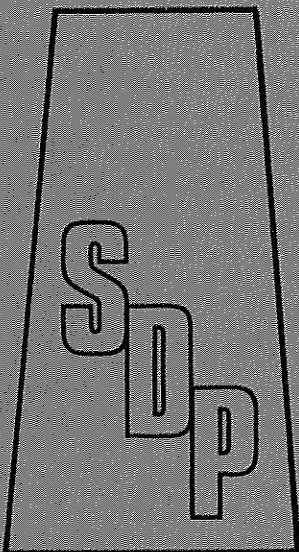


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# **SASKATCHEWAN DENTAL PLAN**

**AUGUST 1976**

**Saskatchewan**

**Dental**

**Plan**

**Report**

**Second Year of Operation**

**September 1, 1975 to August 31, 1976**

5/57 02



PROVINCE OF SASKATCHEWAN  
DEPARTMENT OF HEALTH  
3211 ALBERT STREET, REGINA  
S4S 0A6

## DEPARTMENT OF HEALTH

Regina, March, 1977

TO THE HONOURABLE G. PORTEOUS,  
*Lieutenant Governor of Saskatchewan*

MAY IT PLEASE YOUR HONOUR:

I beg to present herewith for your consideration the Report of the Saskatchewan Dental Plan for the year ending August 31, 1976.

*Respectfully submitted,*

W. A. ROBBINS,  
*Minister of Health.*

## DEPARTMENT OF HEALTH

Regina, March, 1977

TO THE HONOURABLE W. A. ROBBINS  
*Minister of Health.*

SIR:

I have the honour to present herewith the Report of the Saskatchewan Dental Plan for the year ending August 31, 1976.

*Respectfully submitted,*

M. B. DERRICK,  
*Deputy Minister.*



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## EXECUTIVE DIRECTOR'S REMARKS

The Saskatchewan Dental Plan, which commenced in September, 1974, has completed two years of operation. The objective of the Plan is to improve the dental health of young people in Saskatchewan by providing comprehensive dental care to children between the ages of 3 and 12. This care is provided by teams of dentists, dental nurses, and dental assistants in clinics which have been set up in elementary schools and special clinics across the province.

The Saskatchewan Dental Plan operates through school clinics and its activities are more closely related to the school year than to the government fiscal year. In order that the activities of the Saskatchewan Dental Plan can be more meaningfully presented and its costs and services more closely correlated, Dental Plan reports are based on the operational year September 1 to August 31.

The Saskatchewan Dental Plan is the first province-wide school based dental program to be established in North America. Keen interest in the development of the Plan has been shown by the Department of National Health and Welfare, provincial departments of health, professional dental associations, and colleges of dentistry. The present report is a description of the activities of the Saskatchewan Dental Plan which, it is hoped, will prove valuable to other agencies in the development of their own programs.

M. H. Lewis, D.D.S., D.D.P.H.  
*Executive Director*  
*Saskatchewan Dental Plan*



# BACKGROUND

In 1968, the Saskatchewan Department of Health conducted surveys in Regina and Saskatoon which showed that the level of dental health of children in these cities was far from satisfactory. On the basis of the survey results, the Dental Division of the Department of Health proposed that the federal government allocate funds for a dental pilot project in the province. The project was to provide dental health education, preventive services, and treatment services to children through a dental team consisting of a dentist, two dental nurses, three dental assistants and one receptionist-recorder.

The dental nurses were formally trained to provide educational, preventive, and treatment services to children, including deciduous tooth extractions and amalgam and composite restorations in deciduous and permanent teeth. The three dental assistants were formally trained to provide chairside assistance, simple prophylaxis, and application of anticariogenic agents.

Services were made available to children from 3 to 12 years of age in the Oxbow area of Southeastern Saskatchewan. The dental team was housed in a mobile clinic equipped with four dental units, an X-ray machine, a laboratory and a reception room. The project lasted for three years. It demonstrated that high quality care could be provided by such a program and also that parents were prepared to enroll their children in a dental program in which care was provided by dental nurses. It was important to establish that a dental program making use of

dental nurses could be successful because one of the main reasons for testing such a program was the chronic shortage of dentists in the province, especially in rural areas.<sup>1</sup>

On the basis of the successful Oxbow pilot project, the Government of Saskatchewan announced in March, 1972 that a province-wide dental program would be established to provide comprehensive dental care to children between the ages of 3 and 12. The program commenced in September, 1974 and during the first year of operation it provided dental care to children born in 1968. In September, 1975 children born in 1969 and 1970 were added. Children in other age groups will be gradually integrated into the program in subsequent years. All children enrolled in the program are first examined by a fully qualified dentist, who prescribes necessary treatment and decides how often a child should be examined. Dental Nurses, supported by dental assistants, provide most of the dental services under the supervision of the dentist. Services provided by the program, but beyond the scope of the dental nurse, are provided by the dentist.

With the co-operation of the Department of Education and local school boards, dental clinics have been located in schools to make access more convenient for children and parents. More clinics will be added as the program expands. In cases where space for clinics is not available in schools, portable dental equipment can be set up temporarily in the school or a mobile dental clinic can be used. Occasionally, children are transported from a school with no clinic to a nearby school that is equipped with a clinic.

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<sup>1</sup>. Saskatchewan has an average of one dentist for every 3,500 people. In rural areas the ratio is one dentist for every 7,000 people. These figures compare with a national dentist-to-population ratio of 1 : 2,700

# ORGANIZATION AND ADMINISTRATION

## Legislative and Regulatory Authority

In 1973 *The Saskatchewan Dental Nurses Act* was passed. This act created a Saskatchewan Dental Nurses Board to establish and maintain rules for the licensing of dental nurses, to set standards of professional conduct for dental nurses, to advise the Minister of Health on matters referred to the Board, and to ensure that the regulations and standards of professional conduct are met by all registrants. The first Board was appointed on September 25, 1973 and held three meetings during the year to develop regulations concerning the registration and licensing of dental nurses and to define the scope of dental nursing services. The Board now meets

at the call of the Chairman to approve the registration of dental nurses and to rule on standards and questions referred to the Board.

In the following year, *The Dental Care Act, 1974* was passed. This Act gives the Department of Health broad authority to operate a children's dental care program. The act authorizes the Minister of Health to enter into agreements with or to employ dentists, dental nurses, and certified dental assistants and to do whatever else is necessary for the establishment and operation of the dental care program.

## Administrative Structure

The administrative organization is outlined in the Organization Chart on page 10. The Saskatchewan Dental Plan is administered through a central headquarters staff consisting of an Executive Director, an Associate Director, administrative staff, and warehouse and stores personnel. The province is divided into six administrative regions. Regional Headquarters are located in Swift Current, Regina, Yorkton, Saskatoon, Prince Albert and North Battleford.<sup>1</sup> The Saskatchewan Dental Plan does not provide coverage to children in the northern part of the province. The Department of Northern Saskatchewan operates its own dental plan for children in this area, but receives consultation services and advice from the Saskatchewan Dental Plan.

A separate Dental Technical Review Board has been established to recommend methods by which the clinical aspects of the Saskatchewan Dental Plan may be improved and to advise on quality control of services provided.

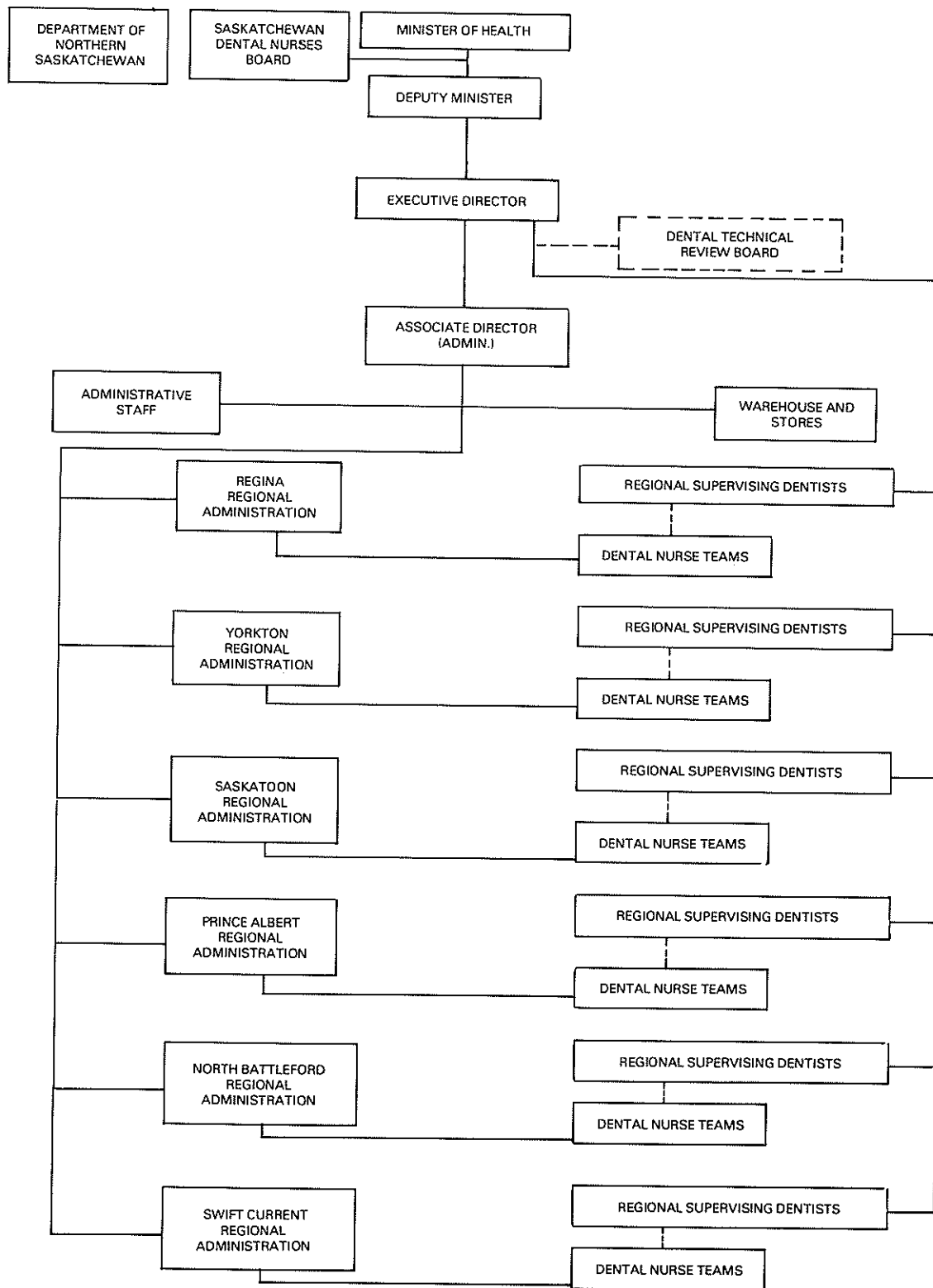
All regions are staffed by supervising dentists, dental nurses and dental assistants, together with an administrator, an equipment maintenance technician and clerical personnel. Health Region No. 1 in Swift Current has had a children's dental program for almost 30 years. The Swift Current Regional Board of Health agreed to provide dental care in the region at the same level as that provided by the Saskatchewan Dental Plan and to hire dental nurses to deliver services in clinics established in elementary schools. On September 1, 1975 the Swift Current Regional Board of Health terminated this arrangement and the Saskatchewan Dental Plan therefore established a sixth dental region with headquarters in Swift Current to provide dental services as in the rest of the province. The Swift Current Health Region has maintained its own dental program providing dental care to children up to and including age thirteen with the exception of children eligible for enrolment in the Saskatchewan Dental Plan.

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<sup>1</sup> The six Dental Plan administrative regions and headquarter locations for dental nurses are shown on the map on page 11.

Figure 1

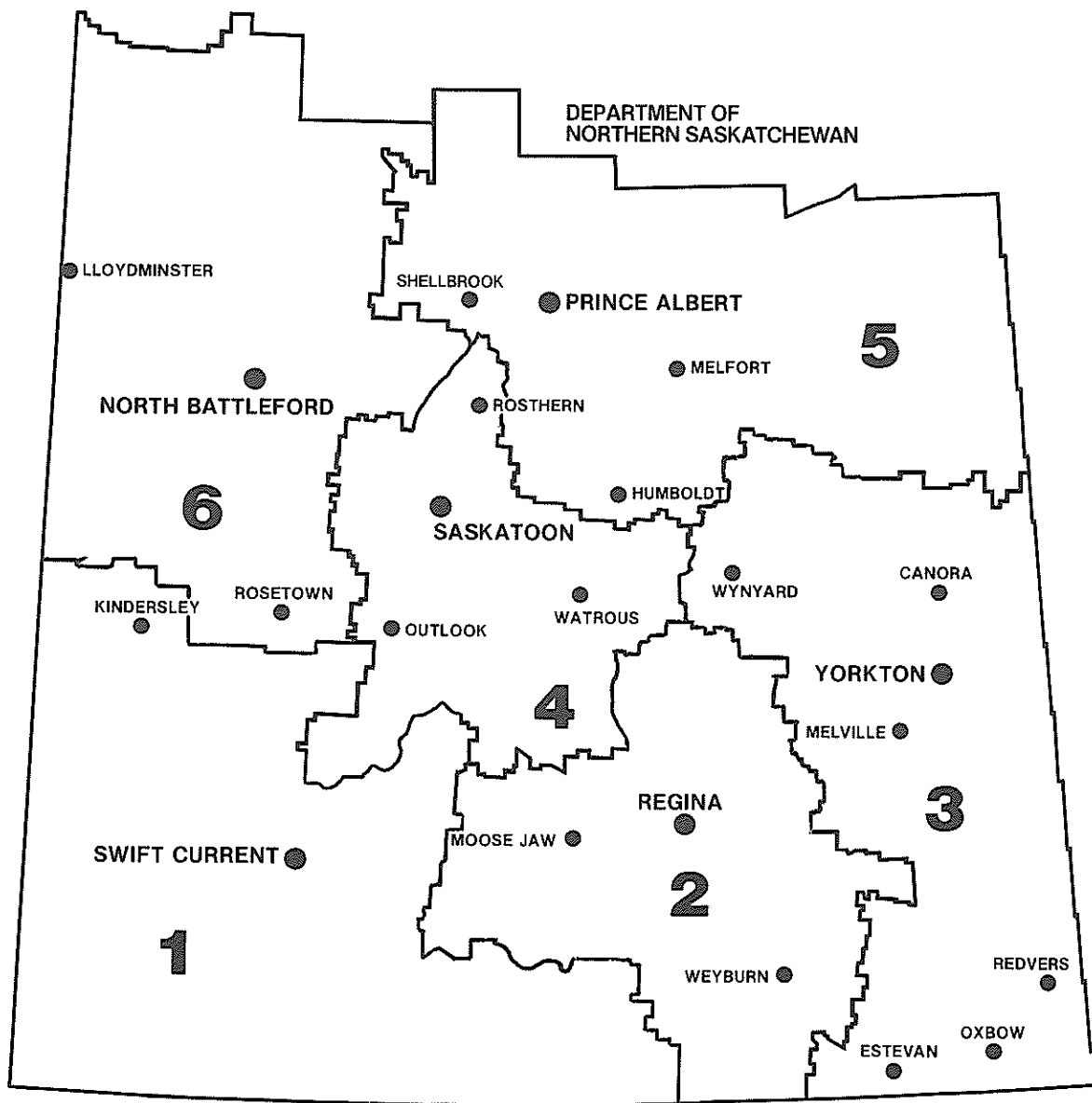
# SASKATCHEWAN DENTAL PLAN ADMINISTRATIVE ORGANIZATION



--- Denotes professional and clinical supervision.

Figure 2

## SASKATCHEWAN DENTAL PLAN ADMINISTRATIVE REGIONS



### KEY TO ADMINISTRATIVE REGIONS

- |                     |                        |
|---------------------|------------------------|
| NO. 1 SWIFT CURRENT | NO. 4 SASKATOON        |
| NO. 2 REGINA        | NO. 5 PRINCE ALBERT    |
| NO. 3 YORKTON       | NO. 6 NORTH BATTLEFORD |

# PROFILE OF SASKATCHEWAN DENTAL PLAN PERSONNEL

## Clinical Personnel

### 1. SUPERVISING DENTIST

The supervising dentist performs a variety of duties in close co-operation with the seven or eight dental nursing teams assigned to each area. The dentist spends a great deal of time examining and formulating treatment plans for enrolled children and carries out services which are beyond the scope of the dental nurse. Lines of communication are always open between the team and the dentist in order to provide the team with immediate consultation or assistance when necessary. As supervisor the dentist constantly monitors the quality and quantity of work being performed by the teams, and sees that priorities and schedules are being arranged and met.

The dentist meets constantly with parents, superintendents, principals, teachers and local officials and thus plays a significant role in public relations. All field staff are essentially public relations officers but it is the supervising dentist (together with the regional administrator) who must assess and deal with the specific difficulties and judge public sentiment.

### 2. DENTAL NURSE

The Saskatchewan Dental Nurse is a graduate of a two-year Dental Nursing Program and is trained to deal with children in both clinical and classroom situations.

The dental nurse provides diet and oral hygiene instruction to children and parents, cleans and polishes teeth, applies topical fluorides and takes radiographs. The dental nurse restores primary and permanent teeth with silver amalgam, composite resins and stainless steel crowns as well as performing pulpotomies and placing space maintainers. The dental nurse also extracts primary teeth.

### 3. DENTAL HYGIENISTS

The Saskatchewan Dental Plan employed four dental hygienists during 1975-76. The hygienists provide a comprehensive and concentrated preventive dentistry program to children with especially serious oral hygiene problems. This instruction may be given in the children's own homes to both the children and parents. The

hygienists also provide group oral hygiene instruction and perform a general public relations function by addressing home and school associations and similar groups. Each hygienist works throughout a dental region and occasionally moves from one region to another in the course of duties.

### 4. CERTIFIED DENTAL ASSISTANT

The certified dental assistant, who is a graduate of a one-year course, plays a dual role within the dental team. She performs many chairside duties for the nurse, such as instrument transfer, suctioning, retraction, preparation of restorative materials and sterilization; she also takes radiographs, cleans and polishes teeth, applies topical fluoride and provides oral hygiene instruction.

With the long-term benefits of preventive dentistry in mind, dental teams also provide classroom instruction to children in age groups not yet enrolled in the Saskatchewan Dental Plan. The educational sessions vary greatly, depending on the age of children in the class. Puppet shows are often staged for the young children, while the older children receive classroom talks with question and answer periods. The instructional sessions stress the cause of dental disease, diet, professional preventive measures and, most important, daily home care. Sessions may be followed by active participation of children in a fluoride brush-in, followed by a fluoride rinse.

## Non-Clinical Personnel

### 1. REGIONAL ADMINISTRATOR

The Regional Administrator maintains records on personnel, equipment, materials, supplies, and services. He works in close co-operation with supervising dentists in assigning service areas for dental nurse teams.

He is responsible for identifying locations for dental clinics, monitoring program progress, identifying operational problems and initiating corrective action. He shares with the Supervising

Dentists, responsibility for public relations in the area and deals with specific difficulties affecting parents, staff and members of the public.

## 2. EQUIPMENT TECHNICIAN

The equipment technician is a graduate of a one-year course in instrument technology. He installs dental equipment in new clinics including the x-ray machines. He repairs and maintains all dental equipment both in the clinic and in their repair shop. Preventive maintenance is practised by all staff under the supervision of the equipment technician. This maintenance eliminates a great deal of lost time because of malfunctioning dental equipment. The equipment technicians' regular visits to dental clinics involve them in considerable travel.

### Staff Employed

As of June 30, 1976, the Saskatchewan Dental Plan employed the following clinical staff. Figures for June 30, 1975 are given for comparison.

	June 30, 1975	June 30, 1976
TOTAL .....	132	207
Dentists .....	11	16
Dental Nurses .....	46	84
Dental Assistants .....	64	96
Dental Hygienists .....	5	4
Equipment Technicians	6	7

Attrition among dental nurses from September 1, 1974 to August 31, 1976 was as follows:

	DENTAL NURSES			
	On Staff	Hired	Resigned	Total
September 1, 1974 to August 31, 1975	—	51	11 <sup>1</sup>	40
September, 1975	40	52	1	91
October	91	—	1	90
November	90	1	—	91
December	91	—	1	90
January, 1976	90	—	—	90
February	90	—	2	88
March	88	—	—	88
April	88	—	1	87
May	87	—	1	86
June	86	—	2	84
July	84	—	3 <sup>2</sup>	81
August	81	—	2	79

<sup>1</sup> Three dental nurses transferred to the Wascana Institute of Applied Arts and Sciences in Regina as dental nurse instructors.

<sup>2</sup> One dental nurse transferred to the Wascana Institute of Applied Arts and Sciences in Regina as a dental nurse instructor.

# TRAINING OF DENTAL NURSES IN SASKATCHEWAN

In September, 1972, a two-year Dental Nursing Program was established at the Wascana Institute of Applied Arts and Sciences in Regina with an enrolment capacity of 35 students per year. This enrolment was subsequently expanded to 60 students per year in September, 1973. The two-year program prepares the students to provide dental care to pre-school and school-age children through the Saskatchewan Dental Plan. Great emphasis is placed on prevention of dental disease, but in addition the dental nurses are fully trained in basic clinical restorative dentistry for children and are able to provide most of their dental needs. The training program consists of co-ordinated classroom and clinical experience. Total scheduled time exceeds 2,300 hours in the

two years of the program. In July, 1974, 35 students graduated from this program, followed by 54 students in July, 1975 and 53 in July, 1976.

## ✓ Entrance Requirements

### EDUCATION —

complete Grade XII with two of the three sciences at the Grade XII level.

### HEALTH —

applicants should be medically and dentally fit.

## PERSONAL QUALITIES —

applicants should have a liking for and an understanding of children and a genuine desire to do dental work. Manual dexterity and ability to do fine work with the hands are desirable, especially if supported by an understanding of simple mechanical principles.

Applicants may be single or married, female or male.

## Curriculum

### YEAR I

#### SEMESTER 1

Anatomy and Physiology (including Histology), Dental Histology and Dental Morphology, Co-ordination and Skills Development, and Preventive Dentistry.

### SEMESTER II

Preventive Dentistry, General Pathology, Communication Skills (including Child Psychology and Behavioral Sciences, Public Speaking, Dental Health Project Development, Education), Pharmacology and Therapeutics, Dental Pathology, and Restorative Dentistry for Children (including dental materials and maintenance and use of dental equipment).

### YEAR II

#### BOTH SEMESTERS

Clinical experience in Restorative Dentistry, Radiography and Preventive Dentistry techniques.

Other classes include recognition of Dental Pathology and Public Health Dentistry.

# ORGANIZATION OF DELIVERY

The Saskatchewan Dental Plan uses a team approach to provide dental services in the elementary school setting. Each team consists of a dental nurse and certified dental assistant. Associated with each dental nursing team is a supervising dentist who works in close conjunction with seven or eight teams.

A great deal of preliminary work in developing schedules within each dental region is undertaken to ensure that a timetable can be developed to provide dental care to all enrolled children with as little disruption to the school system as possible. School superintendents and principals are contacted to discuss suitable times for the teams to visit their schools and to inform them of the number of children enrolled in their particular area. The dental nurse teams explain the operation of the Plan to the teachers involved and discuss the schedule within each particular school. A few days before the child's initial visit to the dental clinic parents are contacted by phone or letter.

On the first clinical visit the child's medical history is checked to see if there are any medical conditions that might affect the provision of dental care. A simple examination of the child's mouth is performed to determine if diagnostic x-rays are required. The required radiographs are taken and immediately processed to make certain

that they are of good diagnostic quality.

On the second visit, the patient is given a full clinical examination by the examining dentist or dental nurse. Parents are encouraged to be present for this visit so that pertinent diagnostic findings and treatment planning can be discussed directly with them. At this time, diet and oral hygiene are also discussed with the parent and child. The prevention of dental disease is of great importance and the dental team stresses preventive measures with the parents and patient throughout the course of treatment. Treatment visits are scheduled according to the dental needs of each individual child.

Except for emergencies and urgent problems, the actual dental treatment usually commences at the third clinical session. A dental nurse and certified dental assistant carry out treatment in accordance with the treatment plan prescribed. As treatment progresses, any necessary modifications in the treatment plan are made in consultation with the examining dentist. Dental teams are encouraged to perform quadrant dentistry, so that all necessary treatment in any quarter of the mouth is performed during one visit. All restorative treatment is performed with the use of rubber dam, a technique which provides visibility and control of the operating field for the dental nurse and comfort and protection for the patient.

Treatment schedules of dental teams vary from region to region. However, in most cases teams work for one or two weeks at a school and then move to the next school. The schools in any particular area are therefore visited several times during the school year.

This schedule is followed for several reasons:

- (a) it allows a greater number of children to be seen early in the year and thus to receive priority care sooner:
- (b) it minimizes classroom disruption:
- (c) it gives the children a longer rest time between clinical sessions, which is especially important in small schools where a few children would be seen too frequently if rotation were not used: and
- (d) it allows the dental teams to identify work loads earlier in the year and thus permits better long-range scheduling by dental teams, principals and teachers.

Dental regions hold staff meetings every six to eight weeks. These meetings last one full day and normally one or two hours of the day are put aside for a review of certain clinical procedures or to review aspects of oral diagnosis, radiographic techniques or techniques in the effective use of chairside dental assistants.

## Summer Activities

During the summer school holidays, clinics are operated throughout the province on a regular basis, though because of school vacations dental teams frequently find it difficult to organize full work schedules. During this period, staff are expected to take their vacation and also to participate in continuing education courses.

## Continuing Education

In July, 1976 a course on the restoration of anterior teeth with composite materials and acid etch techniques was provided by Dr. Bruce Hord, Chairman, Department of Restorative Dentistry, Faculty of Dentistry, University of Toronto. In addition, Dr. Hord discussed and demonstrated methods of treating fractured anterior teeth. This course was particularly appropriate, as during the 1976-77 school year the plan will enroll children 8 and 9 years of age, in whom the treatment of permanent anterior teeth is particularly important.

In August, 1976 a course on the indications for and placing of stainless steel crowns was presented by Dr. Earl Yeamans, a Paedodontist associated with the University of Connecticut.

Both of the above courses involved lectures, demonstrations and participation. Arrangements were made for the courses to be given at the dental division of the Wascana Institute of Applied Arts and Sciences, Regina, in order that their sixty-chair clinic could be utilized for the participation sections of these courses. Instruction notes and video tapes of the procedures were obtained so that refresher courses in both of these subjects can be given during the year at regional meetings.

## Dental Health Education

Saskatchewan Dental Plan clinical staff are involved in community dental health education. Whenever possible, staff participate on television information shows, open-line radio shows and community and school association meetings to promote the importance of dental health and explain the methods of preventing the onset of dental disease. In addition, Dental Plan staff set up displays in shopping malls for school open house days and for careers days in high schools; these displays cover preventive dentistry, modern dental equipment, and careers in dentistry.

The Saskatchewan Dental Plan has prepared a number of brochures explaining the need for and importance of certain dental procedures. The titles of some of the brochures that have been produced for distribution to interested parents are directly related to children's dental health. The titles of brochures produced during the past twelve months include:

- Those New Permanent Teeth
- Fluoride Treatment
- Baby Those Teeth
- Preventive Dentistry
- Early Preventive Filling Care

Dental staff also promote, whenever possible, the importance of fluoridation of community water supplies as a practical and effective health measure for safely and economically reducing the incidence of dental decay.



# EVALUATION OF DENTAL PLAN

After the completion of the first year of the Saskatchewan Dental Plan, the Dental Technical Review Board recommended that some formal evaluation of the services provided should be undertaken. The type of evaluation selected after such a short time in operation was an examination of the amalgam restorations, stainless steel crowns, and previously exposed radiographs provided by the Saskatchewan Dental Plan. Three examiners were selected from outside the province to conduct the evaluation. They were:

Dr. E. R. Ambrose, Dean  
Faculty of Dentistry  
McGill University  
Montreal, Quebec

Dr. A. B. Hord, Chairman  
Department of Restorative Dentistry  
Faculty of Dentistry  
University of Toronto

Dr. W. J. Simpson, Chairman  
Department of Paedodontics  
Faculty of Dentistry  
University of Alberta

Dr. Ambrose was selected as the Chairman of the group and he established the criteria to be used in the examination. Each item to be examined was graded on a three level assessment: superior, adequate or unsatisfactory.

The three examiners worked independently each visiting different clinics. In all, 410 children were examined in 16 different clinics. Of these children 300 were enrolled in the Dental Plan and 110 were not enrolled.

A total of 2,107 amalgam restorations were assessed by the three examiners. The results indicate that for deciduous teeth, just over 20 per

cent of amalgam restorations placed by dentists tended towards a rating of unsatisfactory whereas from 3 to 6 per cent of restorations placed by dental nurses were so rated. Conversely, approximately 15 per cent of deciduous tooth amalgams placed by dentists tended towards a superior rating while amalgams placed by dental nurses were rated as approaching a superior standard in 45 to 50 per cent of restorations.

The pattern repeated itself when amalgam restorations in permanent teeth were evaluated. Permanent tooth amalgams placed by dentists tended towards a rating of unsatisfactory amalgams in 13 to 19 percent of restorations while dental nurses placed unsatisfactory amalgams in less than 2 per cent of restorations assessed. Conversely, 22 per cent of permanent tooth amalgam restorations placed by dentists tended towards the rating of superior as against a corresponding figure of 45 to 50 per cent in the case of dental nurses.

Nine conclusions were made by the authors of this report. The first conclusion stated that "the Saskatchewan Dental Nurse placed amalgam fillings that on the average were better than those placed by dentists." Other conclusions mention that "on the basis of 97 stainless steel crowns evaluated there was no quality difference between the performance by dentists and that by dental nurses. The x-ray films taken under the Saskatchewan Dental Plan were acceptable in 80 percent of cases." The report also states that "the combined quality and coverage of care achieved by the Saskatchewan Dental Plan after nearly two years of operation is impressive." The final conclusion is that "an evaluation of restorative dental care is adequate for the short term assessment of the Plan, but the long term evaluation must be based on the degree to which dental health has improved in the community as a whole." Copies of this report may be obtained from the Saskatchewan Dental Plan.

# DENTAL CLINICS

## Permanent Dental Clinics

Most of the dental work provided by the dental teams is performed in permanent dental clinics. There are 263 such clinics located in elementary schools throughout Saskatchewan. Additional clinics will be established as other age groups are phased into the Plan. Appendix I lists the location of dental clinics alphabetically by dental region.

Permanent clinics have been established in schools with the greatest number of children eligible for enrolment in the Saskatchewan Dental Plan. Because of declining school enrolment, most of these schools had an extra room or a vacant classroom in which a dental clinic could be established. Patients in schools adjacent to permanent clinics walk to the clinic if it is within one block or they are transported by car by the parent or dental team. Permanent clinics are frequently shared with the school public health nurse and may also be used as a rest area for children who become ill at school.

The permanent dental clinics, where possible, consist of a large, bright, well-painted room, often with adjoining waiting room and washroom. All the clinics have increased overhead fluorescent lighting, a ventilation fan and extra electrical plug-ins. Each clinic has a lockable cupboard with a stainless-steel sink and counter work area. Located in the school as close as possible to the clinic is a large fixed air compressor. A portable, self-contained dental unit is attached to the compressed air line by means of a quick-connect coupler in the clinic.

Each permanent clinic is furnished with a motorized dental chair and attached light, operator and assistant stools, mobile dental cabinet, autoclave, amalgamator, x-ray machine, wall bracket, and lead shielding.

All instruments and supplies are carried from clinic to clinic by the dental teams and dentists. For this purpose a large metal instrument and supply case is furnished.

## Temporary Dental Clinics

Portable equipment in temporary space is used to provide dental services in small village

schools without clinics. Temporary clinics have also been established in those few larger schools in which permanent clinic space is not presently available.

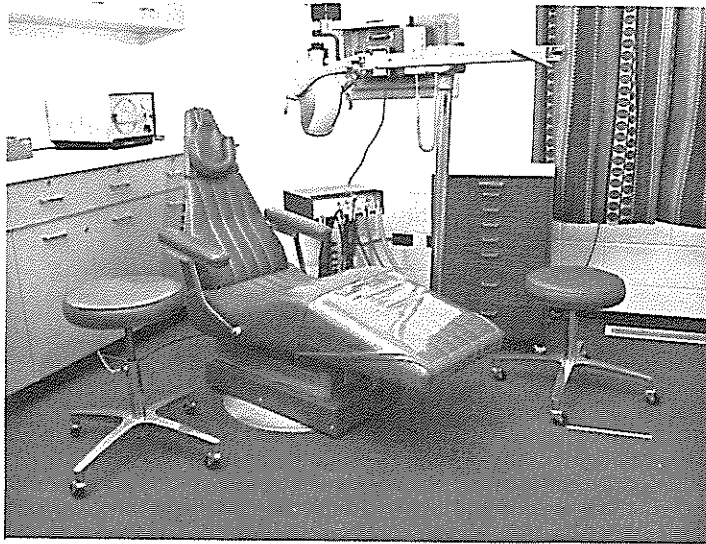
A vacant classroom, a make-ready room, or an infrequently used home economics room is the usual location for a temporary clinic. Using portable equipment, the dental team can provide high quality dental care for children in virtually any well-lit, clean school area. A temporary clinic consists of a portable dental chair, fiberoptic light, portable stools, dental unit, portable compressor, and autoclave, all set up within an adequate room.

## Clinic Design Rationale

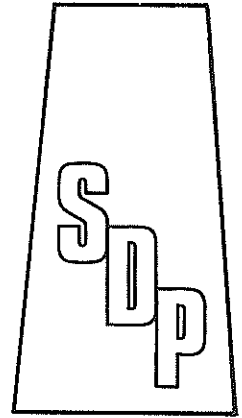
The Saskatchewan Dental Plan uses one-chair clinics as the principal type of permanent clinic. In the cities of Prince Albert, Regina and Saskatoon, multiple-chair clinics are in operation. These clinics are being used to test the feasibility of transporting patients to larger clinics as opposed to treating them in one or two-chair clinics in each school. Prince Albert has a ten-chair clinic to which all the city children are transported for treatment. Regina and Saskatoon each have a four-chair clinic to which children are transported as well as several one-chair permanent clinics.

During the initial planning stages of the Saskatchewan Dental Plan, it was considered better to bring the service to the child than to bring the child to the service. Dental teams save time by having other children readily available in the classroom if the scheduled child is unable to attend, and by not having to transport the children. Dental Teams also appreciate the advantage of treating children in the familiar surroundings of their own school.

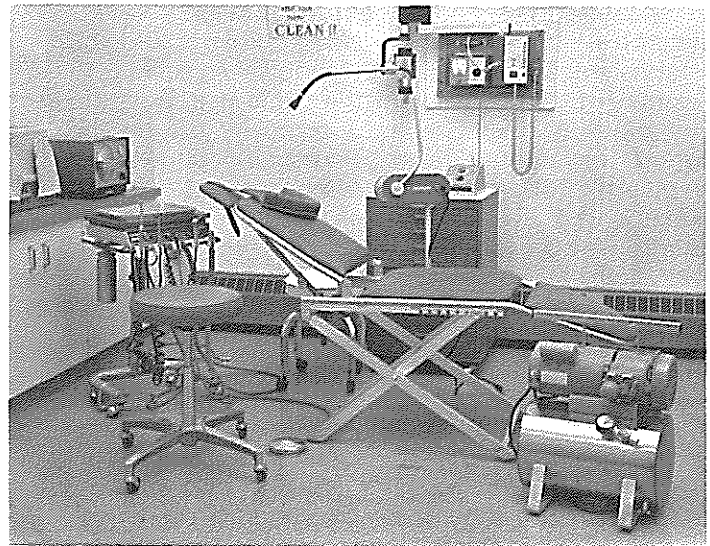
At the present time, it appears that the one-chair clinic in the elementary schools is more acceptable to parents and teachers than larger, centralized clinics. Moving the children from their school to a dental clinic in an adjacent school upsets some parents and disrupts classroom schedules. As more age groups are phased into the program, advantages or disadvantages of one type of clinic over another may become more apparent.



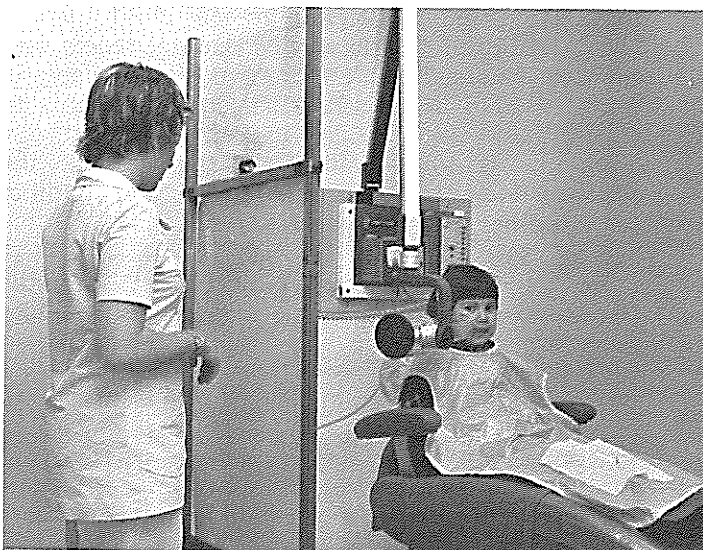
PERMANENT CLINIC



SAS  
DEN  
PLA

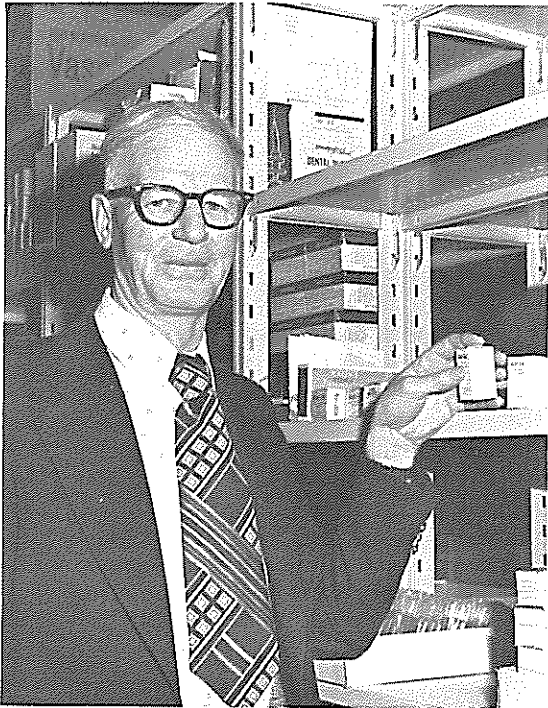


PORTABLE CLINIC

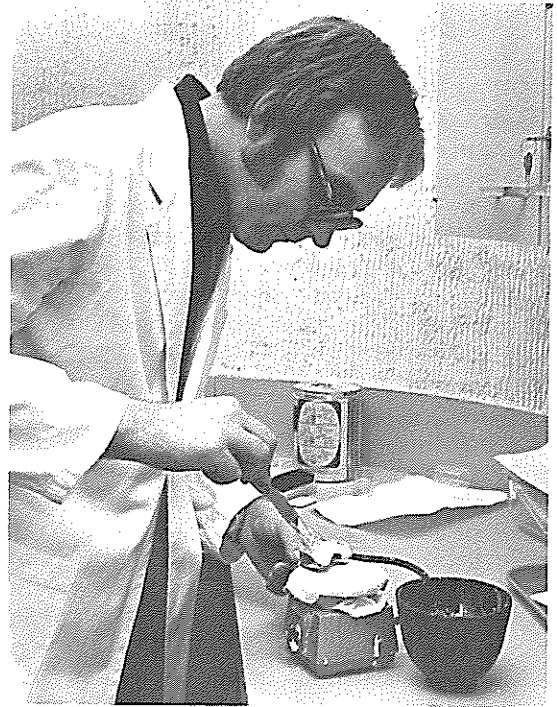


PORTABLE X-RAY

# KATCHEWAN ITAL N

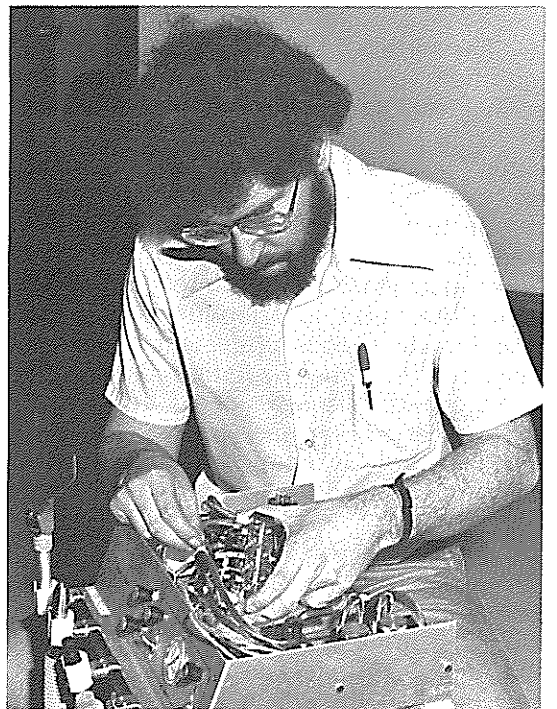


CENTRAL WAREHOUSING



STUDY MODEL PREPARATIONS

EQUIPMENT REPAIR



## Equipment

The Saskatchewan Dental Plan has several major items of equipment in service. The equipment has been centrally assigned to each region on an allotment basis determined by the number of clinics. Within each region every individual piece of major equipment is under a serial number control system. All equipment is located with the dental nursing team, in a permanent clinic or in the regional office.

Located in each permanent dental clinic is a fully motorized dental chair. For the purposes of the Saskatchewan Dental Plan, the gear drive is the mechanism of choice for a dental chair. Hydraulic drives tend to be much heavier than gear drives and hydraulic oil tends to spill and eventually leak from worn hydraulic cylinders. In addition, hydraulic oil has a tendency to solidify when accidentally subjected to sub-zero temperatures during a power failure. Fixed to each motorized chair is an operating light with a fully articulated arm.

The dental nursing teams use a folding portable dental chair in the temporary dental clinics. This chair is fabricated from aluminum; its light weight (35 pounds) facilitates transport by Plan personnel. Mounted laterally on the portable chair is an operating light which utilizes a large fiberoptic bundle to conduct an intense white light from the quartz iodide bulb to the oral cavity.

The Plan uses a dental X-ray machine modified to allow it to be separated into two easily portable components — controls and head. In each permanent clinic and most temporary clinics a metal bracket is attached to the wall to support the assembled X-ray machine. Patients are protected from scattered radiation by a full lead apron. In order to shield the operator and other personnel in a school clinic, screens are used. The exact location of each portable X-ray machine and precise placement of lead screens are sanctioned by the Radiation Safety Unit of the Saskatchewan Department of Labour. X-ray films are processed in each clinic by means of a portable semi-automatic processing machine that uses standard processing solutions.

Sterilization of instruments is accomplished by two means. An autoclave is used to sterilize all items except those fabricated from plastic. Plastic items are sterilized in a cold disinfectant solution. In an autoclave, sterilization is accomplished through a combination of heat and

a chemical vapour. All instruments or sets of instruments are sterilized in sealed bags and are opened only upon use. The chemiclave is quite light in weight (35 pounds) and thus can be easily transported to a temporary clinic.

All clinics employ a completely mobile and portable self-contained dental unit. Located on the unit are five instruments used in the delivery of dental care. Two of the instruments are dynamic. One is an ultra high speed, low torque handpiece and the other is a handpiece of low speed, high torque design. A three-way syringe on the dental unit provides a stream of compressed air, pressurized water or a combination of both. Two forms of suction are provided on the unit. The first suction is a low volume, high vacuum type for purposes of saliva ejection and surgery. The other, a high volume suction, provides good suction for the rubber dam washed field technique used by all dental nurses. The unit also has its own distilled water supply and two separate waste traps for the low and high volume suction.

The dental unit is completely powered by compressed air conducted through one line at 90 PSI. The compressed air is supplied in a permanent clinic by a large, twin cylinder, vertical air compressor. When necessary, these compressors can quite adequately supply four dental units. In temporary clinics, the compressed air is supplied by small, portable, horizontally opposed, twin cylinder air compressors. The compressor is placed outside the clinic area and the air is conducted through plastic lines to the dental units.

Located in each permanent clinic is a mobile instrument cabinet. The cabinet has multiple drawers for storage of instruments and supplies. The top of the mobile cabinet, when used in conjunction with the top of the dental unit, provides an adequate work surface for the dental assistant. In a temporary clinic small portable tables are used to provide the required chairside work surface.

All of the dental equipment is of the most modern design, and extensive testing to ensure its durability and suitability was undertaken before it was selected for the Saskatchewan Dental Plan. All of the dental materials and supplies used are approved by the American Dental Association Council on Materials and Devices.

The following table summarizes the equipment contained in each permanent and portable clinic. The total cost of equipment in a

permanent clinic is \$4,897.97, and in a portable clinic it is \$3,679.49.

**Table 1.**  
**EQUIPMENT IN PERMANENT AND PORTABLE CLINICS,**  
**SASKATCHEWAN DENTAL PLAN,**  
**SEPTEMBER, 1975 — AUGUST, 1976**

Equipment Item	Number per clinic	Manufacturer (model)	Cost per clinic
<i>Permanent Clinic</i>			
TOTAL:			\$4,897.97
Air compressor .....	1	Webster (402-3) .....	525.00
Amalgamator* .....	1	Toothmaster (300) .....	68.78
Dental chair (fixed) .....	1	Vacudent (P-60-AIBS) .....	1,156.60
Dental light (fixed) .....	1	Pelton & Crane (Light Fantastic) ...	245.70
Dental cabinet .....	1	Denco (7 drawer) .....	176.32
Dental unit* .....	1	Adec (Sask-Cart) .....	696.86
Autoclave (chemiclave)* .....	1	Harvey (4000) .....	292.68
X-ray machine* .....	1	Siemens (Heliodont 60) .....	1,417.50
X-ray developer* .....	1	Procomat (II) .....	197.40
Dental stools (portable)* .....	2	Office Specialty (708M) .....	94.72
Dental X-ray viewer* .....	1	Illuminator (14 1/8 x 5 3/8) .....	26.41
<i>Portable Clinic</i>			
TOTAL:			\$3,679.49
Air compressor .....	1	Scripline (¾ HP Motor, 6 gal. tank) .	415.28
Amalgamator* .....	1	Toothmaster (300) .....	68.78
Dental chair (portable) .....	1	Adec (c/w Light Post) .....	272.40
Dental light (portable) .....	1	Roland (Fibreoptic) .....	197.46
Dental unit* .....	1	Adec (Sask-Cart) .....	696.86
Autoclave (chemiclave)* .....	1	Harvey (4000) .....	292.68
X-ray machine* .....	1	Siemens (Heliodont 60) .....	1,417.50
X-ray developer* .....	1	Procomat (II) .....	197.40
Dental stools (portable)* .....	2	Office Specialty (708M) .....	94.72
Dental X-ray viewer* .....	1	Illuminator (14 1/8 x 5 3/8) .....	26.41

\* These items are common to both permanent and portable clinics and need not be duplicated except in situations where they may be required in two different locations simultaneously.

# ENROLMENT OF ELIGIBLE CHILDREN

Table 2.

## SASKATCHEWAN DENTAL PLAN ENROLMENTS, SEPTEMBER, 1975 — AUGUST, 1976<sup>1</sup>

age group	number of invitations sent	number of children enrolled	percent of eligible enrolled	number of refusals	percent refused	number of no response	percent of no response
total <sup>2</sup>	44,801 (17,406)	37,032 (13,070)	82.7 (75.1)	2,936 (203)	6.5 (1.2)	4,833 (4,133)	10.8 (23.7)
born in 1968	14,406 (14,347)	12,268 (10,924)	85.2 (76.1)	773 (195)	5.3 (1.4)	1,365 (3,228)	9.5 (22.5)
born in 1969	14,460	11,676	80.7	1,079	7.5	1,705	11.8
born in 1970	14,286	11,490	80.4	1,033	7.2	1,763	12.4
other ages (Oxbow) <sup>3</sup>	1,649 (3,059)	1,598 (2,146)	96.9 (70.1)	51 (8)	3.1 (.3)	— (905)	— (29.6)

<sup>1</sup> Figures in parentheses are for 1974 — 75 program year.

<sup>2</sup> In addition to these totals, 539 Registered Indians are enrolled in the Plan (70 enrolled in 1974 — 1975). All Indian children aged 5 — 7 were eligible to enroll. However, before service can be provided the children must attend dental clinics in non-segregated schools. Because of a number of circumstances peculiar to this group of children their participation in the Dental Plan is minimal. Their enrolment figures have been excluded to avoid distortion.

<sup>3</sup> Previous years figures include children aged 3 — 5 and 7 — 17. Present year figures include children aged 4 and 8 — 18. On August 31, 1976 services were discontinued to children over age 12 who were enrolled in the Oxbow Demonstration Project.

## DENTAL HEALTH OF ENROLLED CHILDREN

As Table 3 demonstrates the dental health of children enrolling in the Dental Plan is very poor. Children born in 1969 had an average 4.63 decayed teeth and only 1.25 restored teeth. The dental health of children born in 1970 was almost as bad and shows the very early onset of dental disease and the need for early home dental preventive care by parents.

The dental health of children born in 1968 shows the effect of the first year of operation of the Dental Plan. This age group had on average 2.72 decayed teeth and 4.00 restored teeth. The number of decayed teeth was higher than anticipated but the higher average was partly due to the 1,344 additional children born in 1968 who were enrolled for the first time during the second year of the Plan.

**Table 3**

**DENTAL HEALTH OF ENROLLED CHILDREN,  
SASKATCHEWAN DENTAL PLAN,  
SEPTEMBER, 1974 — AUGUST, 1975  
AND SEPTEMBER, 1975 — AUGUST, 1976**

Dental Health Indicators	Average Number or Percent Per Child			
	September, 1974 — August, 1975	September, 1975 — August, 1976 By Year of Birth		
		1968	1969	1970
Decayed, extracted, filled-deciduous teeth (DEF) . . . . .	5.61	5.51	5.56	4.94
Decayed . . . . .	4.11	1.58	3.89	3.88
Extracted . . . . .	0.44	0.72	0.46	0.25
Filled . . . . .	1.06	3.20	1.19	0.79
Decayed, missing, filled-permanent teeth (DMF) . . . . .	0.94	1.95	0.80	0.15
Decayed . . . . .	0.90	1.13	0.73	0.13
Extracted . . . . .	0.00	0.02	0.01	0.00
Filled . . . . .	0.04	0.79	0.06	0.01
Total DEF + DMF . . . . .	6.55	7.47	6.36	5.09
Children with DMF of 0 . . . . .	61.78%	33.58%	65.89%	91.87%
Children with DMF + DEF of 0 . . . . .	12.00%	7.68%	13.43%	19.26%
Decayed deciduous and permanent teeth . . . . .	5.01	2.72	4.63	4.02
Filled deciduous and permanent teeth . . . . .	1.10	4.00	1.25	0.81
Ratio filled deciduous and permanent teeth to DMF + DEF . . . . .	0.17	0.53	0.19	0.15
Ratio missing and extracted to filled teeth . . . . .	0.40	0.18	0.37	0.32
Permanent teeth erupted and not decayed . . . . .	3.36	6.60	3.39	0.75
Deciduous teeth filled and redecayed . . . . .	0.13	0.19	0.18	0.12

**Table 4.**

**SERVICES PROVIDED BY CLINICAL STAFF,  
SASKATCHEWAN DENTAL PLAN,  
SEPTEMBER, 1974 — AUGUST, 1975  
AND SEPTEMBER, 1975 — AUGUST, 1976**

Services	Number					
	September, 1974 — August, 1975 <sup>1</sup>	September, 1975 — August, 1976 (By Year of Birth)				
		1968	1969	1970	Other <sup>2</sup>	Total
Parent contacts						
In person . . . . .	7,689	6,848	11,855	13,976	156	32,835
By phone . . . . .	8,741	9,596	14,166	13,348	247	37,357
By letter . . . . .	3,490	7,414	8,678	6,833	24	22,949



Services	Number					
	September, 1974 – August, 1975 <sup>1</sup>	September, 1975 – August, 1976 (By Year of Birth)				
		1968	1969	1970	Other <sup>2</sup>	Total
Diagnostic services						
Initial oral examination . . . . .	12,126	1,560	10,643	10,080	315	22,598
Emergency oral examination . . . . .	232	249	186	113	62	610
Specific oral examination . . . . .	132	625	368	225	248	1,466
Recall examination . . . . .	387	10,231	727	551	897	12,406
Radiographic services						
Periapical radiographs . . . . .	8,973	2,170	6,423	2,593	493	11,679
Bitewing radiographs (single film) . . . . .	22,680	6,817	17,697	15,891	784	41,189
Panoramic radiographs . . . . .	33	8	7	3	—	18
Preventive services						
Dental prophylaxis . . . . .	11,347	10,669	10,741	9,705	1,388	32,503
Polish amalgam . . . . .	4,745	5,223	5,674	4,564	1,144	16,605
Topical fluoride . . . . .	11,120	9,855	10,029	9,008	1,138	30,030
Nutritional counsel (individual) . . . . .	783	302	382	402	13	1,099
Oral hygiene instruction (individual) . . . . .	10,405	11,636	13,755	11,809	1,197	38,397
Restorative services						
TOTAL amalgam restorations (silver) . . . . .	45,873	26,144	39,833	30,845	3,548	100,370
Amalgam—primary—one surface . . . . .		5,185	9,795	9,858	160	24,998
two surface . . . . .	Detailed	8,104	19,326	16,954	327	44,711
three surface . . . . .	records by	1,235	3,187	2,706	67	7,195
four surface . . . . .	number of	103	300	241	6	650
five surface . . . . .	surfaces per	16	29	12	—	57
Amalgam—Permanent—one surface . . . . .	filling were	8,115	5,174	779	1,707	15,775
two surface . . . . .	not available	3,219	1,876	273	1,037	6,405
three surface . . . . .	during the	155	125	21	208	509
four surface . . . . .	first year	11	19	1	29	60
five surface . . . . .	of operation.	1	2	—	7	10
Composite restorations (white) . . . . .	776	407	491	418	547	1,863
Stainless steel crowns . . . . .	2,054	1,913	4,482	3,722	30	10,147
Pulp therapy services						
Direct pulp cap . . . . .	790	101	380	332	23	836
Indirect pulp cap . . . . .	522	206	507	444	11	1,168
Pulpotomy . . . . .	2,729	1,712	4,737	4,156	47	10,652
Surgical services						
Removal of erupted tooth . . . . .	4,046	2,594	3,740	1,758	260	8,352
Removal of residual roots (soft tissue coverage) . . . . .	74	125	200	70	9	404
Initial management of completely evulsed tooth . . . . .	9	—	2	—	—	2
Space maintainers and minor orthodontic services						
Band and loop type . . . . .	168	Included with S.S. crown and loop type —				
Lingual arch type . . . . .	35	34	38	8	—	80
S.S. crown and loop type . . . . .	73	1	8	—	—	9
Removable acrylic type . . . . .	6	69	23	6	7	105
Tooth movement and space regaining . . . . .	34	95	59	30	7	191
Prevention of thumb sucking . . . . .	2	12	11	9	2	34
Occlusal adjustment . . . . .	46	26	19	14	4	63

<sup>1</sup> Includes children born in 1968 and children aged 3 – 17 in the Oxbow School Demonstration Project.

<sup>2</sup> Includes children aged 4 and aged 8 – 18 participating in the Oxbow School Demonstration Project.

**Table 5.**

**NUMBER OF PREVENTIVE SERVICES PROVIDED BY GRADE,  
SASKATCHEWAN DENTAL PLAN,  
SEPTEMBER, 1974 — AUGUST, 1975  
AND  
SEPTEMBER, 1975 — AUGUST, 1976**

September, 1974 — August, 1975		September, 1975 — August, 1976 <sup>1</sup>	
Grade	Total number of services	No. of classrooms instructed	Approx. no. of children instructed
Total	63,736	672	13,440
Pre-School . . . . .	8	0	0
Kindergarten . . . . .	5,117	107	2,140
Grade I . . . . .	11,986	125	2,500
Grade II . . . . .	10,175	111	2,220
Grade III . . . . .	9,891	154	3,080
Grade IV . . . . .	5,614	126	2,520
Grade V . . . . .	5,966	24	480
Grade VI . . . . .	5,967	17	340
Grade VII . . . . .	4,379	4	80
Grade VIII . . . . .	4,633	4	80

<sup>1</sup> The basis for recording preventive services was changed effective September 1, 1975. Group preventive services were provided to all children in the classroom. Staff reported the number of classroom instructions rather than the number of children attending. Each classroom instruction consisted of a talk on oral hygiene and group instruction on proper brushing and flossing procedures. Estimated average number of children per classroom is 20.

## REFERRALS AND EMERGENCY SERVICES

The costs of services provided by private practitioners to children enrolled in the Dental Plan are not covered by the Plan. There are two exceptions: referred services and emergency services.

Referrals to private practitioners are of two types. A permanent referral is given to a patient when the examining dentist feels that the management of the patient is beyond the capability of the dental nurse. Into the category of patient management fall individuals with such problems as mental or physical handicaps, and medical or emotional problems. Dental Plan dentists are qualified to deal with such situations, but intensive treatment of special cases is not their primary role in the Plan. Rather, their role is to examine all enrolled children and to supervise treatment. It is therefore considered preferable to refer children requiring extensive management to a private practitioner, who can devote more time to them and provide more intensive care.

Enrolled children are also given specific referrals to private practitioners for specific dental problems beyond the capability of the dental nurse. Into this category fall such services as treatment of minor orthodontic problems and extensive surgical procedures.

Private practitioners also provide emergency services to enrolled children. Emergency services are defined as the relief of pain, treatment of infection, or control of haemorrhage. In emergency cases, the patient does not need to be referred by a Dental Plan dentist in order for service costs to be covered.

In addition, seven private practitioners provided dental care to enrolled children on a contract basis. This arrangement was made in certain rural areas of the province.

The following table outlines the types and costs of referred and emergency services provided by private practitioners to children enrolled in the Saskatchewan Dental Plan.

Table 6.

**REFERRALS AND EMERGENCY SERVICES PROVIDED BY PRIVATE  
PRACTITIONERS TO CHILDREN ENROLLED IN THE SASKATCHEWAN  
DENTAL PLAN, SEPTEMBER, 1974 - AUGUST, 1975  
AND  
SEPTEMBER, 1975 - AUGUST, 1976**

Type of service	September 1974 - August 1975 <sup>1</sup>						September 1975 - August 1976 <sup>2</sup>					
	Total		Referral		Emergency		Total		Referral		Emergency	
	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost	No.	Cost
TOTAL	962	\$10,916.04	496	\$5,494.05	466	\$4,179.75	2,368	\$32,361.36	1,390	\$13,520.42	978	\$9,820.33
Initial oral exam	54	483.00	51	465.00	3	18.00	165	1,333.65	159	1,293.20	6	40.45
Specific oral exam	21	147.00	19	133.00	2	14.00	97	767.75	94	750.25	3	17.50
Periapical X-rays	54	213.75	28	104.25	26	109.50	267	875.05	158	456.75	109	418.30
Bitewing X-rays	40	142.00	24	87.50	16	54.50	96	350.25	82	303.60	14	46.65
Panoramic X-rays	2	30.00	2	30.00	0	0.00	18	272.00	14	218.00	4	54.00
Cephalometric X-rays	1	15.00	1	15.00	0	0.00	0	0.00	0	0.00	0	0.00
Diagnostic models	1	6.00	1	6.00	0	0.00	5	44.75	5	44.75	0	0.00
Topical fluoride	18	180.50	17	178.50	1	2.00	56	576.50	50	516.00	6	60.50
Oral hygiene instruction	8	48.00	8	48.00	0	0.00	15	92.00	15	92.00	0	0.00
Fissure sealants	4	8.00	4	8.00	0	0.00	4	25.50	1	6.75	3	18.75
Amalgam restorations	288	3,298.05	160	1,832.80	128	1,465.25	659	7,449.60	420	4,548.50	239	2,901.10
Composite restorations	3	37.50	0	0.00	3	37.50	54	933.05	39	608.75	15	324.30
Stainless steel crowns	26	477.00	17	321.00	9	156.00	86	1,651.60	52	1,016.40	34	635.20
Pulpotomy	60	459.00	21	161.00	39	298.00	88	703.20	25	204.50	63	498.70
Removal of erupted teeth	349	2,931.00	111	936.00	238	1,995.00	701	6,224.35	233	2,033.47	368	4,190.88
Surgical removal of tooth	1	35.00	1	35.00	0	0.00	4	166.50	4	166.50	0	0.00
Tooth movement and/or space regaining	21	974.00	20	944.00	1	30.00	20	1,205.00	19	1,145.00	1	60.00
Prevention of thumb sucking	2	135.00	2	135.00	0	0.00	7	518.00	0	0.00	7	518.00
Observation (orthodontics)	9	54.00	9	54.00	0	0.00	26	152.00	20	116.00	6	36.00
Other services (undefined)	-	1,242.24	-	-	-	-	-	9,020.61	-	-	-	-

1 An additional \$12,191.80 was paid to ten dentists in private practice on contract basis for a total cost of \$23,107.84 for referrals and emergency services.

2 An additional \$27,036.81 was paid to 7 dentists in private practice working on a contract basis providing exam services and writing treatment plans for the children examined. Total amount paid to private practitioners was \$59,398.17 (see statement 1).

# EXPENDITURES

In a review of the following financial statements certain points should be noted:

- 1 Administrative and maintenance staff have been hired at a level able to support the Plan when all age groups (3-12) are enrolled. These staff have been fully occupied however, in activities related to establishing new programs, such as identifying and setting up additional clinics, orientation of new staff, public relations, etc.
- 2 The decision to phase in the program by age group across the province rather than by all age groups region by region results in equality of benefits in all regions. It also results in higher staff travel and sustenance costs per beneficiary and lower productivity. This will decrease proportionately as additional age groups are enrolled in the program.
3. The financial statements include only those expenditures incurred directly by the Saskatchewan Dental Plan, including the provision of secretariat services to the Saskatchewan Dental Nurses Board. Costs related to the Saskatchewan Dental Plan which were incurred by other agencies have been excluded.
- 4 Expenditure statements do not include approximately \$170,000 in start up costs incurred between November 1, 1973 and August 31, 1974. Such costs should be capitalized over the life of the program, in which case the average cost per child per year would be very small.
- 5 Revenue from the activities of the Saskatchewan Dental Plan has not been applied to offset expenditures. The \$14,050 revenue realized during the year includes \$2,970 from registration and licencing of dental nurses by the Saskatchewan Dental Nurses Board and \$11,080 in reimbursement from the Dept. of National Health and Welfare in respect of dental care provided to 70 enrolled Indian children during the period September 3, 1974 – August 31, 1975.

**SASKATCHEWAN DENTAL PLAN**  
**STATEMENT OF PAYMENTS — OPERATING EXPENSES**  
**for the Period**  
**SEPTEMBER 1, 1974 TO AUGUST 31, 1975**  
**AND**  
**SEPTEMBER 1, 1975 TO AUGUST 31, 1976**

	Sept. 1/74 — Aug. 31/75	Sept. 1/75 — Aug. 31/76	
<b>ADMINISTRATION (Regina Central Office)</b>			
Salaries and Honoraria . . . . .	\$ 181,954.40	\$ 255,823.00	
Travel . . . . .	14,601.22	15,015.05	
Public Information and Advertising . . . . .	44,681.72	34,166.07	
Prof. Dues and Staff Training . . . . .	—	910.00	
Office Expenses . . . . .	18,840.79	20,416.25	
Other Expenses . . . . .	81,441.46	72,620.67	
Sub Total . . . . .	<u>\$ 341,519.59</u>	<u>\$ 398,951.04</u>	
<b>PROGRAM EXPENSES</b>			
Salaries . . . . .	\$1,348,235.83	\$2,689,449.21	
Travel . . . . .	196,393.86	365,953.85	
Public Information and Advertising . . . . .	—	488.36	
Prof. Dues and Staff Training . . . . .	4,238.32	7,725.84	
Office Expenses . . . . .	43,871.24	68,819.81	
Private Practitioner Services . . . . .	23,107.84	59,398.17	
Laboratory Supplies and Services . . . . .	(included in dental supplies)	4,473.23	
Dental Supplies . . . . .	264,357.56	146,006.63	
Repairs . . . . .	(included in other expenses)	24,669.29	
Taxes and Licences . . . . .	19,866.72	26,305.68	
Grants and Contributions . . . . .	93,096.00	66,603.15 <sup>1</sup>	
Other Expenses . . . . .	25,258.30	43,289.43	
	<u>\$2,018,425.67</u>	<u>\$3,503,182.65</u>	
Total Operating Expenditure . . . . .	2,359,945.26	3,902,133.69	(see statement 3)
Capital Equipment Purchases . . . . .	467,397.07	252,898.39	
<b>TOTAL EXPENDITURE . . . . .</b>	<u><u>\$2,827,342.33</u></u>	<u><u>\$4,155,032.08</u></u>	(see statement 2)

<sup>1</sup> Includes a final adjustment of \$35,745 paid to the Swift Current Health Region No. 1 in respect to dental services provided by the Regional Board to Saskatchewan Dental Plan enrolled children during the period Sept. 3, 1974 — Aug. 31, 1975.

## Statement 2

### EXPENDITURE STATEMENT RECONCILIATION TO PUBLIC ACCOUNTS <sup>1</sup>

	Public Accounts	Program Year
Expenditure Apr. 1/74 – Aug. 31/74 . . . . .	\$1,047,518.25 <sup>2</sup>	–
Expenditure Sept. 1/74 – Mar. 31/75 . . . . .	<u>1,598,184.49</u>	\$1,598,184.49
Total Public Accounts (Page F325) 1974-75 . . .	<u>2,645,702.74</u>	
Expenditure Apr. 1/75 – Aug. 31/75 . . . . .	1,229,157.84	<u>1,229,157.84</u>
Total Expenditure 1974-75 program year (see Statement 1) . . . . .		<u>2,827,342.33</u>
Expenditure Sept. 1/75 – Mar. 31/76 . . . . .	<u>2,604,396.46</u>	2,604,396.46
Total Public Accounts (Page F156) 1975-76 . . .	<u>\$3,833,554.30</u>	
Expenditure Apr. 1/76 – Aug. 31/76 . . . . .		<u>1,550,635.62<sup>3</sup></u>
Total Expenditure 1975-76 program year (see Statement 1) . . . . .		<u>\$4,155,032.08</u>

<sup>1</sup> This reconciliation is included because the Saskatchewan Dental Plan operates on the school year (begins Sept. 1) rather than on the Government fiscal year (begins April 1).

<sup>2</sup> Expenditures to Aug. 31/74 represent certain start up expenditures, initial inventories including fixed assets, and major repair purchases of 658,483.65.

<sup>3</sup> These expenditures, obtained from Department of Finance monthly expenditure statements relating to the Saskatchewan Dental Plan, will be included in Public Accounts for the fiscal year 1976-77.

**Statement 3**

**ADJUSTMENT TO CASH EXPENDITURE  
STATEMENTS SHOWN IN STATEMENT 1 TO  
DETERMINE ACTUAL COSTS OF SERVICES  
RENDERED TO ENROLLED CHILDREN,  
SEPTEMBER 1, 1974 TO AUGUST 31, 1975  
AND  
SEPTEMBER 1, 1975 TO AUGUST 31, 1976**

	Program Year Sept 1/74—Aug 31/75	Program Year Sept 1/75—Aug 31/76
Total operating expenditure (from statement 1) . . .	\$2,359,945.26	\$3,902,133.69
ADD dental supplies opening inventory . . . . .	\$ 92,908.79	\$216,183.67
LESS dental supplies closing inventory . . . . .	(216,183.67)	(171,843.98)
ADD repair parts opening inventory . . . . .	27,315.65	14,875.96
LESS repair parts closing inventory . . . . .	(14,875.96)	(19,387.73)
ADD equipment losses . . . . .	2,437.51	2,026.46 <sup>1</sup>
LESS grant to Swift Current Health Region for preventive dental health services to children not enrolled in S.D.P. @ \$6.00 ea.	(30,696.00)	(28,134.00)
LESS preventive dental services provided by S.D.P. to children not enrolled in Plan @ \$6.00 ea. . . . .	(303,576.00)	(39,480.00) <sup>2</sup>
	1,917,275.58	3,876,374.07
ADD Depreciation . . . . .	162,692.95	175,919.80 <sup>3</sup>
<b>ACTUAL COST OF SERVICES . . . . .</b>	<b>\$2,079,968.53</b>	<b>\$4,052,293.87</b>
No. of enrolled children (from Table 2) . . . . .	13,140	37,571
Average cost per enrolled child . . . . .	158.29 <sup>4</sup>	107.86 <sup>4</sup>

<sup>1</sup> Included equipment destroyed by a school fire in Humboldt in June/76 (\$1,977.00) and stolen in a break in at Holdfast in July/76 (\$49.46).

<sup>2</sup> Services provided to 329 classrooms of grades 3 — 8 inclusive at an estimated average enrolment of 20 students per classroom.

<sup>3</sup> Opening inventory depreciated fixed assets (\$1,084,619.67 — \$162,692.95) . . . . . \$ 921,926.72  
 ADD purchases during the year . . . . . 252,898.39  
 LESS losses during the year . . . . . (2,026.46)  
 Depreciable fixed assets . . . . . \$1,172,798.65  
 Depreciation calculated at 15% of undepreciated value of fixed assets equals . . . . . \$ 175,919.80

<sup>4</sup> Calculated by dividing total actual cost of services by the number of children enrolled.

NOTE: The Department of Education covered the cost of establishing dental clinics in elementary schools. \$1,081,459.47 was spent between Apr 1/74 and Aug 31/75. A further \$250,794.23 was spent from Sept 1/75 — Aug 31/76. These expenditures are capital in nature and should be amortized over the life of the facility. Based on a depreciation rate of 5% the depreciation would be approximately 5% x \$1,332,253.70 = \$66,613 divided by 37,571 children = \$1.77 per child.

# APPENDIX

## ESTABLISHED DENTAL CLINICS

By Dental Region and Location

### SWIFT CURRENT DENTAL REGION

<i>LOCATION</i>	<i>SCHOOL</i>
Central Butte	Central Butte Elementary
Eastend	Eastend School
Gravelbourg	Gravelbourg Elementary
Gull Lake	Gull Lake Elementary
Herbert	Herbert Elementary
Hodgeville	Hodgeville Elementary
Lancer	Lancer Elementary
Maple Creek	Sidney Street Elementary
Morse	Morse Elementary
Richmond	Richmond School
Shaunavon	Shaunavon Public
Swift Current	Ashley Park Elementary
	Central Elementary
	Fairview Elementary
	James O. Begg Elementary

Total Clinics for 1975-1976

15

### REGINA DENTAL REGION

<i>LOCATION</i>	<i>SCHOOL</i>
Balgonie	Balgonie Elementary
Bethune	Bethune School
Briercrest	Briercrest School
Brownlee	Brownlee School
Caronport	Caronport Elementary
Coderre	Coderre School
Cupar	Cupar Elementary
Duval	Duval Elementary
Dysart	Dysart School
Edenwold	Edenwold Elementary
Fillmore	Fillmore School
Fort Qu'Appelle	Fort Qu'Appelle Elementary
Grand Coulee	Grand Coulee School
Gray	Gray Elementary
Indian Head	Indian Head Elementary
Kronau	Saar Elementary
Leross	Leross Elementary
Lumsden	Arm and River Hutterite Elem.
Marquis	St. Mark Separate Elementary
Midale	Midale School
Montmartre	Montmartre School



Moose Jaw

Camlachie Hutterite Elementary  
Empire Elementary  
John Chisholm Elementary  
Lindale School  
Palliser Heights Elementary  
Prince Arthur Elementary  
Ross Elementary  
St. Agnes Elementary  
St. Margaret Elementary  
St. Mary's Elementary  
Westmount Elementary  
William Grayson Elementary  
Mortlach School  
Mossbank School  
Radville Elementary  
Argyle Elementary  
Athabasca Elementary  
Benson Elementary  
Deshaye Elementary  
Dr. A. E. Perry Elementary  
Judge Bryant  
Kitchener Elementary  
Marion McVeety Elementary  
McNab Elementary  
R. J. Davidson Elementary  
Regent Park Elementary  
Rosemont Elementary  
Ruth Pawson Elementary  
St. Augustine Elementary  
St. Francis Elementary  
St. James Elementary  
St. John Elementary  
St. Leo Elementary  
St. Luke Elementary  
St. Mary Elementary  
St. Matthews Elementary  
St. Patrick Elementary  
St. Peter Elementary  
St. Philip Elementary  
Transcona Elementary  
W. C. How Elementary  
Rockglen School  
Southey Elementary  
Strasbourg Elementary  
Weyburn Elementary  
Wood Mountain School

Mortlach  
Mossbank  
Radville  
Regina

Rockglen  
Southey  
Strasbourg  
Weyburn  
Wood Mountain

Total Clinics for 1975-1976

67

## SASKATOON DENTAL REGION

<i>LOCATION</i>	<i>SCHOOL</i>
Aberdeen	Aberdeen Elementary
Allan	Allan School
Beechy	Beechy School
Clavet	Clavet School
Colonsay	Colonsay School
Craik	Craik School
Davidson	Davidson Elementary
Delisle	Delisle Elementary
Duck Lake	Stobart Elementary
Elbow	Elbow Elementary
Hague	Prince Philip Elementary
Hanley	Hanley School
Hepburn	Hepburn School
Imperial	Imperial School
Lanigan	Lanigan Elementary
Leroy	Leroy Elementary
Martensville	Martensville Elementary
Rosthern	Rosthern Elementary
Saskatoon	Albert Elementary
	Bishop Roborecki Elementary
	Brevoort Park Elementary
	Buena Vista Elementary
	Caroline Robins Elementary
	Caswell Elementary
	Confederation Park Elementary
	Greystone Heights Elementary
	Grosvenor Park Elementary
	Haultain Elementary
	Holliston Elementary
	Howard Coad Elementary
	Hugh Cairns V. C. Elementary
	John Lake Elementary
	King Edward Elementary
	Lester B. Pearson Elementary
	McNab Park Elementary
	Mayfair Elementary
	Montgomery Elementary
	Prince Philip Elementary
	Princess Alexandra Elementary
	Roland Michener Elementary
	St. Augustine Elementary
	St. Edward Elementary
	St. Gerard Elementary
	St. James Elementary
	St. Matthew Elementary
	St. Michael Elementary
	St. Patrick Elementary
	St. Philip Elementary
	St. Thomas Elementary
	Victoria Elementary
	Vincent Massey Elementary

Saskatoon (Cont.)

Viscount  
Waldheim  
Watrous  
Young

Westmount Elementary  
Wilson Elementary  
Viscount Elementary  
Waldheim School  
Watrous Elementary  
McClellan School

Total Clinics for 1975-1976

57

### YORKTON DENTAL REGION

*LOCATION*

*SCHOOL*

Archerwill	Archerwill School
Bredenbury	Bredenbury School
Broadview	M. B. Cope Elementary
Buchanan	Buchanan School
Canora	Canora Junior Elementary
Carnduff	Carnduff Elementary
Carlyle	Carlyle School
Esterhazy	East Elementary
Estevan	Westview Elementary
Grenfell	Grenfell Elementary
Invermay	Invermay Elementary
Ituna	Ituna School
Kamsack	Victoria Elementary
Kelvington	Kelvington Elementary
Kipling	Kipling School
Lampman	Lampman School
Langenburg	Parkside Elementary
MacNutt	MacNutt School
Margo	Margo School
Melville	Melville Comprehensive Miller Elementary
Moosomin	John McLeod Elementary
Neudorf	Neudorf Elementary
Norquay	Norquay Elementary
Oxbow	Mobile Home (S.D.P. owned)
Quill Lake	Quill Lake Elementary
Rama	Rama School
Redvers	Redvers School
Rocanville	Rocanville School
Rose Valley	Rose Valley School
Saltcoats	Saltcoats Elementary
Stoughton	Stoughton School
Sturgis	Sturgis Elementary
Wadena	Wadena Elementary
Wawota	Wawota School
Whitewood	Whitewood School
Wishart	Wishart School
Wynyard	Wynyard Elementary

Yorkton	Columbia Elementary Dr. Brass Elementary Simpson Elementary St. Paul's Elementary
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Total Clinics for 1975-1976	42
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**PRINCE ALBERT DENTAL REGION**

<i>LOCATION</i>	<i>SCHOOL</i>
Albertville	Albertville Elementary
Annaheim	Annaheim School
Arborfield	Arborfield School
Big River	Big River Elementary
Birch Hills	Birch Hills Elementary
Bruno	Bruno School
Canwood	Canwood Elementary
Christopher Lake	Christopher Lake School
Clear Springs	Dixon Lake School
Cudworth	Cudworth School
Debden	Debden School
Domremy	Domremy School
Garrick	Garrick Elementary
Gronlid	Gronlid School
Hudson Bay	Blake Beattie Elementary
Humboldt	Humboldt Elementary
Kinistino	Kinistino Elementary
Lake Lenore	Lake Lenore School
Melfort	Reynolds Central Elementary
Middle Lake	Middle Lake School
Mont Nebo	Mont Nebo Elementary
Muenster	Muenster School
Naicam	Naicam School
Paddockwood	Paddockwood Elementary
Pleasantdale	Pleasantdale School
Prince Albert	Boucher Junior High Red Wing Elementary Spruce Home Elementary
Ridgedale	Ridgedale School
Sage Hill	Dana Elementary
Shellbrook	Wild Rose Central Elementary
Shell Lake	Shell Lake Elementary
Star City	Star City School
St. Brieux	St. Brieux School
St. Louis	St. Louis School
Tisdale	Tisdale Elementary
Watson	Watson Elementary
Weekes	Weekes High School
Weldon	Weldon School
White Fox	White Fox School
Yellow Creek	Yellow Creek School
Zenon Park	Zenon Park School

Total Clinics for 1975-1976	42
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## NORTH BATTLEFORD DENTAL REGION

<i>LOCATION</i>	<i>SCHOOL</i>
Cando	Cando School
Cochin	Cochin Elementary
Cut Knife	Cut Knife Elementary
Denzil	Denzil Elementary
Dodsland	Dodsland Elementary
Dorintosh	Dorintosh Elementary
Edam	H. Hardcastle School
Elrose	Elrose School
Eston	Eston Elementary
Glaslyn	Glaslyn School
Hafford	Hafford School
Harris	Harris Tessier School
Kerrobot	Mary Rodney Elementary
Kindersley	Kindersley School Unit Office
Landis	Landis School
Leask	Leask School
Leipzig	Leipzig School
Leoville	Leoville School
Livelong	Livelong Elementary
Lloydminster	Neville Goss Elementary
Loon Lake	Ernie Studer School
Major	Major School
Marcelin	Marcelin School
Maidstone	Maidstone Elementary
Mayfair	Mayfair School
Maymont	Maymont Central School
Meadow Lake	Lakeview Elementary
Medstead	Medstead School
Milden	Milden Central School
North Battleford	McKitrick Elementary
Paradise Hill	Paradise Hill School
Rabbit Lake	Rabbit Lake School
Rosetown	Walter Aseltine Elementary
Sonningdale	Sonningdale School
St. Walburg	St. Walburg Public
Tramping Lake	Tramping Lake School
Turtleford	Turtleford School
Unity	St. Peter's Elementary
Vawn	Vawn Elementary
Wilkie	St. George Separate School
Total Clinics for 1975-1976	40
Total number of clinics – all regions	263