	13.9	3.4	6.0	4.1	2.3
1955	165	7,754	15.4	3.6	6.8	4.3	2.3

NOTE: Estimated population methodology for the American Indian and Alaska Native population revised in 1976. Maine, New York and Pennsylvania included as Reservation States beginning in 1979, Connecticut, Rhode Island and Texas in 1983 and Alabama in 1984. Decennial census population counts used for 1960, 1970 and 1980.

GASTROINTESTINAL DISEASE DEATHS AND MORTALITY RATES

American Indians and Alaska Natives in Reservation States, U.S. All Races and Other than White Race, Age-Adjusted Rates per 100,000 Population, 1955-1985



LIFE EXPECTANCY AT BIRTH

Life expectancy at birth for American Indians and Alaska Natives has increased from 51.0 years in 1939-1941 to 71.1 years in 1979-1981. However, it is still 3.3 years less than the 1980 figure of 74.4 for the U.S. White population.

TABLE 4.30

Decennial Census Year	American Indians & Alaska Natives			U.S. White Population		
	Both Sexes	Both Male	Female	Sexes	Male	Female
1980	71.1	67.1	75.1	74.4	70.7	78.1
1970	65.1	60.7	71.2	71.7	68.0	75.6
1960	61.7	60.0	65.7	70.6	67.4	74.1
1950	60.0	58.1	62.2	69.1	66.5	72.2
1940	51.0	51.3	51.9	64.2	62.1	66.6

NOTE: Life expectancy at birth based upon 3 years of mortality experience centered in the Decennial Census Year specified for the American Indian and Alaska Native population and for the single year specified for the U.S. White population.

Data for 1940 and 1950 for both population groups are for Continental U.S. American Indian and Alaska Native data for 1960-1980 are for states in which IHS had responsibilities (1960 & 1970 — 25 states, 1980 — 28 states) and U.S. White population 1960-1980 are for 50 states and the District of Columbia.

LIFE EXPECTANCY AT BIRTH BY RACE AND SEX

CHART 5.1

% Decrease in Mortality thru 1983-85

Infants	84
Under 28 Days	80
28 Days - 11 Months	87
Maternal	87
Pneumonia and Influenza	82
Gastrointestinal	93
Accidents	51
Certain Diseases Originating in the Perinatal Period	87
Tuberculosis, All Forms	97
Congenital Malformations	66

% Increase in Services Provided thru 1987

Hospital Admissions	116
Outpatient Visits	978
Dental Services	1,084

PROGRAM ACCOMPLISHMENTS
SINCE IHS ESTABLISHED (1955)

The Indian Health Service maternal and infant mortality review committees have helped to reduce the infant mortality rate 84 percent (from 1954-1956 to 1983-1985) and the maternal mortality rate 87 percent (from 1957-1959 to 1983-1985). The Indian Health Service tuberculosis control program has helped to reduce tuberculosis mortality 97 percent (from 1954-1956 to 1983-1985).

TABLE 5.1

Health Improvements	CY 1954-1956 Rate	CY 1983-1985 Rate	Percent Decrease
Death Rates:			
Infant ¹	62.7	9.8	84
Neonatal ¹	23.1	4.6	80
Postneonatal ¹	39.7	5.3	87
Maternal	82.6 ²	10.8 ³	87
Pneumonia and influenza ⁴	89.8	16.1	82
Certain conditions originating in the perinatal period ⁴	67.6	9.1	87
Tuberculosis, all forms ⁴	55.1	1.8	97
Gastrointestinal diseases ⁴	39.2	2.9	93
Congenital malformations ⁴	19.0	6.4	66
Accidents ⁴	155.6	75.9	51
Increased Use of Services			
Hospital Admissions	FY 1955 50,143	FY 1987 108,103 ⁵	116
Outpatient Visits	455,000	4,902,987 ⁵	978
Dental Services ⁶	80,000	2,130,690 ⁶	1,084

¹ Rate per 1,000 live births.

² Rate per 100,000 live births, for 1957-1959.

³ Rate per 100,000 live births.

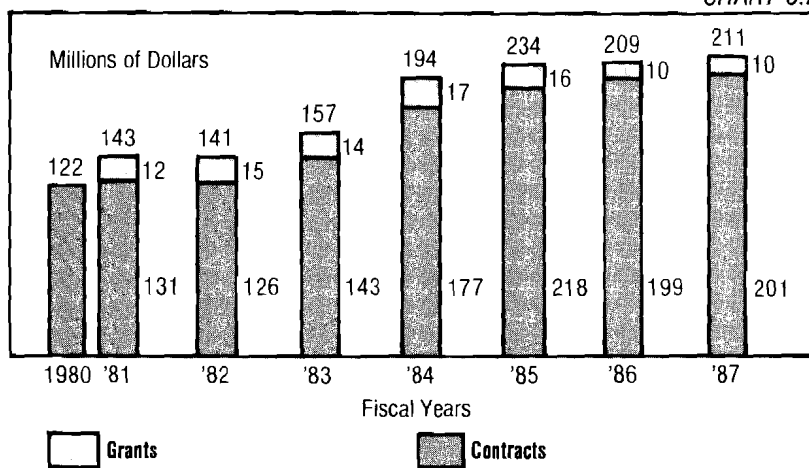
⁴ Rate per 100,000 population.

⁵ IHS and Tribal direct and contract (IHS contract estimated) workload.

⁶ IHS and Tribal direct and contract and urban dental workload.

PROGRAM ACCOMPLISHMENTS

CHART 5.2



INDIAN HEALTH SERVICE TRIBAL HEALTH CONTRACT AND GRANT OBLIGATIONS

Indian Health Service contract and grant obligations for Tribal health have risen from \$122.0 million in FY 1980 to \$211.0 million in FY 1987.

TABLE 5.2

Fiscal Year	Total	Contracts	Grants
1987	\$210.7	\$200.9	\$ 9.8
1986	209.0	199.0	10.1
1985	234.0	218.1	15.9
1984	194.0	177.5	16.5
1983	157.7	143.1	14.6
1982	141.1	126.5	14.6
1981	142.8	130.7	12.1
1980	121.9		
1979	74.0		
1978	70.1		
1977	57.9		
1976	32.6		
1975	17.4		

IHS TRIBAL HEALTH CONTRACT AND GRANT¹ OBLIGATIONS

Fiscal Years 1975-1987, Millions of Dollars

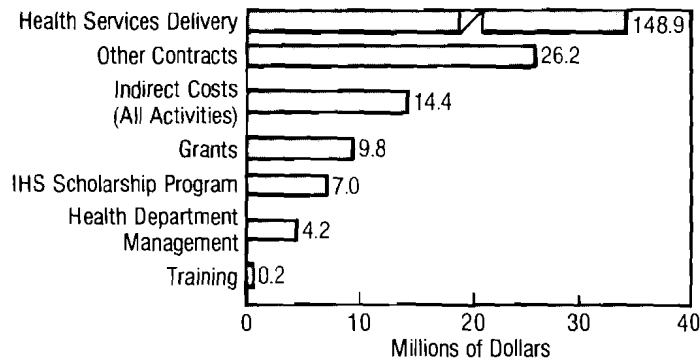
¹ Grant obligations shown for first time, FY 1981. Starting in 1987 IHS Scholarship Program funding was reported under Contracts rather than Grants.

NOTE: Report completed as of January 19, 1988.

SOURCE: TRAIS Contracts Data Base, Data Processing Service Branch/IHS, the Impact Data System run by NIH for PHS, and the PHS Grants Data System.

CHART 5.3

TOTAL OBLIGATIONS: \$210,706,375



INDIAN HEALTH SERVICE TRIBAL HEALTH CONTRACT AND GRANT OBLIGATIONS BY TRIBAL ACTIVITY, FY 1987

The \$148.85 million reported under the Health Services Delivery category for FY 1987 comprised 71 percent of the total Indian Health Service contract and grant obligations for Tribal health.

TABLE 5.3

Tribal Activity	
Contract and Grant Total	\$210,706,375
Contracts Total	200,885,979
Health department management	4,171,395
Health services delivery	148,847,623
Training	203,914
IHS scholarship program	7,018,000
Other contracts	26,221,292 ¹
Indirect costs	14,423,755 ²
Grants	
P.L. 93-638 Projects	9,820,396 ³

¹ "Other contracts" contains \$14,279,354 which has been reported but not assigned to a specific tribal activity as defined on this table.

² Indirect costs are shown separately and are not included in each Tribal contract activity.

³ The grants total includes applied training and development and study grants.

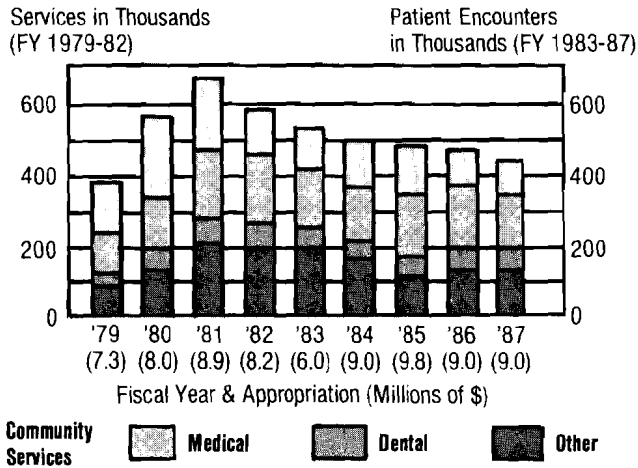
NOTE: Report completed on January 18, 1988.

SOURCE: TRAIS Contracts Data Base, Data Processing Service Branch/IHS, the Impact Data System run by NIH for PHS, and the PHS Grants Data System.

IHS TRIBAL HEALTH CONTRACT AND GRANT OBLIGATIONS BY TRIBAL ACTIVITY

Fiscal Year 1987

CHART 5.4



URBAN INDIAN HEALTH PROGRAM WORKLOAD AND APPROPRIATION

Workload for the Urban Indian Health Program has decreased 32 percent since its peak in FY 1981 of 666,000. In FY 1987, the appropriation for this program was \$9.0 million, and there were 452,000 patient encounters.

TABLE 5.4

Fiscal Year	Total Workload	Community Services	Medical	Dental	Other ²	Appropriation (Millions)
1987 ³	451,966	116,898	146,228	62,377	126,463	\$9,000
1986	485,191	112,071	184,997	60,373	127,071	\$9,000
1985	513,589	153,385	180,094	60,953	119,157	\$9,800
1984	507,055	106,191	162,563	51,800	186,501	\$9,000
1983	534,157	126,814	165,747	52,905	188,691	\$6,000
1982	582,567	142,233	185,502	65,043	189,789	\$8,160
1981	665,980	209,207	185,053	57,887	213,883	\$8,900
1980	564,451	236,383	153,402	54,843	119,823	\$8,000
1979	374,673	154,947	108,654	33,893	77,188	\$7,270

URBAN INDIAN HEALTH PROGRAM WORKLOAD¹ AND APPROPRIATION

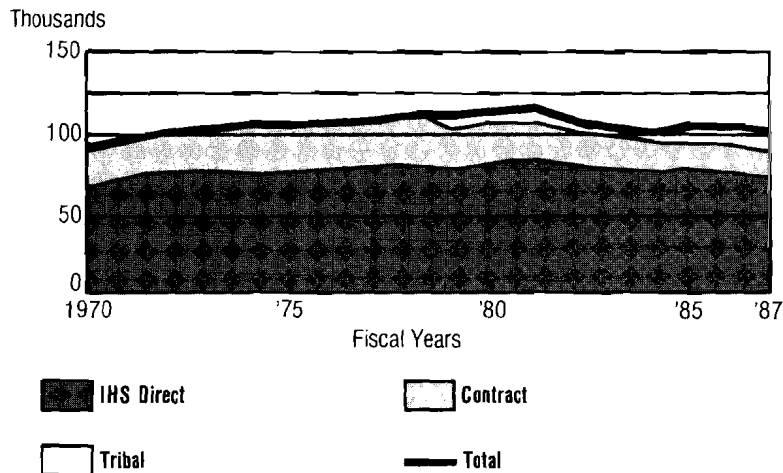
Fiscal Years 1979-1987

¹ Number of services provided—Fiscal Years 1979-1983, number of patient encounters—Fiscal Years 1984-1987.

² In Fiscal Year 1987, the Other category included the following numbers of services provided: Nutrition education (56,085), Health education (40,179), Mental health (12,199), Optometric services (3,963) and Other allied health services which included substance abuse counseling (14,037). Data for previous years also include the provision of these types of services.

³ In Fiscal Year 1987, the Tulsa and Oklahoma City Urban Programs are excluded since they were funded as demonstration projects under the IHS hospitals and clinics activity.

CHART 5.5



NUMBER OF HOSPITAL ADMISSIONS

Total hospital admissions peaked in FY 1978 at 112,000 and have varied within a narrow range since. In FY 1987, there were 108,000 total admissions.

TABLE 5.5

Fiscal Year	Total IHS and Tribal Admissions	Indian Health Service			Total	Tribal	
		Total	Direct	Contract ¹		Direct	Contract
1987	108,103	94,968	76,244	18,724 ³	13,135	5,953	7,182
1986	109,181	96,886	78,162	18,724	12,295	4,969	7,326
1985	108,777	98,245	78,423	19,822	10,532	3,678	6,854 ²
1984	102,843	99,849	77,522	22,327	2,994	2,994	
1983	104,806	102,961	78,027	24,934	1,845	1,845	
1982	104,418	102,343	77,070	25,273	2,075	2,075	
1981	109,353	107,087	81,387	25,700	2,266	2,266	
1980	108,242	106,992	77,798	29,194	1,250	1,250	
1979	107,269	106,329	75,174	31,155	940	940	
1978	112,203	112,203	77,567	34,636			
1977	110,025	110,025	78,424	31,601			
1976	106,461	106,461	76,382	30,079			
1975	105,735	105,735	74,594	31,141			
1974	103,853	103,853	73,402	30,451			
1973	102,350	102,350	75,245	27,105			
1972	102,472	102,472	76,054	26,418			
1971	94,945	94,945	70,729	24,216			
1970	92,710	92,710	67,877	24,833			
1965	91,744	91,744	67,744	24,000			
1960	76,754	76,754	56,874	19,880			
1955	50,143	50,143	42,762	7,381			

¹ Number of discharges used as estimate for number of admissions.

² Comparable tribal contract health services data not available prior to FY 1985.

³ FY 1987 contract data not available; FY 1986 data used as an estimate.

SOURCE: IHS Direct: Monthly Report of Inpatient Services

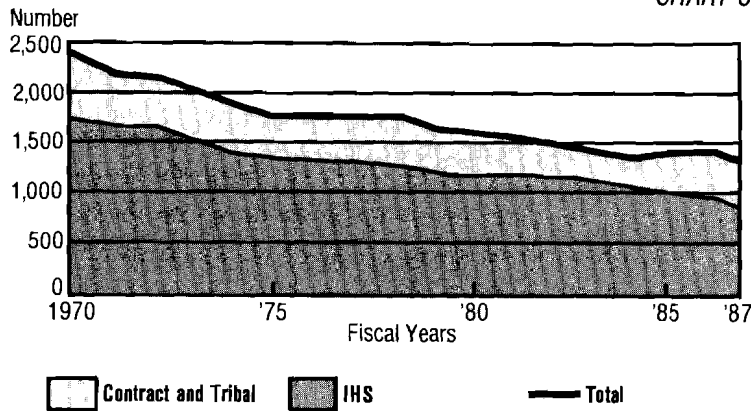
IHS Contract: Annual Report 3I

Tribal: Area submissions

NUMBER OF ADMISSIONS

IHS and Tribal Direct and Contract Hospitals, Fiscal Years 1955-1987

CHART 5.6



AVERAGE DAILY HOSPITAL PATIENT LOAD

The average daily hospital patient load in Indian Health Service and Tribal direct and contract hospitals has decreased 42 percent since FY 1970, although the decline has slowed since FY 1979. The decline has been caused in large part by a drop in average length of stay (e.g., 9.3 days in FY 1970 to 4.6 days in FY 1987).

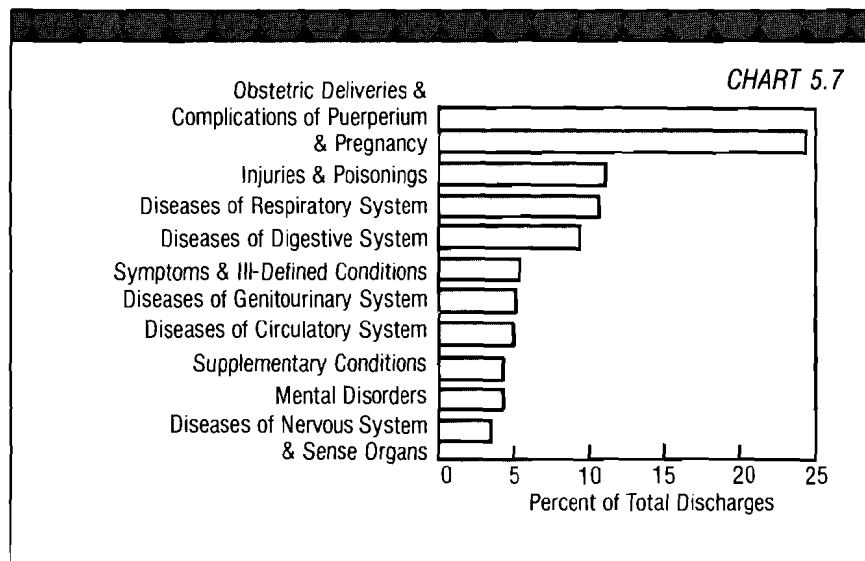
TABLE 5.6

Fiscal Year	Grand Total ADPL	Indian Health Service			Tribal Total	Tribal	
		Total	Direct	Contract		Direct	Contract
1987	1,357	1,191	960	231 ²	166	87	79
1986	1,418	1,248	1,017	231	170	81	89
1985	1,410	1,286	1,052	234	124	47	77 ¹
1984	1,392	1,353	1,072	281	39	39	
1983	1,477	1,449	1,119	330	28	28	
1982	1,488	1,460	1,121	339	28	28	
1981	1,575	1,550	1,194	356	25	25	
1980	1,594	1,576	1,178	398	18	18	
1979	1,586	1,569	1,192	377	17	17	
1978	1,723	1,256	467				
1977	1,710	1,302	408				
1976	1,736	1,299	437				
1975	1,768	1,330	438				
1974	1,840	1,376	464				
1973	2,013	1,499	514				
1972	2,172	1,626	546				
1971	2,177	1,627	550				
1970	2,353	1,729	624				
1965	3,127	2,244	883				
1960	3,142	2,232	910				
1955	3,711	2,531	1,180				

¹ Tribal contract data not available prior to FY 1985.
² FY 1987 contract data not available; FY 1986 data used as an estimate.
 SOURCE: IHS Direct: Monthly Report of Inpatient Services
 IHS Contract: Annual Report 3I
 Tribal: Area submissions

AVERAGE DAILY PATIENT LOAD

IHS and Tribal Direct and Contract Hospitals, Fiscal Years 1955-1987



LEADING CAUSES OF HOSPITALIZATION, FY 1987

IHS AND CONTRACT GENERAL HOSPITALS

In FY 1987, 24.9 percent of all discharges from Indian Health Service and contract general hospitals pertained to "obstetric deliveries and complications of puerperium and pregnancy." This was followed by "injuries and poisonings" at 11.1 percent.

TABLE 5.7

Diagnostic Category	Number of Discharges			Percent Distribution		
	Combined	IHS	Contract	Combined	IHS	Contract
All Categories	93,417	74,693	18,724	100.0	80.0	20.0
Obstetric deliveries and complications of puerperium & pregnancy	23,219	18,772	4,447	24.9	25.1	23.8
Injuries & poisonings	10,395	7,729	2,666	11.1	10.3	14.2
Respiratory system diseases	9,898	8,136	1,762	10.6	10.9	9.4
Digestive system diseases	8,861	6,850	2,011	9.5	9.2	10.7
Genitourinary system diseases	5,006	3,966	1,040	5.4	5.3	5.6
Circulatory system diseases	4,991	3,628	1,363	5.3	4.9	7.3
Symptoms & ill-defined conditions	5,244	4,307	937	5.6	5.8	5.0
Supplementary conditions	4,125	3,990	135	4.4	5.3	0.7
Mental disorders	3,905	3,031	874	4.2	4.1	4.7
Nervous system and sense organ diseases	3,324	2,765	559	3.6	3.7	3.0
All other	14,449	11,519	2,930	15.5	15.4	15.6

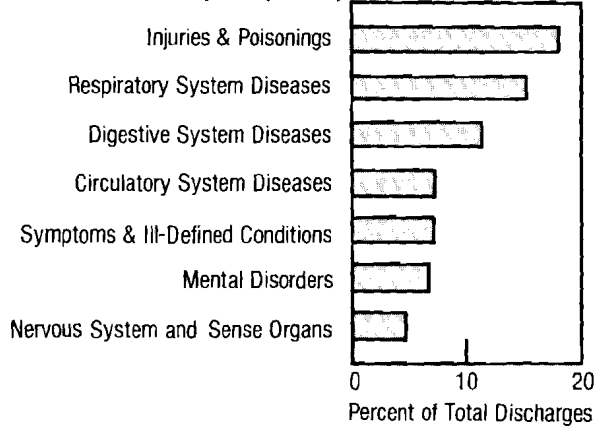
¹ Contract discharges based on FY 1986.
SOURCE: Annual Reports 2C and 3I.

TEN LEADING CAUSES OF HOSPITALIZATION FOR GM&S PATIENTS

Indian Health Service and Contract General Hospitals, Fiscal Year 1987

CHART 5.8

IHS & Contract General Hospitals (FY '87)

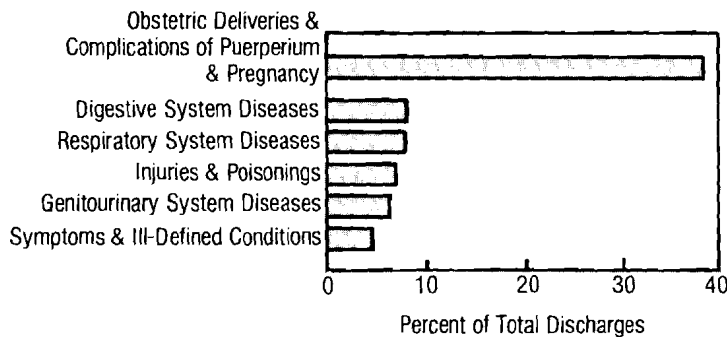


LEADING CAUSES OF HOSPITALIZATION FOR MALES

For males, 18.7 percent of all discharges (FY 1987) from Indian Health Service and contract general hospitals pertained to "injuries and poisonings." This was followed by "respiratory system diseases" (15.3 percent), and "digestive system diseases" (11.8 percent).

CHART 5.9

IHS & Contract General Hospitals (FY '87)



LEADING CAUSES OF HOSPITALIZATION FOR FEMALES

For females, 39.0 percent of all discharges (FY 1987) from Indian Health Service and contract general hospitals pertained to "obstetric deliveries and complications of puerperium and pregnancy." This was followed by "digestive system diseases" (8.2 percent), and "respiratory system diseases" (7.9 percent).

PART 5 — PATIENT CARE STATISTICS

TABLE 5.8

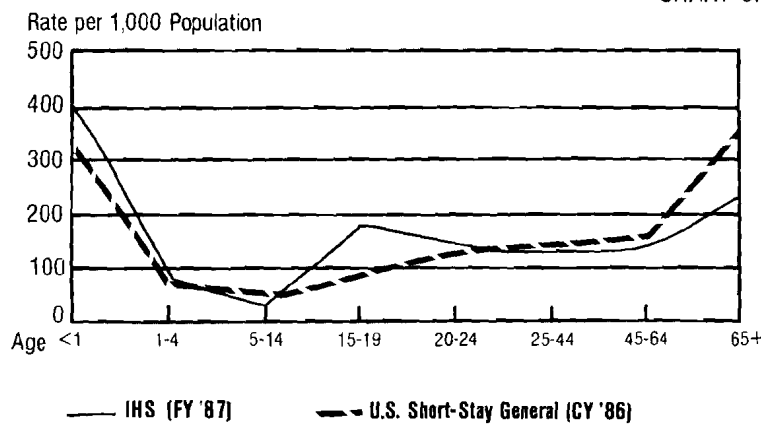
MALE			FEMALE		
Diagnostic Category	Number of Discharges	Percent of Total	Diagnostic Category	Number of Discharges	Percent of Total
All Categories	33,881	100.0	All Categories	59,536	100.0
Injuries & poisonings	6,330	18.7	Obstetric deliveries and complications of pregnancy & puerperium	23,219	39.0
Respiratory system diseases	5,171	15.3	Digestive system diseases	4,852	8.1
Digestive system diseases	4,009	11.8	Respiratory system diseases	4,727	7.9
Circulatory system diseases	2,567	7.6	Injuries & poisonings	4,065	6.8
Symptoms & ill-defined conditions	2,491	7.4	Genitourinary system diseases	3,784	6.4
Mental disorders	2,253	6.6	Symptoms & ill-defined conditions	2,753	4.6
Nervous system and sense organs	1,668	4.9	Supplementary conditions	2,646	4.4
Skin & subcutaneous tissue diseases	1,488	4.4	Circulatory system diseases	2,424	4.1
Supplementary conditions	1,479	4.4	Endocrine, nutritional & metabolic diseases	1,787	3.0
Genitourinary system	1,222	3.6	Nervous system & sense organs	1,656	2.8
All other	5,203	15.4	All other	7,623	12.8

¹ FY 1986 Contract data used; FY 1987 data not available.
SOURCE: On-Request Reports 19 and 21.

TEN LEADING CAUSES OF HOSPITALIZATION BY SEX

Indian Health Service Direct and Contract General Hospitals, Fiscal Year 1987

CHART 5.10



HOSPITAL DISCHARGE RATES BY AGE

For both the Indian Health Service (FY 1987) and U.S. (CY 1986), discharge rates were highest for the age groups under 1 year and over 64 years. Beyond age 4, the U.S. rate was greater than the Indian rate except for the age group 20 through 24 years.

TABLE 5.10

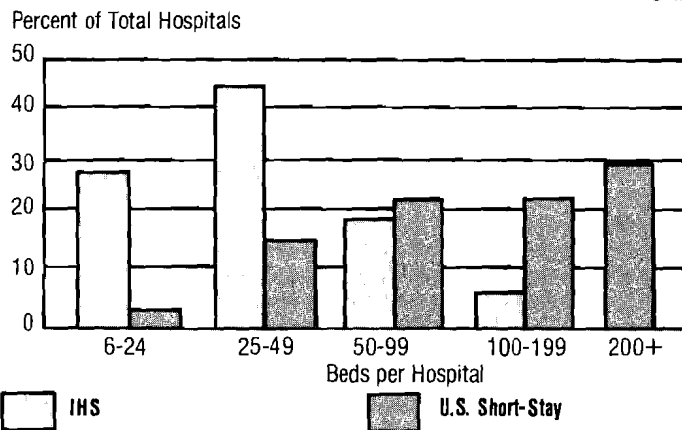
Age at Admission	Discharges per 1,000 Population		Percent Diff. IHS Rate to U.S. Rate
	IHS Rate	U.S. Rate	
Total	103.0	143.1	- 28.0%
Under 1 year	345.5	196.1	76.2%
1-4 years	67.7	58.6	15.2%
5-14 years	23.8	35.7	- 33.3%
15-19 years	75.1	90.6	- 17.1%
20-24 years	139.2	132.2	5.3%
25-44 years	120.2	122.3	- 1.7%
45-64 years	123.9	162.2	- 23.6%
65 years & over	224.3	367.3	- 38.9%

¹ FY 1987 contract hospital data not available; FY 1986 data used as an estimate.

COMPARISON OF IHS AND U.S. HOSPITAL DISCHARGE RATES

Indian Health Service and Contract General Hospitals, FY 1987¹, U.S. General Short-Stay Hospitals, CY 1986

CHART 5.11



BEDS PER HOSPITAL

IHS (FY '87) VS U.S. SHORT STAY (CY '86)

73 percent of Indian Health Service hospitals (FY 1987) had a bed size less than 50, as compared to only 21 percent of U.S. short-stay hospitals (CY 1986).

TABLE 5.11

Bed Size	Number of Hospitals		Percent of Total	
	IHS ¹	U.S.	IHS	U.S.
All	45	5,678	100.0	100.0
6-24	13	211	28.9	3.6
25-49	20	993	44.4	17.5
50-99	9	1,376	20.0	24.2
100-199	3	1,382	6.7	24.3
200 +	—	1,716	—	30.2

¹ Operated by IHS on September 30, 1987.

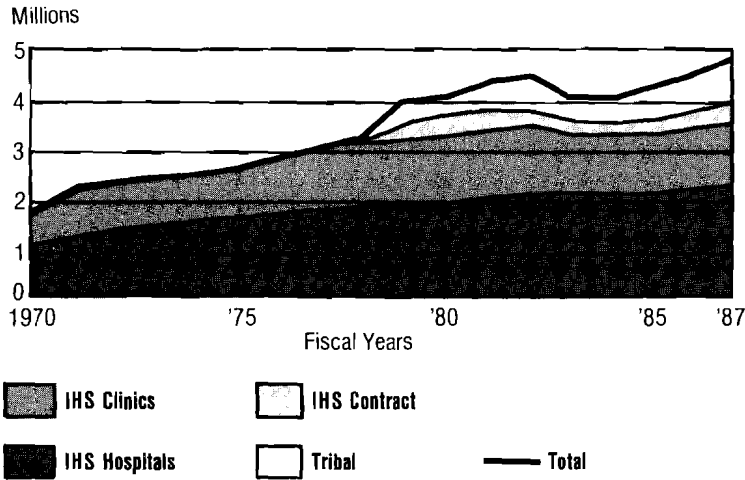
SOURCE: IHS—Monthly Report of Inpatient Services, September 1987

U.S.—Hospital Statistics, 1987 Edition, American Hospital Association, Table 5A

COMPARISON OF IHS AND U.S. HOSPITALS BY BED SIZE

Indian Health Service Hospitals, FY 1987, U.S. Short-Stay Community Hospitals, CY 1986

CHART 5.12



NUMBER OF OUTPATIENT VISITS

Outpatient visits to Indian Health Service and Tribal direct and contract facilities have increased 174 percent since FY 1970. In FY 1987, there were over 4.9 million visits.

TABLE 5.12

Fiscal Year	Grand Total	Indian Health Service Direct Facilities				Tribal Direct	Tribal Contract
		Total	Hospitals	Health Centers and Other Field Clinics	IHS Contract		
1987	4,902,987	3,600,697	2,278,291	1,322,406	300,000 ¹	858,018 ²	144,272
1986	4,745,887	3,507,725	2,200,039	1,307,686	295,227	803,859	139,076
1985	4,432,054	3,389,618	2,088,973	1,300,645	275,457	667,651	99,328 ³
1984	4,051,973	3,248,660	1,982,264	1,266,396	265,073	538,240	
1983	3,989,990	3,252,701	1,955,462	1,297,239	267,899	469,390	
1982	4,065,901	3,334,365	1,973,688	1,360,677	236,706	494,830	
1981	4,053,326	3,319,479	1,934,590	1,384,889	266,577 ⁴	467,270	
1980	3,869,936	3,194,936	1,795,607	1,399,329	275,000 ¹	400,000 ¹	
1979	3,683,350	3,083,350	1,710,686	1,372,664	275,000 ¹	325,000	
1978		3,124,716	1,783,642	1,341,074			
1977		2,960,850	1,715,114	1,245,736			
1976		2,751,546	1,593,130	1,158,416			
1975		2,501,050	1,465,816	1,035,234			
1974		2,361,654	1,366,564	995,090			
1973		2,329,160	1,330,660	998,500			
1972		2,235,881	1,275,726	960,155			
1971		2,195,236	1,202,027	993,209			
1970		1,786,920	1,068,820	718,100			
1965		1,325,400	757,700	567,700			
1960		989,500	585,100	404,400			
1955		455,000	355,000	100,000			

¹ Estimate.

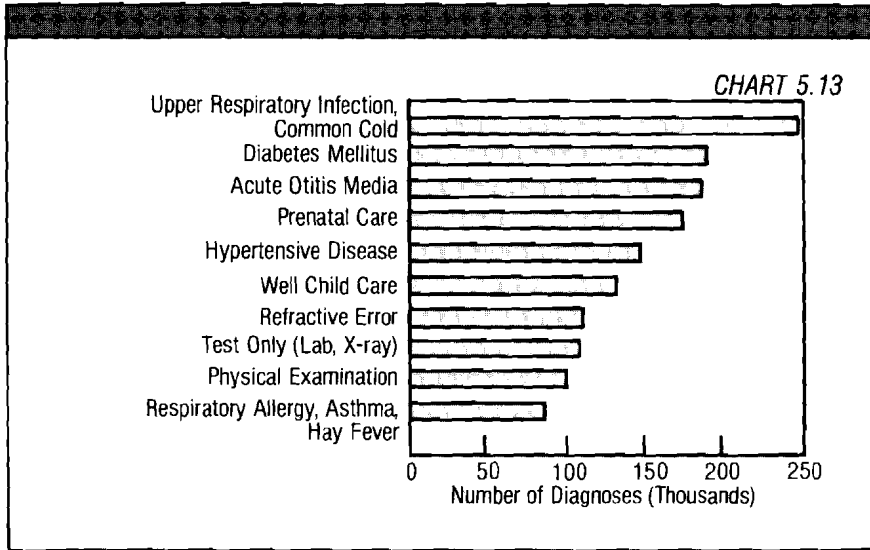
² Includes Tulsa and Oklahoma City Urban Health Programs which were funded as demonstration projects under the IHS hospitals and clinics activity.

³ Comparable Tribal contract health services data not available prior to FY 1985.

⁴ Comparable IHS contract health services data not available prior to FY 1981.

NUMBER OF OUTPATIENT VISITS

Indian Health Service and Tribal Direct and Contract Facilities, Fiscal Years 1955-1987



LEADING DIAGNOSES FOR OUTPATIENT VISITS

INDIAN HEALTH SERVICE FACILITIES (FY '87)

In FY 1987, the leading diagnosis for outpatient visits in Indian Health Service facilities was "upper respiratory infection, common cold." This was followed by "diabetes mellitus."

TABLE 5.13

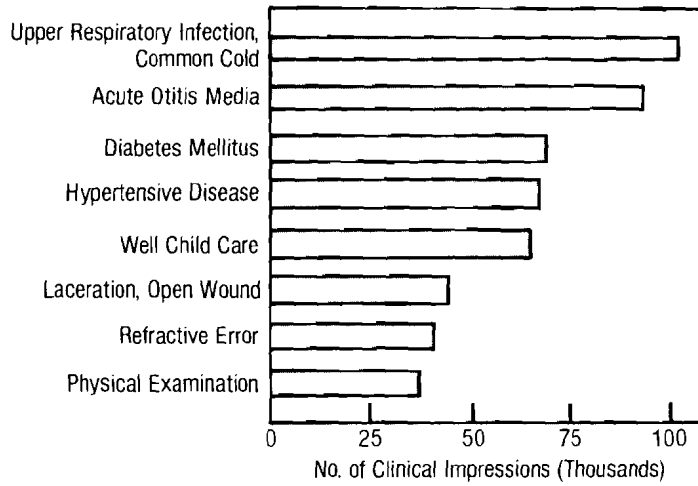
Condition	Number of Clinical Impressions
Upper respiratory infection, common cold	243,223
Diabetes mellitus	189,324
Acute otitis media	186,395
Prenatal care	173,457
Hypertensive disease	147,572
Well child care	131,102
Refractive error	109,690
Test only (lab, x-ray)	107,072
Physical examination	99,863
Respiratory allergy, asthma, hay fever	73,577

NUMBER OF OUTPATIENT CLINICAL IMPRESSIONS BY LEADING SPECIFIC CONDITIONS

Indian Health Service Facilities, Fiscal Year 1987

CHART 5.14

Indian Health Service Facilities (FY '87)

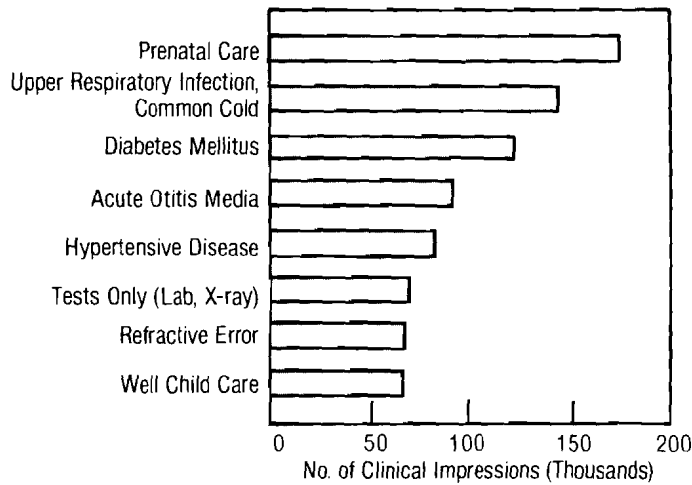


LEADING DIAGNOSES FOR OUTPATIENT VISITS FOR MALES

For Indian males, the leading diagnosis for outpatient visits (FY 1987) in Indian Health Service facilities was "upper respiratory infection, common cold." This was followed by "acute otitis media."

CHART 5.15

Indian Health Service Facilities (FY '87)



LEADING DIAGNOSES FOR OUTPATIENT VISITS FOR FEMALES

For Indian females, the leading diagnosis for outpatient visits (FY 1987) in Indian Health Service facilities was "prenatal care." This was followed by "upper respiratory infection, common cold."

TABLE 5.14

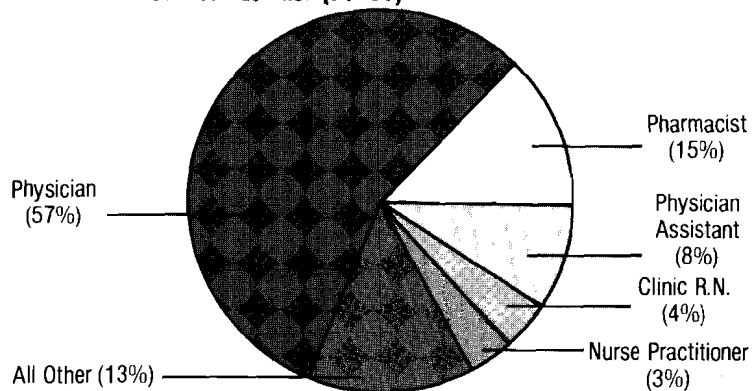
MALE		FEMALE	
Condition	Number of Clinical Impressions	Condition	Number of Clinical Impressions
Upper respiratory infection, common cold	101,174	Prenatal care	173,457
Acute otitis media	93,469	Upper respiratory infection, common cold	142,049
Diabetes mellitus	68,452	Diabetes mellitus	120,872
Hypertensive disease	66,124	Acute otitis media	92,926
Well child care	65,612	Hypertensive disease	81,448
Laceration, open wound	43,276	Tests only (lab, x-ray)	70,797
Refractive error	41,933	Refractive error	67,757
Physical examination	36,910	Well child care	65,490

NUMBER OF OUTPATIENT CLINICAL IMPRESSIONS BY LEADING SPECIFIC CONDITIONS BY SEX

Indian Health Service Facilities, Fiscal Year 1987

Indian Health Service Facilities (FY '87)

CHART 5.16



PERCENT DISTRIBUTION OF OUTPATIENT VISITS BY TYPE OF PROVIDER

For 58 percent of outpatient visits to Indian Health Service facilities in FY 1987, the patient was seen by a physician. For 15 percent, the patient was served by a pharmacist.

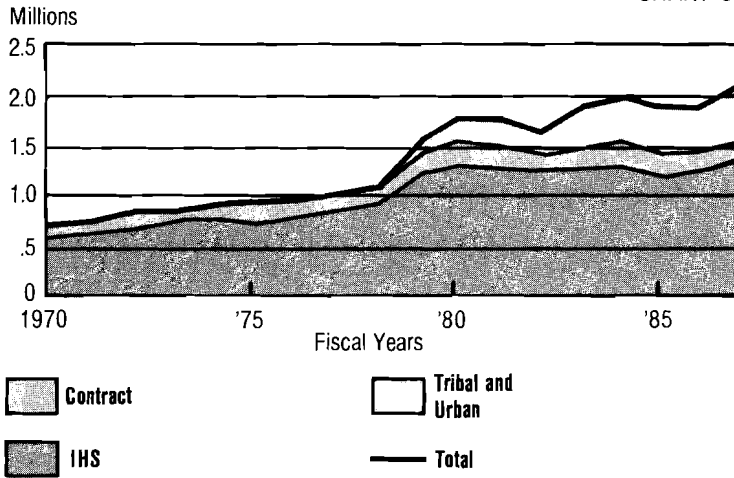
TABLE 5.16

Type of Provider	Number of Outpatient Visits	Percent of Total
TOTAL, ALL PROVIDERS	3,600,351	100.0
PRIMARY CARE PROVIDERS	2,539,820	70.5
Physician	2,068,817	57.5
Physician Assistant	289,221	8.0
Nurse Practitioner	101,191	2.8
Nurse Midwife	42,481	1.2
Contract Physician	16,959	0.5
Pediatric Nurse Practitioner	11,610	0.3
All Other	9,541	0.3
OTHER PROVIDERS	1,060,531	29.5
Pharmacist	547,154	15.2
Clinic R.N.	127,209	3.5
Optometrist	105,673	2.9
Public Health Nurse	37,721	1.0
Physical Therapist	34,254	1.0
Licensed Practical Nurse	27,338	0.8
All Other	181,182	5.0

NUMBER OF OUTPATIENT VISITS BY TYPE OF PROVIDER

Indian Health Service Facilities, Fiscal Year 1987

CHART 5.17

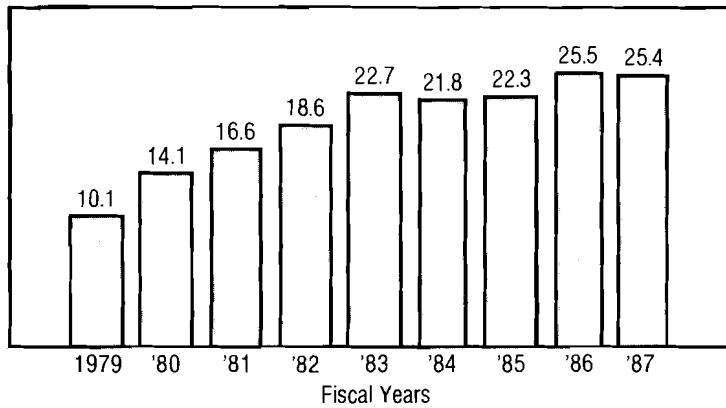


DENTAL SERVICES PROVIDED

The number of direct and contract dental services provided by Indian Health Service, Tribal, and Urban Programs have increased 189 percent since FY 1970. In FY 1987, approximately 2.1 million dental services were provided.

CHART 5.18

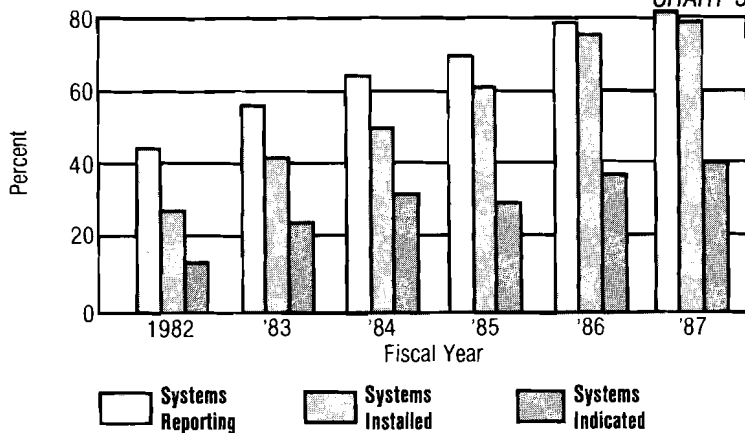
Tribal as Percent of Total



DENTAL SERVICES PROVIDED BY TRIBAL/URBAN PROGRAMS

The number of dental services provided by Tribal and Urban Programs have increased 232 percent since FY 1979. In FY 1987 they comprised 25.4 percent of the total dental services provided, as compared to 10.1 percent in FY 1979.

CHART 5.19



COMMUNITY WATER SYSTEMS ADJUSTING FLUORIDE TO GREATER THAN OR EQUAL TO MINIMUM ACCEPTABLE CONCENTRATION

Steady progress in maintaining at least minimally acceptable levels of fluoride in community water systems has been occurring since FY 1982. For FY 1987, 83 percent of actively fluoridating systems (those that report into the Fluoridation Data System) delivered at least minimally acceptable levels of fluoride for the entire year. While approximately 40 percent of the water systems currently have fluoridation equipment installed, over 660 additional water systems could be enhanced by having fluoridation equipment added.

TABLE 5.17

Fiscal Year	Number of Services Provided			Tribal & Urban	Percent contract of total	Percent tribal & urban of total	Percent increase of total since 1955
	Total	IHS Direct	Contract ¹				
1987	2,130,690	1,397,262	191,639	541,789	9.0	25.4	1,083.7
1986	1,984,522	1,322,794	155,939	505,789	7.9	25.5	1,002.5
1985	1,914,820	1,276,623	210,508	427,689	11.0	22.3	963.8
1984	2,011,326	1,348,599	224,918	437,809	11.2	21.8	1,017.4
1983	1,907,336	1,325,187	149,741	432,408	7.9	22.7	959.6
1982	1,666,263	1,202,422	153,030	311,341	9.2	18.6	825.7
1981	1,801,982	1,319,913	182,880	299,189	10.1	16.6	901.1
1980	1,833,206	1,357,809	216,574	258,823	11.8	14.1	918.4
1979 ²	1,618,383	1,239,108	215,997	163,278	13.3	10.1	799.1
1978	1,099,019	885,019	214,000	-	19.5	-	510.6
1977	1,037,640	823,328	214,312	-	20.7	-	476.5
1976	975,647	798,709	176,938	-	18.1	-	442.0
1975	946,722	745,831	200,891	-	21.2	-	426.0
1974	927,701	775,747	151,954	-	16.4	-	415.4
1973	863,057	728,909	134,148	-	15.5	-	379.5
1972	844,724	718,176	126,548	-	15.0	-	369.3
1971	776,168	684,612	91,556	-	11.8	-	331.2
1970	737,206	646,580	90,626	-	12.3	-	309.6
1969	703,232	634,479	68,753	-	9.8	-	290.7
1968	681,745	613,084	68,661	-	10.1	-	278.7
1967	626,458	545,509	80,949	-	12.9	-	248.0
1966 ²	570,779	502,710	68,069	-	11.9	-	217.1
1965	572,079	495,006	77,073	-	13.5	-	217.8
1964	525,010	462,981	62,029	-	11.8	-	191.7
1963	453,906	398,452	55,454	-	12.2	-	152.2
1962	421,597	364,988	56,609	-	13.4	-	134.2
1961	403,528	348,776	54,752	-	13.6	-	124.2
1960 ²	364,423	307,248	57,175	-	15.7	-	102.5
1959	328,613	283,206	45,407	-	13.8	-	82.6
1958	282,372	282,372	-	-	-	-	56.9
1957	249,048	249,048	-	-	-	-	38.4
1956	219,353	219,353	-	-	-	-	21.9
1955	180,000	180,000	-	-	-	-	-

¹ Beginning with FY 1979 this category excludes contract services purchased from the private sector by Tribes.

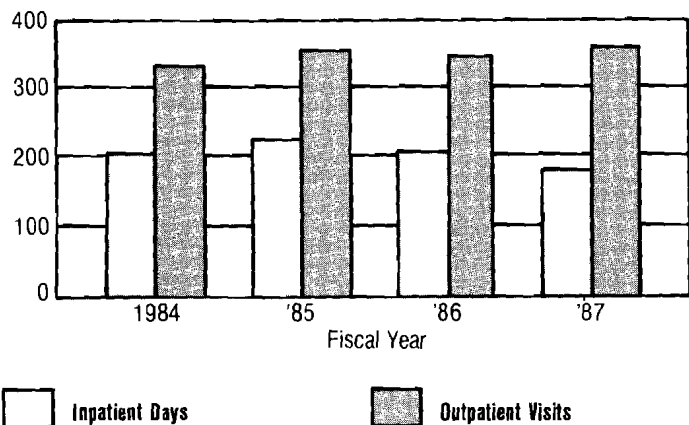
² Data systems were modified in 1960, 1966 and 1978. In 1978 the IHS began to use the dental services coding list adopted by the American Dental Association (ADA). The ADA list identifies individual clinical services. Previously the IHS had reported specified clinical services combined into major dental service groupings. Excluded from the 1978 count are diagnostic and adjunctive services. Excluded from the 1979-1986 clinical counts are diagnostic services other than examinations, revisits and non-clinical adjunctive services. The new coding procedure was used throughout the IHS during only the last 9½ months of FY 1978 but during all of FY—1979-1987. By January 1979, the personnel completing the new forms were thoroughly familiar with the revised procedure and thus their reporting is considered to be more accurate and complete.

NUMBER OF DENTAL SERVICES PROVIDED BY IHS, CONTRACT, TRIBAL AND URBAN PROGRAMS

Fiscal Years 1955-1987

CHART 6.1

Number of Inpatient Days (Thousands)
and Number of Outpatient Visits (Thousands)



ALCOHOLISM AND SUBSTANCE ABUSE TREATMENT WORKLOAD

Outpatient visits at the Indian Health Service alcoholism and substance abuse treatment programs have shown a slight increase since FY 1984, from 336,000 to 364,000. However, inpatient days have decreased since FY 1984, from 205,000 to 186,000.

TABLE 6.1

	1984	1985	1986	1987
Inpatient Days ²	205,067	224,078	209,823	186,329
Outpatient Visits ²	336,161	361,035	358,542	363,960
Unduplicated Count of Clients Treated on an Inpatient and/or Outpatient Basis	20,943	20,793	19,653	19,811

¹ Excludes data for clients treated in the state of Alaska who are reported through the use of a state managed reporting system.

² This workload does not overlap with workload from IHS and Tribal (direct and contract) inpatient and outpatient facilities.

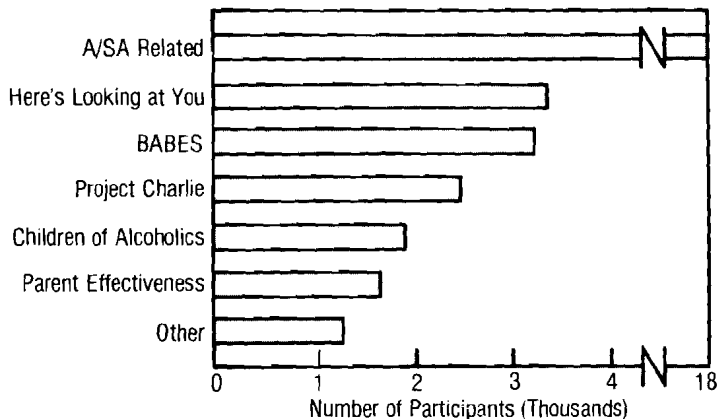
SOURCE: IHS Alcoholism Treatment and Guidance System (ATGS)

IHS ALCOHOLISM AND SUBSTANCE ABUSE WORKLOAD¹

Fiscal Years 1984-1987

CHART 6.2

By Community Based Program



PARTICIPANTS PROVIDED ALCOHOL/SUBSTANCE ABUSE EDUCATION, '85—'86

During the period September 1985 to June 1986, there was good participation in community-based alcohol and substance abuse programs. There were over 18,000 participants in topical or alcohol/substance abuse (A/SA) related activities. There were over 3,000 participants in both Here's Looking at You and BABES, and there were nearly 2,500 participants in Project Charlie.

TABLE 6.2

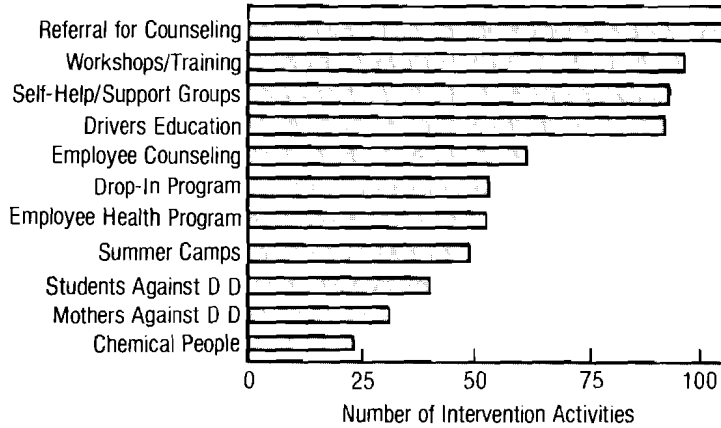
	Participants	Community	Sessions	Session Frequency			
				Wk	Bi-Wk	Mo	Other
TOTAL	31,946	312	5,221	127	41	46	83
Topical (Alcohol/Substance Abuse Related Activities)	18,161	159	2,592	65	14	26	52
Here's Looking At You	3,363	16	261	7	2	1	6
BABES	3,251	25	349	15	3	1	0
Project Charlie	2,436	13	631	8	1	2	3
Children of Alcoholics	1,895	37	533	16	5	6	9
Parent Effectiveness Training	1,615	38	595	13	10	5	9
Traits	443	3	124	2	0	1	0
Chemical People	440	12	88	1	5	2	4
Circle of Life	342	9	48	0	1	1	4

¹ Includes communities in which there are concentrations of American Indian and Alaska Native people both on and off reservations and in urban areas.

COMMUNITY¹ BASED ALCOHOL/SUBSTANCE ABUSE PROGRAMS

September 1985—June 1986

CHART 6.3



COMMUNITY BASED ALCOHOL/SUBSTANCE ABUSE INTERVENTION ACTIVITIES, '85—'86

There were nearly 700 community-based intervention activities during the period September 1985 to June 1986. There were over 100 alcohol/substance abuse counsel/referral activities. There were over 90 activities for each of the following categories: workshops/training, self help/support groups, and drivers education.

TABLE 6.3

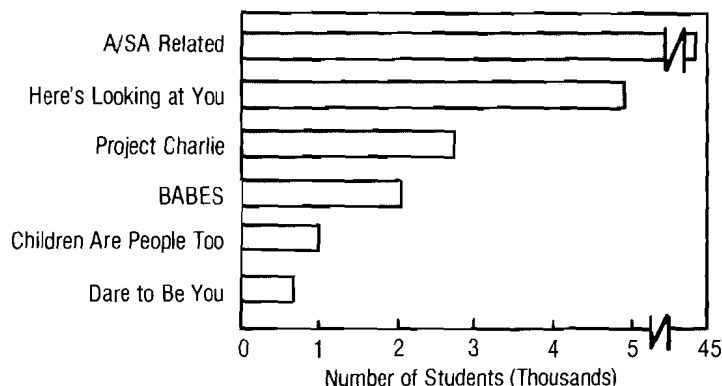
Preventive Intervention Activities	Number	Percent
TOTAL	689	100%
Alcohol/Substance Abuse Counsel/Referral	108	16
Workshops/Training	96	14
Self Help/Support Groups	93	13
Drivers Education	92	13
Employee Counseling Services	60	9
Drop-In Program	52	8
Employee Health Promotion	51	7
Summer Camps	46	7
Students Against Drunk Driving (SADD)	39	6
Mothers Against Drunk Driving (MADD)	30	4
Chemical People	22	3

NUMBER OF COMMUNITY BASED INTERVENTION ACTIVITIES

September 1985—June 1986

CHART 6.4

By School Based Curricula



STUDENTS PROVIDED ALCOHOL/SUBSTANCE ABUSE EDUCATION, '85-'86

During the period September 1985 to June 1986, there was good participation in alcohol/substance abuse programs presented at schools. There were over 44,000 participants in topical or alcohol/substance abuse (A/SA) related curriculum. There were nearly 5,000 participants in Here's Looking at You, over 2,500 participants in Project Charlie, and nearly 2,000 participants in BABES.

TABLE 6.4

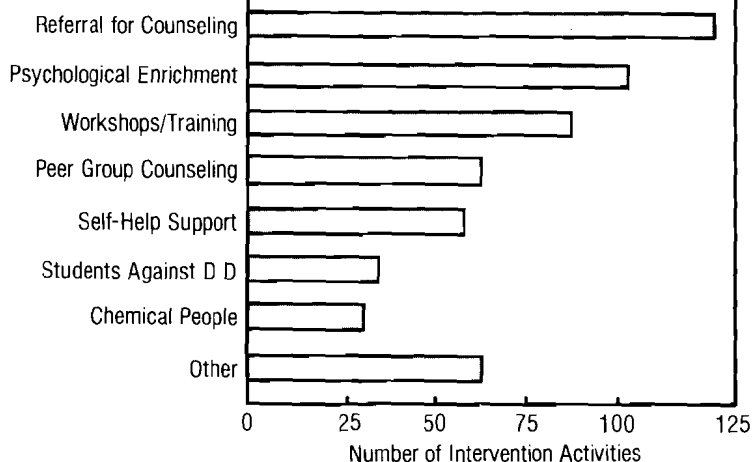
	Students	Schools	Sessions	Session Frequency			
				Wk	Bi-Wk	Mo	Other
TOTAL	57,276	264	4,373	130	25	36	68
Topical (Alcohol/Substance Abuse Related Curriculum)	44,370	178	2,545	77	18	24	54
Here's Looking At You	4,817	23	954	13	2	2	5
Project Charlie	2,633	22	271	12	0	3	1
BABES	1,976	26	153	10	2	3	2
Children Are People Too	917	7	137	5	0	0	1
Dare To Be You	508	8	36	3	1	1	4

¹ The 420 schools under study were managed as follows: BIA (73), Tribes (78), Public (239), Private and Other (30). Type of school was as follows; Head Start/Early Childhood (73), Elementary (138), Jr. High/Middle School (110), Senior High (99). Of these, 264 schools (63 percent) offered one or more of the courses listed.

ALCOHOL/SUBSTANCE ABUSE PROGRAMS PRESENTED AT SCHOOLS¹

With Concentrations of American Indian and Alaska Native Students, September 1985—June 1986

CHART 6.5



SCHOOL BASED ALCOHOL/SUBSTANCE ABUSE INTERVENTION ACTIVITIES, '85-'86

There were nearly 600 preventive intervention activities based at schools during the period September 1985 to June 1986. There were over 125 referral for counseling activities, over 100 psychological enrichment activities, nearly 90 workshops/training activities, and over 60 peer group counseling activities.

TABLE 6.5

Category	Number	Percent
TOTAL	568	100%
Referral for Counseling	127	22
Psychological Enrichment Activities (Coping, Self-Esteem, Decision Making, etc.)	101	18
Workshops/Training	88	15
Peer Group Counseling	62	11
Self-Help Support	59	10
Students Against Drunk Driving (SADD)	36	7
Chemical People	31	5
Other Outreach	16	3
Mothers Against Drunk Driving (MADD)	13	2
Other Activities	35	7

CHART 6.6

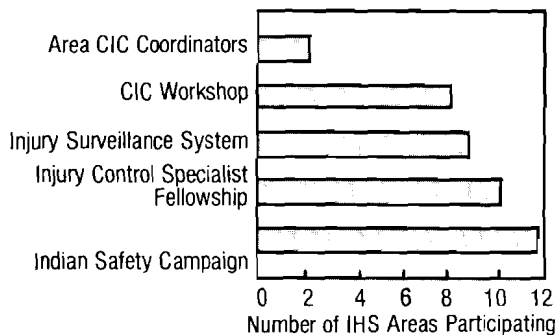
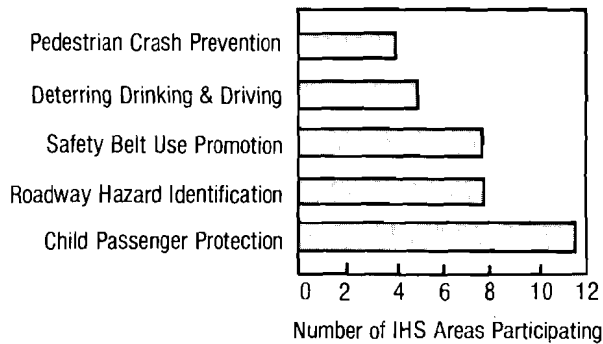


CHART 6.7



NUMBER OF PREVENTIVE INTERVENTION ACTIVITIES BASED AT SCHOOLS

With Concentrations of American Indian and Alaska Native Students, September 1985—June 1986

COMMUNITY INJURY CONTROL (CIC)

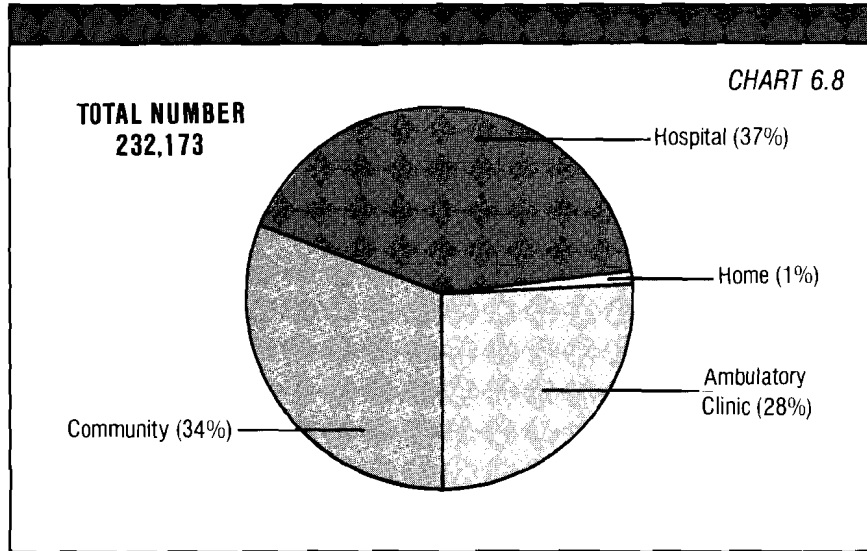
KEY PROGRAM ACTIVITIES, FY 1987

All 12 Indian Health Service Areas participate in the Annual Indian Safety Campaign. 10 Areas are currently participating in a new initiative called the Injury Control Specialist Fellowship Program.

COMMUNITY INJURY CONTROL (CIC)

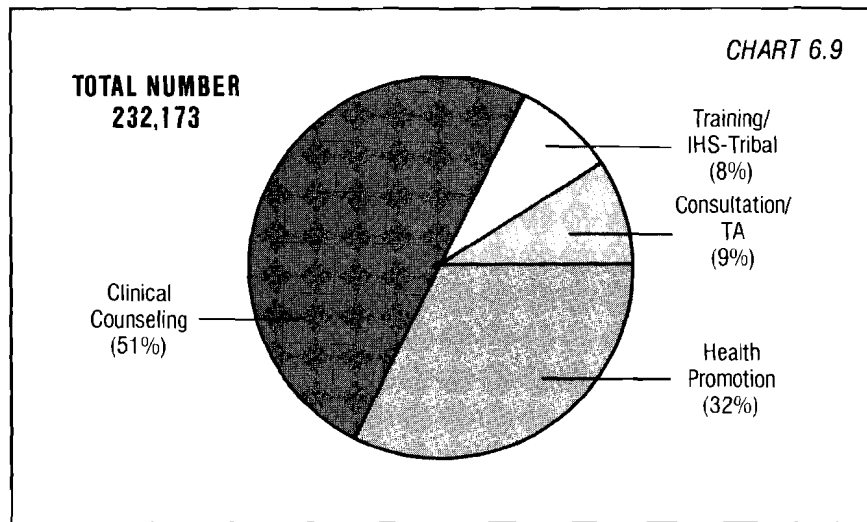
INJURY INTERVENTION PROJECTS, FY 1987

All 12 Indian Health Service Areas have a Child Passenger Protection program in place. 8 Areas have programs dealing with Roadway/Roadside Hazard Identification and Safety Belt Use Promotion.



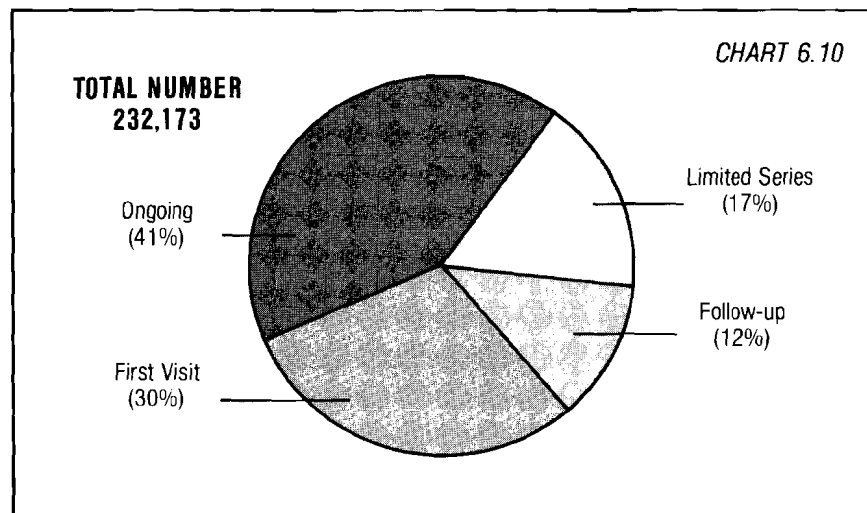
**INDIAN HEALTH SERVICE
NUTRITION AND DIETETICS**
PERCENT OF CONTACTS BY SETTING,
FY 1987

The Indian Health Service nutrition and dietetics program made over 230,000 patient/client contacts during FY 1987. The majority of the contacts were in the hospital (37 percent) and the community (34 percent).



**INDIAN HEALTH SERVICE
NUTRITION AND DIETETICS**
PERCENT OF CONTACTS BY NUTRITION
FUNCTION, FY 1987

Over half (51 percent) of the nutrition and dietetics program contacts during FY 1987 were for clinical nutrition counseling and nearly a third (32 percent) were for health promotion.



**INDIAN HEALTH SERVICE
NUTRITION AND DIETETICS**
PERCENT OF CONTACTS BY TYPE OF
ENCOUNTER, FY 1987

For the nutrition and dietetics program in FY 1987, first visits and follow-up accounted for 42 percent of the encounters, ongoing counseling accounted for 41 percent of the encounters, and series of classes accounted for 17 percent.

TABLE 6.8

	PATIENT/CLIENT CONTACTS	
	Number	Percent Distribution
SETTING		
Total Patient/Client Contacts	232,173	100
Hospita	185,904	37
Community	78,939	34
Ambulatory Clinic	65,008	28
Home	2,322	1
NUTRITION FUNCTION		
Total Patient/Clinic Contacts	232,173	100
Clinical Nutrition Counseling	115,609	51
Nutrition Education (Health Promotion)	74,640	32
Consultation and Technical Assistance	21,956	9
Training for IHS and Tribal Staff	19,968	8
ENCOUNTER		
Total Patient/Client Contacts	232,173	100
Ongoing	95,192	41
First Visit	69,651	30
Limited Series	39,469	17
Follow-up	27,861	12

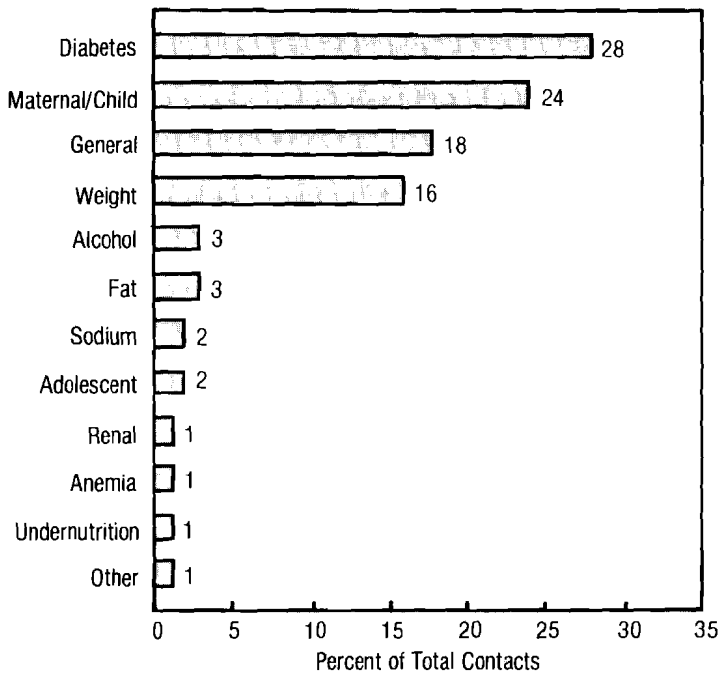
¹ Excludes activities that are not direct patient/client services, and activities associated with program planning, administration, evaluation, and continuing education.

NUTRITION AND DIETETICS PATIENT/CLIENT CONTACTS¹

By Setting, Function, and Encounter, Fiscal Year 1987

TOTAL NUMBER
115,609

CHART 6.11



INDIAN HEALTH SERVICE NUTRITION AND DIETETICS

PERCENT OF CLINICAL COUNSELING CONTACTS BY PURPOSE, FY 1987

Of the clinical nutrition counseling contacts made by the nutrition and dietetics program in FY 1987, the majority were for diabetes (28 percent) and maternal/child (24 percent) nutrition counseling.

TABLE 6.11

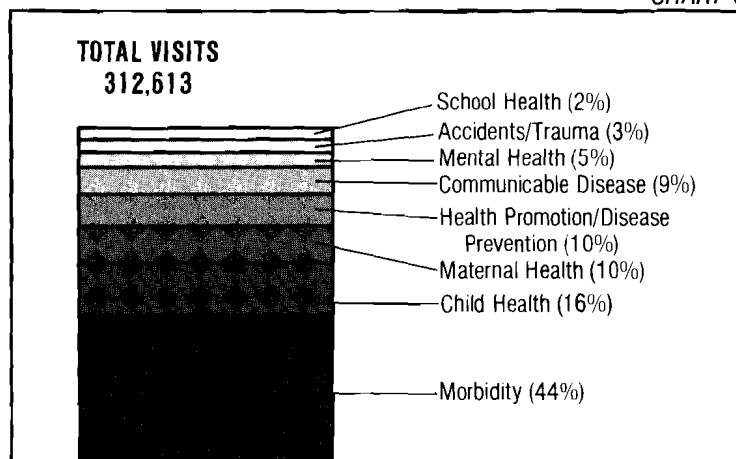
	Number	Percent Distribution
Total Contacts	115,609	100
Diabetes	32,548	28
Maternal and Child Health	27,666	24
General Nutrition	20,658	18
Weight Control	18,467	16
Alcohol Related	2,970	3
Fat Controlled	2,944	3
Sodium Controlled	2,487	2
Adolescent Nutrition	2,392	2
Renal	1,489	1
Anemia	1,284	1
Undernutrition	1,178	1
All Other	1,517	1

¹ Excludes activities that are not direct patient/client services, and activities associated with program planning, administration, evaluation, and continuing education.

LEADING CLINICAL NUTRITION PATIENT/CLIENT CONTACTS

Fiscal Year 1987

CHART 6.12



INDIAN HEALTH SERVICE PUBLIC HEALTH NURSING

PERCENT OF VISITS BY PROGRAM AREA, FY 1987

There were nearly 313,000 Indian Health Service public health nursing visits in FY 1987. The most frequent program areas dealt with during these visits were morbidity (44 percent of the visits) and child health (16 percent).

TABLE 6.12

Program Area	Number of Visits	Percent Distribution
Total Visits	312,613	100.0
Morbidity	137,767	44.1
Child Health	49,783	15.9
Maternal Health	32,482	10.4
Health Promotion/Disease Prevention	30,936	9.9
Communicable Disease	29,426	9.4
Mental Health	9,297	5.4
Accidents/Trauma	8,956	2.9
School Health	5,521	1.8
General	826	0.3
Unspecified	80	0.0

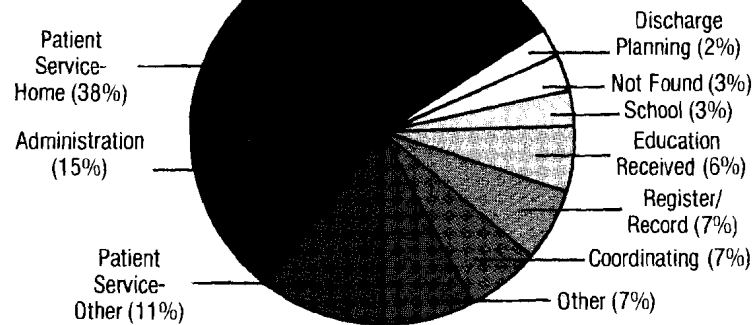
Source: Indian Health Service, Community Health Activities Report No. 3.

PUBLIC HEALTH NURSING VISITS BY PROGRAM AREA

Fiscal Year 1987

CHART 6.13

TOTAL HOURS
567,842



INDIAN HEALTH SERVICE PUBLIC HEALTH NURSING

PERCENT OF PHN TIME BY TYPE OF ACTIVITY, FY 1987

38 percent of public health nursing time in FY 1987 was devoted to patient service in the home, while 15 percent was spent on administrative matters.

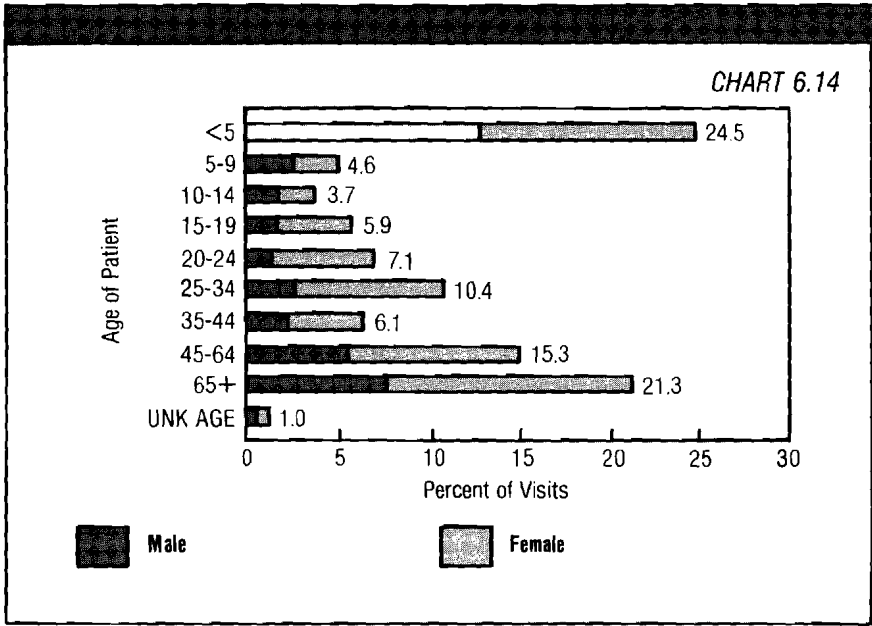
TABLE 6.13

Type of Activity	Number of Hours	Percent Distribution
Total Hours	567,842	100.0
Patient Service-Home	216,933	38.2
Administrative	87,394	15.4
Patient Service-Other	62,572	11.0
Register/Record Maintenance	48,632	8.6
Coordinating	38,287	6.7
Education Received	31,868	5.6
School	17,542	3.1
Not Found	15,435	2.7
Discharge Planning/Hospital Rounds	10,887	1.9
Community Development	10,116	1.8
Interpreting	8,766	1.5
Education Provided	7,259	1.3
Client Classes	7,038	1.2
Clinic	5,113	0.9

Source: Indian Health Service, Community Health Activity Report No. 2, Fiscal Year 1987

PUBLIC HEALTH NURSING TIME WORKED BY TYPE OF ACTIVITY

Fiscal Year 1987



INDIAN HEALTH SERVICE PUBLIC HEALTH NURSING

VISITS BY AGE AND SEX, FY 1987

For the public health nursing program in FY 1987, the ratio of female visits to male visits was 1.7. 13 percent of all visits pertained to male children under 5 years of age. The corresponding percentage for female children was 12.

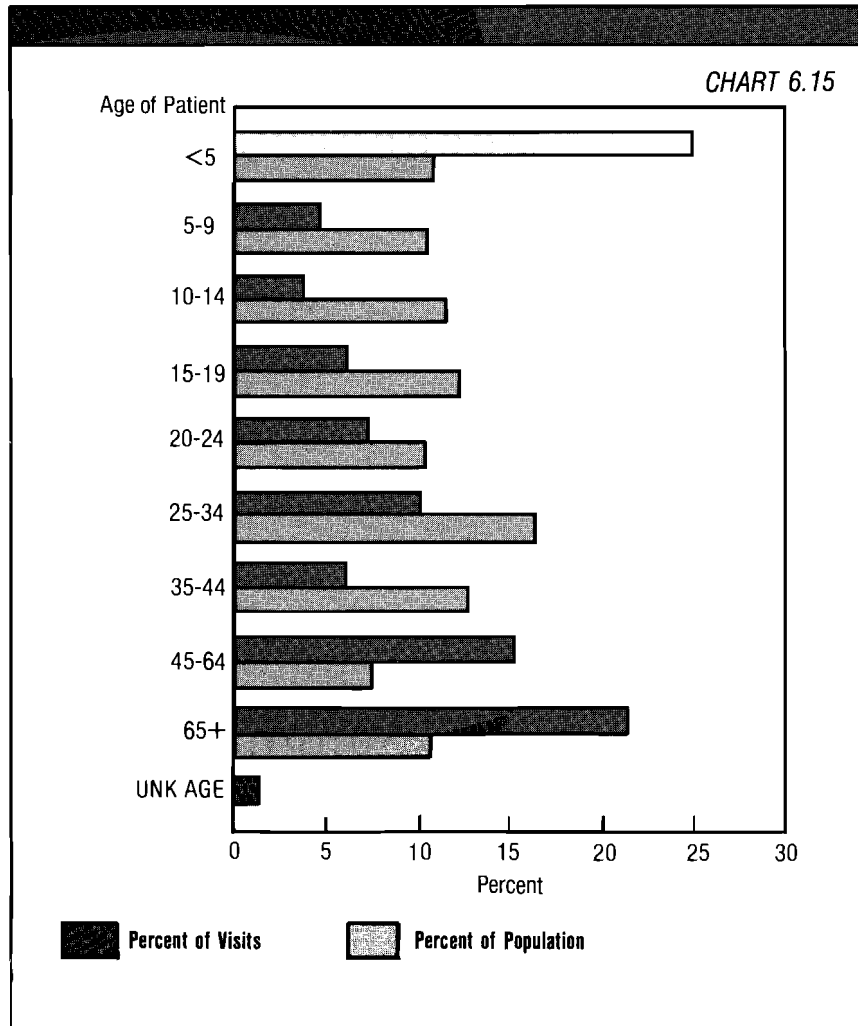
TABLE 6.14

Patient Age	Number of Visits		Percent Distribution		Ratio: Female to Male
	Male	Female	Male	Female	
All Ages	113,678	191,320	37.3	62.7	1.7
Under 5 years	38,441	36,53	412.6	11.9	1.0
5 to 9 years	7,159	7,156	2.3	2.3	1.0
10 to 14 years	5,058	6,181	1.7	2.0	1.2
15 to 19 years	4,259	13,636	1.4	4.5	3.2
20 to 24 years	3,653	17,883	1.2	5.9	4.9
25 to 34 years	6,983	24,556	2.3	8.1	3.5
35 to 44 years	6,213	12,564	2.0	4.1	2.0
45 to 64 years	17,015	29,456	5.6	9.7	1.7
65 years +	23,545	41,466	7.7	13.6	1.8
Unspecified Age	1,252	1,888	0.4	0.6	1.5

Source: Indian Health Service, Community Health Activities Report No. 19.

PUBLIC HEALTH NURSING VISITS BY AGE AND SEX OF PATIENTS

Fiscal Year 1987



INDIAN HEALTH SERVICE PUBLIC HEALTH NURSING

VISITS BY AGE, FY 1987 VS AGE DISTRIBUTION, 1980 CENSUS

25 percent of all public health nursing visits in FY 1987 pertained to children under 5 years of age while 21 percent pertained to adults over the age of 64. Based on the 1980 Census, these 2 age groups comprised much smaller proportions of the Indian population—both were at 11 percent.

TABLE 6.15

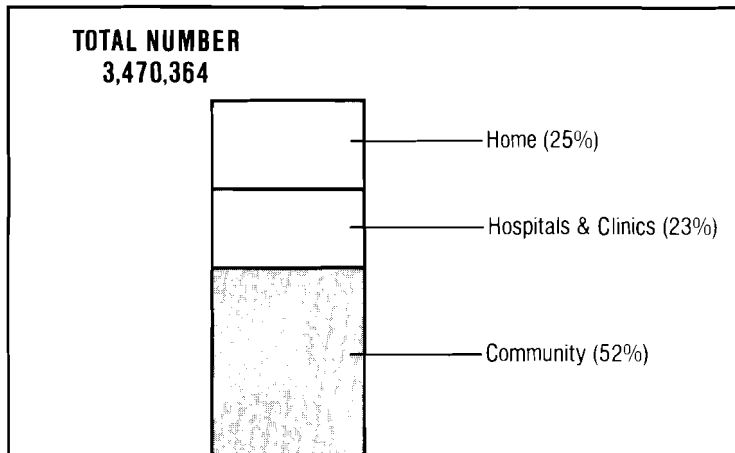
Patient Age	PHN Visits		1980 Census Percent Distribution	Ratio: PHN Visits to 1980 Census
	Number	Percent Distribution		
All Ages	304,998	100.0	100.0	
Under 5 years	74,975	24.6	10.8	2.3
5 to 9 years	14,315	4.7	10.5	0.4
10 to 14 years	11,239	3.7	11.2	0.3
15 to 19 years	17,895	5.9	12.1	0.5
20 to 24 years	21,536	7.1	10.4	0.7
25 to 34 years	31,539	10.3	16.1	0.6
35 to 44 years	18,777	6.2	10.6	0.6
45 to 64 years	46,471	15.2	7.6	2.0
65 years +	65,011	21.3	10.7	2.0
Unspecified Age	3,140	1.0	—	

¹ 1980 Census data are for American Indians and Alaska Natives residing in reservation states.
Source: Indian Health Service Community Health Activities Report, No. 19.

PUBLIC HEALTH NURSING VISITS BY AGE OF PATIENTS

Fiscal Year 1987 Compared with 1980 Census Data¹

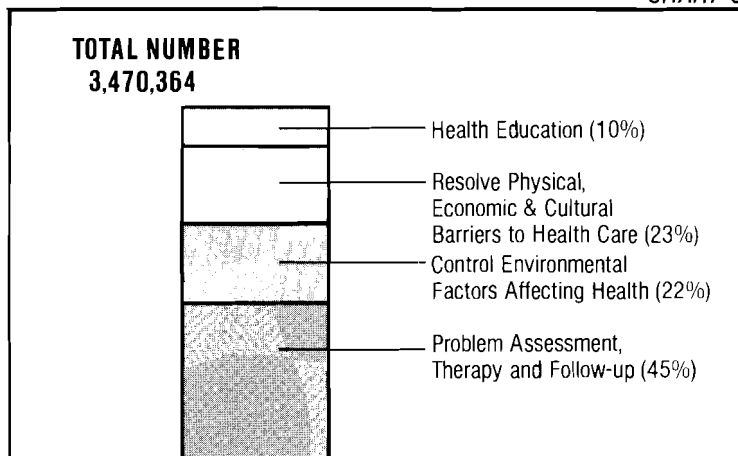
CHART 6.16



DISTRIBUTION OF CHR CLIENT CONTACTS BY SETTING, FY '87

The community health representative (CHR) program made nearly 3.5 million client contacts in FY 1987. Most of these contacts took place in the community (52 percent), with the others taking place in the home (25 percent) and hospitals and clinics (23 percent).

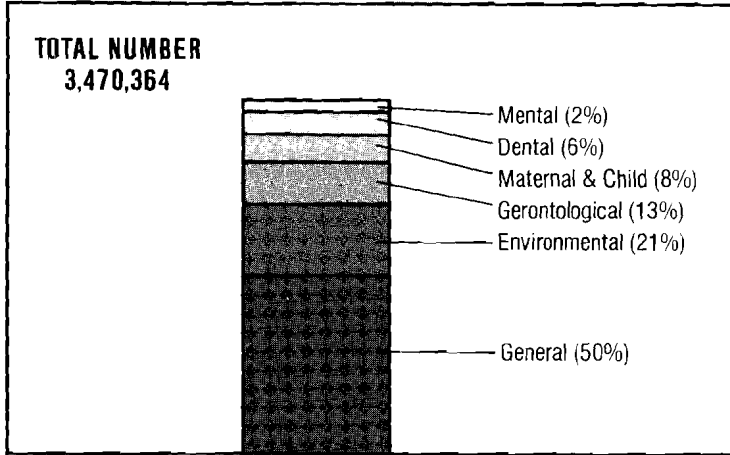
CHART 6.17



DISTRIBUTION OF CHR CLIENT CONTACTS BY FUNCTION, FY '87

The two leading health functions for community health representative (CHR) contacts in FY 1987 were problem assessment, therapeutic and follow-up services (45 percent); and resolve physical, economic and cultural barriers to health care (23 percent).

CHART 6.18



DISTRIBUTION OF CHR CLIENT CONTACTS BY HEALTH CARE AREA, FY '87

The two leading health care areas for community health representative (CHR) contacts in FY 1987 were general health care (50 percent), and environmental health care (21 percent).

TABLE 6.16

SETTING	Client Contacts	
	Number	Percent Distribution
SETTING		
Total Client Contacts	3,470,364	100.0
Community	1,811,714	52.2
Home	861,090	24.8
Hospitals and Clinics	797,570	23.0
HEALTH FUNCTION		
Total Client Contacts	3,470,364	100.0
Problem Assessment, Therapeutic & Follow-up Services	1,553,178	44.8
Resolve Physical, Economic & Cultural Barriers to Health Care	799,320	23.0
Surveillance & Control of Environmental Factors Affecting Health	766,106	22.1
Health Education & Consultation	351,760	10.1
HEALTH CARE AREA		
Total Client Contacts	3,470,364	100.0
General Health Care	1,764,450	50.8
Environmental Health Care	730,292	21.1
Gerontological Health Care	453,858	13.1
Maternal & Child Health	263,910	7.6
Dental Health	204,194	5.9
Mental Health Care	53,660	1.5

COMMUNITY HEALTH REPRESENTATIVE CLIENT CONTACTS¹

By Setting, Function and Health Care Area, Fiscal Year 1987, 243 Reporting Projects

¹ Estimated data based on CHR reports completed October 1, 1986 through March 31, 1987 and projected workload through September 30, 1987. Excludes activities associated with continuing education and training and program administration.

CHART 6.19

TOTAL NUMBER
3,470,364

Maintain/monitor water supply	14%
Transport patient, nonemergency	9%
Provide support services — hospitals, schools, clinics	8%
Provide clinical services — hospital, school or clinic	8%
Deliver medications/supplies	6%
Provide home health care	6%
Health screening	6%
Monitoring client's status (health, food, environment)	5%
Teach — client, family, group	5%
Maintain/monitor waste disposal system	3%
Serve as client advocate	3%
Other client contacts	27%

LEADING DETAILED ACTIVITIES FOR CHR CLIENT CONTACTS, FY '87

The two leading detailed activities for community health representative (CHR) contacts in FY 1987 were maintain/monitor water supply (14 percent); and transport patient, non-emergency (9 percent).

TABLE 6.19

Detailed Activity	Number	Percent Distribution
Total Client Contacts	3,470,364	100.0
Maintain/monitor water supply	473,818	13.7
Transport client, non-emergency	324,712	9.4
Provide support services -hospitals, schools, clinics	296,070	8.5
Provide clinical services—hospital, school or clinic	274,116	7.9
Deliver medications or supplies	210,986	6.1
Provide home health care	205,508	5.9
Health screening	202,844	5.8
Monitor clients status (health, food, environment)	186,016	5.4
Teach—client, family, group	183,124	5.3
Maintain/monitor waste disposal system	109,478	3.2
Serve as client advocate	91,208	2.6
Provide client counseling	75,436	2.2
Research health education topics (in preparation for teaching)	70,080	2.0
Provide meal services	63,272	1.8
Disseminate health information	52,880	1.5
Other client contacts	650,816	18.7

COMMUNITY HEALTH REPRESENTATIVE CLIENT CONTACTS¹ FOR LEADING DETAILED ACTIVITIES

Fiscal Year 1987

¹ Estimated data based on CHR reports completed October 1, 1986 through March 31, 1987 and projected CHR workload through September 30, 1987. Excludes activities associated with continuing education and training and program administration.

CHART 6.20

**TOTAL NUMBER
3,470,364**

Health promotion/ Disease prevention	15%	Child Care	2%
Diabetes	5%	Diseases of the mouth	2%
School health	4%	Tuberculosis	2%
Eye care (preventive)	4%	Alcohol/substance abuse	2%
Nutrition	3%	Immunization	1%
Hypertension	3%	Other health problems	54%
Adverse environmental condition	3%		

**LEADING HEALTH PROBLEMS
FOR CHR CLIENT CONTACTS,
FY '87**

The two leading health problems for community health representative (CHR) contacts in FY 1987 were health promotion/disease prevention (15 percent), and diabetes (5 percent).

TABLE 6.20

Health Problem	Number	Percent Distribution
Total Client Contacts	3,470,364	100.0
Health promotion/disease prevention	525,662	15.1
Diabetes	170,814	4.9
School health	151,960	4.4
Eye care	125,188	3.6
Nutrition	119,310	3.4
Hypertension	107,844	3.1
Adverse environmental condition	104,436	3.0
Child care	80,340	2.3
Diseases of the mouth	78,056	2.2
Tuberculosis	57,832	1.7
Alcohol/substance abuse	50,186	1.5
Immunization	48,956	1.4
Measles	48,212	1.4
Adverse socio-economic conditions	47,072	1.4
Strep throat	47,052	1.4
Arthritis	42,104	1.2
Heart disease	40,020	1.2
Prenatal care	38,784	1.1
Accidents/injuries	38,608	1.1
Ear care	37,236	1.1
Eye diseases	31,078	0.9
Handicapped client	27,154	0.8
Respiratory diseases	23,962	0.7
Injury control	22,416	0.6
Otitis media	21,678	0.6
Influenza	21,402	0.6
Dialysis (kidney failure)	19,196	0.6
Other health problems	1,343,806	38.7

**COMMUNITY HEALTH
REPRESENTATIVE CLIENT
CONTACTS¹ FOR LEADING
HEALTH PROBLEMS**

Fiscal Year 1987

¹ Estimated data based on CHR reports completed October 1, 1986 through June 30, 1987 and projected CHR workload through September 30, 1987. Excludes activities associated with continuing education and program administration.

CHART 6.21

**TOTAL NUMBER
352,542**

Self (client/patient)	17%	Dentist	4%
Tribal administration	10%	Contract physician	2%
Family	9%	Contract public health nurse	2%
Health center	8%	School administration	2%
IHS physician	8%	Laboratory technician	2%
Public health nurse	6%	Other	25%
IHS administration	5%		

**LEADING TYPES OF CHR
INCOMING CLIENT REFERRALS,
FY '87**

The community health representative (CHR) program received nearly 353,000 referrals in FY 1987. Self referrals comprised 17 percent of the total, while 10 percent came from Tribal administrations, and 9 percent from families.

CHART 6.22

**TOTAL NUMBER
171,702**

IHS physician	10%	Tribal administration	3%
Health center	9%	IHS administration	3%
Contract physician	7%	Health aide	3%
Outreach worker	5%	Nurse practitioner	3%
Emergency medical services	5%	Public health nurse	3%
Pharmacist	4%	Environmental health	2%
		Other	43%

**LEADING TYPES OF CHR
OUTGOING CLIENT REFERRALS,
FY '87**

The community health representative (CHR) program made nearly 172,000 referrals in FY 1987. IHS physicians received 10 percent of these referrals, while health centers received 9 percent, and contract physicians received 7 percent.

TABLE 6.21

Referrals Received From:	Number	Percent Distribution
Total Referrals¹	352,542	100.0
Self (Client/Patient)	60,590	17.2
Tribal Administration	35,352	10.0
Family	32,416	9.2
Health Center	27,096	7.7
IHS Physician	26,298	7.5
Public Health Nurse	19,808	5.6
IHS Administration	16,678	4.7
Dentist	15,360	4.4
Contract Physician	8,612	2.4
Contract Public Health Nurse	7,250	2.1
School Administration	6,488	1.8
Laboratory Technician	6,390	1.8
Other	90,204	25.6
IHS Physician	16,794	9.8
Health Center	15,840	9.2
Contract Physician	12,072	7.0
Outreach Worker	9,068	5.3
Emergency Medical Services	7,910	4.6
Pharmacist	6,422	3.7
Tribal Administration	5,528	3.2
IHS Administration	5,478	3.2
Health Aide	5,434	3.2
Nurse Practitioner	5,140	3.0
Public Health Nurse	5,020	2.9
Environmental Health	3,922	2.3
Other	73,074	42.6

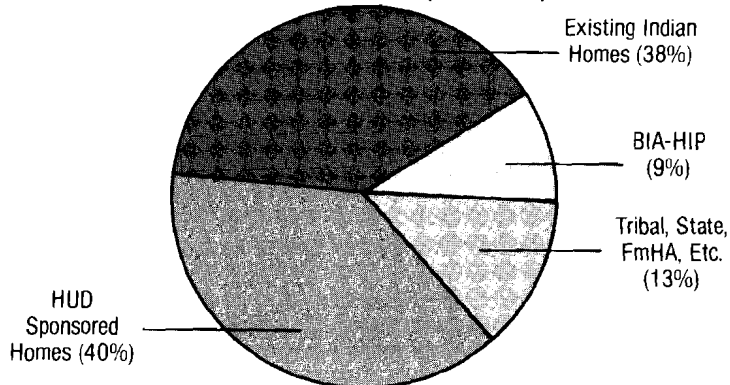
¹ Estimated data based on CHR reports completed October 1, 1986 through March 31, 1987 and projected CHR workload through September 30, 1987. Excludes referrals from other CHR's and self-initiated referrals by CHR's.

TEN LEADING SOURCES OF COMMUNITY HEALTH REPRESENTATIVE CLIENT REFERRALS

Fiscal Year 1987

Over 159,800 First Service Homes Funded (FY '60-'87)

CHART 6.23



TYPES OF INDIAN HOMES WITH SANITATION FACILITIES FUNDED BY INDIAN HEALTH SERVICE

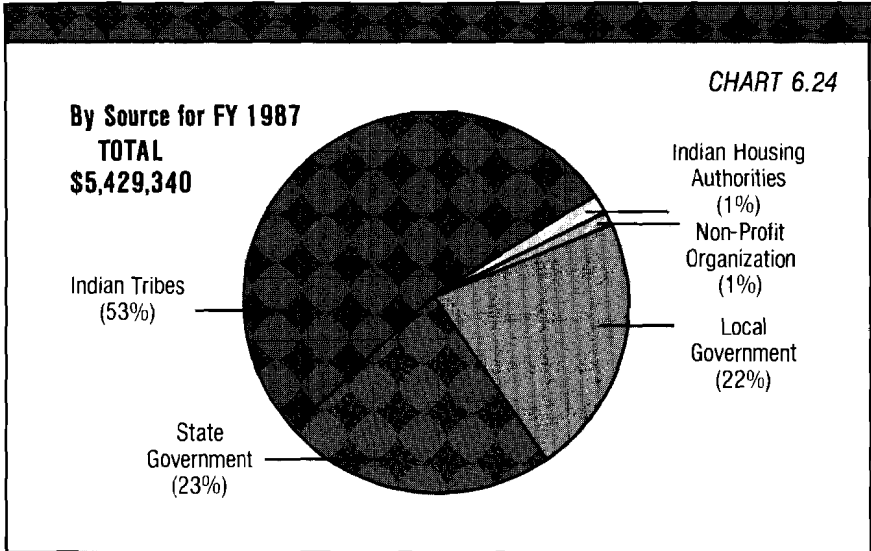
Since 1960, nearly 160,000 Indian homes were funded by Indian Health Service for the provision of sanitation facilities.

TABLE 6.23

Fiscal Year	Total First Service	First Service & Upgrade	Existing First Service	HUD First Service	HIP First Service	Tribal & Other	Total Upgrade
Total	159,885	209,152	60,349	63,103	15,006	21,427	49,267
1987	6,038	8,337	69	3,880	553	1,536	2,299
1986	4,735	6,871	294	2,303	612	1,526	2,136
1985	4,482	8,703	172	2,033	571	1,706	4,221
1984	3,663	7,205	179	1,258	725	1,501	3,542
1983	5,239	10,007	1,762	1,147	1,344	986	4,768
1982	8,560	9,544	989	5,718	564	1,289	984
1981	6,253	8,963	636	4,074	525	1,018	2,710
1980	6,541	9,171	766	4,223	612	940	2,630
1979	7,073	8,480	1,215	3,973	666	1,219	1,407
1978	3,277	3,567	486	1,211	797	783	290
1977	14,249	22,062	6,020	4,952	1,396	1,881	7,813
1976	7,453	9,910	706	4,601	732	1,414	2,457
1975	5,973	8,383	1,628	2,382	851	1,112	2,410
1974	6,081	8,331	2,544	1,964	571	1,002	2,250
1973	8,011	9,547	3,026	3,355	1,075	555	1,536
1972	8,961	10,919	2,613	4,851	707	790	1,958
1971	5,155	6,890	908	2,965	733	549	1,735
1970	6,792	7,728	2,011	3,843	619	319	936
1969	6,377	7,077	4,055	1,416	447	459	700
1968	4,984	5,021	3,637	748	458	141	37
1967	4,064	5,163	3,073	696	114	181	1,099
1966	4,155	4,420	2,600	954	101	500	265
1965	4,075	4,461	3,663	341	71	—	386
1964	6,089	6,380	5,783	164	142	—	291
1963	5,488	5,864	5,458	—	20	10	376
1962	3,450	3,455	3,399	51	—	—	5
1961	2,607	2,633	2,597	—	—	10	26
1960	60	60	60	—	—	—	—

INDIAN HOMES FUNDED TO RECEIVE SANITATION FACILITIES FROM IHS

Fiscal Years 1960-1987



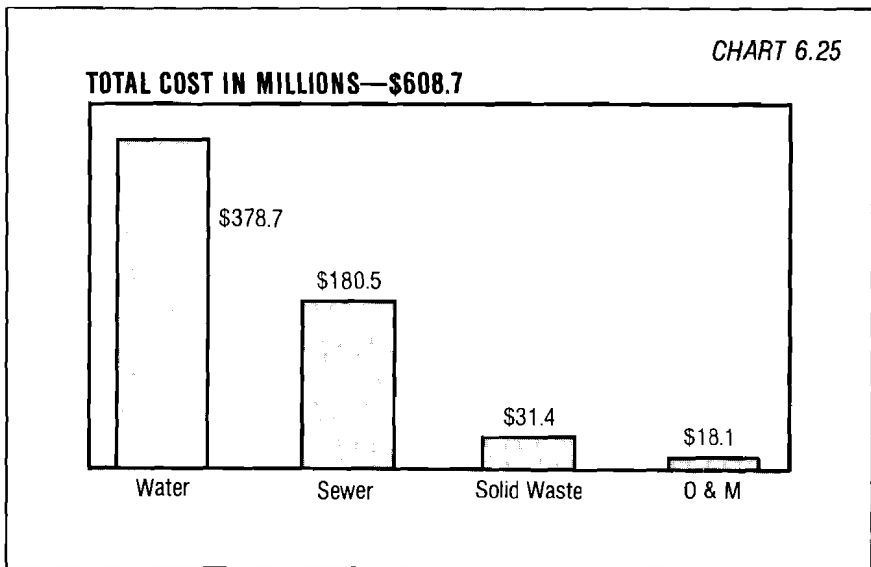
CONTRIBUTIONS TO INDIAN HEALTH SERVICE SANITATION FACILITIES PROJECTS

Contributions to Indian Health Service sanitation facilities projects are received from numerous sources. Once again in FY 1987, the Tribes ranked very high as contributors to these cooperative projects.

TABLE 6.24

Contributor	Contributions	Percent
Total	5,429,340	1000
Tribes	2,853,832	53
State Government	1,218,767	23
Local Government	1,192,857	22
Nonprofit Organizations	52,694	1
Housing Authorities	15,190	1

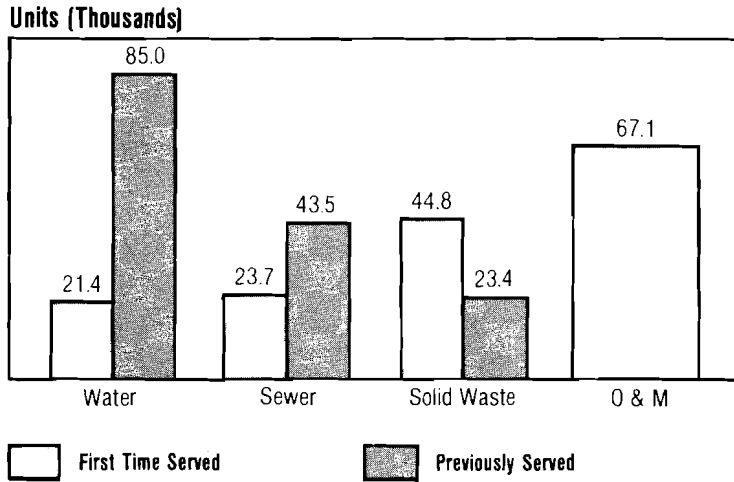
P.L. 86-121 PROGRAM SUMMARY OF CASH CONTRIBUTIONS RECEIVED IN FY 1987 BY CONTRIBUTOR



SANITATION FACILITIES UNMET NEED (1987)—COST

The FY 1987 unmet need of \$608.7 million to serve existing American Indian and Alaska Native homes and communities represents the cost to provide first service sanitation facilities, to upgrade existing facilities, to provide solid waste facilities and to provide assistance to operation and maintenance organizations.

CHART 6.26



SANITATION FACILITIES UNMET NEED (1987)—UNITS

The unmet need for American Indian and Alaska Native homes and communities is categorized into requirements for water, sewer, assistance to establish and equip operation and maintenance organizations, and solid waste disposal systems. The water, sewer and solid waste requirements are for first service and for upgrading existing facilities.

TABLE 6.25

TOTAL UNMET NEED: \$608,702.5 MILLION

	Water		Sewer		Solid Waste	
	UNITS	Cost (THOUSANDS)	UNITS	Cost (THOUSANDS)	UNITS	Cost (THOUSANDS)
Totals:		\$378,736		\$180,532		\$31,339
Total 1st Service	21,435	\$198,348	23,660	\$ 91,599	44,764	\$18,774
Total Prev Service	85,042	\$180,388	43,474	\$ 88,933	23,433	\$12,565

COSTS TO ESTABLISH OR IMPROVE OPERATION AND MAINTENANCE (O&M) ORGANIZATIONS

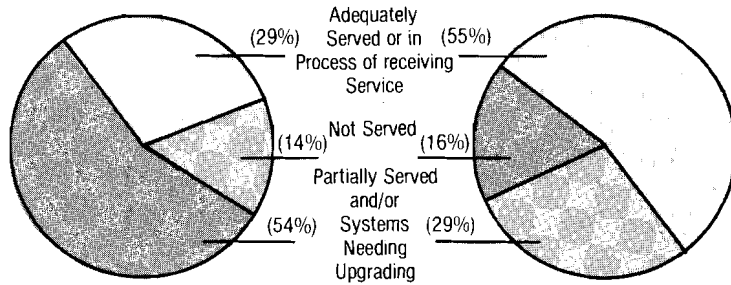
	UNITS	Cost (THOUSANDS)
Total:		\$18,095.5
Establish or Improve O & M:	67,083	\$14,701.0
Improve O & M Organization:		\$ 3,394.5

SANITATION FACILITIES UNMET NEED SUMMARY

CHART 6.27

Water Supply

Sewage Disposal



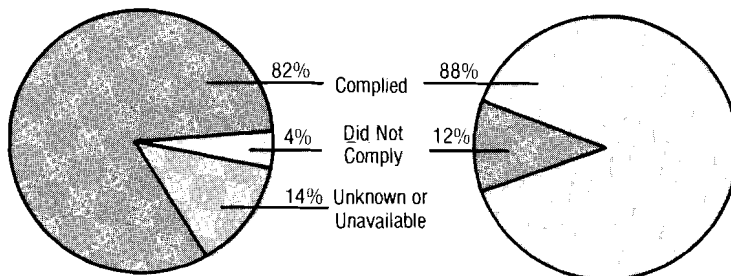
SANITATION FACILITIES SERVING AMERICAN INDIAN AND ALASKA NATIVE HOMES (1987)

Based on Indian Health Service data, approximately 14 percent of the total number of existing American Indian and Alaska Native housing units have not received first service water from the Indian Health Service and approximately 16 percent have not received first service sewerage.

CHART 6.28

Indian and Alaska Native Community Water Systems Serving > 5 Homes (1987)

National Community Water Systems Serving 25-500 People (EPA, 1986)



BACTERIOLOGICAL QUALITY PERCENT COMPLIANCE WITH REQUIREMENTS

82 percent of the community water systems serving over 5 American Indian and Alaska Native homes provided water that complied with the bacteriological requirements of the Safe Drinking Water Act (SDWA) in FY 1987. These systems are comparable in size to the Nation's very small community water systems that had 88 percent of the systems in compliance with the SDWA in 1986.



NHS

Department of Health and Social Care

London

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