

**DOCUMENT RESUME****ED 098 009****HC 008 208**

**TITLE** Indian Health Trends and Services, 1974 Edition.  
**INSTITUTION** Public Health Service (DHEW), Washington, D.C. Div. of Indian Health.  
**REPORT NO** DHEW-HSA-74-12-309  
**PUB DATE** 74  
**NOTE** 85p.; For related document, see ED 086 411

**EDRS PRICE** MF-\$0.75 HC-\$4.20 PLUS POSTAGE  
**DESCRIPTORS** \*American Indians; Data Analysis; Disease Rate; Health Facilities; Health Personnel; \*Health Services; Infant Mortality; \*Program Effectiveness; \*Tables (Data); \*Trend Analysis  
**IDENTIFIERS** Alaska; \*Indian Health Service

**ABSTRACT**

The American Indian Health Service (AIHS), subsidiary of the Department of Health, Education, and Welfare, is dedicated to elevating the health status of Indian and Alaskan Native peoples by: developing modern health facilities; encouraging Indian acquaintance with and participation in existing programs; being responsive to the concept of self-determination; and by providing options for management, guidance, and participation in the planning, operation, and evaluation of AIHS delivery systems. Operational gains described in this report include: (1) a decrease in disease and death rate (infant death rate down 62 percent; gastroenteritis down 86 percent; influenza/pneumonia down 57 percent; early infancy mortality down 81 percent); (2) an increase in acceptance and use of AIHS (hospital admissions doubled; out patient services quintupled; dental services quadrupled; and hospital births spiraled, eliminating home births); (3) an increase in personnel (physicians up from 125 to 486, dentists from 40 to 180, and registered nurses from 780 to 1,100); (4) an increase in new facilities (13 hospitals, 17 health centers, and 58 field stations). Alteration of 14 standing facilities and implementation of a comprehensive environmental program are also reported. Statistical data, indicative of current trends, are provided for the following areas of concern: Natality, Infant and Maternal Mortality, Morbidity, Medical Services, Dental Services, Family Planning Services, Nursing Services, Environmental Services, Pharmacy Workload Units, and Service Costs. (JC)

BEST COPY AVAILABLE

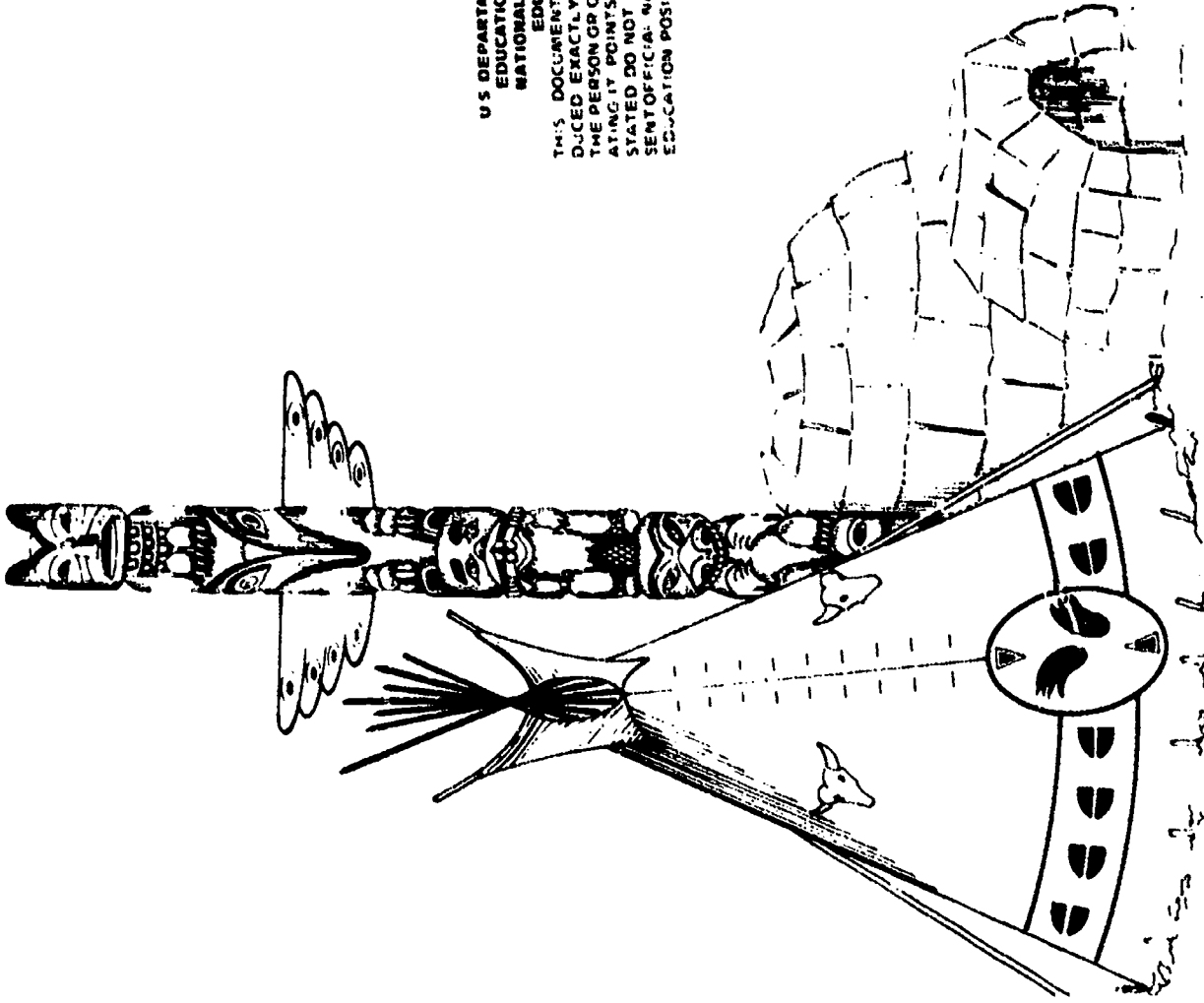
# INDIAN HEALTH TRENDS AND SERVICES

## 1974 Edition

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
NATIONAL INSTITUTE OF EDUCATION  
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.



U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE  
PUBLIC HEALTH SERVICE  
HEALTH SERVICES ADMINISTRATION  
INDIAN HEALTH SERVICE  
DIVISION OF RESOURCE COORDINATION  
OFFICE OF PROGRAM STATISTICS



**INDIAN HEALTH SERVICE**

**Emery A. Johnson, M. D., Director**  
**H. V. Chadwick, Deputy Director**

**DIVISION OF RESOURCE COORDINATION**

**Angel Reaud, M. D., Acting Director**

**OFFICE OF PROGRAM STATISTICS**

**Mozart I. Spector, Director**

**VITAL EVENTS BRANCH**

**Dennis L. McMahan, Chief**

## FOREWORD

The goal of the Indian Health Service is to raise the health status of the Indian and Alaska Native people to the highest possible level. In seeking the achievement of this goal the Indian Health Service must assure a comprehensive health services delivery system.

In order to maintain an effective health delivery system the Indian Health Service has focused on three primary objectives. The first objective has been to develop and apply modern, innovative approaches and methods of high quality health delivery. Secondly, the Indian Health Service has acquainted the Indian people to the available health programs for which they are eligible and further has encouraged their participation in these programs. Thirdly, Indian Health Service continues to be responsive to the desires of Indians to engage in the self-determination process by providing options for them to manage, guide, and participate in the planning, operation, and evaluation of the Indian Health Service delivery systems.

Substantial gains have been made, but much remains to be done before we reach our goal of elevating the health status of Indians and Alaska Natives to the highest possible level. Their problems are more diverse, more severe, and are further compounded by a number of cultural, socio-economic and geographic-environmental factors.

We will continue to pursue our objectives in ways that work. Only in this way can we continue our long term commitment and protect our investment in the future of America's first citizens.



Emory A. Johnson, M.D.  
Assistant Surgeon General  
Director, Indian Health Service

TABLE OF CONTENTS

	<u>Page</u>
Summary .....	1
Introduction.....	3
Natality .....	11
Infant and Maternal Mortality .....	21
Mortality .....	30
Morbidity Statistics .....	44
Medical Services .....	52
Dental Service .....	59
Family Planning Services .....	65
Nursing Services .....	70
Environmental Health Services .....	74
Pharmacy Workload Units .....	76
Cost of Services .....	78

## SUMMARY

## BEST COPY AVAILABLE

Changes from the circumstances of 1955, together with the new input of consumer involvement and the development of more effective health services delivery methods, account for the remarkable progress being made in elevating the health status of Indian people and Alaska Natives.

Since 1955, the infant death rate has declined 62 percent; the death rate from gastroenteritis and other diarrheal diseases has declined 84 percent; the tuberculosis death rate has decreased 86 percent; the influenza and pneumonia death rate has declined 57 percent; and the death rate from certain causes of mortality in early infancy has decreased 51 percent.

The funding of a special trachoma program in 1947 has been instrumental in lowering the incidence rate of trachoma by 64 percent. The tuberculosis control program has reduced tuberculosis morbidity 39 percent.

A significant trend in the Indian health program has been the increased acceptance by Indians and Alaska Natives of health care services, especially utilization of ambulatory services. Hospital admissions have doubled, outpatient visits have increased five-fold, and dental services have quadrupled. In addition, almost all babies are now born in hospitals rather than at home.

New facilities constructed since 1955 include 13 hospitals, 17 health centers, and 58 field stations. Major alterations have been made at 14 standing facilities and many other hospitals and health centers were modified to serve as comprehensive community health facilities. During this same period, physicians assigned to the program increased from 125 to 488, dentists from 40 to 150; and registered nurses from 750 to 1,100.

Since passage of Public Law 86-121, running water and waste disposal systems have been provided for over 78,000 Indian and Alaska Native homes. A continuing program of consultations and services has also been made available to Indian and Alaska Native families and communities to assist them in implementing a comprehensive environmental health program and to maintain a healthful community.

While much remains to be done, the Federal Government's historical commitment to a long-term investment in the future of Indian people and Alaska Natives has proved to be a wise decision.

# PROGRAM ACCOMPLISHMENTS

Health Improvements      **CY 1955-1971**      **Percent Decrease**

<b>Death Rates</b>	
<b>Infants</b> _____	<b>62</b>
<b>Under 28 days</b> _____	<b>45</b>
<b>28 days - 11 Months</b> _____	<b>71</b>
<b>Maternal</b> _____	<b>54</b>
<b>Influenza &amp; Pneumonia</b> _____	<b>57</b>
<b>Certain Diseases of Early Infancy</b> _____	<b>81</b>
<b>Tuberculosis, All Forms</b> _____	<b>86</b>
<b>Gastritis, etc.</b> _____	<b>84</b>
<b>Congenital Malformations</b> _____	<b>43</b>

<b>Incidence Rates</b>	
<b>New Active Tuberculosis Cases</b> _____	<b>39</b>
<b>Trachoma</b> _____	<b>64</b>
 <b>Increased Use of Services</b>	 <b>FY 1955-1972</b> <b>Percent Increase</b>
<b>Hospital Admissions</b> _____	<b>104</b>
<b>Percentage of Babies Born in Hospital</b> _____	<b>12</b>
<b>Outpatient Visits</b> _____	<b>391</b>
<b>Dental Services</b> _____	<b>369</b>



## INTRODUCTION

This report summarizes current and trend information about the demographic characteristics and the health status of Indians and Alaska Natives. Figure 1.1 highlights some of the program accomplishments since the establishment of the Indian Health Service.

### Vital Statistics - Sources and Population Bases

Eighty-five percent of the Indian and Alaska Native population within the United States live in the 24 Reservation States. The natality and mortality statistics in this publication are based on this population group. The sources of these vital statistics are special annual tabulations derived from data furnished to the Indian Health Service by the Vital Statistics Division of the National Center for Health Statistics.

Birth statistics for 1956 through 1966 and 1968 are based on a 50 percent sample of all registered births occurring in the United States during each year. Births for 1967 are based on a combination of 50 percent and 20 percent samples. Statistics for 1955 and 1971 are based on the total file of birth records. The birth statistics for calendar years 1969 and 1970 are not yet available, so estimates have been made where appropriate. Death statistics are based on the total file of registered deaths occurring in the United States. Statistics for 1970 are not yet available, so again, estimates have been made.

The Indian Health Service is divided administratively into eight field areas and two program offices. In compiling vital statistics representative of each of these areas, the following geographic definitions were used. Prior to 1971, the U.S.E.T. Program office was included in the Oklahoma City Area and Tucson was included in the Phoenix Area.

Aberdeen Area.....	Iowa, Michigan, Minnesota, Nebraska, North Dakota, South Dakota, and Wisconsin.
Albuquerque Area.....	Colorado and New Mexico (excluding McKinley and San Juan Counties).
Alaska Area.....	Alaska.

(Cont'd)



Billings Area..... Montana and Wyoming.

Navajo Area..... Arizona (Apache, Coconino, and Navajo Counties only),  
New Mexico (McKinley and San Juan Counties only), and  
Utah (San Juan County only).

Oklahoma City Area.. Kansas and Oklahoma.

Phoenix Area ..... Arizona (excluding Apache, Coconino, Navajo, Pima and  
Santa Cruz Counties), California, Nevada, and Utah  
(excluding San Juan County).

Portland Area..... Idaho, Oregon, and Washington.

U.S.E.T. Program Office Florida, Mississippi, and North Carolina.

Tucson Program Office Arizona (Pima and Santa Cruz Counties)

Statistics for the U. S. population were derived from data appearing in various volumes  
of the following publications:

Vital Statistics of the United States, National Center for Health Statistics, U. S.  
Department of Health, Education, and Welfare.

Monthly Vital Statistics Report, National Center for Health Statistics, U. S.  
Department of Health, Education, and Welfare.

Population Estimates and Projections, Bureau of the Census, U. S. Department of Commerce.

Morbidity Statistics - Sources and Population Bases

Reported cases of notifiable diseases among Indians and Alaska Natives represent those seen  
in Indian Health Service hospitals, health centers, school health centers, and field facilities  
and by facilities and individual physicians under contract. Notifiable diseases are reported  
to Headquarters through the Area Offices.

Reported notifiable diseases for the U. S. All races are taken from various volumes of the following publication:

Morbidity and Mortality, Center for Disease Control, U. S. Department of Health, Education, and Welfare.

The IHS service population represents all Indians and Alaska Natives who look to the Indian Health Service for essential health services. The service population was estimated at 469,632 as of July 1, 1971 (Table 1.2). In calculating incidence rates, the population base is the service population less those in the service population who are not covered by notifiable disease reports (Table 1.3).

The characteristics of the IHS service population differ markedly from the characteristics of the U. S. population. Almost half of the Indians and Alaska Natives are below the age of 18. Their median age of 18.4 is almost 10 years below the U. S. median age of 28.1. Whereas 19 percent of the U. S. population is age 55 or older, only 11.8 percent of the Indian population is in this age group (Table 1.4).

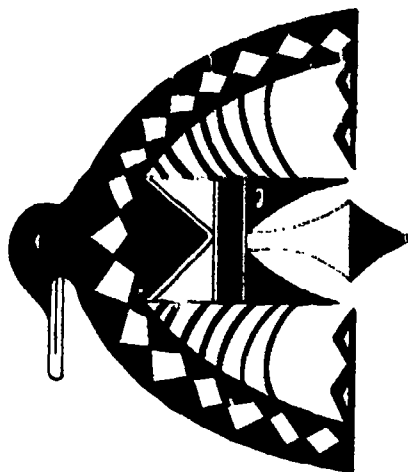


Table 1.1

ESTIMATED TOTAL INDIAN AND ALASKA NATIVE POPULATION IN THE 24 RESERVATIONS STATES  
 AND TOTAL RESIDENT POPULATION OF THE UNITED STATES  
 CALENDAR YEARS 1965-1971

Calendar Year	Indian and Alaska Native	Indian (23 States)	Alaska Native	U.S. Resident Population
1971	722,058	670,647	51,411	205,187,000
1970	701,599	650,945	50,654	203,235,000
1969	681,143	631,246	49,897	201,921,000
1968	660,677	611,538	49,139	199,861,000
1967	640,216	591,834	48,382	197,863,000
1966	619,754	572,129	47,625	195,857,000
1965	599,300	552,432	46,868	193,818,000

Table 1.2

ESTIMATED TOTAL INDIAN AND ALASKA NATIVE SERVICE POPULATION BY AREA  
CALENDAR YEARS 1965-1971

Year	<u>All Areas</u>	<u>Aberdeen</u>	<u>Alaska</u>	<u>Albuquerque</u>	<u>Billings</u>	<u>Navajo</u>	<u>Oklahoma</u>	<u>Phoenix</u>	<u>Portland</u>	<u>USEET</u>	<u>Tucson</u>
1965	413,286	62,903	46,868	29,248	24,803	86,733	88,288	51,306	23,137		
1966	422,609	63,517	47,625	30,020	25,267	87,697	91,685	53,273	23,525		
1967	433,932	64,131	48,382	30,792	25,732	88,661	97,005	55,316	23,913		
1968	442,564	64,745	49,139	31,565	26,197	89,625	100,508	56,484	24,301		
1969	451,196	65,359	49,897	32,337	26,662	90,589	104,012	57,651	24,689		
1970	460,004	65,976	50,654	33,109	27,127	91,553	99,077	49,241	25,081	8,434	9,752
1971	469,632	66,242	51,411	33,881	27,593	92,805	102,342	50,105	25,492	9,088	10,073
1972	479,349	67,708	52,168	34,653	28,058	94,057	106,051	51,273	25,903	9,236	10,242

Table 1.3

TOTAL ESTIMATED NOTIFIABLE DISEASE POPULATION BY AREA  
CALENDAR YEARS 1965-1971

Calendar Year	All Areas		Alaska		Aberdeen	Alaska	Albuquerque	Billings	Navajo	OkJahoma	Phoenix	Portland	USET	Fucson
		Except Alaska												
1965	397,562	350,694	54,028	46,866	29,248	24,803	80,645	88,288	51,306	22,376				
1966	408,474	360,849	54,770	47,625	30,020	25,267	82,697	91,685	53,273	23,137				
1967	424,386	376,004	55,513	48,382	30,792	25,732	87,798	97,005	55,316	23,848				
1968	433,458	384,519	56,256	49,139	31,565	26,197	89,050	100,508	56,484	24,259				
1969	442,531	392,632	56,999	49,897	32,337	26,662	90,301	104,012	57,551	24,670				
1970	451,596	400,942	57,742	50,654	33,109	27,127	91,553	99,077	49,089	25,081	8,434	9,730		
1971	460,588	409,177	57,798	51,411	33,881	27,593	92,895	102,342	50,105	25,492	9,088	10,073		
1972	470,153	417,985	58,512	52,168	34,653	28,058	94,057	102,021	51,273	25,993	9,234	10,242		



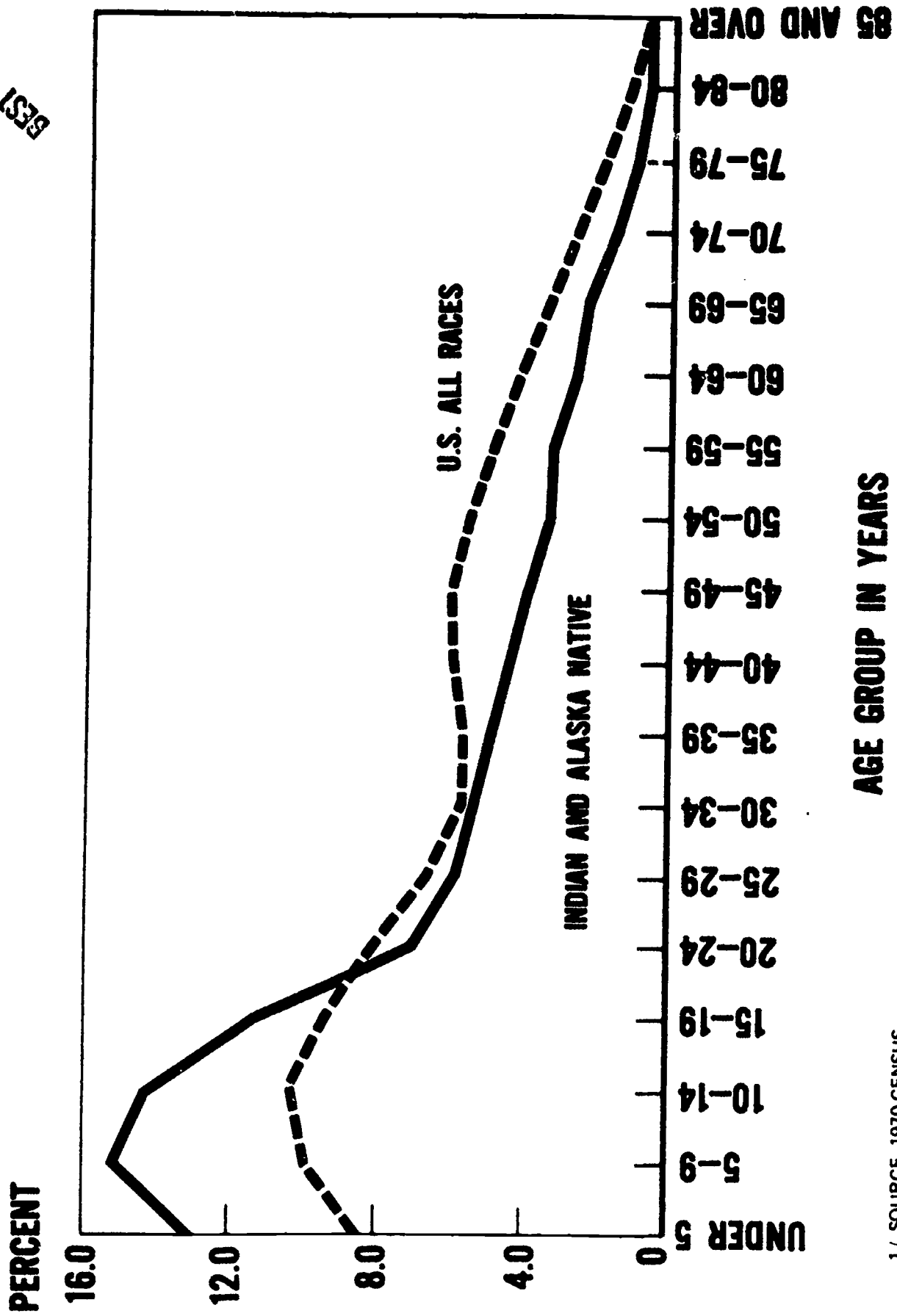
Table 1.4

PERCENT DISTRIBUTION OF POPULATION BY AGE AND SEX, 1970  
 INDIAN AND ALASKA NATIVE SERVICE POPULATION AND U.S. ALL RACES

All Ages	Indian and Alaska Native (24 Reser- vation States)			United States		
	Total	Male	Female	Total	Male	Female
Under 5	13.1	6.5	6.6	8.4	4.3	4.1
5 - 9	15.1	7.6	7.5	9.8	5.0	4.8
10 - 14	14.2	7.1	7.1	10.2	5.2	5.0
15 - 19	11.3	5.6	5.7	9.4	4.7	4.7
20 - 24	7.0	3.3	3.7	8.1	3.9	4.2
25 - 29	5.8	2.8	3.0	6.6	3.3	3.3
30 - 34	5.3	2.5	2.8	5.6	2.8	2.8
35 - 39	4.8	2.3	2.5	5.5	2.7	2.8
40 - 44	4.4	2.1	2.3	5.9	2.9	3.0
45 - 49	3.9	1.9	2.0	6.0	2.9	3.1
50 - 54	3.3	1.6	1.7	5.5	2.6	2.9
55 - 59	3.2	1.5	1.6	4.9	2.3	2.6
60 - 64	2.6	1.3	1.3	4.2	2.0	2.2
65 - 69	2.3	1.2	1.2	3.4	1.5	1.9
70 - 74	1.5	0.8	0.8	2.7	1.1	1.6
75 - 79	1.0	0.5	0.5	1.9	0.8	1.1
80 - 84	0.6	0.3	0.3	1.2	0.4	0.8
85+	0.6	0.2	0.3	0.7	0.3	0.4
Median Age	18.4	18.0	16.7	26.1	26.8	29.3

Figure 1.2

# PERCENT OF POPULATION BY AGE INDIAN AND ALASKA NATIVE AND U.S. ALL RACES<sup>1/</sup>



1/ SOURCE, 1970 CENSUS.

BEST COPY AVAILABLE



## NATALITY

There were 23,806 live Indian and Alaska Native births in 1971 (Table 2.1). The Indian and Alaska Native birth rate experienced an increasing trend prior to 1965, reversed the trend for the next three years, and has remained at a rate between 32 and 33 for the last five years. The birth rate for the U.S. All Races declined each year from 1957 through 1968, increased slightly the next two years, and has since been declining. Since 1960 the Indian and Alaska Native birth rates have been 1.8 to 1.9 times the U.S. All Races rates and 1.3 to 1.4 times the U.S. non-white rates (Table 2.2).

The percentage of Indian and Alaska Native registered live births which occur in hospitals has increased substantially since 1955, particularly among Alaska Natives (Table 2.3). From 1955 to 1971 the percentage of Alaska Natives born outside hospitals decreased from nearly 35 to 5 percent. The percentage of live births born in hospitals in Alaska still falls below the percentages for the Indian and U.S. All Races population.

Infants at birth weighing 2,500 grams or less (about 5½ pounds) are referred to as low-birth-weight of the child at birth with no implications as to length of gestation or any other measure of maturity. Of the live births in 1971 for which the weight was stated, 7.4 percent were low-birth-weight (Table 2.4). This percentage is lower than the latest percentage for the U.S. of 8.2 percent. The low-birth-weight percentages for the U.S. whites and U.S. all other are 7.1 and 13.7 respectively. The highest percentages of low-birth-weight babies are for the age groups under 20 and over 35.

The total fertility rate for the Indian population has been decreasing, but it is still substantially higher than the rate for the U.S. population (Table 2.6). If a group of 1,000 women were to have the same birth rate in each age group as were observed in 1971, they would have a total of 4,232 children by the time they reached the end of the reproductive period. This is a decrease of 26 percent since 1965. The U.S. population total fertility rate in 1968 was 2,477.

The number of Indian births per 1,000 women aged 15-44 is also almost twice the U.S. rate (Table 2.7). While the Indian and Alaska Native rate is 153.8, the projected U. S. rate is 82.3.

Table 2.1

INDIANS AND ALASKA NATIVES IN 24 RESERVATION STATES AND U.S. ALL RACES  
 LIVE BIRTHS AND BIRTH RATES  
 Calendar Years 1955-1971  
 (Rates per 1,000 Population)

Year	Indian and Alaska Native		Indian (23 Res. States)		Alaska Native		U.S.	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1971	23,806	33.0	22,092	32.9	1,714	33.3	3,559,000	17.3
1970	23,027	32.8	21,372	32.8	1,655	32.7	3,718,000	18.2
1969	22,392	32.9	20,797	32.9	1,595	32.0	3,571,000	17.7
1968	21,602	32.7	20,066	32.8	1,536	31.3	3,501,564	17.5
1967	20,658	32.3	18,948	32.0	1,710	35.3	3,520,959	17.8
1966	21,100	34.0	19,154	33.5	1,946	40.9	3,606,274	18.4
1965	22,370	37.3	20,352	36.8	2,018	43.1	3,760,358	19.4
1964	22,782	43.3	20,794	43.1	1,988	45.7	4,027,490	21.0
1963	22,274	43.0	20,142	42.4	2,132	49.5	4,098,020	21.7
1962	21,866	42.7	19,770	42.1	2,096	48.6	4,167,362	22.4
1961	21,664	42.8	19,570	42.3	2,094	48.6	4,268,326	23.3
1960	21,154	42.5	19,188	42.2	1,966	45.6	4,257,850	23.7
1959	20,520	41.7	18,616	41.4	1,904	45.9	4,244,796	24.0
1958	19,371	39.9	17,428	39.2	1,943	48.7	4,203,812	24.3
1957	18,814	39.3	16,982	38.6	1,832	47.7	4,254,784	25.0
1956	17,947	38.0	16,040	36.9	1,907	51.5	4,163,090	24.9
1955	17,028	37.1	15,304	36.1	1,724	49.3	4,047,295	24.6

1/ Provisional - Monthly Vital Statistics Report Vol. 20, No. 13  
 2/ Estimated.

Table 2.2

BIRTH RATES  
(Rates per 1,000 Population)

Year	Birth Rate					Ratio		
	Indian & Alaska Native	Indian	Alaska Native	U.S. All Races	U.S. White	U.S. Non-White	Indian and Alaska Natives to All Races	Indian and Alaska Native to U.S. Non-White
1971	33.0	32.9	33.3	17.3 <sup>1/</sup>	NA	NA	1.9 <sup>1/</sup>	NA
1970	32.8 <sup>2/</sup>	32.8 <sup>2/</sup>	32.7 <sup>2/</sup>	18.2 <sup>1/</sup>	NA	NA	1.8 <sup>1/</sup>	NA
1969	32.9 <sup>2/</sup>	32.9 <sup>2/</sup>	32.0 <sup>2/</sup>	17.8 <sup>1/</sup>	16.9	24.4	1.9 <sup>1/</sup>	NA
1968	32.7	32.8	31.3	17.5	16.6	24.2	1.9	1.4
1967	32.3	32.0	35.3	17.8	16.8	25.0	1.8	1.3
1966	34.0	33.5	40.9	18.4	17.4	26.1	1.8	1.3
1965	37.3	36.8	43.1	19.4	18.3	27.6	1.9	1.4
1960	42.5	42.2	45.6	23.7	22.7	32.1	1.8	1.3
1955	37.1	36.1	49.3	24.6	23.6	33.1	1.5	1.1

<sup>1/</sup> Provisional  
<sup>2/</sup> Estimated

Table 2.3

PERCENTAGE OF LIVE BIRTHS BORN IN HOSPITALS  
 INDIANS AND ALASKA NATIVES IN 24 RESERVATION STATES AND U.S. ALL RACES  
 Calendar Years 1955-1971

Year	Indian & Alaska Native		Indian		Alaska Native		U.S. All Races	
	In Hospital	Not in Hospital	In Hospital	Not in Hospital	In Hospital	Not in Hospital	In Hospital	Not in Hospital
1971	98.6	1.4	98.9	1.1	94.6	5.4	NA	NA
1970	NA	NA	NA	NA	NA	NA	NA	NA
1969	NA	NA	NA	NA	NA	NA	NA	NA
1968	98.0	2.0	98.5	1.5	91.8	8.2	98.5	1.5
1967	97.2	2.8	97.8	2.2	90.4	9.6	98.3	1.7
1966	97.0	3.0	97.7	2.3	89.5	10.5	98.0	2.0
1965	95.5	4.5	96.7	3.3	84.0	16.0	97.4	2.6
1964	95.5	4.5	96.9	3.1	81.4	18.6	97.5	2.5
1963	95.2	4.8	96.8	3.2	79.9	20.1	97.4	2.6
1962	94.3	5.7	96.5	3.5	73.1	26.9	97.2	2.8
1961	93.5	6.5	96.1	3.9	69.3	30.7	96.9	3.1
1960	92.9	7.1	95.1	4.9	70.9	29.1	96.6	3.4
1959	91.3	8.7	94.0	6.0	64.4	35.6	96.4	3.6
1958	90.3	9.7	93.1	6.9	65.5	34.5	96.0	4.0
1957	89.1	10.9	91.7	8.3	64.3	35.7	95.7	4.3
1956	88.7	11.3	91.6	8.4	63.8	36.2	95.1	4.9
1955	88.2	11.8	90.8	9.2	65.1	34.9	94.4	5.6

NA Not available

Table 2.4

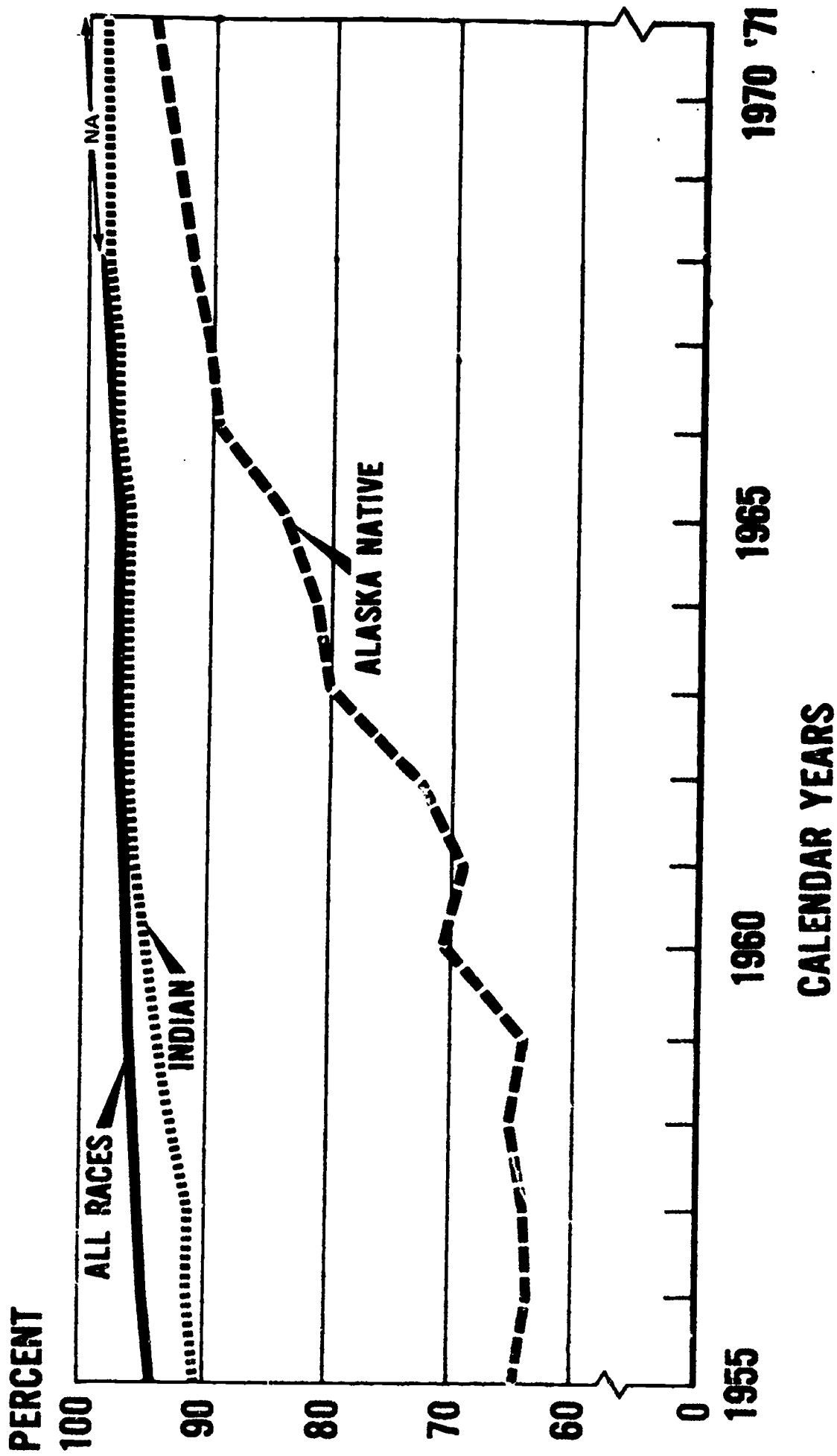
NUMBER AND PERCENT OF LOW BIRTH WEIGHT BABIES  
INDIAN AND ALASKA NATIVES IN 24 RESERVATION STATES  
1971 and 1962

	<u>Indian and Alaska Native, 1971</u>			<u>Indian and Alaska Native, 1962</u>		
	<u>Total</u> <sup>1/</sup>	<u>Number</u> <u>Low</u> <u>Weight</u>	<u>Percent</u> <u>Low</u> <u>Weight</u>	<u>Total</u> <sup>1/</sup>	<u>Number</u> <u>Low</u> <u>Weight</u>	<u>Percent</u> <u>Low</u> <u>Weight</u>
All Ages	23,702	1,765	7.4	19,286	1,486	7.7
Under 20	5,448	437	8.0	2,836	268	9.4
20 - 24	8,854	638	7.2	6,342	440	6.9
25 - 29	4,923	352	7.2	4,706	328	7.0
30 - 34	2,686	188	7.0	3,174	262	8.3
35 - 39	1,342	115	8.6	1,662	134	8.1
40 and up	449	35	7.8	566	54	9.5

<sup>1/</sup> Number of live births for which weight was stated.

Figure 2.1

# PERCENTAGE OF LIVE BIRTHS BORN IN HOSPITALS INDIAN, ALASKA NATIVE, AND U.S. ALL RACES



NA NOT AVAILABLE

BEST COPY AVAILABLE

Table 2.5

NUMBER AND PERCENT OF LIVE BIRTHS BY AGE OF MOTHER AND BIRTH WEIGHT  
INDIANS AND ALASKA NATIVES IN THE 24 RESERVATION STATES  
Calendar Year 1971

Years	Total Live Births	Number of Live Births by Birth Weight								5001 Grams or More	Weight Not Stated									
		500 Grams or Less	501-1000	1001-1500	1501-2000	2001-2500	2501-3000	3001-3500	3500-4000			4001-4500	4501-5000							
Under 15	110	1	1	47	2	24	46	30	6											
15 - 19	5,353	5	18	54	101	262	2,177	1,396	299	42	2	15								
20 - 24	8,886	3	28	72	110	443	3,467	2,413	639	87	8	31								
25 - 29	4,941	2	21	24	72	233	1,818	1,386	445	89	26	18								
30 - 34	2,703	1	15	14	35	123	922	771	288	71	14	18								
35 - 39	1,357	1	2	7	20	85	450	386	136	30	11	15								
40 - 44	423	0	0	1	8	25	111	121	47	10	5	7								
45 - 49	33	0	0	0	0	1	10	10	2	3	1									
Grand Total	23,806	13	85	147	348	1,172	9,001	6,513	1,862	332	67	104								

Years	Total Live Births	Percent Distribution of Live Births by Birth Weight																		
		500 Grams or Less	501-1000	1001-1500	1501-2000	2001-2500	2501-3000	3001-3500	3500-4000	4001-4500	4501-5000									
Under 15	100.0	0.9	0.9	0.9	1.8	4.9	41.8	27.3	5.5	0.8	0.0	0.3								
15 - 19	100.0	0.1	0.3	0.9	1.9	4.9	40.6	26.1	5.6	0.8	0.0	0.3								
20 - 24	100.0	0.3	0.3	0.6	1.2	5.0	39.0	27.1	7.2	0.9	0.1	0.3								
25 - 29	100.0	0.0	0.4	0.5	1.5	4.7	36.8	28.1	9.0	1.8	0.5	0.4								
30 - 34	100.0	0.0	0.6	0.5	1.3	4.6	34.1	28.5	10.7	2.6	0.5	0.7								
35 - 39	100.0	0.1	0.1	0.5	1.5	6.3	33.2	28.4	10.0	2.2	0.8	1.1								
40 - 44	100.0	-	-	0.2	1.9	5.9	26.2	28.6	11.1	2.4	1.2	1.7								
45 - 49	100.0	-	-	-	-	3.0	30.3	30.3	6.1	9.1	3.0	-								
Grand Total	100.0	0.1	0.3	0.6	1.5	4.9	37.8	27.4	7.8	1.4	0.3	0.4								



Table 2.6

TOTAL FERTILITY RATES AND BIRTH RATES BY AGE OF MOTHER  
INDIANS AND ALASKA NATIVES IN THE 24 RESERVATION STATES  
Calendar Years 1965-1971

<u>Year</u>	<u>Total Fertility Rate</u>	<u>10-14 Years</u>	<u>15-19 Years</u>	<u>20-24 Years</u>	<u>25-29 Years</u>	<u>30-34 Years</u>	<u>35-39 Years</u>	<u>40-44 Years</u>	<u>45-49 Years</u>
1971	4,231.8	2.2	129.5	284.2	209.8	122.9	70.6	24.9	2.2
1970	NA	NA	NA	NA	NA	NA	NA	NA	NA
1969	NA	NA	NA	NA	NA	NA	NA	NA	NA
1968	4,502.2	0.9	111.0	281.4	224.0	149.7	94.7	35.4	3.2
1967	4,542.3	1.6	108.9	269.9	223.5	160.6	105.6	34.4	4.0
1966	4,882.9	1.7	112.3	283.7	246.6	176.3	109.5	42.0	4.6
1965	5,696.6	1.4	106.4	317.3	280.1	204.4	132.4	55.8	5.6

NA - Not available.

Table 2.7

FERTILITY RATES

Rates per 1,000 Women 15 - 44

	Fertility Rate				Ratio	
	Indian & Alaska Native	Indian	Alaska Native	U.S. All Races	White	U.S. Non-White
1971	153.8	153.2	162.0	82.3 <sup>1/2</sup>	NA	NA
1970	155.0 <sup>1/2</sup>	154.7 <sup>1/2</sup>	158.8 <sup>1/2</sup>	87.6 <sup>2/2</sup>	NA	NA
1969	155.3 <sup>1/2</sup>	155.3 <sup>1/2</sup>	155.4 <sup>1/2</sup>	85.8 <sup>2/2</sup>	NA	NA
1968	163.5	164.1	156.3	85.7	81.5	114.9
1967	172.8	171.6	188.0	87.6	83.1	119.8
1966	182.3	179.4	216.7	91.3	86.4	125.9
1965	199.8	197.4	228.7	96.6	91.4	133.9
1960	225.9	225.5	242.6	118.0	113.2	153.6

<sup>1/2</sup> Estimated  
<sup>2/2</sup> Projected  
 NA Not available



Indian and Alaska Native Live Births by Reservation State

	1971	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960
24 Res. States	23,806			21,602	20,658	21,100	22,370	22,782	22,274	21,866	21,664	21,151 <sup>1/</sup>
Alaska	1,714			1,536	1,710	1,946	2,018	1,988	2,132	2,096	2,094	1,966
Arizona	4,037			3,928	3,894	4,012	4,216	4,262	4,266	4,158	3,804	3,754
California	1,833			1,790	1,802	1,770	1,922	1,872	1,802	1,696	1,748	1,808
Colorado	356			274	250	250	236	238	192	198	182	178
Florida	123			82	80	96	66	76	64	88	76	96
Idaho	229			204	176	216	226	248	216	200	182	180
Iowa	144			140	60	52	68	54	68	68	68	62
Kansas	153			178	135	96	148	164	132	122	138	144
Michigan	468			382	270	230	222	220	184	192	204	210
Minnesota	842			764	816	756	772	860	786	772	808	806
Mississippi	117			68	115	108	100	124	120	114	108	120
Montana	1,060			918	954	916	1,108	1,094	1,116	1,122	1,206	1,132
Nebraska	252			262	196	232	258	266	238	262	222	244
Nevada	243			238	246	256	240	290	242	244	262	242
New Mexico	2,666			2,402	2,518	2,454	2,678	2,786	2,628	2,678	2,518	2,396
North Carolina	1,587			1,340	1,170	1,304	1,338	1,394	1,326	1,356	1,388	1,364
North Dakota	542			490	568	564	578	594	570	586	578	552
Oklahoma	3,261			2,690	2,135	2,084	2,232	2,408	2,388	2,110	2,360	2,232
Oregon	481			402	355	424	424	396	368	376	424	394
South Dakota	1,334			1,224	1,195	1,296	1,412	1,394	1,330	1,276	1,304	1,270
Utah	429			380	323	322	402	332	336	330	350	288
Washington	1,183			1,082	1,025	966	966	956	1,006	1,042	952	886
Wisconsin	601			634	529	572	562	560	578	588	474	616
Wyoming	151			194	136	178	178	206	186	192	182	176
<sup>1/</sup> Includes data for South Carolina												

NOT AVAILABLE

BEST COPY AVAILABLE



## INFANT AND MATERNAL MORTALITY

The infant death rate among Indians and Alaska Natives declined 62.4 percent between 1955 and 1971. The 1955 rate of 62.5 had been reduced to 23.5 deaths per 1,000 live births by 1971. Concurrently, the U. S. general population experienced a drop of 27.3 percent. The 1955 Indian and Alaska Native infant death rate was 2.4 times the U. S. All Races rate. By 1971 the Indian rate had been reduced to 1.2 times the U. S. rate.

The neonatal death rate has been reduced below that for the U. S. All Races. The postneonatal rate is 2.3 times the U. S. All Races, however, this ratio is improving. In 1966 the ratio was 3.3.

Almost 15 percent of the infant deaths among the Indian and Alaska Native populations is the result of pneumonia. Congenital anomalies, the leading cause of infant deaths in the U. S., is the second leading cause for the Indians and Alaska Natives.

The maternal death rate for Indians and Alaska Natives has been declining since 1962. The three-year average rate for 1970 has declined 64 percent from the 1962 rate. The ratio of the Indian and Alaska Native rate to the U. S. rate has been reduced from 2.5 in 1962 to 1.3 in 1970.

Table 3.1

INDIAN DEATHS AND DEATH RATES  
 INDIANS AND ALASKA NATIVES IN 24 RESERVATION STATES AND U.S. ALL RACES  
 Calendar Years 1955-1971

(Rates per 1,000 live births)

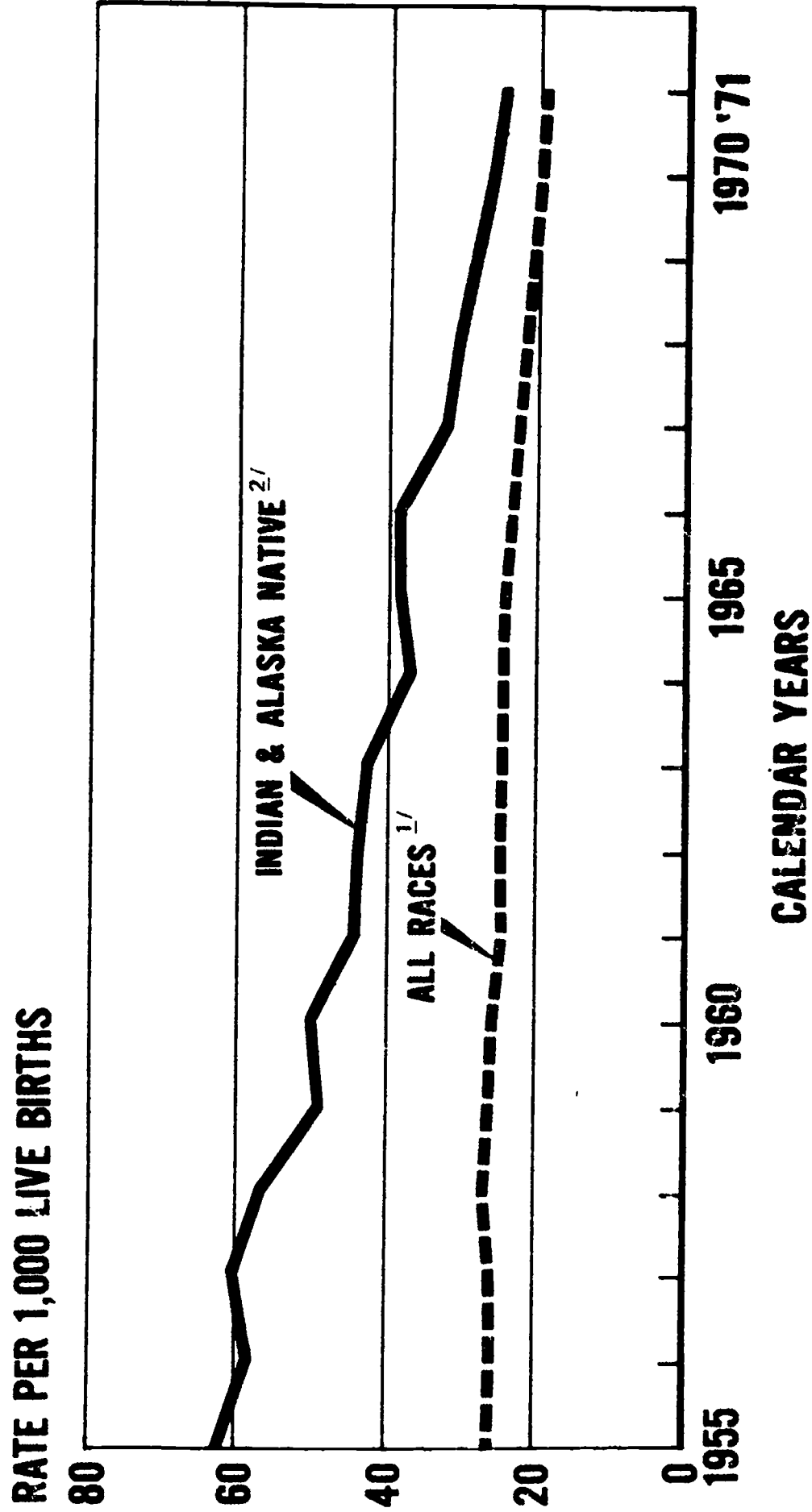
Year	Indian and Alaska Native		Indian		Alaska Native		U.S. All Races	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate
1971	560	23.5	513	23.2	47	27.4	NA	19.22/
1970	570 <sup>1/</sup>	NA	523 <sup>1/</sup>	NA	47 <sup>1/</sup>	NA	NA	19.82/
1969	579	NA	533	NA	46	NA	75,073	21.5
1968	668	30.9	606	30.2	62	40.4	76,263	21.8
1967	666	32.2	571	30.1	95	55.6	79,028	22.4
1966	822	39.0	722	37.7	100	51.4	85,516	23.7
1965	872	39.0	740	36.4	132	65.4	92,866	24.7
1964	856	37.6	747	35.9	109	54.8	99,783	24.8
1963	972	43.6	864	42.9	108	50.7	103,390	25.2
1962	967	44.2	827	41.8	140	66.8	105,479	25.3
1961	961	44.4	827	42.3	134	64.0	107,956	25.3
1960	1,064	50.3	914	47.6	150	76.3	110,873	26.0
1959	1,016	49.5	870	46.7	146	76.7	112,008	26.4
1958	1,123	58.0	989	56.7	134	69.0	113,789	27.1
1957	1,136	60.4	989	58.2	147	80.2	112,094	26.3
1956	1,066	59.4	900	56.1	166	87.0	108,183	26.0
1955	1,065	62.5	936	61.2	129	74.8	108,903	26.4

<sup>1/</sup> Estimated  
<sup>2/</sup> Provisional - Monthly Vital Statistics Report, Vol. 20, No. 12  
 NA Not available

Figure 3.1

BEST COPY AVAILABLE

# INFANT DEATH RATES INDIAN AND ALASKA NATIVE, AND U.S. ALL RACES



<sup>1/</sup> PROVISIONAL, MONTHLY VITAL STATISTIC REPORTS, NCHS VOL. 20, NO. 12 1970, 1971.

<sup>2/</sup> ESTIMATED 1969, 1970.

Table 3.2

INDIAN AND ALASKA NATIVE INFANT DEATH RATES COMPARED TO U. S. POPULATION  
Rates per 1,000 Live Births

Year	Indian & Alaska Native	U.S. All Races	U.S. White	U.S. Non-White	Ratio Indian to U. S. All Races	Ratio Indian to U. S. Non-White
1971	23.5	19.2 <sup>1/2</sup>	16.8 <sup>2/2</sup>	30.2 <sup>2/2</sup>	1.2	0.8
1970	24.8 <sup>1/2</sup>	19.8 <sup>2/2</sup>	17.4 <sup>2/2</sup>	31.4 <sup>2/2</sup>	1.3	0.8
1969	25.9 <sup>1/2</sup>	21.5	18.4 <sup>2/2</sup>	31.6 <sup>2/2</sup>	1.2	0.8
1968	30.9	21.8	19.2	34.5	1.4	0.9
1967	32.2	22.4	19.7	35.9	1.4	0.9
1956	39.0	23.7	20.6	38.8	1.6	1.0
1965	39.0	24.7	21.5	40.3	1.6	1.0
1960	50.3	26.0	22.9	43.2	1.9	1.2
1955	62.5	26.4	23.6	42.8	2.4	1.5

<sup>1/2</sup> Estimated, IHS  
<sup>2/2</sup> Provisional - Monthly Vital Statistics Report, NCHS Vol. 20 No. 12



Table 3.3

**INFANT DEATH RATES BY AGE  
INDIANS AND ALASKA NATIVES IN 24 RESERVATION STATES AND U. S. ALL RACES  
Calendar Years 1966-1971**

(Rates per 1,000 live births)

	Infant Death Rate	Neonatal				Postneonatal	
		Total	Under 1 Day	1-6 Days	7-27 Days	28 Days - 11 Months	
<b>Indians and Alaska Natives</b>							
1971	23.5	12.3	7.3	3.3	1.7	11.2	
1970	NA	NA	NA	NA	NA	NA	
1969	NA	NA	NA	NA	NA	NA	
1968	30.9	14.4	7.9	4.1	2.4	16.5	
1967	32.2	15.3	8.4	5.1	1.8	16.9	
1966	39.0	17.3	9.0	5.6	2.7	21.7	
<b>U. S. All Races</b>							
1971	19.2	14.3	NA	NA	NA	4.9	
1970	19.8	14.9	NA	NA	NA	5.0	
1969	20.7	15.4	NA	NA	NA	5.4	
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	

NA Not available

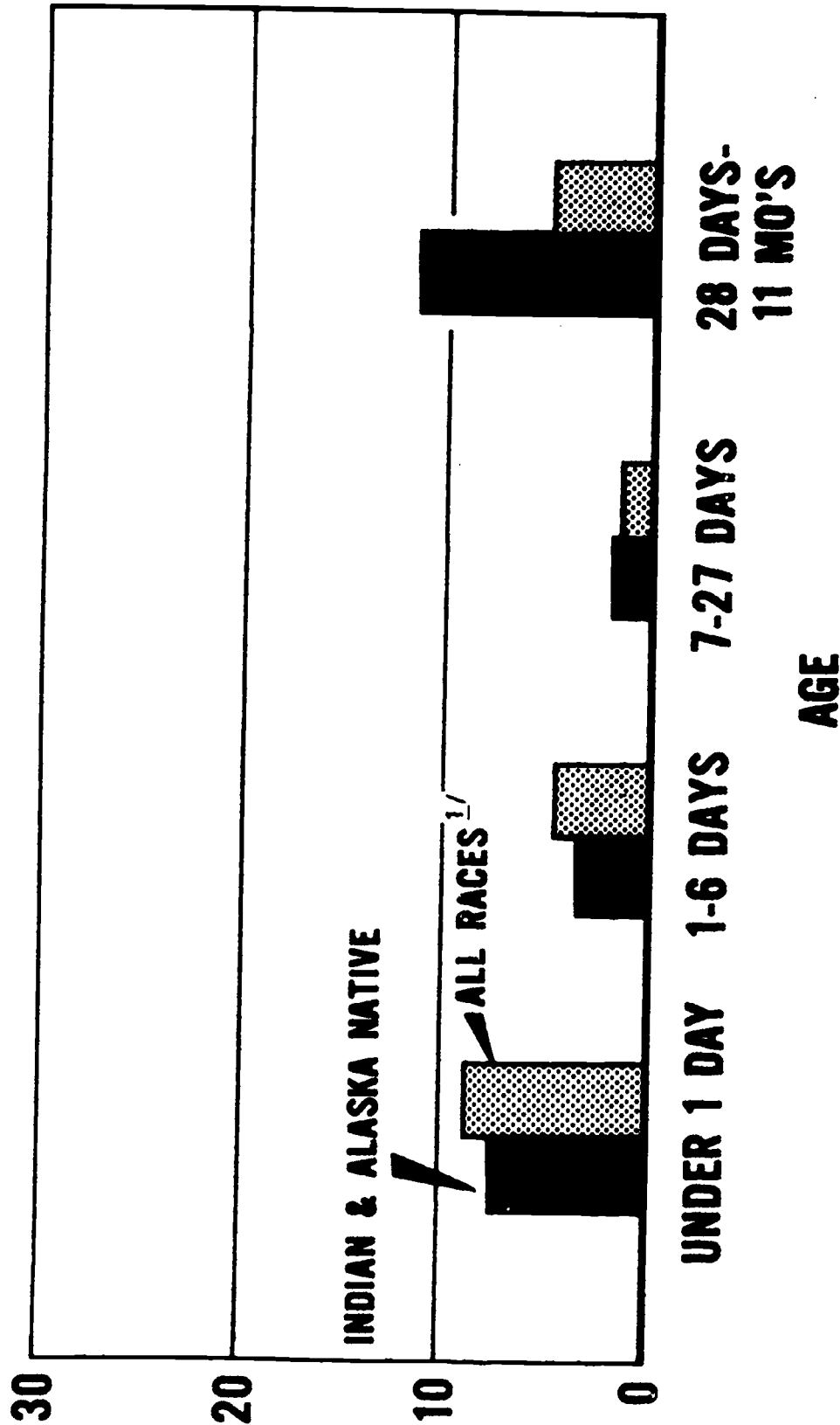
1/ Provisional, Monthly Vital Statistics Report, NCHS, Vol. 20, No. 11.

Figure 3.2

# INFANT DEATH RATES BY AGE AT DEATH INDIAN AND ALASKA NATIVE, AND U.S. ALL RACES CALENDAR YEAR 1971

BEST COPY AVAILABLE

RATES PER 1,000 LIVE BIRTHS



1/ ALL RACES RATES ARE ESTIMATED EXCEPT 28 DAYS - 11 MONTHS WHICH IS PROVISIONAL. MONTHLY VITAL STATISTICS REPORT, NCHS, VOL. 20, NO. 11.

Table 3.4

LEADING CAUSES OF INFANT DEATHS  
INDIANS AND ALASKA NATIVES IN THE 24 RESERVATION STATES AND U. S. ALL RACES

	Number of Deaths			Percent Distribution IHS <sup>1</sup>	Percent Distribution U.S. <sup>2</sup>
	1968	1969	1971		
Total	668	579	560	100.0	100.0
Pneumonia	101	100	69	14.9	9.3
Congenital anomalies	55	55	65	9.7	15.1
Symptoms and ill defined	60	54	60	9.6	4.3
Asphyxia of newborn, unspecified	48	36	43	7.0	12.8
Immaturity, unqualified	45	40	42	7.0	11.9
Respiratory Distress Syndrome	23	25	33	4.5	5.5
Hyaline membrane disease	13	29	21	3.5	6.4
All other complications of pregnancy and childbirth	17	29	20	3.7	7.1
Diarrheal diseases	62	41	20	6.8	1.1
Accidents	33	33	16	4.5	3.2
Meningitis	21	14	13	2.7	0.7
Septicemia	10	17	13	2.2	1.0
All other	180	106	145	23.9	21.6

<sup>1</sup>/<sub>2</sub> Based on three-year average: 1968, 1969, 1971

Table 3.5

LEADING CAUSES OF NEONATAL AND POSTNEONATAL DEATHS  
THREE-YEAR AVERAGE RATES (1968, 1969 and 1971)  
Rates Per 1,000 Live Births

	<u>Rate</u>
<u>Neonatal</u>	<u>13.2</u>
Certain causes of mortality in early infancy	9.5
Asphyxia of newborn unspecified	1.9
Immaturity, unqualified	1.9
Respiratory disease syndrome	1.2
All other complications of pregnancy and childbirth	1.0
Hyaline membrane disease	0.9
All other anoxic and hypoxic conditions not elsewhere classifiable	0.5
Conditions of placenta	0.4
Difficult labor	0.3
Congenital anomalies	1.6
Diseases of the respiratory system	0.7
Septicemia	0.3
Diseases of the digestive system	0.3
<u>Postneonatal</u>	<u>13.6</u>
Influenza and pneumonia	3.4
Symptoms and ill-defined conditions	2.4
Diarrheal diseases	1.7
Accidents	1.3
Congenital anomalies	1.0
Other infective and parasitic diseases	0.7
Meningitis	0.6
Septicemia	0.3
Other diseases of respiratory system	0.3
Diseases of the digestive system	0.3
Other diseases of nervous system and sense organs	0.3

Table 3.6  
Indian and Alaska Native Infant Death by Reservation State

	1971	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960
Total U.S.												
24 Res. States	560		579	668	666	822	872	856	972	967	961 <sup>1/</sup>	1,064 <sup>1/</sup>
Alaska	47		46	62	95	100	132	109	108	140	134	150
Arizona	108		120	169	140	203	197	166	266	218	215	266
California	19		11	24	21	25	32	28	25	37	33	21
Colorado	8		8	10	5	9	8	6	4	8	7	9
Florida	0		2	2	2	2	3	2	2	4	5	5
Idaho	7		11	8	3	7	9	5	13	6	5	9
Iowa	4		0	2	4	5	1	0	4	2	2	3
Kansas	3		0	2	0	1	1	2	3	1	1	3
Michigan	12		6	4	5	5	4	4	8	6	14	9
Minnesota	22		11	15	21	24	22	20	24	23	27	21
Mississippi	1		2	9	5	11	3	2	4	8	4	8
Montana	26		26	30	31	43	36	57	54	56	61	36
Nebraska	3		11	12	12	5	10	6	15	16	14	12
Nevada	7		3	3	4	6	7	11	8	5	8	7
New Mexico	92		103	84	95	117	102	123	126	107	104	141
North Carolina	42		39	37	51	53	51	51	61	48	55	51
North Dakota	13		12	9	14	21	23	26	28	23	30	24
Oklahoma	41		40	40	39	53	49	64	50	54	50	75
Oregon	14		12	9	10	13	13	14	7	14	17	10
South Dakota	42		38	42	43	58	71	54	63	69	72	97
Utah	6		18	25	12	8	23	18	18	19	17	19
Washington	32		37	41	40	42	50	58	59	64	60	54
Wisconsin	9		15	18	14	4	14	21	15	30	17	22
Wyoming	2		8	11	0	7	11	9	7	9	7	9
<sup>1/</sup> Includes data for South Carolina												



Table 3.7

MATERNAL DEATHS AND DEATH RATES  
 INDIANS AND ALASKA NATIVES IN 24 RESERVATION STATES AND U. S. ALL RACES  
 Calendar Years 1958-1971

Year	Number		Rate per 100,000 Live Births	
	Indians and Alaska Natives	All Races	Indians and Alaska Natives <sup>1/</sup>	U. S. All Races
1971	9 <sup>2/</sup>	NA	38.3	20.5 <sup>3/</sup>
1970	7 <sup>2/</sup>	NA	32.3	24.7 <sup>3/</sup>
1969	6	801	32.8	27.4 <sup>3/</sup>
1968	9	859	37.0	24.5
1967	7	987	49.1	28.0
1966	16	1,049	54.6	29.1
1965	12	1,189	63.4	31.6
1964	14	1,343	74.2	33.3
1963	24	1,466	83.7	35.8
1962	18	1,465	89.7	35.2
1961	17	1,573	66.5	36.9
1960	8	1,579	67.9	37.1
1959	18	1,588	68.8	37.4
1958	16	1,581	82.6	37.6

<sup>1/</sup> Indian and Alaska Native rates are three-year average death rates through 1970  
<sup>2/</sup> Estimated  
<sup>3/</sup> Provisional - Monthly Vital Statistics Report Vol. 20, No. 13, August 30, 1972  
 NA Not available

## MORTALITY

### LEADING CAUSES OF DEATH

Accidents continue as the leading cause of death in the Indian and Alaska Native population. One out of every five deaths in this population group is the result of an accident. Less than one out of sixteen deaths in the U. S. population is the result of an accident. Diseases of the heart and malignant neoplasms are the second and third leading causes of death among the Indians. These two classifications are ranked 1 and 2 in the U. S. population. Cirrhosis of the liver, fourth leading cause of death in the Indian population, is the tenth leading cause of death in the U. S. The crude death rate for cirrhosis of the liver has increased 221 percent since 1955. Suicides, diabetes mellitus, and homicide have also experienced considerable increases in their crude death rate during this period. Major reductions have been noted for enteritis and other diarrheal diseases, tuberculosis, influenza and pneumonia, certain causes of mortality in early infancy, and congenital anomalies.

### AGE-ADJUSTED DEATH RATES

The age-adjusted death rate for the Indian and Alaska Native is 28 percent above that for the U. S. All Races. The Indian age-adjusted death rate is 35 percent greater than the white population but is 11 percent below the all other races rate.

The Indian age-adjusted rates are considerably above the U. S. rates for cirrhosis of the liver, tuberculosis all forms, accidents, and influenza and pneumonia. The age-adjusted rates for the Indians for major cardiovascular diseases, malignant neoplasms, and bronchitis, emphysema, and asthma are below comparable rates for the U. S.

### AGE-SPECIFIC DEATH RATES

Age-specific death rates for the Indians and Alaska Natives in the 24 Reservation States are above the age-specific death rates for all age groupings through age group 55-59. For the age groupings 60-64 and beyond the age-specific death rates for the U. S. are higher than the rates for the Indian population.

The age-specific death rates for the Indian population are based on deaths for calendar year 1971 and the estimated population for July 1, 1971, distributed according to the 1970 census age distribution.



Table 4.1

**LEADING CAUSES OF DEATH  
INDIANS AND ALASKA NATIVES IN 24 RESERVATION STATES**

	Crude Death Rates		Percent Change
	1971	1955	
All Causes	771.7	927.2	- 17
Accidents	157.1	155.6	+ 1
Diseases of heart	142.0	133.8	+ 6
Malignant neoplasms	62.5	59.1	+ 6
Cirrhosis of liver	45.6	14.2	+ 221
Cerebrovascular disease	42.8	46.4	- 8
Influenza and pneumonia	38.6	89.8	- 57
Certain causes of mortality in early infancy	29.6	67.6	- 56
Diabetes mellitus	23.0	13.9	+ 65
Homicide	20.6	15.9	+ 30
Suicide	18.7	8.7	+ 115
Congenital anomalies	10.9	19.0	- 43
Tuberculosis	7.8	55.1	- 86
Arteriosclerosis	6.5	-	-
Nephritis and nephrosis	6.0	-	-
Septicemia	5.3	-	-
Bronchitis, emphysema, and asthma	5.1	-	-
Enteritis and other diarrheal diseases	4.4	39.2	- 89
Infection of kidney	3.7	-	-

- Data not available

Table 4.2

**AGE-ADJUSTED DEATH RATES  
INDIANS AND ALASKA NATIVES IN 24 RESERVATION STATES COMPARED TO U. S.  
Calendar Year 1971**

	Indian Health Service	U.S. <sup>1/</sup>			Ratio of IHS to U.S.
		Total	White	All Other	
All Causes	935.5	730.9	694.4	1,046.2	1.3
Major cardiovascular diseases	251.1	352.0	341.4	457.9	0.7
Diseases of heart	182.6	262.3	257.1	312.8	0.7
Cerebrovascular Disease	32.8	68.5	63.8	124.1	0.5
Arteriosclerosis	12.0	9.2	9.2	9.1	1.3
Hypertension	2.6	3.0	2.4	9.5	0.9
Accidents	183.0	55.3	52.6	75.5	3.3
Motor Vehicle	96.5	28.5	27.9	33.7	3.4
All Other	86.5	26.8	24.8	41.8	3.2
Malignant Neoplasms	84.4	129.7	126.8	158.6	0.7
Cirrhosis of Liver	66.8	14.2	12.9	24.0	4.7
Influenza and Pneumonia	41.6	24.6	22.3	41.9	1.7
Diabetes Mellitus	31.7	14.5	13.2	27.7	2.2
Tuberculosis, all forms	10.6	2.3	2.8	8.0	4.6
Bronchitis	6.6	12.0	12.0	10.0	0.6

<sup>1/</sup> 1969 rates (latest available)

Table 4.3

**AGE-SPECIFIC DEATH RATES--1971**  
Rates Per 1,000 Population

Age	U.S. <sup>1/</sup>		
	Indian and Alaska Native	All Races	White
Under 1	32.6	18.6	16.3
1 - 4	1.9	0.8	0.7
5 - 14	0.7	0.4	0.4
15 - 24	3.8	1.3	1.1
25 - 34	5.8	1.6	1.3
35 - 44	8.3	3.1	2.6
45 - 54	11.9	7.0	6.4
55 - 59	16.7	12.8	12.2
60 - 64	19.7	20.1	19.1
65 - 69	25.4	29.4	28.1
70 - 74	43.0	44.4	42.7
75 - 79	50.8	65.7	65.5
80 - 84	86.3	96.1	97.8
85+	122.2	175.5	186.4
			29.3
			1.2
			0.5
			2.0
			3.7
			6.7
			12.6
			18.5
			30.5
			43.0
			68.0
			67.8
			76.6
			91.9

<sup>1/</sup> Based on 10 percent sample of deaths, Monthly Vital Statistics Report, Vol. 20, No. 13.

Table 4.4

DEATHS BY SPECIFIC AGE GROUPS FOR SELECTED YEARS  
INDIANS AND ALASKA NATIVES IN 24 RESERVATION STATES

	1971		1966		1961		1956	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
All Ages	5,572	100.0	4,920	100.0	4,450	100.0	4,381	100.0
Under 1	560	10.1	822	16.7	959	21.5	1,066	24.3
1 - 4	130	2.3	238	4.9	219	4.9	267	6.1
5 - 14	139	2.5	119	2.4	110	2.5	127	2.9
15 - 24	515	9.2	330	6.7	273	6.1	262	6.0
25 - 34	501	9.0	385	7.8	332	7.5	342	7.8
35 - 44	556	10.0	420	8.6	350	7.9	348	8.0
45 - 54	631	11.3	482	9.8	409	9.2	382	8.7
55 - 64	718	12.9	596	12.1	492	11.1	431	9.8
65 - 74	798	14.3	646	13.1	518	11.6	486	11.1
75+	1,018	18.3	871	17.7	773	17.4	648	14.8
Unknown	6	0.1	11	0.2	15	0.3	22	0.5

Table 4.5  
Indian and Alaska Native Deaths by Reservation State

	1971	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960
Total U.S.	5,951		5,579	5,530	5,106	5,265	5,064	4,961	5,168	4,930	4,726	4,517
24 Res. States	5,572		5,153	5,092	4,776	4,920	4,714	4,645	4,868	4,645	4,457	4,231
Alaska	430		377	362	395	473	430	446	430	424	422	359
Arizona	963		832	867	787	829	761	742	864	775	745	757
California	333		321	280	324	317	316	280	294	286	294	304
Colorado	36		44	54	32	28	34	26	22	27	30	30
Florida	15		14	15	15	10	15	12	17	15	17	19
Idaho	76		71	69	63	71	75	57	67	66	55	54
Iowa	19		13	23	16	21	14	8	10	15	17	16
Kansas	48		39	43	26	23	22	23	27	25	27	21
Michigan	117		117	121	91	62	79	80	84	79	70	77
Minnesota	188		126	142	179	163	136	130	135	139	145	141
Mississippi	32		23	34	34	35	27	20	21	31	30	25
Montana	304		246	240	253	309	245	291	272	229	242	206
Nebraska	65		50	76	70	76	69	44	62	66	72	61
Nevada	73		77	63	76	68	76	60	75	73	69	62
New Mexico	632		536	520	531	534	503	496	486	412	386	444
North Carolina	295		318	280	308	261	261	236	295	268	240	263
North Dakota	142		144	121	107	112	125	121	122	120	125	104
Oklahoma	746		649	660	578	546	580	597	615	598	562	596
Oregon	95		90	84	73	93	86	98	105	123	100	97
South Dakota	397		371	368	313	366	332	346	328	333	319	364
Utah	56		62	76	57	51	71	58	54	60	67	64
Washington	309		363	369	293	270	262	263	269	282	249	271
Wisconsin	167		164	160	118	130	129	146	168	166	124	113
Wyoming	32		64	45	37	32	62	43	42	31	38	43
1/ Includes data for South Carolina												
Remainder												

NOT AVAILABLE

BEST COPY AVAILABLE



Table 4.6

INDIAN AND ALASKA NATIVE DEATHS BY AGE FOR EACH RESERVATION STATE  
CALENDAR YEAR 1971

BEST COPY AVAILABLE

	Under																	302	385	6						
	Total	1	2	3	4	5	6-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59				60-64	65-69	70-74	75-79	80-84	85+
24 Res. States	5,572	560	130	67	72	246	269	228	292	264	292	292	339	371	347	382	409	331	302	385	6					
Alaska	430	47	16	6	10	25	27	25	26	27	26	21	23	23	20	22	30	20	19	23	0					
Arizona	963	108	28	17	14	48	46	45	57	58	57	47	63	55	39	46	61	46	47	70	1					
California	333	19	2	5	5	9	14	28	20	17	24	29	21	25	22	18	16	12	21	26	0					
Colorado	35	8	-	1	-	-	1	2	5	4	5	2	-	2	2	1	3	1	3	2	-					
Florida	15	-	-	-	1	2	-	-	2	3	2	1	1	-	1	1	2	-	-	1	-					
Idaho	76	7	2	-	1	2	7	2	4	7	4	2	5	6	5	1	5	2	7	6	1					
Iowa	19	4	1	-	-	-	1	1	1	-	1	2	-	-	2	1	3	-	1	1	1					
Kansas	48	3	1	2	-	-	2	1	2	2	2	2	-	5	5	2	1	7	5	7	-					
Michigan	117	12	-	1	1	1	1	3	2	-	2	7	8	13	11	11	15	13	8	9	1					
Minnesota	188	22	2	1	1	11	15	9	8	11	8	14	11	9	7	14	7	15	8	15	1					
Mississippi	32	1	-	-	3	1	1	2	5	-	5	1	2	-	1	3	4	1	2	4	-					
Montana	304	26	5	3	2	17	20	10	19	10	19	16	16	17	21	20	23	19	20	21	-					
Nebraska	65	3	2	2	-	2	3	1	6	4	4	6	5	4	5	4	5	4	-	5	-					
Nevada	73	7	2	1	-	1	4	2	4	3	6	5	5	7	3	3	6	4	6	4	-					
New Mexico	632	92	22	9	13	37	36	26	35	28	35	21	36	46	27	31	43	27	26	44	-					
North Carolina	295	42	5	2	3	14	16	11	11	9	11	9	14	19	22	17	32	20	16	25	-					
North Dakota	142	13	1	-	4	8	5	5	9	11	9	8	10	10	14	13	8	7	6	5	-					
Oklahoma	746	41	8	4	2	18	15	15	20	26	21	36	56	59	68	86	75	67	59	68	2					
Oregon	95	14	1	-	1	5	5	6	7	3	5	7	7	4	9	3	6	5	5	1	-					
South Dakota	397	42	17	8	6	25	20	11	18	15	18	23	20	21	24	41	30	24	10	21	-					
Utah	56	6	3	-	-	2	3	3	3	4	3	3	4	5	4	1	4	5	2	1	-					
Washington	309	32	7	3	3	14	20	13	14	15	14	24	20	23	14	28	16	16	16	15	-					
Wisconsin	167	9	3	2	2	4	6	7	7	4	7	6	11	16	19	20	9	14	13	11	-					
Wyoming	32	2	2	-	-	-	1	-	4	3	4	-	2	2	2	2	5	2	2	-	-					

Table 4.7

INDIAN AND ALASKA NATIVE DEATHS BY AGE FOR EACH RESERVATION STATE, CALENDAR YEAR 1969

BEST COPY AVAILABLE

	Under																			Total	85 & over	Unk.
	1 yr.	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85 & over			
24 Res. States	5,153	579	153	72	69	203	223	223	239	253	289	277	286	334	357	368	316	308	271	329	4	
Alaska	377	46	14	11	5	13	18	19	14	17	30	28	15	24	23	20	13	29	18	20	0	
Arizona	832	120	36	18	17	25	32	47	49	47	41	51	28	42	49	58	49	30	43	50	0	
California	321	11	10	4	2	9	17	14	20	16	22	15	26	28	26	26	18	21	7	28	1	
Colorado	44	8	2	1	2	1	3	4	2	2	3	0	3	3	1	4	2	2	0	1	0	
Florida	14	2	1	0	0	0	0	0	0	1	1	5	0	0	1	0	2	0	0	1	0	
Idaho	71	11	1	0	1	1	1	2	6	4	4	3	5	4	1	4	6	4	2	11	0	
Iowa	13	0	0	1	0	1	2	0	2	1	1	0	0	1	2	0	1	0	0	1	0	
Kansas	39	0	0	0	1	0	1	2	1	2	2	1	6	3	1	2	4	4	3	3	0	
Michigan	117	6	1	1	2	4	4	6	2	7	7	7	7	14	10	10	5	8	7	9	0	
Minnesota	126	11	3	1	2	10	6	2	5	3	9	9	8	11	7	9	7	9	8	6	0	
Mississippi	23	2	0	0	1	0	0	2	2	1	1	1	1	1	3	3	1	1	2	1	0	
Montana	246	26	7	3	5	12	10	12	10	10	17	14	17	11	17	12	13	17	15	17	1	
Nebraska	90	11	2	0	1	1	1	7	6	3	10	1	8	7	6	9	5	4	4	4	0	
Nevada	77	3	1	0	0	5	6	1	4	6	2	5	8	1	4	6	4	9	5	7	0	
New Mexico	538	103	14	4	6	33	31	27	27	35	27	23	27	31	21	29	24	22	16	36	2	
North Carolina	318	39	5	5	10	20	14	12	12	14	14	18	15	19	29	23	14	20	20	15	0	
North Dakota	144	12	10	1	2	11	5	4	6	9	7	7	7	5	10	12	15	8	5	8	0	
Oklahoma	649	40	7	1	6	13	16	16	17	16	31	36	32	51	74	70	62	60	57	44	0	
Oregon	90	12	0	2	0	3	6	3	6	6	6	1	5	3	6	10	8	4	6	3	0	
South Dakota	371	38	15	8	2	17	24	15	12	19	19	23	17	28	24	25	23	23	17	22	0	
Utah	62	18	4	2	0	1	2	2	2	4	3	0	4	4	2	1	1	6	2	4	0	
Washington	363	37	9	7	4	14	14	21	19	19	29	21	29	23	26	17	23	14	17	18	0	
Wisconsin	164	15	6	1	0	5	7	2	5	5	2	6	14	16	11	12	14	12	14	17	0	
Wyoming	64	8	5	1	0	4	3	3	5	6	1	2	4	4	3	6	2	1	3	3	0	

Table 4.8

**TUBERCULOSIS MORTALITY**  
**INDIANS AND ALASKA NATIVES IN 24 RESERVATION STATES AND U. S. ALL RACES**  
**Calendar Years 1955-1971, Rates per 100,000 Population<sup>1/</sup>**

Year	Indian and Alaska Native		Indian		Alaska Native		U.S. All Races		Ratio Indian and Alaska Native to U.S. All Races
	Number of Deaths	Rate	Number of Deaths	Rate	Number of Deaths	Rate	Number of Deaths	Rate	
1971	56	7.8	51	7.6	5	9.7	4,380 <sup>2/</sup>	2.1 <sup>2/</sup>	3.7
1970	NA	NA	NA	NA	NA	NA	5,560 <sup>2/</sup>	2.7 <sup>2/</sup>	NA
1969	86	12.6	82	13.0	4	8.0	5,567	2.8	4.5
1968	78	12.8	71	12.8	7	12.9	6,292	3.1	3.8
1967	90	13.5	82	13.4	8	14.3	6,901	3.5	3.9
1966	91	15.3	85	15.4	6	15.3	7,625	3.9	3.9
1965	104	19.0	96	19.3	8	16.0	7,934	4.1	4.6
1964	111	21.8	103	21.6	8	24.0	8,303	4.3	5.1
1963	130	25.1	114	24.8	16	28.5	9,311	4.9	5.1
1962	150	26.0	137	25.3	13	34.0	9,506	5.1	5.1
1961	120	25.4	105	24.5	15	34.8	9,938	5.4	5.1
1960	115	26.6	98	25.1	17	43.1	10,866	6.1	4.7
1959	163	29.0	140	27.9	23	41.8	11,456	6.5	4.3
1958	150	34.3	138	31.5	12	65.1	12,361	7.1	4.5
1957	186	38.2	143	34.2	43	83.3	13,324	7.8	4.8
1956	212	46.2	171	40.2	41	116.8	14,054	8.4	4.9
1955	253	55.1	208	47.3	45	157.5	14,940	9.1	5.5

<sup>1/</sup> Indian and Alaska Native rates are three-year averages through 1968. All other rates are based on single year data.

<sup>2/</sup> Provisional figures - Monthly Vital Statistics Report.  
 NA Not available.

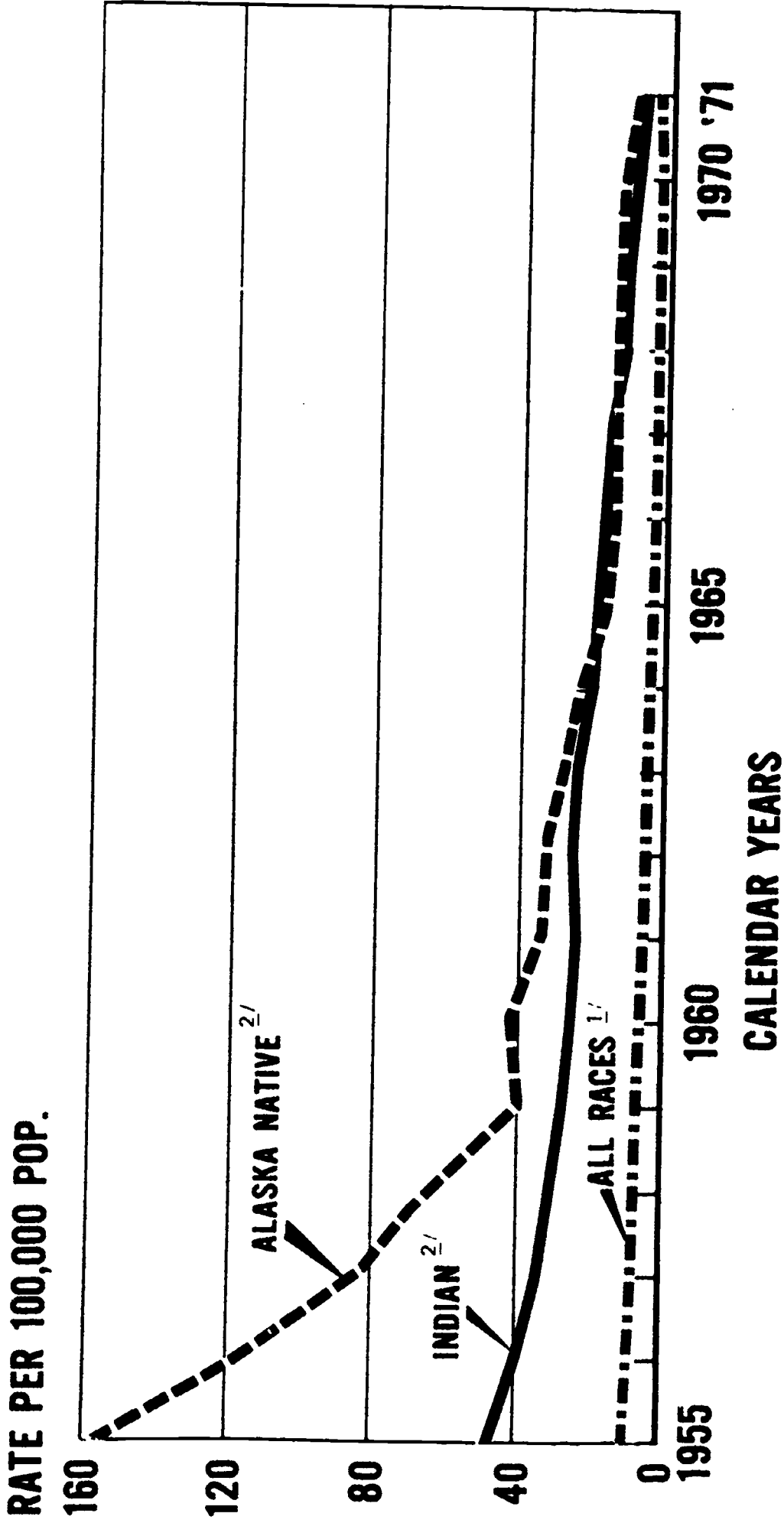


Figure 4.1

# TUBERCULOSIS DEATH RATES \*

## INDIAN, ALASKA NATIVE, AND U.S. ALL RACES

BEST COPY AVAILABLE



\* INDIAN AND ALASKA NATIVE RATES ARE BASED ON 3-YEAR MOVING AVERAGE THRU 1968. ALL OTHER RATES ARE BASED ON SINGLE YEAR DATA.

1/ PROVISIONAL MONTHLY VITAL STATISTICS REPORT, NCHS VOL. 20, NO. 13, 1970, 1971.

2/ ESTIMATED 1970.

Table 4.9

GASTROENTERIC DEATHS AND DEATH RATES  
 INDIANS AND ALASKA NATIVES IN 24 RESERVATION STATES AND U. S. ALL RACES  
 Calendar Years 1955-1971

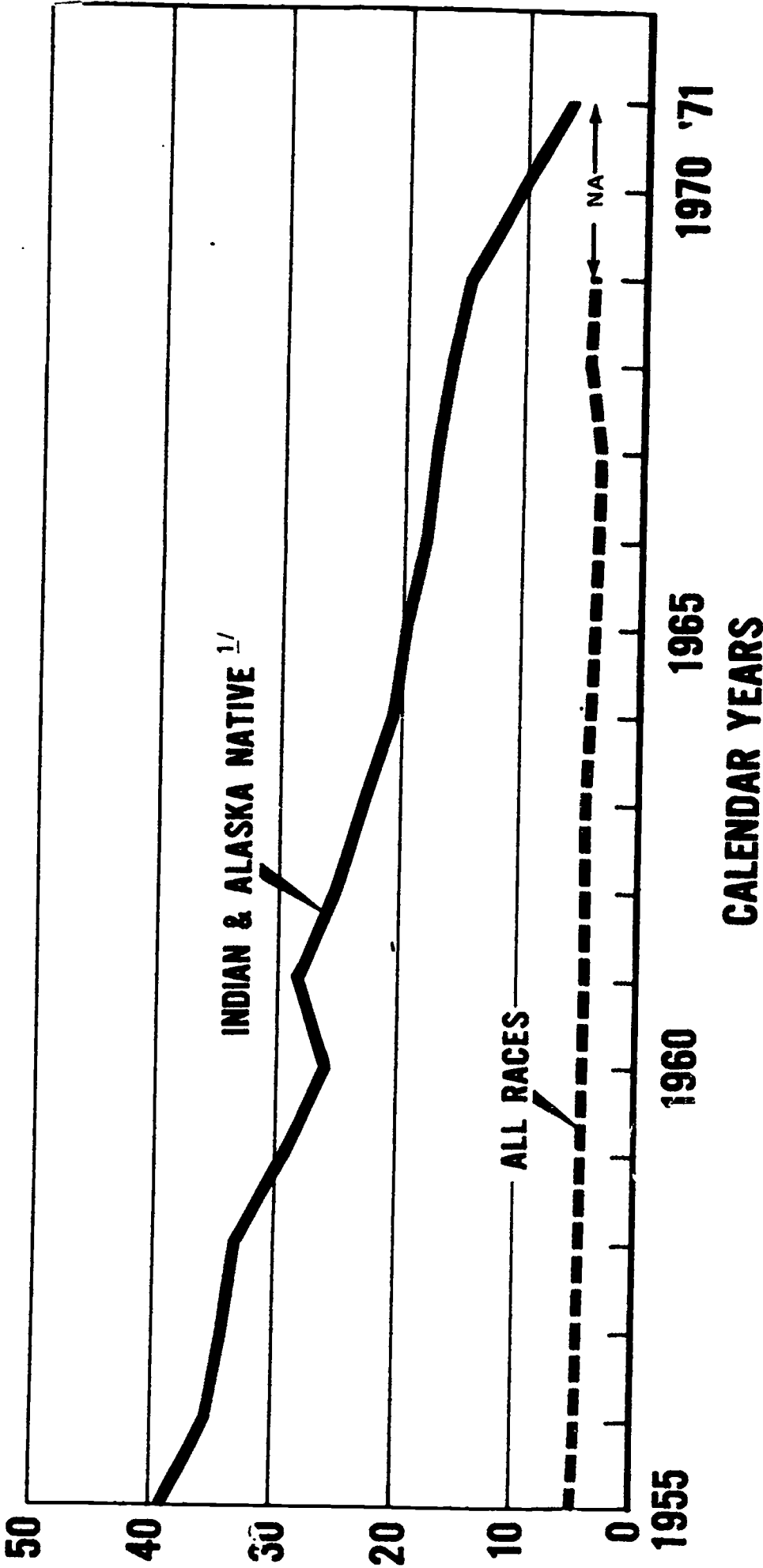
<u>Year</u>	<u>Number</u> <u>Indian and</u> <u>Alaska Native</u>	<u>Rate Per 100,000 Population</u>	
		<u>Indian and</u> <u>Alaska Native</u> <sup>1/</sup>	<u>U. S.</u> <u>All Races</u>
1971	45	6.2	NA
1970	NA	NA	NA
1969	82	12.0	3.9
1968	104	15.7	4.0
1967	80	15.1	3.8
1966	107	16.1	3.9
1965	111	19.8	4.1
1964	100	20.3	4.3
1963	110	23.4	4.4
1962	155	25.0	4.4
1961	119	28.1	4.3
1960	152	26.4	4.4
1959	124	29.5	4.4
1958	159	33.1	4.5
1957	108	34.4	4.7
1956	137	35.5	4.5
1955	165	39.2	4.7

<sup>1/</sup> Indian and Alaska Native rates are three-year moving averages through 1968.  
 NA Not available.

Figure 4.2

**GASTROENTERIC DEATH RATES\*  
INDIAN AND ALASKA NATIVE, AND U.S. ALL RACES**  
RATE PER 100,000 POP.

BEST COPY AVAILABLE



\*INDIAN AND ALASKA NATIVE RATES BASED ON 3-YEAR MOVING AVERAGE THRU 1968. ALL OTHER RATES BASED ON SINGLE YEAR DATA.  
1/ ESTIMATED 1970.  
NA NOT AVAILABLE



Table 4.10

ALCOHOLISM DEATHS AND DEATH RATES  
 INDIANS AND ALASKA NATIVES IN 24 RESERVATION STATES AND U. S. ALL RACES  
 Rates per 100,000 Population

	1966	1967	1968	1969	1970	1971
	Number of Deaths					
	Indians and Alaska Natives in 24 Reservation States					
Alcoholism	55	51	91	81	NA	107
Alcoholic psychoses	5	6	10	7	NA	10
Cirrhosis of liver with mention of alcoholism	128	126	165	179	NA	217
Total	<u>188</u>	<u>183</u>	<u>266</u>	<u>267</u>		<u>334</u>
	Alcoholism Death Rates					
	Indians and Alaska Natives in 24 Reservation States					
Alcoholism	8.9	8.0	13.8	11.9	NA	14.8
Alcoholic psychoses	0.8	0.9	1.5	1.0	NA	1.4
Cirrhosis of liver with mention of alcoholism	20.7	19.7	25.0	26.3	NA	30.1
Total	<u>30.3</u>	<u>28.6</u>	<u>40.3</u>	<u>39.2</u>		<u>46.3</u>
	Alcoholism Death Rates U. S. All Races					
Alcoholism	1.6	1.5	2.0	2.0		
Alcoholic psychoses	0.3	0.3	0.3	0.3		
Cirrhosis of liver with mention of alcoholism	4.8	4.8	5.0	5.2		
Total	<u>6.7</u>	<u>6.6</u>	<u>7.3</u>	<u>7.5</u>		
NA	Not available					



Table 4.11

**AGE-SPECIFIC DEATH RATES BY CAUSE**  
**Calendar Year 1971**  
**Rates per 100,000 Population**

	Under										
	1	1 - 4	5 - 14	15 - 24	25 - 34	35 - 44	45 - 54	55 - 64	65 - 74	75 - 84	85+
All Causes	3,263.8	186.1	72.1	375.7	577.3	828.4	1,193.7	1,801.1	3,211.1	6,318.0	12,222.6
Accidents	198.2	87.3	46.7	234.9	221.2	180.3	259.2	193.2	221.3	239.5	656.5
Motor Vehicle	23.3	27.2	20.2	159.0	138.3	96.8	113.5	85.3	96.6	49.9	156.3
All Other	174.8	60.1	26.5	75.9	83.0	83.4	145.7	107.9	124.7	189.6	500.2
Major Cardiovascular Diseases of Heart	81.6	4.3	1.6	10.9	27.7	116.2	251.6	659.7	1,448.6	3,193.9	6,720.9
Hypertension	64.1	2.9	1.6	8.8	16.1	90.9	200.5	489.2	1,066.4	2,195.8	4,251.3
Cerebrovascular Disease	0	0	0	0	1.2	0	0	10.0	20.1	20.0	93.8
Arteriosclerosis	11.7	0	0	2.2	6.9	8.9	18.9	92.8	185.1	509.0	875.3
Malignant Neoplasms	0	1.4	0	0	1.2	6.0	9.5	27.6	44.3	169.7	906.5
Influenza and Pneumonia	5.8	2.9	4.7	6.6	20.7	38.7	117.3	238.3	499.0	828.4	687.7
Diabetes Mellitus	402.1	11.5	0.5	3.6	15.0	29.8	47.3	60.2	124.7	429.2	1,250.4
Cirrhosis of Liver	0	0	0	0	5.8	13.4	51.1	85.3	209.2	289.5	312.6
Bronchitis, etc.	0	4.3	0	4.4	63.4	156.4	158.9	130.4	80.5	30.0	31.3
Tuberculosis	5.8	2.9	0	0	2.3	1.5	15.1	17.6	16.1	89.8	93.8
Gastroenteritis	0	0	0	0.7	6.9	11.9	13.2	22.6	48.3	99.8	93.8
Homicide	145.7	7.2	0	0.7	0	6.0	3.8	7.5	8.0	10.0	62.5
Suicide	5.8	5.7	1.0	25.5	55.3	43.2	22.7	30.1	8.0	39.9	0
	0	0	2.6	48.2	39.2	28.3	9.5	15.1	0	0	0

## MORBIDITY STATISTICS

Otitis media has been the most frequently reported disease among Indians and Alaska Natives. It has been the leading cause of illness during each of the last seven years. Prior to that gastroenteritis was the leading cause. During the ten-year period 1962-1971, the incidence of otitis media increased 2.8 times. In 1971 strep throat, scarlet fever replaced gastroenteritis as the second leading cause of illness. While the incidence of strep throat is also increasing, the incidence of gastroenteritis has remained steady. Influenza and pneumonia are the fourth and fifth leading notifiable diseases.

The increase in the incidence of gonorrhea within the Indian and Alaska Native populations has been paralleled by the increase in gonorrhea in the U. S. During the period that the number of cases of gonorrhea was increasing 2.8 times, the U. S. experienced a 2.5 fold increase.

Trachoma incidence was 615.8 per 100,000 in 1971. Trachoma was the fourth leading cause in 1964 when its incidence was 1951.0 Its relative position has decreased and the 1971 rate is less than one-third the 1964 rate.

The remaining leading notifiable diseases are chickenpox, bacillary dysentary, mumps, and measles. Measles has declined in rank from the fourth leading cause in 1962 to eleventh in 1971.

Table 5.1

Rank of Leading Notifiable Diseases  
 Indian Health Service  
 Calendar Years 1965-1971

	<u>1971</u>	<u>1970</u>	<u>1969</u>	<u>1968</u>	<u>1967</u>	<u>1966</u>	<u>1965</u>
Otitis Media	1	1	1	1	1	1	1
Gastroenteritis	3	2	2	2	2	2	2
Strep Throat, Scarlet Fever	2	3	3	3	4	5	4
Pneumonia	5	4	4	4	3	3	3
Influenza	4	5	5	5	5	4	6
Gonococcal Infections	6	6	6	6	7	7	7
Trachoma	7	7	7	7	6	6	5
Chickenpox	8	8	8	8	8	9	9
Bacillary Dysentary	9	11	10	10	11	11	10
Mumps	10	9	9	9	10	10	11



Table 5.2

REPORTED NEW CASES OF OTITIS MEDIA  
AND INCIDENCE RATES FOR INDIANS AND ALASKA NATIVES

CY	Indian and Alaska Natives		Indians		Alaska Natives	
	Number of Cases	Rate per 100,000	Number of Cases	Rate per 100,000	Number of Cases	Rate per 100,000
1971	49,478	10,742.4	45,283	11,066.8	4,195	8,159.7
1970	44,008	9,745.0	41,109	10,253.1	2,899	5,723.1
1969	39,351	8,892.3	36,568	9,313.6	2,783	5,577.3
1968	36,470	8,413.7	33,503	8,717.5	2,967	6,038.0
1967	30,211	7,118.8	27,377	7,281.0	2,834	5,857.6
1966	28,224	6,909.6	25,144	6,968.0	3,080	6,467.2
1965	22,614	6,170.3	21,502	6,131.3	1,112	2,372.6
1964	22,290	6,243.7	21,267	6,772.9	1,023	2,379.1
1963	18,397	5,211.6	17,052	5,500.6	1,345	3,127.9
1962	13,382	3,801.7	12,383	4,007.4	999	2,323.3



Table 5.3

**TUBERCULOSIS MORBIDITY**  
Rates Per 100,000 Population

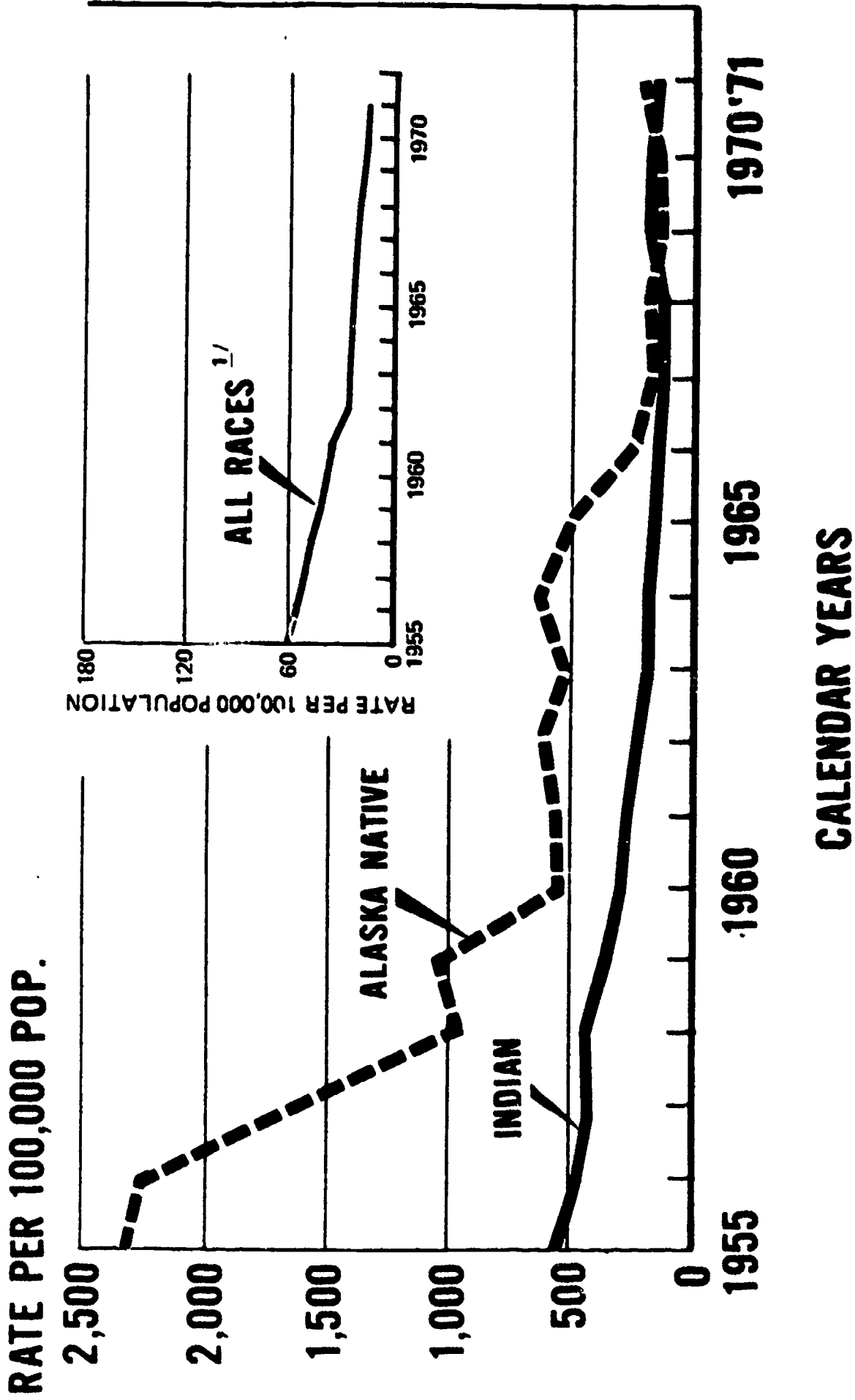
Calendar Year	Indian and Alaska Native		Indian	Alaska Native	U. S. All Races
	Indian and Alaska Native	Indian			
1971	157.4	152.0	200.3	17.0 <sup>L/</sup>	
1970	154.1	154.1	154.0	18.3	
1969	140.8	141.6	134.3	19.1	
1968	133.8	128.0	179.1	21.3	
1967	155.8	152.7	179.8	23.0	
1966	141.7	127.8	247.8	24.4	
1965	201.5	160.5	507.8	25.3	
1964	237.8	184.1	630.2	26.6	
1963	234.0	192.3	534.9	28.7	
1962	257.7	209.4	604.7	28.9	
1961	318.8	284.8	562.8	37.0	
1960	322.4	292.3	547.5	39.4	
1959	418.0	338.2	1,048.0	42.6	
1958	485.0	421.8	978.7	47.5	
1957	565.2	426.9	1,649.7	51.0	
1956	680.6	474.3	2,283.8	54.1	
1955	758.1	563.2	2,325.7	60.1	

<sup>L/</sup> Provisional

Figure 5.1

BEST COPY AVAILABLE

# INCIDENCE RATES FOR TUBERCULOSIS INDIAN, ALASKA NATIVE, AND U.S. ALL RACES



1/ PROVISIONAL, MORBIDITY AND MORTALITY, CDC, VOL. 20 NO. 53. 1971.

Table 5.4

REPORTED NEW CASES AND INCIDENCE RATES OF TRACHOMA  
IN INDIANS AND ALASKA NATIVES

CY	Indian and Alaska Natives	Number of Cases	Rate Per 100,000
1971		2,841	616.8
1970		2,784	616.5
1969		3,388	765.6
1968		3,485	804.0
1967		3,642	858.2
1966		6,996	1,712.7
1965		4,731	1,190.0
1964		7,043	1,572.8
1963		3,146	891.2
1962		3,275	930.4
1961		4,563	1,476.7

Table 5.5

Number of Cases and Incidence Rates for Leading Notifiable Diseases Indian and Alaska Native Service Population in 24 Reservation States, by Area, and U.S. All Races  
CY-1971, Rates Per 100,000 Population

Disease	Indian and Alaska Native		Indian All Areas except Alaska		Alaska		Albuquerque		Billings		Navajo		Oklahoma City		Phoenix		Portland		Uset		Tucson		U.S. All Races			
	All Areas	Native	All Areas	Alaska	All Areas	Alaska	All Areas	Alaska	All Areas	Alaska	All Areas	Alaska	All Areas	Alaska	All Areas	Alaska	All Areas	Alaska	All Areas	Alaska	All Areas	Alaska	All Areas	Alaska		
Otitis Media	49,478	27,513	45,283	7,453	2,380	4,195	4,232	15,221	4,316	8,099	2,014	1,536	32	32	32	32	32	32	32	32	32	32	32	32	32	
Gastroenteritis	27,513	29,722	28,048	3,553	1,937	2,445	2,445	11,057	1,299	4,625	1,155	630	998	998	998	998	998	998	998	998	998	998	998	998	998	
Strep sore throat, etc.	13,827	13,827	13,100	4,701	2,231	1,674	2,585	10,633	1,432	3,905	1,608	715	238	238	238	238	238	238	238	238	238	238	238	238	238	
Pneumonia, excl. Newborn	15,770	15,770	15,210	1,940	1,161	727	757	5,319	935	2,469	371	321	358	358	358	358	358	358	358	358	358	358	358	358	358	
Influenza	7,588	7,588	6,300	1,397	298	1,288	1,277	5,094	901	2,887	911	826	213	213	213	213	213	213	213	213	213	213	213	213	213	
Gonorrhoea	2,841	2,841	2,841	21	178	--	222	1,410	67	818	4	13	108	108	108	108	108	108	108	108	108	108	108	108	108	
Trachoma	2,261	2,261	2,139	349	132	122	158	688	169	385	128	75	55	55	55	55	55	55	55	55	55	55	55	55	55	
Mumps	1,329	1,329	1,261	309	74	68	104	381	120	127	57	22	67	67	67	67	67	67	67	67	67	67	67	67	67	
Dysentery, Amebic and bacillary	1,930	1,930	1,881	69	182	49	100	852	34	428	62	127	27	27	27	27	27	27	27	27	27	27	27	27	27	
Hepatitis	1,706	1,706	1,637	310	196	69	122	581	169	186	43	10	20	20	20	20	20	20	20	20	20	20	20	20	20	
Syphilis, All forms	831	831	812	57	107	19	27	442	46	119	5	--	9	9	9	9	9	9	9	9	9	9	9	9	9	
Tuberculosis, New Active	725	725	622	80	38	103	38	164	54	194	21	2	31	31	31	31	31	31	31	31	31	31	31	31	31	
Measles (Rubeola)	746	746	744	68	33	2	55	81	290	73	36	97	11	11	11	11	11	11	11	11	11	11	11	11	11	
Otitis Media	10,742.4	6,060.3	11,066.8	12,894.9	7,024.6	8,159.7	15,337.2	16,401.1	4,217.2	16,164.1	7,900.5	16,901.4	317.7	317.7	317.7	317.7	317.7	317.7	317.7	317.7	317.7	317.7	317.7	317.7	317.7	317.7
Gastroenteritis	6,453.1	3,002.0	6,854.7	8,133.5	6,584.8	3,256.1	9,368.3	11,457.4	1,399.2	9,226.6	4,530.8	6,932.2	9,907.7	9,907.7	9,907.7	9,907.7	9,907.7	9,907.7	9,907.7	9,907.7	9,907.7	9,907.7	9,907.7	9,907.7	9,907.7	9,907.7
Strep sore throat, etc.	3,423.9	3,423.9	3,201.5	3,240.6	2,057.2	1,414.1	2,743.4	5,731.4	913.6	7,793.6	6,307.9	7,867.5	2,362.8	2,362.8	2,362.8	2,362.8	2,362.8	2,362.8	2,362.8	2,362.8	2,362.8	2,362.8	2,362.8	2,362.8	2,362.8	2,362.8
Pneumonia, excl. Newborn	1,647.5	1,647.5	1,539.7	2,417.0	879.5	2,505.3	4,628.0	5,488.9	860.4	5,761.9	1,455.4	3,532.1	3,554.0	3,554.0	3,554.0	3,554.0	3,554.0	3,554.0	3,554.0	3,554.0	3,554.0	3,554.0	3,554.0	3,554.0	3,554.0	3,554.0
Influenza	616.8	616.8	694.3	36.3	525.4	--	804.6	1,519.3	65.5	1,744.3	902.2	660.2	883.6	883.6	883.6	883.6	883.6	883.6	883.6	883.6	883.6	883.6	883.6	883.6	883.6	
Gonorrhoea	490.9	490.9	522.8	603.8	389.6	237.3	572.6	741.3	165.1	768.3	502.1	143.0	1,072.2	1,072.2	1,072.2	1,072.2	1,072.2	1,072.2	1,072.2	1,072.2	1,072.2	1,072.2	1,072.2	1,072.2	1,072.2	
Trachoma	288.5	288.5	308.2	534.6	218.4	132.3	376.9	410.5	117.3	353.5	223.6	242.0	665.1	665.1	665.1	665.1	665.1	665.1	665.1	665.1	665.1	665.1	665.1	665.1	665.1	
Mumps	419.0	419.0	459.7	117.7	537.2	95.3	362.4	918.1	45.9	834.2	243.2	1,397.4	238.3	238.3	238.3	238.3	238.3	238.3	238.3	238.3	238.3	238.3	238.3	238.3	238.3	
Dysentery, Amebic and bacillary	370.4	370.4	400.0	536.4	578.5	134.2	442.1	626.0	165.1	371.2	168.7	110.0	198.6	198.6	198.6	198.6	198.6	198.6	198.6	198.6	198.6	198.6	198.6	198.6	198.6	
Hepatitis	180.4	180.4	198.5	98.6	315.9	37.0	97.9	476.3	44.9	237.6	*	--	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	
Syphilis, All forms	157.4	157.4	152.0	138.4	112.2	200.3	137.7	176.7	52.8	387.2	82.4	*	307.8	307.8	307.8	307.8	307.8	307.8	307.8	307.8	307.8	307.8	307.8	307.8	307.8	
Tuberculosis, New Active	162.0	162.0	181.8	114.5	97.4	*	199.3	87.3	283.4	145.7	141.2	1,067.3	109.2	109.2	109.2	109.2	109.2	109.2	109.2	109.2	109.2	109.2	109.2	109.2	109.2	
Measles (Rubeola)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	

... Data Not Available --- Quantity zero \* Less than 5 cases, rate not calculated



Table 5.6

## Number of Cases and Incidence Rates for Leading Notifiable Diseases

CY - 1962 - 1971

BEST COPY AVAILABLE

Diseases	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971
Number of Cases										
Otitis Media	13,382	18,397	22,290	22,614	28,224	30,211	36,470	39,351	44,008	49,478
Gastroenteritis	16,000	21,366	20,189	20,000	23,049	22,869	24,131	29,811	22,852	27,913
Strep sore throat, etc.	3,966	6,110	6,965	7,433	8,874	11,947	14,975	20,022	21,223	29,722
Pneumonia, excl. Newborn	10,093	13,576	13,925	13,525	15,204	13,285	14,667	13,423	13,816 <sup>1/</sup>	13,827 <sup>1/</sup>
Influenza	3,610	12,981	3,227	3,652	12,263	3,810	13,278	8,666	11,603	15,770
Gonorrhea	2,664	2,818	2,791	2,849	2,973	3,190	3,651	4,543	5,338	7,588
Trachoma	3,275	3,146	7,043	4,731	6,996	3,642	3,485	3,388	2,784	2,841
Chickenpox	1,577	1,794	1,998	1,867	1,863	1,949	1,652	1,735	2,068	2,261
Mumps	609	1,087	1,157	1,131	1,017	1,519	1,505	1,083	1,605	1,329
Dysentery, all forms	2,244	2,553	2,162	1,901	1,807	2,197	1,341	1,130	1,219	1,706
Hepatitis	678	756	627	538	688	1,018	696	505	777	831
Syphilis, all forms	354	372	405	370	365	424	632	716	696	725
Tuberculosis, New Active	907	826	849	801	579	661	580	623	596	746
Measles (Rubeola)	4,659	5,631	2,556	2,508	2,642	1,906	316	774	1,186	
Rate Per 100,000 Population										
Otitis Media	3,801.7	5,211.6	6,243.7	5,688.2	6,909.6	7,118.8	8,413.7	8,892.3	9,745.0	10,742.4
Gastroenteritis	4,545.5	6,052.7	5,655.2	5,030.7	5,642.7	5,388.7	5,567.1	6,736.5	5,060.3	6,060.3
Strep sore throat, etc.	1,132.4	1,730.9	1,951.0	1,869.6	2,172.5	2,815.1	3,454.8	4,524.4	4,699.6	6,453.1
Pneumonia, excl. Newborn	2,867.3	3,845.9	3,900.6	3,402.0	3,722.1	3,130.4	3,383.7	3,033.2	3,059.4 <sup>1/</sup>	3,002.0
Influenza	1,025.6	3,677.3	903.9	918.6	3,002.1	897.8	3,063.3	1,958.3	2,569.3	3,423.9
Gonorrhea	756.8	798.3	781.8	716.6	727.8	751.7	842.3	1,026.6	1,182.0	1,647.5
Trachoma	930.4	891.2	1,972.8	1,190.0	1,712.7	858.2	804.0	765.6	616.5	616.8
Chickenpox	448.0	508.2	559.7	469.6	456.1	459.3	380.2	392.1	457.9	490.9
Mumps	173.0	307.9	324.1	284.5	249.0	357.9	347.2	244.7	355.4	288.5
Dysentery, all forms	637.5	723.2	605.6	478.2	442.4	517.7	309.4	255.3	...	...
Hepatitis	192.6	214.2	175.6	135.3	168.4	239.9	160.6	114.1	269.9	370.4
Syphilis, all forms	100.6	105.4	113.4	93.7	89.4	99.9	145.8	161.8	172.1	180.4
Tuberculosis, New Active	257.7	234.0	237.8	201.5	141.7	155.8	133.8	140.8	154.1	157.4
Measles (Rubeola)	1,323.6	1,595.2	716.0	630.8	646.8	449.1	72.9	174.9	262.6	162.0

<sup>1/</sup> Includes pneumonia of newborn  
 ... Not available

## MEDICAL SERVICES

Outpatient visits to IHS hospitals, health centers, and field stations have increased each year since fiscal year 1955. Total outpatient visits in fiscal year 1972 were 2,235,881. This is five times as many visits as reported in 1955. Physician visits accounted for 75.8 percent of the total outpatient visits in fiscal year 1972. The percentages ranged from a high of 35 percent for the hospitals to a low of 39 percent for the school health centers.

Admissions to IHS and contract hospitals have also experienced an upward trend since 1955. Admissions for fiscal year 1972 are more than double the number reported in 1955. Admissions to contract hospitals have increased more rapidly than for IHS facilities. The rate of increase for IHS hospitals has been 78 percent as contrasted to a 258 percent increase in contract hospital admissions. Complications of pregnancy, childbirth, and the puerperium is the leading cause of hospitalization. This category accounted for 16.5 percent of the discharges in fiscal year 1972. Other diagnostic categories which accounted for over ten percent of the total were accidents, poisonings, and violence (14.9 percent) and diseases of the respiratory system (11.2 percent).

The hospital utilization rate has increased during the last two fiscal years. In fiscal year 1972, the increase was 5.6 percent. The increase in the utilization rate of Indian Health Service hospitals during the past two years has been the result of the increasing awareness of the Indian people in medical care programs, gradually improving transportation, community stress on improved health and direct Indian involvement in program operations. The impact of the Community Health Representative Program has also been a factor.

Table 6.1

**NUMBER OF ADMISSIONS AND HOSPITAL UTILIZATION RATE  
INDIAN HEALTH SERVICE AND CONTRACT HOSPITALS  
Fiscal Years 1955-1972**

Fiscal Year	Total			Indian Health Service			Contract		
	Number of Admissions	Utilization Rate Per 1,000 Population	Number of Admissions	Utilization Rate Per 1,000 Population	Number of Admissions	Utilization Rate Per 1,000 Population	Number of Admissions	Utilization Rate Per 1,000 Population	
1972	102,472	218.2	76,054	161.9	26,418	56.3			
1971	94,945	206.6	70,729	153.3	24,216	52.5			
1970	92,710	205.7	67,877	150.6	24,833	55.1			
1969	94,490	213.9	69,560	157.5	24,930	56.4			
1968	92,186	213.0	68,086	157.3	24,100	55.7			
1967	89,556	211.3	65,456	154.4	24,100	56.9			
1966	91,799	221.3	67,049	161.6	24,750	59.7			
1965	91,744	226.1	67,744	166.9	24,000	59.1			
1964	89,934	226.7	65,934	166.1	24,000	60.5			
1963	87,549	225.7	64,749	166.9	22,800	58.8			
1962	81,476	214.4	59,976	157.8	21,500	56.6			
1961	74,313	195.5	54,313	142.9	20,000	52.6			
1960	76,754	201.9	56,874	149.6	19,880	52.3			
1959	73,268	198.0	54,568	147.5	18,700	50.5			
1958	71,859	199.1	55,649	154.2	16,210	44.9			
1957	66,455	188.8	53,160	151.0	13,295	37.8			
1956	57,975	169.0	46,218	134.7	11,757	34.3			
1955	50,143	150.2	42,762	128.1	7,381	22.1			



Figure 6.1

BEST COPY AVAILABLE

# NUMBER OF INDIAN AND ALASKA NATIVE ADMISSIONS TO IHS AND CONTRACT HOSPITALS

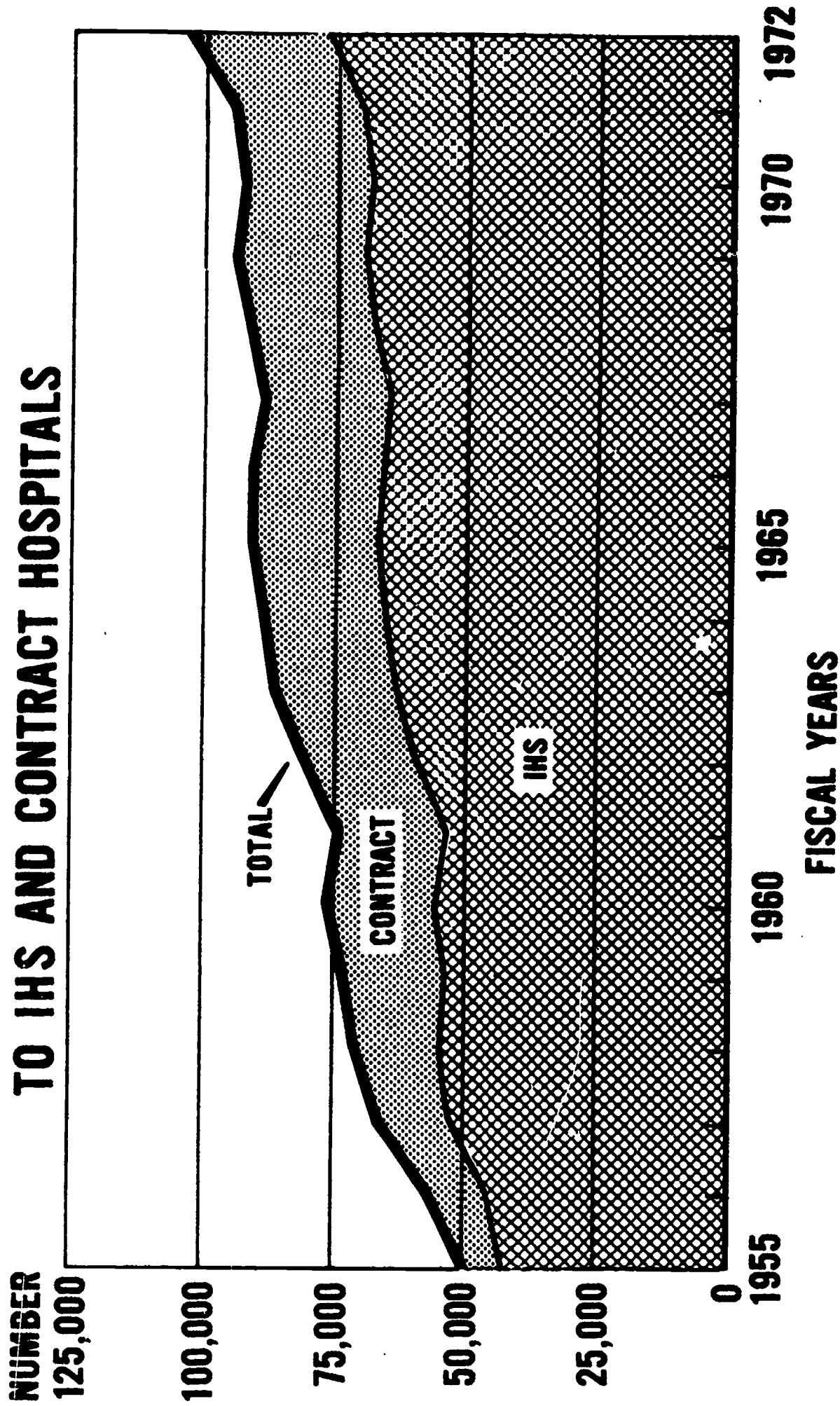






Figure 6.2

# HOSPITAL UTILIZATION RATE INDIAN & ALASKA NATIVE

BEST COPY AVAILABLE

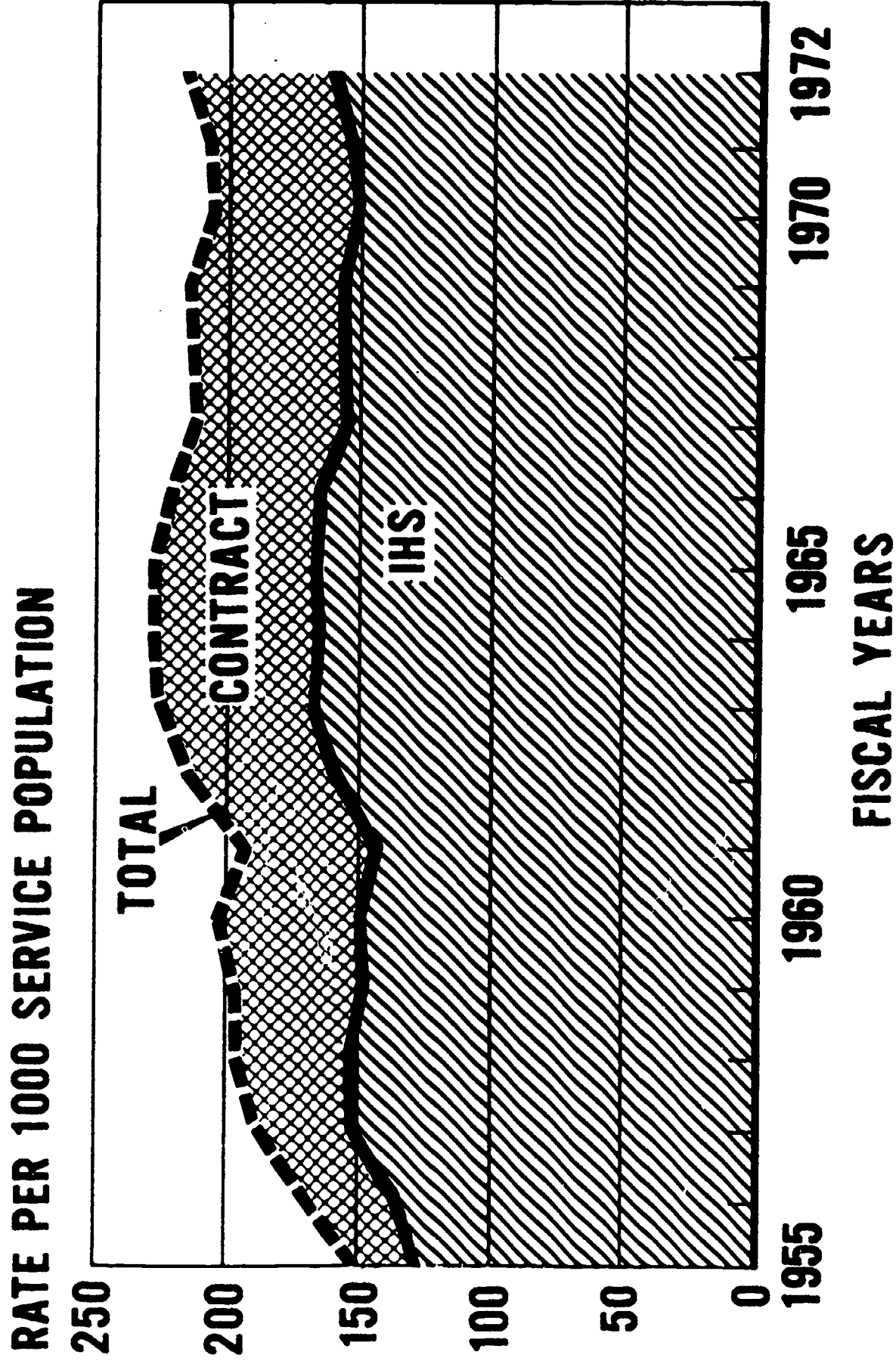


Table 6.3

NUMBER OF OUTPATIENT MEDICAL VISITS<sup>1/</sup>  
TO PHS INDIAN HOSPITALS AND FIELD HEALTH CLINICS  
Fiscal Years 1955-1972

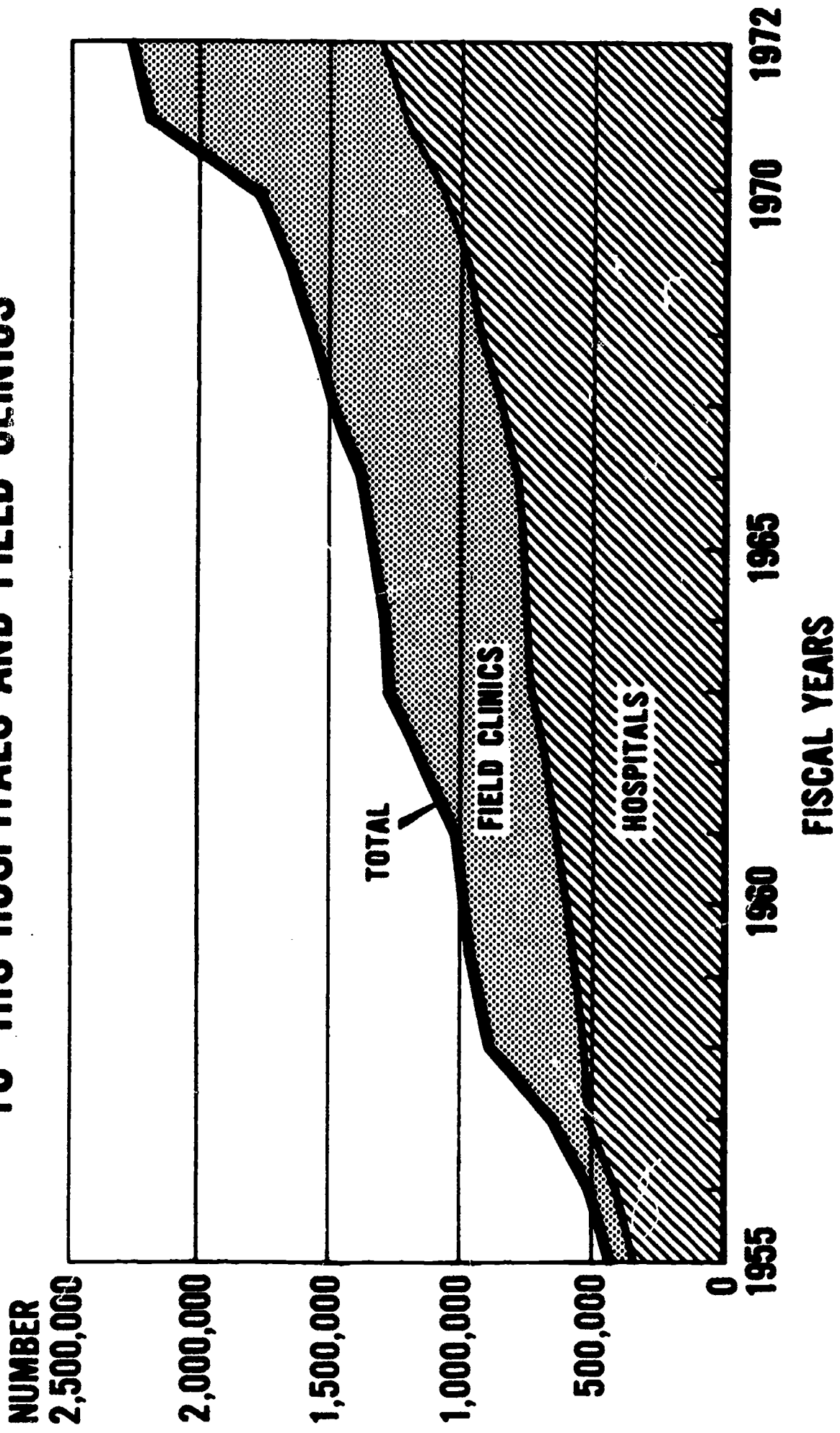
Fiscal Year	Total	Hospitals	Field Clinics
1972	2,235,881	1,275,726	960,155
1971	2,195,240	1,202,030	993,210
1970	1,786,920	1,068,820	718,100
1969	1,661,500	982,300	679,200
1968	1,575,440	926,640	648,800
1967	1,494,600	849,800	644,800
1966	1,367,000	778,500	578,500
1965	1,325,400	757,700	567,700
1964	1,295,000	742,400	552,600
1963	1,271,400	721,700	549,700
1962	1,142,300	673,200	469,100
1961	1,022,600	628,700	393,900
1960	989,500	585,100	404,400
1959	957,900	546,900	411,000
1958	900,000	533,440	366,560
1957	650,000	510,000	140,000
1956 <sup>2/</sup>	540,860	415,860	125,000
1955 <sup>2/</sup>	455,000	355,000	100,000

<sup>1/</sup> Excludes visits for dental services  
<sup>2/</sup> Estimate

Figure 6.3

BEST COPY AVAILABLE

# NUMBER OF INDIAN AND ALASKA NATIVE OUTPATIENT VISITS TO IHS HOSPITALS AND FIELD CLINICS



## DENTAL SERVICES

In fiscal year 1972, 72 percent of the required dental services in the age group 5 - 14 years were provided. This age group has historically been provided the highest percentage of required services. The percentage of services provided decreased with each successive age group.

Estimated services required for the Indian and Alaska Native population in fiscal year 1972 was over 2 million. Forty percent of these services were provided. It is estimated that a total dental program should provide comprehensive dental services to 70 - 80 percent of the population 3 - 19 years old and 46 percent of the population over age 20. The IHS dental program provided services to less than 55 percent of the children under 20 years and only 21 percent of the Indian population age 20 and over. While these percentages are below those of a comprehensive dental program, the number of Indians provided dental care has increased 153 percent since 1957.

The efficiency of the dental program has increased steadily since 1956. While the number of services provided has increased almost threefold since 1956, the number of dentists has increased only 65 percent. From fiscal year 1971 to fiscal year 1972 the number of dental services increased 8.8 percent while the number of dentists increased only 6 percent. This increased efficiency is due to the constantly rising ratio of allied dental staff per dentist, improved facilities, training, staff development, and program research and development. The dental program is constantly seeking better and more efficient methods of delivering dental services to Indians and Alaska Natives, while at the same time improving the quality of the services.

Table 7.1

PERCENT OF ESTIMATED REQUIRED DENTAL SERVICES PROVIDED  
Fiscal Year 1972

Age Group (In Years)	Services Required Per Person Examined	Indian Health Service Population	Estimated Services Required In Population	Services Provided Direct and Contract	Percent of Required Services Provided
All Ages	8.06	469,632	2,098,015	844,724	40.3
Under 5	6.66	61,287	102,042	41,596	40.8
5 - 9	6.45	70,698	364,801	268,554	73.6
10 - 14	5.72	66,800	305,676	214,057	70.0
15 - 19	7.03	53,172	261,659	119,883	45.8
20 - 24	9.80	33,057	161,979	49,615	30.6
25 - 34	10.72	52,148	279,513	63,727	22.8
35 - 44	11.29	43,192	243,818	39,387	16.2
45 - 54	11.57	53,997	177,005	24,927	14.1
55 - 64	11.19	27,135	121,456	14,267	11.7
65 - 74	10.91	18,086	59,195	6,603	11.2
75+	10.47	10,060	21,065	2,108	10.0

Figure 7.1

# PERCENT OF ESTIMATED REQUIRED DENTAL SERVICES PROVIDED IN EACH AGE GROUP FOR INDIANS AND ALASKA NATIVES

BEST COPY AVAILABLE

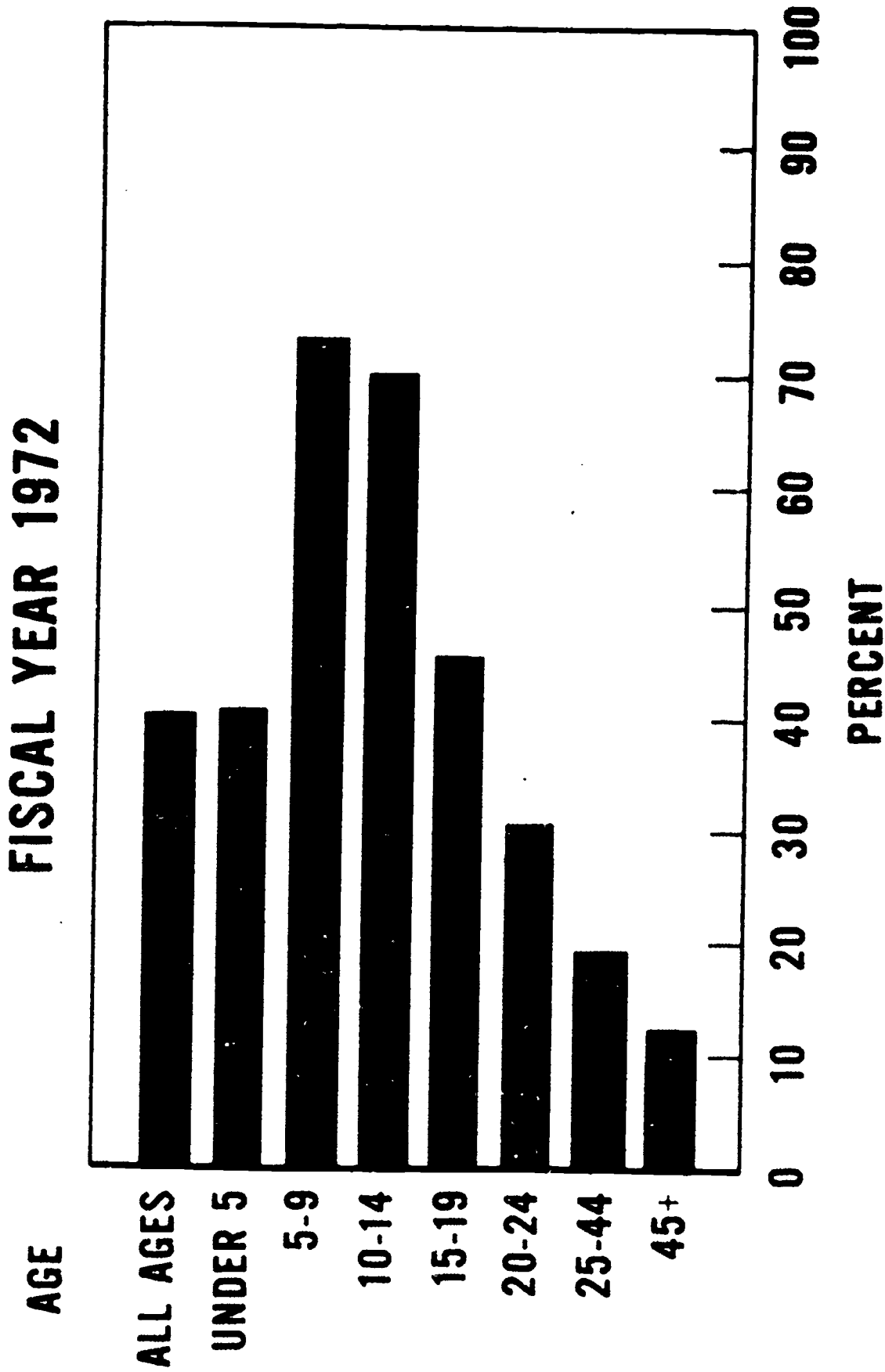




Table 7.2

NUMBER AND PERCENT OF SERVICE POPULATION RECEIVING DENTAL TREATMENT  
 BY AGE GROUP, INDIAN HEALTH SERVICE AND CONTRACT DENTAL CARE  
 Fiscal Years 1957, 1962, 1967 thru 1972

Fiscal Year	All Ages			Under 20		20 and Over	
	Number	Percent	Number	Percent	Number	Percent	
1972	183,689	39.1	137,809	54.7	45,880	21.1	
1971	168,709	36.6	130,243	52.7	38,466	18.0	
1970	158,868	35.3	124,360	51.4	34,508	16.5	
1969	151,310	34.0	120,120	50.1	31,190	15.3	
1968	142,158	32.6	112,562	47.6	29,596	14.8	
1967	134,756	31.5	106,590	45.6	28,166	14.5	
1962	95,343	25.1	73,834	33.5	21,509	13.5	
1957	72,479	19.1	56,079	29.5	16,400	8.6	





Table 7.3

NUMBER OF DENTISTS AND DENTAL SERVICES PROVIDED  
Fiscal Years 1956 - 1972

Year	Number of Dentists	Services Provided	Percent Increase over 1956 Dentists	Services
1972	180.0	844,724	164.7	285.1
1971	170.3	776,168	150.4	253.8
1970	137.3	646,580	101.9	194.8
1969	135.5	634,479	99.3	189.3
1968	129.3	613,084	90.1	179.5
1967	114.2	545,509	67.9	148.7
1966	103.4	502,710	52.1	129.2
1965	101.6	495,006	49.4	125.7
1964	98.8	462,981	45.3	111.1
1963	98.4	398,452	44.7	86.4
1962	94.0	364,988	38.2	66.4
1961	91.0	348,776	33.8	59.0
1960	81.0	307,248	19.1	40.1
1959	81.0	283,206	19.1	29.1
1958	80.0	282,372	17.6	28.7
1957	75.0	249,048	10.3	13.5
1956	68.0	219,353	-	-

Table 7.4

AVERAGE NUMBER OF PERMANENT TEETH  
 DECAYED, MISSING AND FILLED AMONG PERSONS 5-19 YEARS OF AGE <sup>1/</sup>  
 Fiscal Years 1957-1972

<u>Fiscal Year</u>	<u>Total DMF Teeth</u>	<u>Decayed Teeth</u>	<u>Missing Teeth</u>	<u>Filled Teeth</u>	<u>Number Examined</u>
1972	5.92	2.43	0.32	3.17	107,353
1971	5.90	2.38	0.33	3.19	105,731
1970	5.94	2.27	0.38	3.29	103,581
1969	5.91	2.35	0.36	3.20	102,367
1968	6.12	2.58	0.36	3.18	95,265
1967	6.09	2.66	0.37	3.07	73,038
1966	5.70	2.50	0.34	2.86	69,056
1965	5.74	2.73	0.31	2.70	69,542
1964	5.65	2.82	0.32	2.51	65,809
1963	5.54	2.90	0.35	2.30	58,041
1962	5.19	2.81	0.36	2.02	53,046
1961 <sup>2/</sup>	4.78	3.02	0.27	1.49	13,621
1960	NA				
1959 <sup>2/</sup>	4.15	2.47	0.35	1.33	22,635
1958	3.98	2.48	0.37	1.13	46,714
1957	4.00	2.49	0.40	1.11	47,520

<sup>1/</sup> Prior to 1968 Includes Persons 6 - 17 years of age.  
<sup>2/</sup> Incomplete; data from 5 of 8 areas only.

## FAMILY PLANNING SERVICES

---

The Indian Health Service has been active in the field of family planning since fiscal year 1965. Since the inception of the program, 48,600 women have received family planning services. In fiscal year 1972 there were 37,200 medical visits by 20,300 Indian and Alaska Native women. The number of women aged 15-44 in the service population in fiscal year 1972 was 94,100. Thus, IHS provided family planning services to over one-fifth of the women in the childbearing ages.

Of the women receiving services in fiscal year 1972, almost 6,000 were new acceptors and 14,335 were continuing acceptors. While the number of new acceptors in 1972 was the lowest recorded since inception of the program, the number of continuing women has increased each year.

Sixty-seven percent of the women provided services in fiscal year 1972 chose the oral contraceptive method. Another 29 percent were using intrauterine devices with the remainder using rhythm (0.5%) and other methods.

---



Table 8.2

FAMILY PLANNING PROGRAM  
 NUMBER OF WOMEN RENDERED SERVICES\*  
 FY 1967 - 1972

	<u>Total</u>	<u>Oral Contraceptive</u>	<u>IUDs</u>	<u>Rhythm</u>	<u>Other Methods</u>
1972	20,312	13,627	5,877	94	714
1971	16,551	11,261	4,831	58	401
1970	14,526	10,813	3,255	8	450
1969	13,485	10,215	2,900	27	343
1968	11,236	7,460	3,415	87	274
1967	12,506	NA	NA	NA	NA

\* The sum of unduplicated new and old acceptors during the fiscal year.  
 NA Not available.

Figure 8.1

# THE NUMBER OF NEW AND CONTINUING WOMEN PROVIDED FAMILY PLANNING SERVICES

BEST COPY AVAILABLE

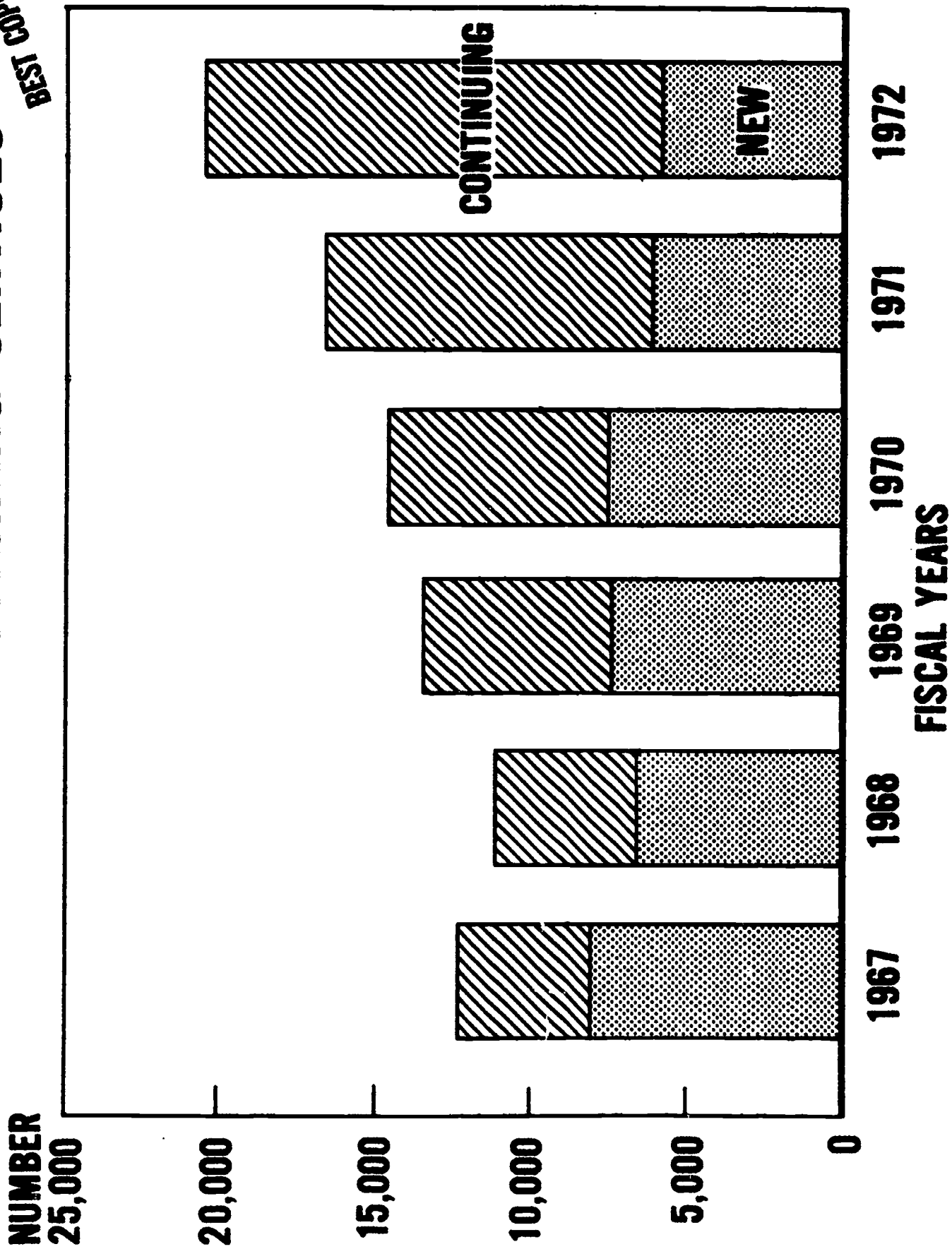


Table 8.3

ADMISSIONS TO FAMILY PLANNING SERVICES BY AREA  
Fiscal Year 1972

	<u>Admissions</u>	<u>All Women Ages 15-44</u>	<u>Rate per 1,000</u>
IHS TOTAL	20,312	94,095	215.9
Aberdeen	3,343	12,428	269.0
Alaska	1,944	10,578	185.8
Albuquerque	944	6,991	135.0
Billings	1,574	5,450	288.8
Navajo	4,261	19,607	217.3
Oklahoma	3,976	19,837	200.4
Phoenix	2,751	10,161	270.7
Portland	882	4,977	177.2
U.S.E.T.	377	2,023	186.4
Tucson	260	2,043	127.3

## NURSING SERVICES

Almost 33,000 families received IHS public health nursing services during fiscal year 1972. This represents an increase of 44 percent in the number of families served over fiscal year 1964 (Table 9.1). Total public health nursing services provided in fiscal year 1972 were 169,000, an increase of 18 percent since 1964. While the total number of services has been increasing, the number of services provided per family has experienced a decreasing trend since 1964. In fiscal year 1972 the average was 5.2 per family (Table 9.3).

The number of admissions for maternal and infant health supervision has increased 72 percent for infant supervision, but has decreased for prenatal and postnatal supervision (Table 9.2).



Table 9.1

NUMBER AND PERCENT OF SERVICE POPULATION FAMILIES RECEIVING  
 IHS PUBLIC HEALTH NURSING SERVICES  
 Fiscal Years 1964-1972

Fiscal Year	Families Served Home and Office Visits	Total Number of Service Population Families	Percent of Total Families Served
1972	32,665	87,154	37
1971	31,157	74,241	42
1970	33,390	66,194	50
1969	33,807	72,050	47
1968	35,172	71,250	49
1967	30,126	68,750	44
1966	29,905	67,900	44
1965	25,560	67,900	38
1964	22,646	67,900	33

Table 9.2

NUMBER OF ADMISSIONS TO IHS PUBLIC HEALTH NURSING SERVICE  
FOR MATERNAL AND INFANT HEALTH SUPERVISION  
Fiscal Years 1964-1972

Year	Number of Admissions for Specified Services		
	Prenatal Supervision	Postnatal Supervision	Infant Supervision
1972	2,461	3,553	10,601
1971	2,563	3,491	10,279
1970	3,372	3,262	6,012
1969	2,975	3,367	6,333
1968	3,253	3,843	6,919
1967	3,227	3,818	6,549
1966	3,456	3,620	6,901
1965	2,959	3,606	6,344
1964	2,710	3,644	6,175

Table 9.3

NUMBER OF PUBLIC HEALTH NURSING SERVICES PROVIDED  
TO FAMILIES THROUGH HOME AND OFFICE VISITS  
Fiscal Years 1964-1972

Fiscal Year	Total Services	Services Per Family
1972	168,890	5.2
1971	144,746	4.6
1970	170,620	5.1
1969	165,457	4.9
1968	174,178	5.0
1967	171,232	5.7
1966	161,074	5.4
1965	145,880	5.7
1964	143,380	6.3

#### ENVIRONMENTAL HEALTH SERVICES

A continuing program of consultation and services is made available to Alaska Natives and Indian tribes, groups, and families for the purpose of helping them to improve and maintain a healthful home and community environment. These basic services are concerned with improving sanitation conditions in the home and community, at Indian celebrations, and at trading posts and other commercial establishments serving Indians. Considerable effort is expended in follow-up surveys of completed sanitation facilities projects to assure that maintenance and care are being furnished and that the facilities are being used properly.

During fiscal year 1972 39,016 technical services and consultations were rendered to individual Indian and Alaska Native homes. The total number of surveys performed in fiscal year 1972 was 92,014.

Table 10.1

ENVIRONMENTAL HEALTH SURVEYS AND SERVICE PROVIDED  
 BY THE INDIAN HEALTH SERVICE  
 Fiscal Years 1964-1972

Fiscal Year	Individual Pre-ise	Community	Institutional
1964	31,913	7,421	2,831
1965	26,249	6,542	5,529
1966	32,328	9,450	9,775
1967	35,015	17,014	12,262
1968	43,900	22,600	16,700
1969	47,600	19,600	19,800
1970	46,701	26,531	19,570
1971	31,469	27,012	22,582
1972	39,016	31,921	21,077

---

### PHARMACY WORKLOAD UNITS

In fiscal year 1972, 3,040,000 pharmacy workload units were provided. This represents an increase of 10 percent over fiscal year 1971. Since 1955 the number of pharmacy workload units performed have increased 35 times. This has been accomplished by an increase in the pharmacy staff of only 6 times the 1955 level.

Table 11.1

PHARMACY WORKLOAD UNITS  
PERFORMED AT IHS HOSPITALS AND HEALTH CENTER PHARMACIES

Fiscal Year: 1955 - 1972

(Numbers in Thousands)

Fiscal Year	Total	Prescriptions	Station Issues	Issues to			Pre-Packaging	Number of Pharmacists
				Other Facilities	Bulk Compounding			
1972	3,040	1,759	182	123	79	177	153	
1971	2,772	1,757	188	113	74	186	143	
1970	2,497	1,770	127	121	28	160	135	
1969	2,233	1,631	158	139	87	218	117	
1968	1,958	1,379	146	151	74	208	109	
1967	1,610	1,071	136	136	94	173	94	
1966	1,454	953	123	132	70	176	77	
1965	1,462	969	120	141	74	158	68	
1964	1,371	888	118	141	77	147	65	
1963	1,290	808	124	130	79	149	64	
1962	1,093	627	107	155	70	134	62	
1961	894	510	81	145	51	107	54	
1960	679	339	64	134	37	105	50	
1959	529	259	54	101	36	79	44	
1958	494	254	57	59	43	81	33	
1957	326	113	59	43	54	57	33	
1956	123						26	
1955	84						22	
							..... Not Available .....	

### COST OF SERVICES

The IHS budget has grown from 24.6 million dollars in 1955 to 155.1 million in fiscal year 1972. Direct patient medical care accounts for just over 50 percent of the IHS budget. Obligations for field health services have increased 13 times over the 1955 level. In fiscal year 1972 this category was 29 percent of the IHS budget. Obligations for contract patient care continues at approximately 19 percent of the total IHS budget. The funds for administration have decreased from 5.3 percent of the total in 1955 to 1.5 percent in 1972.



Table 12.1

**INDIAN HEALTH SERVICE OBLIGATIONS, BY ACTIVITY**  
**Fiscal Years 1955-1972**  
**Millions of Dollars**

<u>Fiscal Year</u>	<u>Direct Patient Medical Care</u>	<u>Field Health Services</u>	<u>Contract Patient Medical Care</u>	<u>Adminis- tration</u>
1955	\$15.1	\$3.2	\$5.0	\$1.3
1956	20.5	4.6	7.7	2.1
1957	22.6	5.9	7.9	2.1
1958	25.0	6.9	7.7	1.1
1959	25.8	7.1	8.0	1.3
1960	27.6	8.0	8.6	1.3
1961	30.8	8.9	8.7	1.4
1962	32.3	9.3	9.7	1.4
1963	34.7	10.0	10.2	1.5
1964	36.0	10.7	11.0	1.7
1965	37.6	11.6	11.7	1.8
1966	39.7	13.0	12.6	1.9
1967	44.0	15.6	14.0	1.8
1968	47.5	19.1	15.5	1.7
1969	51.3	22.8	17.7	1.9
1970	57.8	27.0	19.9	2.1
1971	67.2	32.4	23.6	2.3
1972	78.8	44.4	29.5	2.4