LEGISLATIVE ASSEMBLY OF THE NORTHWEST TERRITORIES

7TH COUNCIL, 53RD SESSION

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TABLED ON JUNE 17, 1974

REPORT

on

HEALTH CONDITIONS

in the

NORTHWEST TERRITORIES

1973

Chief Medical and Health Officer
Government of the Northwest Territories

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I N D E X

REPORT ON HEALTH CONDITIONS IN THE NORTHWEST TERRITORIES - 1973

VITAL STATISTICS

POPULATION:

The population of the Northwest Territories is estimated as follows:

	Indians	Eskimos	Others	Total
Number	7402	13630	15978	37010
Percentage	20.00%	38.82%	43.17%	100.00%

These figures are estimates derived by applying the known natural increase to the 1971 census figures. Immigration and emigration figures are unavailable. Therefore, although the Indian and Eskimo figures are probably quite accurate, the recorded figure for "others" is probably low.

LIVE BIRTHS:

The live birth rates per 1,000 population were:

Indians 26.07 Eskimos 32.80 Others 34.23 All groups 32.09

It is to be noted that whilst the "Indian" birth rate has dropped for a second year in succession, the "Eskimo" rate is slightly above last year's rate and the "other" rate has risen again to the 1971 rate. This is probably indicative of an influx of young families to the Northwest Territories.

SEX RATIO OF BIRTHS:

The ratio of male births per 1,000 female births was:

	1973	1972	1971	1970
Indians	1097	1175	959	1163
Eskimos	1223	1017	969	1207
Others	1140	992	1197	1233

The overall ratio for N.W.T. was 1163.

The national rate for 1970 was 1060.

The four year average for male births per 1,000 female births was:

Indian	1099
Eskimo	1104
Others	1141

The apparent wide swings of this ratio with year and with ethnic origin are probably of little significance, and are more indicative of a small sample than anything else.

BIRTH WEIGHTS:

Average birth weights for live births were as follows:

	INDIANS		ESKIMOS		OTHERS	
	Males	Females	Males	Females	Males	Females
1970	7.13 lbs.	7.01 lbs.	7.17 lbs.	6.84 lbs.	7.69 lbs.	7.15 lbs.
1971	7.06 lbs.	6.92 lbs.	7.11 lbs.	6.81 lbs.	7.56 lbs.	7.13 lbs.
1972	7.27 lbs.	6.99 lbs.	7.12 lbs.	6.88 lbs.	7.66 lbs.	7.22 lbs.
1973	7.11 lbs.	6.81 lbs.	7.00 lbs.	6.81 lbs.	7.45 lbs.	7.51 lbs.

LOW BIRTH WEIGHT INFANTS:

As in previous years, the percentage of so-called "low birth weight infants", i.e. infants below 5.5 lb. in weight, is higher in Indian and Eskimo groups than in the "others". This is probably artificial in that the average birth weight of Indian and Eskimo babies is approximately one half pound lower than the average Caucasian birth weight. Hence, the arbitrary figure of 5.5 lb. as being the lower limit of the normal birth weight range is probably inapplicable.

The rate of low birth weight infants per 100 live births was:

	INDIANS	ESKIMOS	OTHERS	ALL GROUPS	ALL CANADA
1971	10.87	11.77	6.10	9.28	6.8
1972	9.5	12.01	7.66	9.80	
1973	12.43	10.96	4.37	8.16	

There is no significant change in the number of low birth weight infants over the past three years.

MULTIPLE BIRTHS:

The complete absence of twinning in the Indian community is a repetition of last year. The significance - if any - is unknown at present.

The ethnic distribution of twin births was:

Indians - 0 Eskimos - 8 Others - 15

STILL BIRTHS:

There was a further decline of 2 in the number of still births by comparison with 1972.

Indians - 1 Eskimos - 7 Others - 4

HOSPITALIZED BIRTHS:

98.31% of live births occurred in a hospital or nursing station. The number of births occurring in hospital or nursing station continues to be very high. The ethnic distribution was:

Indians - 97% Eskimos - 97.31% Others - 99.63%

MATERNAL AGE

The percentage distribution of live births by age of mother and ethnic groups, N.W.T., 1973:

	INDIANS	ESKIMOS	OTHERS	CANADA (1972)
Under 20	20.72	21.02	12.95	11.94
20-24	35.23	31.31	40.32	34.20
25-29	15.54	18.56	28.83	32.95
30-34	16.57	13.19	12.77	14.02
35-39	6.73	8.27	4.01	5.24
40-44	5.18	3.13	0.91	1.41
45-49	-	0.22	0.18	0.10
N.S.	-	2.01	-	0.13

The flatter fecundity curve of the Eskimo and Indian repeats the experience of 1972. Whereas 70% of infants of "others" are born between 20 and 30 years, this proportion is only about 50% in the other two groups.

BIRTH ORDER:

The change in figures from 1972 indicates a tendency to smaller families in all groups.

Percentage distribution of live births by birth order and ethnic group, N.W.T, 1973:

	INDIANS	ESKIMOS	OTHERS	CANADA (1972)
1st child	29.53	27.51	44.70	41.80
2 & 3rd child	30.56	30.20	43.61	45.20
4th & later	39.90	42.28	11.67	12.90

TABLE I

NORTHWEST TERRITORIES

Vital Statistics - 1973

	INDIANS 1973 Pop. - 7,402				ESKIMOS 1973 Pop. - 13,630				OTHERS 1973 Pop. - 15,978				ALL GROUPS 1973 Pop. - 37,010				ALL CANADA
	1973		1972	1971	1973		1972	1971	1973		1972	1971	1973		1972	1971	1972
	No.	Rate	Rate	Rate	No.	Rate	Rate	Rate	No.	Rate	Rate	Rate	No.	Rate	Rate	Rate	Rate
Livebirths (a)	193	26.07	29.09	34.09	447	32.80	35.12	38.31	548	34.23	31.90	34.06	1188	32.09	32.54	35.65	15.9
Illegitimate Live Births (b)	88	45.60	41.70	38.07	135	30.20	24.80	17.16	89	16.24	16.33	18.30	312	26.30	24.29	21.63	8.9
Livebirths born in Hosps, and N/S (c)	187	96.90	99.52	98.70	435	97.31	98.04	95.80	546	99.63	100.00	99.80	1168	98.31	99.14	97.19	99.6
Low Birth Weight Infants (d)	24	12.43	9.95	10.87	49	10.96	12.01	11.77	24	4.38	7.66	6.10	97	8.16	9.80	9.29	-
Stillbirths (e)	1	5.18	-	8.36	7	15.66	21.45	17.96	4	7.29	8.06	7.82	12	10.10	11.93	12.02	11.4
Perinatal Deaths (f)	5	25.90	9.47	24.89	12	26.84	41.15	45.09	7	12.77	20.00	9.76	24	20.20	26.95	26.92	19.0
Neonatal Deaths (0-28 days) (g)	4	20.72	18.95	25.10	6	13.42	23.60	33.93	3	5.47	14.11	1.96	13	10.94	18.75	19.23	11.9
Post Neonatal Deaths (29-365 days) (h)	2	10.36	28.43	54.39	14	31.32	49.35	68.87	4	7.29	12.09	7.87	20	16.83	29.83	39.26	5.2
Infant Deaths (under 1 year) (i)	6	31.08	47.39	79.49	20	44.74	72.96	97.80	7	12.77	26.20	26.20	33	27.77	48.59	58.49	17.1
Total Deaths (Crude Death Rate) (j)	44	5.94	6.75	8.70	84	6.16	8.89	11.24	93	5.82	5.21	5.96	221	5.97	6.88	8.48	7.4
Deaths in Hosps. and N/S (k)	30	71.42	65.30	54.34	48	57.14	56.77	64.10	44	47.31	61.72	60.93	122	55.70	60.08	61.23	-
Natural Increase (l)	149	20.12	22.34	25.39	363	26.63	26.23	27.07	455	28.47	26.73	28.09	967	26.12	25.66	27.17	8.5
Maternal Deaths (m)	-	-	47.30	-	-	-	21.40	-	-	-	-	-	-	-	17.00	-	1.6

(a) rate per 1,000 population
(b) rate per 100 live births
(c) rate per 100 live births
(d) rate per 100 live births
(e) rate per 1,000 live births
(f) stillbirths plus deaths 0-7 days per 1,000 total births (live births & stillbirths)
(g) deaths 0-28 days per 1,000 live births
(h) deaths 29-365 days per 1,000 live births
(i) deaths under 1 year per 1,000 live births
(j) crude death rate - deaths per 1,000 population
(k) rate per 100 deaths
(l) rate per 1,000 population
(m) rate per 10,000 live births

TABLE II

NORTHWEST TERRITORIES - 1973

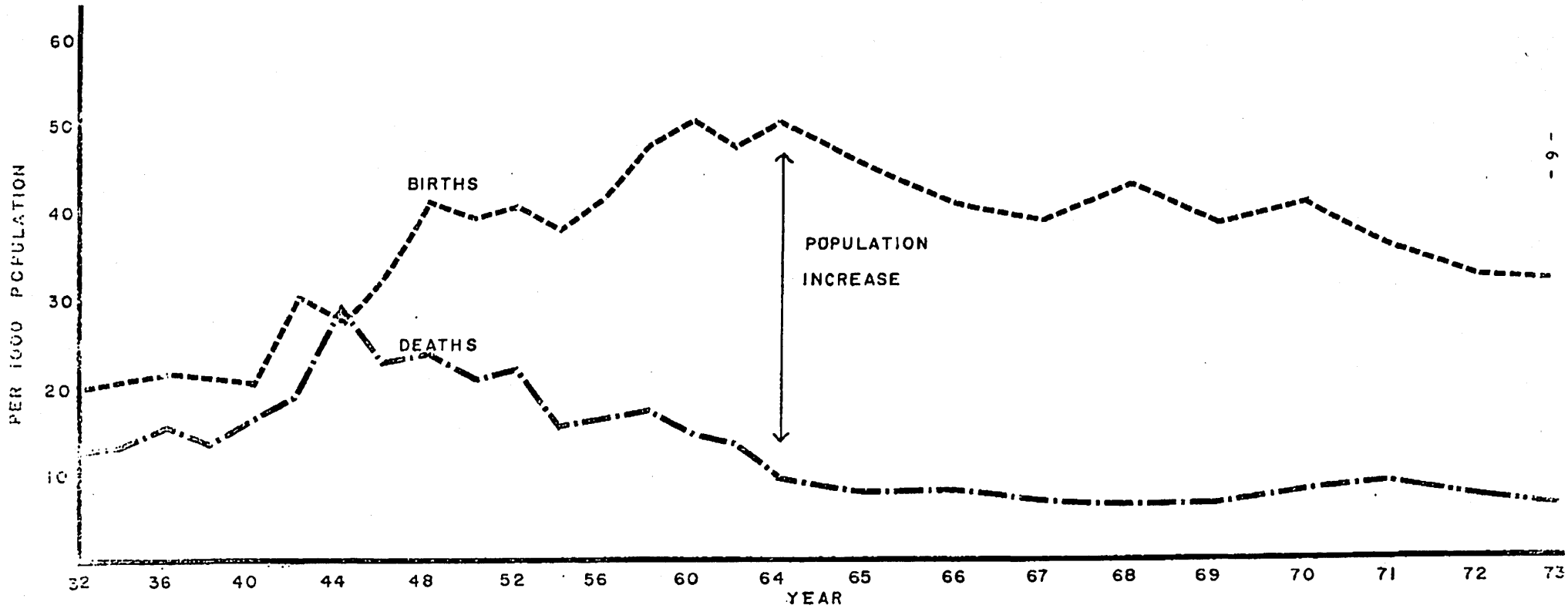
Vital Statistics in Zones

	Mackenzie Zone						Inuvik Zone						Keewatin Zone				Baffin Zone			
	Indians		Eskimos		Others		Indians		Eskimos		Others		Eskimos		Others		Eskimos		Others	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
	5144		2579		12563		2287		2091		1835		3519		407		5540		1076	
Livebirths (a)	130	25.42	82	31.79	396	31.52	62	27.10	55	26.30	99	59.95	103	29.27	14	34.39	207	37.36	40	37.17
Illegitimate Livebirths (b)	60	46.15	19	23.17	67	16.91	18	29.03	34	61.81	19	19.19	21	20.38	-	-	61	29.46	3	7.50
Births in Hosps. or N/S (c)	125	96.15	80	97.56	394	99.49	62	100.0	54	98.18	99	100.0	103	100.0	14	100.0	198	96.65	39	97.50
Low Birth Weight Infants (d)	18	13.85	10	12.19	19	4.79	5	8.06	12	21.81	5	5.05	10	9.70	-	-	17	8.21	1	2.50
Maternal Deaths (e)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stillbirths (f)	1	7.69	1	12.19	5	12.62	-	-	1	18.18	-	-	1	9.70	-	-	4	19.32	-	-
Perinatal Deaths (g)	5	38.46	1	12.19	5	12.62	-	-	3	54.50	-	-	2	19.41	-	-	6	28.98	2	50.0
Neonatal Deaths (h)	4	30.76	-	-	1	2.52	-	-	2	36.36	-	-	1	9.70	-	-	3	14.49	2	50.0
Post Neonatal Deaths (i)	2	15.38	3	36.58	4	10.10	-	-	1	18.18	-	-	3	29.12	-	-	7	33.81	-	-
Infant Deaths (j)	6	46.15	3	36.58	5	12.62	-	-	3	54.50	-	-	4	38.83	-	-	10	48.30	2	50.0
Total Deaths (k)	35	6.84	24	9.30	75	5.96	9	3.93	10	4.78	14	7.62	14	3.97	-	-	36	6.49	4	3.71
Deaths in Hosps. or N/S (l)	25	73.52	11	45.83	35	46.66	5	62.50	8	80.0	6	42.85	14	100.0	-	-	24	66.60	3	75.0
Natural Increase (m)	95	18.59	58	22.48	321	25.55	53	23.18	45	21.52	85	46.32	89	25.29	-	-	171	30.86	36	33.45

(a) rate per 1,000 population
(b) rate per 100 live births
(c) rate per 100 live births
(d) birth weight 2500 grams and below per 100 live births
(e) rate per 10,000 live births
(f) rate per 1,000 live births
(g) stillbirths plus deaths 0-7 days per 1,000 total births (live births and still births)
(h) deaths 0-28 days per 1,000 live births
(i) deaths 29-365 days per 1,000 live births
(j) deaths under 1 year per 1,000 live births
(k) crude death rate - deaths per 1,000 population
(l) rate per 100 deaths
(m) rate per 1,000 population

GRAPH 1

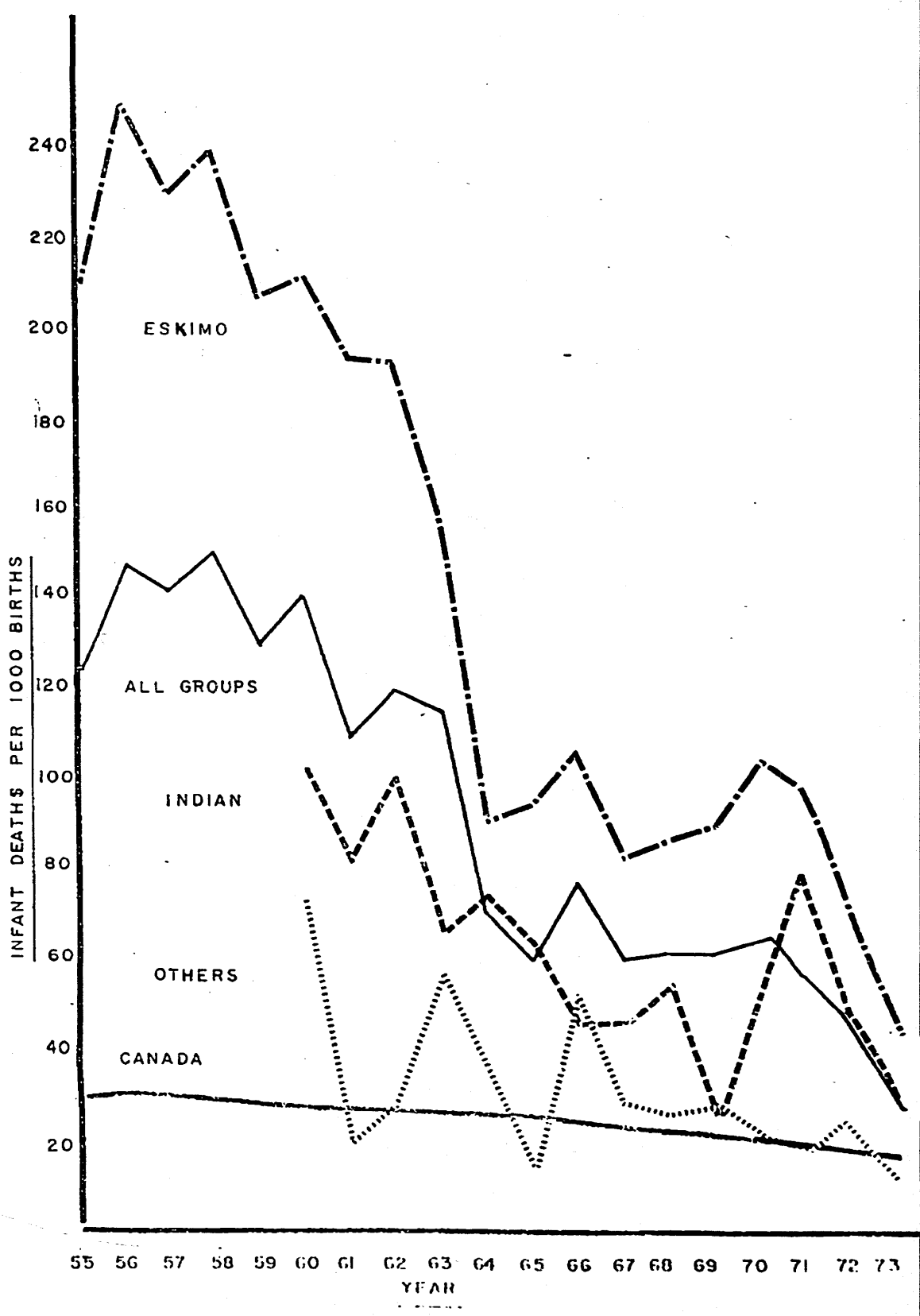
VITAL STATISTICS N.W.T.



GRAPH 2

INFANT MORTALITY RATE

N.W.T.



BIRTHS OUTSIDE THE TERRITORIES:

There was an increase in this figure to 14.4% from 11.33%, the increase being largely accountable by the increase in non-native children (80) born outside.

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DEATHS:

Tables I and II give details of the various death rates according to ethnic groups and zones and include comparisons with the previous two years.

CRUDE DEATH RATE:

There has been a further drop in the crude death rate to 5.92 to be compared with 6.88 in 1972 and 8.48 in 1971.

	Indians		Eskimos		Others		All Groups	
Age Group	No.	%	No.	%	No.	%	No.	%
0 - 7 days	4	9.09	5	5.95	3	3.22	12	5.42
8 - 28 days	-	-	1	1.19	-	-	1	0.45
29 - 365 days	2	4.54	14	16.66	4	4.30	20	9.04
1 - 4 years	5	11.36	6	7.14	3	3.22	14	6.33
5 - 9 years	2	4.54	6	7.14	2	2.15	10	4.52
10 - 14 years	-	-	1	1.19	3	3.22	4	1.80
15 - 19 years	1	2.27	2	2.38	9	9.67	12	5.42
20 - 29 years	2	4.54	6	7.14	16	17.20	24	10.85
30 - 39 years	5	11.36	7	8.33	4	4.30	16	7.23
40 - 49 years	3	6.81	6	7.14	11	11.82	20	9.04
50 - 59 years	2	4.54	11	13.09	12	12.90	25	11.31
60 +	18	40.90	19	22.61	26	27.95	63	28.50
TOTAL	44		84		93		221	

PLACE OF DEATH:

56% of all deaths occurred in either a hospital or nursing station. The ethnic distribution is as follows:

Indians - 71.42% Eskimos - 57.14% Others - 47.31%

MATERNAL DEATHS:

It is pleasant to be able to report that no maternal death occurred in 1973.

PERINATAL DEATHS (0-7 days plus stillbirths)

The further fall in this rate to a level slightly under the 1970 All Canada rate is extremely encouraging. However, the fact that these rates are calculated from very small numbers is cautionary. Maintenance at such a low level will allow of no relaxation of programme.

NEONATAL MORTALITY (0-28 days)

The fall in our neonatal death rate to a level considerably under the 1970 all Canada rate is also noteworthy but the same caution must be observed in drawing conclusions.

POST-NEONATAL MORTALITY (29-365 days)

The fall in the Indian rate to one fifth of the rate experienced in 1971, the halving of the Eskimo rate over the same period and the maintenance of the acceptably low rate for Others are the underlying factors allowing us to report a continued steep decline in this rate. By comparison with Southern Canada, however, our rates are still unacceptably high in this age group. They reflect of course the high incidence of diseases of the chest and gastro intestinal system which are directly referable to overcrowding and poor sanitation.

The reasonably low rates we are able to report have been bought at enormous cost in hospitalisation and aircraft evacuation.

INFANT DEATHS (under 1 year)

Summing up the above groups, we are able to report an overall reduction in infant mortality to 27.77/1,000 which is to be compared with a rate of 48.59 in 1972 and 58.49 in 1971.

This figure is now approximately 50% higher than the national average. It is my belief that we can expect no further decline without a continued improvement in living standards, not least the improvement of water supply and waste disposal.

NATURAL INCREASE:

The rate is static in all three population groups at a level of 2½ times the national average.

CAUSE OF DEATH:

The major causes of death are listed below:

	No. of Deaths	Percentage of Total Deaths
Injuries, Accidents, Violence	77	34.84
Disease of Infancy, Prematurity & Malformation	18	8.14
Cardiovascular Disease	35	15.83
Pneumonia	22	9.95
Malignant Neoplasms	24	10.85
Senility, unknown & other Diseases	12	5.42
Diseases of Central Nervous System (Cerebral accidents, Non-meningococcal meningitis)	11	4.97
Gastrointestinal Diseases (gastroenteritis, Ulcer of Stomach & Duodenum)	7	3.16

MALIGNANT NEOPLASMS (CANCERS) BY SITE, ETHNIC GROUP AND SEX

	Indians		Eskimos		Others		
	Male	Female	Male	Female	Male	Female	Total
Lung	1	-	1	1	3	2	8
Gastro Intestinal	-	-	2	1	2	-	5
Prostate	-	-	-	-	-	-	-
Skin	-	-	-	-	-	-	-
Cervix Uterine	-	-	-	-	-	1	1
Parotid	-	-	-	2	-	-	2
Skeletal	-	-	-	-	-	-	-
Reticulo-Endothelial	-	-	3	-	-	-	3
Kidney	-	-	-	-	-	1	1
Generalized	-	-	1	-	1	-	2
Other	1	-	-	-	-	1	2
TOTAL	2	-	7	4	6	5	24

Accidental deaths continue to loom large in our total mortality picture.

Attention is drawn to the increase in motor vehicle accidents to 13 (from 7 in 1972) and in suicides to 11 (from 8 in 1972), and to the fall of crib deaths to 2 (from 6 in 1972) though it is arguable that this last category should be listed under accidental deaths.

DEATHS FROM ACCIDENTS, INJURIES, VIOLENCE, N.W.T. 1973

	Indian	Eskimo	Other	Total
Exposure	2	4	2	8
Drowning	2	6	10	18
Inhalation of Gastric Contents	1	1	1	3
Asphyxia	-	-	2	2
Suicide	-	3	8	11
Burns	1	1	3	5
Aircraft Crashes	-	-	-	-
Motor Vehicle Accidents	-	3	10	13
Poison (Exclude Alcohol)	-	2	-	2
Gunshot wounds (accidental)	1	-	1	2
Homicide	2	-	1	3
Alcohol Poisoning	1	-	-	1
Others (Falls, Crushing)	2	1	4	7
Crib Deaths	1	1	-	2
TOTAL	13	22	42	77

TABLE III

NORTHWEST TERRITORIES

Causes of Death by Ethnic Group and Selected Age Groups 1973

Number of Deaths

CAUSES OF DEATH	GRAND TOTAL	INDIANS									ESKIMOS									OTHERS								
		Infants		Pre Sch	School		Young Adult	Adult	Eld	TOTAL	Infants		Pre Sch	School		Young Adult	Adult	Eld	TOTAL	Infants		Pre Sch	School		Young adult	Adult	Eld	TOTAL
		0-28 days	29-365	1-4 yrs	5-9 yrs	10-14 yrs	15-34 yrs	35-64 yrs	65+ yrs		0-28 days	29-365	1-4 yrs	5-9 yrs	10-14 yrs	15-34 yrs	34-65 yrs	65+ yrs		0-28 days	29-365	1-4 yrs	5-9 yrs	10-14 yrs	15-34 yrs	34-64 yrs	65+ yrs	
Injuries & Accidents (BE 47-50)	77	-	1	2	1	-	3	4	2	13	-	-	3	3	1	9	5	1	22	-	1	2	1	1	25	11	1	42
Diseases of Infancy & Malformations (B41-44)	18	4	1	1	-	-	-	-	-	6	5	4	-	-	-	-	-	-	9	3	-	-	-	-	-	-	-	3
Cardiovascular Diseases (B24-29)	35	-	-	-	-	-	-	6	-	6	-	-	-	-	-	-	8	3	11	-	1	-	-	1	1	7	8	18
Pneumonia (B31)	22	-	-	1	-	-	1	2	3	7	-	2	2	1	-	1	2	1	9	-	1	1	-	-	-	3	1	6
Malignant Neoplasms (B18)	24	-	-	-	-	-	1	-	1	2	-	-	-	1	-	1	7	2	11	-	-	-	-	-	-	7	4	11
Senility, Unknown & Other Diseases (B45-46)	12	-	-	1	-		-	-	2	3	-	-	-	-	-	1	2	3	6	-	-	-	-	-	-	2	1	3
Diseases of the Nervous System (B22-23)	11	-	-	-	1	-	-	-	2	3	-	2	-	-	-	-	1	1	4	-	-	-	1	1	1	-	1	4
Gastrointestinal Diseases (B33-36)	6	-	-	-	-	-	-	-	-	-	1	3	-	-	-	2	-	-	6	-	-	-	-	-	-	-	-	-
Other Respiratory Diseases (B30 &32)	4	-	-	-	-	-	-	-	-	-	-	2	1	-	-	-	-	1	4	-	-	-	-	-	-	-	-	-
Infective & Parasitic Diseases (B3-17)	3	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	2	-	1	-	-	-	-	-	-	1
Cirrhosis of Liver & Hyperplasis of Prostate (B37-39)	6	-	-	-	-	-	-	-	3	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-	3
Benign Neoplasms	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others	3	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2

MATERNAL AND CHILD HEALTH

As has been commented under the detailed explanatory notes attached to statistical tables, the maternal and child health picture has been one of great progress. The expanded emphasis put into this section of our programme appears to have paid off.

1. "At Risk" - During 1973 the infant "At Risk" registers were reviewed. New criteria were developed for inclusion of infants in a uniform programme to serve the entire Territory - replacing the former locally developed programmes which varied in concept somewhat from Zone to Zone. Implementation of this new pgoramme is scheduled for 1974.

   The purpose of the programme is to identify early infants vulnerable from any cause and to take such measures as may be appropriate to reduce predictable morbidity (and mortality), including social and educational maladjustment, to a minimum.

2. N.W.T. Perinatal and Infant Mortality and Morbidity Study -

   During 1973, the research study encompassing all births in a 12 month period in the Northwest Territories was thoroughly launched, with the input year being established as April 1, 1973 to March 31, 1974 and a subsequent 12 month follow-up period.

   Approximately 1200 births occurred and considerable detailed data is being obtained in theareas of perinatal health, infant health, Denver Development, mortality, nutrition and socio-economic background. A number of basic hypotheses are being tested and it is hoped that many of the known causes of death and illness will be identified with hard data, indicating more forcefully those areas where action must be taken to reduce mortality and morbidity.

3. Although infant morbidity statistics have shown notable improvement across the entire Region, the Keewatin Zone results bear especial mention. The conclusion that this fine showing is attributable, at least in part, to the augmented public health service is inevitable.

4. Family Planning - Statistics related to family planning activities have been available for only one full year. We have, therefore, no basis for comparison as to the use being made of the programme. The fact that the birth rate has dropped not at all is indicative however of the need for increased emphasis.

5. Well Baby Clinics and immunization clinics continue to be one of the main pillars of the child health programme.

It seems unfortunate that the primary purpose for which an infant is brought to the well baby clinic is construed as the necessity for a "needle", but the accepted immunization programme is a most valuable catalyst in the general nurse-parent consultant relationship in addition to its basic disease control function.

Immunization in the North is extremely comprehensive, and is probably more complete than in any other part of Canada.

NURSING COVERAGE

During 1973, we went from famine to feast in nursing coverage with an acute shortage during the summer and the majority of vacancies filled by the end of the year.

The turnover of nurses is still high as shown in the following table:

Zone	Number of Positions	Vacancies Dec.31/73	Terminated in 1973	Hired 1973	% of Turnover
Baffin-Field	27	7	16	14	59%
Frobisher Bay Hospital	16	-	12	12	75%
Inuvik-Field	22	3	12	6	55%
Inuvik Hospital	27	2	21	16	77%
Keewatin	18	3	8	9	44%
Mackenzie	41	2	10	19	25%
TOTALS	151	17	79	76	52%

New nursing positions were created at Fort Simpson to staff the new twelve bed hospital.

Educational leave for studies at the university level was granted to six nurses plus three who were sponsored by N.W.T. bursaries. Also, non-university courses were sponsored for four nurses. Sixteen nurses went on the Clinical Training for Nurses Courses at various universities and returned to positions in which they can use their advanced clinical skills and knowledge. This brings the number of nurses with this specialized training to 34, of whom 25 remain in the Northwest Territories.

Of the 134 nurses employed at years end, 38 had public health nursing qualifications, 44 had midwifery training, and 5 had psychiatric nursing post-graduate training.

MEDICAL SERVICES

During the early part of 1973 there was some difficulty in maintaining adequate coverage by Medical Officers in the field, particularly at Inuvik Hospital, but the situation improved considerably by mid year, and a more stable overall staffing situation has recently prevailed.

The single doctor stations posed less of a problem, and apart from Cambridge Bay towards the end of the year, generally unbroken service was maintained. It is heartening to record that during 1973 a staff physician was appointed to the Keewatin Zone to operate from Rankin Inlet. This represents improved physician coverage to this Zone.

The turnover rate for physicians remains stable since late 1971 at about 2 years and 3 months. As many of the physicians serving Northern Region are young graduates broadening their experience of practice, this is an acceptable period of service.

In December 1972 the Northern Scholarship Plan became operative. To date it does not appear to have offered a very great incentive to recruitment. Evaluation of the scheme as an aid to recruiting and maintaining physicians in Northern locations must be delayed pending a further period of its operation.

During December private medical practice ceased in Fort Smith and staff physicians of the Department maintained physician service to the town.

There are now nineteen private medical practitioners in the Northwest Territories. These doctors are located at Yellowknife, Hay River and Frobisher Bay.

Consultant visits by specialists from a number of Universities continued to add to the number and quality of services available. During 1973 renegotiation of contracts continued: Toronto University was added to the list of contracted Universities, and now supplies specialist psychiatric services to Baffin Zone.

FACILITIES

BAFFIN ZONE - While there were no new facilities constructed or placed in service in this Zone in 1973 planning was instituted for expansion of the Frobisher Bay General Hospital to provide space for a rapidly expanding diagnostic and treatment clinic. The studies and evaluations are evolving into a firm plan of expansion for an all inclusive health centre.

The calling of tenders for the first phase of a new nursing station at Pangnirtung met with no success. However, working drawings were developed for construction of a new station within 1974.

General maintenance of existing structures throughout the Zone was carried out and improvements made in storage facilities.

KEEWATIN ZONE - An expansion of the Rankin Inlet Nursing Station was planned and executed culminating in the addition of 3 two bed wards, nurse station, two additional staff rooms, increased storage and improved entrances. A comprehensive maintenance plan was initiated which should maintain the value, function and comfort of stations to higher standards.

INUVIK ZONE - After cancellation of the Inuvik General Hospital expansion in 1972 due to fiscal emergencies, the program was reactivated in 1973 resulting in a contract award and commencement of construction on the new wing to accommodate an out-patient clinic, pediatrics ward, administration functions, public health department, a new standby power and heating plant and miscellaneous auxiliary services. Planning was initiated for additional improvements to follow and/or coincide with the present contract.

Plans were prepared for erection of a central stores building on the existing piling at the Inuvik General Hospital. Unfortunately, quotations exceeded the budget necessitating deferment of the project.

A transient trailer to accommodate Zone staff, visiting specialists and extra emergency staff was delivered and installed at Tuktoyaktuk.

The Health Centre at Arctic Red River was relocated to a central site in the community to facilitate access by the settlement members.

Interior renovations were carried in the Norman Wells Nursing Station to provide increased fire rating of the structure and provide improved surroundings for the dispensing of health care. A new modern fire alarm system was incorporated. Negotiations were initiated for acquisition of a site for the construction of a new health facility in the future.

The health station at Paulatuk has since its inception operated with considerable inconvenience as no electric power was available. Medical Services is most grateful for the installation of the central plant in 1973 and the facility was connected to the service.

Every effort was made to install a nursing station building at Sachs Harbour in 1973 to accommodate a resident nurse who could serve the community. It was most disappointing that our tender call received no response. A repeat call has resulted in the facility now being factory fabricated for installation in 1974.

MACKENZIE ZONE - 1973 saw the completion of the Fort Simpson General Hospital and renovation of the old clinic to a staff residence. While late delivery of some specialty items retarded use of certain areas, all departments of this 12-bed hospital, and associated public health and out-patient clinic, are now functional.

Development of plans and construction of a cottage hospital for Rae-Edzo was given high priority and this facility is now virtually complete. In response to the local wishes conversions were effected during construction to increase the in-patient capacity to 11 or 12 beds including cribs. This was accomplished without loss to areas provided for diagnosis, treatment, dentistry, dispensing of drugs, and public health. We believe this to be a very functional building and while it was of the lowest per square foot cost of our 1973 permanent construction, it has been evaluated as a most substantial structure and incorporating significant features relative to ease of access and low maintenance. It is designed to accept expansion.

When the clinic structure at Detah Village was destroyed by fire, 24th December, immediate steps were taken to effect replacement and this unit has been fabricated ready to be moved to site as soon as conditions permit. Efforts to procure staff housing in Cambridge Bay to allow conversion of the nursing station to full medical use were futile. Arrangements were therefore completed to purchase a prefabricated residence this has been fabricated and is scheduled for delivery by water route in 1974. Development of plans took place for the renovation and expansion of the existing structure to provide space for improved and many additional services.

SCHOOL HEALTH

1973 is the last year in which we shall be attempting to provide pre-school medical examinations by a physician. From this point on the primary screening will be done by a well trained nurse and only those children found to have health problems will be referred to a physician.

This will relieve the physicians of a rather heavy and unproductive load and at the same time, reduce somewhat the drain on the public purse.

During school life, the child is seen regularly by the nurse and formal examinations are given in grades 6 and 10, with referral to a physician where necessary.

At any time, the nurse is available for consultation by the student or by the teaching staff on matters of health or behaviour.

Although our staff deliberately avoid becoming involved in the teaching programme in the schools, preferring to act in resource roles in the case of Venereal Disease, our Communicable Disease Control Officer is planning an extensive coverage in the schools in an attempt to introduce understanding of Venereal Disease, and thereby reduce the size of the problem. In this context, we are offering the actual teaching to relieve teachers of a task in which they may well feel uncomfortable.

PUBLIC SERVICE HEALTH

The Public Service Health programme in the Northwest Territories receives less emphasis than the comparable programmes in the other Regions. Basically this is because of relatively small numbers of government employees in any one spot which makes nonsensical any effort to provide special health programmes and facilities.

Employees of the Federal Government and of some departments of the Northwest Territorial Government, notably teachers, are required to have a pre-employment physical check-up, and a comparable examination of their accompanying dependents

This medical examination is carried out at the cost of the employing department for Northwest Territorial Government employees and Public Service Commission for Federal employees. Its aim is two-fold: 1. to benefit the employee by detection of unsuspected disease and to enable counselling, and 2. to benefit the employer by the prior detection of employees who would be medically or psychologically unsuited to service in remote areas, and possibly to recommend against their employment in specific locations.

Additionally, we provide special medical examinations to meet specific requirements as for transfer of pension rights.

Those parts of the Public Service Health programme which provide counselling services, or health advisory services are taken care of by our regular staff or by the private practice sector where we do not have employed medical expertise.

TREATMENT SERVICES

Although it is our primary aim to maintain health by the operation of the widest possible range of public health and prophylactic activities, there is a constant demand for treatment of illness. This could be construed as secondary health care. To satisfy this need, we operate daily sick clinics in all nursing stations, and at these a wide variety of minor conditions of a mostly infective nature receive attention.

In addition to the out-patient care given in our nursing stations we have facilities in all stations for short term or emergency in-patient care, and for maternity.

In these facilities, there is no attempt made to provide continuous nursing service for major illness. Such patients are looked after in the nursing stations only until they may be safely evacuated to a treatment referral centre, either one of the larger hospitals in the Northwest Territories or to a Southern hospital if facilities or staffing preclude satisfactory treatmentof the particular patient in the Northwest Territories hospitals.

Admissions to nursing stations are tabulated hereunder:

Baffin Zone	246	Patient Days	476
Inuvik Zone	164	Patient Days	300
Keewatin Zone	301	Patient Days	714
Mackenzie Zone	588	Patient Days	1731

PUBLIC HEALTH SERVICES

Under this heading we are including only a few items of the programme which have not been dealt with elsewhere in the report under specific programme headings.

In each Zone one or more physicians are appointed as Medical Officers of Health. He has the legal responsibility to enforce rulings made under the Public Health Ordinance, e.g. condemnation of water supplies, buildings, closure of eating establishments for health reasons, enforcement of isolation and quarantine, etc.

Although much use is not generally made of such legal powers, preference being given to the powers of reason and persuasion, they do provide the backbone of the regulatory service and may be used when unavoidable.

Under these same general powers are investigatory powers for the unravelling of epidemic disease, a process not infrequently required to identify means of spread of a particular outbreak and to enable the taking of measures designed to limit that spread. During 1973, we experienced epidemics of Infectious Hepatitis in Igloolik and Pond Inlet, and Streptococcal disease in Gjoa Haven for which an epidemiological approach indicated the control programme. In the Northwest Territories, because of relative isolation of communities, serious attempts may be made to prevent the spread of a particular disease between communities, an effort that might be inappropriate in Southern Canada, though the ready availability of inter-settlement travel by aircraft today makes such control infinitely more difficult than in even the recent past.

On another front, we are making increasing use of electronic data delivery systems to maintain regular supervision of chronically ill patients. This Health Data Bank and Information System is an example of a public health measure being used in the interests of specific individuals rather than of the population at large.

NORTHWEST TERRITORIES WATER BOARD

The regular meetings of the Water Board were attended whenever possible by a senior representative of Northern Region, Medical Services, staff.

At the technical advisory committee meetings, Medical Services representation was provided by the courtesy of Environment Canada through the person of Mr. Jack Grainge of the Arctic Technology Section. Mr. Grainge's expertise in environmental problems has been invaluable to this office and to the service of the Water Board.

DENTAL SERVICES

Treatment services were provided at Government Dental Clinics set up to serve residents in Baffin, Keewatin and Inuvik Zones. Seven dentist employees continued to serve throughout the year, two based at Frobisher Bay, two at Churchill and three at Inuvik. In addition, five visiting dentists provided their services for varying lengths of time in Baffin Zone. A Dental Nurse Therapist who served in Inuvik Zone during the latter half of 1972 left our service at mid-year. Dr. W.J. Siebert, well known to long time residents of the lower Mackenzie Valley, returned from his active retirement at Rosthern, Saskatchewan to serve at several communities within Inuvik Zone during the months of November and December.

In Mackenzie Zone, treatment services were provided by dentists who reside in Fort Smith, Hay River, Yellowknife and Fort Simpson.

The number of individual dental patient visits for 1973 remained almost constant with those of 1972, numbering about 20,000. Increases have been reported, however, in the number of teeth repaired (1973 - 13,000, 1972 - 11,000) in the number of teeth extracted (1973 - 10,000, 1972 - 9,000), and in the number of patients examined (1973 - 8,500, 1972 - 7,000).

Although there has been a marked increase in productivity by our dental field staff in 1973 over previous years, concern has been expressed that the level of dental health is slipping due to the increased rate of consumption by northerners of sweetened soft drinks, highly refined carbohydrates, and confections in general. Counter measures must be instituted to curb these destructive forces resulting from improvements in northern transportation and the purchasing power of most northern residents.

The Dental Therapy School in Fort Smith continued according to its developmental plan. A further intake of students brought the student body up to near capacity.

Eight students from the first intake group are expected to graduate in June of 1974 and by years end plans were afoot for placement of these graduates in the field.

The arrival of these newcomers will necessitate certain changes in dental philosophy and programming for our trained dentists, but the end result should be a greater availability of dental service and dental health education to the smaller settlements.

NOTIFIABLE DISEASES

Although there was no repeat of the increased typhoid experience of 1972 and a further fall in Bacillary Dysentery statistics for 1973, there has been a notable increase in Infectious hepatitis which is normally an enteric infection and in Red Measles during the year.

The increase in Infectious Hepatitis was largely to be accounted for by the occurrence of two major outbreaks in Baffin Zone, at Igloolik and at Pond Inlet.

The spread of this disease is to be connected directly with conditions of insanitation. Although epidemics may be associated with contamination of water supplies by sewage, there is no indication that such a route was involved anywhere in the Northwest Territories in 1973. Rather, the absence of adequate water supplies for hand washing, or the failure to take advantage of what is available must be cited. The outbreak, which was very thoroughly analysed in retrospect by our nursing staff, appeared among young children of elementary school age, being spread by them to other family members at home. This is a common pattern for this disease.

The original introduction of the disease to the communities has not been traced though many possibilities exist. The transfer occurred most probably towards the end of the shipping season, at the time when there is much traffic in and out of the communities.

The increase in red measles during 1973 was alarming in view of the heavy emphasis on measles vaccination.

Review of the figures indicated that a substantial proportion (more than half) of the cases of Red measles occurred before the recommended time for measles vaccination (12-18 months according to the American Paediatric Association). Accordingly, our programme has been amended to include early measles vaccination (at six-nine months) and a repeat vaccination at eighteen months to catch those who missed the first dose along with those who failed to react by virtue of left-over maternal immunity.

This one little exercise is an example of the problems that can result from trying to apply the principle of southern medicine to the Northern situation. They do not always fit.

In short, the communicable disease picture is labile and convincing evidence, if any is needed, of our overcrowded and insanitary environment.

There were a total of eight isolations of Diphtheria organisms during the year, mostly from throats though including one from an ear and one cutaneous lesion.

Three of these came from a single family, two being found on follow-up of contacts of an initial discovery.

There were no cases of classical diphtheria.

Major notifiable diseases were recorded as follows:

	1971	1972	1973
Typhoid Fever	1	6	1
Bacillary Dysentery	109	93	49
Diphtheria		1	6
Meningococcal Meningitis	3	3	8
Meningococcal Infection (not specified)		1	1
Whooping Cough	8	1	7
Hepatitis, Infectious	268	122	435
Red Measles	29	22	480
Rubella	36	30	36
Influenza	3478	1591	1140

with the distribution by Zone being:

DISEASE	INUVIK	MACKENZIE	KEEWATIN	BAFFIN
Infectious Hepatitis	97 - 1973 33 - 1972	50 - 1973 87 - 1972	0 - 1973 1 - 1972	288 - 1973 1 - 1972
Bacillary Dysentery	7 - 1973 44 - 1972	41 - 1973 48 - 1972		1 - 1973 1 - 1972
Red Measles	45 - 1973 1 - 1972	311 - 1973 14 - 1972	116 - 1973 2 - 1972	8 - 1973 5 - 1972
Rubella	8 - 1973 3 - 1972	13 - 1973 21 - 1972	8 - 1973 1 - 1972	7 - 1973 5 - 1972
Influenza	66 - 1973 391 - 1972	78 - 1973 605 - 1972	577 - 1973 396 - 1972	419 - 1973 199 - 1972

VENEREAL DISEASE

1. SYPHILIS

Comparatively speaking, Syphilis is a minor problem in the Northwest Territories. Only four cases were discovered and of these, only one was potentially infectious, the remaining three being old infections only recently identified by blood tests.

The probable reason for our favorable syphilis experience in the face of such a high incidence of Venereal Disease in general, is the extremely active programme of case finding and treatment aimed at Gonorrhoea. The drugs used and the dosage employed for gonorrhoea treatment are calculated to be effective for the abortion of all incubating syphilis cases as well. This, however, cannot be the whole story and if Syphilis did become introduced at all regularly, the evident promiscuity would undoubtedly lead to a rapid spread within the community. Constant vigilance is essential.

2. GONORRHOEA

The year 1973 saw an increase of 38% of confirmed gonorrhoea over the comparable figures for 1972.

In addition to this, there was a 110% increase in unconfirmed gonorrhoea which may in part reflect the actual increase in disease but also an increased awareness of the likelihood of this disease being recognized by medical and nursing personnel.

The gonorrheal vaccine which was being tried out as a means to reduce incidence was not found to be satisfactory and has been dropped following final evaluation.

Because of increasing resistance of the gonococcus to penicillin increased doses are being used supplemented as in 1972 with Probenecid.

Treatment failure is rare following adequate dosage of penicillin but other drugs are on hand to treat resistant cases.

Gonorrheal statistics appear in the attached tables. The graph on page 25 shows the gonorrhoea rate for the Northwest Territories compared with the reported rates in the Provinces. Even when due recognition is given to the fact that the provincial rates appear artificially low because of gross under-reporting, the rates in the Northwest Territories are still unquestionably much higher.

Because of this disproportionate incidence, a heavy emphasis is being given to our V.D. educational programme in 1974 with input from this department into the schools as a primary point of attack.

Occurrence of Gonorrhoea by Zone (confirmed and unconfirmed)

	1971	1972	1973	1973 change from 1972
INUVIK	354	529	913	increase of 72%
MACKENZIE	869	921	1380	increase of 50%
KEEWATIN	105	97	238	increase of 145%
BAFFIN	476	600	738	increase of 23%

Gonorrhoea Occurrence by Sex and Ethnic Group (confirmed and unconfirmed)

	Indian		Eskimo		Other		Total		Total
	M	F	M	F	M	F	M	F	
N.W.T.	461	136	726	719	726	189	1913	1356	3269

Gonorrhoea Incidence (proportional) by ethnic group (confirmed and unconfirmed)

	Indian	Eskimo	Other	Total
N.W.T.	27.81% (30.74% 1972)	44.20% (45.5% 1972)	27.99% (23.76% 1972)	3269

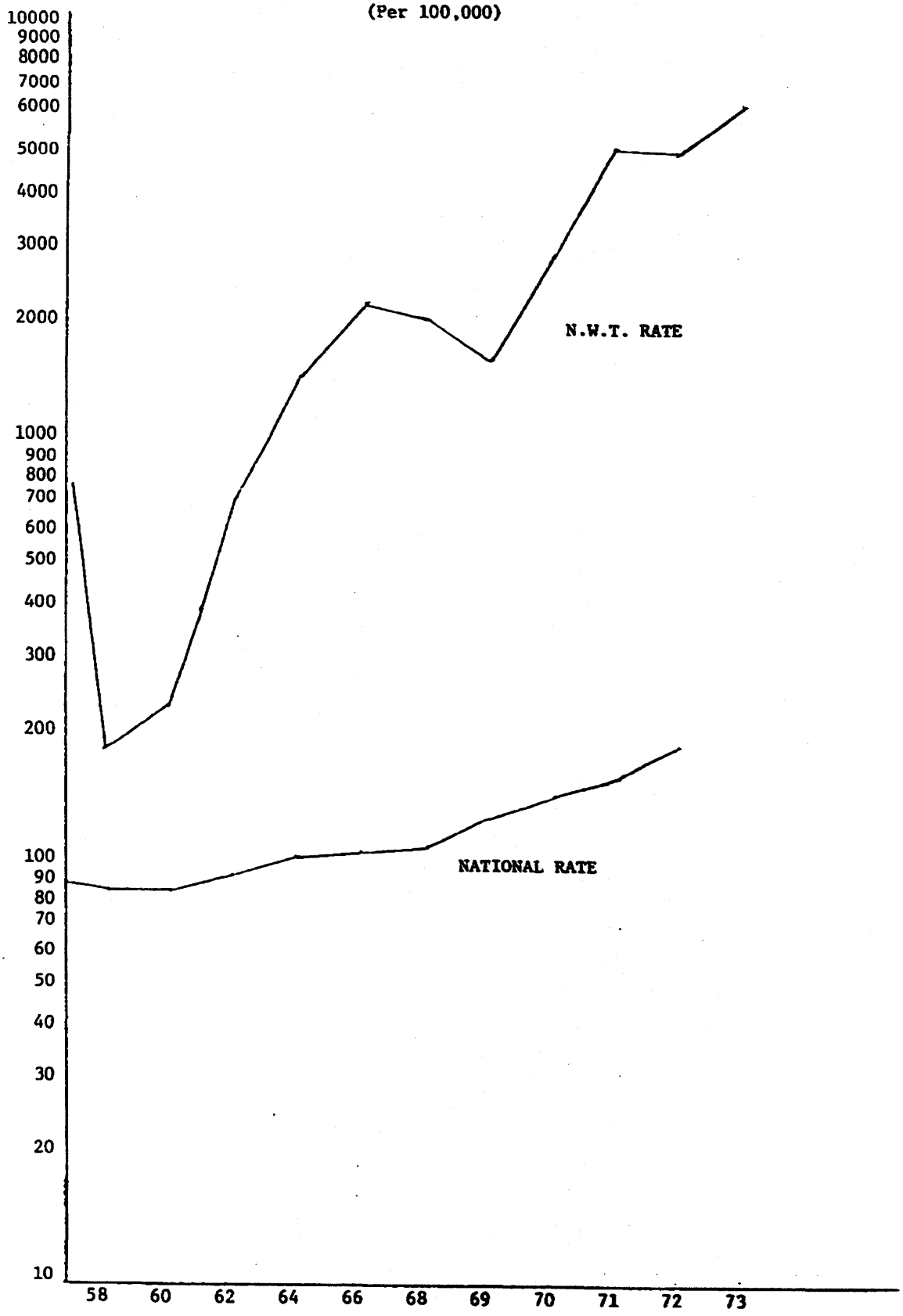
N.W.T. Gonorrhoea Incidence by sex and age group (all categories) Total

-1 yr.		1 - 4		5 - 9		10 - 14		15 - 19		20 - 24		25 - 29		30 - 39		40 - 59		60 +		Age ?	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
1			2		1	7	50	358	478	784	488	522	226	363	212	199	114	16	6	13	5

GONORRHOEA: Confirmed and clinical cases. Unconfirmed cases not included.

Ethnic Group	Total by Sex		Age Groups							Age not Stated
			0-9	10-14	15-19	20-24	25-39	40-59	60 +	
	M	F								
Indians	404	236	1	6	145	215	218	50	5	
%			.02	.09	23.09	34.08	34.78	7.86	.08	
Eskimos	589	464	3	24	257	331	343	87	3	5
%			.02	2.28	24.71	31.73	32.95	8.36	.02	.03
Others	576	115			98	234	292	63	2	2
%					14.18	33.88	42.51	9.37	.03	.03
Total Cases 2384	1569	815	4	30	500	780	853	200	10	7
%	65.82	34.18	.16	1.25	20.9	32.7	35.7	8.3	.4	.29

GONORRHOEA RATE FOR N.W.T.*
(Per 100,000)



* NOTE: Unconfirmed Cases Not Included

A graph shown on a logarithmic scale indicates the proportionate rise or fall of incidence, eg. 1:2 and 500:1000 will appear on a logarithmic graph in similar proportions.

TUBERCULOSIS - NORTHWEST TERRITORIES 1973

This report is based on the tuberculosis case finding activities in the Northwest Territories, which were again carried out with the same intensity as in previous years, but with greater emphasis on screening of the infected cases. This resulted in a further reduction of the new active cases of tuberculosis.

There were 40 new and reactivated cases of tuberculosis reported in the calendar year 1973, a decrease of 28% from the previous year. This decrease provides a low rate of 132 per 100,000 which is the lowest in the recorded history of the Northwest Territories.

It is of interest to note that of the 49 new and reactivated cases only 30 were adult pulmonary tuberculosis, again indicating a downward trend in the spread of tuberculosis.

The case finding services of Northern Region provided 37,065 tuberculosis diagnostic procedures to the residents of the Northwest Territories during the year 1973. These tests included mass chest x-ray surveys (9,984), stationary clinical examinations in departmental and non-departmental hospitals, nursing stations and health units (11,200), tuberculin tests (9,533) and bacteriological tests (6,348).

The continuance of the domiciliary drug program as a preventative measure continues to play an important role in the eradication of tuberculosis. There are currently 1,091 people on tuberculosis preventive drug treatment.

The decrease in the number of active cases is the result of many activities. There continues to be a high ratio of bacteriologically positive pulmonary tuberculosis cases (36 out of 44). It is of interest to note that the number of direct smear positive cases has decreased from 15 in 1972 to 10 in 1974, indicating a decrease in the spread of tuberculosis.

Reactivation of tuberculosis among the native people of the Northwest Territories continues to remain relatively high. Of the 49 cases reported in 1973, 11 were reactivated. In a review of the records of the reactivated cases, it is noted that ten had inadequate treatment for their initial infection, which indicates that closer surveillance is required to ensure that proper treatment is carried out. It is also recommended that all active tuberculosis cases who have been discharged from hospital to continue at home should be under close supervision.

There were no tuberculosis deaths reported during the year 1973.

The following tables identify the activities and the incidence of tuberculosis in the Northwest Territories during the calendar year 1973.

BACTERIOLOGICAL STATUS

OF NEW AND RE-ACTIVATED TUBERCULOSIS CASES

NORTHWEST TERRITORIES - 1973

	DIRECT SMEAR		CULTURE		BIOPSY		NON-BACILLARY	
	NEW	RE-ACT	NEW	RE-ACT	NEW	RE-ACT	NEW	RE-ACT
Indians	2	-	5	2	1	-	3	-
Eskimos	4	2	10	4	-	-	3	1
Others	2	-	6	2	-	-	2	-
TOTAL	8	2	21	8	1	-	8	1

TUBERCULOSIS ACTIVITY REPORT

NORTHWEST TERRITORIES - 1973

ETHNIC GROUP	INDIANS			ESKIMOS			OTHERS			ALL GROUPS		
YEAR	1973	1972	1971	1973	1972	1971	1973	1972	1971	1973	1972	1971
POPULATION	7,402	7,089	7,009	13,630	12,919	13,077	15,978	14,799	16,000	37,010	34,807	36,562
NEW ACTIVE CASES	11	15	17	17	27	52	10	6	4	38	48	73
INCIDENCE	0.15	0.21	0.24	0.12	0.21	0.39	0.16	0.04	0.02	0.10	0.13	0.20
REACTIVATED CASES	2	4	4	7	16	13	2	0	3	11	20	20
CASES ON HOME CHEMOTHERAPY										1,224	1,477	1,664
TUBERCULIN TESTS										9,533	5,955	7,325
B.C.G.										567	2,529	1,150
NO. OF X-RAY SURVEY FILMS										9,984	13,313	37,445
NO. OF REFERRED FILMS										11,200	12,755	12,320
BACTERIOLOGY TESTS										6,348	7,529	7,612

NORTH EST TERRITORIES - 1973

	FAR ADVANCED	MODERATELY ADVANCED	MINIMAL	PRIMARY	PLEURISY	EXTRA-PULMONARY	TOTAL
NEW CASES	-	8	22	3	-	5	38
% OF TOTAL		21%	58%	8%		13%	100%
REACTIVATED CASES	-	5	6	-	-	-	11
% OF TOTAL		45%	55%				100%

NEW AND RE-ACTIVATED CASES OF TUBERCULOSIS

BY AGE, SEX AND RACIAL ORIGIN

NORTHWEST TERRITORIES - 1973

AGE GROUP	TOTAL			INDIANS			ESKIMOS			OTHERS		
	T	M	F	T	M	F	T	M	F	T	M	F
0 - 4	2	1	1	1	1					1		1
5 - 9	1	1		1	1							
10 - 14	1	1								1	1	
15 - 19	3	2	1	1	1		2	1	1			
20 - 24	6	5	1				3	2	1	3	3	
25 - 29	7	2	5	2		2	5	2	3			
30 - 49	19	8	11	5		5	12	7	5	2	1	1
50 - 69	8	5	3	2	1	1	2	2		4	2	2
70 - Over	2	2		1	1					1	1	
TOTAL	49	27	22	13	5	8	24	14	10	12	8	4

TUBERCULOSIS CONTROL REPORT

NORTHERN REGION

1973

	INDIANS		ESKIMOS		OTHERS		TOTAL		RECENT CONVERTERS
	NEW	RE-ACT	NEW	RE-ACT	NEW	RE-ACT	NEW	RE-ACT	
Eskimo Point			1				1		
Whale Cove									1
Baker Lake			2	1			2	1	3
Rankin Inlet									5
Chesterfield Inlet									
Coral Harbour									1
Repulse Bay				1				1	15
Fort Churchill									
Belcher Islands				1				1	
TOTAL - KEEWATIN ZONE			3	3			3	3	25
Arctic Bay			2	1			2	1	1
Clyde River			1	1			1	1	1
Grise Fiord									
Igloolik									
Pond Inlet			1				1		
Pangnirtung			1				1		1
Broughton Island									
Cape Dorset			2				2		
Frobisher Bay				1				1	2
Lake Harbour									5
Hall Beach				1				1	
Port Burwell									
Resolute Bay			2				2		
TOTAL - BAFFIN ZONE			9	4			9	4	10

TUBERCULOSIS CONTROL REPORT

NORTHERN REGION

1973

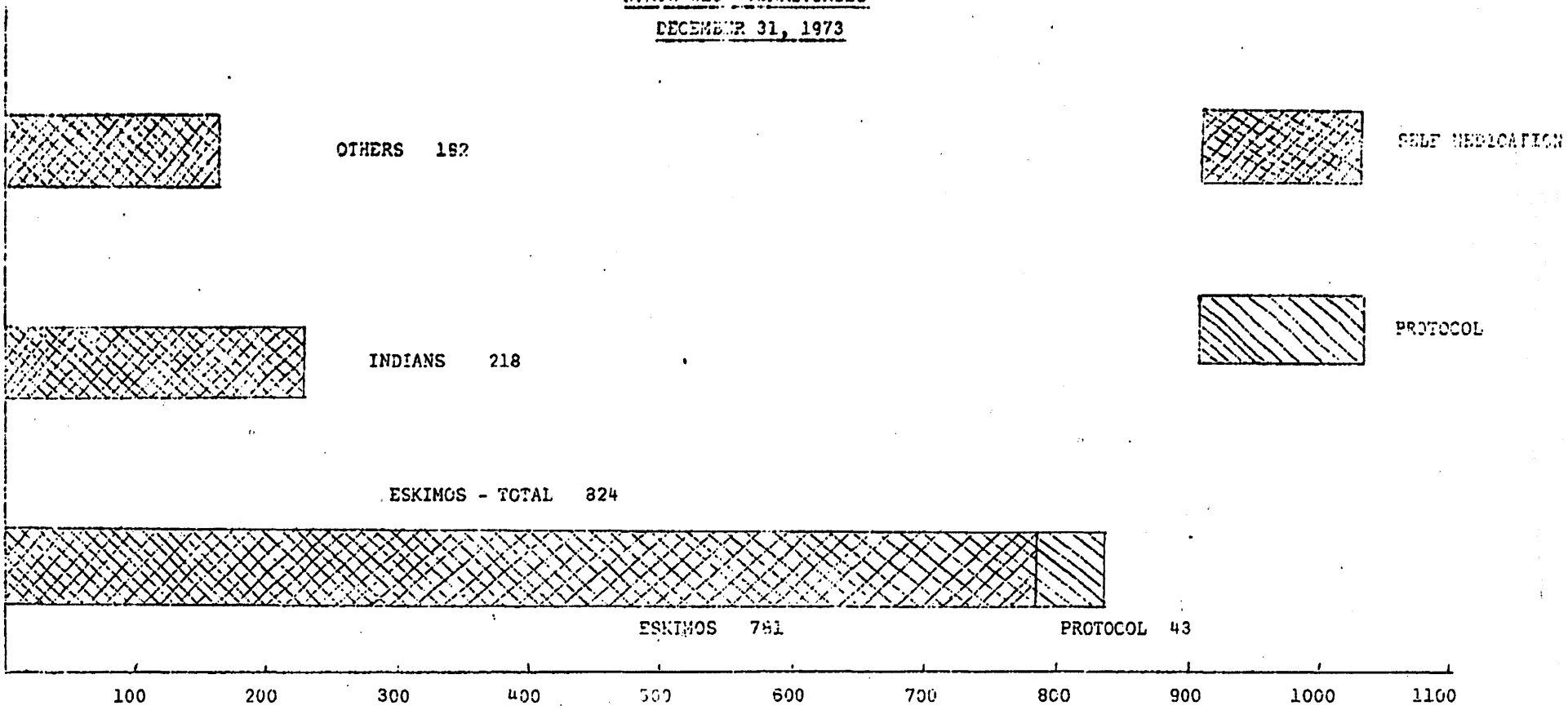
	INDIANS		ESKIMOS		OTHERS		TOTAL		RECENT CONVERTERS
	NEW	RE-ACT	NEW	RE-ACT	NEW	RE-ACT	NEW	RE-ACT	
Tuktoyaktuk									
Inuvik			1		1	1	2	1	
Aklavik	1						1		
Fort McPherson	2						2		
Fort Good Hope	1				1		2		1
Fort Norman									
Fort Franklin									
Arctic Red River									
Norman Wells									
TOTAL - INUVIK ZONE	4		1		2	1	7	1	1
Cambridge Bay			2				2		4
Coppermine									
Holman Island									
Spence Bay									1
Gjoa Haven			2				2		
Fort Simpson									
Fort Liard									
Fort Wrigley	2						2		1
Fort Resolution	1	1					1	1	1
Fort Smith	2				4		6		5
Hay River					2	1	2	1	
Fort Providence									
Fort Rae									4
Snowdrift									
Yellowknife	2	1			2		4	1	1
Pelly Bay									
TOTAL - MACKENZIE ZONE	7	2	4		8	1	19	3	17

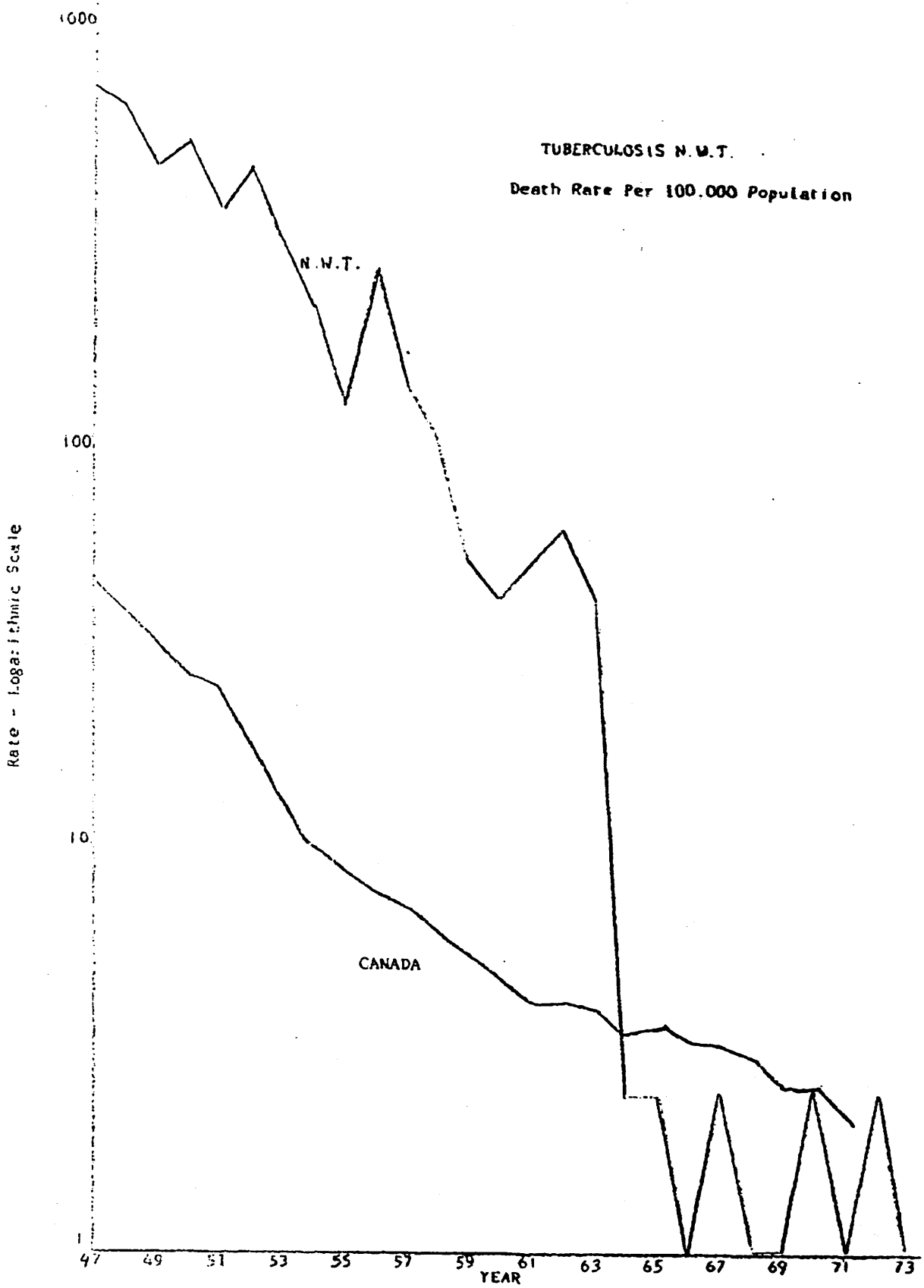
TREATMENT AT HOME

PREVENTION AND TREATMENT OF TUBERCULOSIS (CHEMOPROPHYLAXIS AND CHEMOTHERAPY)

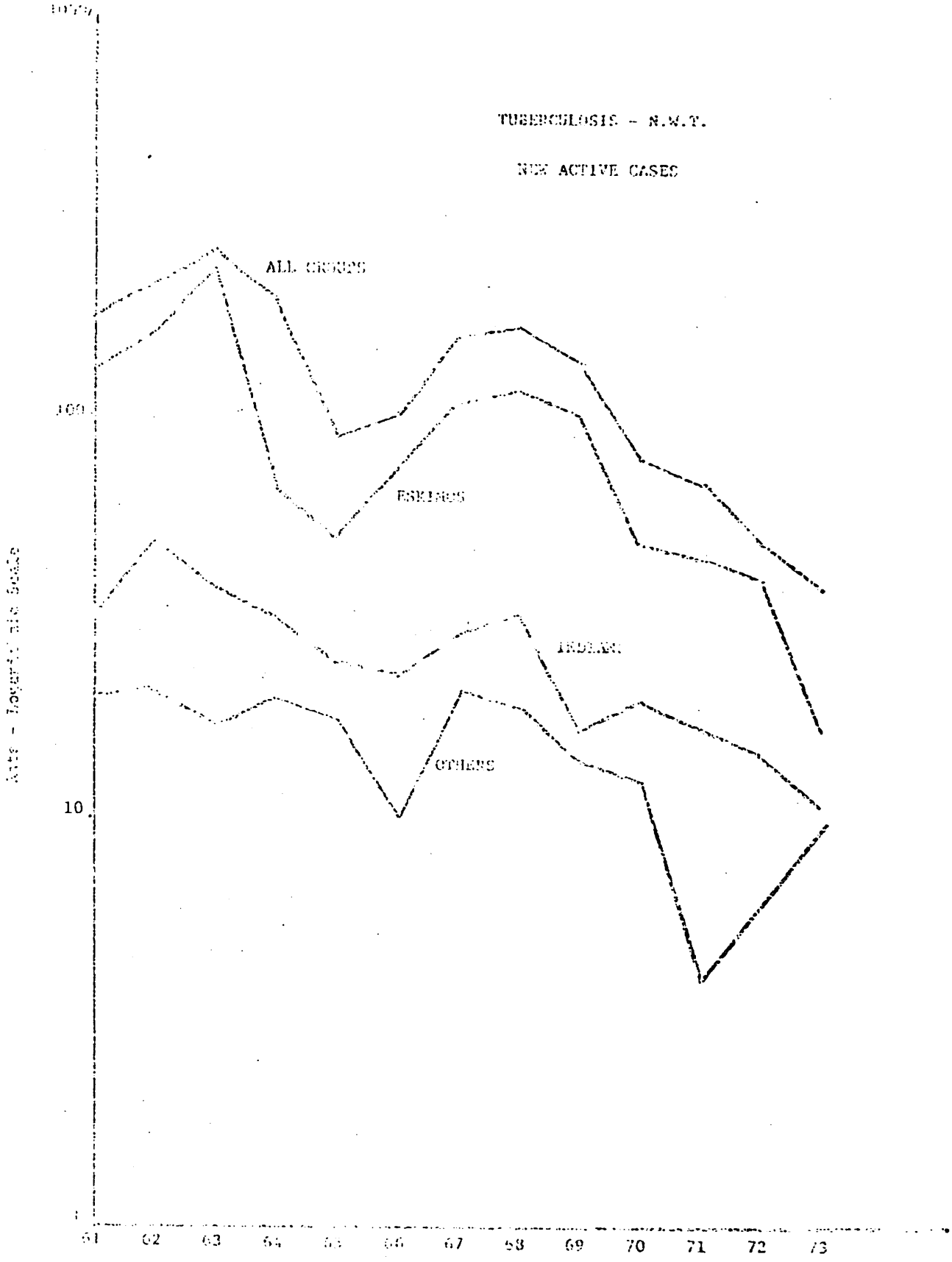
NORTH WEST TERRITORIES

DECEMBER 31, 1973





A graph shown on a logarithmic scale indicates the proportionate rise or fall of incidence, eg. 1:2 and 500;1000 will appear on a logarithmic scale in similar proportions.


TUBERCULOSIS - N.W.T.
NEW ACTIVE CASES
ALL GROUPS
ESKIMOS
INDIANS
OTHERS
100
10
1
61
62
63
64
65
66
67
68
69
70
71
72
73

MENTAL HEALTH

PSYCHIATRIC SERVICES TO THE NORTHWEST TERRITORIES

The main stay of the psychiatric program to the Northwest Territories in 1973 continued to be the provision of visiting psychiatrists from southern centres. Consulting psychiatric services to Mackenzie Zone were provided by the Zone Psychologist (resident in Yellowknife), a psychiatrist from the University of Alberta and the Regional Psychiatrist from Edmonton. Inuvik Zone which had previously been serviced by the University of Alberta will, in future, be serviced by the Regional Psychiatrist and it is planned that in 1974 there will be extension of these visiting services to both Mackenzie and Inuvik Zones.

The University of Manitoba continues to provide the psychiatric consultation visits to the Keewatin district.

A new agreement has been signed between Northern Health Services and the Clarke Institute of Psychiatry in Toronto whereby the Clarke Institute will be sending a team composed of a psychiatrist, a child psychiatrist and a psychiatric resident three to four times per year to Frobisher Bay and Cape Dorset. Two such visits were made during 1973 and on one visit, the team included a specialist in speech problems and learning disabilities. The costs for this specialist were met by the Department of Education, Northwest Territories. This co-operative venture between the Department of Health and Welfare Canada and the Department of Education, Northwest Territories was found to be extremely useful and, hopefully, such joint teams will be a feature in future services.

Very much has been achieved by our visiting specialists but there is still a need for further service from locally based people. To date, the only member of our Department working strictly in the area of mental health is the Zone Psychologist for Mackenzie Zone in Yellowknife. Budgetary restraints did not allow us to increase the numbers of personnel working in mental health in the North during 1973 but plans are afoot to begin programs involving psychiatric nurses in selective settlements in 1974.

MENTAL HEALTH STATISTICS

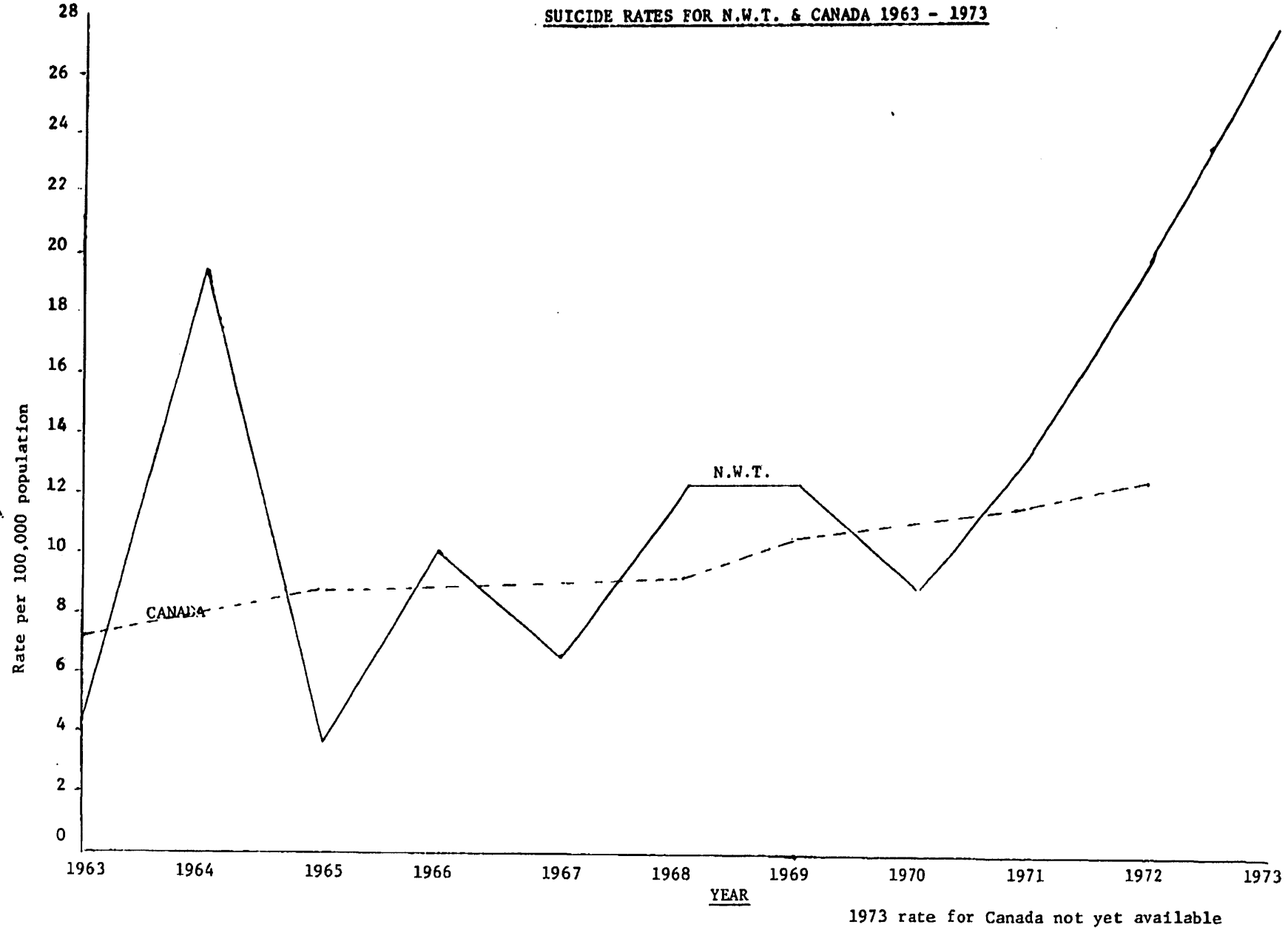
ADMISSIONS TO MENTAL HOSPITALS:

The total admissions to mental hospitals in 1973 was 41 patients. This figure is down from 1972 when 50 patients were evacuated. As in previous years, the number of male patients vastly outnumbered females in a ratio of 3 to 1. Similarly, non-native people outnumbered native patients in the

ratio of 3 to 1. This high number of male non-native patients can probably be attributed to the fact that many of these are transient individuals not residents of the Northwest Territories, at least only resident for a brief period of time.

SUICIDES:

The accompanying graph demonstrates that the suicide rate in 1973 rose yet again. It should be cautioned that because we are dealing with very small numbers, one or two suicides more or less will make a great difference to the appreance of the graph. This not withstanding, however, the figures are rather disturbing. As in previous years, the vast majority of suicides occurred in the non-native population and yet again, there were no suicides in persons of Indian status. The total for 1973 was 10 suicides of which 1 was by poisoning, 5 by gunshot wounds, 3 by hanging and 1 by stabbing. One particularly disturbing feature of the suicides in 1973 was the fact that 7 of 10 occurred in persons under the age of 30 (3 occurring in persons under the age of 20).



1973 rate for Canada not yet available

HEALTH EDUCATION

Although health education is a responsibility of all health personnel and any staff member may be expected to attend public informational or inter-departmental meetings relevant to his own specialty, Medical Services employed two specialists in the field of Health Education throughout 1973.

A Zone Health Educator serves Mackenzie Zone and a Regional Health Educator serves Regional needs as well as the other three Zones.

The expertise of these two individuals is relied upon to identify, maintain stocks of and make available teaching materials and equipment pertaining to the health field, including films, film strips, video and audio tapes, books, pamphlets, posters, etc.

All nursing stations throughout the Northwest Territories are equipped with the necessary basic equipment and devices to make use of such educational materials. Where special equipment not normally carried at the nursing stations is required for a specific purpose, e.g., a T.V. camera is required, health education staff are responsible for locating and making available.

For many health education activities the services of Medical Services Branch are parallel to and interdependent with services of branches of the Northwest Territories Government. It is the duty of the Health Educators to facilitate the interlocking of such mutually complementary services. One way in which this was done in 1973 was by the close involvement of health education personnel with the junior high school curriculum committee.

Through these Health Educators and the nursing division we also have representation on the Family Planning Association and the Alcohol Education programme, to name but two.

The report of the task force on Community Health Auxiliaries was the motivating force behind our planning a major effort towards a Community Health Aide training programme for the first quarter of 1974. All the preliminary work setting up teaching courses in Fort Simpson for the Western Zones and Pangnirtung for the Central and Eastern Zones was completed in the latter half of 1973.

This planning was coordinated by the Regional Health Educator with considerable input by other senior Regional staff. Temporary clerical and advisory assistance was also contracted for this programme. This major effort to involve and train local people for service in community health projects involved a heavy expenditure of time, effort and money. If it achieves its aim it will have been well spent.

This was another programme in which we received greatly valued assistance from the Local Government Department and the Adult Education Division of the Government of the Northwest Territories and which pointed up the value of co-operation between the two levels of Government.

NUTRITION PROGRAMME 1973

The problems related to nutrition in the Northwest Territories are manifested in a variety of forms and have multiple causes.

Towards the end of the year under review the report of Nutrition Canada was released and we were promised a special report on the nutritional status of native peoples. This was still not available at the end of the year.

In general, the problems of dietary imbalance that were defined in Southern Canada are exaggerated in the Northern scene.

High food costs coupled with selective non-availability of certain foods (e.g. fresh fruits, eggs) lead to excessive reliance on foods which may assuage hunger but do little to foster metabolic well being. Candy, cookies, soft drinks and carbohydrate products in general tend to usurp the place of green vegetables, milk, eggs and other such sources of necessary minerals, amino-acids and trace elements, with the all too obvious devastating effect on dentition, and the less obvious but equally present deficiencies of Iron and Vitamin C.

Amongst adults, both young and old, the heavy dependence on beverage alcohol causes further deterioration in nutritional level, both by diverting food dollars from the entire family and by reducing by substitution, the intake of necessary nutrients in the alcohol dependent subject.

Region employed a full time nutritionist throughout 1973 who divided her time between the Yukon and the Northwest Territories and provided counselling service for nurses, institutions, and not least a variety of women's groups throughout the two Territories.

She gave assistance where required for the orientation of senior dietary staff in the Federal Hospitals.

She assisted with the planning and teaching at home education workshops run by the Department of Social Development, and also with the preparation of teaching materials such as videotapes on dietary subjects in native languages.

MEDICAL RESEARCH

The greatest proportion of the time of the Medical Specialist in charge of Northern Medical Research was devoted during 1973 to the preparation for the forthcoming Third International Symposium on Circumpolar Health to be hosted by Canada in Yellowknife in July 1974. This is a major scientific meeting drawing contributions from all countries having territorial or other interests in the Arctic.

The first of these meetings was held in Alaska and the second in Finland.

A special contract employee was obtained to look after much of the physical administrative detail (travel, accommodation, etc). The total involvement for the research unit personnel has been immense and has involved long hours and months of meticulous attention to detail (At the beginning we were not even certain of hotel accommodation and we had to develop alternative plans in case anticipated hotel building did not materialize).

In spite of this involvement time was still found for studies on INH metabolism - published during 1973, on Neoplastic disease in Canadian Eskimos, on Infant Mortality and Morbidity in conjunction with the Perinatatal Study group and into topics developed by the International Biology Program studies at Hall Beach and Igloolik.

Meetings at an international and national level were attended and papers presented at these meetings and on invitation by the Universities of Calgary, Edmonton and Manitoba.

There has also been involvement with the Canada - U.S.S.R. cultural exchange programme, in which the physician specialist has been appointed as Medical Services' representative for Canada.

In the parasitological field, our department has sponsored continued basic monitoring service for Northwest Territories residents admitted to the Charles Camsell Hospital, a referral service primarily for Indian patients from Saskatchewan and Alberta and a consultative service available to any physician in Canada.

There has been representation and scientific papers have been presented at International (Athens) and National (Toronto) meetings related to Tropical and Parasitological medicine.