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THE CITY OF CALGARY

DEPARTMENT OF PUBLIC HEALTH

1971 ANNUAL REPORT

LOCAL BOARD OF HEALTH FOR THE CITY OF CALGARY

His Worship Mayor R. Sykes (Chairman)

Dr. R. Truscott

Dr. M.H. MacDonald

Mrs. V.A. Cooney

C.D. Howarth, City Engineer, Ex-officio

Medical Officer of Health, L.C. Allan, M.B., Ch.B., D.P.H.

Deputy Medical Officer of Health, Agnes E. O'Neil, M.D., D.P.H.



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His Worship the Mayor,
Members of City Council,
City Commissioners.

Lady & Gentlemen:-

I have the honour to present the Annual Report and Financial Statement of the City Health Department for the year 1971.

The Civic Census, enumerated in early January 1971, disclosed that the population had been recorded as 398,034 persons. During 1971 the City population increased by 14,743, for a percentage increase of 3.7%. The boundaries of the City remained unchanged during 1971 at 155.8 square miles.

The natural increase of population during 1971 amounted to 5,163 (i.e. 7,586 births minus 2,423 deaths). This figure represents a decrease of 774 persons from that recorded in the previous year. The difference between the over-all population increase (14,743) and the natural increase (5,163), or 9,580 represents the approximate number of persons coming from other areas to take up City residence within the year.

The steady growth trend is shown over the last five years by the figures below.

Year	Population Census	Over-All Increase	% Increase	Natural Increase Residents	+ Previous - Year
1971	398,034	14,743	3.7	5,163	- 774
1970	385,436	12,598	3.3	5,937	+ 595
1969	369,025	16,411	4.4	5,342	+ 226
1968	354,856	14,169	4.0	5,116	- 154
1967	335,806	19,050	5.7	5,270	+ 314

The rates appearing in the statistical tables of this report are based on the 1971 Civic Census population as recorded by the City Clerk at 398,034 persons.

There were 4,178 marriages registered during the year, representing a rate of 10.5 per thousand population. This shows an increase in the number of marriages performed over the previous year of 183.

Year	No. of Marriages	Rate Per 1,000 Population
1971	4,178	10.5
1970	3,995	10.4
1969	4,000	10.8
1968	3,435	9.7
1967	3,224	9.6

LIVE BIRTHS BY AGE OF MOTHER AND BIRTH ORDER - CALGARY RESIDENTS ONLY - 1971
(Including Illegitimate Births Of Residents)

AGE OF MOTHER	B I R T H O R D E R											TOTALS	INFANTS BORN WITH DEFORMITIES APPARENT AT BIRTH	SETS OF TWINS	SETS OF TRIPLETS
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th	13th			
Under 15 Years	10														
15 - 19 Years	725	136	9	1									7	*7	
20 - 24 Years	1476	1048	283	63	15	1							22	**19	
25 - 29 Years	786	939	504	199	53	19	3	3					23	28	1
30 - 34 Years	154	280	243	150	53	31	13	8			1		10	6	1
35 - 39 Years	28	60	70	67	41	21	14	3	4	1	1	2	5	1	
40 Years & Over	5	15	13	10	4	5	4	5	2	3	2		1		
TOTALS	3184	2478	1122	490	166	77	34	19	6	4	4	2	68	61	2

In addition to the 68 infants born with deformities apparent at birth, 15 other infants were found to have congenital deformities according to death certifications, raising the total of resident infants born with deformities in 1971 to 82.

* Asterisks indicate 3 illegitimate infants with deformities -- one born to a mother in the age group 15 - 19 and 2 to mothers in the age group 20 - 24.

LIVE BIRTHS BY AGE OF MOTHER AND BIRTH ORDER - NON-RESIDENTS ONLY - 1971
(Including Illegitimate Births)

AGE OF MOTHER	B I R T H O R D E R											TOTALS	INFANTS BORN WITH DEFORMITIES APPARENT AT BIRTH	SETS OF TWINS
	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th	11th			
Under 15 Years														
15 - 19 Years	156	20	1									177	*1	
20 - 24 Years	134	97	35	3	1							270	*1	1
25 - 29 Years	41	74	54	25	10	10	1	1				216	1	3
30 - 34 Years	12	22	28	18	7	8	3	2	4			104	*1	1
35 - 39 Years	2	5	7	5	4	8	3	3	1	2		40	1	
40 Years & Over		1	1	2	1	2	3	4			1	15	1	
TOTALS	345	219	126	53	23	28	10	10	5	2	1	822	6	5

In addition to the 6 infants born with deformities apparent at birth, 6 other infants were found to have congenital deformities according to death certifications, raising the total to 11 non-resident infants born with deformities in 1971.

* Asterisks indicate 3 illegitimate infants born with deformities.

ILLEGITIMATE LIVE BIRTHS BY AGE OF MOTHER AND BIRTH ORDER - CALGARY - 1971

AGE OF MOTHERS	O R D E R O F B I R T H										Total Number of Infants Born in Calgary to Unwed Mothers		No. Of Mothers Previously Married	
	1st		2nd		3rd		4th		5th					
	Residents	Non-Residents	Residents	Non-Residents	Residents	Non-Residents	Residents	Non-Residents	Residents	Non-Residents	Total Residents	Total Non-Residents	Residents	Non-Residents
12 Years	1										1			
14 Years	9										9			
15 Years	16	6									16	6		
16 Years	*45	25	1	2							46	27		
17 Years	85	26	5	1	1						91	27		
18 Years	*80	30	10	4		1					90	35	2	
19 Years	65	30	7	1	3						75	31	2	
20-24 Years	*167	36	68	14	29	8	12	2	4	1	280	61	48	1
25-29 Years	32	4	30	5	12	3	11	2	9	*8	94	22	38	6
30-34 Years	4	2	4	2	7		2		10	7	27	11	16	3
35-39 Years	3		3	1	2	2			9		17	3	10	1
40 Years & Over	1								1	3	2	3		3
TOTALS	508	159	128	30	54	14	25	4	33	19	748	226	116	14

*A total of six sets of twins were born to unwed mothers, as indicated by the asterisks;
3 sets of twins were born to the age group 20 - 24 years.

The gross number of births registered in the City in 1971 totalled 8,408 for a rate of 21.1 per thousand population. This gross figure includes births to females not normally resident within the City boundaries. In 1971 there were 7,586 registered births to City residents, establishing a rate of 19.0 births per thousand population. This net figure is a decrease of 563 from the previous year (8,149). The net birth rate of 19.0 per thousand is the lowest yet recorded and a considerable reduction from the previous year, when the rate was 21.1 per thousand population. Despite a steadily rising population, the number of births has declined significantly from the figure of the previous year (8,149), showing a decrease of 563 from that recorded in 1970. It is interesting to note that in comparison to the birth rate of 19.0 per thousand in 1971, the corresponding rate a decade ago was 30.6 per thousand population. The ever-increasing dissemination of information from many sources concerning birth control methods, family planning clinics and the greater availability of legalized abortions are undoubtedly significant factors in the declining birth rate.

Included in the total births, 8,408, are 974 illegitimate babies, representing 11.6% of all births occurring in the City Hospitals. This is a significant decrease of 2.7% from that recorded in the year previous. Actually, 748 illegitimate births occurred to females registered as living within the City boundaries, or 9.8% of the net total of 7,586 births, a reduction of 210, or 2.0%, from the previous year. Of 822 babies born in Calgary but registered to non-resident females, 226 were illegitimate, or 27.5%. This is also a decrease in number from the previous year of 124, or 8.1%.

This is the first year in over a decade in which there has been a significant reversal of the trend of an increasing yearly illegitimacy rate. This coincides with the greater use being made of birth control information and persons seeking abortions in City Hospitals. In the statistical table it will be seen that in the age group 12 - 19, classed as teen-agers, there were 454 illegitimate babies, with 323 born to City residents and 126 to non-residents. In the age group 20 - 29 years, there was a total of 457 illegitimate births, with 374 classed as City residents and 83 as non-residents.

The gross number of stillbirths registered was 89, for a rate of 10.6 per thousand live births. The net figure of 77 represents residents only, for a rate of 10.1 per thousand live births. This is a decrease in the rate recorded in the previous year for stillbirths of 1.6 and 2.3 respectively from the previous year.

VITAL STATISTICS

Gross Live Births	8,408	Birth Rate per 1,000 Population	21.1
Gross Stillbirths	89	Stillbirth Rate per 1,000 Live Births	10.6
Net Live Births (City Residents)	7,586	Rate per 1,000 Population	19.0
Net Stillbirths	77	Rate per 1,000 Population	10.1

There were 822 non-resident births and 12 non-resident stillbirths in 1971.

The gross number of deaths during the year 1971 from all causes numbered 2,810. This figure accounts for deaths of persons both resident and non-resident in the City. Converted into a rate per thousand population, the figure is 7.0. Total deaths recorded in the registered statistics over the year show an increase of 219 over the 1970 figure. Net deaths, or deaths recorded in City residents only, numbered 2,423, for a rate of 6.1 per thousand population. This figure remains relatively constant over the years. Deaths of non-resident persons numbered 387, or 8 more than in the previous year.

The following Table shows the chief causes of death and is based on the gross deaths reported.

THE CHIEF CAUSES OF DEATHS ARE:-

1. Diseases of the heart and circulatory system (Code No. A 79 - A 86) accounted for 665 deaths. Vascular lesions affecting the central nervous system (Code No. A 70) accounted for 277 deaths.	665 + 277 = 942
2. Neoplasms - all forms (Code No. A 44 to A 60)	635
3. Violent and accidental deaths (Code No. AE 138 to AE 149)	298
4. Diseases of the respiratory system (Code No. A 87 to A 97) i.e. Influenza, Pneumonia, Bronchitis, Emphysema, Bronchiectasis, Etc.	252
5. Diseases of the digestive system (Code No. A 99 to A 107) i.e. Peptic Ulcers, Herniae, Appendicitis, Cirrhosis of Liver, Cholecystitis, Etc.	156
6. Certain diseases of early infancy, including birth injuries, infections and prematurity (Code No. A 130 to A 135)	100
7. Diseases of the genito-urinary system (Code No. A 108 to A 114) i.e. Nephritis, Pyelitis, Renal Calculi, Prostatic Hypertrophy, Etc.	57
8. Congenital Malformations, Deaths in all age groups (Code No. A 127 to A 129)	53
9. Diabetes Mellitus (Code No. A 63)	29

DEATHS FROM INFECTIVE DISEASES:-

1. Tuberculosis, Pulmonary (Code No. A 1), including deaths of Calgary residents in Sanatoria	4
2. Tuberculosis, Non-Pulmonary (Code No. A 5), Non-Resident	1
3. Meningococcal Infections (Code No. A 23)	2
4. Infectious Hepatitis (Code No. A 34)	2
5. Congenital Rubella (With Encephalitis) (Code No. A 43)	1
6. Gas Gangrene (A 43)	1

Diseases involving the heart and circulatory system together with vascular lesions of the central nervous system accounted for 942 deaths or 33.5% of all deaths recorded. Of the actual deaths of City residents in these categories, there were 848

deaths, representing a figure of 33.7% of the total City deaths and a rate of 2.1 per thousand.

Diseases of the cardio-vascular system continue to occupy the leading place as the cause for ending human life, despite remarkable achievements in the last two decades in the realms of cardiac surgery. Arteriosclerosis and coronary disease are responsible for over 50% of all cardiac deaths. The incidence of death from heart disease from age 45 upwards is very much higher in the male sex than in the female. A reduction in the incidence of heart disease can be achieved if persons would pay heed to such advice as stopping tobacco smoking, avoidance of overweight by limiting the food intake and taking sufficient exercise to acquire a good standard of general physical fitness. A short period daily devoted to jogging, bicycle riding or a brisk two mile walk is an excellent start in such a program. Too many people in midlife are overweight. Although obesity has never been finally established as a cause of high blood pressure or heart disease, it is a most significant factor. From everyday observation it can be established that "old people are thin people". All health education literature emphasizes the importance of physical exercise and recreational pursuits involving bodily activities. It is only in this way that the heart and circulation retains its tone by being stimulated over the years.

In the number two position as the commonest cause of death in the statistical tables is malignant disease of all kinds. In 1971 malignant neoplasms in all forms accounted for 635 deaths or 23.0% of the total deaths recorded. There were 541 deaths of City residents attributable to malignant neoplasms or 22.3% of the total deaths. These figures are remarkably constant year after year.

Leukaemia deaths numbered 20 in residents. There were 13 deaths in males and 7 in females, accounting for 0.90% of all deaths.

A total of 108 persons died in Calgary Hospitals as a result of Cancer of the respiratory system, accounting for 3.9% of the gross deaths. Deaths of City residents from this cause numbered 91, with a sex distribution of 69 males and 22 females, or 3 to 1 ratio, accounting for 3.7% of all deaths. Deaths amongst males are always greater than in females.

Clinical and autopsy studies have clearly established the fact that damage to the lungs occurs as the result of inhaling potential Cancer-producing chemicals in cigarette smoke. A heavy smoker has at least thirty times the risk of developing a Lung Cancer than that of a non-smoker. This is ample evidence that cigarette smoking as a predisposing cause of pre-cancerous cell changes in the bronchi and lung tissue is greater than any degree of atmospheric pollution presently existing in the whole Dominion at the present time.

To those who continue to smoke cigarettes, it should be emphasized the necessity of accepting a chest x-ray on a regular annual basis. Only by early detection by means of x-ray may the victims of Lung Cancer stand even a slim chance of a possible cure.

Violent and accidental deaths numbered 298, an increase in the gross figure over the previous year of 24. 223 victims were City residents, with 75 classified as non-residents. Deaths in City residents accounted for 9.2% of all deaths recorded, down 0.4% from the previous year. Motor vehicle accidents accounted for 67 deaths

of residents with the highest incidence in the age group 15 - 24 years, with a preponderance of males in a ratio of 3 to 1. Deaths due to motor vehicles accidents within the actual City boundaries numbered 42 residents during the year. Traffic accidents accounted for 34.2% of all the violent deaths recorded and 30.0% within that category when related to City residents only.

Accidental falls as a contributing factor in death numbered 42 in City residents with the incidence greater in the female sex and in the age group over 65 years. There were 11 deaths ascribed to drowning, 6 due to fire and explosion, and 15 due to poisoning, despite continuing publicity put out by all agencies promoting all aspects of safety. Accidents are commonly considered to be due to chance, bad luck or carelessness. In the final analysis, it can usually be established in any subsequent investigation that there was a lack of due care exercised either by the victim or by those responsible for the victim. This is the case where a young child is involved.

Suicide and self-inflicted injuries numbered 55 in City residents, 38 males and 17 females. Suicides accounted for a rate of 0.15 per thousand population, or one such death for every 7,237 residents.

Deaths ascribed to ill-defined and unknown causes numbered in City residents 109 in 1971. With only a sketchy medical history being available to the physician called to see a body after death, without an autopsy it is virtually impossible to assign the cause of death to a defined classification.

Deaths due to diseases of the respiratory system numbered 233 in City residents, accounting for 9.6% of total deaths.

There were 164 deaths of infants in their first year of life, representing a gross rate of 19.5 per thousand live births. This figure includes 22 non-resident infant deaths. The 142 deaths of infants in City residents represent a net infant mortality rate of 18.7 per thousand live births. Prematurity, congenital malformations and respiratory conditions accounted for 80.0% of deaths in this broad grouping.

80 infant deaths occurred within the first twenty-four hours of life, or 49.3% of the total; 38 or 23.0% of deaths occurred within the first week of delivery; 12 deaths occurred within the first month of life, or 7.3%.

There was 1 death in a City resident related to pregnancy in the year. Maternal mortality gross is thus 0.12 per thousand births and 0.13 per thousand births net.

Communicable diseases reportable for Dominion statistical purposes numbered 3,964 cases during the year.

Whereas in 1970 there had been a cyclic epidemic incidence of Red Measles, in 1971 Rubella, or German Measles, was in evidence in cyclic epidemic incidence, with 2,682 cases being reported with 1 death. The greatest incidence of this disease was noted in the age groups 5 years through age 19 years, with 2,422 cases being reported. Sex distribution indicated a slightly higher incidence in females. The age group 10 - 14 years recorded the highest incidence. Following the program of immunization adopted for the Province as a whole, all females aged 12 years were

immunized with the new Rubella Vaccine. The epidemic attained its greatest incidence during the months March to June; however, with the closure of schools for the summer vacation the incidence thereafter dropped very quickly.

Cases of Red Measles reported in 1971 numbered 321, with the highest incidence of cases reported in the age group 5 - 9 years, with 190 cases. It is noteworthy that in the age group 1 - 4 years there were only 49 cases, again confirmation of the value of anti-measles vaccine in the control of this condition.

Salmonella infections numbered 91 cases. The cases were of a sporadic nature, and in all instances stool samples were obtained and submitted for laboratory investigation from all other members of the family in which a case occurred. All cases were followed until stool samples were reported negative on two successive occasions by a bacteriologist.

There were 424 cases of Infectious Hepatitis during the year with 2 deaths, an increase of 166 cases over the previous year. This generally is reflecting the higher incidence reported in the Province as a whole. Immune Serum Globulin inoculations were given to all family contacts by the public health nurse in an effort to halt the spread within the family. Cases of Serum Hepatitis numbered 31, with the greater incidence amongst the male sex -- 25 cases as opposed to 6 in females. This condition is associated with a transfer of the infectious viral agent from one person to another by contaminated syringes and needles. Its high incidence in the age group 15 - 24 years reflects the association with illicit drug abuse.

There were 3 cases of Meningococcal Meningitis, with 2 of them fatal.

In 1971 there was a total of 33 new active cases of all forms of Tuberculosis discovered during the year and admitted to the Sanatorium for treatment, giving an over-all rate of 8.3 per 100,000 for this condition. This is a reduction of 24 cases from the year before. New active cases of Pulmonary Tuberculosis numbered 25, again a reduction from the previous year of 16. The rate for Pulmonary Tuberculosis was 6.3 and for Non-Pulmonary cases 2.0 per 100,000 population. 4 deaths were recorded giving Tuberculosis as the immediate cause of death amongst City residents, with 1 non-resident death attributed to Non-Pulmonary Tuberculosis.

Much time and effort is spent by all nurses, particularly in the Tuberculosis Division, in the follow-up of ex-patients and Tuberculin positive reactors and contacts of known cases to keep their regularly scheduled follow-up x-ray appointments. At the Chest X-Ray Unit, located in the Health Department, 16,370 persons took advantage of this free service to obtain a chest x-ray during the year. With the low incidence of Tuberculosis in this area of the Province, it was decided to omit the usual annual visit of the Mobile X-Ray Unit to the City in 1971.

Over 17,900 school children and school personnel received a T.B. skin test during the year, with 134 school pupils being reported as having a positive reaction and requiring further investigation of the families concerned.

At the Grade I level, with 7,230 pupils tested, or 92.3% of the total school enrollment in that Grade for the year, only 37 positive reactors to the T.B. skin

testing were found to be positive. This represents a reactor rate of 0.51/1,000 pupils at age six years.

In the Grade IX Program, 6,319 pupils, or 91.5% of enrollment, 97 positive skin reactors were identified, for a reactor rate of 1.53/1,000 pupils. Of the 97 positive reactors identified:-

31 were immigrants, 8 of whom had previously been immunized with B.C.G. Vaccine;

14 others were Canadian born who had been similarly immunized with B.C.G. Vaccine;

4 members of the Grade IX groups of that year were previously known to be positive reactors from previous family investigations, leaving 46 new reactors being identified and requiring full investigation of the other siblings and family members.

Rabies, which had made its appearance in certain wild and domestic animals within the Province in the latter months of 1970, continued to be reported in the early months of 1971. A determined effort at selective extermination of the skunk and coyote populations in rural areas along the eastern and south-east borders of the Province by the Department of Agriculture quickly produced favourable results. By the time spring arrived the notification of rabid animals had virtually ceased. There were 11 animals identified as suffering from Rabies in widely scattered areas of the Province during January, with a further 5 positive identifications in February. Through March and April the numbers had dropped to a single case in each month. Of the 21 positive animal identifications of rabid animals in the Province in 1971, it is gratifying to report that none were within thirty miles of the Calgary boundaries. During the critical months of 1971 the Health Department and the Federal Health of Animals Division exercised constant vigilance in following any biting incidents by animals involving City residents by the imposition of quarantine on the animals identified and in submitting heads for examination to the Animal Research Laboratory in Lethbridge.

The incidence of Venereal Diseases showed a definite increase over the previous year. Confirmed cases of Gonorrhoea numbered 1,168, for a rate of 293.4 per 100,000 population, an increase of 180 cases over 1970 when the corresponding rate was 211.1 per 100,000. Cases of Syphilis in all forms numbered 32, with a sex distribution of 19 males and 13 females, reflecting a rate of 8.0 per 100,000 population, for an increase of 10 cases over that reported in the previous year. There were no cases of Congenital Syphilis; however, out of the total cases (32), 6 were recorded within the age group under 20 years. The greatest increase in the incidence of Gonorrhoea in 1971 is reflected in the age group 15 - 19 years, with 70 more cases reported than in the previous year.

This increased incidence in cases of Gonorrhoea is, no doubt, inter-related with the increasing urban populations. Persons moving to the urban centres to seek work are usually young persons. Another factor is a change in sexual behaviour associated with the increasing use of contraceptive pills and intrauterine devices. More and more young persons are now leaving home at an earlier age to travel across the Country in greater numbers than ever before to become exposed to more free and easy, unsupervised living conditions. Gonorrhoea in the female may be virtually asymptomatic. With its short incubation period many

females unwittingly continue to disseminate the infection to a number of males before being identified by contact tracing. In view of the higher incidence of Gonorrhoea, there would appear to be a silent reservoir of infection amongst females that may be responsible for the present rise in cases of this disease. It is a problem of some magnitude to locate and treat infected persons and thus break the cycle in the spread of this disease. With the maintenance of a walk-in Social Hygiene Diagnostic and Treatment Centre in the City providing free treatment, there should be no reason for anyone neglecting to have a sore or a suspected discharge in the region of the genital organs checked and investigated without delay.

In the light of the foregoing, the upswing in the incidence of Venereal Disease amongst the older teen-age and young adult groups suggests that a lack of reliable information and awareness of the consequences of these social diseases may be a causal factor. It is the intent of the Department to put increased emphasis on information dissemination in this field in an effort to reverse this present rising trend.

From the Report of the Provincial Poison Control Services for the year 1971, there were 5,129 incidents of accidental poisoning reported. The number of such incidents have tended to increase each year since the program was instituted in 1961. There were 1,843 accidental poisoning incidents treated at the Poison Control Centres of the four major Calgary Hospitals during the year, with a total of 6 deaths. This represents an average of 5 accidental poisoning incidents happening in the City each day of the year. Each year sees a new batch of complex inorganic and organic products manufactured for some type of domestic use which add extra hazards to the life and safety of young, inquisitive and unsuspecting children to tamper with if they are not stored with regard to "home safety". These coupled with medicinal products within the home improperly stored, account for nearly all such poisoning incidents. The age group 0 - 4 years accounts for the highest incidence of these tragic happenings by far.

Only 1 death was attributable to this cause in this age group during the year, however. The public health nurse makes a follow-up home visit to every case of accidental poisoning reported in the age group under four years. The nurse and parent review the circumstances leading up to the incident and check the safety precautions to be taken by means of safety pamphlets so that the house is "poison proofed" against a subsequent incident. Aspirin compounds, both child and adult variety, are without doubt the most common single drug involved in home poisoning incidents. Only by awareness of large numbers of potential home hazards by parents will we be able to prevent the rising rate of tragedies associated with medicinal drugs and household chemicals. Where there are young children in the home, it is the parents' responsibility to see that drugs, cleaning agents, household chemicals, toilet preparations and the like are properly stored on high shelves or locked in cupboards or drawers and out of reach of young children, no matter the personal inconvenience to either parent.

The Dental Division was under a handicap during the first half of 1971 when understaffed by three dental hygienists. A full complement was recruited and available for work in the Department during the latter half of the year. The Department was able to maintain a full complement of dentists on staff during the year to provide a comprehensive treatment program to the eligible groups

of school and pre-school children.

A total of 7,070 appointments were made for the dentists, 6,455 respecting school children and 615 for pre-school children. In the school program, dental work was performed at 6,455 appointments kept. 480 appointments were not kept by patients during the year. Of the 615 appointments made for pre-school treatment purposes, only 7 were not kept by the patient.

Of the 6,628 teeth treated, 5,396 (81.4%) were restored to be healthy functioning units, whereas 1,232 (18.6%) teeth required extraction. Of the total restorations performed (5,396), 3,242, or 60.1%, were on permanent and 2,154, or 39.9%, were on baby teeth. A total of 414 teeth were treated by the fitting of steel crowns. Complete prophylaxis was given to 1,522 patients and topical fluoride applications performed on 1,474 patients. 211 patients received a root canal treatment in an effort to save a tooth from extraction. Space maintainers were inserted for 146 patients to prevent drifting of teeth following extraction and 93 received an orthodontic appliance for the correction of tooth malalignment. A total of 3,428 dental x-rays were done during the course of treatment. 2,897 patients received instructional educational talks relating to oral hygiene and the care of the teeth.

In the program of preventive dentistry carried out by the dental hygienists, 5,966 appointments were made for pre-school pupils and a further 2,273 appointments for school children. 7,259 children received a dental prophylaxis and topical fluoride application to their teeth. A total of 7,338 children received an inspectional examination and appraisal of the condition of their teeth with a report being provided to the parents.

In the school program for the instruction of children in the care of their teeth and the prevention of dental decay, 4,034 pupils in Grades II and III in 32 schools participated in a program using dental kits and instructional materials provided by the Proctor & Gamble Company. This program is very favourably received by pupils and teachers alike.

Dental health education sessions were conducted in an additional 36 elementary schools by invitation of teachers and covered a further 4,620 pupils. A similar program was presented in 32 kindergartens with an enrollment of 1,089 pupils.

With dental decay one of the most common maladies of mankind, it is fitting that every avenue of control should be used to combat this condition. The Provincial Government makes available free fluoride supplements to all children whose parents obtain a prescription for their use from a doctor or dentist. In 1971 the Health Department filled requests for fluoride supplements, representing new and refill prescriptions for tablets and drops totalling 31,321 -- 20,398 for liquid supplement and 10,923 for tablets. Refill prescriptions totalled 12,462, divided into 6,748 for liquid and 5,714 for tablets. This represents a comparatively small number of children regularly receiving fluoride supplements, when it is recognized that there are over 120,000 children under the age of 15 years in the City. No significant reduction in the incidence of tooth decay will be achieved in this community as long as the initiative for administering fluoride supplements remains a home-based program.

For the fourth time in a period of fourteen years, a further referendum was held on the issue of Fluoridation of the Municipal Water Supply at the time of the

October Civic Elections. It is very encouraging to report that for the first time when the issue of Fluoridation was again to the fore that a strong group of concerned parents formed the Calgary Pro-Fluoridation Association to actively promote the immense value of water fluoridation in combatting the incidence of dental decay in children. Incorporated under The Societies Act, with Mr. Stanley Johnson as the President, they sold memberships in the organization for the sum of \$1.00 to raise funds for promotional purposes. With but limited funds, a sincere and lively campaign was conducted right up to the last day. When the final tally of the citizens' vote was counted, the result was NO - 60,394, YES - 49,122. Once again this time-tested Public Health measure that is being used by some 7 million Canadians in most of the Nation's major urban areas had been rejected for adoption in this City. It is only by utilizing all avenues of approach on preventive methods that we can hope to conquer dental decay. In an age when the medical sciences move from one triumph to another, it should not be forgotten that dental disease in the form of tooth decay, which is to a very great extent preventable, still remains the most common disease of all.

It was again a very busy year for the staff engaged in the preventive services provided in the community, school and pre-school divisions. In the schools the nurses held health counselling sessions with 34,124 students and had conferences with the classroom teachers concerning the health and welfare of 22,772 pupils.

39,343 health inspections and interviews were conducted on school pupils. 53,649 vision tests were conducted in the schools, with 6,102 pupils being referred for further examination and assessment by an ophthalmologist or optometrist. A total of 13,887 individual audiometer tests were performed, with 399 pupils referred to an ear specialist for further specialized investigation and assessment.

In Grades I and IX, out of a total enrollment of 14,741 pupils, 13,549 Heaf Tests for Tuberculosis appraisal were performed, resulting in a positive reaction found in 134 cases which required follow-up and investigation on their parents, siblings and close family associates.

30,756 pupils received a dental inspection by the nurses, resulting in 6,989 requiring referral to the family dentist for treatment. First-aid treatment for minor troubles and accidents was carried out on 18,366 students and 3,181 pupils were interviewed concerning communicable diseases, chiefly concerning exclusions from school to prevent spread to other pupils. 9,068 home visits were made by the nurses to discuss matters of a pupil's health with the parents.

3,734 teachers and 488 members of the administration staff and janitors were skin tested for Tuberculosis control, resulting in 261 positive reactors identified with 2,246 of these adults who work very closely with school children being x-rayed.

In the immunization program performed in the City schools, 22,399 doses of various antigens were given to update protection against Diphtheria, Tetanus and Poliomyelitis. 20,405 vaccinations against Smallpox were given and 23,180 doses of Sabin Oral Vaccine were administered, and 6,315 doses of Rubella Vac-

cine were administered to girls who had attained their twelfth birthday and to susceptible female staff members of hospitals and similar institutions, in accordance with a new Provincial Program for the use of this particular Vaccine.

The Child Health Service Clinics had a total attendance of infants and pre-school children in 1971 numbering 58,380. 32,862 pre-school consultations were conducted and a further 25,520 infants received health development and growth assessment services by the nurses. 29,130 doses of Quadruple and Triple Vaccines were administered to infants and pre-school children, with a further 6,414 doses of Live Attenuated Measles Vaccine also being administered.

The public health nurses visited 7,586 newborn children and the mother in their homes to provide counselling services and health information. Home visits to adults in the community concerning communicable diseases, mental health problems, investigation into matters relating to old age, Tuberculosis control, pre-school children, handicapped persons, etc. numbered 14,297 visitations.

1,308 patient visits were paid to the Family Planning Clinic, with 533 persons attending for the first time. There were 83 clinic sessions held at this Family Planning Clinic. Recall appointments numbered 875. The Family Planning Clinic is a cost-shared program with the Preventive Social Services Agency. Free birth control supplies are provided according to a means test. For those who do not qualify under the means test, a prescription is written to be filled out at any drugstore.

In the fall of 1971 the Well Baby Clinic and Inoculation Centre that has been located on the ground floor of the City Hall moved to a new location in the City Hall Annex, 237-7th Avenue S.E., immediately west of the Bank of Montreal. The annex building underwent extensive remodelling to provide a very bright, spacious and efficient lay-out for these very important services. The staff and public have readily adapted themselves to the inconveniences brought about by splitting this service away from the main Administration Building.

The Health Department Laboratory performed 22,061 tests on the water samples collected at various points in the water distribution system and the Glenmore Reservoir Water Treatment Plant to ensure quality control. 11,440 tests were performed on samples of water used by City residents in outlying areas within the City not serviced by City water mains. A total of 15,904 tests were performed on 1,715 milk samples obtained from milk shippers into the Calgary area. A further 6,672 tests were done on 826 milk samples selected at random from grocery stores and milk delivery wagons. 8,013 tests classified as miscellaneous were performed on restaurant and beverage room utensils, etc. for an overall total of 64,090 tests completed during the year.

In the Environment Control Division, a mention of some of the work will illustrate that a continuous inspection service is constantly alert in the protection of the health of the Public. 7,278 check inspections were carried out on the 530 restaurants registered in the City; 1,075 inspections were made in bakeries and confectionaries, with butcher shops and meat processing departments checked on 1,059 occasions.

During the year the Department provided field work experience for certain dental auxiliaries in training at the School of Dental Hygiene in Edmonton. Opportunity

was provided for nurses in training in Calgary Hospitals and at Mount Royal College to receive a period of instruction and observation with the public health nursing staff as in past years.

The Department would again wish to pay tribute to the ladies who have volunteered their time to assist in the Well Baby Clinics and to act as recorders.

The Department is most appreciative of the help, advice and guidance given throughout the year by the following:-

His Worship the Mayor, Board of Commissioners and Members of City Council,
Members of the Calgary Public and Separate School Boards,
Superintendents and staffs of the Provincial Sanatoria and Mental Hospitals and Institutions,
Alberta and Calgary (Kinsmen's Club) Tuberculosis and Respiratory Disease Association,
Provincial Cancer Clinic,
Provincial Guidance Clinic,
Provincial Social Hygiene Clinic,
Provincial Department of Public Health,
The Director and staff of the Provincial Laboratory of Public Health, Southern Branch,
The Calgary Branch of the Victorian Order of Nurses,
The Calgary General Hospital and Holy Cross Hospital and staffs,
The Foothills Provincial Hospital and staffs,
The Calgary Press, Radio and Television Stations, and to the many volunteer workers in the City.

In closing this report, a word of thanks must go to all the many members of the staff of the Health Department because without their loyalty, co-operation and the painstaking way in which their duties have been discharged, the Medical Officer of Health would have no accomplishments to report.

Respectfully submitted,

Leslie C. Allan, M.B., Ch.B., D.P.H.,
Medical Officer.

	No. of Deaths incl. Non-Residents	Rate per 1,000 Population	No. of Deaths Residents Only	Rate per 1,000 Population
1971	2,310	7.0	2,023	6.1
1970	2,391	6.7	2,012	5.7
1969	2,332	6.5	2,002	5.6
1968	2,389	6.6	2,000	5.6
1967	2,372	6.7	2,000	6.0

From all causes a total of 2,310 deaths were reported in 1971, including 207 deaths of non-residents.

VITAL STATISTICS

LIVE BIRTHS - 1967 TO 1971

Out of 8,408 live-born babies born in Calgary in 1971, 744 were premature (the weight recorded as 5½ pounds or less) - this represents 8.8% of all births.

Year	Population	Births Inc. Non-Residents	Rate per 1,000 Population	Births Residents Only	Rate Per 1,000 Population
1971	398,034	8,408	21.1	7,586	19.0
1970	385,436	9,136	23.7	8,149	21.1
1969	369,025	8,349	22.6	7,429	20.1
1968	354,856	7,937	22.4	7,184	20.2
1967	335,806	8,068	24.0	7,301	21.7

STILLBIRTHS - 1967 TO 1971

Year	No. of Stillbirths Incl. Non-Residents	Rate per 1,000 Live Births Gross	Stillbirths Residents Only	Rate per 1,000 Live Births Net
1971	89	10.6	77	10.1
1970	112	12.2	101	12.4
1969	101	12.1	84	11.3
1968	72	9.1	66	9.2
1967	102	12.6	87	11.9

MARRIAGES - 1971

Number of marriages performed in the City of Calgary in 1971 was 4,178. This represents a rate of 10.5 per 1,000 population.

DEATHS AND MORTALITY RATES - 1967 TO 1971

	No. of Deaths Incl. Non-Residents	Rate per 1,000 Population	No. of Deaths Residents Only	Rate per 1,000 Population
1971	2,810	7.0	2,423	6.1
1970	2,591	6.7	2,212	5.7
1969	2,390	6.5	2,087	5.6
1968	2,399	6.8	2,068	5.8
1967	2,322	6.9	2,031	6.0

From all causes a total of 2,810 deaths were registered in 1971, including 387 deaths of non-residents.

INFANT DEATHS AND MORTALITY RATES - 1967 TO 1971

DEATHS WITHIN FIRST YEAR OF LIFE	1971		1970		1969		1968		1967	
	Gross	Net	Gross	Net	Gross	Net	Gross	Net	Gross	Net
Number of Infant Deaths	164	142	178	142	159	132	133	112	174	153
Rate per 1,000 Live Births	19.5	18.7	19.5	17.4	19.0	17.8	16.8	15.6	21.6	20.9

CAUSES OF INFANT DEATHS - 1967 TO 1971

Of the 164 infant deaths in 1971, 80 occurred within the first twenty-four hours of life, 38 deaths occurred after twenty-four hours but within the first week of life, and 12 deaths occurred after one week of life but within the first month of life; combined they represent 79.3% of the total infant deaths.

CAUSES OF DEATHS	1971	1970	1969	1968	1967
Immaturity and ill-defined diseases of early infancy (Code No. A 135)	85	83	75	62	83
Congenital malformations (Code No. A 127 to A 129)	33	39	37	32	41
Acute respiratory infections including Pneumonia (A 132, A 87 to A 97)	13	20	5	16	11
Accidental causes (AE 138 to AE 147)	5	9	5	3	4
Postnatal asphyxia and atelectasis (A 131)	5	5	11	1	7
Non-Meningococcal Meningitis (A 71)	4	2		2	1
Injuries at Birth (A 130)	2	5	8	2	2
Gastro-Intestinal disorders (A 101 to A 107)	1	1	4	5	3
Haemolytic Disease of the newborn (A 133)	1	4	6	1	1
Malignant neoplasm (A 44 - A 59)	1	3	1		2
Septicaemia (A 20)		1	1	2	
Meningococcal Infection (A 23)		1			
Measles (A 32)		1			1
All other and unknown causes	14	4	6	7	18
TOTALS	164	178	159	133	174

Gross - Includes Non-Residents; Net - Residents Only.

MATERNAL MORTALITY (INCLUDING NON-RESIDENTS)

1967 - 1971

Year	Live Births	Number Of Maternal Deaths		Rate Per 1,000 Live Births
		Resident	Non-Resident	
1971	8,408	1	-	0.12
1970	9,136	-	1	0.11
1969	8,349	-	1	0.12
1968	7,937	2	-	0.25
1967	8,608	-	1	0.12

CAUSES OF MATERNAL DEATHS

1970 - 1971

	Number Including Non-Residents		Residents Only	
	1971	1970	1971	1970
Sepsis of pregnancy and the puerperium	-	-	-	-
Toxaemias of pregnancy and the puerperium	-	-	-	-
Accidents of pregnancy and child-birth (massive hemorrhage)	1	-	1	-
Abortions, Septic and Non-Septic	-	1	-	-
Other complications of pregnancy, childbirth and the puerperium	-	-	-	-

REPORTED CASES AND DEATHS FROM TUBERCULOSIS

1967 - 1971

Year	New Active Cases	Number Died In Calgary	Number Died In Sanatoria	Total Deaths	Death Rate Per 100,000 Population
1971	33	-	4	4	1.0
1970	57	2	2	4	1.0
1969	29	1	2	3	0.8
1968	40	2	4	6	1.7
1967	40	-	3	3	0.9

In addition, one Non-Resident died in Baker Memorial Sanatorium of Non-Pulmonary Tuberculosis.

REPORTED CASES AND DEATHS FROM CHICKENPOX, DIPHTHERIA, INFECTIOUS HEPATITIS, MEASLES, MENINGOCOCCAL MENINGITIS, PERTUSSIS, SALMONELLA INFECTION, ETC. 1969 - 1971

COMMUNICABLE DISEASE	C A S E S			D E A T H S			Mortality Rate Per 100,000 Population		
	1969	1970	1971	1969	1970	1971	1969	1970	1971
Chickenpox	600	942	1,070	-	-	-	-	-	-
Diphtheria	-	-	-	-	-	-	-	-	-
Infectious Hepatitis	206	258	424	1	1	2	0.3	0.25	0.5
Measles	216	1,123	321	-	1	-	-	0.25	-
Meningococcal Meningitis	4	3	3	1	1	2	0.3	0.25	0.5
Pertussis	23	39	96	-	-	-	-	-	-
Salmonella Infection	33	87	91	-	1	-	-	0.25	-
Late Effects of Acute Poliomyelitis	-	-	-	-	1	-	-	0.25	-
Rubella (Death - Newborn Infant)	233	776	2,682	-	-	1	-	-	0.25

CHIEF CAUSES OF DEATHS - 1971, 1970, 1969
(Including Non-Residents Who Died In Calgary)

CAUSES OF DEATHS	Number Of Deaths			Rate Per 100,000 Population		
	1971	1970	1969	1971	1970	1969
Diseases of the heart, arteries and kidneys, including apoplexy	979	936	863	245.9	242.8	233.9
Neoplasms - all forms	635	553	544	159.5	143.5	147.4
Violent and Accidental Deaths	298	274	197	74.9	71.1	53.4
Pneumonia, Bronchitis & Influenza	183	162	156	46.0	42.0	42.3
Certain Diseases of Early Infancy	100	106	105	25.1	27.5	28.5
Chronic Respiratory Diseases -- Emphysema, Bronchiectasis, Pulmonary Fibrosis, Etc.	64	50	43	16.1	13.0	11.6
Cirrhosis of Liver	46	49	27	11.5	12.7	7.3
Congenital Malformations (All Age Groups)	53	54	57	13.3	14.0	15.4
Diabetes Mellitus	29	46	48	7.3	11.9	13.0
Communicable Diseases (other than Tuberculosis & Influenza) including late effects	7	8	10	1.7	2.1	2.7
*Tuberculosis - all forms	5	4	6	1.2	1.0	0.8
All other causes	411	349	334	103.2	90.5	90.5
TOTALS	2,810	2,591	2,390			

*In this number are 4 City Residents who died in TB Sanatoria (2 of them listed in Calgary) and 1 Non-Resident who died in Baker Memorial Sanatorium.

CAUSES OF DEATH BY AGE AND SEX (NON-RESIDENTS INCLUDED) - 1971

ABBREVIATED LIST OF 15 CAUSES OF DEATH

	Male	Female	Under 1 year	1 - 4 years	5 - 14 years	15 - 24 years	25 - 44 years	45 - 64 years	65 yrs. & up	TOTALS
1. Infective & parasitic diseases	5	4	1	1			2	4	1	9
2. Neoplasms	360	275		2	9	6	46	194	378	635
3. Allergic, endocrine system, metabolic and nutritional diseases; diseases of the blood and blood forming organs (Code No. A 61 - A 66)	30	30			1	1	8	19	31	60
4. Mental, psychoneurotic & personality disorders (alcoholism)	6	4			1	1	2	6		10
5. Diseases of the nervous system & sense organs	130	172	5		1	2	15	41	238	302
6. Diseases of the circulatory system	405	260				3	21	142	499	665
7. Diseases of the respiratory system	165	87	6	2	1	1	10	30	202	252
8. Diseases of the digestive system	94	62	1		1	3	19	43	89	156
9. Diseases of the genito-urinary system	34	23			1		4	7	45	57
10. Deliveries & complications of pregnancies, childbirth & the puerperium		1					1			1
11. Diseases of the skin & cellular tissue, diseases of the bones & organs of movement	7	4				2		2	7	11
12. Congenital Malformations	30	23	33	4	5	5	3	2	1	53
13. Certain diseases of early infancy (including prematurity & birth injuries)	62	38	100							100
14. Symptoms, senility, ill-defined & unknown causes of mortality	181	20	13	1			5	46	136	201
15. Accidents, poisonings & violence	194	104	5	9	17	65	87	57	58	298
Totals	1703	1107	164	19	37	89	223	593	1685	2810

CAUSES OF DEATH - 1971

Intermediate List of 150 Causes of Death

List No.	Causes of Death	Sex	Total	Residents	Non-Residents	A G E A T D E A T H						
						Under 1 yr.	1 - 4	5 - 14	15 - 24	25 - 44	45 - 64	65 years and over
A 1	Tuberculosis of Respiratory System	M F	1 1	1 1							1 1	
A 5	Tuberculosis, all other forms	M F	1		1						1	
A 23	Meningococcal Infections	M F	2	2			1			1		
A 34	Infectious Hepatitis	M F	1 1	1 1						1	1	
A 43	All other diseases classified as infective & parasitic	M F	2	2		1						1
A 44	Malignant neoplasm of buccal cavity & pharynx	M F	8 3	5 2	3 1					1 1	3 1	4 1
A 45	Malignant neoplasm of oesophagus	M F	6 4	6 4							2 1	4 3
A 46	Malignant neoplasm of stomach	M F	25 14	22 11	3 3					2	2 5	23 7
A 47	Malignant neoplasm of intestine, except rectum	M F	26 32	23 25	3 7					1 2	5 9	20 21
A 48	Malignant neoplasm of rectum	M F	15 15	12 14	3 1					1	4 7	10 8
A 49	Malignant neoplasm of larynx	M F	4	3	1						2	2
A 50	Malignant neoplasm of trachea, bronchus & lung, not specified as secondary	M F	82 26	69 22	13 4					1	26 12	55 14
A 51	Malignant neoplasm of breast	M F	52	45	7					9	24	19
A 52	Malignant neoplasm of cervix uteri	M F	9	8	1					2	2	5
	Carried Forward		330	279	51	1	1			22	109	197

List No.	Causes of Death	Sex	Total	Residents	Non-Residents	AGE AT DEATH						
						Under 1 yr.	1 - 4	5 - 14	15 - 24	25 - 44	45 - 64	65 years and over
	Brought Forward		330	279	51	1	1			22	109	197
A 53	Malignant neoplasm of other & unspecified parts of uterus	M F	10	8	2						3	7
A 54	Malignant neoplasm of prostate	M F	51	45	6						2	49
A 55	Malignant neoplasm of skin	M F	2 2	2 2							1 1	1 1
A 56	Malignant neoplasm of bone & connective tissue	M F	4 6	3 5	1 1		1			1 1	2 3	1 1
A 57	Malignant neoplasm of all other & unspecified sites	M F	95 72	83 65	12 7				3	10 5	34 21	48 46
A 58	Leukaemia & Aleukaemia	M F	18 10	13 7	5 3		1	2 3	2	2 1	5 2	7 3
A 59	Lymphosarcoma & other neoplasms of lymphatic & haematopoietic system	M F	20 19	17 15	3 4			3	1	2 3	9 4	5 12
A 60	Benign neoplasms & neoplasms of unspecified nature	M F	4 1	4 1				1		1	1 1	1
A 62	Thyrotoxicosis with or without goiter	M F										1
A 63	Diabetes Mellitus	M F	15 14	15 12						1 4	7 2	7 8
A 64	Avitaminosis & other deficiency states	M F	1	1								1
A 65	Anaemias	M F	4 3	2 3	2				1	1	1 1	1 2
A 66	Allergic disorders; all other endocrine, metabolic & blood diseases	M F	10 12	7 10	3 2			1		2	5 3	5 6
	Carried Forward		704	600	104	1	3	10	7	56	217	410

List No.	Cause of Death	Sex	Total	Residents	Non-Residents	AGE AT DEATH						55 years and over
						Under 1 yr.	1 - 4	5 - 14	15 - 24	25 - 44	45 - 64	
	Brought Forward		330	279	51	1	1			22	109	197
A 53	Malignant neoplasm of other & unspecified parts of uterus	M F	10	8	2						3	7
A 54	Malignant neoplasm of prostate	M F	21	42	6						2	49
A 55	Malignant neoplasm of skin	M F	2	2	2						1	1
A 56	Malignant neoplasm of bone & connective tissue	M F	4	3	1		1			1	2	1
A 57	Malignant neoplasm of all other & unspecified sites	M F	95	83	12				3	10	34	48
A 58	Leukemia & Aleukemia	M F	18	13	5		1	2	2	2	2	7
A 59	Lymphomas & other neoplasms of lymphatic & hematopoietic system	M F	20	17	3			3	1	2	9	12
A 60	Benign neoplasms & neoplasms of unspecified nature	M F	4	4				1		1	1	1
A 61	Hypertoxosis with or without goiter	M F	1	1								1
A 62	Diabetes Mellitus	M F	16	15	1					1	7	7
A 64	Avitaminosis & other deficiency states	M F	1	1								1
A 65	Anaemias	M F	4	2	2				1	1	1	1
A 66	Alberic disorders; all other endocrine, metabolic & blood diseases	M F	10	7	3			1		2	2	2
	Carried Forward		704	600	104	1	3	10	7	26	217	410

List No.	Causes of Death	Sex	Total	Residents	Non-Residents	A G E			A T		D E A T H	
						Under 1 yr.	1 - 4	5 - 14	15 - 24	25 - 44	45 - 64	65 years and over
	Brought Forward		704	600	104	1	3	10	7	56	217	410
A 68	Psychoneuroses & disorders of personality (alcoholism)	M F	5 4	5 4					1	2	4 2	
A 69	Mental deficiency	M F	1		1			1				
A 70	Vascular lesions affecting central nervous system	M F	120 157	111 150	9 7	1			2	5 3	15 18	97 136
A 71	Non-meningococcal Meningitis	M F	2 4	2 3	1	2 2					2	
A 72	Multiple Sclerosis	M F	2 4	2 4						1 2	1 1	1
A 73	Epilepsy	M F	3 3	2 3	1			1		1 2	2	
A 78	All other diseases of the nervous system & sense organs	M F	3 4	2 4	1					1	1 1	1 3
A 80	Chronic Rheumatic Heart Disease	M F	9 12	7 10	2 2					2 1	3 3	4 8
A 81	Arteriosclerotic & degenerative heart disease	M F	304 160	263 150	41 10					14 1	89 19	201 140
A 82	Other diseases of heart	M F	15 17	14 15	1 2						2	13 17
A 83	Hypertension with heart disease	M F	22 17	18 16	4 1						4 2	18 15
A 84	Hypertension without mention of heart	M F	5 2	4 2	1						3 1	2 1
A 85	Diseases of arteries	M F	41 42	34 38	7 4				2	1 2	9 1	31 37
A 86	Other diseases of circulatory system	M F	9 10	7 9	2 1				1		3 3	5 7
	Carried Forward		1,681	1,479	202	6	3	12	13	94	406	1,147

List No.	Causes of Death	Sex	Total	Residents	Non-Residents	AGE AT DEATH						
						Under 1 yr.	1 - 4	5 - 14	15 - 24	25 - 44	45 - 64	65 years and over
	Brought Forward		1,681	1,479	202	6	3	12	13	94	406	1,147
A 87	Acute upper respiratory infections	M F	1 1	1 1		1						1
A 88	Influenza	M F	1 6	1 6						1		1 5
A 89	Lobar Pneumonia	M F	1 3	1 3						1	1	2
A 90	Bronchopneumonia	M F	42 26	40 26	2	1	1		1	1	3 1	36 24
A 91	Primary atypical, other & unspecified pneumonia	M F	47 27	43 26	4 1	2 1		1		2	3 1	41 23
A 93	Bronchitis, chronic & unqualified	M F	20 8	14 8	6						4 1	16 7
A 95	Empyema & abscess of lung	M F	4 1	4 1						1 1	1	2
A 97	All other respiratory diseases	M F	49 15	46 12	3 3	1	1			2 1	12 3	34 10
A 99	Ulcer of stomach	M F	1 4	1 4							1	4
A 100	Ulcer of duodenum	M F	13 4	12 3	1 1				1	1	3 1	8 3
A 101	Gastritis & Duodenitis	M F	1	1								1
A 102	Appendicitis	M F	1		1				1			1
A 103	Intestinal obstruction & hernia	M F	16 14	12 11	4 3	1				2	2 2	13 10
A 104	Gastro-enteritis & Colitis, except diarrhoea of the newborn	M F	6 9	4 7	2 2			1		1	2 2	3 6
	Carried Forward		2,002	1,767	235	13	5	14	16	108	449	1,397

List No.	Causes of Death	Sex	Total	Residents	Non-Residents	AGE AT DEATH						
						Under 1 yr.	1 - 4	5 - 14	15 - 24	25 - 44	45 - 64	65 years and over
	Brought Forward		2,002	1,767	235	13	5	14	16	108	449	1,397
A 105	Cirrhosis of liver	M F	31 15	24 14	7 1					8 4	15 5	8 6
A 106	Cholelithiasis & Cholecystitis	M F	13 4	9 3	4 1					2	2 1	9 3
A 107	Other diseases of digestive system	M F	12 12	8 8	4 4				1	1	4 3	7 8
A 108	Acute Nephritis	M F	1		1							1
A 109	Chronic, other and unspecified Nephritis	M F	6 12	6 10				1		2 2	1 3	3 6
A 110	Infections of kidney	M F	8 9	7 9	1						1 2	7 7
A 111	Calculi of urinary system	M F		1								1
A 112	Hyperplasia of prostate	M F	17	14	3							17
A 114	Other diseases of genito-urinary system	M F	2 1	2	1							2 1
A 117	Hemorrhage of pregnancy & childbirth	M F	1	1						1		
A 122	Arthritis & Spondylitis	M F	3 2	3 2							1	2 2
A 126	All other diseases of skin & musculoskeletal system	M F	4 2	2 2	2				2		1	1 2
A 127	Spina bifida & meningocele	M F	1		1		1					
A 128	Congenital malformations of circulatory system	M F	12 9	10 6	2 3	10 5			1 2		1	
	Carried Forward		2,180	1,908	272	28	7	15	22	129	489	1,490

List No.	Causes of Death	Sex	Total	Residents	Non-Residents	A G E A T D E A T H						
						Under 1 yr.	1 - 4	5 - 14	15 - 24	25 - 44	45 - 64	65 years and over
	Brought Forward		2,180	1,908	272	28	7	15	22	129	489	1,490
A 129	All other congenital malformations	M F	17 14	11 12	6 2	11 7	2	3 2	2	2	1	1
A 130	Birth injuries	M F	2	2		2						
A 131	Postnatal asphyxia & atelectasis	M F	3 2	2 1	1 1	3 2						
A 132	Infections of the newborn	M F	5 2	5 2		5 2						
A 133	Haemolytic disease of the newborn	M F	1	1		1						
A 135	Ill-defined diseases peculiar to early infancy, and immaturity unqualified	M F	53 32	44 31	9 1	53 32						
A 136	Senility without mention of psychosis	M F	45 35	42 30	3 5							45 35
A 137	Ill-defined and unknown causes of morbidity & mortality	M F	88 33	79 30	9 3	6 7	1			4 1	34 12	44 12
AE 138	Motor vehicle accidents	M F	72 30	49 18	23 12	1	3 3	6 3	22 11	20 8	14 4	6 1
AE 139	Other transport accidents	M F	5 4	2 1	3 3		1	1 1	2 1	1 1		1
AE 140	Accidental poisoning	M F	11 5	10 5	1	1			1 1	7	3 2	1
AE 141	Accidental falls	M F	24 31	18 24	6 7					4	6	14 31
AE 142	Accidents caused by machinery	M F	2	2						1	1	
	Carried Forward		2,696	2,329	367	161	17	31	62	178	566	1,681

DEATHS FROM ACCIDENTAL POISONING IN CALGARY - 1971

List No.	Causes of Death	Sex	Total	Residents	Non-Residents	A G E A T D E A T H						
						Under 1 yr.	1 - 4	5 - 14	15 - 24	25 - 44	45 - 64	65 years and over
	Brought Forward		2,696	2,329	367	161	17	31	62	178	566	1,681
AE 143	Accidents caused by fire & explosion of combustible material	M F	3 8	2 4	1 4		1		4	1	2 1	1 1
AE 145	Accidents caused by firearm	M F	1 1	1 1				1	1			
AE 146	Accidental drowning & submersion	M F	11 1	10 1	1			3	4 1	1	3	
AE 147	All other accidental causes	M F	12 1	9 1	3	3	1	1	2	2	3 1	
AE 148	Suicide & self-inflicted injury	M F	43 19	38 17	5 2			1	12	19 13	10 5	1 1
AE 149	Homicide & injury purposely inflicted by other persons (not in war)	M F	10 4	6 4	4				3	5 4	2	
	Totals		2,810	2,423	387	164	19	37	89	223	593	1,685

There were 7 cases of suicide in the non-residents.

* Asterisks indicate the number of non-residents in each group.

DEATHS FROM ACCIDENTAL POISONING IN CALGARY - 1971

	Under 1 Year		1 - 14		15-24		25-44		45-64		65 Years & Over		Total
	M	F	M	F	M	F	M	F	M	F	M	F	
1. Overdose of Drugs and Medicines for Internal Use		1					1		2	2			6
2. Overdose of Drugs With Alcohol Intoxication					1		*3				1		5
3. Car Exhaust Fumes						1	1		1				3
4. Industrial Fumes (Dry Cleaning Plant)							1						1
5. Heroin Addiction							1						1
Totals		1			1	1	7		3	2		1	16

*One in this group is a non-resident.

SELF-INFLICTED DEATHS (SUICIDES) IN CALGARY - 1971

	14 Years		15-24		25-44		45-64		65 Years & Over		Total
	M	F	M	F	M	F	M	F	M	F	
1. Gunshot Wounds			*7		**10	1	6				24
2. Drug Overdose					*6	8		2		1	17
3. Car Exhaust Fumes			1		2	*1	4	1			9
4. Hanging	1		3			2		1	1		8
5. Drowning						1		*1			2
6. Glue Sniffing			1								1
7. Jumping From A Building					*1						1
Totals	1		12		19	13	10	5	1	1	62

There were 7 cases of suicide in the non-residents.

* Asterisks indicate the number of non-residents in each group.

REPORTED CASES AND DEATHS FROM NOTIFIABLE COMMUNICABLE DISEASE (RESIDENTS ONLY) - 1971

31

D I S E A S E	Under 1 yr.			1 - 4			5 - 9			10-14			15-19			20-24			25-29			30-39			40-59			60 yrs. & over			Total Cases	Deaths If Any
	M	F		M	F		M	F		M	F		M	F		M	F		M	F		M	F		M	F		M	F			
Amoebiasis																												1			1	
Bacillary Dysentery				2	4		5	3		1	1								1			1	2		1	1					22	
Diarrhoea of Newborn	1																														1	
Infectious Hepatitis				5	6		20	36		22	34		43	47		51	32		36	15		19	17		14	23		3	1		424	2
Meningococcal Infection				1	1		1																								3	2
Malaria							1					1																			2	
Pertussis	7	3		16	7		16	29		5	9		2									1			1						96	
Puerperal Pyrexia																1															1	
Red Measles	2	3		24	20		87	103		31	38		3	5		2			1						1	1					321	
Rubella	12	7		63	45		465	507		527	544		169	210		33	44		3	16		8	24		1	4					2,682	1
Salmonella Infection	6	8		12	10		8	6		5	4		1	2		2	5		2	2		5	2		3	5			3		91	
Scarlet Fever	1			13	4		42	42		28	27		13	17		22	26		8	3		2	4		2	2					256	
Serum Hepatitis											1		13	3		10			1	1		1	1								31	
Tuberculosis, Pulmonary								2		2							3		1			1			6	1		6	3		25	4
Tuberculosis, Non-Pulmonary																	1		2	1		1	2						1		8	
TOTALS	29	21		136	97		644	729		621	658		286	243		112	120		55	38		38	53		28	38		10	8		3,964	9

In Addition:- 1 Non-Resident died of Non-Pulmonary Tuberculosis in Baker Memorial Sanatorium.

REPORTED COMMUNICABLE DISEASES BY MONTH IN 1971

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
Amoebiasis									1				1
Bacillary Dysentery		5		2	1			1	2	6	5		22
Diarrhoea of Newborn				1									1
Infectious Hepatitis	25	22	20	18	36	28	29	48	65	32	54	47	424
Malaria										2			2
Meningococcal Infections		1						1				1	3
Pertussis	8	1	5	10	4	11	8	7	6	7	19	10	96
Puerperal Pyrexia					1								1
Red Measles	43	54	32	38	50	69	12	5	1	5	8	4	321
Rubella (German Measles)	215	294	563	334	534	578	32	12	15	21	46	38	2,682
Salmonella Infection	2	3	13	5	3	8	6	10	15	2	5	19	91
Scarlet Fever & Streptococcal Sore Throat	32	36	30	18	25	7	6	6	22	27	25	22	256
Serum Hepatitis		1		1	1	6	2	4	6	2	6	2	31
Tuberculosis, Pulmonary		3	3		2		2	2	4	2		7	25
Tuberculosis, Non-Pulmonary	1			2	1			1		3			8
Totals	326	420	666	429	658	707	97	97	137	109	168	150	3,964

COMMUNICABLE DISEASES NOT NOTIFIABLE IN THE PROVINCE OF ALBERTA - REPORTED IN 1971

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
Mumps	186	129	94	71	86	48	5	5	2	25	61	52	764
Chickenpox	248	128	95	60	61	72	9	3	8	57	204	125	1,070
Totals	434	257	189	131	147	120	14	8	10	82	265	177	1,834

VENEREAL DISEASE INCIDENCE - CALGARY - 1971

	0-9 Years		10-14 Years		15-19 Years		20-24 Years		25-39 Years		40-59 Years		60 Years & Over		Age Not Stated		Totals
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Syphilis:- Acquired Primary					3				3		1						7
Syphilis:- Acquired Secondary						1		2	2								5
Syphilis:- Acquired Tertiary (Cutaneous)													1				1
Syphilis:- Acquired Latent (including Tentative)						2	1		3	2	3	2	1	3	1		18
Syphilis:- Type Undetermined							1										1
Gonorrhoea (all forms)			1		100	70	335	81	404	63	85	4	7		15	3	1,168
Totals			1		103	73	337	83	412	65	89	6	8	4	16	3	1,200

Leslie C. Allan, M.B., Ch.B., D.P.H.,
Medical Officer of Health,
City of Calgary.

Dear Dr. Allan:-

It is my privilege to report from the Nursing Service of the Chest Clinic for the year 1971.

	1971
Patients Visiting Office	2,765
Home Visits - Total	1,282
Other Calls - To Schools, Sanatorium, Etc.	35
Streptomycin Injections	617
Tuberculin Tests - Total	2,777
Positive 802	
In Office	1,306
Outside The Office	1,471
School Tuberculin Testing - Total	17,900
Reactor Rate - Grade I	0.51
Reactor Rate - Grade IX	1.53
Portable Unit X-Rays (Nursing Home)	144
City Hall X-Rays	16,370

A total of 33 new active cases of Tuberculosis, both Pulmonary and Non-Pulmonary, were discovered during 1971. The case rate per 100,000 population is 8.29 for Calgary (Provincial case rate 18.20). Ten patients were admitted with reactivated disease. We presently have 4,500 patients and contacts on surveillance, with approximately 150 receiving chemotherapy or chemoprophylaxis at any one time.

There continues to be a minority group reluctant to report for periodic x-rays as recommended by the Sanatorium doctors. With many returned to work while continuing outpatient treatment, it is increasingly difficult to find them at home to carry out a satisfactory health teaching program.

Transportation to City Hall X-Ray was provided for two patients and ten were driven to Outpatient Clinic at the Sanatorium.

Respectfully submitted,

IRENE H. WALTON,
NURSE-IN-CHARGE,
CHEST CLINIC.

SUMMARY OF CHEST X-RAY OPERATIONS - CITY OF CALGARY

JANUARY 1st, 1971 - DECEMBER 31st, 1971

# TUBERCULIN TESTED					
TOTAL ABNORMALITIES				1,064	
OTHER ABNORMALITIES	NON - TB CONDITIONS		99		
	PROBABLE NEOPLASM		1		
	FURTHER EXAMINATION REQUESTED		43		
	PLEURISY	INACTIVE	149		
		ACTIVE			
	PROBABLE TB	INACTIVE	672		
ACTIVE					
% X-RAYED OF # REGISTERED					
# PERSONS X-RAYED				*16,515	
# REGISTERED TO ATTEND CLINICS					
				CALGARY CITY HALL STATIONARY X-RAY UNIT	

*This number includes portable unit x-rays (144) done in a nursing home.

SUMMARY OF CHEST X-RAY OPERATIONS - CITY OF CALGARY

JANUARY 1st, 1971 - DECEMBER 31st, 1971

# TUBERCULIN TESTED			
TOTAL ABNORMALITIES			1,064
OTHER ABNORMALITIES	NON - TB CONDITIONS		99
	PROBABLE NEOPLASM		1
	FURTHER EXAMINATION REQUESTED		43
	PLEURISY	INACTIVE	149
		ACTIVE	
PROBABLE TB	INACTIVE	672	
	ACTIVE		
% X-RAYED OF # REGISTERED			
# PERSONS X-RAYED			*16,515
# REGISTERED TO ATTEND CLINICS			
			CALGARY CITY HALL STATIONARY X-RAY UNIT

*This number includes portable unit x-rays (144) done in a nursing home.

STATISTICAL SUMMARY OF DISTRICT INSPECTIONS
DETAILED REPORT - 1971

Dr. L. C. Allan,
Medical Officer of Health,
Health Department.

Dear Dr. Allan:-

It has been a pleasure to direct the Inspectional Staff of the Health Department this past year under your guidance and to have had the support of the Inspectors.

Mr. W. Vanrobaeys left the Department and returned to his home in Winnipeg. He has been replaced by Mr. Bruce Stephen from B.C.

The varied activities of the Department have been efficiently carried on during the year. The Senior Inspectors have worked well with their staff, as is shown in the detailed report. I wish to thank them for their complete support.

The Department of Agriculture has taken over the inspection of dairy farms, thus leaving Ken Porter, the Dairy Inspector, free to take over the new position of Housing Inspector. Mr. Porter was recognized by the Dairy Commission, the Dairies and this Department for a job well done.

There has been an increase in the number of food outlets and all types of businesses that are under the control of the Inspectional Services of this Department; thus the workload is up over the past year. A concentrated effort was made by the staff appointed to the Calgary Exhibition Grounds to keep the food concessions at a high standard. This was rewarded by the few complaints that were received.

There were numerous lectures given by the Inspectors to a varied group, including Schools, Southern Alberta Institute of Technology, Nursing Staff, Dietary Staff, Bakers and Restaurant Staff, which were well received. In addition, the Inspectors conducted educational tours with Student Nurses, Student Dental Hygienists and Nursing Aides to a dairy plant, Glenmore Waterworks Plant, packing plants and other establishments that are inspected by the Department.

I would like to take this opportunity to express my thanks and appreciation to you, and to Dr. O'Neil, Deputy Medical Officer of Health, the Public Health Nurses and the Clerical Staff for their help and co-operation during the past year.

The statistical reports follow.

Respectfully submitted,

N. L. Bruce, C.S.I. (C), M.R.S.H.,
Chief Public Health Inspector.

STATISTICAL SUMMARY OF DISTRICT INSPECTIONS
DETAILED REPORT - 1971

	Number Established As Of December 1971	Number Of Inspections Made
Abattoirs	6	64
Accessory Buildings		43
Air Pollution Monitoring Stations	14	237
Apartment Blocks		744
Apiaries		8
Auto Courts	36	144
Aviaries		5
Bakeries	98	1,075
Barber Shops	213	1,135
Basement Rooms		57
Basement Suites		133
Baths	10	48
Beauty Parlours	292	1,186
Beverage Rooms	27	382
Billiard Halls	36	198
Boarding Houses	2	18
Bottling Works	9	35
Bowling Alleys	15	104
Breweries	2	20
Butchers	163	1,059
Cabarets	24	69
Camp Grounds	4	23
Candy Manufacturing	7	33
Caterers	60	351
Chickens		53
Chicken Slaughter Houses	1	14
Chinchilla Farms	79	157
Clubs	40	150
Cocktail Lounges	45	381
Concessions	8	5,394
Dairy Bars	38	280
Day Nurseries	61	281
Delicatessens	24	244
Departmental Stores	22	144
Dogs		382
Drug Stores	23	87
Dry Cleaners	97	329
Dry Cleaners - Coin	10	59
Dye House	1	6

	Number Established As Of December 1971	Number Of Inspections Made
Factories	30	165
Feed Lots	7	51
Fish Markets	2	8
Fish Wholesale	2	13
Food Packaging	4	62
Foster Homes	10	15
Freezer Plants	2	28
Fur Farms		8
Garages	27	160
Garbage		1,289
Groceries & Milk Vendors	380	3,897
Halls	128	259
Hatcheries	1	1
Hawkers	9	41
Heating and Ventilation		118
Home Occupations	29	127
Honey Processing	1	3
Horses		25
Hospitals	7	41
Hostels	1	64
Hotels	43	153
Housing		399
Ice Cream & Soft Drinks	389	1,343
Ice Arena	3	1
Incinerators	5	61
Infestations		337
Institutions and Schools	77	181
Kennels (Boarding)	5	28
Kennels (Registered)	6	29
Kindergartens	109	326
Lanes		1,233
Laundries	45	95
Laundries - Coin	39	231
Locker Plants	6	37
Massage Parlours	10	49
Meat Processing	9	16
Miscellaneous		2,847
Mobile Canteens	16	116
Motels	38	194
Noxious Gases		63
Nursing Homes	26	114

	Number Established As Of December 1971	Number Of Inspections Made
Office Buildings	12	117
O.P.C. Beverage Rooms		54
O.P.C. Cocktail Lounges		112
O.P.C. Drinking Fountains		9
O.P.C. Poultry		25
O.P.C. Restaurants		2,045
O.P.C. Swimming Pools		13
O.P.C. University of Calgary		8
O.P.C. Wells		132
Pest Control		171
Pet Shops		52
Pig Farms	1	15
Pigeons		132
Pigeon Lofts	56	132
Plumbing		78
Poultry		22
Poultry Keeper	2	10
Rendering Plants	2	35
Restaurants	536	7,278
Riding Academies	4	4
Rodents		44
Roller Rinks	2	2
Rooming Houses	13	8
Rug Cleaners	5	5
Salvage Metal & Paper	4	42
Second-Hand Clothing Stores		15
Septic Tanks		24
Service Stations	78	93
Sewage Disposal		33
Shopping Centres	61	653
Slaughter Houses	4	3
Staff Cafeterias	22	197
Swimming Pools - Private	3	29
Swimming Pools - Public	11	117
Swimming Pools - Semi-Private	41	156
Tanneries	1	3
Theatres	17	56
Toilet Accommodations		190
Trailers	13	177
Trailer Courts	20	170
Unsightly Premises		323
Upholsterers	23	63
Used Car Lots	12	55

FOODSTUFFS CONDEMNED - 1971

MISCELLANEOUS PROCEDURES

Complaints	2,075	Notices - Verbal	7,247
Complaints - Call Back	1,321	Notices - Written	241
Planning Applications	546	Written Reports	970
Requests for Inspections	732	Letters	190
Burning Barrels Removed	3	Lectures Given	88

DAIRIES AND MILK CONTROL - 1971

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Dairy Farm Inspections	44	48	57	63	67	57	44	15	28	26	58	22	529
Milk Plant Inspections	3	4	4	4	4	5	6	6	3	3	6	8	56
Permits Issued to Dairymen	252	1	6	2			1	7			1	2	272
California Mastitis Tests	8	11		5	12		8	4					48
Permits Issued to Milk Plants	3												3
Permits Issued to Collectors	46												46
Permits Suspended		4			1		1			1		1	8
Complaints Received	1	1	2	2	4	4	4	3	1	3	1	3	29
Complaints Justified	1			2	4	3	4	3	1	3	1	3	25
Notices Issued	1		2	2	4	3	4	3	1	3	1	3	27
Special Tests	9	3	12	4	4	9	4	6		3		3	57
Dairymen's Samples Collected - Total	298	309	399	236	318	299	243	293	316	321	408	296	3,736
Distributors' Samples Collected - Total	111	113	133	93	114	138	77	131	104	128	130	78	1,350
Soft Ice Cream Samples	15	20	18	36	26	35	19	13	5		22	4	213
Retail Store Samples	65	65	72	64	64	56	56	48	32	24	41	24	611
Total Samples Collected	489	507	622	429	522	528	395	485	457	473	601	402	5,910

Dr. L. C. Allan,
Medical Officer of Health,
Health Department.

Dear Dr. Allan:-

I am respectfully presenting the Annual Report of the Health Department Laboratory for 1971.

The ever-increasing population of the City and its industrial sector with the density increased in the Watershed of both Rivers, the Elbow and the Bow, has drastically changed the scope and the workload of the Lab expressed in over 10,000 samples and over 64,000 analyses.

In order to maintain the maximum efficiency in our analytical work on water, milk supplies, public eating and beverage establishments, adulterated food, etc., we had to modify, update and streamline various aspects.

We had to further improve liaison with the people and sectors directly involved in our work.

The completed major task in establishing and plotting the bacteriological and chemical variations of several hundred water wells within City Limits has given us the opportunity to better understand the City's subsurface water table and subsequently the water supplies which, in case of a sudden complete breakdown of Greater Calgary water supply system, could be of paramount importance in Calgary's functional existence. We are also providing the water quality analytical services at a nominal fee to several major water users, sensitive to any qualitative fluctuations of their water supplies.

On the strength of our initial success, and encouraged by the National Research Council of Canada and the University of Calgary to use a computer in forecasting the initial bacterial level of the untreated water, we hope to implement the collected data in our qualitative control work of the Glenmore Filtering Plant, and in particular on the new Bearsaw Water Treatment Plant.

The detailed functions of the Health Department Lab are as follows:-

- Water
- a) Responsible for final qualitative determinations of all drinking water supplied by the City of Calgary through two Filtering and Treatment Plants.
 - b) Establishing and plotting the safety level for human consumption according with The Canadian Drinking Water Standards of connected, superchlorinated and flushed new water mains and interconnections for the Engineering Department.
 - c) Determining the origin of the water seepages reported to the Engineering Department.
 - d) Conducting Bacteriological and Chemical Analyses, plotting and maintaining records of some 800 wells within the City's boundaries.
 - e) Handling all complaints from the industrial sector and from the individual water users.

Milk In co-operation with the City Dairy Inspector and our Dairy Technician, responsible for qualitative evaluations of all processed milk and milk products in the City of Calgary at the plant and retail level.

Food Conducting Bacteriological & Chemical and Microscopic examinations on adulterated solid and liquid food, soft drinks, cereals, canned food, etc., except meats.

Urine On request from Baby Clinic and from City Hall Physicians, conducting urinalysis and pregnancy tests for Family Planning Clinic.

Additional Functions

- Bacteriological tests of all eating and beverage establishments within City Boundaries.
- Consultations and liaison work with public in general, various City Hall Departments and with industrial sector on various technical matters.
- Administrative duties, ordering new reagents, media and equipment, correspondence, reports, including maintenance and some repairs of the Lab equipment.

In closing, I would like to express my sincere thanks to all people connected with our operational work, and in particular to our supporting staff.

Respectfully submitted,

George J. Kurdydyk, B.Sc., C.S.Ch.E.,
Laboratory Supervisor.

Number of Samples	Plate Count	Total
Milk	826	1,796
Ice Cream		4,876
		6,672

MISCELLANEOUS TESTS

	No. Tests
Chemical Analyses on 340 Water Samples	4,295
Fluoride Determination on 88 Water Samples	88
Plate Counts on Swabs From Restaurant and Beverage Establishments	3,458
Chemical, Bacteriological and Microscopic Tests on Water, Milk, Soft Drinks, Cheese, Cereals, Foreign Matter, Etc. (78 Samples Analyzed)	172
Total	8,013

Total No. of Samples (Water, Milk and Miscellaneous)
Received for Examination:-

10,149

Total No. of Tests Done on These Samples:-

Water Supplies	33,501
Milk Samples	15,304
Store Milk & Milk Products	6,672
Miscellaneous Tests	8,013
Grand Total	64,090

LABORATORY REPORT FOR 1971

EXAMINATION OF WATER SUPPLIES

S O U R C E O F S A M P L E	Number Received	Presum. Lactose 100 ml.	Presum. Lactose 10 ml.	Presum. Lactose 1 ml.	Agar Plate Count	Con- firma- tion	Total No. Of Tests
City Water	1,435	3,248	1,464	1,464	2,870	292	9,338
Glenmore Plant	785	2,351	2,351	2,351	1,550	18	8,621
Well Water	1,070	3,093	2,845	2,845	2,144	513	11,440
Water Works	354	1,045	1,045	1,045	712	255	4,102
Totals	3,644	9,737	7,705	7,705	7,276	1,078	33,501

EXAMINATION OF MILK SAMPLES

Number of Samples Received	Fat (Babcock)	Phos- phatase	Specific Gravity	Total Solids Tests	Total Solids Not Fat Tests	TGEM Plate Count	BGB Coli- forms	Plate Count On Raw Milk	Totals
1,715	488	220	484	484	484	2,890	5,801	5,053	15,904

STORE MILK AND MILK PRODUCTS

Number of Samples	Plate Count	BGB Coliform Tests	Totals
Milk) Ice Cream) 826	1,796	4,876	6,672

MISCELLANEOUS TESTS

	No. Tests
Chemical Analyses on 340 Water Samples	4,295
Fluoride Determination on 88 Water Samples	88
Plate Counts on Swabs From Restaurant and Beverage Room Utensils	3,458
Chemical, Bacteriological and Microscopic Tests on Water, Milk, Soft Drinks, Cheese, Cereals, Foreign Matter, Etc. (78 Samples Received)	172
Total	8,013

Total No. of Samples (Water, Milk and Miscellaneous)
Received for Examination:-

10,149

Total No. of Tests Done on These Samples:-

Water Supplies	33,501
Milk Samples	15,904
Store Milk & Milk Products	6,672
Miscellaneous Tests	8,013

Grand Total 64,090

DAIRYMEN'S OFFICIAL PLATE COUNT TESTS - 1971

PERCENTAGE BREAKDOWN OF THE LABORATORY REPORT FOR 1971

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
Good	181	197	216	146	190	208	144	172	235	207	255	196	2,347
Fair	69	55	121	44	68	45	66	60	45	61	89	64	787
Bad	48	57	62	46	60	46	33	61	36	53	64	36	602
Totals	298	309	399	236	318	299	243	293	316	321	408	296	3,736

AVERAGE OFFICIAL PLATE COUNT - 1971

GLASS BOTTLES

Homogenized	3,050
Skim	3,020
Partly Skim	3,009
Chocolate	3,081

CARTONS

Homogenized	3,216
Homogenized -	
½ gal.	3,062
Homogenized -	
3 qts.	<3,000
Skim	3,241
Partly Skim	3,438
Partly Skim -	
½ gal.	3,039
Partly Skim -	
3 qts.	3,003
Substandard	
Cream	3,254
Whipping Cream	3,691
Chocolate	3,464

PLASTIC

Homogenized -	
½ gal.	< 3,000
Partly Skim -	
½ gal.	< 3,000

AVERAGE BUTTER FAT CONTENT - 1971

Homogenized Milk	3.32	Partly Skim Milk	2.12
Skim Milk	0.09	Substandard Cream	10.61
		Whipping Cream	36.80

The milk and cream sales in the City of Calgary are not followed up as to quantities any longer. Therefore, the milk and cream consumption figures per capita, per day, are not available.

1971 ANNUAL REPORT CHILD HEALTH DEPARTMENT PERCENTAGE BREAKDOWN OF THE LABORATORY REPORT FOR 1971

		Approximate Number Of Analyses	Percentage Of Total Number Of Analyses
WATER	City Water, Treatment Plant (Glenmore), Water- works	22,100	34.50%
	Wells	11,440	17.80%
DAIRY PRODUCTS	Pasteurized Milk, Homo, Partly Skimmed, Skimmed, Creamo, Whipping Cream, Cottage Cheese, Fat Anal., Phosphatase Tests	22,500	35.20%
MISCELLANEOUS TESTS	Chemical Analyses, Swab Tests, Bacteriology, Microscopy, Soft Drinks, Cereals, Foreign Matter	8,000	12.50%
		GRAND TOTAL 100.00%	

Grand Total = Samples for Analyses = OVER 10,000

Grand Total = Samples Analyzed = OVER 64,000

Information on the volume of work done by our staff in the schools and on behalf of school children, the Tuberculin reactivity and immunization status of the students, the communicable diseases notified in the student age group, are set out in the following tables.

1971 ANNUAL REPORT

CHILD AND MATERNAL HEALTH

Agnes E. O'Neil, M.D., D.P.H.,
Assistant Medical Officer of Health.

A school population of 101,460 was given health services in 1971.

These were students of:-

The Calgary Public School System	79,141	
The Calgary Separate School System (Roman Catholic)	21,624	
Hebrew School	268	
Peretz Institute	57	
Calgary Christian	210	
Highland Academy	100	
Adult Day Centre	60	101,460

The School Health Services consist of routine activities and activities carried out as a response to problems.

Routine activities include immunization, T.B. testing, vision screening, hearing testing, physical inspections, teacher-nurse conferences and educational presentations, with films on smoking. Activities in response to problems are things like physical examination by the doctor, home visiting in order to explain reasons for our urging further care or to understand and find a remedy for neglect. An innovation this year was the offering of Rubella Vaccine in school to 12 year old girls. Certain procedures are carried out as the occasion warrants or as the invitation is presented, such as searching a classroom of children for Pediculosis or giving talks on Nutrition, Drug Abuse or Venereal Disease. Changes in the organization of high schools, such as *semester system* and *no home rooms* as well as the addition of new categories of personnel to school staff such as counsellors and social workers, have combined to result in barriers to the function of the nurse. Only in a few high schools has the conscious effort and understanding by principal and staff of the kind of work the public health nurse can do, made possible her useful function. Efforts to increase this have been fruitless and the service will only be continued where it is used.

Information on the volume of work done by our staff in the schools and on behalf of school children, the Tuberculin reactivity and immunization status of the students, the communicable diseases notified in the student age group, are set out in the following tables.

The group of 37 Positive Reactors includes:-

No. of T. B. Tests	18,039
No. of Positive T. B. Tests	262
Nurses' Inspections	39,343
No. of Vision Tests	53,649
Ref. Re Vision	6,102
No. of Audio Tests	13,887
Ref. Re Hearing	399
No. of Dental Inspections	30,756
No. Requiring Dental Treatment	6,989
Referred to School Medical Officer	86
Referred to Family Physician	3,437
First Aid	18,366
Exclusions	3,714
Phone Calls	38,176
Color Vision Tests	5,968
Color Vision Tests Failed	263

CONFERENCES:-

Doctors	557
Teachers	22,772
Parents	8,173
Students	34,124
Supervisors	2,523
Co-Op Other Agencies	1,391
Films & Classroom Talks	1,256

HOME VISITS:-

School	9,068
T. B.	72
T. B. Contact	81

SCHOOL TUBERCULIN TESTS - 1971GRADE I

NO. OF GRADE I PUPILS IN SCHOOLS	TUBERCULIN TESTS ACCEPTED	% ACCEPTING TESTS	TUBERCULIN TESTS POSITIVE	% FOUND POSITIVE REACTORS
7,834	7,230	92.3	37	0.51

The group of 37 Positive Reactors includes:-

- 18 Immigrants, 11 of whom had had BCG
- 1 Other who had had BCG
- and 2 Previous Positive Reactors

GRADE IX

NO. OF GRADE IX PUPILS IN SCHOOLS	TUBERCULIN TESTS ACCEPTED	% ACCEPTING TESTS	TUBERCULIN TESTS POSITIVE	% FOUND POSITIVE REACTORS
6,907	6,319	91.5	97	1.53

The group of 97 Positive Reactors includes:-

- 31 Immigrants, 8 of whom had had BCG
- 14 Others who had had BCG
- and 4 Previous Positive Reactors

STAFF

CONTACTS

(Of Positive Reactors Among
Staff and Students)

	No. Tested	No. Of Positive Reactors	No. X-Rayed	No. Tested	No. Of Reactors	No. X-Rayed
School	3,734	152	2,246	401	72	236
Administration	201	29				
Maintenance & Library Centre	287	80				

TOTAL IMMUNIZATIONS OF SCHOOL CHILDREN

DIPHTHERIA		TETANUS		SALK		SABIN		TAB		TYPHUS		CHOLERA	
D	C	D	C	D	C	D	C	D	C	D	C	D	C
2,452	18,535	2,524	19,875	1,925	7,813	3,394	19,786	433	385	69	104	176	166

DILUTED DIPH.	SCHICK	G.G.	SMALLPOX		LIVE MEASLES	RUBELLA
			PRIMARY	REVACC.		
15	187	423	3,485	16,920	4	6,315

D = Early Doses in a Series

C = For The Final Dose in a Series and for Boosters

GRADE I IMMUNIZATION STATUS - OCTOBER 1971

AGE GROUP 5 - 19 YEARS

DISEASE	FULL %	LAPSED %	INADEQUATE %	NONE %	UNKNOWN %	TOTAL %
Diphtheria	5,642 68.2	1,262 15.2	427 5.2	624 7.5	326 3.9	8,281 100
Tetanus	5,642 68.2	1,262 15.2	427 5.2	624 7.5	326 3.9	8,281 100
Smallpox	4,178 50.5	1,449 17.5		2,323 28.0	331 4.0	8,281 100
Measles:-						
a) Live	5,522 66.7		281 3.4	1,167 14.1	354 4.3	8,281 100
b) Had Disease	957 11.5					
Polio	4,889 59.0	919 11.1	1,429 17.3	715 8.6	329 4.0	8,281 100

GRADE I IMMUNIZATION STATUS - JUNE 1971

DISEASE	FULL %	LAPSED %	INADEQUATE %	NONE %	UNKNOWN %	TOTAL %
Diphtheria	8,574 96.6	92 1.0	79 0.9	76 0.9	58 0.6	8,879 100
Tetanus	8,574 96.6	92 1.0	79 0.9	76 0.9	58 0.6	8,879 100
Smallpox	7,465 84.1	249 2.8		1,107 12.5	58 0.6	8,879 100
Measles:-			216 2.5	1,413 15.9	153 1.7	
a) Live	5,391 60.7					8,879 100
b) Had Disease	1,706 19.2					
Polio	8,404 94.7	63 0.7	256 2.9	93 1.0	63 0.7	8,879 100

COMMUNICABLE DISEASE INCIDENCE

AGE GROUP 5 - 19 YEARS

Rubella	2,422 Cases
Red Measles	267
Infectious Hepatitis	202
Scarlet Fever & Strep Throat	169
Pertussis	61
Salmonella Infection	26
Serum Hepatitis	17
Bacillary Dysentery	10
Tuberculosis, Pulmonary	4
Malaria	2
Meningococcal Meningitis	1
Total	3,181 Cases
Mumps	764
Chickenpox	1,070
Gonorrhoea	171
Primary and Secondary Syphilis	4

SUMMARY OF WORK DONE BY PHYSICIANS IN CALGARY SCHOOLS - 1971

No. of Routine Grade 1 Examinations	854
No. of these Referred to Family Doctor	43
No. of these Referred to Dentist	321
No. of these Referred to Eye Examiner	45
No. of Children Examined as Routine New Admissions to School Other Than Grade 1	372
No. of these Referred to Doctor, Dentist or Eye Examiner	202

* The home visits to the elderly have increased in number in 1971; there were only 200 home visits to the elderly in 1970.

HOME VISITS BY NURSES TO OTHER AGE GROUPS

Pre-Natal	225		
Newborn	7,578		
Other Infants	1,329		
Pre-School Children	8,017		
Kindergartens & Nurseries	244		
Adults	14,344		
*Geriatric	382		
<u>STATE OF HEALTH AS DETERMINED IN GRADE I EXAMINATIONS</u>			
T.B. Cases	72		
T.B. Contacts	81		
Acute Communicable Disease	707		
Handicapped	793		
Mental Health	3,043		
Investigations Re Complaints	260		
Poison Control & Safety	400		
Family Planning	2,553	First Visits	10,457
Family Folder	561	Repeat Visits	3,840
Co-op Social Service	348	Not Home	4,160
		Not Found	683
	* * * * *		
Meetings Addressed by Nurses	331	Meetings Attended by Nurses	2,389
	* * * * *		

SUMMARY OF WORK DONE BY PHYSICIANS IN CALGARY SCHOOLS - 1971

No. of Routine Grade I Examinations	854
No. of these Referred to Family Doctor	43
No. of these Referred to Dentist	321
No. of these Referred to Eye Examiner	45
No. of Children Examined as Routine New Admissions to School Other Than Grade I	372
No. of these Referred to Doctor, Dentist or Eye Examiner	202

* The home visits to the elderly have increased in number in 1971; there were only 200 home visits to the elderly in 1970.

No. of Children Examined on Referral by Teacher, Parent
or Nurse or Child

185

No. of these Referred to Doctor, Dentist or
Eye Examiner

61

Total No. of Children Examined by Physicians in Schools

1,411

STATE OF HEALTH AS DETERMINED IN GRADE I EXAMINATIONS

No. of Pupils With Health Grade A	677
No. of Pupils With Health Grade B	171
No. of Pupils With Health Grade C	6
Total No. Examined	854

DEFECTS FOUND IN ROUTINE GRADE I EXAMINATIONS

History of repeated Eczema, Asthma or Hay Fever	25	Heart	8
Skin	40	Respiratory	12
Nutrition	89	Abdomen - Hernia	1
Speech	52	- Gastro-Intestinal ...	4
Ears	36	- Urinary	2
Eyes	28	- Genital	14
Nose	23	Ortho - Posture	15
Throat	37	- Feet	33
Teeth	328	- Other	10
Glands - Lymph	35	Nervous System	6
Glands - Endocrine	2	Mental Health	21

Haemoglobin Tests 2

First-Aid 9

No. of Children Examined With Their Parent Present 465; Consultations 10

EXAMINATIONS OF SCHOOL CHILDREN REFERRED TO CITY HALL

No. of Pupils Examined	17
No. of Audiometer Threshold Hearing Tests ...	212
No. Showing Hearing Loss	99
No. Referred to Ear Specialist	64
No. of Pupils Provided With Free Glasses	21

IMMUNIZATIONS - 1971

D = Dose
C = Completed
P = Primary
R = Revaccination

	DIPHTHERIA		PERTUSSIS		TETANUS		POLIO (SALK)		POLIO (SABIN)		SMALLPOX	
	D	C	D	C	D	C	D	C	D	C	P	R
Infants	12,460	4,409	12,447	4,400	12,460	4,409	12,438	4,148	4,357	2,941	36	1
Pre-School	2,135	11,366	2,016	10,501	2,152	11,398	1,894	1,162	2,975	8,643	4,662	1,691
School Age	2,452	18,535		2	2,524	19,875	1,925	7,813	3,394	19,786	3,485	16,920
Adults	36	27			1,665	2,139	502	263	1,096	3,190	438	9,708
TOTALS	17,083	34,337	14,463	14,903	18,801	37,821	16,759	13,386	11,822	34,560	8,621	28,320

	LIVE MEASLES AFTER KILLED MEASLES VACCINE	LIVE MEASLES ALONE	RUBELLA
Infants	5	27	
Pre-School	1,093	5,288	
School Age		1	6,315
Adults			
TOTALS	1,098	5,316	6,315

GAMMA GLOBULIN AND TRAVEL IMMUNIZATIONS - 1971

	GAMMA GLOBULIN	DILUTED DIPH-THERIA	SCHICK TESTS	*TYPHOID PARATYPHOID AB		TYPHUS		CHOLERA		ROCKY MOUNTAIN SPOTTED FEVER		RABIES	
				D	C	D	C	D	C	D	C	D	C
Infants	28			2	2	1	1	7	4				
Pre-School	194			79	56	25	21	62	53				
School-Age	423	15	187	434	384	69	104	176	166				
Adults	604	25	253	2,431	2,298	607	758	1,497	1,345	6		94	86
TOTALS	1,249	40	440	2,946	2,740	702	884	1,742	1,568	6		94	86

D = Dose C = Completed

* The immunizations for Typhoid, Paratyphoid AB shown in this Table are the sum of single TAB antigens and TAB components of multiple antigens (TAB + Tetanus, TAB + Tetanus + Diphtheria + Polio).

In addition to the above multiple antigens, TAB + Tet. + Diph. + Polio was used as follows:-

Adults 1971 - Doses 29, Completed 23

Schools 1971 - Doses 2

USAGE OF MULTIPLE ANTIGENS IN 1971 AND 1970 IMMUNIZATIONS

D = Doses
C = Completed

	DIPH. + TET.		TET. + POLIO (BIAD)		DIPH. + TET. + POLIO (TRIAD)		DIPH. + PER- TUSSIS + TET. (TRIPLE)		TRIPLE + POLIO (QUAD)		QUAD + MEASLES (QUINT)		TAB + TET.	
	DOSES	COMP.	DOSES	COMP.	DOSES	COMP.	DOSES	COMP.	DOSES	COMP.	DOSES	COMP.	DOSES	COMP.
Infants 1971	15	9			1		28	245	12,310	4,113				
Infants 1970	5	8		2	2		12	166	5,758	1,736	5,376	2,163		
Pre-School 1971	103	843		13	20	21	214	9,343	1,789	1,086			2	4
Pre-School 1970	25	235		11	56	702	247	9,050	1,402	954	494	222	1	1
School 1971	1,642	10,856	28	40	767	7,506		2					21	92
School 1970	158	9,824	16	16	2,049	7,841							45	234
Adults 1971	5	1	323	154	2	2							1,098	1,329
Adults 1970	4		375	186									1,140	1,286
TOTALS 1971	1,765	11,709	360	207	790	7,529	242	9,590	14,099	5,199			1,121	1,425
TOTALS 1970	192	10,067	392	215	2,107	8,543	259	9,216	7,160	2,690	5,870	2,385	1,186	1,521

The multiple antigens used in immunizations at the Shaganappi Clinic in the month of October 1971 were not recorded and are, therefore, not included in the above count.

In addition to the above multiple antigens, TAB + Tet. + Diph. + Polio was used as follows:-

Adults 1971 - Doses 29, Completed 23
Schools 1971 - Doses 2

USAGE OF SINGLE ANTIGENS IN 1971 AND 1970 IMMUNIZATIONS

D = Doses
C = Completed
P = Primary
R = Revaccination

	SALK		SABIN		TETANUS		SMALLPOX		RUBELLA	LIVE MEASLES ALONE	LIVE MEASLES AFTER KILLED	TYPHOID PARA- TYPHOID AB	
	D	C	D	C	D	C	P	R				D	C
Infants 1971	12	6	4,357	2,941			36	1		27	5	2	2
Infants 1970	3	6	3,791	2,699		3	58	17			23	6	
Pre-School 1971	70	37	2,975	8,643	6	15	4,662	1,691		5,288	1,093	77	52
Pre-School 1970	23	18	2,499	8,666	1	8	4,072	1,756		1,095	5,472	134	58
School 1971	1,089	263	3,394	19,786	23	1,209	3,485	16,920	6,315	1		411	292
School 1970	70	61	3,220	18,247	48	747	2,888	18,046			4	694	227
Adults 1971	149	84	1,096	3,190	208	629	438	9,708				1,304	946
Adults 1970	166	99	1,030	2,958	212	436	443	9,983				1,076	479
TOTALS 1971	1,320	390	11,822	34,560	237	1,853	8,621	28,320	6,315	5,316	1,098	1,794	1,292
TOTALS 1970	262	184	10,540	32,570	261	1,194	7,461	29,802		1,095	5,499	1,910	764

<u>SERA AND VACCINE DISTRIBUTED FOR USE IN CALGARY</u>	
Tetanus Toxoid, Paratyphoid & Typhoid Vaccine, 25 cc. pkge.	335
Diphtheria Antitoxin, 1,000 units	30
Diphtheria Toxoid, Singles	23
Diphtheria Toxoid, Diluted 4 cc.	23
Diphtheria Toxoid, Pertussis Vaccine & Tetanus Toxoid, Singles	691
Diphtheria Toxoid, Pertussis Vaccine & Tetanus Toxoid, 10 cc.	958
Diphtheria Toxoid & Tetanus Toxoid, Singles	339
Diphtheria Toxoid & Tetanus Toxoid, 10 cc.	695
Gas Gangrene Antitoxin, Vials of 10,000 units	45
Immune Serum Globulin, 2 cc. pkge.	229
Immune Serum Globulin, 5 cc. pkge.	518
Immune Serum Globulin, 10 cc. pkge.	16
Materials for Schick Tests (25)	227
Poliomyelitis Vaccine, 10 cc. pkge.	383
BIAD (Tetanus, Polio Vaccine), 10 cc. pkge.	123
TRIAD (DT - Polio Vaccine), 10 cc. pkge.	307
QUAD (DPT - Polio Vaccine), 10 cc. pkge.	2,893
Measles Vaccine, Live, 1 dose	7,874
Rabies Vaccine (Duck Embryo) 1 dose	21
Rabies Vaccine (Tissue Culture) 1 dose	247
Rabies Antiserum, 1,000 Units	17
Rocky Mountain Spotted Fever Vaccine, 3 cc. pkge.	6
Rocky Mountain Spotted Fever Vaccine, 15 cc. pkge.	3
Rubella Vaccine, Live, 1 dose	6,977
Sabin, Poliovirus Vaccine, 20 dose pkge.	2,724
Sabin, Poliovirus Vaccine, 10 dose pkge.	737
Smallpox Vaccine, Singles	1,648
Smallpox Vaccine, 10's	4,265
Staphylococcus Toxoid (4 cc. & 5 cc. pkges.)	208
Staphylococcus Antitoxin, 20,000 units	2
Tetanus Antitoxin, 1,500 Units	54
Tetanus Antitoxin, 20,000 Units	2
Tetanus Toxoid, 30 cc. pkge.	158
Tetanus Toxoid, 3 cc. pkge.	1,436

Tetanus Toxoid, Paratyphoid & Typhoid Vaccine, 3 cc. pkge.	335	
Tetanus Toxoid, Paratyphoid & Typhoid Vaccine, 25 cc. pkge.	95	
Typhoid & Paratyphoid Vaccine, Singles	200	1971
Typhoid & Paratyphoid Vaccine, 10 cc. pkge.	251	

(All the above material supplied free by the Provincial Government)

	1965	1966	1967	1968	1969	1970	1971
Infant Attendance	10,311	11,307	13,492	14,959	14,963	16,400	18,760
Total Infant Attendance	15,081	17,336	19,037	20,579	21,000	22,774	25,520
Cholera Vaccine, 2½ cc. pkge.							281
Cholera Vaccine, 10 cc. pkge.							248
Typhus Vaccine, 3 cc. pkge.						183	97
Typhus Vaccine, 30 cc. pkge.						521	62
Total Pre-School Attendance	20,061	23,402	27,524	26,392	26,177	27,704	32,862

NEW ENROLLMENTS EXPRESSED AS PERCENTAGE OF BIRTHS MINUS DEATHS

	1965	1966	1967	1968	1969	1970	1971
Births	7,235	7,064	7,301	7,184	7,429	8,149	7,586
minus							
Infant Deaths	155	125	153	112	132	178	142
	7,080	6,939	7,148	7,072	7,297	7,971	7,444
New Infants	5,070	5,429	5,548	5,620	6,037	6,374	6,760
plus							
Pre-Schoolers Enrolled	3,417	3,865	3,788	3,297	3,285	3,183	3,339
	8,487	9,294	9,336	8,917	9,322	9,557	10,099
New Infants Plus Pre-Schoolers Enrolled Expressed as a % of Births Minus Deaths	120%	134%	130.4%	126.1%	127.7%	119.9%	135.7%

ATTENDANCE AT CHILD HEALTH CENTRES

	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>
<u>Infant Attendance</u>							
New	5,070	5,429	5,548	5,620	6,037	6,374	6,760
Old	10,011	11,907	13,489	14,959	14,963	16,400	18,760
Total Infant Attendance	15,081	17,336	19,037	20,579	21,000	22,774	25,520
<u>Pre-School Attendance</u>							
New	3,417	3,866	3,768	3,297	3,285	3,183	3,339
Old	16,644	19,543	23,756	23,695	22,892	24,521	29,523
Total Pre-School Attendance	20,061	23,409	27,524	26,992	26,177	27,704	32,862

NEW ENROLLMENTS EXPRESSED AS PERCENTAGE OF BIRTHS MINUS DEATHS

	<u>1965</u>	<u>1966</u>	<u>1967</u>	<u>1968</u>	<u>1969</u>	<u>1970</u>	<u>1971</u>
Births	7,235	7,064	7,301	7,184	7,429	8,149	7,586
minus							
Infant Deaths	<u>155</u>	<u>125</u>	<u>153</u>	<u>112</u>	<u>132</u>	<u>178</u>	<u>142</u>
	7,080	6,939	7,148	7,072	7,297	7,971	7,444
New Infants	5,070	5,429	5,548	5,620	6,037	6,374	6,760
plus							
Pre-Schoolers Enrolled	<u>3,417</u>	<u>3,866</u>	<u>3,768</u>	<u>3,297</u>	<u>3,285</u>	<u>3,183</u>	<u>3,339</u>
	8,487	9,295	9,316	8,917	9,322	9,557	10,099
New Infants Plus Pre-Schoolers Enrolled Expressed as a % of Births Minus Deaths	120%	134%	130.4%	126.1%	127.7%	119.9%	135.7%

ATTENDANCE BY CLINICS - 1971

	Bowness	Brentwood	City Hall	Forest Lawn	Haysboro	North Hill	Scarboro	Shaganappi
INFANTS								
Attendance	1,617	923	3,566	3,377	5,081	4,438	3,264	3,254
Admissions	354	173	893	843	1,248	1,617	877	755
On Breast On Bottle	100 254	35 138	77 815	75 766	168 1,077	195 1,422	204 673	70 684
PRE-SCHOOL								
Attendance	2,860	814	5,648	5,514	5,336	5,206	3,415	4,069
Admissions	266	49	470	530	631	798	312	283
Doctor's Examinations	369	-	187	140	192	150	265	164
Doctor's Days	44	-	37	43	45	38	48	41
Total Attendance	4,477	1,737	9,214	8,891	10,417	9,644	6,679	7,323
No. of Clinic Days	153	66	240	207	241	242	205	243
Average Attendance	29.3	26.3	38.4	42.95	43.2	39.85	32.6	30.1

The following gives the extent of the Department's involvement in providing students with experience and observation in a functioning health service.

FAMILY PLANNING CLINIC

A joint preventive service in 1971 - CITY OF CALGARY HEALTH DEPARTMENT, the Family Planning Clinic served 69 patients, who made a total of 1,308 visits to the Clinic. At the Clinic, the students participated in interviews, discussion of birth control and related matters, physical examination and filling of prescription. It is the only birth control clinic operating in the City, and is open two evenings a week.

1971 - CITY OF CALGARY HEALTH DEPARTMENT PUBLIC HEALTH NURSING SECTION - STUDENT PROGRAM

CALGARY GENERAL HOSPITAL

- School of Nursing

57 Students - $\frac{1}{2}$ days = 28 $\frac{1}{2}$ days

MENTAL HEALTH

Dietetic Internes

1 Student - 3 days =
3 Students - 2 days = 9 days

HOLY CROSS HOSPITAL

- School of Nursing

41 Students - 1 $\frac{1}{2}$ days = 60 $\frac{1}{2}$ days

MOUNT ROYAL COLLEGE

- Nursing Education Program

1 Student - $\frac{1}{2}$ day =
1 Student - 1 day = 1 $\frac{1}{2}$ days

UNIVERSITY OF CALGARY

Nursing Students

6 Students - 1 day = 6 days
39 Students - 2 $\frac{1}{2}$ days = 97 $\frac{1}{2}$ days
6 Students - $\frac{1}{2}$ day = 3 days

PRE-NATAL CLASSES

UNIVERSITY OF ALBERTA

Dental Hygiene Students

3 Students - 3 days = 9 days

TOTAL 158 Students 214 days

Panel Discussions with V.O.N. & P.H.N. 8

Panel Discussions - P.H.N. 2

Lectures 2

12

FAMILY PLANNING CLINIC

A joint preventive service financed 80% by the Province of Alberta, the Family Planning Clinic served 697 patients, who made a total of 1,308 visits to the Clinic. At the Clinic, opportunity is afforded for individual interviews, discussion of birth control and related matters, physical examination and filling of prescription. It is the only birth control clinic operating in the City, and is open two evenings a week.

MENTAL HEALTH

While at all of our contacts with children, parents and others opportunities are grasped to pass on a knowledge of mentally healthy ways of handling personal relations, there has been added to our program a suggestion of something new. The Health Department has in 1971 been receiving summaries of case histories on discharge of a few selected patients of one of the large Alberta (Mental) Hospitals. It is implied that the district public health nurse should visit such cases, assisting by friendly support or alerting doctor or hospital of untoward developments that signal the need for renewed psychiatric care. In general, either our staff has been poorly prepared for this, or the selection of cases has not taken into account the lack of resources. It is to be hoped that guidance, resources and co-ordination will be offered to make this a useful service.

RUBELLA VACCINE

This is a new program -- offering protection to girls aged 12 in school who have not previously had this disease. As well, the Vaccine is available free of charge to doctors to immunize adult women who have not had the disease. Since it is a live vaccine, and live vaccines of viruses with any possibility of damaging a foetus are not to be given to a woman in early pregnancy, it is up to the doctor and patient to exercise the appropriate safeguards.

PRE-NATAL CLASSES

Pre-Natal Classes, as in other years, were offered at the Haysboro and North Hill Clinics. 58 mothers took advantage of these classes. It seems that physicians recommend and expectant mothers tend to comply or prefer the classes offered at hospitals.

The integrated Pre-Natal Class-Group Discussion-School Health Service to the Calgary School Board's Education Program for unwed pregnant school girls continued in 1971. In the school year September 1971 to June 1972, 96 individual girls took part in these classes.

FAMILY PLANNING CLINIC

A joint preventive service financed 80% by the Province of Alberta, the Family Planning Clinic served 827 patients, who made a total of 1,308 visits to the Clinic. At the Clinic, opportunity is afforded for individual interviews, discussion of birth control and related matters, physical examination and fitting of prescription. It is the only birth control clinic operating in the City, and is open two evenings a week.

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Dr. L. C. Allan,
Medical Officer of Health,
Health Department,
City of Calgary.

Dear Sir:-

The following is a report and summary of the Pre-School and School Dental Services for the year 1971.

In civilized communities most epidemic diseases such as smallpox or cholera, which formerly took thousands of lives, have been brought under control. Considerable progress has also been made in controlling tuberculosis, pneumonia and other endemic diseases. As a result, diseases which were relatively unimportant health problems are assuming a new importance. In this category are the chronic and debilitating diseases such as arthritis and dental diseases. One of these, dental caries, the commonest of all chronic diseases, has remained unchecked or has actually increased in spite of an over-all improvement in the health picture of the community, making it a major health problem. This is so not only because of the possible deleterious effect of dental caries and its sequelae on general health but also because of the cost of treatment.

The feature that distinguishes dental caries from most other human ailments is that once it has started it usually does not cease to progress nor does it heal naturally. Each affected tooth needs specific treatment by qualified personnel using costly, highly specialized equipment. If not treated, a carious lesion inevitably progresses to pulp involvement and total destruction of the tooth.

Because of the fact that dental caries is never mentioned on death certificates, its significance as a disease is underestimated, despite it being, without a doubt, among the most prevalent of human afflictions. Aside from impaired speech, poor aesthetics and the hindering of the normal growth of the jaws and face, dental damage due to caries may also endanger general health. It must be realized that oral and dental health cannot be divorced from general health, for health is not a divisible entity. The total health of an individual encompasses all the body's component parts. For example, loss of teeth impairs masticatory function, and as a result may affect the entire digestive system. Difficulty in masticating food leads to either improperly comminuted food or to the choice of soft, pappy, over-cooked, non-nutritious foodstuffs. In either case, varying degrees of malnutrition will inevitably occur. The swallowing of improperly masticated food imposes severe digestive difficulties upon the gastro-intestinal tract, generally in old age, when it is least capable of dealing with the situation.

Proper mastication of food is an important phase of digestion and the primary or baby teeth are the means whereby the essential nutrients or foods are prepared for digestion. The foods are also mixed with saliva, which is the first digestive juice in the breaking down of foods for the body's use.

The underlying message that is continually being emphasized throughout all procedures is the fact that dental care and supervision of young children is extremely important. Parents must be made to realize that the oral cavity is plagued by more disease than any other part of the body and the permanently

septic state of the mouth results in a tremendously high incidence of dental and parodontal disease, with debilitating consequences upon general health.

However, health is determined not by what we know but what we do and it takes more than dental health education to get people to the dentist. Even the scientifically intelligent people may risk illness or premature death because of certain practices, for example, smoking. It apparently takes more than sound data on the aetiology of cancer to get people to stop smoking. Too often we think of the other fellow and don't apply the rules to our own behavior. For some unaccountable reason, we keep thinking "it won't happen to me". You can tell people what to do, but just how do you get them to do it? Many people just don't accept these things which are obviously going to be good for them unless the rewards include financial gains, fame or better personal appearance. The desire for better health or fear of death are not strong enough forces to motivate many people to seek out sound health services.

Dentistry, therefore, continues to face two serious problems:- (1) how to motivate people to seek dental care, and (2) how to motivate patients to accept our recommendations once they have decided to ask for our help. The obvious solution to the first problem is to eliminate or reduce the factors which deter potential patients from the office, i.e., eliminate the cost, the fear, the distrust, the apathy, the inconvenience, etc., and then provide incentives to make dental care more attractive than just better oral health alone. It is, of course, impossible to eliminate all of the deterrents and to develop incentives that would be meaningful enough to all, yet we must at least try.

The City of Calgary's minimal charge for dental services has almost eliminated the cost and so has very little effect on the family budget. The dental profession has done and is still doing a commendable job of diminishing fear since pain has been markedly reduced during dental procedures. But the problems of apathy and distrust still loom large. They will be solved only over a long period and only by focusing our efforts on children. It is very hard to motivate adults to establish new habits, especially if any displeasure is involved, but children can be moulded. However, it is upon the example, guidance and understanding of parents that children's health depends most. The parents' responsibility is not one that can be met by expressing love and affection only, but by informed good sense and necessary action. The "love" that holds back a child from inoculation against disease or from periodical medical-dental examination and treatment is a misguided tenderness that takes no thought of end results.

Public dental health consists in preventing disease and prolonging dental efficiency through organized community efforts. A more intelligent use of all known means of preventing dental disease and abnormalities is called for. These methods include sound nutrition, good dietary habits and properly timed and effective tooth brushing. With all due allowance for human frailty, approximately 80% of dental disease should not happen. Prevention is a personal responsibility and it remains only for people, as individuals and as members of communities, to see to it that the preventive measures are used.

TABLE I

DENTAL SERVICES 1971

The treatment aspect of our program remained basically the same, offering comprehensive dental treatment for the children of Calgary families of low economic status. Treatment included x-rays, fillings, extractions, stainless steel crowns, space maintainers, endodontics and minor preventive orthodontics.

Of the 6,628 individual teeth attended to, 5,396 (81.4%) were restored to healthy functioning units, while the remaining 1,232 (18.6%) had to be extracted.

Of the number restored, 3,242 (60.1%) were permanent teeth and the remaining 2,154 (39.9%) were baby teeth. Because of the extent of the lesion, 414 teeth could not be adequately restored with the normal filling materials and so were rebuilt to their former functioning condition by the use of stainless steel crowns.

Teeth were extracted because they could not be adequately restored due to the extent of the lesion, a periapical abscess was involved, or an acceptable occlusion could not be established without extractions. Of the number extracted in the City Clinics, 279 (22.7%) were permanent teeth and the remaining 953 (77.3%) were primary or baby teeth.

To replace these baby teeth which were prematurely lost, the Dental Division inserted 144 space maintainers in order to maintain the resultant spaces until the permanent teeth could erupt into place. However, a "spacer" is not always required after an extraction. For example, when the roots of the baby tooth are at least two-thirds resorbed and the permanent tooth is in normal position to erupt.

The following Table (Table I) presents a summary of the work performed by the Dentists for the year 1971.

		SCHOOL	PRE-SCHOOL
A-S	Polished	460	
	Temporary	167	5
E	Pulpotomy Deciduous	146	38
H	Endo. Permanent	26	1
D	No. of Endo. Appointments	107	35
C	Deciduous	240	91
N	Permanent	43	
O			
W			
H			
S			
A A	Space Maintainer	132	14
P N	Ortho. Appliance	88	5
P C	Appliance Checks	218	4
L E	Impressions	272	25
I-S			
S G	Permanent Teeth Extracted	688	64
U E	Deciduous Teeth Extracted	276	1
U-R			
Y	Frenectomy, etc.	11	
	Completed Clinic Cases	1,216	104
	Patients Discharged	26	5

TABLE I

DENTAL SERVICES 1971

		SCHOOL	PRE-SCHOOL
A P P O I N T M E N T S	Welfare	613	47
	Paying	5,655	558
	Free	800	57
	Cancellations	492	7
	Missed	480	7
	Emergency	184	9
	Recall	1,244	80
	New	758	138
E X A M S	Clinical	2,178	235
	No. of X-Rays	3,244	184
	Carious 6 Yr. Molar	1,791	12
P R E T R E V E N - E	Parent and/or Child Education	2,647	250
	Prophylaxis Completed	1,386	136
	Topical Fluoride Completed	1,343	131
	Periodontal Treatment	31	
R E S T O R N A - S	Permanent Restorations	3,195	4
	Permanent Surfaces	5,088	5
	Deciduous Restorations	1,343	440
	Deciduous Surfaces	2,532	720
	Polished	460	
	Temporary	167	5
E N D O	Pulpotomy Deciduous	146	38
	Endo. Permanent	26	1
	No. of Endo. Appointments	187	35
C R O W N S	Deciduous	280	91
	Permanent	43	
A A P P P C L E I - S	Space Maintainer	132	14
	Ortho. Appliance	88	5
	Appliance Checks	218	4
	Impressions	272	25
S G U E R - R Y	Permanent Teeth Extracted	889	64
	Deciduous Teeth Extracted	278	1
	Frenectomy, Etc.	11	
	Completed Clinic Cases	1,716	184
	Patients Dismissed	26	5

Dental Hygienists' Services

Dental health educational efforts in child health clinics and intensified efforts in the schools are the methods used by this Division to encourage the parents and children to transform knowledge into action. The Dental Hygienists, who are university trained and licensed to practice under the supervision of a Dentist, are a valuable addition to the City of Calgary Dental Staff. Their formal duties are wide and varied and covered by law. The actual duties which the Hygienist performs are, however, to a great extent determined by the needs of the dental health program itself and are summarized as follows:-

(1) Professional - Clinical Service

This service includes dental prophylaxis -- the scaling and polishing of the patient's teeth; the application of topical fluorides. She may also act as a general chair-side assistant to the Dentist during the performance of his duties. The results of this service are summarized in Table IV.

(2) Clerical - Administrative Service

These duties are those procedures of an office and business - financial nature which are designed to make the non-technical side of the dental program more efficient -- scheduling appointments; the recall of patients; bookkeeping; keeping office records; etc.

(3) Educational

Her role as educator has two facets. On the one hand, she is to teach the parent and child the proper care of teeth and in general make them more aware of good dental health procedures. On the other hand, her university education ostensibly equips her to educate the public at large (particularly in groups) on dental health problems. These results (school visits) are summarized in Table II.

For a period of five months this Department had only three Hygienists on staff to carry out the aforementioned duties. Although their activities were somewhat curtailed by their numbers, Miss Sheppard, Mrs. Tully and Miss Marshall were able to keep the program on a fairly even keel. The success of their efforts was shown by the number of positive reactions received, not only from the parents attending the dental health clinics with their children, but also from the Teachers who returned questionnaires regarding the effectiveness of the school educational session which had just taken place in their classrooms.

With the addition of Miss Dodds, Miss MacDonald and Miss Blanchard for the second school session, the program was expanded to cover more schools, but still not to the extent we would have liked.

The promotion of dental health among school children in Calgary represents the co-operative efforts of the Health Department and educational leaders alike. The response to this program from the various Teachers was excellent, especially when we consider the number of problems and pressures in today's school system. Many groups want the school program to include a particular

item or to place special emphasis on a certain aspect of the curriculum. Dentistry is only one of the groups with "special interests".

In carrying out the direct classroom instructions, the Dental Hygienists work as closely as possible with the Teacher in charge. Teachers possess skills as unique to their profession as are the skills of the Dentist and they are ordinarily far better equipped to instruct than are Dentists and Dental Hygienists. Teachers have the skills and years of preparation to do the job of classroom instruction; they know their children and their vocabulary levels. The Teacher has a daily continuing relationship with the child for a period of at least ten months and, in some cases, over a period of years, and can, therefore, play a major part in promoting dental health instruction either through the medium of formal health instruction or incidentally at various times when the opportunity for health education arises.

The one weakness in the school dental health program was our insufficient number of Dental Hygienists to carry on a continuous program in the schools. It is important to recognize the fact that dental health instruction cannot be confined to one or two lessons but must function on a continuing basis throughout the year. With our present staff we are able to cover only a limited number of schools per year and are, therefore, unable to make the return visits to each school that the Teachers would like and have requested. The results of the questionnaires handed out to the Teachers in whose classroom the teaching session took place were indicative of their desire to have the Hygienists conduct this program in their class the following year. They were just as desirous of having follow-up lessons conducted in the same year in order to reinforce the points covered in the program at the first visit.

Dental inspections were again carried out on Grade II students and some Grade III students, participating in the Proctor & Gamble section of the program (Table III). The school dental inspection included clinical observation of oral hygiene, teeth and surrounding tissues of the mouth. The purpose is not to count cavities (dental x-rays would be required to locate all such defects), nor to suggest methods of treatment. These suggestions rest with the Family Dentist. Although it is hoped that the inspection may in some way serve to motivate the child to better health attitudes and habits, its main purpose is to provide base line and cumulative data for evaluation of the school dental health program. It also serves to provide information as to the status of dental needs so the advisability of supporting a sound dental health program may be recognized.

The dental health of the children was assessed in terms of the following criteria (Table III):-

- Caries-free (no evidence of previous caries experience);
- Complete caries treatment (all caries treated by fillings, extractions or both);
- Partial caries treatment (some, but not all, caries treated);
- Never treated (caries present and no sign of any treatment);
- Premature extractions (one or more teeth prematurely extracted).

TABLE III

SCHOOL DENTAL HEALTH EVALUATION

DENTAL HYGIENISTS'
SCHOOL VISITS 1971

STUDENTS								OH		
GRADE	NUMBER	CF	ATC	NTR	NR	X	XR	G	F	P
<u>SCHOOLS USING PROCTOR & GAMBLE MATERIALS</u>										
Grade 11	1,871	241	605	858	439	494	135	115	570	1187
32 Schools		12.9%	31.8%	51.1%	26.7%					
Grade 111	833	79	334	465	199	280	107	55	283	495
		9.5%	40.1%	54.6%	24.9%					
TOTAL	2,704	320	939	1411	698	783	182	170	853	1682
		11.8%	34.7%	52.2%	25.8%	29.0%	6.7%	6.3%	31.5%	62.2%

Grade 2 = 1,952 Students

Grade 3 = 2,082 Students

Total 4,034 Students

KINDERGARTENSLEGEND:-

CF 32 (Approximately 60 Sessions)

1,089 Children

ATC - All Treatment Completed

XR - Due For Extraction

NTR - More Treatment Required

OH - Oral Hygiene --

NR - No Restorations

G - Good; F - Fair; P - Poor

SPECIAL CLASSES

15 Sessions

168 Students of various
ages and of limited
physical and/or men-
tal ability

THE RESULTS FROM THE SCHOOL DENTAL INSPECTION SHOW THAT APPROXIMATELY 11.8% OF THE CHILDREN EXAMINED WERE CARRIES-FREE, THAT IS, HAD NO EVIDENCE OF PREVIOUS CARRIES EXPERIENCE. THIS IS AN APPROXIMATE VALUE, AS IT WOULD BE ONLY THROUGH THE USE OF DENTAL X-RAYS THAT WE COULD BE SURE ALL DEFECTS HAD BEEN LOCATED.

OTHER SCHOOLS

THE USE OF DENTAL X-RAYS IN THE EXAMINATION WOULD UNDOUBTEDLY LOWER THIS PERCENTAGE OF CARRIES-FREE CHILDREN.

36 Schools

4,620 Students

THIS HIGH RATE OF CARRIES ATTACK CAN BE DIRECTLY RELATED TO THE POOR ORAL HYGIENE OF THE CHILDREN EXAMINED. OUT OF 2,704 CHILDREN EXAMINED, 1,089 (40.3%) WERE CLASSIFIED AS HAVING GOOD ORAL HYGIENE.

Grade 1 = 1,082 Students

Grade 2 = 1,259 "

Grade 3 = 855 "

Grade 4 = 390 "

Grade 5 = 499 "

Grade 6 = 500 "

Grade 7 = 35 "

T A B L E I I I

SCHOOL DENTAL HEALTH EVALUATION

S T U D E N T S		O H S C H O O L								
GRADE	NUMBER	CF	ATC	MRT	NR	X	XR	G	F	P
Grade II	1,871	241	605	956	499	494	135	115	570	1187
		12.9%	31.8%	51.1%	26.7%	26.4%	7.2%	6.2%	30.5%	63.3%
Grade III	833	79	334	455	199	289	47	55	283	495
		9.5%	40.1%	54.6%	23.9%	34.7%	5.6%	6.6%	33.9%	59.5%
TOTAL	2,704	320	939	1411	698	783	182	170	853	1682
		11.8%	34.7%	52.2%	25.8%	29.0%	6.7%	6.3%	31.5%	62.2%

LEGEND:-

CF - Caries Free
 ATC - All Treatment Completed
 MTR - More Treatment Required
 NR - No Restorations

X - Tooth Extracted
 XR - Due For Extraction
 OH - Oral Hygiene --
 G - Good; F - Fair; P - Poor

THE RESULTS FROM THE SCHOOL DENTAL INSPECTION SHOW THAT APPROXIMATELY 11.8% OF THE CHILDREN EXAMINED WERE CARIES-FREE, THAT IS, HAD NO EVIDENCE OF PREVIOUS CARIES EXPERIENCE. THIS IS AN APPROXIMATE VALUE, AS IT WOULD BE ONLY THROUGH THE USE OF DENTAL X-RAYS THAT WE COULD BE SURE ALL DEFECTS HAD BEEN LOCATED. THE USE OF DENTAL X-RAYS IN THE EXAMINATION WOULD UNDOUBTEDLY LOWER THIS PERCENTAGE OF CARIES-FREE CHILDREN.

THIS HIGH RATE OF CARIES ATTACK CAN BE DIRECTLY RELATED TO THE POOR ORAL HYGIENE OF THE CHILDREN EXAMINED. OUT OF 2,704 CHILDREN, ONLY 170 (6.3%) WERE CLASSED AS HAVING GOOD ORAL HYGIENE.

TABLE IV

DENTAL HYGIENIST SERVICES 1971

	SCHOOL	PRE-SCHOOL
Appointments Made	2,273	5,966
Cancellations	107	387
Missed Appointments	94	313
Recall Patients	1,190	2,272
New Patients	887	2,519
Visual Examination	2,072	5,266
Poor Oral Hygiene	775	2,249
Apparent Caries Free	705	3,110
Visual Dental Decay	653	1,279
Carious 6-Year Molar	162	444
Treatment Completed	716	884
Malocclusion/Malalignment	137	320
Premature Loss of Primary Teeth	143	95
Other Abnormalities	45	74
Prophylaxis	2,042	5,217
Fluoride Painting	2,042	5,217
Polished Fillings	2	7
Parent and/or Child Education	2,017	4,802
Unfinished Cases	30	49
Taking Systemic Fluoride	1,601	4,232
Prescribed Systemic Fluoride	229	410
Refused	50	115
Referred to Private Dentist	311	905
Referred to City Dental Clinic	15	27
Schools Visited	68	
Kindergartens Visited		31

As far as the clinical duties were concerned (Table IV), the Dental Hygienists performed 7,338 cursory examinations in the various health clinics around the City. The parents who accompanied their children during this session were informed that these examinations were done without benefit of x-rays and, therefore, were not intended to replace accurate and complete dental examinations by the Family Dentist.

From this number, 7,259 children received prophylaxes (cleaning) and topical fluoride applications (2,042 school children, 5,217 pre-school children). The parents of these children received counselling on the various aspects of oral hygiene and its close relationship to the general health of the body.

In closing, I would like to take this opportunity to express my thanks and appreciation to you, to the Deputy Medical Officer of Health, the Dental Division staff, the Public Health Nurses and the Health Department Clerical Staff for the help and co-operation received throughout the past year.

Respectfully submitted,

John J. Willey, B.A., D.D.S., D.D.P.H.,
Director, Dental Health Services.

NUTRITIONIST'S ANNUAL REPORT 1971

I am pleased to report on the Nutrition Services provided by the City of Calgary Health Department in 1971.

As the Public have become more aware of the Nutrition Services available through the Health Department, requests for information on nutrition have increased. In 1971 there were 972 'phone calls and 115 interviews in regard to general nutrition information, food costs, or special diets. There were 33 home visits made in relation to special diets, food budgeting and institutional management, 67 letters were written and 511 nutrition publications were distributed.

Information on food, nutrition and health was gleaned from attendance at 26 meetings as an observer or participant in informal question and answer sessions. Included in this group are professional meetings attended such as the In-Service Meetings for Public Health Staff, Home Economist in Business Meetings and Alberta Registered Dietitian Association Meetings.

There were 19 meetings held to formulate plans for various nutrition education programs in which the Nutritionist was involved.

Nutrition information was disseminated when 65 groups were addressed on numerous nutrition and related topics. As an example, the topics included prenatal nutrition, dieting and weight control, budgeting and meal planning, food for little folks, duties of the Nutritionist, nutrition and grooming, fads and fallacies about diet. Also included in meetings addressed were in-service education programs for:- Homemakers for the Calgary Home Care Program on Nutrition, special diets and menu planning for the sick; Social Workers on diet and food budgeting; Public Health Nurses on counselling in food management and discussion on current topics of interest in nutrition. Two nutrition series of six sessions each were presented by the Nutritionist. One series held at the City Hall Clinic was on weight reduction. The other series was held at the Shaganappi Tri-Services Auditorium and dealt with menu planning, budgeting and food purchasing. Assistance was again provided for the Calgary Exhibition and Stampede's educational display. This year's topic was horticulture and emphasis was placed on the nutritive value, selection and preparation of fruits and vegetables.

Five newsletters with relevant and useful nutrition information were prepared and distributed to the Public Health Staff. Other information publications were prepared and mimeographed for distribution, such as food exchange lists for reducing diets, herbs for seasoning special diets, blending foods for babies and economical menus for persons living alone.

Recommendations were made and a sample cycle menu was developed for an Institution in the City. In addition, sample cycle menus with food costing and nutritive values were calculated for day care operations.

The Nutritionist was asked to submit comments and suggestions on a number of publications under revision. Comments were also made on the dietary requirements of pre-school children in day care, the nutritionist's and dietitian's role in community health centres and the nutritional labelling of foods.

Four Dietetic Interns from the Calgary General Hospital affiliated with the Nutritionist and Public Health Nurse in order to appreciate and understand the role of the Nutritionist and the Public Health Program in the Community.

REPORT OF DISTRICT DIRECTOR OF VICTORIAN ORDER OF NURSES

In 1971 the Nutritionist was involved in Nutrition Canada, the National Nutrition Survey. In addition to speaking engagements about the Survey, recommendations were made in regard to the location of schools for the survey clinics, volunteers were obtained for baby-sitting, discussions were held with the Nurses involved in the Survey and the news media were contacted and reminded of the Survey. Visits were also made to the three survey clinics held in Calgary, at which time information on the services of the Health Department was distributed.

In the past year there has been increased nutritional awareness. The Public have been requesting factual information on the value of food after processing and the effects of additives, chemical fertilizers and pesticide residues on foods. When the data from Nutrition Canada is available in 1973, we will have the answers to some of these questions and, more important, an accurate appraisal of the Nutritional Status of Canadians.

the number of visits made after regular working hours; these night visits were mainly to patients suffering terminal illnesses who wished to remain at home as long as possible. There has also been an increase in under sixty-five years of age who need nursing care.

Catherine Ellis,
Nutritionist.

The Home Care Program, working smoothly in its second year of operation, continues under the administration of the V.O.N. In 1971, 3,571 visits were made to give nursing care to patients on this program; it has been gratifying to use a co-ordinated approach with other services to demonstrate how well a variety of illnesses can be cared for at home.

In 1971, 3,577 hours were spent in special activities such as hospital liaison programs. Time purchased by the active treatment hospitals has been supplemented by the Home Care Program so that V.O.N. nurses currently spend seventy hours weekly with patients, doctors and hospital personnel assessing patients' needs and making suitable arrangements for their discharge. Referrals for care are made to many community resources; 1,010 referrals were made during the year by referral nurses. The V.O.N. has continued liaison programs in some hospitals as long as ten years. We are at the close of 1971, carrying out a critical study with the help of the patient (consumer), physicians and hospital personnel to determine whether we are being as effective as we could and should be in these programs.

In September we were invited to attend case conferences held weekly in each of the auxiliary hospitals in the City. The increased communication between our two agencies has been most helpful in our common goal of giving the most

REPORT OF DISTRICT DIRECTOR OF VICTORIAN ORDER OF NURSES

It is my pleasure to report to you on the Nursing Service provided by the Victorian Order of Nurses to the Community in 1971.

A statistical summary has been included in this Annual Report. Nursing visits have shown a great increase over the previous year, totalling 30,974 in 1971, up 3,943 over the previous year. Cases opened totalled 3,432, an increase of 83, and the hours on duty were up a relatively small amount with time per visit averaging 48.1 minutes. There has been a great increase in the number of visits made after regular working hours; these night visits were mainly to patients suffering terminal illnesses who wished to remain at home as long as possible. There has also been an increase in patients under sixty-five years of age who need nursing care.

The Home Care Program, working smoothly in its second year of operation, continues under the administration of the V.O.N. In 1971, 3,571 visits were made to give nursing care to patients on this program; it has been gratifying to use a co-ordinated approach with other services to demonstrate how well a variety of illnesses can be cared for at home.

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In September we were invited to attend case conferences held weekly in each of the auxiliary hospitals in the City. The increased communication between our two agencies has been most helpful in our common goal of giving the most

suitable care we can in the most suitable place for the patient.

Our statistics demonstrate a trend towards decreased visits to newborns and postnatal mothers. As mothers read more and take a more active part in the care of their babies in the hospital, we find relatively fewer of them need the demonstrations of infant care we offer. However, there will always be a percentage of families who benefit from professional reassurance and guidance when they bring a new baby home. We made 2,544 visits to 942 newborns in 1971.

In-service education for staff was carried out as time permitted. One nurse attended a three-week institute at the Manitoba Rehabilitation Hospital in Winnipeg and all others attended a one-day symposium on Home Care in Edmonton. A representative attended the Canadian Public Health and the Alberta Registered Nurses' Associations Annual Meeting.

As Director, I attended the Annual V.O.N. Meeting in Ottawa in May and found this very stimulating. Three staff members attended the Alberta Hospital Association Institute on Long Term Care in Calgary.

Staff nurses acted as field guides for four University of Alberta and one University of Saskatchewan students who spent one and two weeks respectively in the branch. We also arranged observation periods for 165 students from local schools of nursing, as well as one registered nurse from hospital staff who requested observation periods.

There were five resignations and six new nursing appointments during the year as we experienced increased demands for service. A modified team nursing approach has been implemented with a leader appointed for each of the north and south sections of the City. This improved organization has, along with admirable staff co-operation, resulted in a much more efficient operation of our nursing program.

Much of the aforementioned increased demand for service has been brought about because of the helpful interpretation of our service given by the press, radio TV and interested community citizens.

May I take this opportunity to express the appreciation of all the staff for the warm community relationships we have enjoyed and my personal appreciation for the help of the Board of Management and staff who helped make 1971 such a vintage year.

Maternity	1,955	1,871
Med-Surgical	3,200	3,311

Respectfully submitted,
Faith Stanley,
District Director.

VISITS

Maternity	4,884	4,229
Med-Surgical	21,919	26,470
Other	228	274
	<u>27,031</u>	<u>30,973</u>

NIGHT VISITS

	264	685
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TIME ON DUTY

Visiting Nursing	23,406	24,849
Other Nursing Activities	3,102	3,577
	<u>26,508</u>	<u>28,426</u>

HOSPITAL REFERRAL PROGRAMS

Number of Referrals	832	1,010
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PAY STATUS OF VISITS

	1970		1971	
Full	3,992	14.7%	4,522	14.6%
Part	5,802	21.5%	6,335	20.5%
Free	4,652	17.2%	5,583	18.0%
No Charge	5,003	18.5%	4,538	14.7%
Insurance	2,021	7.5%	2,971	9.6%
Government	4,761	17.5%	7,024	22.6%
	<u>27,031</u>	<u>100.0%</u>	<u>30,973</u>	<u>100.0%</u>

V.O.N.
CITY OF SERVICE STATISTICS

	<u>1970</u>	<u>1971</u>
<u>CASES (New)</u>		
Maternity	1,955	1,871
Med-Surgical	<u>1,245</u>	<u>1,440</u>
Travelling Expenses	3,200	3,311
Private Car Allowances		
Employee Transit Tickets & Passes		46
Equipment Maintenance	479	444
Stationery & Office Supplies	4,884	4,229
Maternity	21,919	26,470
Med-Surgical	228	274
Other	<u>27,031</u>	<u>30,973</u>
<u>NIGHT VISITS</u>	264	685
<u>TIME ON DUTY</u>		
Visiting Nursing	23,406	24,849
Other Nursing Activities	<u>3,102</u>	<u>3,577</u>
Printing, Stationery & Office Supplies	26,508	28,426
Medical Supplies		
Sundries	1,417	1,362
<u>HOSPITAL REFERRAL PROGRAMS</u>	196	327
Number of Referrals	832	1,010
Staff Development & Training	408	676

PAY STATUS OF VISITS

	<u>1970</u>		<u>1971</u>	
Full	3,992	14.7%	4,522	14.6%
Part	5,802	21.8%	6,335	20.5%
Free	4,652	10.4%	5,583	18.0%
No Charge	5,003	17.6%	4,538	14.7%
Insurance	2,821	18.5%	2,971	9.6%
Government	<u>4,761</u>	<u>17.2%</u>	<u>7,024</u>	<u>22.6%</u>
Dental Equipment	27,031	100. %	30,973	100. %
Furniture & Furnishings				
Staff Development & Training			6,305	
Shaganappi Clinic Equipment			16,004	CR.
Charges Recovered			169,725	130,479

CITY OF CALGARY HEALTH DEPARTMENT

FINANCIAL STATEMENT

	1971	1970
HEALTH		
Administration		
Salaries	108,590.	91,322.
Travelling Expenses	230.	165.
Private Car Allowances	532.	522.
Employee Transit Tickets & Passes	-	46.
Equipment Maintenance	419.	444.
Printing, Stationery & Office Supplies	2,258.	2,378.
Janitorial & Housekeeping Supplies	11.	6.
Sundries	642.	555.
Office Machines	590.	242.
Purchasing & Stores Handling	2,843.	2,537.
	116,115.	98,217.
School Medical Services		
Salaries	414,598.	373,393.
Travelling Expenses	695.	343.
Private Car Allowances	19,035.	16,405.
Employees' Transit Tickets & Passes	-	594.
Equipment Maintenance	51.	225.
Uniforms	-	515.
Printing, Stationery & Office Supplies	4,271.	3,049.
Medical Supplies	7,020.	6,777.
Sundries	1,417.	1,362.
Medical Equipment	196.	327.
Furniture & Furnishings	-	275.
Glasses for Underprivileged Children	411.	522.
Staff Development & Training	488.	676.
	448,182.	404,463.
School & Pre-School Dental Services		
Salaries	160,856.	131,344.
Travelling Expenses	424.	154.
Private Car Allowances	621.	433.
Equipment Maintenance	1,330.	633.
Laundry Service	1,647.	1,847.
Printing, Stationery & Office Supplies	1,248.	1,223.
Dental Supplies	12,568.	7,847.
Sundries	202.	206.
Dental Equipment	413.	-
Furniture & Furnishings	-	598.
Staff Development & Training	115.	122.
Shaganappi Clinic Equipment	6,305.	-
Charges Recovered	16,004. CR.	13,928. CR.
	169,725.	130,479.

	<u>1971</u>	<u>1970</u>
<u>Infant & Pre-School Clinics</u>		
Salaries	412,119.	371,206.
Private Car Allowances	19,035.	16,405.
Employees' Transit Tickets & Passes	-	608.
Printing, Stationery & Office Supplies	1,863.	1,293.
Sundries	368.	335.
Furniture & Furnishings	2,218.	436.
	435,603.	390,283.
<u>General Health Services</u>		
Salaries	27,076.	11,968.
Private Car Allowances	759.	-
Equipment Maintenance	28.	10.
Printing, Stationery & Supplies	356.	441.
Medical Supplies	98.	287.
Sundries	23.	146.
Drugs & Serum	1,493.	1,337.
Chemicals	184.	196.
Furniture & Furnishings	148.	11.
Milk for Sickly & Undernourished	450.	666.
Special Health Programs	931.	1,475.
Family Planning Clinic	13,047.	7,525.
Family Planning Costs Recovered	13,107. CR.	7,525. CR.
	31,486.	16,537.
<u>Inspection Services</u>		
Salaries	211,879.	191,804.
Travel Expense	143.	16.
Private Car Allowances	15,589.	14,050.
Passenger Car Rentals	2,882.	4,460.
Employees' Transit Tickets & Passes	228.	266.
Equipment Maintenance	311.	359.
Laundry Service	82.	130.
Milk Inspection	1,095.	1,087.
Meat Inspection	-	1,640.
Fly & Insect Control	8,737.	1,696.
Pigeon Control Program	800.	-
Printing, Stationery & Office Supplies	758.	460.
Laboratory Supplies	2,588.	2,476.
Sundries	133.	216.
Laboratory Equipment	1,118.	1,016.
Furniture & Furnishings	-	149.
Staff Development & Training	247.	520.
	246,590.	220,345.

	<u>1971</u>	<u>1970</u>
<u>Health Centres Maintenance</u>		
Buildings & Property Rentals	700.	961.
Buildings & Property Maintenance	2,489.	5,274.
Equipment Maintenance	185.	95.
Utilities	4,522.	3,030.
Telephones	3,624.	2,904.
Janitorial Service	10,085.	6,855.
Laundry Service	1,869.	1,570.
Janitorial & Housekeeping Supplies	672.	850.
Sundries	197.	59.
Grounds Development	-	900.
	<u>24,343.</u>	<u>22,498.</u>
 <u>SUMMARY</u>		
Administration	116,115.	98,217.
School Medical Services	448,182.	404,463.
School & Pre-School Dental Services	169,725.	130,479.
Infant & Pre-School Clinics	435,603.	390,283.
Victorian Order of Nurses Pre- & Post-Natal Services	8,912.	11,944.
General Health Services	31,486.	16,537.
Inspection Services	246,590.	220,345.
Health Centres Maintenance	<u>24,343.</u>	<u>22,498.</u>
	<u>1,480,956.</u>	<u>1,294,766.</u>
 Less:-		
Fees, Miscellaneous Sales	3,346.	4,505.
Provincial Government Health Grants	<u>425,758.</u>	<u>502,868.</u>
	<u>1,051,852.</u>	<u>787,393.</u>
 Population	 398,034	 385,436
 Per Capita Expenditure	 2.64	 2.04
 Per Capita Expenditure Without Consideration of Grants	 3.71	 3.35

