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TRUST TERRITORY OF THE PACIFIC ISLANDS

FIVE YEAR COMPREHENSIVE HEALTH PLAN

February, 1979

REPOSITORY ME-FORRESTAL  
COLLECTION Monkey files  
BOX No. 6 of 6  
FOLDER 2.8 Marshall Islands  
#4 September 1978-May 1979

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## CHAPTER FOUR

### VI. DEMOGRAPHY

#### A. Population Size:

Table IV-2 shows the number of TTPI citizens residing in each district of the Trust Territory, and indicates what percentage of the total Micronesian population they represent. Truk has the TTPI's largest population, followed in order of size by the Marshalls, Ponape, Palau, Yap and Kosrae.

TABLE IV-2 DISTRICT POPULATION (TTPI CITIZENS), 1973\*

District	Population	Percent of Total TTPI Population
Kosrae	3,989	3.9
Marshalls	25,045	25.2
Palau	12,673	12.6
Ponape	19,263	19.1
Truk	31,609	31.3
Yap	7,870	7.8
TTPI TOTALS	100,918	99.9

Source: OPS Bulletin of Statistics 12/77

\*Excluding those individuals of unspecified place of residence and citizens of foreign nations including the U.S.

B. Age Distribution:

Table IV-3 shows the percentage of each district's population according to age groups. The youthful character of Micronesia's population is clearly evident; in 1973 approximately 47% of the population was under fourteen years of age. Conversely, less than ten percent of all Micronesians were older than fifty-five years.

TABLE IV-3 POPULATION OF THE TRUST TERRORY AND THE  
NORTHERN MARIANAS BY AGE AND SEX, 1973 - all persons, percentages  
(De Facto Population by District of usual residence)

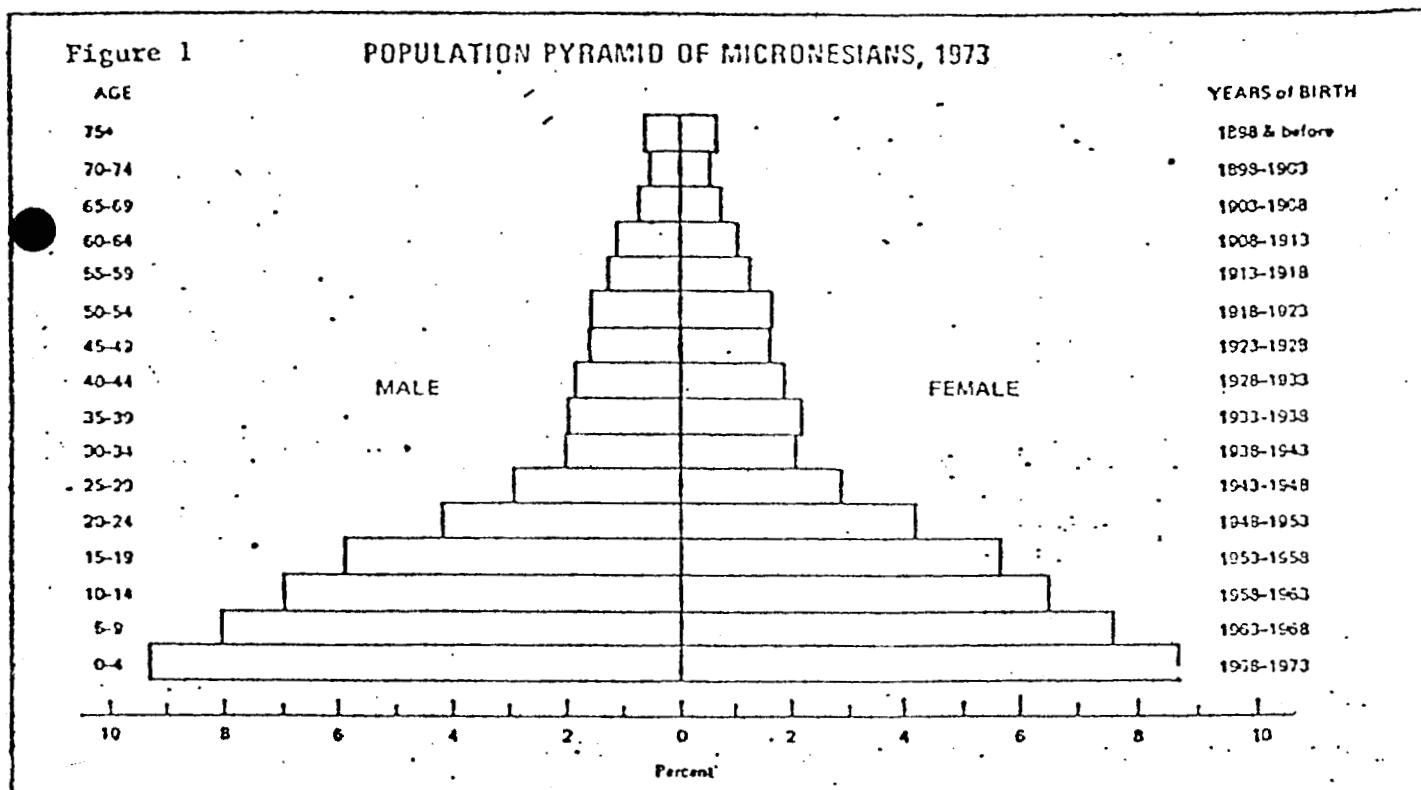
District Age Group	Total Trust Territory			Kosrae			Marshalls			Palau			Ponape			Truk			Yap			Northern Marianas		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
0-4	18.1	18.5	17.8	18.8	18.4	19.1	19.3	19.6	18.8	15.0	15.1	14.9	18.7	18.7	18.6	18.5	18.9	18.1	15.5	15.9	15.0	16.9	16.5	17.1
5-9	15.6	15.9	15.3	17.6	17.2	17.6	15.9	16.0	15.8	15.9	15.8	16.5	15.4	15.7	15.1	15.1	15.5	14.8	14.0	14.2	13.9	15.3	15.1	15.6
10-14	13.4	13.6	13.2	14.4	16.7	12.1	12.5	12.2	12.9	14.4	14.4	14.5	13.9	14.2	13.7	12.9	13.0	12.9	12.8	13.4	12.2	13.4	13.3	13.5
15-19	11.5	11.6	11.4	11.5	11.0	12.0	11.3	11.0	11.7	12.3	12.6	11.9	11.3	11.5	11.1	11.2	11.5	10.9	11.0	10.3	11.7	11.4	10.4	12.6
20-24	8.3	8.3	8.3	7.4	6.4	8.6	8.5	8.7	8.3	8.5	9.4	7.6	8.1	8.1	8.2	8.4	8.0	8.8	8.0	7.9	8.0	8.8	7.9	9.8
25-29	5.7	5.6	5.8	6.1	5.9	6.4	6.4	6.3	6.6	5.7	6.2	5.2	4.9	4.7	5.0	6.1	6.0	6.3	5.6	6.0	5.2	6.9	7.2	6.5
30-34	4.0	3.9	4.2	4.4	4.1	4.6	4.1	4.6	3.9	4.4	4.4	4.4	4.1	3.8	4.3	4.2	4.1	4.2	4.5	4.1	5.0	5.3	6.1	4.4
35-39	4.2	4.0	4.4	4.3	4.2	4.3	3.7	3.7	3.7	4.2	4.1	4.2	4.2	4.0	4.3	4.6	4.3	5.0	4.9	4.7	5.0	5.0	5.5	4.4
40-44	3.8	3.8	3.7	3.9	3.9	4.0	3.4	3.6	3.1	3.5	3.4	3.6	4.0	3.9	4.1	3.9	4.1	3.8	4.6	4.6	4.6	4.2	2.8	3.5
45-49	3.3	3.1	3.5	2.6	2.1	3.1	3.1	3.0	3.2	3.5	3.0	3.9	3.6	3.6	3.6	3.3	3.1	3.5	3.7	3.6	3.9	3.1	3.7	2.5
50-54	3.3	3.2	3.5	2.8	3.0	2.6	3.0	2.9	3.0	3.3	3.5	3.1	3.7	3.4	4.0	3.3	3.2	3.4	4.2	3.7	4.6	2.9	3.1	2.8
55-59	2.6	2.5	2.6	1.5	1.7	1.3	2.6	2.7	2.6	2.9	2.6	3.1	2.7	2.9	2.5	2.3	2.1	2.4	3.2	3.4	2.9	2.3	2.1	2.5
60-64	2.2	2.2	2.2	1.6	1.6	1.5	2.1	2.1	2.1	1.7	1.6	1.8	2.0	2.1	1.9	2.6	2.6	2.5	2.6	2.6	2.5	1.9	2.0	1.7
65-69	1.5	1.4	1.6	1.3	1.4	1.2	1.4	1.3	1.6	1.6	1.4	1.8	1.3	1.4	1.3	1.5	1.4	1.6	1.8	1.7	1.9	1.2	1.1	1.3
70-74	1.1	1.1	1.1	1.1	1.4	0.7	1.0	0.9	1.2	1.1	1.0	1.2	1.0	1.0	1.0	1.1	1.2	1.0	1.6	1.6	1.5	0.8	0.6	0.9
75 and over	1.4	1.3	1.4	0.9	0.9	0.9	1.5	1.4	1.6	2.0	1.8	2.2	1.1	1.0	1.3	1.0	1.0	1.0	2.1	2.1	2.0	0.7	0.6	0.8

Source: OPS Bulletin of Statistics 12/77

The youthful nature of the T.T.P.I. population is graphically displayed by the population pyramid found on page 55.

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1/ The great majority of Micronesians (more than 72 percent) are less than thirty years old, and the Territory's median age (16.2 years) is one of the world's lowest. Particularly significant for population planning is the fact that 72 percent of all females are less than thirty years of age. This represents an extremely high "fecundity" -- i.e. biological potential for reproduction -- in the population. (See Table IV-3)



Source: Figure 1 is taken from Alan Kay, "Population Growth in Micronesia," Micronesian Reporter, XXII (2nd Quarter, 1974), No. 2, P. 17.

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C. Geographic Distribution:

Table IV-4 shows Trust Territory citizens by place of residence at the time of the 1973 census, both in absolute numbers and as a percent of the total district population.

This table slightly understates the proportion of residents in District Centers since it excludes aliens, who reside almost exclusively in District Centers.

The geographical areas selected are not political sub-divisions, but rather geographical units defined by social characteristics and travel times (accessibility to hospital services). 2/

Table clearly shows that more people live in the district centers than in any other single geographical sub-area. 3/ It also shows that the combined populations of the district and sub-district centers account for more than one-half of the TTPI's entire population. Thus, it is possible to say that most Micronesians reside in areas with relatively easy access to hospitals 4/ and other health services.

TABLE IV-4  
TRUST TERRITORY CITIZENS BY PLACE OF RESIDENCE  
September 1973

District	D. Center	Sub D.C.	Intermediate*	Outer Islands**
Total				
100,918	51,778	9,873	28,550	20,431
100%	47%	9%	26%	18%
Kosrae	Lelu, Malem, Tafunsak		Malung	
3,898				
100%				
Marshalls	Majuro (DUO, Laura)	Ebeye	Arno	Likiep; Utirik; Ailuk; Mejit; Wotje; Maleolap; Aur; Namorik; Mili; Ebon; Kili; Ailinglaplap; Jaluit; Lib; Jabwot; Rongelap; Namu; Ujelang; Bikini; Wotho; Lae; Ujae; N.S.
25,045	10,290	5,469	1,120	8,166
100%	41%	21.8%	4.5%	32.6%
Palau	Koror		Babelthuap; Angaur; Peleliu; Kayangel	Pulo Anna; Sonsorol; Tobi; N.S.
12,673	7,669		4,867	137
100%	60.5%		38.4%	1%
Ponape	Kolonia; Nett, Sokehs.		Uh; Kiti; Metalanim	Pingelap; Mokil; Nukuoro; Ngatik; Kapingamarangi 2.004 10.4%
19,263	9,368		6,891	
100%	53.8%		35.8%	
Truk	Moen		Dublon; Tol Uman; Fefan; Romanum; Udot; Tsis; Param; Eot; Fala-Beguest	Nama; Losap; Pis-Losap; Namoluk; Oneop; Satawan; Lukunor; Fananu; Etal; Kutu; Moch; Tamatam; Ta; Pulusuk; Puluwat; Pulap; Nomwin; Magur; Ulul; Onari; Ono; Ruo; Pisaras; Pisaras, Murillo; N.S.
31,609	9,568		48	93
100%	30.2%		46.3%	23.5%
Yap	Rull; Weloy; Gagil; Map; Tomil; Fanif; Gilman; Dalipebinau; Kanifay		Rumung	Ulithi; Fais; Sorol; Lamotrek; Ngulu; Woleai; Faralep; Elato; Eauripik; Ifalik; Satawal; N.S.
7,870	5,011		129	2,730
100%	63.7%		1.6%	34.7

Source: TTPI SHPOA  
from 1973, TTPI Census

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\* An intermediate area is more than 2 hours but less than 1 day's travel time from the district center.

Table IV-5 shows distribution among the sub-areas of those persons defined as high-risk in terms of health care problems. The first three groups (0-1 year, infants; 1-4 year, children; and females in the prime, child bearing ages, 15-44 years) are the critical ages for maternal and child health care; the last (persons aged 55 years and older) are of importance because of the special health needs of the elderly.

TABLE IV-5  
GEOGRAPHIC DISTRIBUTION OF HIGH-RISK  
AGE GROUPS (TTPI CITIZENS), 1973

GEOGRAPHIC AREA	INFANT (0-1 year) NUMBER	%*	CHILD (1-4 years) NUMBER	%*	FEMALE (15-44 years) NUMBER	%**	ELDERLY (55 & over years) NUMBER	%*
District Center	1,982	4.4	6,799	15.0	10,562	23.5	3,744	8.3
Sub-District Center	440	8	1,488	27	1,865	34	691	12.6
Intermediate	1,235	4.3	4,236	14.8	4,709	16.5	2,754	9.6
Outer Island	843	4.1	2,940	14.4	3,469	17	2,245	11
TTPI Total	4,500		15,463		20,605		9,434	
Percentage of TTPI Population Falling Into High-Risk Age Categories		4.5		15.3		20		9.4

\* Percentage of Area Population in High-Risk Groups

Source: TTPI SHPDA - Note: The combined populations of these high risk age groups (50,002) represent 49.6% of the total TTPI population.

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Table IV-5 shows that 49.6 percent of all TTPI citizens fall into these high-risk age groups. In other words, nearly one-half of Micronesia's population can be considered of special interest to health planning because of the propensity of these persons to require certain health services. Table IV-5 also shows that there are proportionately more elderly persons residing in the outer islands and intermediate areas than in the district and sub-district center. At the same time, proportionately more women of the prime child-bearing ages live in the district and sub-district centers than in the intermediate areas and outer islands. Given this latter fact, it may seem surprising that all four geographic subdivisions have relatively similar proportions of infants and children among their populations. This apparent discrepancy is explained by the fact that many district center women of child-bearing age send their children to live with relatives and friends in the other geographic sub-areas of Micronesia.

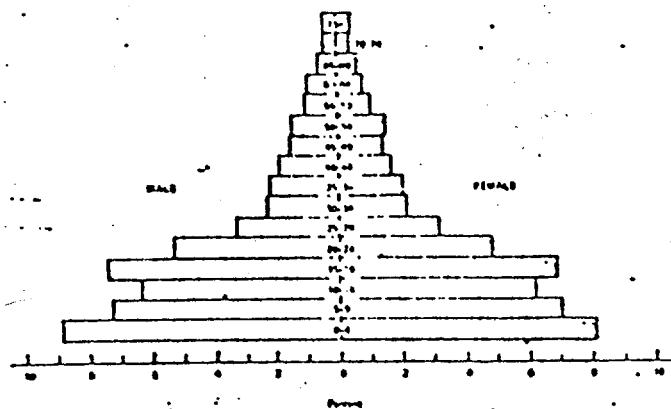
Figures IV-2b and IV-2c 5/ analyze the district center and outer island populations in terms of age, as well as sex. These two population pyramids show that there is a much larger proportion of young adults of both sexes aged 15-24 years living in the district centers than in the outer islands. This selective migration to the district centers from the outlying areas of the Trust Territory, is probably due to the increased educational and vocational opportunities at the district centers, as well as the attraction exerted by the "modern" amenities available in the district center.

Various characteristics of the district center and outer island populations are summarized in Figure IV-2d.6/ It shows that 25 percent of the district center population is between 15 and 24 years of age, while only 15 percent of the outer island population falls into this age group. Figure IV-2d also shows the small proportion of elderly persons in the TTPI, with more residing in the outer islands than in the district center.

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Figure IV-2b

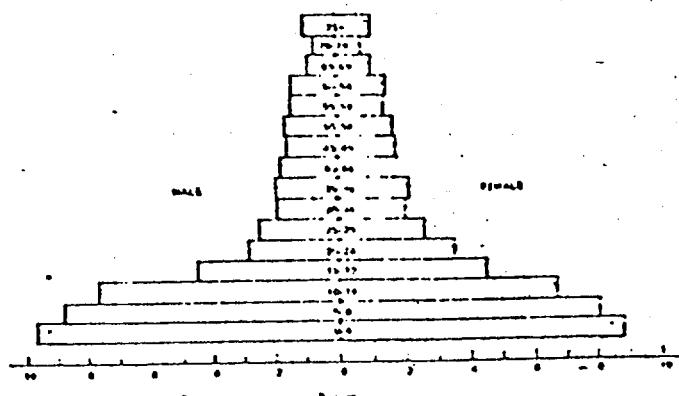
POPULATION PYRAMID OF  
DISTRICT CENTER RESIDENTS, 1973



Source: Kay's - See Footnote 5

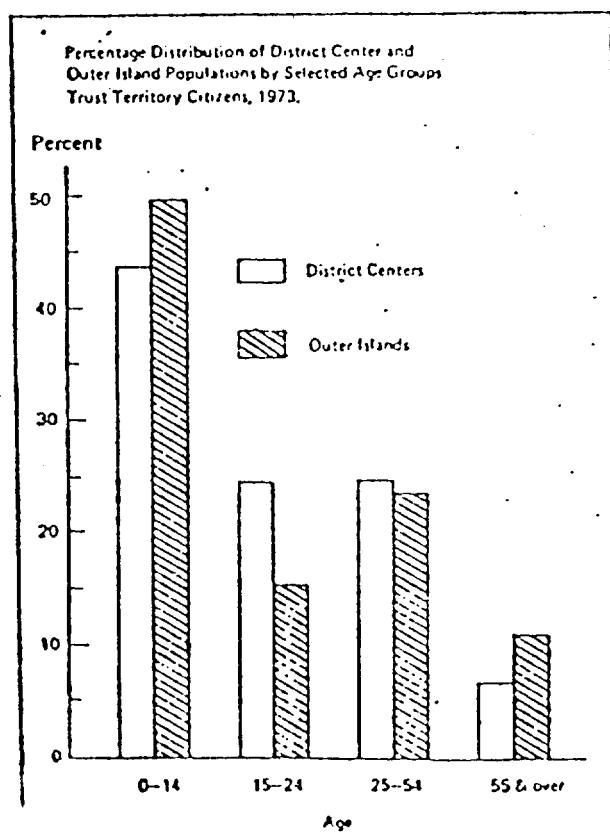
Figure IV-2c

POPULATION PYRAMID OF  
OUTER ISLAND RESIDENTS, 1973



Source: Kay's - See Footnote 5

Figure IV-2d



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D. Population Trends and Projections

The population characteristics discussed above were extracted from data compiled in the TT Census of 1973, the Trust Territory's last official population enumeration. When they are compared with data contained in the 1967 TTPI Census, a number of significant changes in the size, composition, and distribution of Micronesia's population become evident. In the following section, we establish these population "trends" (changes between 1967 and 1973), and use them to project plausible patterns of future growth. Our projections assume, of course, that the components of future population growth will continue to closely approximate the rates existing between 1967 and 1973. 7/

The left-hand side of Table IV-6 contains the 1967 and 1973 TTPI citizen populations of each district, and shows the average annual growth rate for each district, as calculated using a formula based on the principle of compound interest.

The table shows that between 1967 and 1973 Micronesia's population grew at a very high rate (3.6 percent annually); if this rate of growth continues, the population will double from 1973 levels by 1993--a period of only twenty years. This extremely high rate of growth is due primarily to high rates of "natural increase"--in other words, most areas of the TTPI have high birth rates and low death rates. This fact is reflected in Table IV-6, which shows that all the districts of the Trust Territory,

except Yap and Palau, have annual rates of growth similar to, or greater than, the 3.6 percent annual growth rate of the entire TTPI.

TABLE IV-6 DISTRICT POPULATION GROWTH

(TTPI CITIZENS), 1967--1973

DISTRICT	RESIDENT POPULATION		Annual Growth Rate %
	1967	1973	
Kosrae	3,226	3,952	3.4
Marshalls	18,599	25,045	4.4
Palau	10,991	12,673	1.7
Ponape	18,064	19,263	4.0
Truk	24,821	31,609	3.9
Yap	6,618	7,870	2.4
TTPI TOTALS	82,319	100,918	3.6

Source: TTPI SHPDA

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Table IV-7 shows the mid-year TTPI citizen population estimate by age groups and projects the size of these age groups up to 1982. The proportion of Micronesians under 30 years of age is projected to increase slightly by 1982 (to 76 percent, as compared to 73 percent in 1973).

Table IV-7

		Projected mid-year population of the Trust Territory 1973 - 1982					by age, sex and district.	
		(TTPI citizen pop.)						
District	Sex	Age group	1970	1975	1980	1981	1982	
Trust Territory Total	Both sexes	Total	119,480	116,960	120,340	125,020	129,460	
		0 - 14	51,250	52,350	53,270	55,430	57,300	
		15 - 64	57,550	57,250	62,040	64,190	64,810	
		65 over	6,690	6,450	5,930	5,200	5,350	
	Male	Total	57,900	57,650	61,590	63,700	65,550	
		0 - 14	26,450	27,010	27,710	28,550	29,470	
		15 - 64	29,110	30,240	31,410	32,610	33,840	
	Female	Total	2,310	2,350	2,470	2,550	2,640	
		65 over	2,360	2,530	2,540	2,650	2,710	
Enderbury	Both sexes	Total	4,610	4,730	4,940	5,110	5,300	
		0 - 14	2,700	2,850	2,950	3,100	3,470	
		15 - 64	2,160	2,350	2,390	2,610	2,730	
		65 over	150	160	160	160	160	
	Male	Total	2,330	2,420	2,500	2,580	2,690	
		0 - 14	1,110	1,130	1,150	1,150	1,150	
		15 - 64	1,110	1,200	1,250	1,310	1,370	
	Female	Total	80	90	90	90	90	
		65 over	70	70	70	70	70	
Marshall Islands	Both sexes	Total	22,880	29,720	29,470	32,210	37,340	
		0 - 14	13,030	15,270	15,600	17,920	21,440	
		15 - 64	13,750	16,290	15,860	15,160	16,100	
		65 over	1,120	1,160	1,210	1,260	1,330	
	Male	Total	10,210	11,610	15,110	15,410	16,210	
		0 - 14	6,750	6,830	7,040	7,110	7,460	
		15 - 64	6,340	7,210	7,500	7,810	8,110	
	Female	Total	530	550	550	600	620	
		65 over	500	610	630	660	680	
Palau	Both sexes	Total	13,910	14,370	14,890	15,310	15,870	
		0 - 14	5,930	6,110	6,160	6,440	6,640	
		15 - 64	7,330	7,630	7,350	8,360	8,550	
		65 over	990	950	920	920	940	
	Male	Total	7,130	7,350	7,590	7,860	8,130	
		0 - 14	3,070	3,130	3,210	3,310	3,410	
		15 - 64	3,150	3,250	4,190	4,260	4,400	
	Female	Total	270	280	280	290	310	
		65 over	270	280	280	290	310	
Pohnpei	Both sexes	Total	6,730	6,970	7,210	7,460	7,740	
		0 - 14	3,320	3,530	3,650	3,130	3,210	
		15 - 64	3,510	3,620	3,850	4,060	4,150	
		65 over	370	360	310	310	350	
	Male	Total	3,110	3,350	3,590	3,860	4,130	
		0 - 14	1,270	1,310	1,310	1,310	1,310	
		15 - 64	1,250	1,320	1,490	1,660	1,800	
	Female	Total	270	280	280	290	310	
		65 over	270	280	280	290	310	
Tinian	Both sexes	Total	21,170	22,510	22,150	23,910	24,770	
		0 - 14	9,810	9,990	10,350	10,540	10,710	
		15 - 64	11,160	11,580	12,000	12,430	12,870	
		65 over	800	850	870	930	970	
	Male	Total	11,130	11,540	11,800	12,200	12,610	
		0 - 14	5,050	5,130	5,240	5,420	5,600	
		15 - 64	5,470	5,840	6,090	6,310	6,510	
	Female	Total	400	470	450	470	490	
		65 over	400	470	450	470	490	
Yap	Both sexes	Total	16,650	16,370	16,350	16,720	16,140	
		0 - 14	8,160	8,450	8,390	8,710	8,330	
		15 - 64	5,490	5,200	5,210	6,120	5,340	
		65 over	400	620	660	640	670	
	Male	Total	16,350	16,370	16,350	16,010	16,160	
		0 - 14	10,510	10,760	9,220	9,150	9,570	
		15 - 64	9,110	9,170	9,310	10,310	10,450	
	Female	Total	1,570	1,530	1,570	1,510	1,640	
		65 over	1,570	1,530	1,570	1,510	1,640	
Saipan	Both sexes	Total	18,750	18,470	19,350	20,210	21,450	
		0 - 14	8,510	8,760	9,220	9,150	9,570	
		15 - 64	9,110	9,170	9,310	10,310	10,450	
		65 over	270	270	270	270	270	
	Male	Total	18,470	18,470	19,350	19,710	20,440	
		0 - 14	8,110	8,360	8,410	8,790	9,010	
		15 - 64	9,110	9,170	9,310	10,170	10,510	
	Female	Total	270	270	270	270	270	
		65 over	270	270	270	270	270	
U.S.	Both sexes	Total	8,750	9,020	9,110	9,430	9,740	
		0 - 14	4,350	4,510	4,610	4,820	5,120	
		15 - 64	4,530	4,730	4,630	4,630	4,730	
		65 over	470	480	520	510	520	
	Male	Total	8,432	8,540	8,710	8,870	9,020	
		0 - 14	4,110	4,270	4,610	4,820	5,120	
		15 - 64	4,232	4,510	4,110	4,630	4,730	
	Female	Total	8,122	8,460	8,610	8,750	8,920	
		65 over	332	240	250	250	260	

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It has already been noted that nearly one-half of all Micronesians reside in the district centers. Table IV-8 shows the number of TTPI citizens living in each of the district centers in 1967 and 1973, and indicates the corresponding annual growth rates. It also shows the district center populations as percentages of each district's entire population for 1967, 1973, and projections for 1978, 1982. Clearly, an increasing proportion of each district's future population can be expected to reside in the district centers rather than in the intermediate or outer island areas. The district center annual growth rate is seven percent, the sub-district centers' annual growth rate is 4.2 percent, and the intermediate areas annual growth rate is only 1.6 percent. The total outer island population is expected to decrease slightly each year.

TABLE IV-8 District Center Population Growth, 1967-1973  
and District Center Population as a Percent of the Entire District, 1967-1982

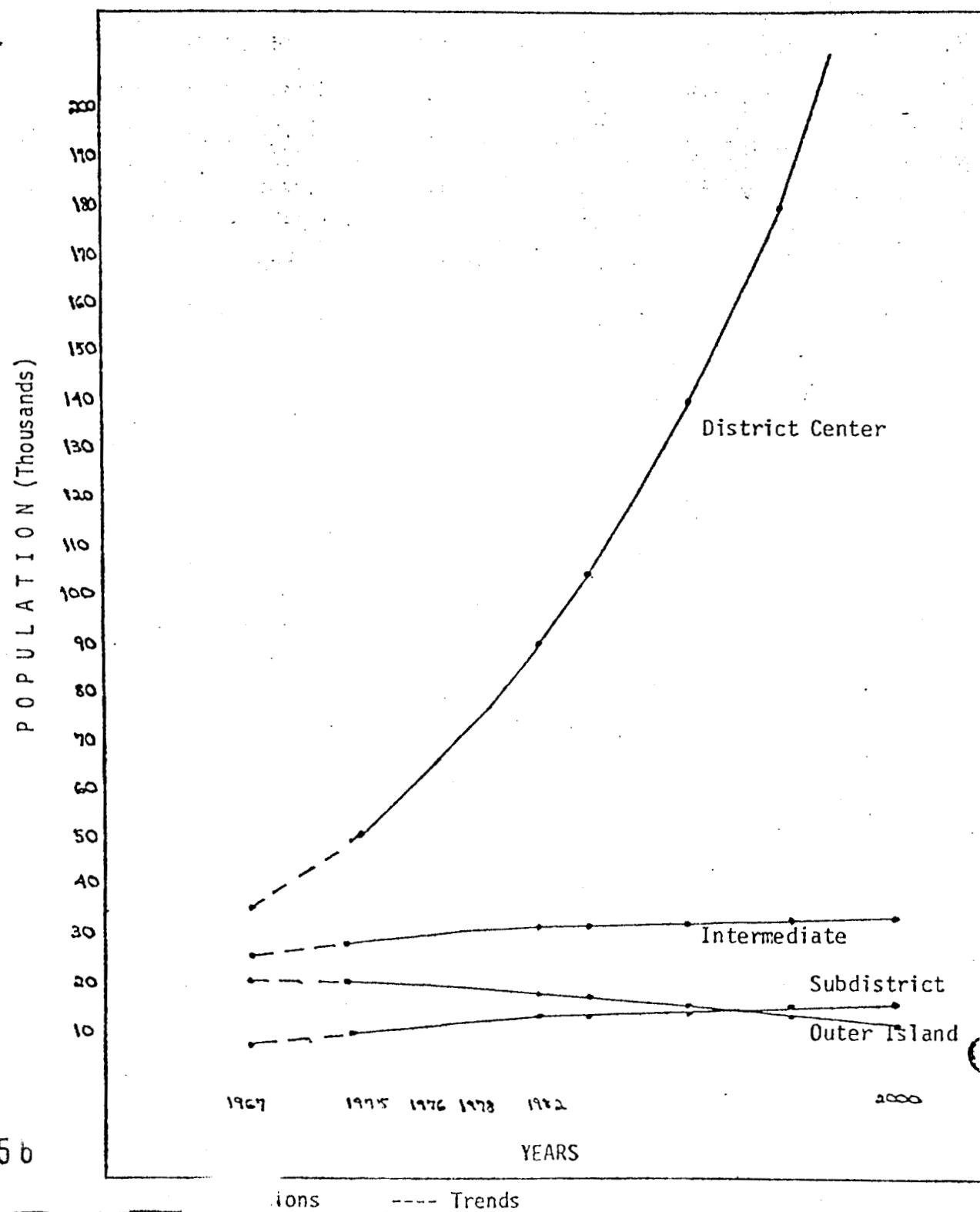
Selected District Centers	Resident Population (All Persons)			Annual Growth Rate	District Center as % of District			
	1967	1973			1967 %	1973 %	1978 %	1982 %
Majuro Atoll	5,077	9,661	11.3	27.2	40	51.1	59.4	
Moen	5,772	9,293	8.3	23.2	29.7	35.8	40.9	
Kolonia-Sokehs-Net	6,311	10,070	8.1	34.9	44	51.7	57.8	
Yap	3,741	4,776	6.1	56.5	62.7	67.5	71.0	
Kosrae	3,226	3,989		100.0	100.0	100.0	100.0	
Koror	5,363	7,219	5.1	48.7	59.3	67.6	73.5	
District Center Totals	29,490	45,008						

The projections shown in Table IV-8 are significant for health planning purposes. District center populations are growing nearly twice as fast as the TTPI as a whole; in some instances the rate of growth is even greater. The population of Majuro, for example, nearly doubled in the six years between the last two TTPI censuses. In only fifteen years (1967-1982) the proportion of all Micronesians residing in the district centers is expected to increase by more than 20 percent. This dramatic rate of growth is attributable to the previously mentioned high birth rates, as well as increasing net migratory influx to district centers from other geographical subdivisions of the Trust Territory. Figure IV-3a shows a distinct pattern of in-migration to the district centers from other parts of Micronesia. The graphs show the extremely high rate of district center growth, and the much lower growth rates for sub-district centers and intermediate areas. At the same time, the outer islands have been experiencing a steady population decline. This large difference in growth may be attributed to migration pattern from outlying areas into the district centers.

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Figure IV-3a

GEOGRAPHICAL SUBDIVISION GROWTH  
(T.T.P.I. Citizens) 1967-2000  
1967-2000



Figures IV-3b, IV-3c, IV-3d and IV-3e show trends and projections of growth for four high risk age groups, according to geographical distribution.

1. Distribution of Infants:

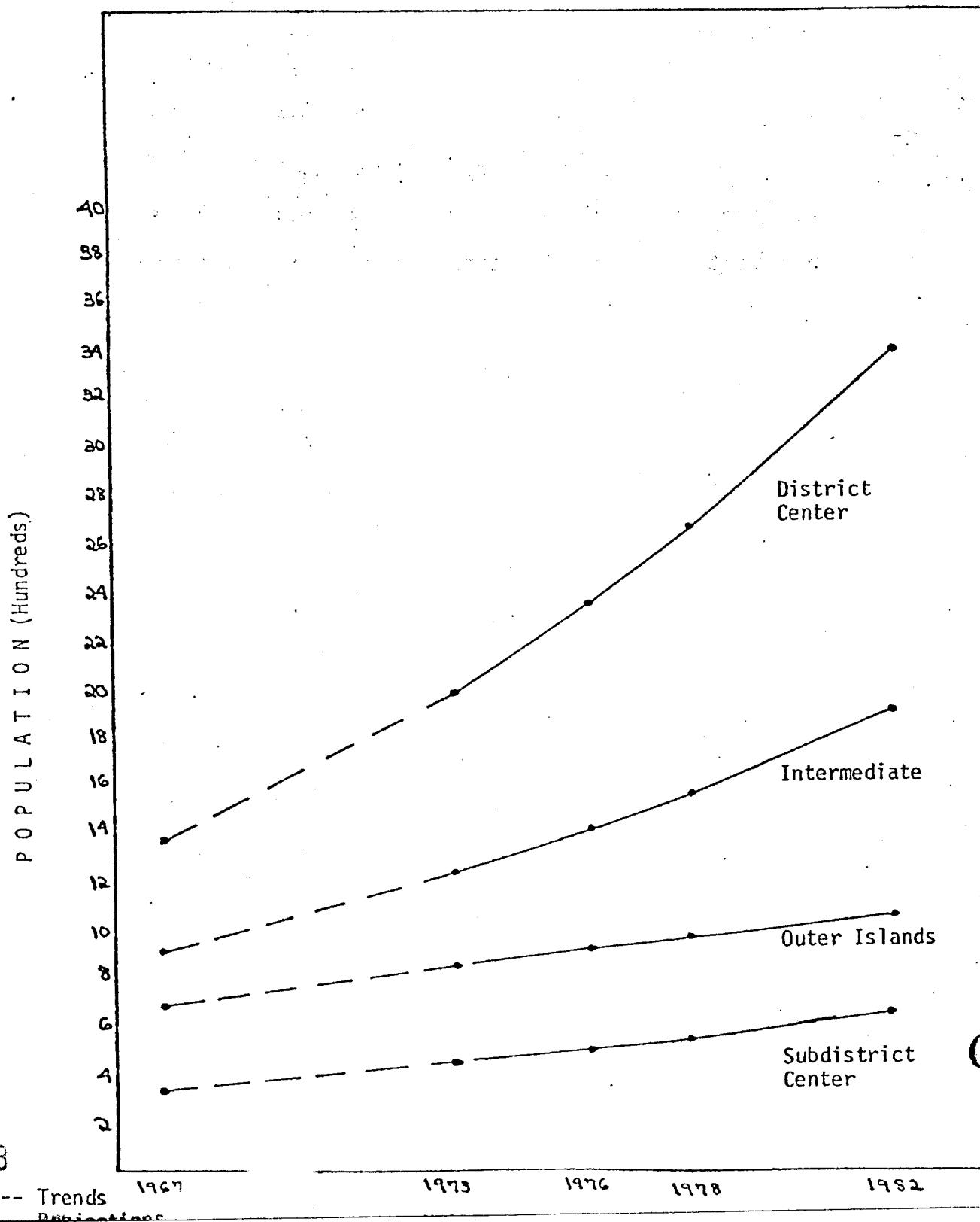
Figure IV-3b indicates that the infant population (0-1 year) is expected to grow at the highest rate in the district centers, followed by the intermediate areas. The sub-district centers and the outer islands are expected to grow at lower levels, but nearly identical rates. At the same time the total number of infants is expected to remain greatest in the district centers, followed by the intermediate areas, the outer islands, and the sub-district centers. By 1982, nearly one-half (48 percent) of all infants are projected to be living in the district centers -- an increase of four percent from 1973. However, despite this steady increase in the numbers of district center infants, this population group will continue to constitute 3.8 percent of the total district center population through 1982. By comparison, infants are expected to constitute increasingly larger proportions of the total sub-district center, intermediate area, and outer island populations. Again this can be attributed to the practice of young women who reside in the district centers, sending their children to live with relatives in outlying regions.

2. Distribution of Children:

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Figure IV-3b

GEOGRAPHICAL DISTRIBUTION OF INFANTS (0-1 Year)  
1967-1982 (T.T.P.I. Citizens)



2. Distribution of Children:

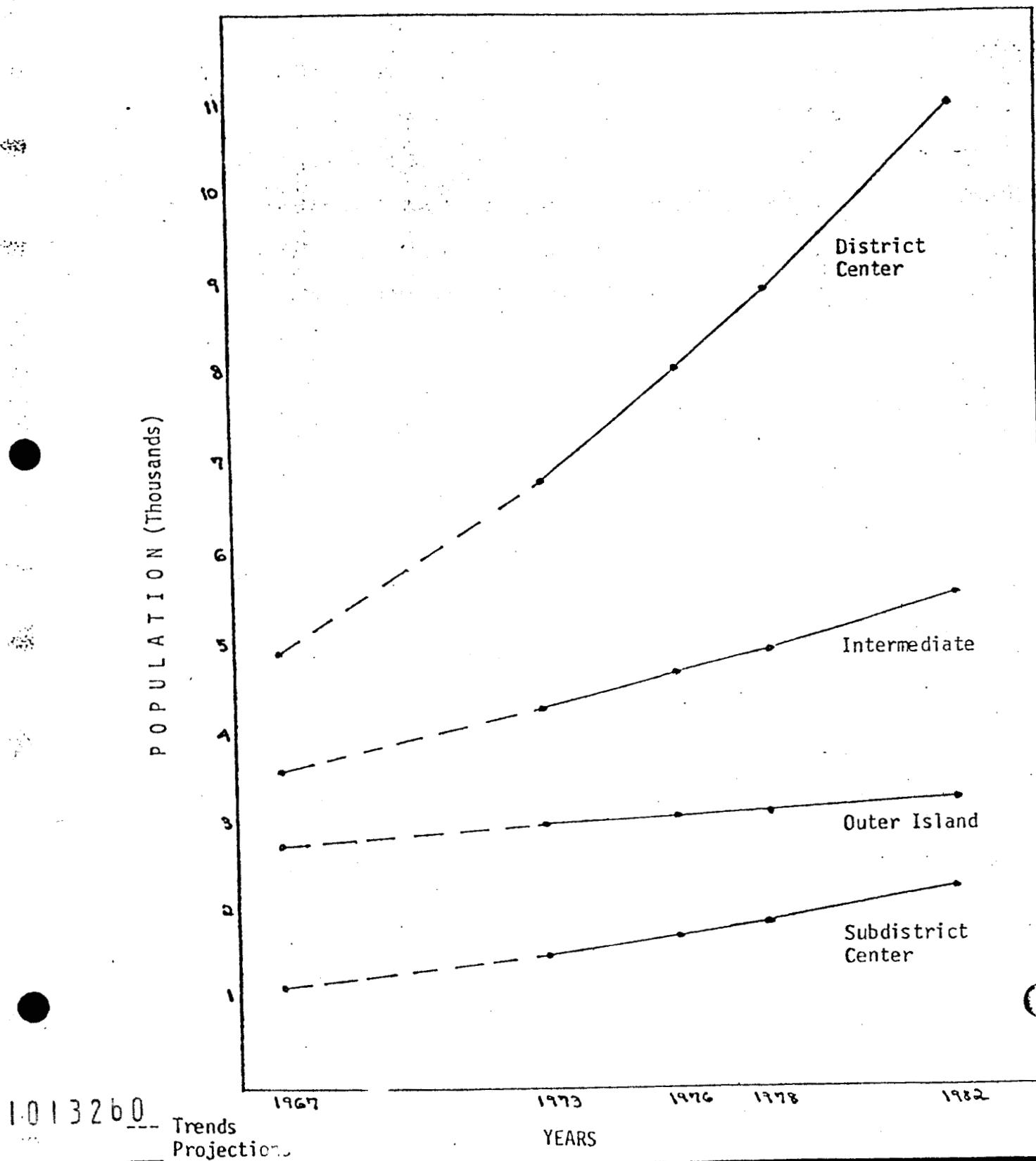
Figure IV-3c shows a projected growth pattern for children (1-4 years) similar to that pattern for infants. Again, the district centers are projected to grow at the highest rate, followed by the intermediate areas. The child population in the sub-district centers is expected to grow faster than in the outer islands. In terms of total numbers, the district centers are also expected to have the greatest number of children, followed by the intermediate areas, the outer islands, and the sub-district centers. Fifty percent of all children are expected to be living in the district centers by 1982. However, they will constitute a decreasing proportion of the district centers' total population (12.1 percent in 1982, as compared to 13.1 percent in 1973), while the population of children in the other geographical subdivisions of Micronesia will constitute an increasing proportion of those areas total population.

3. Distribution of Women:

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Figure IV-3c

GEOGRAPHICAL DISTRIBUTION OF CHILDREN (1-4 years)  
1967-1982 (T.T.P.I. Citizens)



3. Distribution of Women:

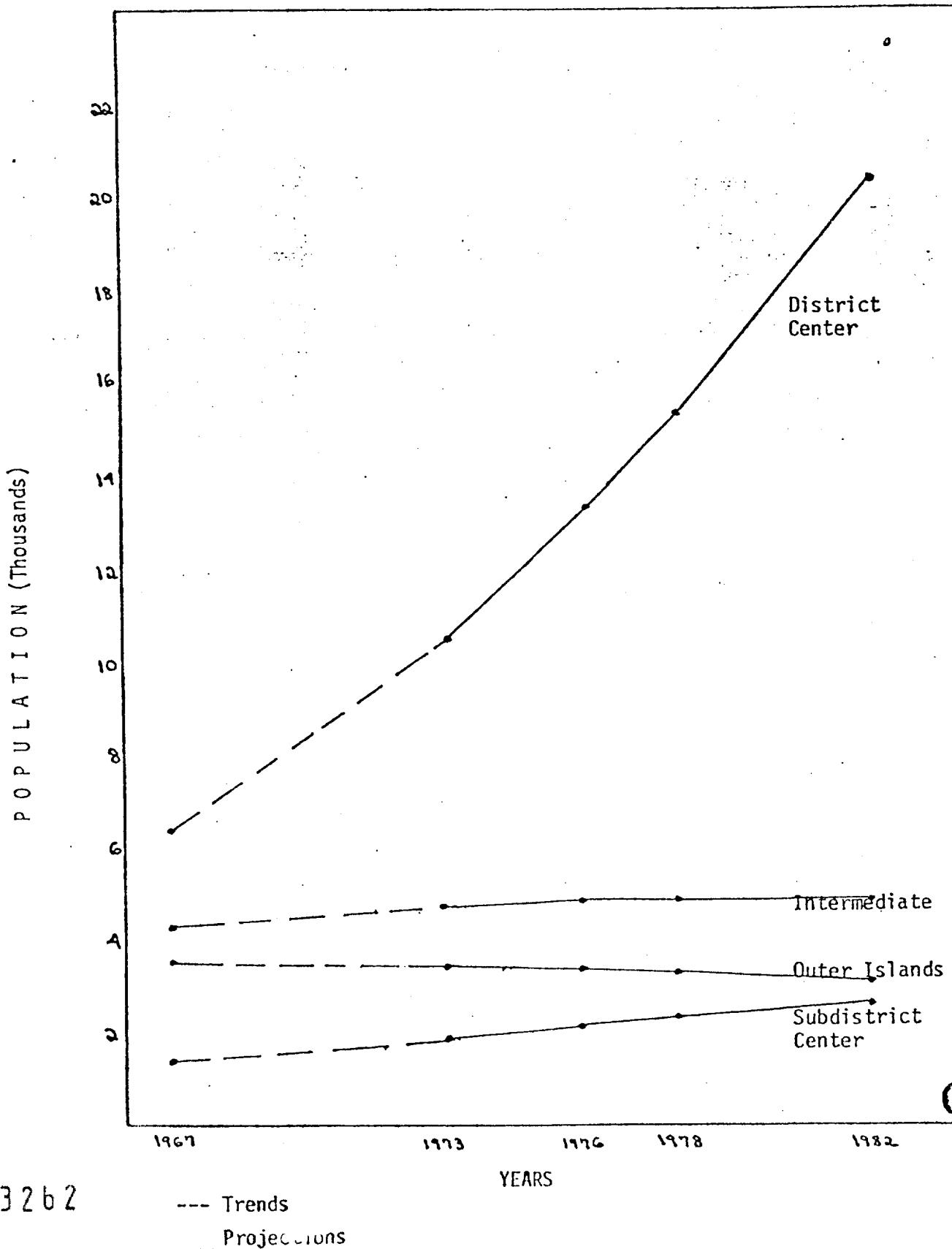
Figure IV-3d shows growth trends and projections for women of prime children bearing age (15-44 years). Once again, the district centers are expected to experience the highest rate of growth. Both the sub-district centers and the intermediate areas are projected to grow at much lower rates. The outer islands can expect a negative growth rate. In terms of total numbers, the district centers will have the greatest number of women in their child-bearing year, with 66 percent of all women aged 15-44 expected to be living in the district center by 1982. The intermediate areas, outer islands, and sub-district centers will follow in total numbers. However, despite the negative growth expected in the outer islands, women of prime child-bearing age will actually constitute a slightly increasing proportion of that area's total population. Conversely, even though the intermediate areas should experience a positive rate of growth through 1982 for women aged 15-44, this population group is expected to constitute a slowly decreasing proportion of the sub-districts' total population.

4. Distribution of the Elderly:

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Figure IV-3d

GEOGRAPHICAL DISTRIBUTION OF WOMEN IN PRIME CHILD-BEARING YEARS  
(15-44 Years) 1967-1982 (T.T.P.I. Citizens)



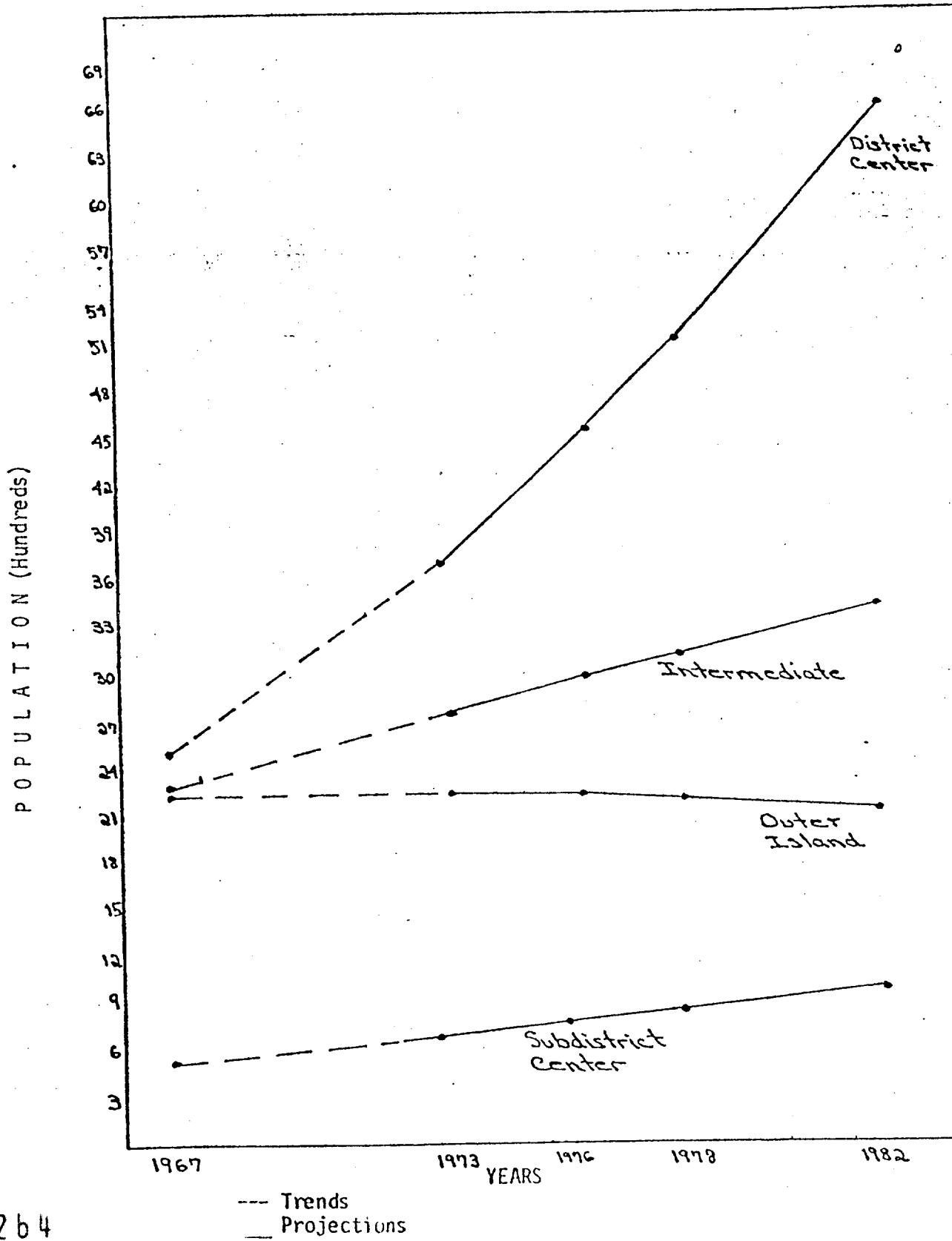
4. Distribution of the Elderly:

Figure IV-3e shows growth trends and projections for the elderly (55 years and older) in each of the four geographical sub-divisions of Micronesia. The district centers should continue to lead the TTPI in terms of both rates of growth and total numbers, with the intermediate areas second. The elderly population is expected to grow faster in the sub-district centers than in the outer islands, but in terms of total numbers the outer islands will continue to lead the sub-district centers. By 1982, one-half of all elderly persons are expected to be living in the district centers. However, they will constitute only 7.2 percent of the entire district center population, while in the outer islands they are expected to constitute 11.9 percent of the total population.

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Figure IV-3e

GEOGRAPHICAL DISTRIBUTION OF THE ELDERLY  
(55 years and older) 1967-1982 (T.T.P.I. Citizens)



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Notes

1. In this instance, and in all subsequent use of Kay's graphic materials, it must be noted that Kay's figures do not always correspond exactly to figures in this report (differing in most cases by statistically insignificant proportions). Kay's graphs are intended to suggest broad demographic features, and they accurately illustrate the population characteristics indicated by this data, which are presented with more precision in tabular form.
2. For the purposes of this report, the following definitions have been used to describe each geographical sub-division:

"District Centers" and "Sub-district Centers" have been defined, whenever possible, to conform with the criteria used in the 1973 TTPI Census; i.e. "These centers have been designated according to a combination of lifestyle related criteria including the presence or absence of district and sub-district government administrative offices, hospitals and high schools, concentration of stores, salaried wage earners, public utilities (water and electricity), post offices, road and cars, airfields, harbors, etc." In terms of health care delivery, district and sub-district center populations are all within one or two hours traveling time by car or boat to hospital services.

"Intermediate Areas" include all those municipalities, islands, and atolls which are more than two hours traveling time from hospital services, but within less than one day's travel by small boat.

"Outer Islands" are all those islands and atolls located more than one day's travel from district and sub-district center. They are primarily accessible only by ship.

3. 1973 Trust Territory of the Pacific Islands (TTPI) Census, P.4

In defining geographical sub-areas, we have not always followed exactly the criteria of the 1973 census. For example, the census defines Ponape's district center to include Kolonia Municipality and certain census enumeration districts in Nett and Sokehs Municipalities. However, we were unable to express our data in terms more specific than whole municipalities. At the same time, good road conditions have made the amenities of district center living readily available to the residents of Nett and Sokehs Municipalities. Consequently, we chose to include all of Nett and Sokehs in our district center totals. In other cases, we disagreed with the definitions used in the census. For example, we decided that because of the excellent condition of the roadway connecting Laura to Majuro (DUD), they both warranted inclusion as the Marshalls District Center. In the case of the Yap Islands complex, only Rumung is inaccessible by road to the hospital services of Colonia. Although Rumung is within two hours travel to Colonia

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by boat, tide and weather conditions frequently increase travelling time by one or two hours, and therefore, we have designated Rumung an intermediate area. Similar considerations prompted us to designate Walung in Kosrae as an intermediate area.

4. Sub-district center hospitals are much more limited in services, equipment, and personnel than district center hospitals. The two geographic sub-areas are not exactly comparable.
5. These figures are reproduced from Kay, "Population Growth" P.20. See his discussion of them. P. 20-21.
6. Ibid
7. Changing future political status (See Section \_\_\_\_\_), may change population variables in ways which cannot now be predicted, especially the migration patterns.

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CHAPTER FIVE

HEALTH STATUS IN THE TTPI

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CHAPTER 5  
HEALTH STATUS:

A. INTRODUCTION

A health delivery system acts in concert with many elements of an individual's and a community's environment to effect the goal of enhancing health and eradicating sickness. Limited resources are available to expend upon a health system in any nation, but areas such as the TTPI which are in the midst of political and financial transition, are particularly cognizant of the need to limit expenditures while maintaining maximal health within the population. In order to effectively balance cost with benefit, it is necessary for any plan to begin by assessing the state of health within a community and by assessing the major threats to health within that same community. It is this assessment which the Health Status Section of the Trust Territory Health Plan will attempt to perform.

"Health" is defined by the World Health Organization as ". . . a state of complete physical, mental and social well being and not merely the absence of disease or infirmity."

This is a comprehensive definition which represents the ultimate goal of the health system as it interacts with the individual's and community's environment to promote well being. The definition

avoids defining health solely in terms of physical health and the absence of disease. This definition emphasizes the mix of personal and governmental choices required to create and maintain a system which is health and not illness oriented, i.e. a system which emphasizes prevention of disease. It further serves to remind that health (or the lack of health) is a product beyond the hospital or dispensary and thereby beyond the health system currently operating in the United States (the system upon which that of the Trust Territory is modeled).

Unfortunately, data by which to assess health in the comprehensive and positive fashion espoused by the WHO is not currently available in the TTPI. The development of this plan must rely upon negative indicators (i.e. rates of disease present within the population) of physical health (i.e. physical health alone, as opposed to the more comprehensive mental and social health described above). The only social indicators currently available enumerate the incidence of suicide and violent crime and describe economic conditions. The only positive indicators show immunization levels and crude birth rates. As health planning in the TTPI matures, it will expand its data base to include more comprehensive and positive oriented data.

Seven sets of data are used to analyze health status:

- Crude birth rates (number of births per year for the total population)
- Mortality rates (number of deaths per year for the total population)
- Morbidity rates (number of persons exhibiting disease conditions per year)
- Communicable/Reportable Disease Incidences
- Utilization Figures for the Hospital OPD's and for the Dispensaries
- Hospital Discharge Data
- Immunization Statistics

It must be kept in mind, however, the data which will be presented is not fully reliable. A modern data management system\* requires a far larger population base and a far more advanced technology than is present in the Trust Territory. In addition, logistics and limited personnel training make the collection of accurate statistics difficult. Further, it should not be assumed, reporting errors are randomly distributed. Data from the district centers would appear to be the most complete and the most reliable, with data from the outer islands being the least. Quality of outer island reporting depends, among other things, upon the skill levels & motivation of the health service personnel stationed on the various islands; and consequently varies from island to island. The data presented provide the best estimate available of the incidence of the various illnesses but the reader must keep in mind, the figures are only estimates.

\* The TTPI Bureau of Health Services is in the process of converting to a more comprehensive computerized data system. Programming for the system and the initial printout will become available in early 1979.

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The Trust Territory health care delivery system is vastly different from the United States model. Within the Trust Territory, there are no private practitioners. All health care is provided by the government.

Health needs in the Trust Territory are different in that with the small population and smaller incomes (when compared to the United States), the health status is generally lower than in the United States. It is more appropriate to look at the health status in the Trust Territory in comparison with other nations and municipalities in the Pacific area. To this end, data on mortality and morbidity of neighboring countries are included for comparison along with data from the United States.

The prioritization of Goals and Recommendations for Health Status were developed based on the best assessment of severity of the problem and the best estimate of resources available in the Trust Territory.

In many areas, no standards have been articulated since data is sparse, lacking, or in need of development. Many of the problems associated with insufficient data sources will be eliminated upon implementation of the new computer-based data system slated for Spring, 1979.

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II. INFANT BIRTH AND MORTALITY

Table V-1 presents crude birth, death and infant mortality rates of the Trust Territory of the Pacific Islands for the years 1965-1976. The average crude birth rate for the period 1972-77 was 33.6 births per 1,000 population. This birth rate is high when compared to the United States birth rate of 14.8. However, when compared to Pacific area countries of American Samoa, 38.1; and Guam 29.3; the Trust Territory of the Pacific Islands' birth rate is acceptable.

The birth rate in Table V-1, also indicates some decline in the birth rate. As the TTPI population becomes more dependent upon a cash economy, the downward trend in births will probably continue.

Table V-2 presents births by location for 1976. It is significant to note that 33% of all births occur outside the district hospitals. Of that total, 27.1% of the births occur at home.

Table V-3 presents births by age and location of mother.

Table V-1

Population, Births, Infant Deaths, Deaths, and Natural Increase  
Trust Territory of the Pacific Islands, 1955 - 1976

Year	Population	Total Births	Birth Rate	Infant Death	Infant Death Rate	Total Death	Death Rate	Natural Increase	Rate of Natural Increase
1955	64,290	1,989	30.9	68	34.2	364	5.7	1,625	25.3
1956	65,039	1,992	30.6	65	32.6	362	5.6	1,630	25.1
1957	67,199	2,210	32.9	85	38.5	393	5.8	1,817	27.0
1958	70,594	2,298	32.6	85	37.0	350	5.0	1,948	27.6
1959	73,052	2,466	33.8	99	40.1	393	5.4	2,073	28.4
1960	75,836	2,649	34.9	85	32.1	451	5.9	2,198	29.0
1961	77,913	2,895	37.2	93	32.1	412	5.3	2,483	31.9
1962	80,980	2,694	33.3	89	33.0	386	4.8	2,308	28.5
1963	84,777	2,756	32.5	105	38.1	425	5.0	2,331	27.5
1964	88,215	3,024	34.3	99	32.7	529	6.0	2,495	28.3
1965	90,596	3,032	33.5	132	43.5	530	5.9	2,502	27.6
1966	92,373	3,359	36.4	111	33.0	493	5.3	2,866	31.0
1967	93,580	3,301	35.3	108	32.7	496	5.3	2,805	30.0
1968	94,469	3,440	36.4	112	32.6	545	5.8	2,895	30.6
1969	98,009	3,321	33.9	116	34.9	533	5.4	2,788	28.4
1970	102,250	3,733	36.5	78	20.9	599	5.9	3,134	30.7
1971	107,054	3,684	34.4	131	35.6	579	5.4	3,107	29.0
1972	114,645	3,959	34.5	120	30.3	600	5.2	3,359	29.3
1973	114,773	4,001	34.9	129	32.2	537	4.7	3,464	30.2
1974	118,903	4,004	33.7	124	31.0	608	5.1	3,396	28.6
1975	123,184	4,222	34.3	135	33.2	613	5.0	3,609	29.3
1976	127,624	3,973	31.1	71	17.9	540	4.2	3,433	26.9

Note: All rates are per 1,000 population, except the Infant Death Rate which is computed per 1,000 live births.

Source: Population from annual reports, Trust Territory of the Pacific Islands. The 1958, 1967 and 1973 populations were enumerated in a Territory-wide census. The 1974 and 1975 populations are projected based on 1973 census population. Population in this table is permanent resident population from appendix I, B, page 162. Births and deaths are from certificates registered for events in each year. Figures for 1970 - 1974 have increased from previous reports by the inclusion of events which were registered late (delayed registration). 118

TABLE V-2, Comparison of TTPI Infant Mortality Rate  
with selected South Pacific Islands.

- 6203-VB 302 Medical Geography -

INFANT MORTALITY FOR SOUTH PACIFIC ISLAND STATES

	Population Per 1000 cire 1975	Infant Death Rate Per 1000 Population	Percentage of Total Deaths Under 5 Yrs.	Population Per 1000 Hospital Bed Physician	
Papua New Guinea	30,000	4	33	28	170 1,154
Tokelau Islands	22,000	-	34	38	116 6,667
Fiji Islands	600,000	5	21	20	350 2,070
French Polynesia	120,000	-	-	35	132 2,097
Guam	65,000	4	15	14	372 2,432
Puerto Rico	670,000	5	14	5	224 640
Hawaii	6,500	-	32	33	34 700
California	161,000	10	-	23	85 1,325
Niue	5,000	6	29	21	167 1,000
Papua New Guinea	2,500,000	17	159	-	354 10,644
Tonga	80,000	3	-	21	83 3,000
Wallis & Futuna	9,000	11	41	32	83 3,330
Western Samoa	150,000	4	41	29	226 3,330
TTPI	115,000	4.2	28.8	-	-

Source: United Nations, 1970-1976 Data.

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TABLE V-3

LIVE BIRTHS BY AGE OF MOTHER

NUMBER OF REGISTERED LIVE BIRTHS BY AGE OF MOTHER,

TRUST TERRITORY DISTRICTS (TTPI) AND THE NORTHERN MARIANAS, 1976

AGE GROUP	D	I	S	T	R	I	C	T	S	TOTAL	% OF TOTAL
	KOSRAE	MARSHALLS	PALAU	PONAPE	TRUK	YAP					
Under 15	0	1	1	0	1	0				3	0.09
15-19	7	208	49	136	85	45				530	15.58
20-24	30	403	168	300	224	88				1,213	35.56
25-29	23	281	92	198	205	71				870	25.57
30-34	9	120	40	108	130	30				437	12.85
35-39	10	58	20	71	67	19				245	7.2
40-44	7	20	4	29	24	10				94	2.76
45-49	0	1	1	2	5	1				10	0.29
50 & Over	0	0	0	0	0	0				0	0
Age Unknown	0	0	0	0	0	0				0	0
TOTAL	86	1,092	375	844	741	264				3,402	100.00

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### INFANT MORTALITY

The six year average infant mortality rate for the years 1972-77 was 30.1 deaths per 1,000 live births. In other words, for every 1,000 births, about 30 will die within the first year of life.

This infant death rate is moderate by comparison to other countries with similar characteristics and resources. Table V-4 presents a comparison of Pacific Islands countries' infant mortality rates.

Infant death rates in the Pacific Islands range from a high of 159 for Papua-New Guinea to a low of 14 for Hawaii.

The 28.9 infant mortality rate is much higher than the 1975 U.S. rate of 16.1. However, the evidence of rapid decrease provides encouragement for achieving target levels.

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TABLE V-4  
TRUST TERRITORY OF THE PACIFIC ISLANDS  
SELECTED NOTIFIABLE DISEASES BY NUMBER OF CASES  
1970 - 1976 and 7 Year Total

Rank	Kinds of Diseases	Number of cases for 7 years	1976	1975	1974	1973	1972	1971	1970
1	Dysentery, Amoebic	18,076	3,172	2,792	2,768	3,513	2,147	2,323	1,361
2	Diarrhea	4,150	413	532	629	756	733	661	426
3	Fish Poisoning	1,898	340	221	281	263	288	310	195
4	Infectious Hepatitis	1,143	39	69	239	568	183	21	24
5	Malaria	745	1	-	5	25	8	698	8
6	Tuberculosis, Pulmonary	600	37	73	109	112	94	175	94
7	German Measles	497	13	5	39	17	408	15	-
8	Leprosy	104	27	14	14	23	11	12	3
9	Tuberculosis, other forms	107	15	9	13	12	13	19	26
10	Meningitis, other forms	88	35	11	11	10	6	6	6
11	Meningitis, Meningoccal	12	1	1	2	4	2	2	-
12	Tuberculosis, all forms	801	52	82	122	124	107	194	120
13	Influenza	117,768	17,439	16,539	13,661	8,076	25,659	24,189	12,205

OBJECTIVE 1.1

BY 1983, THE TRUST TERRITORY INFANT MORTALITY SHOULD NOT EXCEED AN AVERAGE OF 16 INFANT DEATHS PER 1,000 LIVE BIRTHS FOR ANY CONSECUTIVE THREE YEAR PERIOD AND NOT EXCEED 20 DEATHS PER 1,000 LIVE BIRTHS FOR ANY INDIVIDUAL YEAR.

Table V-5 presents the leading cause of infant deaths for the year 1964-1975.

Prematurity is clearly the primary cause of infant deaths. For the period 1972-1976, prematurity accounted for 27% of all infant deaths.

The TTPI infant mortality rate due to prematurity is 8.6 per 1,000 live births. (1974-1976). The United States rate for prematurity as a cause of death is 1.4 per 1,000.

OBJECTIVE 1.2

BY 1982, THE INFANT MORTALITY RATE FOR PREMATURITY WILL BE NO GREATER THAN 5 DEATHS PER 1,000 LIVE BIRTHS.

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TABLE V.  
Leading Causes of Infants Deaths by Year  
Trust Territory of the Pacific Islands, 1964 - 1973  
(Listed in rank order of 1973)

CAUSE	YEAR						
	1975	1974	1973	1972	1971	1970	1969
Prematurity	54	43	33(1)	30(1)	29(1)	31(1)	28(1)
Injury anoxic and hypoxic condition	-	-	23(2)	17(3)	21(2)	14(3)	14(4)
Diarrheal & intestinal diseases	21	15	19(3)	11(4)	19(3)	8(4)	18(3)
Influenza 7 pneumonia	10	9	14(4)	20(2)	21(2)	16(2)	19(2)
Congenital malformation	6	3	11(5)	9(5)	6(4)	3(6)	7(5)
Meningitis, all forms	1	4	5(6)	2(7)	-	-	-
Nutrition	2	-	2(7)	3(6)	-	-	-
Accident, all types	-	-	1(8)	2(7)	4(5)	5(5)	2(6)
All other causes specified	16	21	13	14	16	8	5
Causes ill-defined 7 unknown	(11)	(10)	7	18	29	33	30
Total all causes	121	105	128	126	145	118	123
						117	92
						110	132
							99

Note: Number in parentheses are ranking order of causes of death for each year.  
Figures for 1967 - 1972 have increased from previous reports by the inclusion of events  
which were registered late (delayed registration).

Source: Trust Territory of the Pacific Islands to the United Nations, 1965 - 1975.

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Crude Death Rate

The average crude death rate for the three year period of 1975-1977 was 4.86 deaths per 1,000 population. Table V-6 indicates that the death rate seems to be gradually decreasing from an annual high of 7.4 per 1,000 in 1964 to the lowest rate ever of 4.3 in 1976. The 1977 rate rose to 5.2. Indications are that the increase in the crude death rate can be attributed to a shigellosis epidemic which also accounts for a dramatic increase in mortality of diarrheal diseases.

In comparison, the United States crude death rate was 8.9 in 1975, 5.0 for Hawaii, and 4.8 for American Samoa in 1976. Since the crude death rate seems to be on the decline, no goal has been set for the further reduction of mortality.

Table V-6 and Figure V-1 list the ten leading causes of death in rank order in the Trust Territory for the years 1975-1977. Included in Table V-6 is the death rate by cause.

Figures V-2a--j graphically illustrates the incidence of the ten leading causes of mortality in the Trust Territory for the period from 1971-1976.

MALIGNANT NEOPLASMS

Cancer is the leading cause of death in the Trust Territory for the period 1975-1977. Approximately 8.8% of all deaths were attributable to cancer

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TABLE V-6  
TEN LEADING CAUSES OF  
DEATH REPORTED IN THE TRUST TERRITORY OF THE PACIFIC ISLANDS IN.  
CALENDAR YEAR 1975, 1976 and 1977 LISTED IN RANK ORDER OF 1976.

CAUSE OF DEATH	Average No. of Dates			TPPI Rate/1 100,000	*U.S. Rate/2 100,000	American Samoa Rate/3 100,000	Guam Rate/4 100,000
	1977	1976	1975**	1977	1977	1977	1977
Giant Neoplasms (140-209)	48	37	2	42.3	38.4	170.5	43
Diarrheal & Intestinal Diseases (004,006,008,009)	70	19	33	40.6	36.8	UNK	UNK
Heart Disease (390-398,402,410-429)	41	29	38	36	32.7	339.0	400
Prematurity* (777)	29	14	52	31.7	8.6	1.4	6.5
Influenza & Pneumonia (470,480-486)	38	31	29	32.7	29.7	27.0	28
Accidents, All Types (E800-E949)	30	36	18	28	25.4	47.6	49.7
Bronchitis, Emphysema Asthma (490, 493)	26	29	32	29	26.3	11.9	21.4
Cerebrovascular Disease (430,938)	10	21	20	17	15.4	91.8	51
Suicides (E950,E959)	16	10	19	15	13.6	12.6	9
Diabetes Mellitus (250)	7	8	8	7.7	7.0	16.8	34.4

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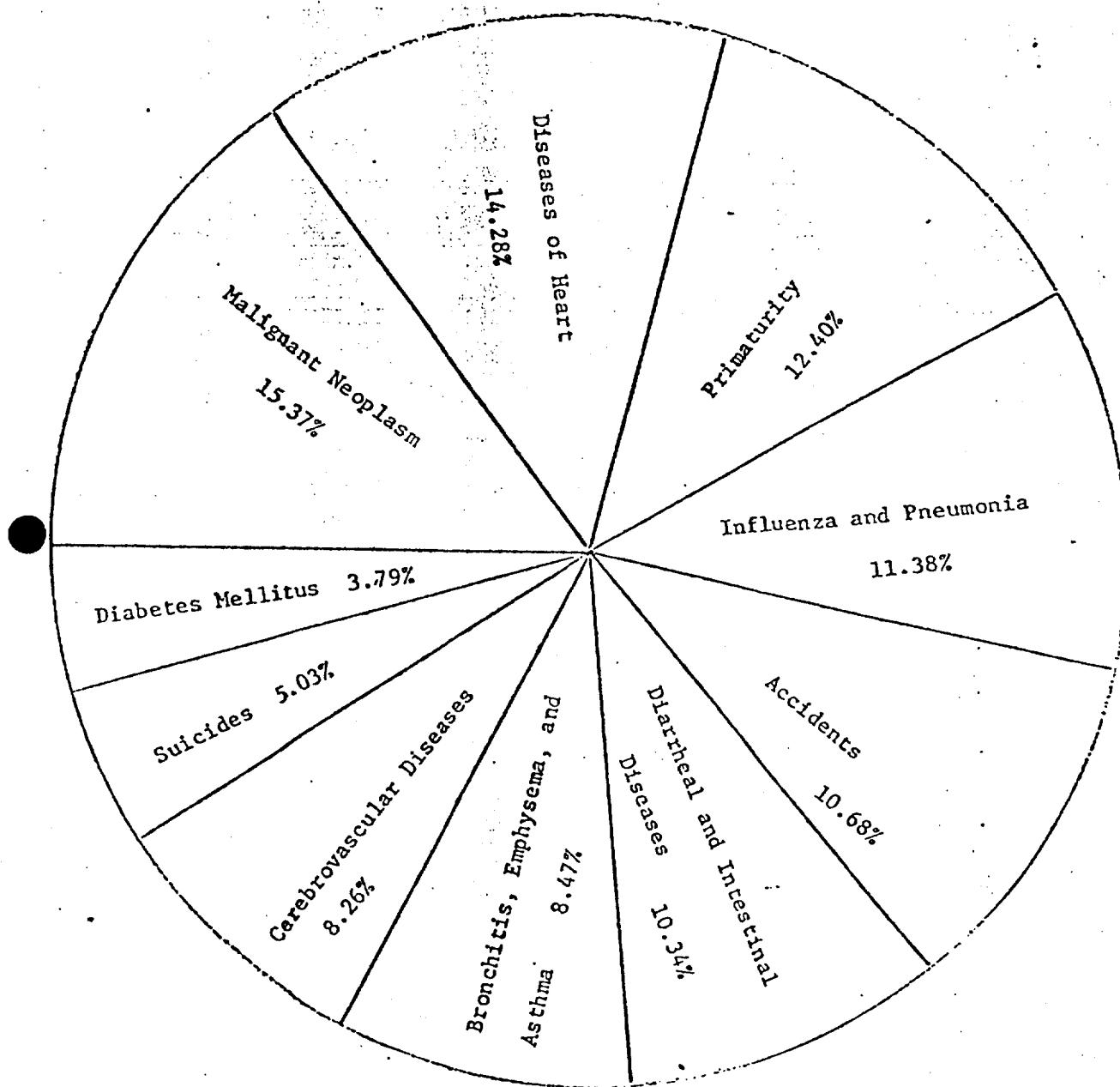
182 E-0

1. Average Rate for 1975-77, TPPI
2. Average Rate for 1975, U.S. (Provisional)
3. Average Rate for 1974-76-American Samoa (Source: AS-HSP)
4. Average Rate for 1971-1976, Guam (Source: Guam-HSP)

per 1,000 live births

TEN (10) LEADING CAUSES OF DEATH  
TRUST TERRITORY OF THE PACIFIC ISLANDS  
1974 - 1976

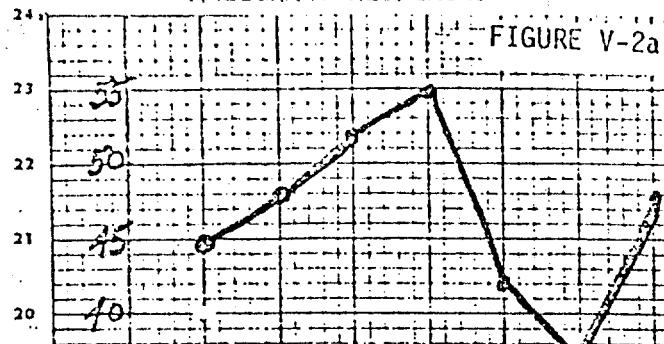
Figure V-1



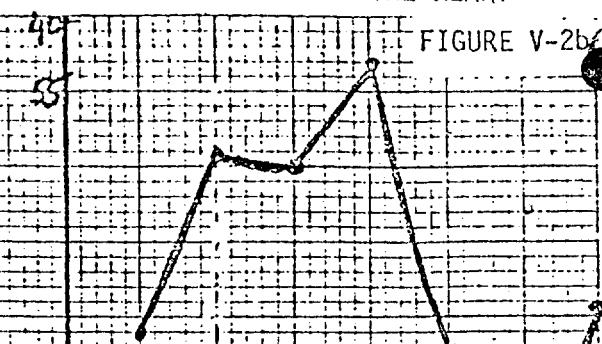
Percentage figures indicate % of 10 leading causes of all deaths.

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MALIGNANT NEOPLASMS



DISEASE OF THE HEART



ACCIDENT

DIARRHEAL AND INTESTINAL

FIGURE V-2e

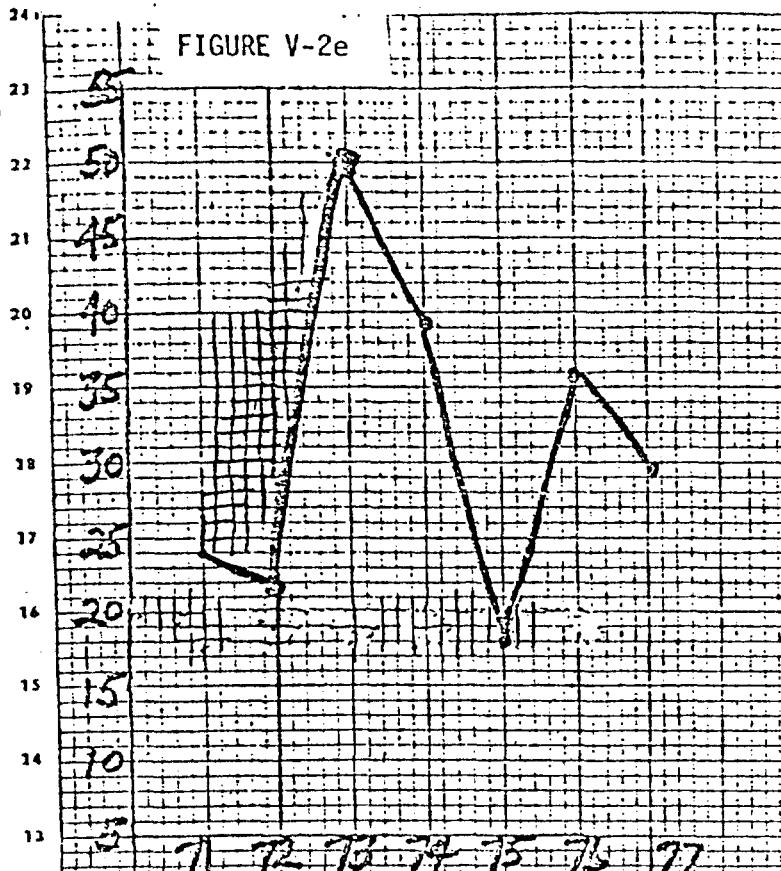
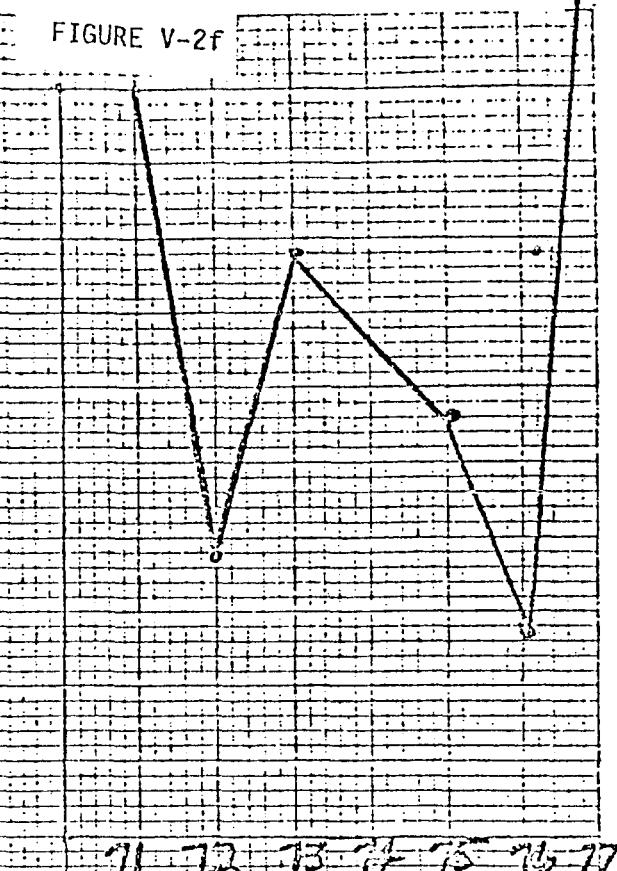


FIGURE V-2f



BRONCHITIS EMPHYSEMA & ASTHMA

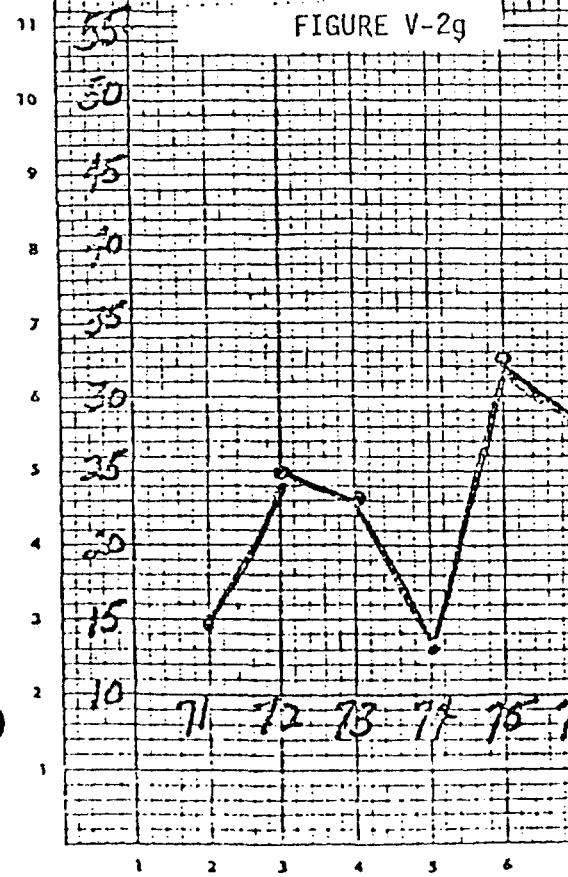
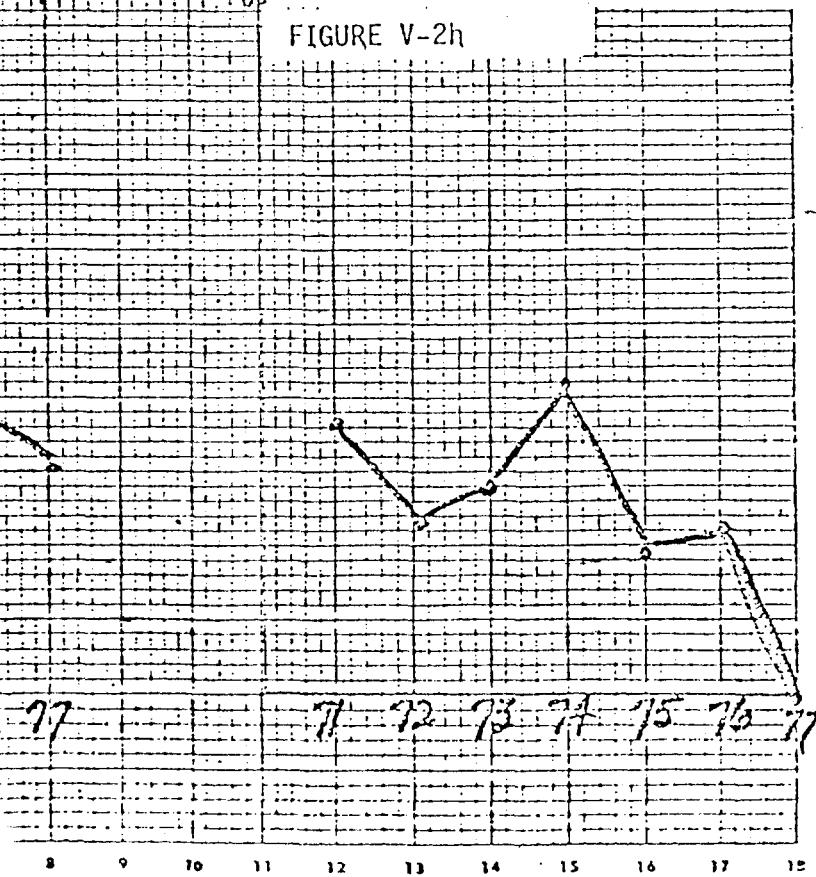


FIGURE V-2g

CEREBROVASCULAR DISEASES

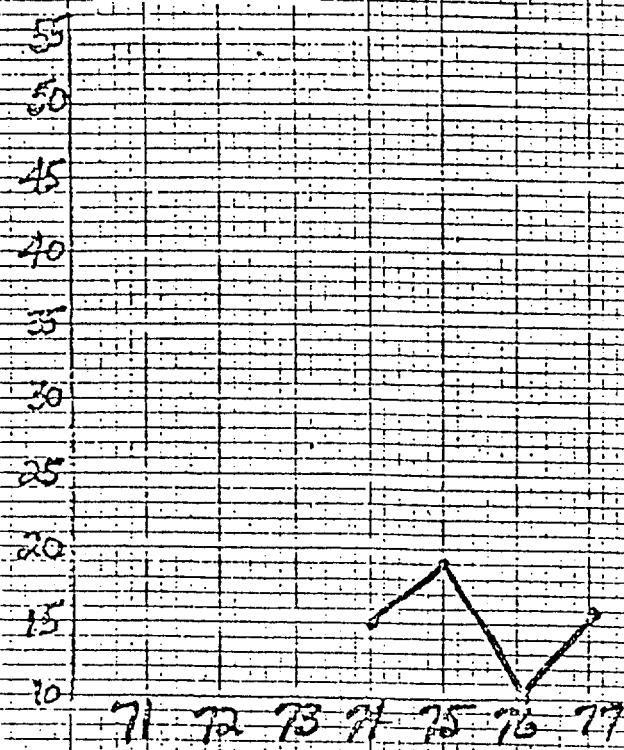
FIGURE V-2h



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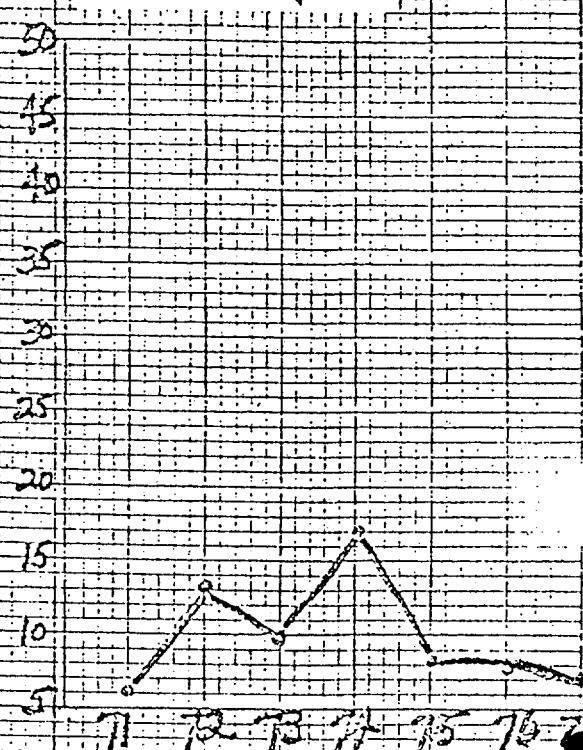
SUICIDES

FIGURE V-2i



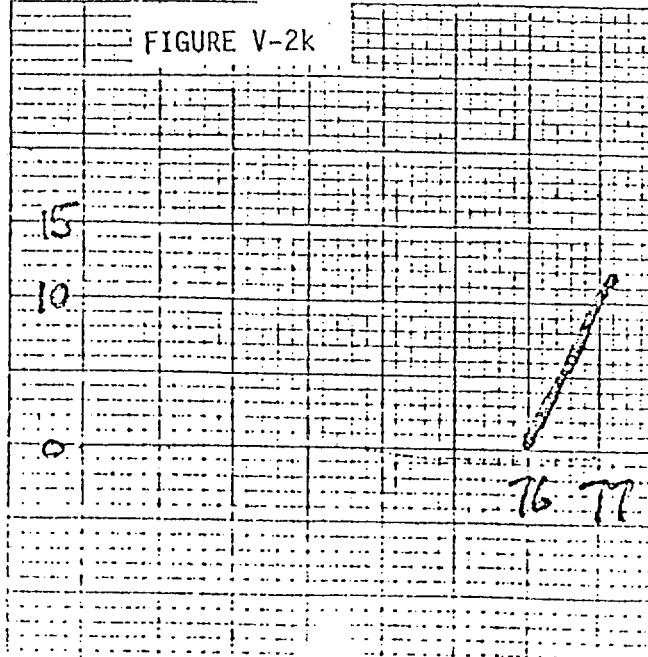
DIABETES MELLITUS

FIGURE V-2j



NUTRITIONAL DEFICIENCIES

FIGURE V-2k



RECORDED BY

1013285

during the above stated period for an average of 42.3 cancer deaths per year.

- The cancer mortality rate per 100,000 population for the period was 38.4. In comparison, the United States cancer mortality rate for 1975 was 170.5 per 100,000 population. The average age of death from cancer was 59.6 years.

In comparison with cancer rates in the United States, American Samoa and Guam, a Trust Territory of the Pacific Islands' citizen has a lower risk of dying of cancer. For example, a TTPI citizen has a 79% less likely chance of dying of cancer than a United States citizen, and 18% less likely chance of death by cancer than a Guamanian. (See Table V-6).

OBJECTIVE: MAINTAIN CANCER MORTALITY RATES AT 36/100,000 POPULATION.

#### HEART DISEASES

Diseases of the heart is the third leading cause of death in the TTPI. The number of deaths attributed to heart disease for the period of 1975-1976 averaged 36 deaths per year. (Table V-6). Yearly incidence of death by heart disease seems to be declining, however, the disease is still a major concern of Micronesia since this disease is usually most prevalent in industrialized nations. Micronesia is a developing country and must remain vigilant of health trends of advanced nations. The mortality rate of heart disease for persons

101328b

over age 35 was 185/100,000 population.

In comparison to American Samoa, which has a heart disease mortality rate of 400/100,000 population for the same age group, TTPI citizens have 54% less likely chance of death by heart disease.

#### INFLUENZA AND PNEUMONIA

The fourth leading cause of death in the TTPI is influenza and pneumonia. The TTPI influenza and pneumonia mortality rate per 100,000 population of 29.7 is high in comparison with the United States rate of 27.0 and Guams rate of 28. About 26% of all deaths with influenza and pneumonia as cause are infants.

OBJECTIVE            BY 1983, THE AGE SPECIFIC MORTALITY RATE FOR HEART DISEASES FOR PERSONS OVER AGE 35 WILL NOT EXCEED 175/100,000 POPULATION

OBJECTIVE            BY 1983, INFLUENZA AND PNEUMONIA MORTALITY RATES WILL NOT EXCEED 20 DEATHS/100,000 POPULATION.

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Within the TTPI, influenza and pneumonia accounted for 12.3% of all hospital discharges. During the years 1975-1977, 49,888 cases of influenza was reported in the TTPI.

#### CEREBROVASCULAR DISEASE

Cerebrovascular disease is a chronic ailment which was the eighth leading cause of death for the period of 1975-1977. Sometimes referred to as stroke, this disease afflicts primarily the elderly. The mortality rate for cerebrovascular disease for the period of 1975-1977 was 15.4 deaths per 100,000 population. This rate is lower than either the U.S. rate, 91.8 deaths per 100,000 population or the Guam and American Samoa rates of 35 and 51 per 100,000.

OBJECTIVE: BY 1982, DECREASE THE CEREBROVASCULAR MORTALITY RATE BY 15%.

#### IV. INFECTIOUS & NOTIFIABLE DISEASES

The control of several acute preventable diseases is a priority activity in most countries throughout the world. These diseases which are infectious and passed or transmitted by either man, air or water, are characterized by sudden onset.

When diagnosed, these diseases must be reported by the physician or provider of medical care to the TTPI Bureau of Health Services - Headquarters.

1013288

The prevention of diseases is of primary concern and priority in the Trust Territory. With the relative density and smallness of population an outbreak of a disease could be catastrophic. Therefore, it is of extreme importance that the district departments of Health Services maintain increased vigilance and reporting capabilities.

Table V-7 presents morbidity data on the reported number of cases of notifiable diseases and the average incidence rate per 100,000 population for the period of 1975-1977.

Influenza, amebiasis and gastroenteritis are the notifiable diseases with the highest incidence rate in the Trust Territory.

The mortality rate for communicable diseases during the period of 1972-1977 was 27.67 per 100,000 population.

Table V-8 presents a comparison of communicable disease incidence rates for Pacific Islands countries. With the exception of amoebiasis, the Trust Territory communicable disease incidence rates are comparable to other Pacific Islands.

OBJECTIVE

BY 1983, DEATHS FROM COMMUNICABLE DISEASES WHICH ARE PREVENTABLE WILL BE LESS THAN 12 PER 100,000 POPULATION.

1013289

GASTROINTESTINAL DISEASES

Amoebiasis/Dysentary/Gastroenteritis

The Trust Territory reports a high incidence rate for amoebiasis, 3,595 per 100,000 population. Over 4,000 cases of amoebiasis are reported annually. The procedure for diagnosing the disease is based on laboratory examination of unstrained stool specimens. However, recent studies by the Communicable Disease Control Branch of the United States Public Health Service and other Pacific Islands countries have indicated that most of the reported amoebiasis is probably incorrectly diagnosed and the proper diagnosis would probably be dysentary. Gastroenteritis and dysentary are the principle diseases responsible for the high communicable disease mortality rate.

Table V-5 presents the number of deaths by year from gastrointestinal diseases. Of the 265 deaths, 192 or 75% were children less than one year of age. The mortality rate due to gastroenteritis and dysentary for the period 1972-1977 was 29.26 deaths per 100,000 population. Children less than 1 year of age account for 19% of all cases hospitalized for gastroenteritis diseases.

OBJECTIVE BY 1983, THE MORTALITY RATE FOR GASTROINTESTINAL DISEASES WILL BE NO MORE THAN 18 PER 100,000 POPULATION.

OBJECTIVE BY 1982, THE INCIDENCE OF GASTROINTESTINAL DISEASE WILL BE REDUCED BY 12%.

1013290

## COMMUNICABLE DISEASES IN PACIFIC ISLAND POPULATIONS, 1974-75

Average Annual Incidence Rates per 100,000 Population

POPULATION	CHILDHOOD AND OTHER IMMUNIZABLE DISEASES		FOOD AND WATER BORNE DISEASES		RESPIRATORY DISEASES		VENEREAL DISEASES		MISCELLANEOUS EXPENSES															
	GILBERT & ELICE ISLANDS	CURRY	GUAM	HAWAII	P.T.T.P.I.	PHILIPPINES SUDOSTAN	SOLICON ISLANDS	FJILL	NEW CALIFORNIA	NEW HEBRIDES	NOFOLK ISLAND	FIJI-AUSTRALIA	NEW GUINEA	NE LANESTA	COOK ISLANDS	FRANC POLYNESIA	NUKE	ZAMBALIAN	SANTA AMERICAN	TOMELAU ISLANDS	YACCA	WALLS & FUTNA ISLANDS	POCONGIA	SUBTOTAL
DISEASES	NEASLES	PESTDISSES	DETRANS	DITHHERIA	DYSENTERY BACTERIAL	INFECTION	INTERFERAGE-LIKE	TOXOCAROSIS	TEPHROID FEVER	INFECTION	ENDEADS FEVER	GENITALIA	STAPHYLITIS	MENINGOENCEPHALITIS OTHERS	RENINGITIS	ENCEPHALITIS	LEPTOCY	POLYMYXIC FEVER	VENUS	XARS				
GILBERT & ELICE ISLANDS	5,350	-	-	30	2,171	99	-	20,335	78	17	-	4,729	2	2	45	5	12	-	-	-	-	16	10	
CURRY	15	133	1	-	3	14	197	1	1,456	24	205	2	-	-	1	17	1	13	-	-	-	-	-	
HAWAII	-	-	-	-	-	-	136	-	8,143	86	72	-	8,879	-	-	1	-	-	-	-	-	-	-	
P.T.T.P.I.	10	85	1	-	1,987	1,107	-	20,560	81	538	2	12	1	3	10	12	2	-	-	-	-	-		
PHILIPPINES SUDOSTAN	1,003	92	1	-	336	295	195	-	9,107	64	344	2	1,093	1	2	19	6	11	-	-	-	-		
SOLICON ISLANDS	90	-	19	-	-	8	60	1	1,14	69	6	-	-	-	-	17	14	19	-	-	-	-	-	
FJILL	172	4	133	-	-	1	13	26	-	6,961	34	121	5	4,115	1	-	11	9	8	-	-	-	-	
NEW CALIFORNIA	452	35	6	-	3	10	8	14	4	1,414	139	179	203	3	-	3	-	13	-	-	-	-		
NEW HEBRIDES	497	268	1	-	-	454	63	-	2,597	94	145	-	379	2	37	1	6	1	45	-	-	-	-	
NOFOLK ISLAND	-	56	-	-	-	-	444	-	-	417	56	-	29	-	-	-	-	-	-	-	-	-		
FIJI-AUSTRALIA	202	30	4	1	1	21	22	20	1	1,070	8	224	49	1	2	13	11	-	-	-	24	-		
NEW GUINEA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
NE LANESTA	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
FIJIAN	210	31	3	-	1	9	104	24	1	1,933	15	134	44	671	2	13	10	3	1	16	-	-		
COOK ISLANDS	1,201	-	-	-	-	-	435	641	-	13,441	32	865	-	-	11	11	14	12	-	-	-	-		
FRANC POLYNESIA	52	112	3	-	2	4	121	219	6	3,393	107	193	40	262	2	3	73	7	126	-	-			
NUKE	21	1	-	-	-	1	167	121	-	11,528	17	90	-	279	-	-	22	-	-	-	-	-		
ZAMBALIAN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
SANTA AMERICAN	314	65	206	0	0	-	28	72	1	6,794	24	155	-	367	-	12	6	3	11	-	-	-		
TOMELAU ISLANDS	83	-	-	-	-	-	-	104	1,377	21	62,055	21	-	-	3,779	-	63	-	-	200	-	-		
YACCA	20	-	9	-	-	8	219	26	65	9,913	49	16	-	2,982	-	2	11	-	7	6	-	-		
WALLS & FUTNA ISLANDS	141	6,315	-	-	-	-	-	50	-	4,480	176	31	-	-	-	-	-	-	-	-	-	-		
POCONGIA	-	242	67	4	-	1	3	112	121	17	9,105	60	167	11	697	2	6	28	7	45	1	-		
SUBTOTAL	270	39	3	1	1	64	178	45	2	3,177	23	174	33	719	2	11	12	3	6	16	-	-		
TOCIE																								

Table V-8

13291

VENERAL DISEASE

The annual incidence of gonorrhea in the TTPI was 459 cases per 100,000 population during the period 1974-1977.

The United States incidence rate of gonorrhea in 1974 (mid-period of the last five years) was 420 cases per 100,000 population.

A schematic comparison of gonorrhea incidence rates for the TTPI and United States is given in Figure V-2.

An increase of gonorrhea is anticipated as the population grows "younger" and employment opportunities become more scarce. Another problem which may increase susceptibility to the disease is the recent discovery of penicillin resistant strain of gonorrhea in the TTPI.

OBJECTIVE                    BY 1983, THE INCIDENCE RATE OF NEW CASES OF GONORRHEA WILL NOT EXCEED 400 CASES PER 100,000 POPULATION.

OBJECTIVE                    TO MAINTAIN INCIDENCE RATE FOR SYPHILIS AT THE CURRENT LEVEL.  
(Over recent years, no syphilis cases have been reported in the TTPI.)

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Table V-2

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YEAR	CITIES									
	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
1970	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
1971	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
1972	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
1973	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
1974	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
1975	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
1976	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
1977	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
1978	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
1979	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000

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CITY / STATE / ZIP

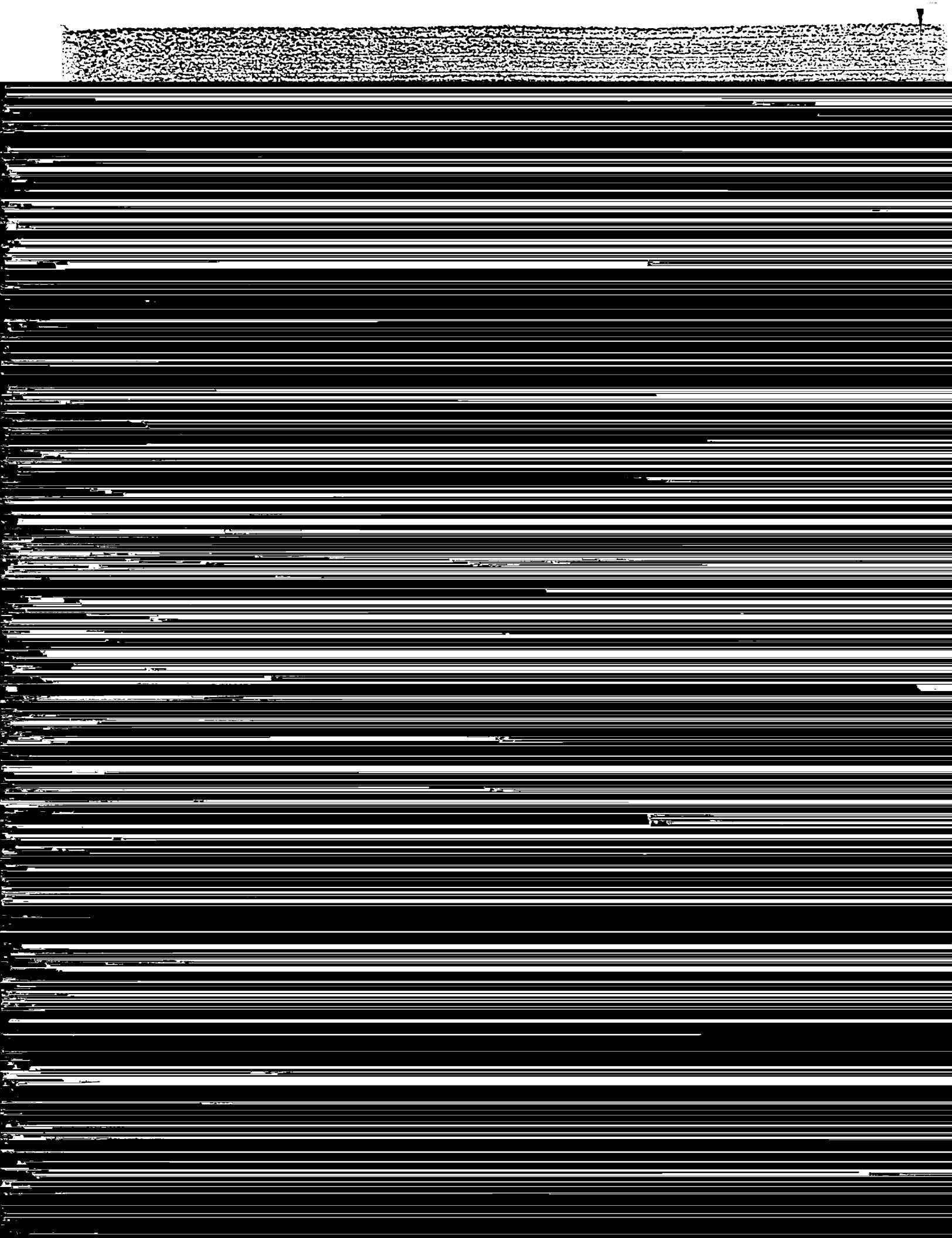


Table V-9

TABLE I

DATE 7/31/78

## IMMUNIZATION ASSESSMENT OF TRUST TERRITORY OF THE PACIFIC ISLANDS

BIRTH GROUP: 1957 - 1977

GROUPS	BIRTH SAMPLE	#	%	ALL IMMUNIZATIONS		#	%	PARTIAL IMMUNIZATIONS		#	%	TOTAL NEEDING IMMUNIZATIONS		TOTAL NUMBER IMMUNIZED BY VACCINE TYPE							
				DPT	POLIO			MEASLES	REDVFLU					MEASLES	REDVFLU	MICRS					
V. Day-Care Center Children (1970-1975)		8	2	#	%	#	%	#	%	#	%	#	%	#	%	#	%				
Kosrae																					
Palau																					
Yap																					
Marshalls		44	100	25	57	5	11	14	32	19	43	29	66	31	70	33	75	32	73	15	36
Monape																					
Truk																					
Total		44	100	25	57	5	11	14	32	19	43	29	66	31	70	33	75	32	73	16	36
VI. Headstart Center Children (1971-1974)																					
Kosrae																					
Palau		132	100	119	90	5	4	8	6	13	10	120	91	120	91	122	92	121	93	26	20
Yap		146	100	126	85	1	1	19	15	20	14	127	87	127	87	130	89	130	89	21	14
Marshalls		204	100	166	51	2	1	36	18	38	19	176	85	181	89	199	93	167	92	45	22
Monape		177	100	89	70	-	-	38	30	39	30	105	83	105	83	115	91	103	81	31	14
Truk		115	100	58	50	1	1	56	49	57	50	78	68	72	63	82	71	90	70	16	4
Total		724	100	558	77	9	1	157	22	166	23	606	54	606	54	659	88	673	86	224	51
VII. Kindergarten Children (1971-1974)																					
Kosrae																					
Palau		205	100	197	96	-	-	9	4	9	97	193	97	220	97	203	99	231	99	123	60
Yap		205	100	233	92	-	-	26	8	26	8	256	93	291	91	371	93	311	93	122	59
Marshalls		309	100	233	92	-	-	26	8	26	8	256	93	291	91	371	93	311	93	122	59
Monape																					
Truk																					
Total		515	100	430	93	-	-	35	8	35	8	435	98	491	95	507	93	502	98	245	48
VIII. Elementary School Age Children (1964-1971)																					
Kosrae		1,323	100	503	58	4	35	816	62	820	62	1,123	55	631	51	1,031	52	836	63	79	6
Palau		3,182	100	2,713	45	50	2	426	15	426	15	2,371	98	2,719	86	1,373	50	1,325	57	214	7
Yap		1,774	100	1,472	85	17	1	235	16	302	17	1,523	86	1,525	85	1,273	62	1,200	63	676	37
Marshalls		8,253	100	2,519	31	477	6	5,234	63	5,715	69	2,057	36	2,057	35	6,095	74	4,557	55	1,153	31
Monape		6,041	100	1,558	26	211	3	4,312	21	4,523	24	1,810	39	1,737	29	4,321	21	3,525	55	574	17
Truk		9,779	100	1,796	19	357	4	7,615	78	7,921	83	3,257	31	2,345	24	5,061	61	3,021	51	271	5
Total		30,400	100	10,520	35	1,814	4	13,692	61	19,810	65	18,575	45	11,994	59	20,575	65	23,771	45	2,570	10
IX. High School Age Children (1960-1963)																					
Kosrae		473	100	268	57	7	1	198	42	205	43	373	70	258	55	302	61	125	24	7	1
Palau		3,400	100	916	61	85	6	420	35	522	39	1,167	78	950	61	933	67	537	36	35	2
Yap		377	100	220	73	9	2	98	25	107	27	342	86	295	71	210	58	218	55	-	-
Marshalls		2,212	100	24	1	334	18	2,023	25	2,411	22	126	5	54	2	1,191	33	353	15	-	-
Monape		1,057	100	147	14	258	24	632	63	910	85	166	15	153	14	493	35	269	23	310	5
Truk		3,103	100	43	1	104	3	2,753	95	3,657	99	740	25	121	4	1,917	62	202	2	1	-
Total		8,987	100	1,693	19	100	9	6,428	72	7,754	81	2,949	35	1,831	20	5,111	57	1,696	19	27	1
X. 18-20 Year Old Children (1957-1960)																					
Kosrae		353	100	72	23	7	2	271	79	251	83	251	71	73	22	65	19	33	9	7	2
Palau		525	100	269	16	4	1	317	58	321	54	155	32	115	20	244	41	9	1	-	-
Yap		1,318	100	25	2	272	15	1,172	72	1,457	94	611	4	15	2	610	11	61	1	-	-
Marshalls		545	100	23	16	37	2	347	22	424	33	87	17	55	17	214	58	147	33	-	-
Monape		1,047	100	1	1	54	1	1,043	66	1,655	66	577	21	32	2	1,047	61	1,05	4	-	-
Truk		4,638	100	462	16	348	8	3,763	32	4,154	29	601	22	20	2	1,047	61	1,05	4	-	-
Total		4,638	100	462	16	348	8	3,763	32	4,154	29	601	22	20	2	1,047	61	1,05	4	-	-

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### TUBERCULOSIS

Although in the decline, tuberculosis still continues to be a problem. Most of the tuberculosis patients are centered in the outer islands where health care is limited.

The tuberculosis incidence rate for the period of 1974-1977 was 62 cases per 100,000 population. That figure is high compared to the United States' rate of 15.0.

OBJECTIVE BY 1983, THE TUBERCULOSIS INCIDENCE RATE OF 62 CASES PER 100,000 POPULATION WILL BE DECREASED BY 25%.

### V. IMMUNIZATIONS

Table v-9 displays a 1978 assessment of immunization levels in the Trust Territory of the Pacific Islands for children born in the years prior to 1975. Of the 27,805 children, only 12,186 or 44% had complete immunization. Most of the children with partial or no immunizations reside in the outer islands which poses an accessibility problem to public health officials.

OBJECTIVE BY 1983, 90% OF ALL CHILDREN THROUGH THE AGE OF SIXTEEN WILL BE IMMUNIZED AGAINST COMMUNICABLE DISEASES.

101329b

VI. CHRONIC AND HANDICAPPING DISEASES

Within the TTPI, the most prevalent morbidity problem is diseases of the respiratory system. During fiscal year 1977, 23.5% of all inpatient discharges were due to diseases of the respiratory system. Also during FY 1977, 26,850 cases or 22.5% of all reported outpatient problems were diagnosed as respiratory diseases.

During the years 1974-1976, the average number of deaths due to diseases of the respiratory system was 24.6. The mortality rate for the same three year period was 23.7 deaths per 100,000 population. This rate is high, compared to the United States rate of 11.9.

However, the TTPI rate is comparable to the American Samoa rate of 21.4.

DIABETES MELLITUS

Diabetes is a disease which is greatly under-estimated as it is seldom a primary cause of death, but it is handicapping and reduces the work force of a community.

The importance of diabetes in producing disability is compounded by its predisposing influence in the development of arteriosclerotic complications

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which account for the majority of all deaths of diabetic individuals.

During the reporting years of 1974-1977, deaths due to diabetes as a primary cause averaged 11 deaths per year. The TTPI data recording system does not currently have the capability of recording contributing causes of death. The eleven deaths annually directly attributed to diabetes yields a mortality rate of 10.6 deaths per 100,000 population. This rate would probably increase substantially if secondary or contributing causes were retrievable.

NATIONAL GOAL

MAINTAIN ACCEPTABLE LEVELS OF PREVALENCE OF CHRONIC AND HANDICAPPING DISEASES.

OBJECTIVE

BY 1983, THE MORTALITY RATE FOR DISEASE OF THE RESPIRATORY SYSTEM WILL BE REDUCED TO LESS THAN 20 DEATHS PER 100,000 POPULATION.

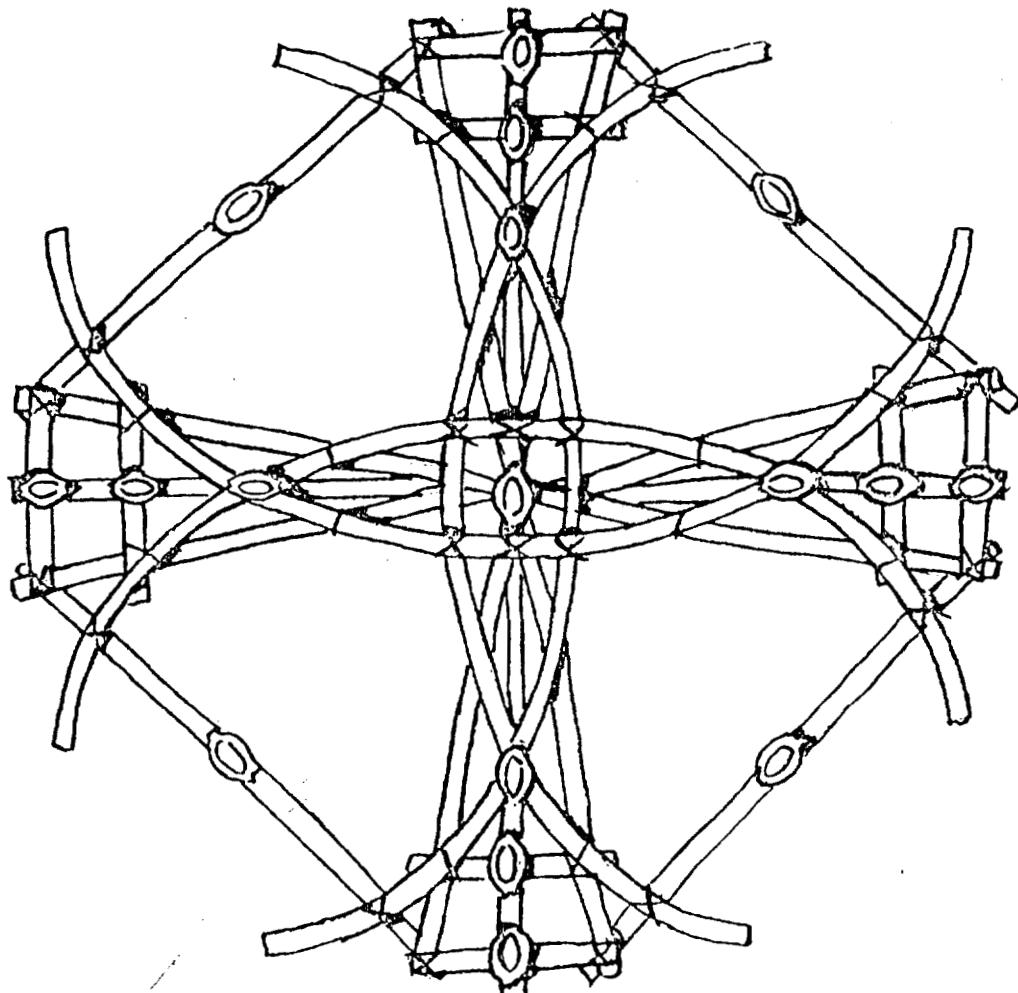
OBJECTIVE

BY 1983, THE MORTALITY RATE FOR DIABETES AS A DIRECT OR CONTRIBUTING CAUSE OF DEATH WILL NOT EXCEED 8 PER 100,000 POPULATION.

1013298

# MARSHALL ISLANDS

## 5-YR HEALTH PLAN



### FINAL DRAFT

PREPARED BY:  
TRUST TERRITORY DEPT. OF HEALTH SERVICES  
OFFICE OF HEALTH PLANNING AND RESOURCES DEVELOPMENT

1013299

## ABSTRACT OF THE FIVE-YEAR COMPREHENSIVE HEALTH PLAN

**I. AUTHORITY AND PURPOSE:**

Everywhere in the world there is a trend of increasing cost for all services. This is true for health care services, too. In the United States, the Congress passed Public Law 93-641 in 1975 in an effort to deal with the problem of rising medical costs and equal availability and accessibility of quality of medical care to all segments of the population. This Law requires all States of the Union to develop comprehensive health plans which must be approved by appointed authorities in the States in order for each State to be eligible to receive funds from the Department of Health, Education and Welfare. Under this Law, a State Health Coordinating Council has the legal mandate to revise and approve the State Health Plans. The Law also designated the Trust Territory of the Pacific Islands as a "State" under the same requirements. The responsibility of the development of the Territorial Health Plan was entrusted by the High Commissioner to the Department of Health Services, which in turn designated the Office of Health Planning within the Department to be responsible for the development of the Health Plan. In the effort to make the Territorial Plan more responsive to the needs of the different Districts, the Office of Health Planning decided to first develop a Health Plan for each District and then to use each District Plan as a basis for the development of the Territorial Plan. Under this Law, the Micronesia Health Coordinating Council, with members from each District, was formed to be the legal authority responsible for the revision and approval of the Plan. Marshallese members of the Council

1013300

are: Dr. Ezra Riklon, Mr. Jiba Kabua, and Mr. Caleb Rantak.

II. METHODS AND APPROACH:

Development of the Marshalls District Health Plan was started in August, 1977. A team of planners from Saipan came to Majuro and Ebeye to gather information and material that would be used in the development of the Plan. The District Director of Health Services and his staff provided all needed help in this process by providing needed material, equipment, and manpower for the various tasks. Members of the Marshall District Health Coordinating Council also actively participated in the formulation of questionnaires used in a Consumer Survey as well as participating in conducting the Survey itself.

Input data and information came from three main sources:

1. The Health Service System Itself: The planners gathered data and information from the hospital and dispensaries that would help them describe and assess the present situation of the health system's facilities, services, and manpower. Assessment of the system included assessment of the Administration, Medical Care Delivery, Nursing Care Delivery, Dispensary Operations, operation of all support services at the hospital, and all other health services programs now existing within the health services system.

2. Other Departments with Health-Related Programs and Interests:

Input for this segment of the Health Plan came from the Departments of Education, Public Safety, Public Affairs, and Vocational Rehabilitation,

as well as the Office of District Planning and the Budget office within the District Administration. Selected Community Leaders also gave input in this Section. The health planners interviewed respective Department heads to get their ideas about the existing situations in health services and also their ideas about how the system might be improved in order to improve the health status of the population of the Marshalls.

3. Community: A survey of consumer attitudes of the delivery of health care in the Marshalls was administered during the first field visit. The total number of respondents was 33. All respondents were women and had no vocational relationships with the Marshalls Department of Health Services.

A questionnaire was developed by the field team and translated into the Marshallese language. The questionnaire was composed of eight questions and identification of the respondent was not required. The respondents resided in four villages on Majuro and Ebeye.

The Saipan team of health planners were in the Marshalls for this data gathering phase for a total of three weeks. All of the information and data gathered during this phase were analyzed in Saipan and formed the basis of the Marshalls Health Plan which was written November, 1977.

### III. THE PLAN:

Analysis of health information gathered in the assessment of the health system in the Marshalls District revealed the following prevalent conditions:

1013302

1. Health Status:

- a) The Marshalls has an extremely high birth rate in comparison to the Trust Territory. The population will increase 50% every four years.
- b) It would appear the major causes of morbidity (illness) in the Marshall District are skin, respiratory and gastrointestinal related conditions. This holds true for Majuro, Ebeye, and the Outer Islands alike.
- c) It would appear the major chronic illness in the Marshall District are asthma, diabetes, and hypertension.
- d) Causes of death closely parallel those of the United States with the long term, non-communicable diseases of the heart and cerebro-vascular systems and cancer being responsible for 40% of the deaths from 1974 to 1976. At the same time however, prematurity and conditions associated with delivery are significant causes of death.
- e) Neonatal deaths would appear to be a far more significant problem in the urban centers of the District than in the Outer Islands while infant and child death rates are approximately equal across all geographic areas.
- f) Prematurity (the second leading cause of death 1974-1976) is much higher in Ebeye than in either Majuro or the Outer Islands although the rate in Majuro (at 53.9 incidence per 1,000 live births) is far greater than in the Outer Islands (at 10.2 incidence per 1,000 live births).

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Rates of pregnancy/delivery complications in the Outer Islands (except for hyperemesis and prolonged labor) are far lower than in the other two locations.

g) Immunization levels are low throughout Marshall District. Therefore there is a large population at risk in case of communicable disease outbreaks.

2. Health Services: In general, providers and the general public consider the providers of medical care to be well trained and capable of delivering quality health care. The exception to this is that practically all dispensary users were dissatisfied with the present level of skills of the Health Assistants.

Most consumers of health care expressed dissatisfaction with the use of Medex in the delivery of health care at the hospital.

The majority of problems expressed by the consumers of health care regarding the health system have to do with the administration:

- Lack of availability of physicians at the hospital during weekends, nights, etc.
- Lack of controls to assure delivery of quality medical care, such as the performing of physical examinations before prescribing medications.

Other problems of health care have to do with public expectations of the level of professionalism and diligence from the health providers. The consumers often complained about the unfriendliness and lack of courtesy of certain nurses; physicians taking time for coffee breaks while

patients wait, etc.

Consumers of health care also complained about the inadequacy of activities or controls directed in assuring the cleanliness of the environment (increased number of junked cars, rodents, litter in the environment, as well as the infrequency of sanitation team visits, etc.).

3. Consumers of Health: Certain problems were also identified with the consumers of health care:

- Foremost is a lack of understanding on health related issues.
- There is also a certain level of expectations of services that are not aligned with economic realities, such as expectation of services at no cost or minimal cost, expectation of physician care at all times, etc.).

#### IV. GOALS AND OBJECTIVES:

Certain goals and objectives have been developed based on the problems identified with respect to the health status of the population and the administration of the health services system as well as the level of consumers' understanding and participation in the improvement of the health status of the total population of the Marshalls.

The summary of these goals and objectives follows:

Goal #1: To increase support of and to concert efforts on the activities and services that are directed towards the prevention of diseases. This goal summarizes the goals and objectives for Public Health, Environmental

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Health, Health Education, Nutrition Services, and Mental Health Divisions of the Department of Health Services, as well as the goals and objectives for the Departments of Public Affairs, Public Works, Public Safety, and Education.

Goal #2: To improve the administration and supervision of health services to the extent that more effective and efficient medical care services could be delivered by the health system. This goal summarizes the goals and objectives set for Health Services Administration (including the Medical Staff), Nursing and Dental Health Divisions, as well as the Division of Public Health as it relates to the dispensary operations.

Goal #3: To raise the level of awareness and understanding of the public regarding health-related issues, to the extent that more individuals would involve themselves actively in improvement efforts of their own for their health and the health status of the community. Part of this goal is also directed towards raising the public awareness and understanding of the responsibility that the public has in affecting health policies.

V. PHILOSOPHY IN DEVELOPMENT OF GOALS AND OBJECTIVES AND PRIORITY SETTING:

In the development of goals and objectives and in the setting of priorities for the Marshall District Five-Year Comprehensive Health Plan, the underlying two-fold philosophy adhered to was:

- To change the emphasis of health services from the curative to the preventive and to emphasize the goals and objectives which require minimal additional resources, including the use of expatriate consultants.

The purpose of this philosophy is to involve the general population to a much greater extent than before in the responsibility for their own health and to utilize local resources to the fullest extent. It is hoped that the use of available local resources would stimulate national pride and self respect. It is also an effort to minimize the drainage of monetary resources spent on outside consultants, many of whom--judging from past performance--have been largely ineffective.

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**VOLUME II**

**MARSHALL FIVE YEAR HEALTH PLAN**

**DATA AND APPENDICES**

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MARSHALL ISLANDS DISTRICT COMPREHENSIVE FIVE-YEAR HEALTH PLAN

VOLUME II

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FIGURE 1

CRUDE BIRTH RATES:  
MARSHALLS DISTRICT COMPARED  
TO TPPI, 1955 - 1975.

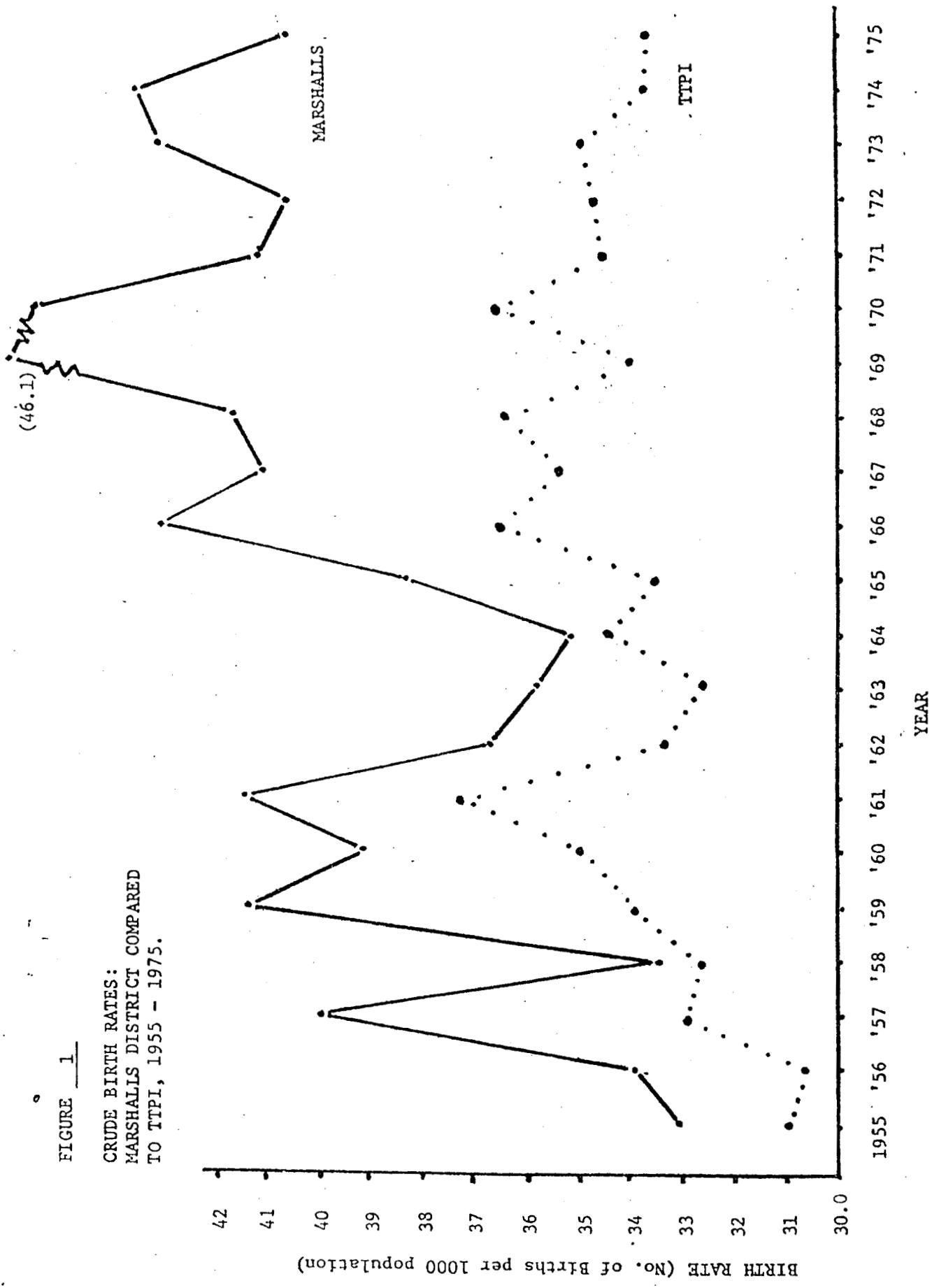


TABLE III-1

Population, Births, Infant Deaths, Deaths, and Natural Increase  
Trust Territory of the Pacific Islands  
Marshall Islands, 1955-1975

Year	Population	Total Births	Birth Rate	Infant Rate	Infant Death Rate	Total Deaths	Death Rate	Natural Increase	Rate of Natural Increase
1955	14,260	470	33.0	21	44.7	105	7.4	365	25.6
1956	13,984	474	33.9	19	40.1	96	6.9	378	27.0
1957	13,231	528	39.9	18	34.1	64	4.8	464	35.1
1958	13,928	465	33.4	20	43.0	96	6.9	369	26.5
1959	14,290	590	41.3	24	40.7	116	8.1	474	33.2
1960	14,907	582	39.0	23	39.5	123	8.3	459	30.8
1961	15,399	638	41.4	15	23.5	81	5.3	557	36.2
1962	15,710	575	36.6	18	31.3	79	5.0	496	31.6
1963	17,363	622	35.8	41	65.9	119	6.9	503	29.0
1964	18,205	638	35.0	24	37.6	96	5.3	542	29.8
1965	18,062	692	38.3	24	34.7	114	6.3	578	32.0
1966	18,239	784	43.0	16	20.4	95	5.2	589	37.8
1967	18,925	775	41.0	21	27.1	121	6.4	654	34.6
1968	18,998	791	41.6	29	36.7	145	7.6	646	34.0
1969	19,328	891	46.1	17	19.1	118	6.1	773	40.0
1970	20,206	918	45.4	26	28.3	138	6.8	780	38.6
1971	23,166	951	41.1	32	33.6	104	4.5	847	36.6
1972	24,248	984	40.6	25	25.4	127	5.2	857	35.3
1973	25,044	1,077	43.0	50	46.4	152	6.1	925	36.9
1974	26,146	1,136	43.4	24	21.1	130	5.0	1,006	38.5
1975	27,296	1,108	40.6	41	37.0	127	4.7	981	35.9

Note: All rates are per 1,000 population, except the Infant Death Rate which is computed per 1,000 live births.

Source: Population from annual reports, Trust Territory of the Pacific Islands. 1958, 1967 and 1973 populations were enumerated in a Territory-wide census. The 1974 and 1975 populations are projected based on 1973 census population. Population in this table is permanent resident population from Appendix I, B. p. 162. Births and deaths are from certificates registered for events in each year. Figures 1970-1974 have increased from previous reports by the inclusion of events which were registered late (delayed registration).

Table III-2 Population, Births, Infant Deaths, Deaths, and Natural Increase  
Trust Territory of the Pacific Islands, 1955 - 1976

Year	Population	Total Births	Birth Rate	Infant Death	Infant Death Rate	Total Death	Death Rate	Natural Increase
1955	64,290	1,989	30.9	68	34.2	364	5.7	1,625
1956	65,039	1,992	30.6	65	32.6	362	5.6	1,630
1957	67,199	2,210	32.9	85	38.5	393	5.8	1,817
1958	70,594	2,298	32.6	85	37.0	350	5.0	1,948
1959	73,052	2,466	33.8	99	40.1	393	5.4	2,073
1960	75,836	2,649	34.9	85	32.1	451	5.9	2,198
1961	77,913	2,895	37.2	93	32.1	412	5.3	2,483
1962	80,980	2,694	33.3	89	33.0	386	4.8	2,308
1963	84,777	2,756	32.5	105	38.1	425	5.0	2,331
1964	88,215	3,024	34.3	99	32.7	529	6.0	2,495
1965	90,596	3,032	33.5	132	43.5	530	5.9	2,502
1966	92,373	3,359	36.4	111	33.0	493	5.3	2,866
1967	93,580	3,301	35.3	108	32.7	496	5.3	2,805
1968	94,469	3,440	36.4	112	32.6	545	5.8	2,895
1969	98,009	3,321	33.9	116	34.9	533	5.4	2,788
1970	102,250	3,733	36.5	78	20.9	599	5.9	3,134
1971	107,054	3,684	34.4	131	35.6	579	5.4	3,107
1972	114,645	3,959	34.5	120	30.3	600	5.2	3,359
1973	114,773	4,001	34.9	129	32.2	537	4.7	3,464
1974	118,903	4,004	33.7	124	31.0	608	5.1	3,396
1975	123,184	4,222	34.3	135	33.2	613	5.0	3,609
1976	127,624	3,973	31.1	71	17.9	540	4.2	3,433

Note: All rates are per 1,000 population, except the Infant Death Rate which is computed per 1,000 live births.

Source: Population from annual reports, Trust Territory of the Pacific Islands. The 1958, 1967 and 1973 population were enumerated in a Territory-wide census. The 1974 and 1975 populations are projected based on 1973 census population. Population in this table is permanent resident population from appendix I, B. page 162. Births and deaths are from certificates registered for events in each year. Figures for 1970 - 1974 have increased from previous reports by the inclusion of events which were registered late (delayed registration).

TABLE III-3 A.  
COMPLICATIONS OF PREGNANCY - MARSHALL DISTRICT (TTPI Citizens only) 1974

Births	Outer Islands #	Outer Islands Rate	Kwajalein #	Kwajalein Rate	Majuro #	Majuro Rate	Total District #	Total District Rate
304	304		204	204	453	453	997	
Prematurity *	2	6.6	17	70.8	35	77.3	54	54.0
Low Birth Weight**	2	6.6	3	12.5	12	26.5	17	17.0
Abnormal Presentation Including Breech	1	3.3	1	4.2	8	17.7	10	10.0
Prolonged Labor	1	3.3	-	-	10	22.0	11	11.0
C-Section	-	-	-	-	1	2	1	1.0
Maternal Lacerations (1st & 2nd degree)	1	3.3	1	4.2	38	83.9	40	40.0
Other Complications of Delivery	1	3.3	-	-	12	26.5	13	13.0
Maternal Anemia	-	-	2	8.3	13	28.7	15	15.0
Hyperemesis	3	9.9	3	12.5	10	22.0	16	16.0
Other Complications of Pregnancy	-	-	-	-	2	4.4	2	2.0
Congenital Defects of Child	-	-	1	4.2	1	2.0	2	2.0
Total Complications of Delivery	8	26.0	22	91.7	116	256.1	146	146.4
Total Complications of Pregnancy	3	9.9	5	20.8	25	55.2	33	33.1
Total All Complications & Congenital Defects	11	36.2	28	116.7	142	313.5	181	181.5

\*Defined as gestation period less than 40 weeks.

\*\* Defined as 40 weeks or longer gestation period but birth weight less than 5lbs. 8 ozs.

Source: TTPI birth certificates: TT Department of Health Services Division of  
Vital Statistics.

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TABLE III-3 B.

COMPLICATIONS OF PREGNANCY - MARSHALL DISTRICT (TTPI Citizens only) 1975

	Outer Islands #	Islands -Rate	Kwajalein #	Kwajalein Rate	Majuro #	Majuro Rate	Total #	District Rate
Births	341		323		494		1158	
Prematurity.*	5	14.7	34	105.3	28	56.7	67	57.9
Low Birth Weight**	2	5.9	8	24.8	35	70.8	45	38.9
Abnormal Presentation Including Breech	2	5.9	6	18.6	8	16.2	16	13.8
Prolonged Labor	4	11.7	3	9.3	1	2.0	8	6.9
C-Section	-	-	-	-	2	4.0	2	1.7
Maternal Lacerations (1st & 2nd degree)	2	5.9	-	-	55	111.0	57	49.0
Other Complications of Delivery	-	-	1	3.1	1	2.0	2	1.7
Maternal Anemia	2	5.9	1	3.1	18	36.4	21	18.0
Hyperemesis	7	20.5	0	0	4	8.1	11	9.5
Other Complications of Pregnancy	1	2.9	0	0	2	4.0	3	2.6
Congenital Defects of Child	1	2.9	1	3.1	1	2.0	3	2.6
Total Complications of Delivery	15	44.0	52	161.0	130	263.0	197	170.0
Total Complications of Pregnancy	10	29.0	2	6.2	25	50.6	37	31.9
Total All Complications & Congenital Defects	26	76.2	55	170.3	156	314.8	237	204.7

\*Defined as gestation period less than 40 weeks.

\*\*Defined as 40 weeks or longer gestation period but birth weight less than 5lbs. 8 ozs.

Source: TTPI birth certificates: TT Department of Health Services Division of Vital Statistics.

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TABLE III-3 C.

## COMPLICATIONS OF PREGNANCY - MARSHALL DISTRICT (TTPI Citizens only) 1976

	Outer Islands #	Outer Islands Rate	Kwajalein #	Kwajalein Rate	Majuro #	Majuro Rate	Total District #	Total District Rate
Births	337		272		482		1091	
Prematurity*	3	8.9	20	73.5	14	29.0	37	33.9
Low Birth Weight**	3	8.9	6	22.0	41	85.0	50	45.8
Abnormal Presentation Including Breech	2	5.9	3	11.0	15	31.0	20	18.3
Prolonged Labor	3	8.9	1	3.7	4	8.3	8	7.3
C-Section	-	-	-	-	5	10.4	5	4.6
Maternal Lacerations (1st & 2nd degree)	-	-	1	3.7	97	201.0	98	89.8
Other Complications of Delivery	2	5.9	-	-	2	4.0	4	3.7
Maternal Anemia	-	-	1	3.7	9	18.7	10	9.2
Hyperemesis	5	14.8	-	-	2	4.0	7	6.4
Other Complications of Pregnancy	-	-	1	3.7	-	-	1	.9
Congenital Defects of Child	-	-	-	-	-	-	-	-
Total Complications of Delivery	13	38.6	31	114.0	178	369.0	222	203.5
Total Complications of Pregnancy	5	14.8	2	7.3	11	22.8	18	16.5
Total All Complications & Congenital Defects	18	53.4	33	121.3	189	392.0	240	220.0

\*Defined as gestation period less than 40 weeks.

\*\*Defined as 40 weeks or longer gestation period but birth weight less than 5lbs. 8 ozs.

Source: TTPI birth certificates: TT Department of Health Services Division of Vital Statistics.

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TABLE III-3 D.

COMPLICATIONS OF PREGNANCY - MARSHALL DISTRICT (TTPI Citizens only)  
SUMMARY: 1974, 1975 and 1976.

	Outer Islands: #	Outer Islands: Rate	Kwajalein: #	Kwajalein: Rate	Majuro: #	Majuro: Rate	Total: #	District: Rate
Births	982		835		1429		3246	
Prematurity*	10	10.2	71	85.0	77	53.9	158	48.7
Low Birth Weight**	7	7.0	17	20.3	88	61.6	112	34.5
Abnormal Presentation Including Breech	5	5.1	10	12.0	31	21.7	46	14.2
Prolonged Labor	8	8.1	4	4.8	15	10.5	27	8.3
C-Section	-	-	-	-	8	5.6	8	2.5
Maternal Lacerations (1st & 2nd degree)	3	3.0	2	2.4	193	135.0	198	61.0
Other Complications of Delivery	3	3.0	1	1.2	15	10.5	19	5.8
Maternal Anemia	2	2.0	4	4.8	40	28.0	46	8.0
Hyperemesis	15	15.3	3	3.6	16	11.2	34	10.5
Other Complications of Pregnancy	1	1.0	1	1.2	4	2.8	6	1.8
Congenital Defects of Child	1	1.0	2	2.4	2	1.4	5	1.5
Total Complications of Delivery	36	36.7	105	125.7	429	296.7	565	174.1
Total Complications of Pregnancy	18	18.3	9	10.8	61	42.7	88	27.0
Total All Complications & Congenital Defects	55	56.0	116	138.9	487	340.8	658	202.7

\*Defined as gestation period less than 40 weeks.

\*\*Defined as 40 weeks or longer gestation period but birth weight less than 51bs. 8 ozs.

Source: TTPI birth certificates: TT Department of Health Services Division of  
Vital Statistics.

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( SUPPLEMENT TO TABLE III-3 )

COMPLICATIONS OF PREGNANCY - 1974

OTHER COMPLICATIONS OF DELIVERY

Outer Islands	Kwajalein	Majuro	
Retained placenta	1	-0-	Egisiotomy 5
			Partial Placenta Previa 1
			Retained Placenta 2
			Cord around neck Disproportion 1
			Cephalopelvic 1
			Post partum hemorrhage 2

OTHER COMPLICATIONS OF PREGNANCY

-0-	-0-	Toxemia 1
		Polyhydramnios 1

CONGENITAL DEFECTS OF CHILD

-0-	Polydactylism 1	Accessory digit of thumb 1
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## ( SUPPLEMENT TO TABLE III-3 )

## COMPLICATIONS OF PREGNANCY - 1975

OTHER COMPLICATIONS OF DELIVERY

Outer Islands	Kawajalein	Majuro
-0-	Difficult delivery 1	Low lying placenta 1

OTHER COMPLICATIONS OF PREGNANCY

Preeclampsia 1	-0-	Uterine bleeding 2
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CONGENITAL DEFECTS OF CHILD

Cleft Palate 1	Achondroplasia 1	Super nummery (6 fingers) 1
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## ( SUPPLEMENT TO TABLE III-3 )

## COMPLICATIONS OF PREGNANCY - 1976

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OTHER COMPLICATIONS OF DELIVERY

Outer Islands	Kwajalein	Majuro
Weak contractions 2	-0-	Placenta previa complete 1
		Retained placenta 1

OTHER COMPLICATIONS OF PREGNANCY

-0-	Interuterine bleeding 1
-----	-------------------------

CONGENITAL DEFECTS OF CHILD

-0-	-0-	-0-
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**TABLE III-4**  
**Fetal; Neonatal; Infant & Child Deaths\* - MARSHALL DISTRICT**  
**1974 - 1976 (TPI citizens only)**

Geographic Location	Births	Fetal Deaths	Fetal Rate	Neonatal Deaths	Neonatal Rate	Infant Deaths (0 - 1)	Infant Rate	Child Deaths (1 - 4)	Child Rate	Maternal Deaths	Maternal Rate
<b>1974:</b>											
Outer Islands	304	12	39.5	-0-	-0-	4	13.2	1	3.3	N/A	N/A
Kwajalein	240	22	91.7	3	12.5	3	12.5	4	16.7	N/A	N/A
Majuro	453	18	39.7	9	19.7	10	22.1	3	6.6	N/A	N/A
TOTAL DISTRICT	997	52	52.2	12	12.0	17	17.0	8	8.0	1	1.003
<b>1975:</b>											
Outer Islands	341	16	46.9	4	11.7	6	17.6	4	11.7	N/A	N/A
Kwajalein	323	10	31.0	10	31.0	13	40.2	4	12.9	N/A	N/A
Majuro	494	22	44.5	13	26.3	18	36.4	5	10.1	N/A	N/A
TOTAL DISTRICT	1148	48	41.4	27	23.3	37	31.9	13	11.2	2	1.727
<b>1976:</b>											
Outer Islands	337	14	41.5	3	8.9	10	29.7	5	14.8	N/A	N/A
Kwajalein	272	2	7.3	1	3.7	1	3.7	0	0	N/A	N/A
Majuro	482	23	47.7	5	10.4	8	16.6	5	10.4	N/A	N/A
TOTAL DISTRICT	1091	39	35.7	9	8.2	19	17.4	10	9.2	N/A	N/A
<b>Summary 1974, 75, 76:</b>											
Outer Islands	982	42	42.8	7	7.1	20	20.4	10	10.2	N/A	N/A
Kwajalein	835	34	40.7	14	16.8	17	20.3	8	9.6	N/A	N/A
Majuro	1429	63	44.1	27	18.9	36	25.2	13	9.1	N/A	N/A
TOTAL DISTRICT	3246	139	42.8	48	14.8	73	22.5	31	9.5	3***	1.4

NOTE: All rates calculated on the basis of deaths per 1,000 live births.

\*\*\*Rate calculated on basis of 1974 and 1975 statistics.

TABLE III-5  
INFANT MORTALITY RATES FOR ALL DISTRICTS, 1976

District	Number of Live Births	Number of Infant Deaths	Infant Mortality Rate*
Palau	373	9	24.12
Marianas	570	11	19.30
Yap	262	6	22.90
Truk	741	10	13.50
Ponape	892	16	17.9
Marshalls**	1,091	19	17.4
TT-Wide	3,929	71	18.07

(These figures for January-December, 1976: Provisional until official statistics are released)

SOURCE: TT Headquarters Office of Medical Records and Statistics.

\* per 1,000 live births

\*\*Data for the Marshalls is drawn from birth certificates on file with the TT Division of Medical Records and Statistics.

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Table III-6

SELECTED INTERNATIONAL INFANT MORTALITY RATES FOR 1974  
(with Marshalls District and TTPI included)

<u>Location:</u>	<u>Infant Mortality Rate:</u>
Sweden	9.6
Kwajalein Atoll	12.5
Outer Is. - Marshall District	13.2
California	13.7
Hawaii	15.5
Tonga	16.0
U.S.A.	16.7
Marshall District	17.0
Majuro	22.1
TTPI	31.0
Kenya	55.0
Congo	180.0
Cameroon	200.0

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TABLE III-7

## NEONATAL, INFANT AND CHILD DEATHS - MARSHALL DISTRICT - 1974-76 CAUSES OF DEATH

Year	Region	Death Category	Cause	# of Deaths
1974	Outer Islands	Neonatal	N/A	-0-
		Infant	Severe vomiting	1
			Pneumonia	1
			Meningitis	1
			Muscular Atrophy	1
			Total : Deaths	4
		Child	Peritonitis (acute appendicitis)	1
			Total	1
1974	Kwajalein Atoll	Neonatal	Prematurity	3
		Infant	N/A	-0-
		Child	Gastroenteritis	2
			Amebiasis	1
			Asthmatic Bronchitis	1
			Total	4
1974	Majuro	Neonatal	Prematurity	4
			Aspiration	1
			Respiratory Distress Syndrome	1
			Congenital Disorder	1

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TABLE III-7 (a)

Amebiasis

Birth injury

1

1

		Total Deaths-----	9
Infant	Ingvinal Lymphaderitis	Total -----	1

Child	Congenital heart disease	Total -----	1
	Cerebral edema		1
	Bronchopneumonia		1

		Total Deaths -----	3
--	--	--------------------	---

1975	Outer Islands	Neonatal	Prematurity
			Atelectasis
			Aspiration pneumonia
			Prolapsed umbilical cord
			Total -----

Infant	Gastroenteritis	Total -----	4
Child	Malnutrition	Total -----	2
	Pneumonia		1
		Total -----	4

1975	Kwajalein Atoll	Neonatal	Prematurity
			Gastroenteritis
			Small bowel perforation
			Aspiration
			Total -----

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TABLE III-7 (b)

		Infant	Poisoning (accident)	Total Deaths--	3	
		Child	Congenital disorder	Total Deaths--	2	
			Bronchopneumonia		1	
			Unknown		1	
			Total--		4	
		Neonatal	Prematurity		9	
			Congenital disorder		1	
			Aspiration		1	
			Immature lungs		1	
			Prolapsed umbilical cord		1	
			Total--		13	
		Infant	Flu		2	
			Gastroenteritis		1	
			Meningitis		1	
			Congenital disorder		1	
			Total--		5	
		Child	Gastroenteritis		2	
			Viral respiratory infection		1	
			Protein calorie malnutrition		1	
			Total--		5	

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1976	Outer Islands	Neonatal	Aspiration pneumonia	1	
			Viral pneumonia	1	
			Erythroblastosis fetalis	1	
			Total Deaths-----	3	
Infant	Gastroenteritis			3	
	Infectious hepatitis			1	
	Hydrocephalus			1	
	Viral pneumonia			1	
	Total-----			7	
Child	Viral pneumonia			2	
	Gastroenteritis			1	
	Accidental drowning			1	
	Acute meningitis			1	
	Total-----			5	
1976	Kwajalein Atoll	Neonatal	Aspiration pneumonia	1	
			Total-----	1	
			Infant N/A	-0-	
1976	Majuro		Premature	2	
			Aspiration	1	
			Premature separation of placenta	1	
			Gastroenteritis	1	
			Total-----	5	

TABLE II-7 (d)

Infant

3

Meningitis

Total Deaths---- 3

Child	Meningitis		Total Deaths---- 3
	Peritonitis (appendicitis)	1	
	Accident	1	
	Hydrocephalus	1	
	TB meningitis	1	
			Total---- 5

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Table III-8 -  
CAUSES OF MORTALITY\* MARSHALL DISTRICT, 1974, 1975 and 1976 (TPII Citizens Only)

	Outer Islands				Kwajalein Atoll			Majuro			All Years			Total District		Total District	
	1974	1975	1976	1974	1975	1976	1974	1975	1976	1974	1975	1976	Death Rate 1974	Death Rate 1975	Death Rate 1976	Total 1976	
Cerebral Vascular	3	4	6	0	2	0	7	3	8	.38	.33	.38	.33	.33	.35	.49	
Cancer	4	5	5	3	2	3	7	2	2	.53	.53	.53	.59	.59	.59	.07	
Pneumonia	0	1	0	3	6	0	4	9	2	.25	.27	.27	.18	.18	.18	.18	
Heart Related	4	5	2	0	2	0	3	6	3	.24	.27	.27	.44	.44	.44	.21	
Pneumonia	7	2	5	1	1	0	4	2	1	.23	.46	.46	.18	.18	.18	.21	
Gastroenteritis	3	6	4	3	2	0	1	4	1	.24	.27	.27	.44	.44	.44	.18	
Inanition	5	3	4	0	1	0	1	2	5	.21	.23	.23	.22	.22	.22	.32	
Chronic Lung Disease	2	5	3	1	2	0	3	1	1	.18	.23	.23	.3	.3	.3	.14	
Diabetes	4	0	0	1	4	0	4	1	5	.19	.34	.34	.18	.18	.18	.18	
Accidents	0	1	2	0	1	0	3	6	2	.12	.12	.12	.29	.29	.29	.14	
Nonmaternal Conditions of birth process	0	3	3	0	2	1	2	2	2	.14	.08	.08	.22	.22	.22	.2	
Suicide	0	2	0	2	2	0	1	2	3	.12	.12	.12	.22	.22	.22	.12	
Huntingitis	1	0	2	1	0	0	0	1	6	.11	.08	.08	.04	.04	.04	.28	
Chronic Gastro Related	4	2	0	0	0	1	1	0	2	.10	.19	.19	.07	.07	.07	.12	
Congenital	0	0	1	0	3	0	2	3	1	.10	.08	.08	.22	.22	.22	.07	
Kidney Related	2	1	2	0	0	0	0	1	1	.07	.03	.03	.07	.07	.07	.12	
Nutrition Deficiency	0	1	1	0	2	0	1	2	0	.07	.04	.04	.18	.18	.18	.035	
Unknown	2	3	0	1	2	0	0	1	0	.09	.115	.115	.22	.22	.22	-	
Other	4	1	6	2	1	2	6	5	4	.31	.45	.45	.22	.22	.22	.42	

\* Source: TPII Death Certificates - Courtesy TT Health Services Division  
of Vital Statistics.

Note: Year 1974, Total District Population: 26,146, Total Deaths 113, Death Rate per 1,000 Population: 4.3.  
Year 1975, Total District Population: 27,296, Total Deaths 131, Death Rate per 1,000 Population: 4.8.  
Year 1976, Total District Population: 28,285, Total Deaths 102, Death Rate per 1,000 Population: 3.6.

TABLE III-9

## LEADING CAUSES OF DEATH: MARSHALL DISTRICT 1974 - 1976

<u>DISEASE</u>	<u>NUMBER OF CASES</u>
1. Cancer	33
2. Cerebral vascular diseases	33
3. Prematurity	25
4. Heart Diseases	24
5. Gastroenteritis	24
6. Pneumonia	23
7. Inanition*	21
8. Diabetes	19
9. Chronic lung conditions	18
10. Nonmaternal conditions associated with delivery	14
11. Accidents	12
12. Suicide	12
13. Meningitis	11
14. Chronic gastro-related conditions	10
15. Congenital defects	10
16. Kidney diseases	7
17. Nutritional deficiencies	7
18. Unknown	9
19. Other	31

\* Wasting of the body due to lack of food. Condition is generally listed in official statistics as relating to senility. In all cases in the Marshall District this condition occurred in individuals over the age of 65.

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TABLE III-9 (SUPPLEMENT)

RANK ORDER SELECTED CAUSES OF DEATH - YEARS 0 THROUGH 4, 1974-1976

	<u>TOTAL # DEATHS</u>	103
<u>Deaths by:</u>	Prematurity	23 or 22.3%
	Congenital defect & birth related injuries	20 or 19.4%
	Gastroenteritis and amebiasis	18 or 17.5%
	Pneumonia	9 or 8.7%
	Malnutrition	5 or 4.8%
	<b>TOTAL-----</b>	<b>75 or 72.8%</b>

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## SUPPLEMENT TO TABLE III-9

MORTALITY DATA

Calendar Year

Other Conditions 1974 are:

Retained placenta	1	
Cirrhosis of liver	2	
Severe vomiting	1	
Spinobulbar muscular atrophy	1	
Amebiasis	2	
Inguinal lymphadenitis	1	
Cerebral edema	1	
Cerebralencephalopathy	1	
Aspiration	1	
TB	1	

Calendar Year  
1975 1974Other Conditions 1975 are:

Eclampsia	1	
Amebiasis	1	
Flu	2	
Viral respiratory tract infection	1	
Uterine gangrene infection	1	
Thoracic myelopathy	1	

Other Conditions 1976 are:

Infectious hepatitis	1	
Osteomyelitis	1	
Agranulocytosis	1	
Chickenpox	1	
Prostatic hypertrophy	1	
Glioblastoma	1	
Central nervous system disorder	1	
Infection above knee amputation	1	
TB	1	
Fish poisoning	1	
Cerebral encephalomalacia	1	
Paralytic ileus	1	

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TABLE III-10

## TEN LEADING CAUSES OF DEATH - UNITED STATES - 1973

Diseases	Number	Rate/1000 Population
Ischaemic Heart Disease	674,066	3.26
Cerebrovascular Disease	214,312	1.02
Malignant neoplasms of trachea, bronchus & lung.	74,933	.36
Diseases of arteries, arterioles & capillaries	58,698	.28
Pneumonia	55,824	.27
Motor vehicle accidents	55,511	.265
Malignant neoplasms of prostate	18,830	.184
Malignant neoplasms of intestine(except rectum)	38,380	.183
Diabetes Mellitus	38,208	.182
Cirrhosis of liver	33,350	.159

## TEN LEADING CAUSES OF DEATH - PERU - 1972

Diseases	Number	Rate/1000 Population
Pneumonia	15,954	1.104
Enteritis	10,728	.742
Bronchitis, emphysema & asthma	4,616	.32
Tuberculosis of respiratory system	3,585	.248
Influenza	3,045	.211
Avitaminoses & other nutritional deficiencies	2,331	.161
Ischaemic Heart Disease	2,003	.139
Cerebrovascular Disease	1,924	.133
Whooping cough	1,765	.122
Measles	1,709	.118

Source: World Health statistical annual, 1973-76, Vital Statistics and Cause of Death, Vol. 1, World Health Organization, 1976.

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TABLE III-11

Deaths Reported in the Trust Territory of the Pacific Islands in Calendar Year  
1974, 1975 and 1976 (Listed in Rank Order of 1976).

Rank Order	Cause of Deaths	Calendar Year		
		1976	1975	1974
1	Malignant neoplasms (140-209)	37	42	55
2	Accident, all types (E800-E949)	36	18	39
3	Influenza and pneumonia (470, 480-486)	31	29	39
4	Bronchitis, emphysema, and asthma (490-493)	29	32	13
4	Diseases of heart (390-398, 402, 410-429)	29	38	57
5	Cerebrovascular diseases (430-438)	21	20	31
6	Diarrheal and intestinal diseases (004,006,008,009)	19	33	38
7	Prematurity (777)	14	52	43
8	Suicides (E950-E959)	10	19	15
9	Meningitis (320)	9	3	13
10	Diabetes mellitus (250)	8	8	17
10	Tuberculosis, all forms (001-019)	8	5	11
11	Congenital anomalies (740-759)	6	9	6
11	Cirrhosis of liver (571)	6	4	14
12	Certain causes of mortality of early infancy (760-768, 769-771, 772, 773-775, 776, 778)	4	8	17
13	Maternal deaths (630-639, 740-645, 650-678)	3	6	7
14	Nutritional deficiencies (260-269)	1	12	7
	All other causes	177	159	141
	of these ill-defined and unknown	(117)	(121)	81
	<b>TOTAL</b>	<b>448</b>	<b>497</b>	<b>1126</b>

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TABLE III-12 Cases of Notifiable Diseases Reported in Trust Territory Districts  
January - December 1976

Diseases	Total	Marshalls	Ebeye	Ponape	Kosrae	Truk	Marianas	Rota	Yap	Palau
<b>CATEGORY "B"</b>										
BA	Dengue Fever	3,172	395	305	1,179	66	975	168	5	78
BC	Dysentery - Amoebic	32	-	-	32	-	-	-	-	-
BD	Dysentery - Bacillary	-	-	-	-	-	-	-	-	-
BE	Encephalitis	-	-	-	-	-	-	-	-	-
BF	Measles	1	-	-	6	-	-	8	-	-
BG	Meningitis - Meningococcal	1	-	-	-	-	-	-	-	-
BH	Meningitis - (Other forms)	35	21	-	-	4	1	-	-	-
BI	Pertussis	5	-	-	-	-	-	-	-	-
<b>CATEGORY "C"</b>										
CA	Gonorrhea	413	88	45	78	9	27	9	5	45
CB	Infective Hepatitis	39	-	-	20	-	4	-	-	-
CC	Influenza	17,439	1,652	32	3,899	1,059	4,619	3,236	84	1,061
CD	Leprosy	27	2	-	-	-	22	-	-	3
CE	Rheumatic Fever	11	-	-	-	-	7	4	-	-
CP	Syphilis	26	-	16	-	-	9	-	-	1
CG	Tetanus	37	8	-	4	1	4	14	-	2
CH	Tuberculosis, Pulmonary	15	9	-	3	-	-	2	-	-
CI	Tuberculosis, Other Forms	-	-	-	-	-	-	-	-	-
CJ	Yaws	-	-	-	-	-	-	-	-	-
<b>CATEGORY "D"</b>										
DA	Chickenpox	784	320	3	31	-	77	278	18	23
DB	Conjunctivitis, Acute Infectious of Newborn	-	-	-	-	-	-	-	-	3
DC	Dysentery, Unspecified Type	149	-	-	5	-	-	-	-	-
DD	Filariasis	340	225	86	3	-	5	18	3	-
DE	Fish Poisoning	13	8	-	4	-	-	-	-	-
DF	German Measles	170	7	-	1	-	31	23	104	1
DG	Kumps	322	9	-	17	-	6	-	288	1
DH	Strep Throat & Scarlet Fever Salmonella	3	-	1	2	-	-	-	-	-
DI	Shigella	12	-	12	-	-	-	-	-	-

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Table III-13  
CASES OF NOTIFIABLE DISEASES IN MARSHALLS ISLANDS - 1976 - 1971

Diseases	Total	1976	1975	1974	1973	1972	1971
Influenza	25,702	1,684	5,094	2,972	1,032	8,721	6,199
Dysentery - Amoebic	4,801	700	587	1,009	935	769	801
Chickenpox	1,155	323	218	166	138	168	142
Gonorrhoea	969	133	121	189	219	212	95
Fish Poisoning	1,390	311	114	233	214	246	272
Mumps	852	7	14	814	5	5	7
Tuberculosis, Pulmonary	61	8	8	16	6	11	12
Leprosy	11	2	3	3	3	-	-
German Measles	464	8	3	39	5	407	2
Meningitis - (other forms)	26	21	2	1	1	-	-
Tuberculosis (other forms)	27	9	2	5	3	5	3
Salmonella	2	1	1	-	-	-	-
Dengue Fever	19	-	-	19	-	-	-
Infectious Hepatitis	257	-	-	2	87	168	-
Meningitis - Meningococcal	2	-	-	-	1	1	-
Dysentery - Bacillary	1	-	-	-	-	1	-
Dysentery, Unspecified Type	715	-	-	-	-	-	715

TABLE III-14

Ten Leading Causes Of Outpatient Visits In  
Marshalls District Hospital  
1974

<u>Diseases And Conditions</u>	<u>No. Of Patient Visits</u>
1. Other diseases and conditions	10,851
2. Other respiratory system	8,944
3. Influenza	4,632
4. Digestive system	4,366
5. Skin and substaneous tissue	3,220
6. Asthma	3,212
7. Eye	2,531
8. Intestinal parasites	1,915
9. Ear and Mastoid	1,496
10. Infectious diseases of intestinal tract	1,486

1975

1. Other diseases and conditions	12,727
2. Diabetes	8,850
3. Influenza (Flu)	6,331
4. Other respiratory system	5,702
5. Skin and substaneous tissue	4,183
6. Infectious diseases of intestinal tract	2,211
7. Digestive system	2,097
8. Asthma	2,075
9. Intestinal parasites	1,762
10. Pneumonia	1,073

1976

1. Other diseases and conditions	12,805
2. Skin and substaneous tissue	5,143
3. Other respiratory system	4,184
4. Intestinal parasites	2,009
5. Influenza (flu)	1,970
6. Infectious diseases of intestinal tract	1,940
7. Asthma	1,697
8. Scabies	1,395
9. Diabetes	1,208
10. Digestive system	1,334

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TABLE III-15

Ten Leading Causes Of Outpatient Visits In  
Ebeye District Hospital  
1974

<u>Diseases And Conditions</u>	<u>No. Of Patient Visits</u>
1. Other respiratory system	15,271
2. Other diseases and conditions	10,110
3. Skin and substaneous tissue	7,010
4. Digestive system	3,517
5. Ear and mastoid	2,462
6. Eye	2,335
7. Infectious diseases of intestinal tract	1,473
8. Intestinal parasites	1,347
9. Mumps	1,289
10. Asthma	898
<u>1975</u>	
1. Other respiratory system	8,565
2. Other diseases and conditions	5,147
3. Skin and substaneous tissue	4,242
4. Digestive system	1,706
5. Ear and Mastoid	1,170
6. Eye	1,051
7. Infectious diseases of intestinal tract	772
8. Diabetes	677
9. Intestinal parasites	473
10. Asthma	460
<u>1976</u>	
1. Other diseases and conditions	3,336
2. Other respiratory system	1,714
3. Infectious diseases of intestinal tract	985
4. Skin and substaneous tissue	591
5. Intestinal parasites	363
6. Diabetes	289
7. Influenza (flu)	221
8. Digestive system	209
9. Fungus	169
10. Asthma	148

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Table III-16

## DISPENSARY UTILIZATION BY CONDITION FOR WHICH CARE WAS SOUGHT (1976-77)

Total Number Dispensaries - Marshall District	63
Total Number Dispensaries Surveyed**	25
% of Total Dispensaries Surveyed	40%
Total projected yearly visits (surveyed dispensaries)	24,620
Total projected yearly visits (all dispensaries)	65,653
Average visits per dispensary per year	984.8

Condition/Symptom	Av. # Visits *** per Dispensary per year	% Total Visits per Dispensary per year
Worms	13.8	1.4%
Abdominal pain	44.58	4.5
Vomiting and nausea	13.36	1.4
Diarrhea	4.6	4.2
Gastroenteritis	16.0	1.6
Total GI tract related* conditions/symptoms	135.5	13.8
Upper respiratory infec.	83.7	8.5
Pneumonia	5.97	.6
Flu	32.0	3.3
Colds & sore throat	37.35	3.8
Cough	48.47	4.9
Total of all respiratory system related complaints	207.5	21.1
Non-infected wounds	67.25	6.8
Infected wounds	14.1	1.4
Burns	14.9	1.5
Total Accidents	96.25	9.7
Dental related visits	24.4	2.5
MCH related visits	45.0	5.3
Skin Conditions	230.7	23.4
Fish Poisoning	7.14	.7

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• • TABLE III-16 (a)

Ear conditions	23.0	2.3%
Eye conditions	29.7	3.0
Allergy	1.9	.2
Headaches	48.6	4.9
General aches	18.55	1.9
Backaches	18.17	1.8
Arthritis	13.57	1.4
Shortness of breath	5.32	.54
Chest pain	10.3	1.0
Fever	16.45	1.8
Asthma	18.9	1.9

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Other conditions	33.1	3.36%
------------------	------	-------

\*Figures include visits for amoeba, gastritis and other miscellaneous GI conditions for which incidence was not of sufficient frequency to break down.

\*\* See Appendix for a listing of surveyed dispensaries.

\*\*\* Average # of visits per 1,000 population.

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Table III- 17

TEN LEADING CAUSES OF DISPENSARY UTILIZATION - 1976-77  
MARSHALL DISTRICT.

Diseases	% of all visits	# of visits* per 1000 Population
Skin conditions	23.4%	1096
Respiratory system complaints	20.5	874
Gastrointestinal related	13.8	631
All accidents	9.7	375
MCH related	5.3	200
Headaches	4.9	237
Eye conditions	3.0	116
Dental related	2.5	127
Ear conditions	2.3	116
Asthma	1.9	62

\*Based on 21 dispensaries - excludes Laura and Tokewa, Airok and Santos for which no population estimates were available. Based on 1973 census figures.

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TABLE III-16 and III-17 (SUPPLEMENT)

Dispensaries surveyed to complete dispensary utilization data found in the Health Status Section. pp. 28 - 46. (Table III-16 and III-17)

Namorik

Mejit

Kaven, Malowlap

Wotje, Wotje

Jebal, Likiep

Ailuk, Ailuk

Ebon, Ebon

Ujae, Juae

Tokewa, Mili

Aur, Aur

Airok, Ailinglaplap

Ujeland, Ujeland

Mae, Namu

Bikini, Bikini

Jabat:

Lib

Santos, Kwajalein

Rongelap

Wotho

Laura

Jabwor, Jaluit

Arno, Arno

Kili Island

Uterik, Uterik

Lae, Lae

Table III-18

## TEN LEADING CAUSES OF INPATIENT VISITS IN EBÉYE SUB-HOSPITAL

<u>Cause Group</u>	<u>1974</u>	<u>Number of Discharges</u>
1. Normal Deliveries		273
2. Other and unspecified forms of dysentery		148
3. Symptoms, senility and ill-defined diseases		96
4. Asthma		78
5. Complications of pregnancy, delivery & puerperium		76
6. Amebiasis		74
7. Bronchitis and emphysema		65
8. Infections of skin and subcutaneous tissue		46
9. Gastritis and duodenitis		38
10. Influenza		37
 <u>1975</u>		
1. Normal Deliveries		295
2. Other and unspecified forms of dysentery		162
3. Bronchitis and emphysema		136
4. Symptoms, senility and ill-defined diseases		78
5. Pneumonia		63
6. Complications of pregnancy, delivery & puerperium		57
7. Acute Respiratory Infections		47
8. Asthma		47
9. Other diseases and conditions of eye		43
10. Influenza		42
 <u>1976</u>		
1. Normal Deliveries		291
2. Bronchitis Emphysema		143
3. Other and unspecified forms of dysentery		109
4. Asthma		74
5. Symptoms, senility and ill-defined diseases		68
6. Complications of pregnancy, delivery & puerperium		59
7. Acute Respiratory Infections		50
8. Accidental Poisoning		50
9. Amebiasis		48
10. Pneumonia		46

Source: Monthly Hospital Statistical Report, TT 210 pp. 4.

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TABLE III-20

DISTRICT: Majuro

NUMBER OF HOSPITAL DISCHARGES FOR TWENTY-FIVE  
DISEASES AND FOR CHILD-BIRTH RELATED HEALTH CARE,  
1974 - 1975 - 1976

1. Complications of pregnancy, delivery and puerperium (630-639, 640-646, 651-661, 670-678)
  2. Gastritis and duodenitis (535)
  3. Gastroenteritis and colitis, except ulcerative (561)
  4. Symptoms, senility and ill-defined disease (780-797)
  5. Non-transport accidents (E887-E929)
  6. Pneumonia (480-486)
  7. Other and unspecified forms of dysentery (007-009)
  8. Bronchitis and emphysema (489-492)
  9. Infections of skin and subcutaneous tissue (680-686)
  10. Asthma (493)
  11. Influenza (470)
  12. Other diseases of urinary system (590-599)
  13. Amebiasis (006)
  14. Arthritis and rheumatism, except rheumatic fever (710-718)
  15. Mental disorders (290-319)
  - Acute respiratory infections (460-465)
  16. Diseases of uterus and other female genital organs (620-629)
  17. Transport accidents (E807-E841)
  18. Injury purposefully inflicted by another person (E968-969)
  19. Other diseases of the nervous system (330-333, 340-358)
  20. Other helminthiasis (120-124, 127-129)
  21. Diabetes Mellitus (250)
  22. Other diseases of the respiratory system (500-508, 510-519)
  23. Hypertensive disease (400-405)
  24. Other diseases of esophagus, stomach and duodenum (530-534, 536-537)
  25. Diseases of ear and mastoid process (380-389)
- Child-Birth Related Health Care:

Normal deliveries (650)  
Premature births (01-05)  
Mature births (06-11)  
Birth weight not stated (99)

Total Newborn:

	1976	1975	1974
	106	102	93
	38	75	53
	4	15	1
	125	95	167
	48	68	73
	28	70	49
	101	114	193
	11	67	31
	65	49	47
	120	48	99
	68	161	95
	35	32	29
	36	33	36
	11	20	19
	10	4	8
	58	55	49
	30	28	45
	34	32	25
	7	7	13
	14	11	9
	35	14	16
	20	17	27
	4	5	21
	27	18	15
	5	10	18
	3	3	5
	410	395	400
	38	52	49
	387	347	360
	-	-	-
	425	403	409

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Data represent reporting as of: Sep 1977

TABLE III-21

DISTRICT: Ebeye

NUMBER OF HOSPITAL DISCHARGES FOR TWENTY-FIVE  
DISEASES AND FOR CHILD-BIRTH RELATED HEALTH CARE.  
1974 - 1975 - 1976

1. Complications of pregnancy, delivery and puerperium (630-639, 640-646, 651-661, 670-678)
  2. Gastritis and duodenitis (535)
  3. Gastroenteritis and colitis, except ulcerative (561)
  4. Symptoms, senility and ill-defined disease (780-797)
  5. Non-transport accidents (E887-E929)
  6. Pneumonia (480-486)
  7. Other and unspecified forms of dysentery (007-009)
  8. Bronchitis and emphysema (489-492)
  9. Infections of skin and subcutaneous tissue (680-686)
  10. Asthma (493)
  11. Influenza (470)
  12. Other diseases of urinary system (590-599)
  13. Amebiasis (006)
  14. Arthritis and rheumatism, except rheumatic fever (710-718)
  15. Mental disorders (290-319)
    - Acute respiratory infections (460-465)
  16. Diseases of uterus and other female genital organs (620-629)
  17. Transport accidents (E807-E841)
  18. Injury purposefully inflicted by another person (E968-969)
  19. Other diseases of the nervous system (330-333, 340-358)
  20. Other helminthiases (120-124, 127-129)
  21. Diabetes Mellitus (250)
  22. Other diseases of the respiratory system (500-508, 510-519)
  23. Hypertensive disease (400-405)
  24. Other diseases of esophagus, stomach and duodenum (530-534, 536-537)
  25. Diseases of ear and mastoid process (380-389)
- Child-Birth Related Health Care:
- Normal deliveries (650)
  - Premature birth (01-05)
  - Mature births (06-11)
  - Birth weight not stated (99)
  - Total Newborn:

1976	1975	1974
59	57	76
26	18	38
9	7	22
68	78	96
29	26	31
46	63	31
109	162	148
143	136	65
42	31	46
74	47	78
17	42	37
28	14	15
48	35	74
10	3	7
8	7	5
50	47	33
15	13	18
18	2	4
3	6	-
6	19	8
19	2	16
30	16	17
1	2	2
5	3	8
13	24	19
7	1	-
291	295	273
28	39	30
261	262	241
-	-	6
289	301	277

Data represents Reporting as of:

1013347

## IMMUNIZATION LEVELS - MARSHALL DISTRICT

Table III-22 - TOTAL MARSHALL DISTRICT

		All Immunization Completed				No Immunizations				Partial Immunizations				Total Needing Immunizations				Total Immunized by Vaccine Type										
Totals 1969-75	Birth Sample	Have 844's*	#	%		#	%		#	%		#	%	DPT	#	%	Polio	#	%	Measles	#	%	Rubella	#	%	Mumps	#	%
Marshall Dist.	7065	11053	2602	23.5	648	5.9	7803	70.6	8451	76.4	4113	37.2	4677	42.3	4261	38.5	3918	35.4	663	6.0								
<u>Group A</u>																												
DUD (Majuro Laura, Arno, Mili)	5564	1132	20.3	336	6.0	4166	74.9	4432	79.6	2167	38.9	2347	42.2	1836	33.0	1693	30.4	360	6.5									
<u>Group B</u>																												
Ebeye	1694	670	39.5	235	13.9	794	46.9	1024	60.5	899	56.1	920	54.3	745	44.0	690	40.7	169	10.0									
<u>Group C</u>																												
All Other Islands	3795	800	21.1	77	2.0	2918	76.9	2995	78.9	1069	28.2	1437	37.9	1716	45.2	1571	41.4	134	3.5									

Source: TTPI Dept. of Health Service, Division of Communicable Disease Control.

Data drawn from a survey conducted in 1975.  
(a repeat survey will be performed in 1978)

\* The higher number of children having 844's (a permanent Public Health record file) than enumerated in the birth sample (56.4% higher) can be interpreted as one indication of the degree to which births in the Marshalls are unreported to TTPI Dept. of Health Services, Division of Vital Statistics.

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TRUST TERRITORY OF THE PACIFIC ISLANDS

TABLE III-23

## SUMMARY OF IMMUNIZATION ASSESSMENT

BIRTH GROUPS: 1969 - 1974

Date: January 26, 1977

AREAS	IMMUNIZATIONS	HAVE 844'S	#	ALL COMPLETED IMMUNIZATIONS	#	%	PARTIAL IMMUNIZATIONS	#	%	TOTAL NEEDING IMMUNIZATIONS	#	%	TOTAL NUMBER IMMUNIZED BY VACCINE TYPE							
													DPT	POLIO	MEASLES	SUCCES				
Palau ..	2,255	2,100!	1,665	79	12	42%	428	20	435	21	1,838	88	1,851	88	1,845	88	1,494	71	262	12
Marianas	3,037	2,957	2,261	76	38	1	650	22	696	24	2,229	75	1,993	50	2,253	76	2,209	75	1,019	34
Panama	4,650	4,234	2,276	54	4	40%	1,954	46	1,958	46	2,826	67	2,874	68	2,599	61	2,347	55	520	12
Yap	1,455	1,531	765	50	73	5	693	45	766	50	1,189	78	1,090	7L	1,032	67	921	60	100	7
Trix	5,025	6,838	2,637	39	201	3	4,000	58	4,201	61	3,453	50	3,534	52	4,201	61	4,020	59	507	7
Marshalls	5,957	50,145	2,582	25	521	5	7,042	70	7,563	75	3,974	39	4,525	45	4,203	41	3,863	38	617	6
Total	22,572	27,805	12,186	44	849	3	14,770	53	15,619	56	15,509	56	15,367	55	16,130	58	14,854	53	3,025	11

#8 - Less than 1%.

Table IV-1  
Marshall Islands

HEALTH SERVICES EXPENDITURES - 1976

	Authorized Funds	Revenue	Obligation	Balance
District Hospital/Outer Islands	\$1,088,175	\$3,491.85	\$985,527.74	\$106,139.11
Medical Referral	378,700	-0-	434,496.06	(55,796.06)
Environmental Health	41,675	-0-	37,793.89	3,881.11
Dental Health	119,625	1,417.60	103,779.34	17,263.26
Recruit. Repat. / Home team	8,000	-0-	7,793.52	206.48
Recruit. Repat. / Home team	9,500	-0-	7,250.32	2,249.68

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TABLE IV-1 (a)  
MARSHALLS HEALTH EXPENDITURES - 1977

	Authorized	Revenue	Obligations	Balance
Hospital & Dispensaries	\$744,550	\$29,564	\$824,140	(\$50,026)
Medical Referrals	330,000	7,00	646,426	(316,419)
Environmental	23,600	-0-	21,175	1,885
Dental	78,850	2,110	87,354	(6,394)
Medical Supply	202,600	7,489	181,551	(28,538)
TOTAL-----	\$1,379,600	\$39,169	\$1,761,900	(\$349,131)
<u>EBEYE:</u>				
Hospital & Dispensaries	\$191,500	\$29,049	\$187,147	\$33,402
Medical Referrals	100,000	-0-	135,617	(35,617)
Environmental	2,200	-0-	1,604	596
Dental	6,600	964	5,960	1,604
Medical Supply	43,300	162	41,023	2,439
TOTAL-----	\$343,600	\$30,175	\$371,352	\$2,423

SOURCE: Trust Territory Department of Finance

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TABLE IV-2  
HEALTH SERVICES BUDGET - Marshalls

<u>Marshalls Health Budget</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
	\$1,723	\$1,713	\$1,713

Activity Breakdown:

Hospitals & Dispensaries	\$ 919	\$ 900	\$1,076
Medical Referrals	452	436	440
Environmental Health	21	21	21
Medical Supply	245	270	90
Dental Services	86	86	86

FIVE YEAR PROJECTIONS:

	<u>1979</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>
Hospitals & Dispensaries	\$1,076	\$1,052	\$1,000	\$947	\$841
Medical Referrals	440	423	402	381	338
Environmental Health	21	20	19	18	16
Medical Supply	90	86	82	78	70
Dental Services	86	83	79	75	67
TOTAL BUDGET-----	\$1,713	\$1,661	\$1,579	\$1,496	\$1,327

SOURCE: U.S. Department of Interior Budget Justifications, FY 1979

TABLE IV-3

## 1977 FEDERAL PROGRAM GRANTS

	<u>TT Federal Health Grants</u>	<u>Marshalls Allocation</u>
<b>COMPREHENSIVE PUBLIC HEALTH</b>		
Formula Grant	\$384,600	\$50,470
Hypertensive Grant	49,789	-0-
Mental Health	73,300	9,200
Crippled Childrens Services	173,400	-0-
Family Planning	30,000	21,000
Maternal & Child Health	575,300	73,500
Alcohol Grant	77,180	9,670
Disease Control	22,174	3,870
Venereal Disease	22,608	4,060
Immunization (1976)	109,870	19,700
Drug Abuse	29,089	3,600
Emergency Medical Service	67,700	-0-
SHPDA	241,269	-0-
Cancer Detection	158,171	19,950
Environmental Protection	139,000	17,500
Dental Manpower	58,855	4,830
Health Assistant Retraining	117,500	14,800
Water Pollution Control & Public Water Systems Supervisor	318,755	8,300
<b>TOTAL-----</b>	<b>\$2,603,750</b>	<b>\$260,450</b>

SOURCE: Health Services Federal Programs Coordinator

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TABLE IV-4

## STAFFING PATTERN FOR DISTRICT HOSPITAL MAJURO, MARSHALL ISLAND

Units	#Beds	Type of Staff	Number	am	pm	Night	Relief
Administration		District Chief Nurse Clinical Sup. & Assist. District Chief Nurse	1 1				
Anesthetist Nurses			1	vacancy			
Shift Supervisor		Head Nurse Staff Nurse Practical Nurse Health Assistant	4	1	1	1	1
Surgery Central Supply Delivery Room Recovery Room	2			1 vacancy 1 vacancy 2	0 0		
Surgical Ward	8	Head Nurse Staff Nurse Practical Nurse Health Assistant	1 2 3 1	vacancies vacancies vacancies vacancy	0 0 0 1	0 0 0 1	0 0 0 1
Hematologist Room	10	Nurse Specialist Head Nurse Staff Nurse Practical Nurse Health Assistant	1 1 1 1	0 vacancy vacancy vacancy	0 0 0 0	0 0 0 0	0 0 0 1
Medical A & B	24& 24	Head Nurse Staff Nurse Practical Nurse Health Assistant	1 1 1 1	vacancy vacancy vacancy vacancy	0 1 1 0	0 0 0 0	1 0 1 0
Obstetrical Ward & Nursery. Cribs--	12	Head Nurse Staff Nurse Practical Nurse	1 2 2	vacancy vacancies vacancies	0 1 1	0 0 1	1 0 0

TABLE IV-4 (a)

Pediatric cribs--	2	Head Nurse	1 vacancy	0	0	0
	10	Staff Nurse	1 vacancy	0	0	0
		Practical Nurse	3 vacancies	0	0	1
		Health Assistant	3 vacancies	0	0	0
Rehabilitation Ward	18	Head Nurse	1 vacancy	0	0	0
		Staff Nurse	2 vacancies	0	0	0
		Practical Nurse	2 vacancies	0	0	0
		Health Assistant	1 vacancy	1	0	1
Outpatient & Emergency		Head Nurse	1 vacancy	0	0	0
		Staff Nurse	1 vacancy	0	0	0
		Practical Nurse				
		Health Assistant				
Public Health		P.H. Supervisor(1)				
		Field Supervisor (1)	3 vacancies			
		Head Nurse (2)	1 vacancy			
		Staff Nurse	3 vacancies			
		Practical Nurse (10)				
Ambulance driver (2)						
Ward Clerk (0)						
District Chief Nurse (1)		Clinical Supervisors (1)				
Shift Supervisors (4)		Public Health Supervisors (1)				
Field Supervisor (1)		Nurse Anesthetist (1)				
Nurse Specialist (1)		Head Nurses (3)				
Head Nurses (3)		Staff Nurses (6)				
Practical Nurses (9)		Health Assistants (13)				
P.H. Practical Nurses (10)		Practical Nurses (9)				
Health Assistants (6)		Head Nurse (7) vacancies				
Staff Nurse (10) vacancies		Practical Nurses (12) vacancies				

TABLE IV-5

Sept. 1977

Name	Title	Date of Birth	Date of Hire	PL	Bi-Weekly	Bi-Monthly	Soc. Secn:
Peter, Jeita (Mrs.)	Dist. Chief Nurse	02-27-28	07-01-51	21/5	324.64	8,440.64	04-02807
Andrike, Item	Supervisor Nurse	02/29-33	10-7-56	20/4	283.52	7,371.52	04-02809
Leviticus, Millie	Supervisor Nurse	01-27-30	07-1-51	19/4	264.95	6,888.92	04-02811
Helmi, Juanita	Supervisor Nurse	07-20-30	02-13-56	19/4	264.92	6,888.92	04-02819
Riklon, Grace	Supervisor Nurse	01-28-27	08-15-55	19/3	247.68	6,439.68	04-20792
Antolok, Cathellina	Supervisor Nurse	03-04-45	12-13-63	19/2	231.44	6,017.44	04-02821
Lejjena, Dakjen	Head Nurse	08-29-30	07-01-51	16/3	202.16	5,256.16	04-02812
Paul, Neftata	Head Nurse	03-15-32	11-20-60	16/1	176.56	4,590.56	04-02816
Bingham, Hemiko	Specialized Nurse	06-25-42	10-05-71	16/4	215.32	6,624.32	04-14781
Bellu, Florina	Head Nurse	04-17-47	07-11-71	16/3	202.16	5,256.16	04-20964
Schmidt, Ernest	Head Nurse	03-04-45	12-13-45	16/3	202.16	5,256.16	04-02822
Bien, Christiana	Staff Nurse III	01-03-47	09-02-59	14/4	188.96	4,912.95	04-14394
Barau, Rina	Staff Nurse III	02-28-26	09-16-56	14/3	176.56	4,590.56	04-99914
Nikajle, Jordan	Staff Nurse II	05-26-49	09-17-72	13/3	165.04	4,291.04	04-11920
Harris, Ruth	Supervisor PH Nurse	03-25-31	09-17-51	20/5	303.36	7,887.36	04-02803
Aralong, Torha	Supervisor Field Nurse	04-12-35	05-22-55	19/4	246.96	6,888.96	04-03265
Laukon, Chiako	Practical Nurse II	02-22-42	12-13-53	6/7	134.72	3,502.72	04-02829
Tartios, Alicy	Practical Nurse II	11-19-39	12-13-63	6/6	125.92	3,273.92	04-02824
August, Annot	Practical Nurse II	04-24-45	08-73-70	6/5	117.68	3,059.68	04-02839
Heine, Esra	Practical Nurse II		10-17-74	6/8	144/16	3,748.16	04-20701
Elaisa, Neilang	Practical Nurse II	08-24-31	03-10-56	6/5	117.68	3,059.68	04-02861
Lang, Telbin	Practical Nurse II	03-14-35	07-21-65	6/5	117.68	3,059.68	04-02830
Langrine, Helpin	Practical Nurse II	05-18-44	01-23-70	6/4	110.00	2,860.00	04-11983
Kiona, Tinar	Practical Nurse II	01-17-45	05-9-65	6/6	125.92	3,273.92	04-02828
Lavin, Cathleen	Head Nurse		12-23-31	12-9-55	16/3	202.16	5,256.16
Riklon, Albina	Practical Nurse II	06-09-52	02-6-75	6/2	96.08	2,498.08	04-26248
* Enne, Elizabeth	Practical Nurse II	02-16-47	02-16-75	6/2	96.08	2,498.08	04-05333
* Anten, Altina	Practical Nurse I	06-16-53	02-16-75	3/2	78.40	2,038.40	04-31647
Juralong, Dafsy	Practical Nurse I	12-21-45	02-16-75	3/2	78940	2,038.40	04-02788
Joash, Arabella	Practical Nurse II	05-08-50	02-16-75	6/2	95.08	2,498.08	04-23634
Abija, Second	Practical Nurse I	02-14-52	10-06-76	2/3	78-40	2,038.40	04-31678
* Bobtak, Berney	Practical Nurse I	06-01-46	02-16-75	3/2	78.40	2,038.40	04-06208
Andrike, Temsa	Practical Nurse I	09-03-53	08-21-75	3/2	78.40	2,038.40	04-25344
Andrika, Steyenson	Practical Nurse I	04-05-54	06-08-75	3/2	78.40	2,038.40	04-20414
Peter, Haggie	Practical Nurse I	03-14-50	06-08-75	3/2	78.40	2,038.40	04-31646
Soaz, James	Practical Nurse I			3/2	75.40	2,032.40	
Caleb, Kary	Head Nurse	02-27-46	06-06-75	16/2	168.96	4,912.96	

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TABLE IV-5 (a)

<u>NAME</u>	<u>Title</u>	<u>Date of Birth</u>	<u>Date of Hire</u>	<u>PL</u>	<u>B-Weekly</u>	<u>P-Annually</u>	<u>Soc.Sec.</u>
Hellan, Mineko	Practical Nurse I	12-03-44	04-16-72	3/2	78.40	2,038.40	04-11982
Michael, Mina	Practical Nurse I	03-01-41	09-02-74	3/2	78.40	2,038.40	04-05312
Alik, Almi	Staff Nurse	08-15-047	03-27-77	12/1	134.72	3,502.72	04-02794
Minor, Kathy	Practical Nurse II	07-05-44	05-17-64	6/6	125.92	3,273.92	04-02827

TABLE IV-6  
SUMMARY OF IN-PATIENT SERVICES - MARSHALL DISTRICT

Month	Daily Census			Total Census Days	Occupancy		In-Patients Treated	Disch.	Days Care	Av. Length of Stay
	Min.	Max.	Ave.		Hosp. Beds	% of Occup.				
1976 January	59	78	69	2,138	88	78.4	226	163	1577	10
1976 February	55	82	71	2,062	88	80.7	236	165	1431	9
1976 March	55	78	69	2,142	88	78.4	222	170	3639	21
1976 April	53	74	62	1,866	88	70.5	251	194	2741	14
1976 May	55	89	70	2,170	88	79.5	215	137	1643	12
1976 June	72	100	84	2,532	88	95.5	211	152	1554	10
1976 July	90	109	102	3,164	88	115.9	320	222	1628	7
1976 Aug.	105	126	115	3,579	88	130.7	245	172	1589	9
1976 Sept.	102	120	111	3,341	88	126.1	215	157	2108	13
1976 Oct.	106	127	115	3,578	88	130.7	216	144	1840	13
1976 Nov.	52	75	64	1,917	88	72.7	203	146	3273	22
1976 Dec.	54	75	63	1,953	88	71.6	240	183	2504	14
1977 Jan.	45	66	57	1,770	88	64.8	203	138	1037	8
1977 Feb.	55	80	68	1,918	88	77.3	223	168	1560	9

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TABLE IV-7

## SUMMARY OF IN-PATIENT SERVICES - EBEYE DISTRICT

Month	Daily Census			Total Census Days	Occupancy		In- Patients Treated	Disch	Days Care	Av. Length of Stay
	Min.	Max.	Ave.		Hosp. Beds	% of Occup.				
1976 January	10	22	16	489	22	72.7	141	123	450	4
1976 February	12	26	20	567	22	90.9	132	114	528	5
1976 March	8	28	17	515	22	77.3	148	140	637	5
1976 April	8	21	13	400	22	59.1	120	104	346	3
1976 May	8	21	15	477	22	68.2	135	125	498	4
1976 June	6	20	15	450	22	68.2	108	89	417	5
1976 July	12	24	19	583	22	86.4	167	148	532	4
1976 Aug.	10	23	18	573	22	81.8	146	124	621	5
1976 Sept.	11	26	19	560	22	86.4	159	141	530	4
1976 Oct.	13	27	20	607	22	90.9	169	152	548	4
1976 Nov.	11	24	18	543	22	81.8	117	103	544	5
1976 Dec.	7	17	12	376	22	54.5	100	88	477	5
1977 Jan.	8	23	17	525	22	77.3	110	92	475	5
1977 Feb.	n/a	-	-	-	n/a	-	-	-	-	-

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TABLE IV-8 DATA ON OPERATIONS, MARSHALLS HEALTH SERVICES, 1976-1977

<u>AUGUST, 1977</u>	Local - General -
Appendectomy (3), Cone Biopsy (4), Hemorrhoid (3), Hernia (1), Ligation (3).	
<u>JULY, 1977</u>	Local - 15 General - 12
Amputation (1), Appendectomy (5), D & C (2), Hemorrhoid (2), Ligation (3).	
<u>JUNE, 1977</u>	Local - 10 General - 21
Appendectomy (6), Debridement under anesthesia (6), D & C (5), Hernia (1), Ligation (2), Thyroidectomy (1).	
<u>MAY, 1977</u>	Local - 37 General - 27
Amputation (1), Appendectomy (5), Cone Biopsy (4), Debridement under anesthesia (7), D & C (4), Hemorrhoid (2), Ligation (4).	
<u>APRIL, 1977</u>	Local - 19 General - 10
Amputation (1), C. Section (1), D & C (3), Hemorrhoid (2), Hysterectomy (2), Ovarian Cyst (1).	
<u>MARCH, 1977</u>	Local - 17 General - 12
Appendectomy (2), C. Section (1), D & C (4), Hernia (1), Ligation (2), Vasectomy (2).	
<u>FEBRUARY, 1977</u>	Local - 12 General - 16
Appendectomy (3), Cholecystectomy (1), D & C (2), Hernia (1), Hydrocele (1), Ligation (6), Lipoma (2).	
<u>JANUARY, 1977</u>	Local - 8 General - 12
Appendectomy (3), D & C (2), Fistula (2), Hemorrhoid (2), Inguinal Hernia (1), Ligation (2).	
<u>DECEMBER, 1976</u>	Local - 5 General - 10
Appendectomy (1), D & C (1), Hemorrhoid (1), Hysterectomy (4), Ligation (2), Ovarian Cyst (1).	

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<u>NOVEMBER, 1976</u>	Local - 6 General - 15
Amputation (1), Appendectomy (3), C. Section (2), D & C (2), Exploratory (2), Fistulectomy (3), Ligation (2).	
<u>OCTOBER, 1976</u>	Local - 8 General - 10
Appendectomy (1), D & C (1), Hemorrhoid (2), Hysterectomy (4), Ligation (2), Ovarian Cyst (1).	
<u>SEPTEMBER, 1976</u>	Local - 13 General - 10
Amputation (1), Appendectomy (3), D & C (1), Hernia (1), Hysterectomy (2), Ligation (1), Thyroidectomy (1).	
<u>AUGUST, 1976</u>	Local - 12 General - 26
Amputation (2), Appendectomy (8), C. Section (2), Compound Fracture (1), D & C (5), Hemorrhoid (3), Ligation (5).	
<u>JULY, 1976</u>	Local - 7 General - 14
Appendectomy (2), D & C (3), Hemorrhoid (4), Ligation (2), Vasectomy (3).	
<u>JUNE, 1976</u>	Local - 15 General - 25
Appendectomy (2), C. Section (1), D & C (5), Hernia (6), Hysterectomy (4), Ligation (4), Thyroidectomy (3).	
<u>MAY, 1976</u>	Local - 18 General - 8
Amputation (1), Appendectomy (4), D & C (1), Hernia (1), Ligation (1).	
<u>APRIL, 1976</u>	Local - 10 General - 27
Appendectomy (2), C. Section (1), Cholecystectomy (2), Hernia (1), Hysterectomy (1), Ligation (14), Thyroidectomy (3).	
<u>MARCH, 1976</u>	Local - 40 General - 12
Appendectomy (3), C. Section (1), D & C (1), Hernia (2), Ligation (5).	
<u>FEBRUARY, 1976</u>	Local - 14 General - 23
Amputation (BK) (3), Appendectomy (5), Cystotomy (3), D & C (2), Hernia (4), Ligation (5).	
<u>JANUARY, 1976</u>	Local - 15 General - 25
Appendectomy (5), C. Section (2), D & C (5), Hernia (3), Hysterectomy (2), Kidney (2), Thyroidectomy (1), Thyroid Ligation (4).	

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## SUMMARY OF T.T. REFERRALS BY SERVICES

Jan.-Aug. 1977

TABLE IV-9

I. REFERRALS BY SERVICE	No. Cases	% of Total	Percent by District				Percent to Hospital Trip.			Age Mean
			Patau	Yap	N. Ht.	Truk	Ponape	Marsh.	Queens	
<b>Medicine</b>										
Cardiology	27	10.5	7(25.9)	1(3.7)	9(33.3)	5(18.5)	0	5(18.5)	14(51.8)	5(18.5)
Gastrointestinal	27	10.5	1(3.7)	1(3.7)	13(48)	5(18.5)	6(22.2)	5(18.5)	22(81)	3(11)
Endocrine	11	4.3	1(9.1)	0	2(18)	4(36.4)	0	4(36.4)	2(18.2)	9(81.8)
Pulmonary	6	2.3	2(33.3)	2(16.6)	1(16.6)	2(16.6)	1(16.6)	0	5(83.3)	0
Surgery	22	8.6	5(22.7)	1(4.5)	8(36.4)	3(13.6)	1(4.5)	4(18.2)	6(27.3)	8(36.4)
Orthopedics	31	12.1	2(6.45)	7(22.6)	10(32.3)	2(6.4)	2(6.5)	8(25.8)	17(54.8)	11(35.5)
Neurology	25	9.8	5(20)	6(24)	10(40)	1(4.0)	1(4)	2(8)	22(88)	2(8)
Urology (Inc. Renal)	28	10.9	6(21.4)	1(3.6)	9(32)	0	5(17.5)	7(25)	9(32)	11(39)
ENT	23	9.0	2(8.6)	2(8.6)	11(48)	4(17.4)	2(8.6)	2(8.6)	13(56.5)	7(30)
Ophthalmology	17	6.6	2(11.7)	3(17.6)	10(58.8)	2(11.8)	0	0	17(100)	0
Dermatology	11	9.3	0	2(18.2)	7(63.6)	1(9.1)	1(9.1)	0	11(100)	0
Pediatrics	8	3.1	0	0	3(37.2)	2(25)	1(12.5)	2(25)	5(62.5)	3(37.5)
OB/Gyn.	14	5.5	0	3(21)	3(21)	1(7.1)	2(14.3)	5(35.7)	6(42.8)	7(50)
I.C.U.	8	3.1	0	0	8(100)	0	0	8(100)	0	0
<b>II. OTHER SPECIFIC CONDITIONS</b>										
Carcinomas	34	13.2	3(8.8)	2(5.8)	4(11.7)	9(26.5)	5(14.7)	11(32.4)	8(24)	23(67)
Cardiovascular Diseases	28	10.9	7(25)	3(10.7)	8(28.5)	5(17.8)	0	5(17.8)	13(46)	8(28)
Injuries & Trauma	18	7.0	2(11.1)	1(5.5)	9(50)	2(11.1)	3(16.6)	1(5.5)	12(66.6)	5(27.7)
Burn	3	1.2	1(33.3)	1(33.3)	1(33.3)	0	0	0	100	0

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IV-13 - RIFLEMAN LADY IN SPITE : C. 1977 FOR THE 1977 DISTRICT OF COLUMBIA SHELLS ASSOCIATION

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DISEASE OR CONDITION		SEX	AGE	PLACE OF REFERRAL	PATIENT TRAVEL COST	ATTENDANT TRAVEL COST	TOTAL TRAVEL COST	MEICAL COSTS	TOTAL COSTS
Laryngeal Tumor	v	F	49	Tr pier	783.00	1	783.00	653.00	1,436.00
Ca. of Liver	v	M	55	Tr pier	1,539.00	1	1,539.00	653.00	2,192.00
Ca. of Cervix	v	F	43	Tr pier	783.00	2	783.00	653.00	1,436.00
Head Injury	v	F	22	Tr pier	3,749.00	2	3,749.00	607.00	4,356.00
Cyst Lt. Pelvis	v	M	48	Tr pier	783.00	1	783.00	653.00	1,436.00
Urinary Blad.	v	E	20	Tr pier	783.00	1	783.00	553.00	1,336.00
Centriloculartrial Shunt	v	F	6	Tr pier	255.00	1	255.00	262.00	517.00
Va. Shunt	v	M	1	Tr pier	1,039.00	1	1,039.00	639.00	1,678.00
Vascular Lesion	v	F	33	Tr pier	783.00	1	783.00	653.00	1,436.00
Kidney	v	F	51	Tr pier	180.00	1	180.00	656.40	836.40
Early Urinaria	v	F	29	Tr pier	783.00	1	783.00	653.00	1,436.00
Kidney Construction	v	M	31	Tr pier	783.00	1	783.00	653.00	1,436.00
Adeno-Carcinoma	v	F	43	Quon	783.00	1	783.00	653.00	1,436.00
Ca. Cervix	v	F	46	Tr pier	783.00	1	783.00	653.00	1,436.00
Rheumatic H. Disease	v	M	52	Tr pier	783.00	1	783.00	653.00	1,436.00
Cerebellar Hernia	v	F	38	Tr pier	783.00	1	783.00	653.00	1,436.00
Ortho. Problem Leg	v	F	29	Tr pier	783.00	1	783.00	653.00	1,436.00
Chario Lt.	v	E	60	Tr pier	783.00	1	783.00	653.00	1,436.00
Breast Tumor	v	F	30	Tr pier	783.00	1	783.00	653.00	1,436.00
Urology for Plastic Surgery	v	F	37	Tr pier	783.00	1	783.00	653.00	1,436.00
Ca. Spine	v	F	60	Tr pier	783.00	1	783.00	653.00	1,436.00
Breast Tumor	v	F	Internal Uterine Hemorrhage	Tr pier	1,295.00	1	1,295.00	1,632.00	3,927.00
Cervix Duct Obstruct	v	F	38	Tr pier	513.00	2	513.00	513.00	1,026.00
Extensive Ulcer foot	v	F	45	Tr pier	2,995.00	2	2,995.00	936.00	3,931.00
Cervic Invasive	v	F	57	Tr pier	783.00	1	783.00	653.00	1,436.00
Keratinizing,cell Car	v	F	Undetermined	Tr pier	783.00	1	783.00	653.00	1,436.00
Gangrene Tr. Hand	v	F	9	Tr pier	1,743.00	1	1,743.00	353.00	2,096.00
Prosthetic-fitting	v	F	9	Tr pier	1,143.10	1	1,143.10	353.00	1,496.10
Stump	v	M	70	Tr pier	783.00	1	783.00	653.00	1,436.00
Invasive squamous cel	v	F	35	Tr pier	563.00	1	563.00	610.00	1,173.00
Ca. of Cervix	v	F	2 nos.	Tr pier	923.00	1	923.00	553.00	1,476.00
Fistula in Vagina	v	F	2 nos.	Tr pier	563.00	1	563.00	610.00	1,173.00
Cyanotic Heart Dis.	v	F	2 nos.	Tr pier	563.00	1	563.00	610.00	1,173.00

WATER SHED		REFERRALS FROM DISTRICT CENTER TO LOCATIONS OUTSIDE DISTRICT				DISTRICT Marshall's	
DISEASES OR CONDITIONS	AGE	PLACE OF REFERRAL	PATIENT SERV.	ATTENDANT SERV.	TOTAL TRAVEL COST	MEDICAL COSTS	TOTAL COSTS
Rupture urinary adder		F Tripler	563.00		563.00	5,610.00	6,173.00
Osteomyelitis C-V	44	M Tripler	563.00		563.00	5,610.00	6,173.00
Osteomyelitis rt. hip joint.	38	F Tripler	1,067.00	609.00	1,676.00	5,610.00	7,286.00
Pulmonary neoplasm	43	M Tripler	563.00		563.00	5,610.00	6,173.00
Renal shut down complicated by Pul- monary Embolism	39	F Tripler	923.00	789.00	1,712.00	5,610.00	7,322.00
Kidney failure / flexor digitorum / da rt. finger 23	33	F Tripler	563.00	660.00	1,223.00	5,610.00	6,833.00
Ca. Cervix	45	H Tripler	803.00		803.00	5,610.00	6,413.00
Subdural Hematoma	8mos.	F Tripler	803.00		803.00	1,870.00	2,673.00
Leukopenia Etiology	45	F Tripler	1,070.00	709.00	923.00	5,340.00	6,263.00
Heart Block	62	H Tripler	653.00		1,779.00	5,340.00	7,119.00
Kidney disease (complication)	45	M St. Fran.	1,566.00	758.00	2,324.00	3,740.00	6,064.00
Hydrocephalus	1	F Tripler		563.00	563.00	5,610.00	6,173.00

## OUTLAYS - TT-WIDE MEDICAL REFERRALS

ACTIVITY	FY 75	FY 76	FY 77	FY 78
H.Q.	\$797,273	\$97,770	\$85,369	\$100,000
Marianas		316,868	307,973	225,000
Palau		89,939	160,742	80,000
Yap		94,217	129,458	75,000
Truk		115,782	267,002	110,000
Ponape		324,082	175,737	100,000
Kosrae		-0-	17,576	-0-
Marshalls		434,496	684,819	435,900
TOTAL----	\$797,273	1,473,154	1,828,676	1,125,900

1. FY 75 medical referral funds were centralized at Headquarters.
2. Kosrae included
3. Allotments according to FY 78 budget.

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TABLE IV-15  
DISPENSARY FACILITIES INVENTORY - MARSHALLS DISTRICT - July 1977

	Location of Dispensary (Island or Municipality)	Construc. Funded by:	Construc. Material	Date of Construc.	Typhoon Proof?	# of Inpt. Beds	Floor Space for Beds	Type of Communic. System	# of Health A. Offs	(11)	(12)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1	Mejit Utrik	Nitipla Local Council	Concrete Loc. Mater.	1974 1949	X	3	16x24	SSB	1											
2	Aituk	Comm. Develop.	Concrete	1972	X	2	21x24	SSB	1											
3	Enejelar	Local Council	Loc. Mater.	1970	X	3	36x36	SSB	1											
4	Likiep	Local Council	Wood Frame	1946	X	0	--	None	1											
5	Jebal	Nitipla Local (Proposed)	Concrete	1970	X	2	24x24	SSB	1											
6	Wotje*	Congress/Micro	Concrete	1973	X	6	72x72	SSB	1											
7	Ormej	Congress/Micro	Aluminum	1974	X	1	12x12	None	1											
8	Nibun	Local Council	Loc. Mater.	1975	X	0	--	None	1											
9	Kaben	Comm. Develop.	Concrete	1970	X	4	36x36	SSB	1											
10	Jang	Comm. Develop.	Concrete	1970	X	4	36x36	None	1											
11	Wolot	Comm. Develop.	Concrete	1970	X	4	36x36	None	1											
12	Torva	Japanese Govt.	Concrete	1935	X	0	--	SSB	1											
13	Airok	Local Council	Loc. Mater.	1961	X	3	20x12	SSB	1											
14	Aur	Nitipla Local Council	Concrete	1970	X	3	36x36	None	1											
15	Tobal	Local Council	Loc. Mater.	1971	X	1	14x20	SSB	1											
16	Laura	Local Council	Loc. Mater.	1945	X	3	16x20	SSB	1											
17	RongRong	Hill Burton	Aluminum	1977	X	1	12x16	SSB	1											
18	Ajetake	Hill Burton	Aluminum	1977	X	1	12x16	None	1											
19	Arno	TT Government	Aluminum	1971	X	2	20x24	SSB	1											
20	Ulien	Hill Burton	Aluminum	1977	X	1	12x16	None	1											
21	Bikares	Local Council	Loc. Mater.	1968	X	0	--	None	1											
22	Tutu	Local Council	Loc. Mater.	1958	X	0	--	None	1											
23	Langar	Local Council	Loc. Mater.	1970	X	0	--	None	1											
24	Malel	Local Council	Loc. Mater.	1976	X	0	--	SSB	1											
25	Ine	TT Government	Aluminum	1970	X	0	--	SSB	1											
26	Mil	Local Council	Loc. Mater.	1962	X	1	12x16	SSB	1											
27	Nallu	Local Council	Loc. Mater.	1973	X	1	12x20	None	1											
28	Tokwra	Local Council	Loc. Mater.	1974	X	1	12x12	None	1											
29	Lukumor	Local Council	Loc. Mater.	1961	X	1	12x12	None	1											
30								SITE												

\*Has 1 dental chair & has 1 pedex

TABLE IV-15 (continued)  
DISPENSARY FACILITIES INVENTORY - MARSHALLS DISTRICT - July 1977

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Location-of-Dispensary (Island-or-Municipality)	Construc- Funded By:	Construc- Material	Date-of- Construct.	Typhoon- Proof?	# of Inpt. Beds	Floor- Space-for Beds	Type-of- Commun. System	# of Health A- Off*		
1 Frejet	Comm. Develop.	Concrete	1972	X	4	32x48	S3B	1		
2 Jaluit	Local Council	Loc. Mater.	1960	X	0		None	1		
3 Hejrunok	Local Council	Loc. Mater.	1968	X	0		None	1		
4 Naamej	Local Council	Loc. Mater.	1965	X	0		None	1		
5 Hejatto	Local Council	Loc. Mater.	1971	X	1	8x12	None	1		
6 Imurej	Local Council	Loc. Mater.	1976	X	1	8x12	S3B	1		
7 Imwej	Local Council	Loc. Mater.	1972	X	0		None	1		
8 Jabwor*	Congress/Micro.	Concrete	1970	X	6	72x72	S3B	1	*Has electric power, dental	
9 Kili	Local Council	Wood	1973	X	1	12x16	S3B	1	1 chair, 1 Medex.	
10 Nanorik	Comm. Develop.	Concrete	1974	X	3	12x12	S3B	1		
11 Ebon*	Local Council	Wood	1945	X	3	36x36	S3B	1	X *HAS 1 Medex	
12 Tolca	Comm. Develop.	Loc. Mater.	1973	X	3	34x36	S3B	1		
13 Enekolon	Local Council	Wood	1974	X	0		None	1	X	
14 Jah	Local Council	Wood	1956	X	3	24x24	S3B	1		
15 Airok*		Wood	1973	X	3	36x36	S3B	1	X *HAS 1 Medex	
16 Buoj	Comm. Develop.	Wood	1974	X	2	24x24	None	1		
17 Hoja	Local Council	Loc. Mater.	1973	X	0		S3B	1		
18 Aenkan (Proposed)										
19 Jobat	Local Council	Wood	1967	X	1	12x12	S3B	1		
20 Namu	Comm. Develop.	Concrete	1965	X	3	36x36	S3B	1		
21 Maikon*	Comm. Develop.	Concrete	1965	X	3	36x36	S3B	1		
22 Mae	Local Council	Wood	1960	X	1	12x16	S3B	1		
23 Lip	Local Council	Wood	1967	X	1	4x12	None	1		
24 Santo	Local Council	Loc. Mater.	1972	X	1	4x12	S3B	1		
25 Ebaton	Local Council	Concrete	1974	X	4	32x48	S3B	1		
26 Uiae	Comm. Develop.	Concrete	1974	X	2	12x12	S3B	1		
27 Lae	Comm. Develop.	Concrete	1973	X	1	12x12	S3B	1		
28 Otto	Comm. Develop.	Wood	1970	X	1	12x12	S3B	1	*Has electric power	
29 Bikini*	Local Council	Wood	1959	X	4	32x48	S3B	1		
30 Ronglap	A.E.C.	Wood	1973	X	1	12x12	S3B	1		
31 Ujiang	M.C.A.	Wood	1977	X	1	2x6	S3B	1		
32 Tebtan	Local Council	Wood								

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TABLE IV-16

## Health Manpower Inventory

Marshall Islands

	Position	Grade	Serial Range	Date of Birth	Sex	Citizenship	Where Trained	Educational Background-Medical Personnel Only			Source of Funding (Fed/TT)	Duty Station
								Certificates	When Trained	Degrees		
Chief Dist. Dental Services		15707.38	8/26/27	M	X	Guam/Fiji	47-51	Certificate		X	TT	Majuro
Dental Officer II		13718.64	5/17/27	M	X	Guam/Fiji	48-52	Certificate		X	TT	Majuro
Dental Officer II		12821.12	5/12/30	M	X	"	"	49-54	Certificate	X	TT	Majuro
Dental Officer II		12821.12	3/25/33	M	X	"	"	49-54	Certificate	X	TT	Ebeye
Dental Nurse II		4291.04	11/19/45	F	X	Majuro	62-64			X	TT	Majuro
Dental Nurse II		4291.04	10/24/45	F	X	Majuro	62-64			X	TT	Majuro
Dental Nurse II		3273.92	7/28/49	M	X	Palau	72-74	Diploma			TT	Majuro
Dental Nurse II		3273.92		M	X	Palau	74-76	Diploma			Ceta	Ebeye
Dental Assistant				M	X	Ebeye					MCH	
Dental Lab Technician		4291.04	2/24/25	M	X	Guam, USN				X	TT	Majuro
Dental Lab Technician		4291.04	5/8/27	M	X					X	TT	Majuro

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TABLE IV-17  
PERCENT OF EXTRACTING, FILLINGS & CROWN SERVICES -

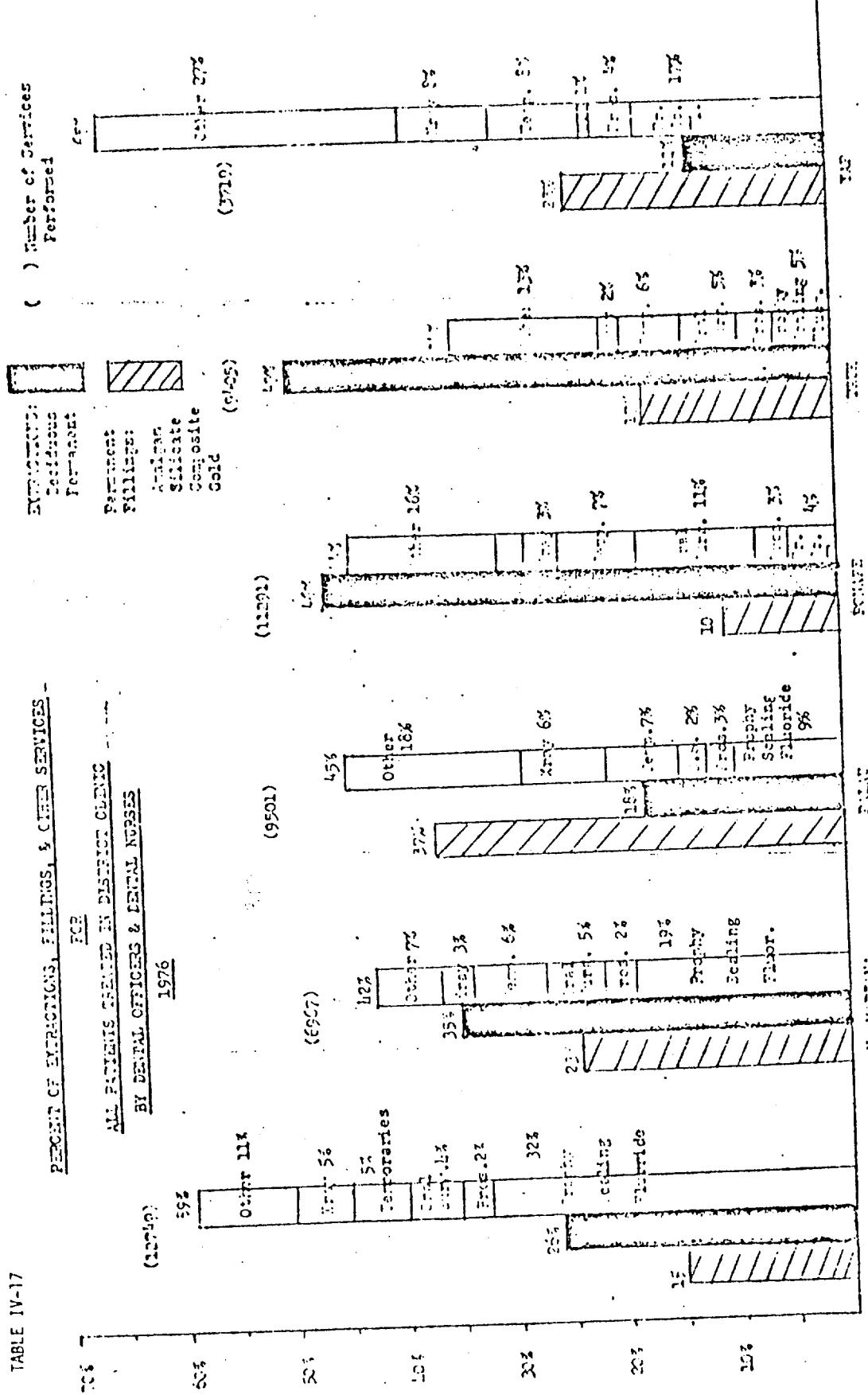


TABLE IV-17 (a)

Marshall Islands  
January - June 1974

DENTAL CLINIC			FIELD			
0-5 Yrs.	6-17 Yrs.	18 Yrs. & Over	0-5 Yrs.	6-17 Yrs.	18 Yrs. & Over	Total

## Patient Visits

1st visit*	54	504	1,201	8	85	240	2,092
Return visit	3	104	789		12	56	964
Total receiving care	a+b	57	608	1,990	8	97	296
1st visit*	40	131	306		1	5	483
Return visit	3	14	125			7	149
Total examined only	d+e	43	145	431	1	12	632
Total visits	c+f	100	753	2,421	8	98	3,688
Patients with all defects corrected			8	95			103

\*First time seen by dentist during Fiscal Year.

## Services

Amalgam, one surface		33	129	1	4	3	170
Amalgam, two or more surfaces		25	160			10	195
Cement base	2	52	260	1	5	13	333
Temporary filling	9	26	80		1	5	121
Silicate		17	76			2	95
Prophylaxis	7	33	51			12	103
Scaling		5	59				64
Fluoride treatment	9	47					56
Extraction, deciduous	30	152	7	7	13	1	210
Extraction, simple permanent	1	267	967		53	169	1,457
Extraction, impaction		1	10				11
Extraction, alveolectomy		2	17			1	20
Extraction, residual roots		28	142		9	39	218
Gold inlay		1	6		1	2	10
Gold crown		1	6		2	2	11
Stainless steel crown							
Gold, fixed bridge		2	24		2	5	33
Denture, full			33			2	35
Denture, partial			12			1	13
Denture rebase			19			1	20
Denture repair	"		59			14	73
Root canal			1				1
Pulp capping							
X-ray	1	69	261			7	338
Other operation (specify)	11	73	359		10	39	492

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TABLE IV-17 (b)

Marysville District  
July-December 1974

DENTAL CLINIC			FIELD			Total
0-5 Yrs.	6-17 Yrs.	18 Yrs. & Over	0-5 Yrs.	6-17 Yrs.	18 Yrs. & Over	

Patient Visits

1st visit*	124	515	1,296	40	108	194	2,277
Return visit	30	222	1,173	1	-	6	1,432
Total receiving care	a+b	154	737	2,469	41	108	200
1st visit*		51	44	271	-	-	366
Return visit		1	9	84	-	-	94
Total examined only	d+e	52	53	355	-	-	460
Total visits	c+f	206	790	2,824	41	108	200
Patients with all defects corrected		12	28	84	-	-	144

\*First time seen by dentist during Fiscal Year.

Services

Amalgam, one surface	4	106	260	-	-	-	370
Amalgam, two or more surfaces	5	36	297	-	-	-	338
Cement base	3	111	435	-	-	-	549
Temporary filling	48	90	99	29	-	2	268
Silicate	1	17	106	-	-	-	124
Prophylaxis	84	52	111	-	-	37	284
Scaling	1	16	153	8	1	-	179
Fluoride treatment	94	74	1	37	-	37	243
Extraction, deciduous	25	159	60	2	49	-	295
Extraction, simple permanent	1	208	874	-	48	174	1,305
Extraction, impaction	-	1	5	-	-	-	6
Extraction, alveolectomy	-	-	6	-	-	-	6
Extraction, residual roots	-	22	129	-	4	46	201
Gold inlay	-	1	5	-	-	-	6
Gold crown	-	1	7	-	-	-	8
Stainless steel crown	-	-	1	-	-	-	1
Gold, fixed bridge	-	1	12	-	-	-	13
Denture, full	-	-	47	-	-	-	47
Denture, partial	-	-	10	-	-	-	10
Denture rebase	-	-	19	-	-	-	19
Denture repair	-	-	72	-	-	-	72
Root canal	-	5	6	-	-	-	11
Pulp capping	-	8	15	-	-	-	23
X-ray	5	66	327	-	-	-	398
Other operation (specify)	3	134	630	-	-	-	773

1013371

TABLE IV-17 (c)

July - December 1975

DENTAL CLINIC			FIELD			Total
0-5 Yrs.	6-17 Yrs.	18 Yrs. & Over	0-5 Yrs.	6-17 Yrs.	18 Yrs. & Over	

## Patient Visits

	42	618	1,024	3	187	218	2,092	
Return visit	14	209	1,104				1,327	
Total receiving care	a+b	56	827	2,128	3	187	218	3,419
1st visit*		4	34	148	4	3	2	195
Return visit			14	38				52
Total examined only	d+e	4	48	168		7	2	247
Total visits	c+f	60	875	2,314	7	190	220	3,666
Patients with all defects corrected			13	76				89

\*First time seen by dentist during Fiscal Year.

## Services

Amalgam, one surface	7	78	169				247
Amalgam, two or more surfaces		47	179				226
Cement base	2	109	298				409
Temporary filling	12	63	89				164
Silicate	2	12	94				108
Prophylaxis	7	182	71				260
Scaling	2	11	88				101
Fluoride treatment	6	175	11		93		285
Extraction, deciduous	42	169	4	3	29		247
Extraction, simple permanent		232	800		47	285	1,364
Extraction, impaction		6	10				16
Extraction, alveolectomy		7	30				37
Extraction, residual roots		39	224			22	285
Gold inlay		1	5				6
Cold crown		2	10				12
Stainless steel crown							
Gold, fixed bridge		2	10				12
Denture, full			30				30
Denture, partial				17			17
Denture rebase			28				28
Denture repair		2	86				88
Root canal		2	12				14
Cap capping	3	4	12				19
X-ray		62	267				329
Other operation (specify)	5	78	448				531

1013372

TABLE IV-17 (d)

Marshall Islands  
January - June 1976

	DENTAL CLINIC			FIELD			Total
	0-5 Yrs.	6-17 Yrs.	18 Yrs. & Over	0-5 Yrs.	6-17 Yrs.	18 Yrs. & Over	
<b>Patient Visits</b>							
1st visit*	218	862	937	5	101	209	2,352
Return visit	15	219	1,218				1,452
Total receiving care a+b	233	1,101	2,155	5	101	209	3,804
1st visit*	6	362	120		18	4	510
Return visit		13	77				90
Total examined only d+e	6	375	197		18	4	600
Total visits c+f	239	1,476	2,352	5	119	213	4,404
Patients with all defects corrected			18				18

\*First time seen by dentist during Fiscal Year.

Services							
Amalgam, one surface	2	182	115			299	
Amalgam, two or more surfaces		49	203			252	
Cement base	3	220	261			484	
Temporary filling	13	79	115			207	
Silicate		16	91			107	
Prophylaxis	185	642	152			979	
Scaling		7	99			106	
Fluoride treatment	186	640	71			897	
Extraction, deciduous	34	227	8	5	65	339	
Extraction, simple permanent	2	284	940		43	207	1,476
Extraction, impaction		2	12				14
Extraction, alveolectomy		3	10				13
Extraction, residual roots		28	162		16	47	253
Gold inlay			2				2
Cold crown			2				2
Stainless steel crown							
Cold, fixed bridge		1	4				5
Denture, full			17				17
Denture, partial			5				5
Denture rebase			15				15
Denture repair		1	61				62
Root canal		2	7				9
Pulp capping		3	15				18
X-ray	2	89	284				375
Other operation (specify)	5	72	436				513

1013373

TABLE IV-17 (e)

Marshall Islands  
July - September 1976

	DENTAL CLINIC			FIELD			Total
	0-5 Yrs.	6-17 Yrs.	18 Yrs. & Over	0-5 Yrs.	6-17 Yrs.	18 Yrs. & Over	
<b>Patient Visits</b>							
1st visit*	30	373	698	2	30	45	1,178
Return visit	11	347	748			15	1,121
Total receiving care	a+b	41	720	1,446	2	30	60
1st visit*		169	44	4	37	7	261
Return visit		1	2	7			10
Total examined only	d+e	1	171	51	4	37	7
Total visits	c+f	42	891	1,497	6	67	67
Patients with all defects corrected			63	23			86

\*First time seen by dentist during Fiscal Year.

Services							
Amalgam, one surface		271	75			2	348
Amalgam, two or more surfaces	2	43	156		1	7	209
Cement base	4	311	190		1	9	515
Temporary filling	10	131	69			3	213
Silicate		204	103			10	317
Prophylaxis	6	118	106				230
Scaling	1	13	99			3	116
Fluoride treatment	7	121	1				129
Extraction, deciduous	24	233	23	2	15	11	308
Extraction, simple permanent		234	523		16	42	815
Extraction, impaction		1	8				9
Extraction, alveolectomy			6			1	7
Extraction, residual roots		19	93		3	2	117
Gold inlay			1			2	3
Gold crown		3	11				14
Stainless steel crown		149					149
Gold, fixed bridge		2	23				25
Denture, full			17				17
Denture, partial			9			1	10
Denture rebase			11				11
Denture repair		1	51				52
Root canal		7	20		1		28
Pulp capping	1	6	25				32
X-ray			51	136	1	2	190
Other operation (specify)	4	110	297			2	413

1013374

TABLE IV-17 (f)

Marshall Islands  
October - December 1976

	DENTAL CLINIC			FIELD			Total
	0-5 Yrs.	6-17 Yrs.	18 Yrs. & Over	0-5 Yrs.	6-17 Yrs.	18 Yrs. & Over	

## Patient Visits

		0-5	6-17	18 Yrs. & Over	0-5	6-17	18 Yrs. & Over	Total
1st visit*		86	520	403	1	12	36	1,058
Return visit		9	326	740			3	1,078
Total receiving care	a+b	95	846	1,143	1	12	39	2,136
1st visit*		2	567	78				647
Return visit			6	28				34
Total examined only	d+e	2	573	106				681
Total visits	c+f	97	1,419	1,249	1	12	39	2,817
Patients with all defects corrected		26	185	24				235

\*First time seen by dentist during Fiscal Year.

## Services

Amalgam, one surface		106	46				2	154
Amalgam, two or more surfaces		27	133				4	164
Cement base		111	154					265
Temporary filling		9	161	60				230
Silicate			5	53			1	59
Prophylaxis		71	350	49				470
Scaling			13	65				78
Fluoride treatment		71	350					421
Extraction, deciduous		18	195		1	5		219
Extraction, simple permanent			137	458		7	18	620
Extraction, impaction				2			3	5
Extraction, alveolectomy				2				2
Extraction, residual roots		13	66				3	82
Gold inlay								
Gold crown				5				5
Stainless steel crown			3					3
Gold, fixed bridge				3				3
Denture, full				18			2	20
Denture, partial				18				18
Denture rebase				12				12
Denture repair				46			2	48
Root canal				10				10
Pulp capping			2	11				13
X-ray		1	10	99			3	113
Other operation (specify)		1	21	250			1	273

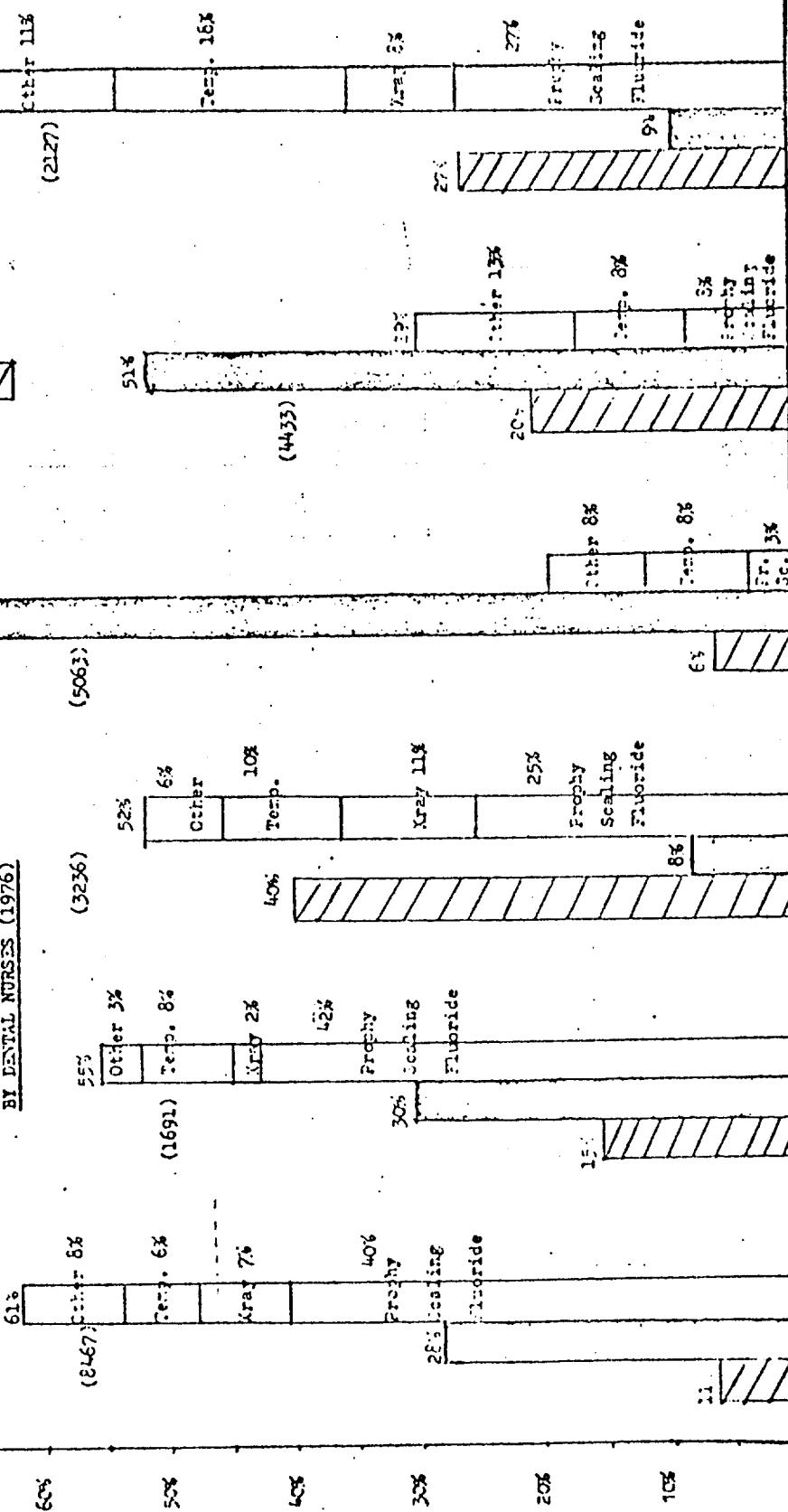
1013375

TABLE IV-18

PERCENT OF EXTRACTIVES, FILLINGS, & OTHER SUBSTANCES

5

ALL PATIENTS TREATED IN DISTRICT CLINIC



MURKIN  
LANDS

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TABLE IV-16  
SOURCES OF INFORMATION PERTAINING TO CEMETESES

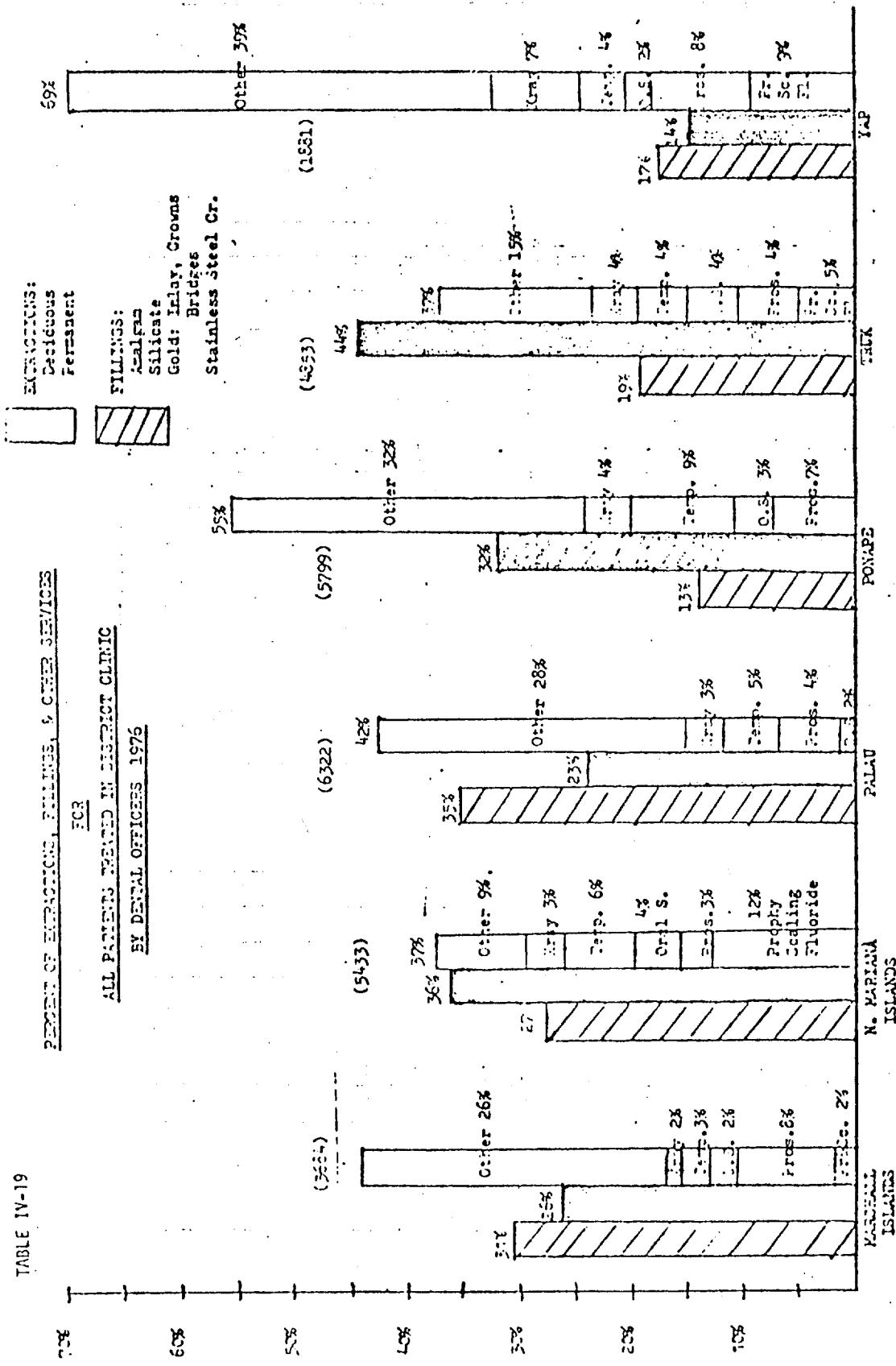


TABLE IV-20

TABLE IV-21 : the following six pages are excerpts from Public Health reports.

1013379

TRUST TERRITORY OF THE PACIFIC ISLANDS  
Department of Health Services  
Majuro, Marshall Islands

May 3, 1977

To : District Director Health Services, Marshalls  
From : Public Health Head Nurse  
Subject : Monthly Report April 1977

The following are the lists of the result of Activities of Public Health Nursing staffs, clinic in the office and Outside Field Activities, during the month of April 1977.

MCH PROGRAM:

A. Prenatal Clinic

First Visit to Doctor

1st trimester	4
2nd trimester	14
3rd trimester	4
Total	22

Revisit to Doctor

1st trimester	0
2nd trimester	19
3rd trimester	82
Total	101

First Visit to Nurse

1st trimester	8
2nd trimester	2
3rd trimester	4
Total	14

Revisit to Nurse

1st trimester	24
2nd trimester	76
3rd trimester	86
Total	186

Prenatal referred to dental clinic ..... 14

Prenatal immunized with TD ..... 14

Post Partum Clinic:

1st visit to nurse ..... 23  
Revisit to nurse ..... 0

Well Baby Clinic:

Number of children received Immunization	135
Under 1 year	75
1 - 6 years	31
5 - 17 years	14
18 - up	5

1013380

Polio .....	52
Malaria.....	4
Cholera .....	4

**B. COMMUNICABLE DISEASE CONTROL PROGRAM:**

**TB CLINIC**

TB follow up physical examination .....	4
New TB diagnosed .....	1
Medical Conference .....	4
Routine TB Case follow up .....	12
Nursing Conference .....	12
PPD given to contacts ,.....	4
I.M prophylaxis .....	4
PPD positive .....	0
Number of X-ray taken for PPD positive contacts .....	4

**VENEREAL DISEASE PROGRAM:**

Number of patient diagnosed for C.G. ....	19
Number of patient treated .....	19
Number of contacts treated .....	23
Number of contacts examined .....	19
Number of cultures obtained .....	62
Number of culture positive .....	3
Number of culture negative .....	54

**LEPROSY PROGRAM:**

New case .....	0
Old patient under treatment .....	2

**AMERIASIS:**

New case .....	32
Case treated .....	32

**WORM INFESTATIONS:**

Ascariasis .....	125
Hookworm .....	7

**OBESEITY AND HYPERTENSION PROGRAM:**

Number of patients seen for first visit .....	53
Number of patients seen for revisit .....	53

**FAMILY PLANNING CLINIC:**

First visit to nurse .....	26
Revisit to nurse .....	29
IUD .....	4
Vasectomies .....	0
Tubal ligation .....	1

CANCER DETECTION CLINIC:

First visit to nurse .....	29
Revisit to nurse .....	29
PAPASmear obtained.....	412
Biopsy done .....	0
Repeat PAP Smear .....	26

REMARKS:

A team from Health Services left this month on N/V Millitobi for giving Health routine clinic to the people of Eastern Island lead by Public Health Nurse Supervisor, Ruth Harris. This team were scheduled to performed Family Planning, Cancer Detection as well as Well Baby Clinic. Aratha Nathan, The medex was also present with this team for examining children and the pregnant mothers.

Thank you

Ernest Schmidt  
Public Health Head Nurse

cc: Distad, Marshalls  
Chief, MCH/CCS, Saipans  
Communicable Disease Control Division, Saipans  
District Chief Nurse, Marshalls  
File

1013382

TRUST TERRITORY OF THE PACIFIC ISLANDS  
Department of Health Services  
Majuro, Marshall Islands

Arc. NO. FTA46/A600

April 25, 1977

To : District Director Health Services, Marshalls  
From : Public Health Nurse Supervisor, Marshalls  
Subject : Field Trip Report

Departed Majuro March 26, 1977 at 5:00 P.M. for the continuation of our Field Service to the Central Islands. During this trip the Southern Islands were also scheduled for regular Field Services.

Your Public Health team member aboarded H/S Milltobi were as follows.

- |                   |   |
|-------------------|---|
| 1. Ruth L. Harris | - Team Leader                                       |
| 2. Minna Michael  | - Cancer Detection Nurse                            |
| 3. Arbella Joash  | - Cancer Detection Nurse                            |
| 4. Temsa Andrike  | - MCH and Immunization Nurse                        |
| 5. Elbira Anitok  | - Public Health Recorder                            |
| 6. Vincent Silk   | - Assistant Vital Statistician and Medical Recorder |

The underling are the Activities and Areas which have covered during our trip.

AILINGLAPLAP:

Number of children immunized .....	159
Number of PAP Smear collected .....	107
Number of New Family Planning .....	3
Number of follow up on Family Planning .....	6
Number of follow up on PAP for confirmation.....	1

NAMU:

Number of children immunized .....	69
Number of PAP Smear collected .....	54
Number of New Family Planning .....	6
Number of follow up on Family Planning .....	5
Number of follow up on PAP for confirmation .....	2

For the matter of time given us was rather limited. We didn't have choice but work throughout the whole evening that we were at Namu and Ailinglaplap Atoll.

JABAT ISLANDS:

Number of children immunized .....	16
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TABLE IV-23

## CERVICAL CANCER DETECTION: COMPARATIVE FIGURES FOR DISTRICTS' PERFORMANCES.

DISTRICT:	TOTAL FEMALE POPULATION 15 YEARS AND OVER	MAY 1975 - APRIL 1976		MAY 1976 - APRIL 1977	
		# SMEARS	% OF TARGET	# SMEARS	% OF TARGET
MARIANAS	3,678	986	26.8	878	23.9
MARSHALLS (Majuro)	6,353	770	12.1	1,357	21.4
EBEYE	1,388	476	34.3	653	47.0
PALAU	3,262	1,346	41.3	1,490	45.7
PONAPE	5,932	1,040	17.5	2,321	39.1
TRUK	8,375	916	10.9	1,101	13.1
YAP	2,234	890	39.8	672	30.1
KOSRAE	352	302	85.8	509	144.6

Source: TTPI Headquarters Cervical Cancer Detection Program Office.

#83101

Number of PAP Smear collected .....	8
Number of New Family Planning .....	3
Number of follow up on Family Planning .....	0

NAMRIK ATOLL:

Number of children immunized .....	83
Number of PAP Smear collected .....	13
Number of New Family Planning .....	5
Number of follow up on Family Planning .....	4
Number of follow up on PAP for confirmation .....	1
Number of TB follow up .....	4

ECON ATOL&:

Number of children immunized .....	60
Number of PAP Smear collected .....	57
Number of New Family Planning .....	6
Number of follow up on Family Planning .....	1
Number of follow up on PAP for confirmation .....	2

JALUIT ATOLL (JASOR AND INROJ)

Number of children immunized .....	20
Number of PAP Smear collected .....	51
Number of New Family Planning .....	4
Number of follow up on Family Planning .....	6
Total number of PAP Smear collected .....	264
Total number of children immunized .....	397
Total number of Family Planning .....	38
Total number of Medical referral from outer island .....	15

COMMENTS:

Our work went on smoothly. Although we had to work late at night using flash light and lantern as to collect PAP smear and of course as you may see another problem was when transfer and compile records under the dim light.

For your further information the ship schedule was rather a rush one and it was very inconvenience for both your team members and the Islanders. However at this point I wish to inform you that 85% of our work was successfully carried out.

In conclusion of this report I would like to extend our great appreciation and thanks to the Master of M/S Imitobi and his entire crew members for their time effort and cooperation which given us during the trip.

Thank you

Ruth L. Harris,  
Public Health Nurse Supervisor,  
Marshalls

MILITARY TERRITORY OF MARSHALL ISLANDS  
Department of Health Services  
FAMILY PLANNING MONTHLY REPORT

DISTRICT Marshallas

DATE May 1977

LOCATION OF Majuro, Amher Ichoda W.M.C. Hosp.  
DISPENSARY

FOR ALL METHODS:

AGE GROUPS	NUMBER OF CHILDREN								1ST VISIT (Ever)	1ST VISIT OF YEAR (Old Patients)	RETURN VISIT (Old Patients)
	0	1	2	3	4	5	6	7 or more			
14 and younger											
15 - 19			2	1					3		
20 - 24		2	4	2	1	1			7		3
25 - 29		1	3	1		2	3	4	8	1	7
30 - 34			3		1	3		3	5		5
35 - 39	1						1	3	2		3
40 - 44				1					1		
45 and older								2	1		1
TOTAL	2	3	12	4	3	6	4	12	23	1	19

CONTRACEPTIVE METHODS:

	AMOUNT DISPENSED	1ST VISIT (Ever)	1ST VISIT OF YEAR (Old Patients)	RETURN VISIT (Old Patients)
Pill	170	124	7	54
I.U.D.	2	2	2	0
Cream or Foam	M F	0	0	0
Condom	M F	0	0	0
Rhythm				
Other				
TOTAL				

TOTALS:

TUBAL LIGATIONS 4

CONTRACEPTION DISCONTINUED (TOTAL PATIENTS) \_\_\_\_\_

(Give explanation why discontinued)

none

VASECTOMIES 0

HYSTERECTOMIES 0

PAP SMEARS 0

Submit to Chief, MCH/CCS

Minister of Health