STATE OF ALASKA

WILLIAM A. EGAN, GOVERNOR

DEPARTMENT OF HEALTH AND WELFARE

DIVISION OF PUBLIC HEALTH

Family Health Section
CHILD HEALTH SECTION
POUCH H - JUNEAU 99801
Pouch H 06B

September 3, 1974

R. E. Aloysius, Supervisor
Dental Program
Yukon-Kuskokwim Health Corporation
P.O. Box 528
Bethel, Alaska 99559

Dear Mr. Aloysius:

Attached is a copy of the fully-executed contract Number 06-2670 for the purpose of providing dental services to the children in the Bethel area.

If you have any questions or we can be of further assistance, please do not hesitate to contact our office.

Sincerely,

Barbara J. Miklos

Barbara J. Miklos
Research Analyst

BJM/lb

CONTRACTOR'S COPY

Department of Health and Social Services

State of Alaska

CONTRACT FOR SERVICES

This contract, effective as of the 1st day of July, 19 74, between the State of Alaska, Department of Health and Social Services, (which will be hereinafter called the "State"), and Yukon-Kuskokwim Health Corporation, (hereinafter called the "Contractor").

WITNESSETH that:

Whereas, the State is entering into this contract by direct negotiation and not by competitive bids because this is a contract for professional services;

Whereas, the Contractor is willing to undertake the performance of this cont under the terms of this contract;

Whereas, the Department of Health and Social Services has the authority to enter into this contract by AS 44.29.020;

NOW THEREFORE, the Parties hereto agree as follows:

Article I. The Service to be Performed.

Provide dental services to children in the Bethel area.
Refer to appendix A

Article II. The Period for Performance.

The period of performance under this contract shall commence on July 1, 1974, and expire on June 30, 1975. Performance may be extended for additional periods by the mutual written agreement of the parties.

Article III. Consideration.

(a) In full consideration of the Contractor's performance hereunder, and subject to the documentary evidence requirements set forth in (b) below, the State shall pay the Contractor

Pay $6,666 in September, November and February, Fiscal Year 1975. Payment will be made upon receipt of authorized billings in triplicate.

(b) Before any payment can be made under the terms of this contract, it will be necessary for the Contractor to provide documentary proof of payment of taxes, and if appropriate, evidence of an Alaskan Business License and coverage under Alaska's Workmen's Compensation Act. The Contractor agrees to furnish with his initial billing copy(s) of the following documents:

(1) SA Dept. of Revenue Form DR 600 E.S. (Declaration of Estimated Alaska Income Taxes) or SA Dept. of Revenue Form DR 700 W (Corporation Estimated Income Tax Worksheet) or SA Dept. of Revenue Form 06-654 (Affidavit of Estimated Taxes).

(2) SA Dept. of Revenue Form DR BL-1 (Alaska Business License) or SA Dept of Revenue Form DR BL 2 (Business License Application.

(3) Letter or other documentary proof from insurance carrier or the Alaska Workmen's Compensation Board attesting to the fact that the firm has the required coverage under AS 23.30.

Article IV. Additional Contract Provisions.

Appendix B attached hereto and made a part hereof sets forth additional general contract provisions of this contract.

Article V. Changes

Appendix C attached hereto and made a part hereof, sets forth any changes or additions that were made in this contract prior to its execution. (If Appendix C is not attached hereto, there have been no such changes or additions.)

IN WITNESS WHEREOF, the parties have executed this contract.

Contractor:

By: Alvin L. Strauss

Executive Director

Official Title

Date: 6 August 1974

Recommended for Approval:

By: Duard L. Freudenberger

Director, Division of Public Health

Date: 8/16/74

Department of Health & Social Services Approval:

John J. Dalton M.D.

Medical Assistance

8/21/74

Frederick McGinnis

Commissioner

Date: 8/27/74

CERTIFIED TRUE COPY:

Louis N. Patrianakos, Contract Officer
Dept. of Health & Social Services
State of Alaska

State of Alaska Approval:

M. K. Coleman

Department of Administration

Date: 8/30/74

NOTE: In affixing signatures to the above it is expressly understood and agreed that this contract shall not be binding on either party until it has been finally approved and signed by the Department of Administration, State of Alaska (See AS 37.05.220).

06-5266 (Revised)
May 1972

DISTRIBUTION		FISCAL DATA
Contractor	( )	Total amount of contract not to exceed $20,000
State Agency	( )	Program or Activity Family Health (MCH)
Administration	( )	Account Code 06-31-1-624

Budgeted funds are available for the period and purpose of this expenditure

D/Thrift

State Agency Accountant

(If contractor is a corporation, the following certificate shall be executed by the secretary or assistant secretary.)

I, Joseph Lovell, certify that I am the President Secretary of the corporation named as Contractor in the attached contract; that Alvin S. Beran, who signed said contract on behalf of the Contractor, was then Executive Director of said corporation, that said contract was duly signed for and in behalf of said corporation by authority of its governing body, and is within the scope of its corporate powers.

(Corporate Seal)

APPENDIX A - SERVICES TO BE PERFORMED

(Continuation of Article I)

1. Provision of Dental Health Educator services to Bethel and six surrounding villages.

2. Purchase of educational materials.

3. Submission of annual narrative and statistical report to the Department of Health and Social Services.

4. Contract renewable if legislature appropriates further funding.

APPENDIX B

Article B - 1. Definitions.

(a) The term "Contracting Officer" as used herein means the person executing this contract on behalf of the State and includes a duly appointed successor or authorized representative.

(b) The term "Department" means the Department which has executed this contract for the State of Alaska.

Article B - 2. Inspection and Reports.

(a) The Department shall have the right to inspect, in such manner and at all reasonable times as it deems appropriate, all activities of the Contractor arising in the course of its undertakings under this contract.

(b) The Contractor shall make progress and other reports in such manner and at such times as the Department may reasonably require.

Article B - 3. State Saved Harmless.

The Contractor shall hold and save the State, its officers, agents and employees, harmless from liability of any nature or kind, including costs and expenses, for or on account of any or all suits or damages of any character whatsoever resulting from injuries or damages sustained by any person or persons or property by virtue of performance of this contract.

Article B - 4. Equal Employment Opportunity.

(a) The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, ancestry, age, or sex. The Contractor will take affirmative action to insure that applicants are employed and that employees are treated during employment without regard to their race, color, religion, national origin, ancestry, age, or sex. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruiting advertising; layoff or termination, rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.

(b) The Contractor shall state, in all solicitations or advertisements for employees to work on State of Alaska contract jobs, that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, ancestry, age, or sex.

(c) The Contractor will send to each labor union or representative of workers with which the Contractor has a collective bargaining agreement or other contract or understanding a notice advising the said labor union or workers' representative of the Contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to all employees and applicants for employment.

(d) The Contractor will include the provisions of Paragraphs (a) through (c) of this Section in every contract, and will require the inclusion of those provisions in every sub-contract entered into by any of its sub-contractors, so that such provisions will be binding upon each sub-contractor, as the case may be. For the purpose of including such provisions in any construction, maintenance, or service contract or sub-contract, as required hereby, the term "Contractor" and the term "Sub-Contractor" may be changed to reflect appropriately the name or designation of the parties of such contract or sub-contract.

(e) The Contractor agrees that he will fully cooperate with the office or agency of the State of Alaska which seeks to deal with the problem of unlawful or invidious discrimination, and with all other State efforts to guarantee fair employment practices under this contract, and said Contractor will promptly comply with all requests and directions from the State Commission for Human Rights or any of its officers or agents relating to prevention of discriminatory employment practice.

(e) Full cooperation as expressed in clause (c) foregoing shall include, but not be limited to, being a witness in any proceeding involving questions of unlawful or invidious discrimination if such is deemed necessary by any official or agency of the State of Alaska, permitting employees of said Contractor to be witnesses or complainants in any proceeding involving questions of unlawful or invidious discrimination, if such is deemed necessary by any official or agency of the State of Alaska, participating in meetings, submitting periodic reports on the equal employment aspects of present and future employment, assisting in inspection of the construction site, and promptly complying with all State directives deemed essential by any office or agency of the State of Alaska to insure compliance with all Federal and State laws, regulations and policies pertaining to the prevention of discriminatory employment practices.

(f) Failure to perform any of the above agreements pertaining to equal employment opportunities shall be deemed a material breach of the contract.

The responsible officer overseeing compliance with such fair practice and non-discrimination provision shall be the executive head of such department or other agency of the State of Alaska as is a party to the contract. Such responsible officer shall report to the State Commission for Human Rights whenever discriminatory practices are brought to his attention.

Article B - 5. Termination.

The Contracting Officer, by written notice, may terminate this contract, in whole or in part, when it is in the best interest of the State. The State shall be liable only for payment in accordance with the payment provisions of this contract for services rendered prior to the effective date of termination.

Article B - 6. No Assignment.

The Contractor shall not assign this contract, nor any part thereof, nor any right to any of the monies to be paid him hereunder, nor shall any part of the work done or materials furnished under said contract be sublet, except with the written consent of the Contracting Officer.

Article B - 7. No Additional Work.

No claim for additional services, not specifically herein provided, done or furnished by the Contractor, will be allowed by the Commissioner or the head of the agency, nor shall the Contractor do any work or furnish any material not covered by the contract, unless such work is ordered in writing by the contracting officer.

Article B - 8. Independent Contractor.

The Contractor, and any agents and employees of the Contractor, shall act in an independent capacity and not as officers or employees or agents of the State in the performance of this contract.

Article B - 9. Availability of Appropriation.

This Agreement is subject to the availability of appropriation by the State.

Article B - 10. Conformity with Federal Regulations.

Notwithstanding any other provisions of this contract, it is expressly understood that during any wage/price freeze imposed by Executive order or Federal Legislation the rates paid will be determined in accordance with federal guidelines.

No retroactive payment will be made at the termination of the wage/price freeze unless such payment is consistent with federal guidelines.

Article B - 11. [illegible]

The Contractor, [illegible] subject to the provisions of the Alaska Workmen's Compensation Act (AS [illegible]), shall [illegible] furnished by the insurance carrier, of [illegible] workmen's compensation insurance with an insurance company or association [illegible] workmen's compensation insurance in the State of Alaska, or proof, [illegible] by the Alaska Workmen's Compensation Board, of a current certificate of self-insurance [illegible] by the Alaska Workmen's Compensation Board. If the Contractor fails to maintain proper workmen's compensation coverage, the State shall implement the provisions of AS [illegible](c).

Article B - 12. Payment of Taxes.

As a condition of performance of this contract, the contractor shall pay all Federal, State, and local taxes incurred by the contractor, subcontractor or other persons in the performance of this contract, and proof of payment of these taxes is a condition precedent to payment by the State under this contract.

Revised 7/21/72

APPENDIX C - CHANGES

(Continuation of Article V)

1. Appendix A provision #1 should read "Provision of Dental Health Educator services to Bethel."

Reason for this is that the Bethel Dental Health Educator has a heavy work load and the Dental Health Education are provided to the outside villages by YKHC personnel.

Approval as to form

Department of Law

STATE OF ALASKA

JAY S. HAMMOND, Governor

DEPT. OF HEALTH AND SOCIAL SERVICES

DIVISION OF PUBLIC HEALTH
FAMILY HEALTH SECTION

POUCH H06B 99811
JUNEAU 99811

March 17, 1975

Rec'd 3-21-75

Robert Aloysius, Supervisor
Dental Programs
Yukon-Kuskokwim Health Corporation
P.O. Box 528
Bethel, Alaska 99559

Dear Mr. Aloysius:

Thank you for your letter of March 4, 1975, giving a narrative description of your program and a fiscal report through February 28, 1975.

The last billing that we have received from you is dated February 7, 1975, in which you billed for $6,666 to cover services performed during the months of December, January and February. Payment of that billing brings the amount available for FY 1975 down to $2. Further funds will be available only on renewed legislative appropriation and would be available July 1, 1975, if authorized by the current Legislature.

I am sorry that I did not have a chance to meet with you personally when I was in Bethel last month, but I heard good reports from all quarters regarding your program. I will look forward to meeting you personally if you come to Juneau or the next time I get a chance to go to Bethel.

As I review our files here in the Section of Family Health on the $20,000 per year appropriation that has come to YKHC for the past three years, I am left uncertain as to which specific villages have received personal services from the dental health educators. Have the same villages received service from the start or has your program moved from village to village?

Do you have evaluation capability that would allow us to assess the program effectiveness and look into the question of covering all villages with such a program of dental health education?

Finally, could you send me the name and address of the University that you expect to be utilizing this spring for education in preventive dentistry

for your dental health educators? My interest stems from the fact that we are setting up a dental health program in the Russian village of Nikolaevsk on the Kenai Peninsula and will be looking for a similar program in preventive dentistry for someone from that community.

Sincerely yours,

David A. Spence, M.D.

David A. Spence, M.D., M.P.H., Chief
Section of Family Health

DAS/lb

cc: Ms. Dorothy Redfern, Region X
Dr. John Stolpe, AANHS

YUKON-KUSKOKWIM HEALTH CORPORATION

AFFILIATE OF THE ALASKA FEDERATION OF NATIVES

P.O. Box 528
Bethel, Alaska 99559
(907) 543-2506
(907) 543-2508

March 4, 1975

Dr. David Spence, M.D.
Chief, Family Health Section
Division of Public Health
Pouch H-06B
Juneau, Alaska 99801

Dear Dr. Spence,

Following is a narrative of the attached expenditures list for contract number 06-2670. The purpose of the contract is to provide dental services to the Bethel area.

Personnel Services - are for the Dental Health Educator stationed in Bethel. She provides topical flouride applications and instructional services to the school children in the Bethel school system. During tooth brushing to clean teeth for and applying topical flourides she gives instruction on proper tooth cleaning procedures. Ways of preventing dental diseases is the main topic emphasized during this instruction. Effort is made to do topicals at least three times a year on the children who have approval from parents or guardians. Topicals are not given to children without parental or guardian approval.

Health Supplies - are for toothbrushes, dental floss, disclosing tablets prophy paste and trays for the gelatin topical fluoride. We usually order these supplies in June so as to have them by the time school opens in late August of the new school year.

Dental Contract - monies are used for services performed at the State/PHS/YKHC dental clinic at the Regional High School. Students from all over the Y-K area attend the BRHS and services are rendered to them at the clinic instead of using the monies at the village level. The students are here. Dr. Carpenter, the only local private dentist does the work and usually starts in March of each year, after he has completed his field trips for the PHS dental services branch.

Trainee Expense - is a tuition fee paid to a University that specializes in preventive dentistry. Each year, in April or May, the Bethel DHE along with the other YKHC DHE's attends a week long course in the L-48 in new methods of reaching out to clientele (motivation) and new techniques in dental disease prevention.

The Housing Expense - is a subidy that all YKHC employees are entitled to, due to the high cost of rentals in Bethel.

Travel and Per Diem - are for the DHE when she travels to the L-48 for the week long training session in dental disease prevention.

Some of the figures under the amount used to date are not accurate, because a lot of bills have not been received and are therefore not accountable.

If there are any questions on anything, please feel free to call or write me.

Sincerely,

R. E. Aloysius

Robert E. Aloysius
Supervisor
Dental Programs

REA/aj

YUKON-KUSKOKWIM HEALTH CORPORATION

AFFILIATE OF THE ALASKA FEDERATION OF NATIVES

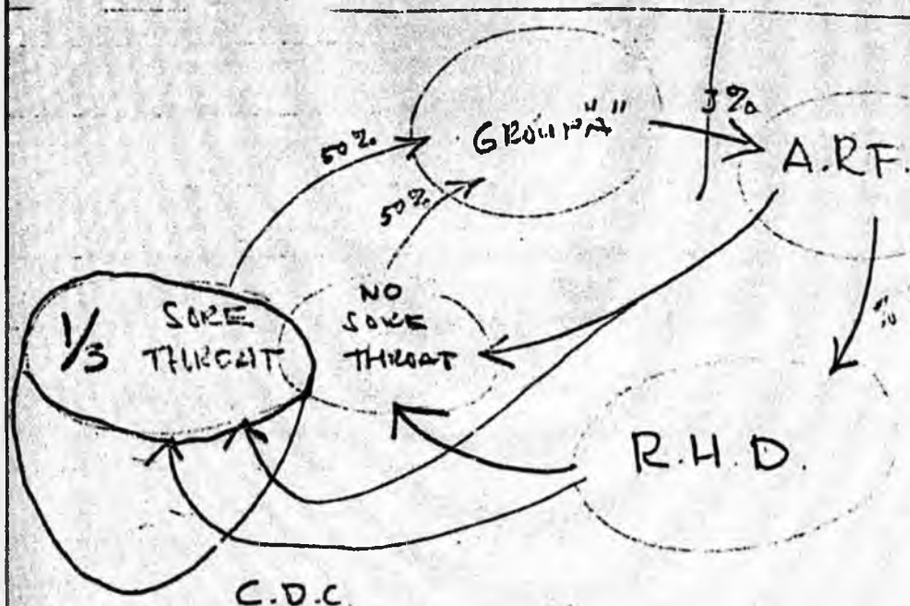
P. O. Box 528
Bethel, Alaska 99559
(907) 543-2506
(907) 543-2508

February 28, 1975

STATE OF ALASKA GRANT July 1, 1974 to June 30, 1975

CONTRACT NUMBER 06-2670 To Provide Dental Services to Children In The Bethel Area.

Expenditures	Total Budget	Amount Used to Date
Personnel Services		
Salaries & Wages	$8,623.00	$6,503.59
Payroll Tax/Comp. Ins.	827.00	387.22
Group Insurance	293.00	163.28
Expendible Supplies		
Health Supplies	1,050.00	0
Consultants & Contracts		
Dental	5,232.00	0
Other Direct Expenses		
Trainee Expense	100.00	0
Housing Expense	3,000.00	2,020.55
Travel		
Comm'l Air Transportation	700.00	0
Per Diem	175.00	0
TOTALS	$20,000.00	$9,074.64



1/5 SURVEILL
4 • SYMPTOMATIC
3 • EPIDEMIC
2 • FOLLOW UP ON RHEUM
1 • SCREEN FOR R.H.D

TO LATE IF CARDIAC DAMAGE

(3:5)

① M TIPIBLE WITH GIVE ENOUGH WEAPONS.

② "C" IN PIP NEVER HAVE "A" WITH SE IMMUNOLOGICAL DEFENCE.

③ EPIDEMICS ARE IMPORTANT TO CONTROL. EPIDEMICS RHEUMATIC FEVER ATTACKS.

Br

Gordis, L., Effectiveness of Comprehensive-Care Programs in Preventing Rheumatic Fever: New England Journal of Medicine, 289:331, 1973.

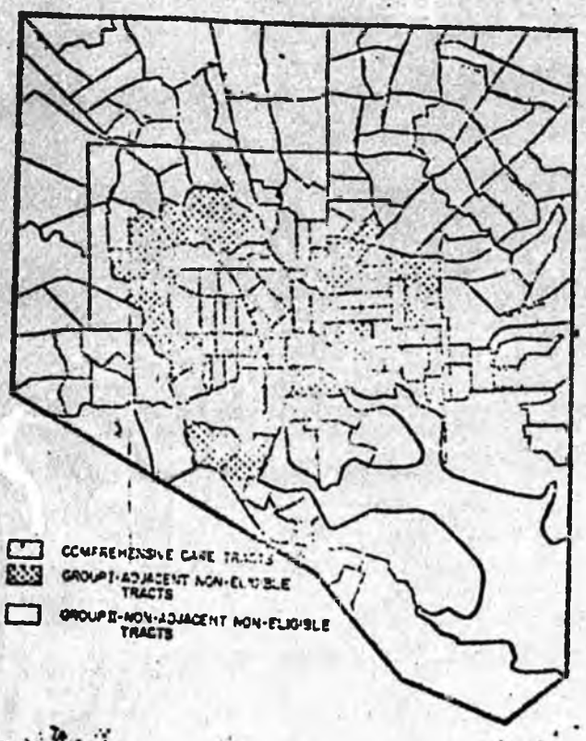


Figure 1. Map of Baltimore Showing Comprehensive-Care Census Tracts and Comparative Groupings of Noneligible Tracts.

Table 3. Changes in Incidence of Rheumatic Fever in the Study Populations Eligible for Comprehensive-Care Programs (CCP) and Those Not Eligible.

Census Tract	1960-1964			1968-1970			Net Change
	No. of cases	1960 population	Annual incidence (rate)	No. of cases	1970 population	Annual incidence (rate)	%
Eligible	51	38,022	26.8	11	34,609	10.6	−60.4
Not eligible.							
Adjacent to CCP	21	23,212	18.1	13	28,400	15.3	−15.5
Not adjacent	5	12,284	8.1	18	41,071	14.6	+80.0
All not eligible	26	35,496	14.6	31	69,477	14.9	+ 2.0

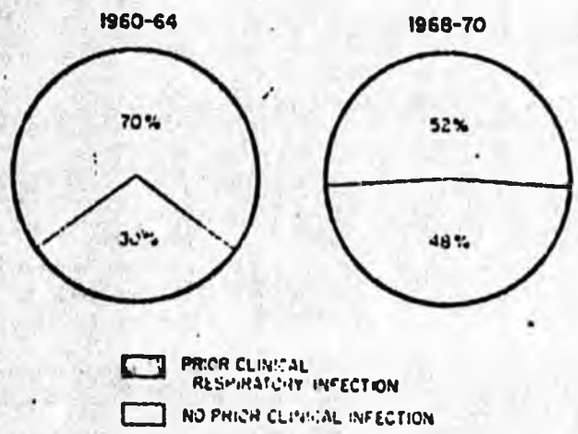


Figure 2. Changes in the Proportion of First Attacks of Rheumatic Fever Preceded by Clinical Respiratory Infection.

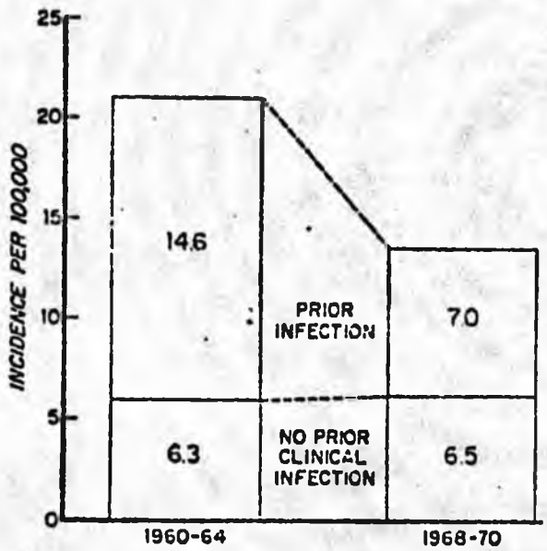


Figure 3. Changes in the Annual Incidence of First Attacks of Rheumatic Fever in Relation to Preceding Clinical Respiratory Infection.

YUKON-KUSKOKWIM HEALTH CORPORATION

AFFILIATE OF THE ALASKA FEDERATION OF NATIVES

P. O. Box 528
Bethel, Alaska 99559
(907) 543-2506
(907) 543-2508

March 19, 1975

NCK
Mental Health
D. Sina

Dr. Donald K. Freedman
Division of Public Health
Pouch H
Juneau, Alaska 99801

Dear Dr. Freedman:

We are very pleased that the State is considering taking action in regards to a Statewide Preventive Streptococcal and Rheumatic Heart Disease Program.

We have some questions in regards to the States activities as proposed in your memorandum of March 14, 1975.

Component #1 Registry for A.R.F. Patients

1. How do all health providers input into the registry?
2. Who and how will the registry information get back to the P.H.N.'s, health aides, and physicians to follow-up?
3. Who will be monitoring the patients on the registry to make sure that treatment was in fact given on a monthly basis?
4. Will you need more funds to make sure the registry is used?

Component 2a Lab. for Symptomatic's

1. The State already provides this service:

   a. How much do you now spend on processing symptomatic cultures?
   b. How many cultures are you performing?

2. If additional monies are needed, it is assumed that you are not meeting the demand for processing symptomatics. Where is this new demand coming from? Rural, Urban, or Bush?

3. If you do expand your lab as indicated in the memorandum can you process symptomatics from rural villages which have no lab back-up?

4. If you do process more symptomatics do you have the staff to monitor the positive patients making sure they are treated within 10 days?

PROPOSALS FOR 76 YKHC

YKHC PROPOSALS TO THE STATE OF ALASKA FY 1976
SUMMARY

STREPTOCOCCAL DISEASE SURVEILANCE

YKHC proposes that the State accept the proposal for the D.H.&.S.S. to develope a Statewide registry for A.R.F. patients, a lab for Symptomatics, a reference lab and an epidemiologist pending modifications of budgets and scope of work as outlined to the finance committee by Dr. Freedman in his memorandum of March 14, 1975. We further propose that the State fund a Strept Surveilance Program for the city of Bethel. The Bethel Service area has one of the highest incidence of acute Rheumatic Heart Fever and streptococcus infection rates. A concentrated program of routine surveilance is the only method for preventing the high incidence of Rheumatic Heart Disease. Proposed Budget $ 50,842.00.

MATERNAL AND CHILD HEALTH

Maternal and child health problems in the Yukon-kuskokwim area are recognized as the area's most pressing problems. Infant mortality which had shown signs of decreasing in 1970 has jumped up from its 1970 level 24.5 infant deaths per thousand live births to 40.4 in 1971, 27.0 in 1972, and 31.8 in 1973. Infant mortality as measured by hospital admissions is three times as high as communities in the lower 48. We propose that the State contract with YKHC to continue and expand its M,C.H. program. The present M.C.H program functions as a coordinating service to the I.H.S., P.H.N and the Health Aides. The program maintains monthly records on all pregnant women and children to age one. Prenatal risk and plans of care are developed with a physician. The M.C.H program insures that prenatal and infant patients obtain services according to their own plan of care. Limited direct services are also provided. Proposed Budget is for $85,935.00.

MENTAL HEALTH

YKHC-PHS Mental health team proposes to the State Division of Mental Health to fund a position and a half to work with the above Mental Health team. These people would be placed at the Bethel jail and they would see every person in jail. Many of the first time offenders could be helped if seen and counselled early, hopefully preventing further contact with the jail system. Proposed Budget is for #36,477.00.

A PROPOSAL

TO

THE ALASKA STATE DIVISION OF MENTAL HELATH

FOR

A FULL TIME AND A HALF TIME COUNSELOR

TO

THE BETHEL CITY JAIL

FOR

JULY 1975 OR SOONER

SUBMITTED BY: IKAYRUISTET UMYUANEK
YUKON KUSKOKWIM HEALTH CORP.
PUBLIC HEALTH SERVICE
MENTAL HEALTH TEAM

YUKON KUSKOKWIM HEALTH CORPORATI
P.O. BOX 536
BETHEL, ALASKA 99559

543-2506 543-2508 543-2818

DECEMBER 30, 1974

TABLE OF CONTENTS

INTRODUCTION

During the past 18 months the Yukon-Kuskokwim Health Corporation and U.S. Public health Service have developed a joint Mental Health Team. This team consists of:

1. Kline, Bridget - Counselor, Dept. Chairman, YKHC
2. Kopanuk, Dana, Counselor, YKHC
3. Lehman, Milton, Social Worker, PHS
4. Olrun, Prudy, Child Counselor, YKHC
5. Shelton, Fred, Asst. Social Worker, PHS
6. Stillner, Marianne, Child Psychiatric Nurse (Part Time), YKHC
7. Stillner, Verner, Psychiatist, PHS
8. Williams, Mike, Admin. Record-Keeper Counselor, YKHC

The population served by this team includes approximately 3,000 Bethel residnets and 12,500 members of 53 surrounding villages.

The focus of the team has been to provide services throught the training of bi-lingual local inhabitants. Our work takes place through direct and consultative services to the Bethel Hospital, Bethel Primary, Middle School, Regional High School, Dormitory, Regional High School Boarding Home, YKHC-Health Aide Training, Head Start Program, Division of Corrections, Division of Family and Children Services and Court and Jail.

Our work in the Bethel City Jail in the last 16 months has included 16 court referrals resulting in 52 individual visit-interviews by one of our team members.

In addition, we estimate that our team has made an additonal 24 visits to the Bethel City Jail for medications and disposition problems.

August 73 - December 74	16 Court Referrals	52 Visits
August 73 - December 74	Medications Etc.	24 Visits
		76 Visits

During our jail work we have been cordially received by the Bethel City Police Force and Staff as well as the clients. As a result of our contact with a segment of the Bethel City Jail population, we have found a need for counseling services.

Many of the people held for protective custody do not come in contact with the court, social services, or individual churches. It is our impression that early contact with the first timer and young jail citizen would serve a preventive function never before tried in the Alaska Rural Jail System. There is also a need for inter-agency coordination for the court referred clients as well as the non-court referred clients.

Division of Corrections Census data for July, August, September 1974 reveal an average daily Bethel City Jail Census of 12. The majority of these people are men to reflect the jail population. There should be a full time male counselor to counsel men and a half time counselor to see the women. Additionally two people would provide Bethel coverage for Interagency coordination in the absence of one of the counselors due to sickness, vacation, and travel. The counselor would be expected to work five days a week:

1. Counseling - The Counselors would come into daily contact with each Bethel City Jail client. Ideally each person would be seen individually or in a group during his time in jail. The supervision for this counseling would come from the staff of YKHC, PHS Mental Health Team and the counselors would be seen as members of the team. Jail counseling will provide an opportunity for:

    a. Crisis Intervention
    b. Enabling the jail to be an emotionally corrective experience.
    c. Planning follow-up, i.e., housing, job, & counseling.

2. Coordinating with social agencies, schools, churches & legal services.

Many of the jail clients are known to multiple Bethel agencies. To prevent duplication confusion, and neglect the counselors would act as inter-agency coordinators. The counselors orientation will include a familiarity with each agency and their personnel. The counselors will be responsible for contacting appropriate agencies to ensure an effective plan and follow-up for each client.

BUDGET REQUEST FOR BETHEL CITY JAIL COUNSELOR AGENCY COORDINATOR.

	Full Time	Half Time
Salary	15,000.00	7,500.00
Fringe	2,535.00	1,267.00
Admn. Overhead 10%	1,950.00	975.00
Psychological Testing by Anchorage psychologists (4 trips). Travel	2,000.00	-
4 Anchorage Trips (API, McLaughlin, Eagle River, Palmer).	1,000.00	500.00
3 Village Trips	500.00	250.00
Housing	3,000.00	-0-
	25,985.00	10,492.00
Total	36,477.00	

January 13, 1975

Public Health Service Mental Health Team
P. O. Box 536
Bethel, Alaska 99559

To the Mental Health Team:

After reviewing the details contained in your proposal to the Alaska State Division of Mental Health for a full time and half time counselor at the Bethel City Jail, I'm writing this letter in support of your plan.

As Public Defender for the Bethel area, I have seen numerous instances where a position such as that outlined in the proposal would have aided in the disposition of cases before the Court. Most of the clients I have suffer from either severe drinking problem or else a mental problem. Those with a mental problem are housed in the jail as are all the rest of those charged with crimes. It is my belief that those with mental problems are in need of more personal and on-going attention than they have been getting in the past.

A jail experience can be upsetting for anyone no matter how stable their mental make-up is. But when an unstable person is thrown into the jail setting it is a dangerous situation,

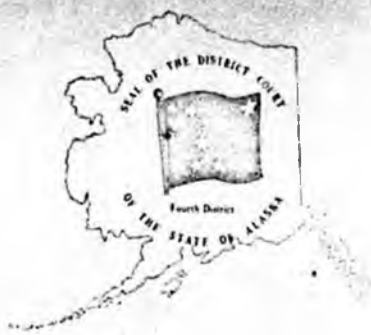
If we are committed to rehabilitating those who are charged with crimes then we must start by giving them the proper attention from the time they are brought to jail. The Bethel Mental Health Team has shown that it is uniquely qualified to assist in the rehabilitative process. It makes good sense to utilize the resourses we have here locally to the maximum extent.

I heartily endorse the proposal of the Mental Health Team.

Yours very truly,

Myron Angstman
Assistant Public Defender

MA/mnc



District Court

State of Alaska

FOURTH JUDICIAL DISTRICT
BETHEL, ALASKA
99559

CHAMBERS OF
NORA GUINN, JUDGE

January 10, 1975

Dr. Jerry L. Schrader
Director of Division of Mental Health
Dept. of Health & Social Services
Pouch H
Juneau, Alaska 99801

Dear Dr. Schrader:

I have studied carefully the proposal submitted to you for a full time Counsellor and a half time counsellor to the Bethel City Jail by the mental health team of the Yukon Kuskokwim Health Corp., I support this proposal wholeheartedly as outlined. It is progressive, realistic and completely applicable to our needs. I anticipate lasting results from this type of services particularily through the training of bi-lingual local personnel.

I sincerely recommend that you give this plan every consideration.

Sincerely,

Nora Guinn
District Judge

NG:aw

cc: Dr. Vernon Stillnor, Y.K.H.C.

IN REPLY REFER TO:

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF INDIAN AFFAIRS

Mr. Peter Three Stars, Superintendent
, P. O. Box 347, Bethel Agency
Bethel, Alaska 99559
January 10, 1975

Dr. Jerry L. Schrader, Director
Division of Mental Health
Pouch H
Juneau, Alaska 99801

Dear Dr. Schrader:

I am writing this letter to verify the need for the proposed jail counselor at the Bethel City Jail.

It has been my experience on several occasions that individuals being held in jail on one charge or another, although an active part of my case load, have not come to my attention for several days. This, in large part, is due to the fact that with the many threatening aspects of being jailed, with little or no supportive counseling help presently available on an "in shop" basis, the client is in many instances too confused and frightened to have the jailer contact my office.

I feel that through creating a full-time counselor position at the jail, this problem could be resolved.

I firmly support the proposal for this position.

Thank you very much.

Sincerely,

Richard E. Marchant
BIA Social Worker

REM:lfm

MEMORANDUM State of Alaska

TO: Jerry L. Schrader, Director
Division of Mental Health
Pouch "H"
Juneau, Alaska 99811

DATE: January 27, 1975

FILE NO:

TELEPHONE NO:

FROM: J. Randall Luffberry
Assistant District Attorney
Anchorage

SUBJECT: Proposal for Counselor to Bethel City Jail

Vern Stillner and other members of the Yukon-Kuskokwim Health Corporation in Bethel, Alaska, have approached me with a proposal to staff the Bethel City Jail with a full-time and half-time counselor in the interest of improving the mental health and attitudes of the prisoners housed in that facility. As Assistant District Attorney for the Bethel service area, I heartily endorse such a project. I feel that such an aid to the sentenced prisoners who remain in the Bethel Jail would be instrumental in improving the rehabilitation aspect of prison incarceration, particularly, for the native inmate who finds himself in the Bethel Jail for the first or second time because of an alcohol-related offense. These are the type persons who, I believe, could be helped by intensive counseling to bolster their defenses against alcohol. And quite obviously, these are the type persons who have not, for what ever reason, been reached by the present alcohol programs in the Bethel area. In addition, such individual often can benefit from professional full-time help in obtaining jobs and in working out other problems. On many occasions, Judge Nora Guinn, myself and a public defender have made attempts to do such work, but we are, of course, limited by a lack of in-depth knowledge of the job market and a lack of training in this particular area.

While I can see some difficulties and conflicts arising over counseling of non-sentenced prisoners awaiting trial, I feel that, if this project is limited to the sentenced prisoner, it would be most valuable in reducing recidivism in alcoholic type crimes.

JRL:dla

cc: Vern Stillner, Psychiatrist
Public Health Service
Bethel

XXXXXXXXXXXXX

JAY HAMMOND, GOVENOR
COMMISSIONER RICHARD L. BUR
-ON

P.O. BOX 268
BETHEL, ALASKA 99559

JANUARY 9, 1975

Dr. Jerry C. Schrader
Director-Division of Mental Health
Dept. Health & Social Services
Pouch A
Juneau, Alaska

Dear Dr. Schrader:

I have been asked to comment regarding my feelings on a proposal by the Yukon Kuskokwim Health Corp. to place a full and a parttime counselor in the Bethel City Jail to do counseling work with inmates. In reading YKHC proposal and from what I have observed in the last three and a half years as the commander for the Alaska State Troopers Bethel Detachment, I believe there is a definite need for the program proposed by YKHC.

The Bethel jail system at present has no rehabilitation program to speak of. At present the jail is used for those persons with less then 30 days to serve. For a good part these people are made up of first time offenders. Which to me is the time that counseling work should begin with those involved with the law. Prior to their getting into serious trouble and recieving a sentence of length requiring their transportation to a Anchorage jail where counseling may be available.

From my observation it also appears that the percentage of mental health problems in the lower Kuskokwim-Yukon area is greater then most areas of the State.

I respectfully request that you give this proposal your consideration.

Sincerly;

Sgt. Lorn M. Campbell
Commander
Bethel Detachment

cc: Col. M. E. Dankworth, Director
Dr. V. Stillner, PHS Bethel

STREPTOCOCCAL SURVEILLANCE PROGRAM

Streptococcal Surveillance Program

Problem:

The Rheumatic Heart Fever rate for Alaskan Natives in the Bethel area has been highest in Alaska. The Bethel area has had incidence rates of 20 to 157 cases per 100,000 persons 5-19 years old between 1968 and 1973. The average rate in the Bethel area between 1968 and 1973 was 82 cases per 100,000 persons 5-19 years old compared to the Statewide Alaskan Native rate of 44 per 100,000. The national rate for the same age group is around 26 cases per 100,000. Because of the nature of Rheumatic Heart Disease, the average life time cost per person with Rheumatic Heart Fever is around $40,000. These costs do not include the loss of work time or school time resulting from the treatment services and sickness.

The streptococcal infection rate, the precussor to Rheumatic Heart Fever is also extremely high in the Bethel area. A research project operated by the Communicable Disease Control Laboratory (C.D.C.) has shown that streptococcal disease in Alaskan Natives is eighteen times higher than in the U.S. population. Streptococcal infections also contribute to school absenteeism, resulting in the secondary problem of inhibiting a child's learning process.

Objectives:

The objectives of a streptococcal surveillance program are to reduce the Rheumatic Heart Fever rate and reduce the morbidity resulting from streptococcal infections in children ages 5-19. According to C.D.C. findings it is possible to almost eliminate new cases of Rheumatic Heart Diseases and to reduce the streptococcal infection rate by half through a program of monthly surveillance and early treatment of persons with streptococcal infections. The surveillance program will be on Bethel School children.

Resources:

The start up funds in 1975 have come from Yukon-Kuskokwim Health Corporation. It is now proposed that the State contract with Y.K.H.C. to maintain the program in 1976. A preliminary budget is attached; (See Attachment I).

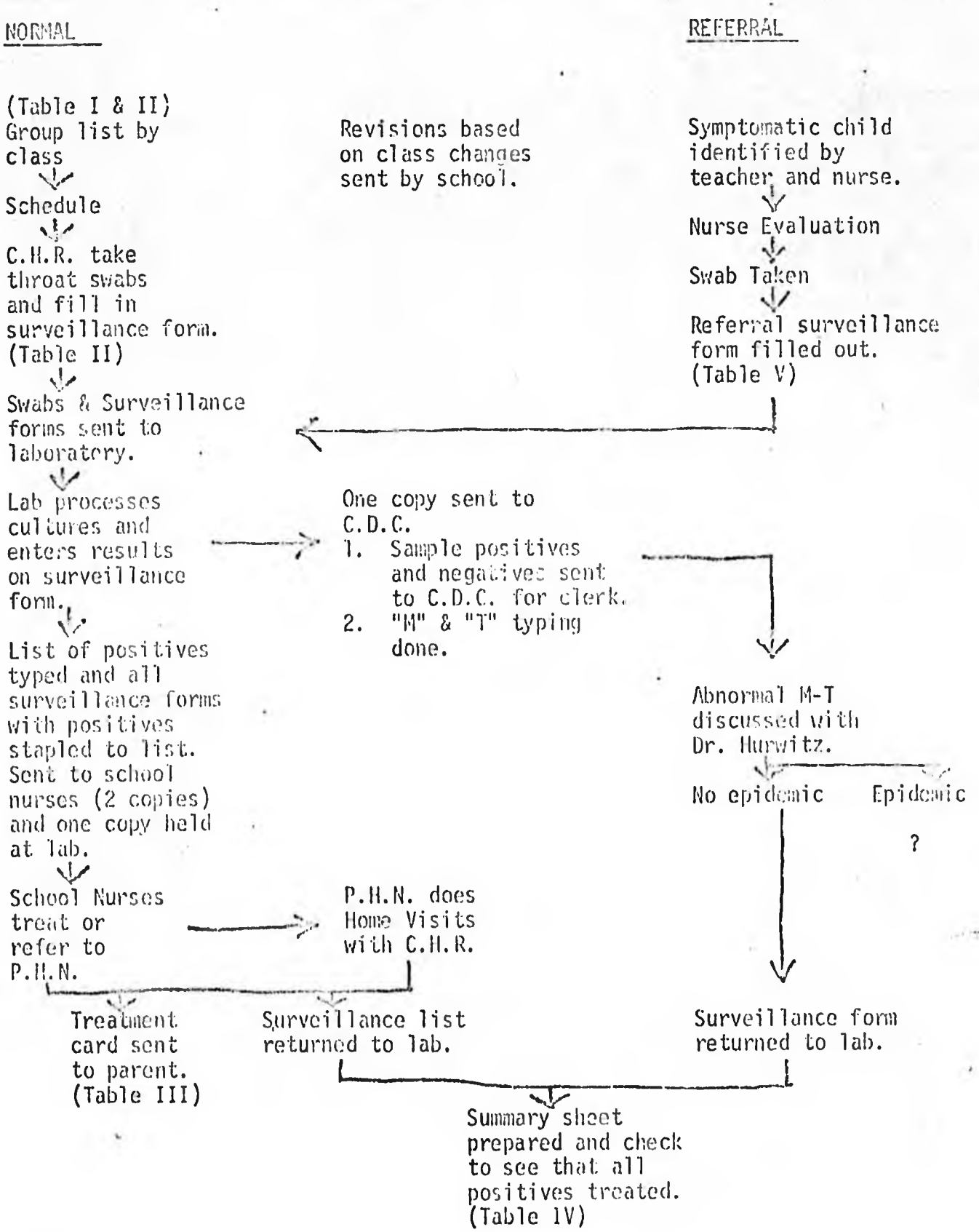
Action Plan:

The method being employed to achieve the objectives is to culture the entire school age population in Bethel each month with treatment provided to those with positive cultures. If the treatment is completed within ten days it is 80 to 90% probable that the streptococcal infection will not develop into Rheumatic Heart Fever. The procedure used in Bethel is outlined in Attachment II, "Surveillance Procedure." The procedure in Attachment II has been based upon the work of C.D.C. in its streptococcal surveillance research project.

Attachment I
Budget for 12,000 Cultures

Personnel	
Lab. Tech. (1)	16,880
Secretary (1)	9,450
School Aide (9 months 1/2 time)	3,937
Fringe 13%	3,935
Sub-total	34,202
Supplies	
Lab supplies for 12,000 cultures @ 50¢/cultures.	$6,000
Forms and records.	488
Office	300
Sub-total	$6,788
Equipment	
Laboratory	600
Sub-total	$600
Space Costs	
Lab. Utilities	$3,900
Fire Insurance	750
	$4,650
Travel	
Training	$630
	$630
Other	
Malpractice Insurance	$650
Postage	160
Sub-total	$810
Administration	
Accounting/Supply	$1,000
Administration	1,500
Xerox	100
Janitorial Service	562
	$3,162
Total	
	$50,842

SURVEILLANCE PROCEDURE



PROJECT DESIGN

1. Approval - The streptococcal surveillance program involves the routine screening of children in the Elementry, Middle, and High Schools. Children who have streptococcus will require medication. Because the program involves treatment we will require the approval of not only the YKHC Board but the School Board and parents of each child. After the School Board has approved the project a unified permission slip authorizing a child to participate in the strept. surveillance, dental care, and other health care activities will be developed and approved by the School Boards and Health Professionals. The approved permission slips will be given to each teacher to hand out to the children. Returned permission slips will be given to the microbiologist who will compare class registration to permissions lips received to determine the children without permission slips. The microbiologist would then direct the Community Health Representatives to make Home Visits to families who do not want to participate or have not responded. The C.H.R's would discuss the Streptococcal Program with each family as well as the Dental Program and other programs requiring parental consent. If families cannot be contacted the School Boards will have to determine if we should continue with the project. Only children with parental approval will be in the streptococcal program.

2. Surveillance Procedure - Based on a profile of children in each classroom the Elementry, Middle, and High School children would be divided into four groupings of classrooms. Each child in a group would be assigned a code number to be used through out the year. Each week one of the four groups would be tested by C.H.R.'s and a Public Health Nurse to determine if they have a streptococcal infection. Children not tested in their assigned group because they are absence could be added to the following weeks group. Any children already exhibiting signs of streptococcus infection as determined by teachers and/or the school nurse would also be tested. After four weeks the entire school population in Bethel would have been surveyed.

   When the prevalence of streptococcal isolates rise to a predetermined level, for example 20 or 30 percent, more than one group could be surveyed and treated or the entire school population could be treated prophylacticly. Other criteria such as 50% or more "M" types appearing in the positive cases would also be used to determine if an epidemic has started and whether it warrants a concentrated effort to treat or screens the school population. This decision will be made by the project director Dr. Hurwitz, the microbiologist and C.D.C. officials.

3. Laboratory - After the C.H.R.'s take the throat swabs they will be given to the laboratory for analysis. The swabs are received in metal foil packets containing silica gel, each with the cultured child's identifying code number. The desiccated swabs are incubated 4-6 hours at 37°C in Todd-Hewit broth. A loopful of the broth is added to 15 cc of melted neopeptone agar with 5% sheep blood and pour plates made. After incubation at 37° C for 18 hours, Betahemolytic colonies are picked and subcultured on quartered neopeptonesheep blood agar plates with bacitracin discs. After 24 hours incubation at 37°C, presuptive group A determination is made. Total time through the laboratory should not exceed three days.

   Positive cultures would be transmitted to the C.D.C. laboratory in Anchorage for "M" and "T" typing to determine if an epidemic is begining. The number of positives transferred to C.D.C. in Anchorage would be determined by C.D.C. and the project director.

4. Treatment - Individuals that respond positively to the streptoccal tests would be treated whether or not they are symptomatic. The test and treatment must be completed within 10 days to assure that a child does not develop rheumatic heart disease. The laboratory results would be given to the school nurse who would administer the treatment to each positive child. If a child cannot be located or is absent at school the treatment would be given by the Public

Health Nurse with assistance from C.H.R.'s. Treatment would conform to current American Heart Association Recommendations:

a. Children over age 10.	1.2 million units LA bicillin IM (Benzathine Penicillin G.).
b. Children age 10 and younger.	600,000 units LA bicillin IM. (Benzathine Penicillin).

Allergic children would be given 250 mg erythromycin four times daily for 10 days.

Every child treated would have a card or record of treatment which would be returned to the laboratory for cross checking to make sure that all positive children actually were treated.

During an epidemic the treatment would have to be accelerated. Backup personnel consisting of Itinerate Public Health Nurses and available hospital staff would be called to assist the school nurses. The state may also be able to bring in other nurses to help stem an epidemic. During an epidemic all activities would be co-ordinated by the project director Dr. Hurwitz.

5. Records - Records will consist of:

   a. Permission slips on each child.

   b. List of individuals in each group. The list would be developed initially by C.D.C., the microbiologist, school nurses and school administration. After initial set up of each group the C.H.R.'s would be given a roster and stick'um labels coded by number and group. Any revisions would be co-ordinated by the project director. The list would also include information on whether a child is allergic to penicillin.

   c. Treatment card and/or test card. - The results of the tests would be entered on a card or roster. All positive cards or a roster would be given to the school nurses who would do the follow-up treatment. The cards or roster would be returned to the lab.

Each week the culture results would be tabulated so that point prevalence of Group A strep can be calculated.

6. Organization - The project will be headed by the Indian Health Service Project Director, Dr. Robert Hurwitz. A microbiologist and clerk would operate the laboratory and maintain records. The School Nurses would co-ordinate the surveillance activities of the C.H.R.'s and would administer the treatment for any positives. The C.H.R.'s would collect throat swabs, assist the Public Health Nurse in Home Visits to treat absent children and would help obtain permission slips. The Center for Disease Control will act as technical consultants and will evaluate the program. An organizational chart appears on the next page.

Perry, L.W., et al. Rheumatic Fever and Rheumatic Heart Disease Among U.S. College Freshman. Public Health Reports, 83;919, 1968.

Table 3. Prevalence of probable or definite rheumatic fever or rheumatic heart disease, or both, per 1,000 students surveyed, by sex and State of residence at time of survey, 1956–65

Rank[1]	State of residence	Total		Male		Female	
		Number of cases	Rate per 1,000 examinations	Number of cases	Rate per 1,000 examinations	Number of cases	Rate per 1,000 examinations
	Total	[2] 12,134	15.8	7,273	15.9	4,838	15.8
46	Alabama	20	6.9	14	6.7	6	7.2
	Alaska	24	88.9	16	103.9	8	70.2
8	Arizona	112	25.6	66	24.9	46	27.0
27	Arkansas	20	14.3	12	13.5	8	15.9
30	California	485	13.7	243	13.0	240	14.3
12	Colorado	329	24.1	172	23.7	154	21.1
36	Connecticut	100	11.6	55	10.1	45	14.2
33	Delaware	56	12.2	31	11.9	25	12.7
	District of Columbia	72	9.3	32	7.3	40	11.9
29	Florida	109	13.8	78	13.5	31	14.9
34	Georgia	72	11.9	41	11.0	31	13.6
	Hawaii	8	9.7	4	8.5	4	11.3
10	Idaho	120	24.8	66	20.1	54	35.0
23	Illinois	377	16.2	224	17.2	152	14.9
6	Indiana	53	26.9	35	27.8	18	25.7
15	Iowa	373	20.8	231	22.5	142	18.5
19	Kansas	407	18.0	250	18.0	155	17.9
21	Kentucky	178	17.4	96	15.9	81	19.5
35	Louisiana	67	11.9	49	14.5	18	8.1
26	Maine	39	14.5	24	13.3	15	17.0
40	Maryland	63	11.2	46	11.2	17	11.4
45	Massachusetts	401	9.6	245	9.3	156	10.4
41	Michigan	771	11.0	427	11.0	344	11.1
13	Minnesota	724	22.6	454	22.3	270	23.3
32	Mississippi	109	12.3	86	14.4	22	8.5
16	Missouri	405	20.5	231	19.5	174	22.3
3	Montana	475	32.6	267	30.1	207	36.8
20	Nebraska	372	17.9	256	19.2	115	15.5
2	Nevada	40	38.5	30	47.2	10	24.9
39	New Hampshire	81	11.3	54	9.8	26	15.7
31	New Jersey	224	13.4	126	14.5	98	15.2
9	New Mexico	59	25.1	26	18.8	33	31.1
42	New York	541	10.2	315	11.8	229	8.7
24	North Carolina	135	16.2	29	15.0	106	16.6
22	North Dakota	85	16.9	53	14.7	32	22.8
28	Ohio	1,379	14.2	869	14.7	508	13.3
38	Oklahoma	233	11.3	136	10.9	97	11.9
5	Oregon	81	28.1	46	29.0	35	27.0
18	Pennsylvania	731	19.3	509	20.0	221	17.8
44	Rhode Island	25	10.0	15	9.5	10	10.8
43	South Carolina	60	10.2	48	10.0	12	10.9
7	South Dakota	201	26.2	123	25.0	78	28.4
25	Tennessee	61	14.6	32	15.2	32	14.0
47	Texas	71	6.8	43	6.9	28	6.6
1	Utah	527	40.5	315	42.3	212	38.3
37	Vermont	8	11.4	5	11.5	3	11.3
48	Virginia	128	5.7	84	5.5	44	6.2
11	Washington	285	24.7	168	23.6	116	26.5
14	West Virginia	202	21.3	129	20.9	72	21.9
17	Wisconsin	303	20.3	159	18.5	142	22.5
44	Wyoming	287	29.7	183	30.9	102	27.6
	Puerto Rico	2	9.5	2	12.6	0	.0
	Virgin Islands	0	.0	0	.0	0	.0
	Foreign group	38	6.5	23	5.3	14	9.8

[1] Rank of prevalence rates for total group surveyed in each State of continental United States. Rank not assigned to Alaska, District of Columbia, Hawaii, Puerto Rico, Virgin Islands, and foreign students.

[2] Total includes 23 cases in which sex was not stated.

ALASKA NATIVE HEALTH SERVICE
TEN LEADING NOTIFIABLE DISEASES
(RANKED IN ORDER OF INCIDENCE)
1972 - 1971

Disease	Cases 1972 Number	1972 Rank	1971 Number	1971 Rank	Percent Change '72/'71
Total Reported Notifiable Diseases	20,630 1/	-	13,909	-	48.3
Total Ten Leading Notifiable Diseases	19,474	-	13,241	-	-
Upper Respiratory Infect., C/Cold	7600	1	3672 2/	2	107.0
Acute Otitis Media	4297	2	4195	1	2.4
Strep Throat	2156	3	1686	3	27.9
Gonococcal Infections	1378	4	1288	4	7.0
Gastroenteritis, Diarrhea	1335	5	380	8	251.3
Impetigo	907	6	532	7	70.5
Influenza	900	7	597	6	50.8
Pneumonia (excl. NB)	655	8	727	5	-9.9
Chickenpox	127	9	115	10	10.4
Bacillary Dysentery	119	10	49	15	142.9

1/ Increase partially due to a change in disease coding.
2/ Does not include "common cold" diagnosis.

SOURCE: Office of Systems Development, Alaska Native Health Service
Community Health and Epidemiology Branch, Alaska Native Health Service
IHS Inpatient/Outpatient Reporting System

TOTAL RHEUMATIC FEVER INCIDENCE BY SERVICE UNIT OF RESIDENCE
ALASKA NATIVES AGED 5-19 YEARS
Case Rate Per 100,000 Population

S.U.	Anch.	Bar.	Beth.	Kan.	Kotz.	Mt.E.	Tan.	Total
Pop.	4761	1012	5089	1331	3781	3418	2301	21,733
1968	0	0	157	150	79	79	0	64
1969	0	0	20	0	26	29	43	18
1970	42	0	39	75	0	0	0	23
1971	42	0	118	225	53	88	0	74
1972	84	96	118	0	0	29	0	55
1973	63	0	39	0	0	29	0	28
Mean Inci.	39	16	82	75	26	34	7	44

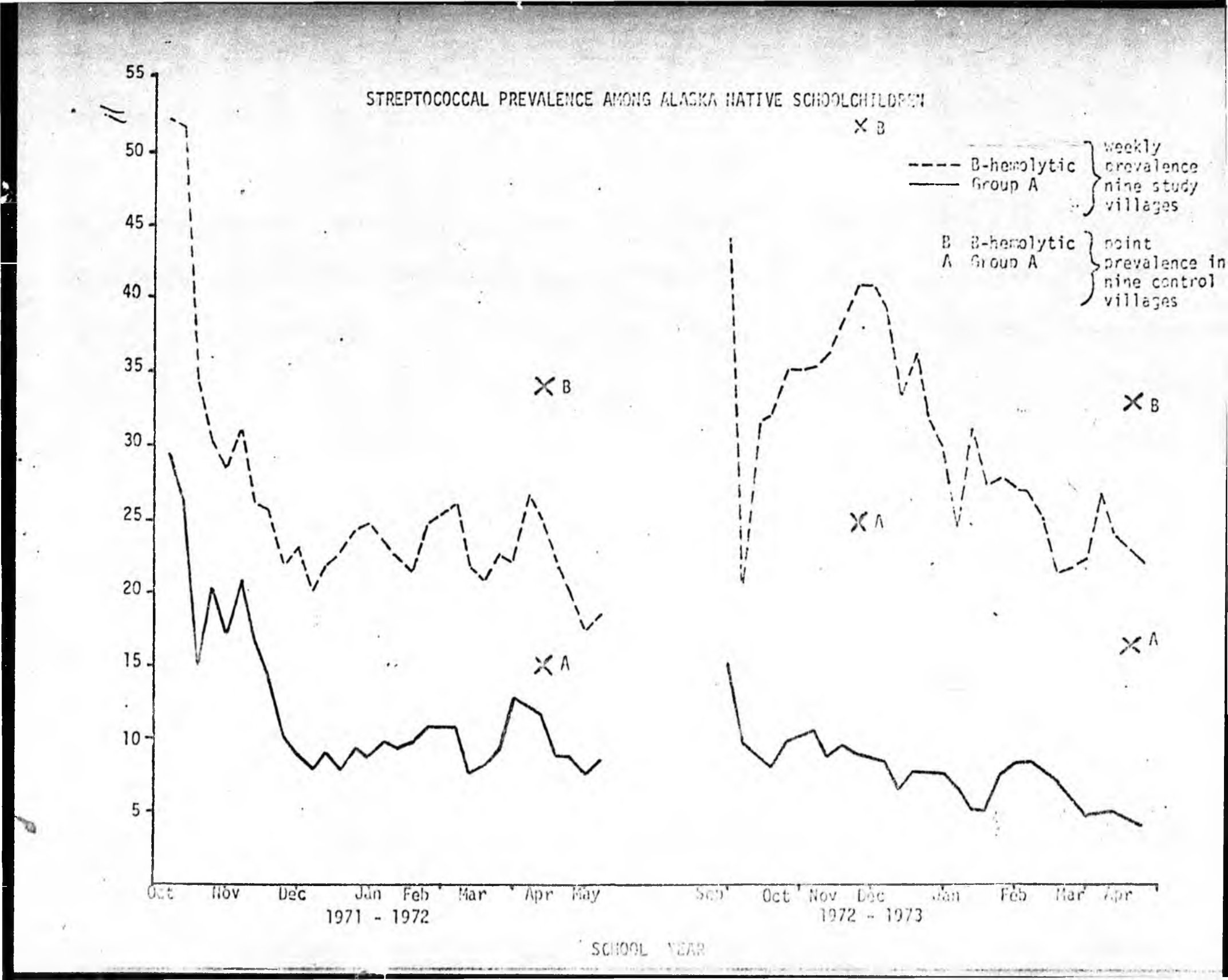
Only cases meeting the revised Jones criteria were used in determining these rates.

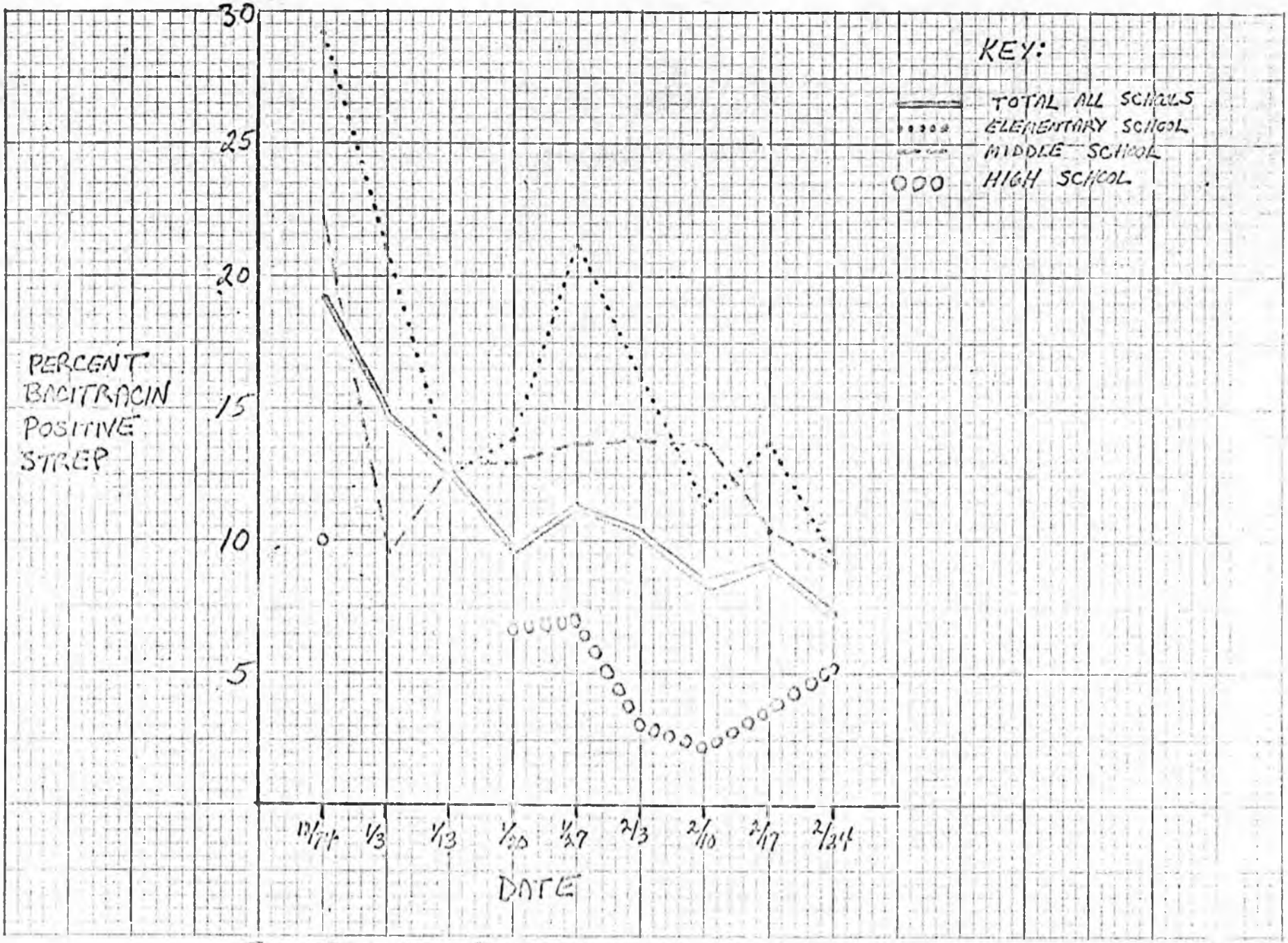
REVIEW CHARTS for PROPER DIAGNOSIS.

PREVALENCE OF RHEUMATIC HEART DISEASE IN ALASKA NATIVES
HOSPITALIZED CASES, ALL AGES
1968-73

Service Unit	Cases	Rate/10,000
Total	316*	60.7
Anchorage	48	38.0
Barrow	13	55.8
Bethel	103	88.3
Kanakanak	27	86.1
Kotzebue	55	65.5
Mt. Edgecumbe	57	67.5
Tanana	13	23.9

*158 definite RHD
42 probable RHD
116 possible RHD


STREPTOCOCCAL PREVALENCE AMONG ALASKA NATIVE SCHOOLCHILDREN
55
50
45
40
35
30
25
20
15
10
5
B-hemolytic
Group A
weekly prevalence nine study villages
B B-hemolytic
A Group A
point prevalence in nine control villages
B
A
Oct Nov Dec Jan Feb Mar Apr May
1971 - 1972
Sep Oct Nov Dec Jan Feb Mar Apr
1972 - 1973
SCHOOL YEAR



STREPTOCCAL PREVALENCE IN BETHEL SCHOOLS - SCHOOL YEAR 1974-75
Y.K.H.C. PROGRAM

STREPTOCOCCAL SURVEILLANCE PROGRAM
BETHEL SUMMARY SHEETS

WEEK GROUP

STARTED WEEK	FINISHED WEEK	TOTAL CULTURED	TOTAL POSITIVE	%	TOTAL TREATED	%	PRIMARY SCHOOL POSITIVE	%	MIDDLE SCHOOL POSITIVE	%	HIGH SCHOOL POSITIVE	%
2-3	A	270	30	11	28	93	cult. 75 14	19	cult. 94 13	14	cult. 101 3	3
2-10	B	260	23	9	23	100	cult. 71 8	11	cult. 92 13	14	cult. 97 2	2
2-17	C	249	24	10	24	100	cult. 72 10	14	cult. 95 10	11	cult. 82 4	5
2-24	D	231	16	7	16	100	cult. 51 4	8	cult. 78 7	9	cult. 92 5	5
[illegible]		1000	93	9	91	98	cult. 269 36	13	cult. 357 43	12	cult. 372 14	4

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U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE
from ACTA SOCIO-MEDIA SCANDINAVICA – SUPPLEMENT 6, 1972

STREPTOCOCCAL SURVEILLANCE IN REMOTE ARCTIC POPULATIONS

The Development of a System for Detection of Group A Pharyngitis and the Prevention of Nonsuppurative Sequelae

THOMAS R. BENDER, M.D., ROBERT A. ZIMMERMAN, PH.D.,
JAMES D. KNOSTMAN, M.D., STEPHEN A. SHERMAN, M.D.,
ANNETTE PRICE, R.N. AND J. KENNETH FLESHMAN, M.D.

Ecological Investigations Program, Center for Disease Control and the Alaska Area Native Health Service, Indian Health Service, U.S. Department of Health, Education and Welfare, Anchorage, Alaska.

Abstract

A surveillance program to detect streptococcal pharyngitis and reduce the incidence of acute rheumatic fever and glomerulonephritis was initiated in two remote Eskimo villages in Alaska between January and May, 1971. Two different techniques were used in the attempt to reduce sequelae. In one village, two separate periods of increased group A prevalence and M-typeability occurred. In a second village unusually low group A levels were observed but were concomitant with a high prevalence of group C. Serum antibody studies conducted in both villages suggest that the populations have had greater previous exposure to group A organisms than that reported elsewhere. Treatment of villagers with positive cultures for group A organisms might prevent epidemic spread if the time between culturing, laboratory reporting, and treatment were shortened.

Introduction

Only two attempts have been made to control streptococcal pharyngitis and nonsuppurative sequelae in civilian populations through longitudinal observance (Phibbs B, et al., 1970, Zimmerman R. A., Biggs B. A., Bolin R. A., et al., 1971). Both have met with considerable success, especially the Natrona County, Wyoming study which has succeeded in a practical way of almost eradicating acute rheumatic fever (ARF) and acute glomerulonephritis (AGN) during the last 10 years. However, such a system has not been attempted previously in areas as isolated as those found in Alaska. Although the success of both the Wyoming and Colorado studies depends upon parental and child understanding, it appears that application of the same procedures in remote Alaska Native villages can accomplish the desired goals. Our objectives were to test the logistics of such a system within Alaska and to lower group A prevalence rates to below 5 per cent in two villages which

have had a high incidence of streptococcal infections and nonsuppurative sequelae.

Demographic data

Two villages of similar size and ethnic composition were selected, mainly on the basis of past reported experience of acute rheumatic fever. Nunapitchuk, a village of approximately 332 persons with 129 school age children, is situated on the Kuskokwim River Delta near Bethel in southwest Alaska. Stebbins, a village of 239 persons with 61 elementary school children, is located on Norton Sound, southeast of Nome. The average annual rate of acute rheumatic fever for these areas has been reported as between 54 to 65 cases per 100,000 population, a figure five to 20 tir.es the rates reported for southern states (Goorman J.R., 1968). There is little movement of the villagers during the winter months, although adolescents attend high school away from home. In the summer, many families migrate from the villages to fish camps. A few individuals or families move to other villages or larger towns for medical or personal reasons at any time of year.

Materials and methods

Throat Cultures: A pharyngeal swab was obtained from all school children and as many adults as possible in January and May, 1971. In the interim, cultures were collected weekly on a random sample of the school children, symptomatic or not. In addition, swabs were obtained from all individuals presenting to the health aide with complaints of sore throat. Swabs were preserved in silica gel and forwarded to the Streptococcal Disease Section, Fort Collins, Colorado and processed as described elsewhere (Wilson E, et al., 1968). Due to the difficulties of weather and flight schedules, they were received at the Colorado laboratory between three and 13 days after mailing.

Blood Specimens: Ten or 15 cc of blood was collected by venipuncture from all school children and as many adults as possible during the first collection period in January. In May, bloods were again collected from the children in both villages and from all adults who attended the general clinics. Both group A and type specific antibodies (TSA) were determined as previously described (Zimmerman R. A. et al., 1971, Zimmerman R. A. et al., 1968).

Urine Specimens: Because of a possible epidemic situation, urine specimens from school children in Nunapitchuk were collected in paper cups and screened with Labstix. Children who had blood or albumin in their urine were examined and referred to the hospital for further study.

Nasal Washings: Nasal washings were obtained from all school children in both villages during the mass culture periods in January and May. The subject was placed on a table in a supine position with his head extended beyond the edge. The child was instructed to hold his breath and 5 of physiological saline was instilled in each nares with a Cornwall syrin As each nostril was washed, the child was raised and told to vigorou expel the washings into a cup. These specimens were used for determinat of immunoglobulins A and G (IgA, IgG) and type specific antibodies.

Treatment: In Nunapitchuk, each individual positive for group A organis was treated with long- acting penicillin or erythromycin as recommene by the American Heart Association (1970). Results were transmitted fr Colorado to Anchorage by telephone and then by teletype and radio to village health aide. In Stebbins, individuals positive for group A organisms w not treated. The results from both villages were compared weekly w three criteria for epidemicity as described elsewhere (Zimmerman R. Gross W.M, Miller D. R., et al., 1971). This technique allows mass prophyla with antibiotics when the following exist simultaneously: (1) group A pre lence is found to be 30 per cent or more, (2) at least half of these organis are M-typeable, and (3) a single strain accounts for one-third of those typeab

Results

Tables I and II give the age specific prevalence rates for beta hemoly and group A streptococci for Nunapitchuk at the times of mass culturi In January the group A prevalence was 36.6 per cent in school childr

TABLE I. Initial Throat Cultures Nunapitchuk, Alaska Januar 27, 1971

	Age		
	0—14	15+	T
Total Cultures	101	95	1
Per Cent Beta Hemolytic	45.5	20.0	
Total Group A	37	11	
Per Cent Beta Hemolytic Group A	36.6	11.6	
M-typeable Per Cent of Group A	56.8	27.3	
T-typeable Per Cent of Group A	100	100	1

TABLE II. Final Throat Cultures Nunapitchuk, Alaska May 3, 1971

	Age		
	0—14	15+	T
Total Cultures	118	102	2
Per Cent Beta Hemolytic	50.8	27.5	
Total Group A	59	18	
Per Cent Beta Hemolytic Group A	50.0	17.6	
M-typeable Per Cent of Group A	84.7	88.9	
T-typeable Per Cent of Group A	96.6	100	

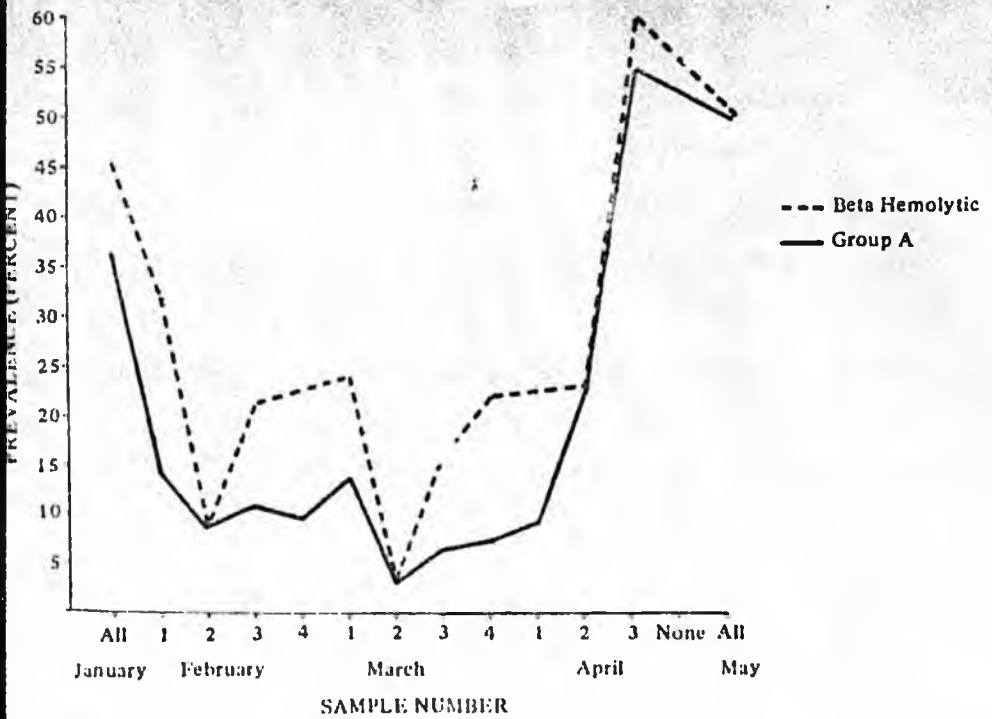


Fig. 1. Results of throat cultures taken from a rotating sample of school children, Nunapitchuk, Alaska, January, 27 — May 3, 1971.

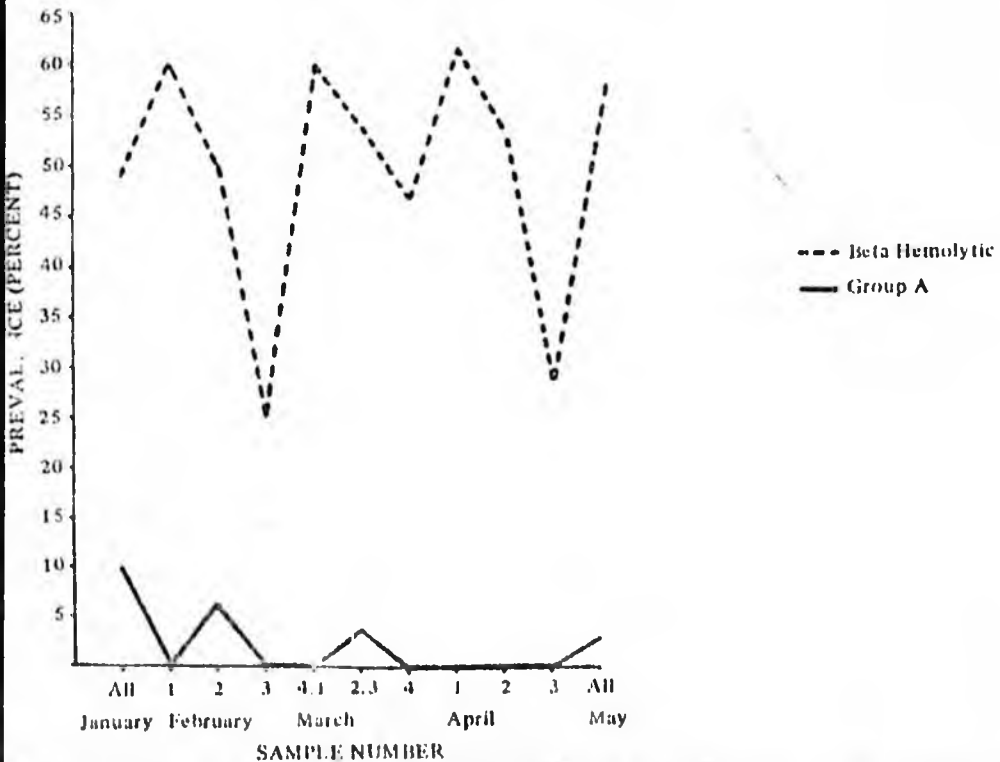


Fig. 2. Results of throat cultures taken from a rotating sample of school

TABLE III. Initial Throat Cultures Stebbins, Alaska January 27, 1971.

	Age		
	0—14	15+	Tot
Total Cultures	69	70	141
Per Cent Beta Hemolytic	49.3	18.6	33
Total Group A	7	6	13
Per Cent Beta Hemolytic Group A	10.1	8.6	9
M-typeable Per Cent of Group A	—	16.7	7
T-typeable Per Cent of Group A	42.9	50.0	46

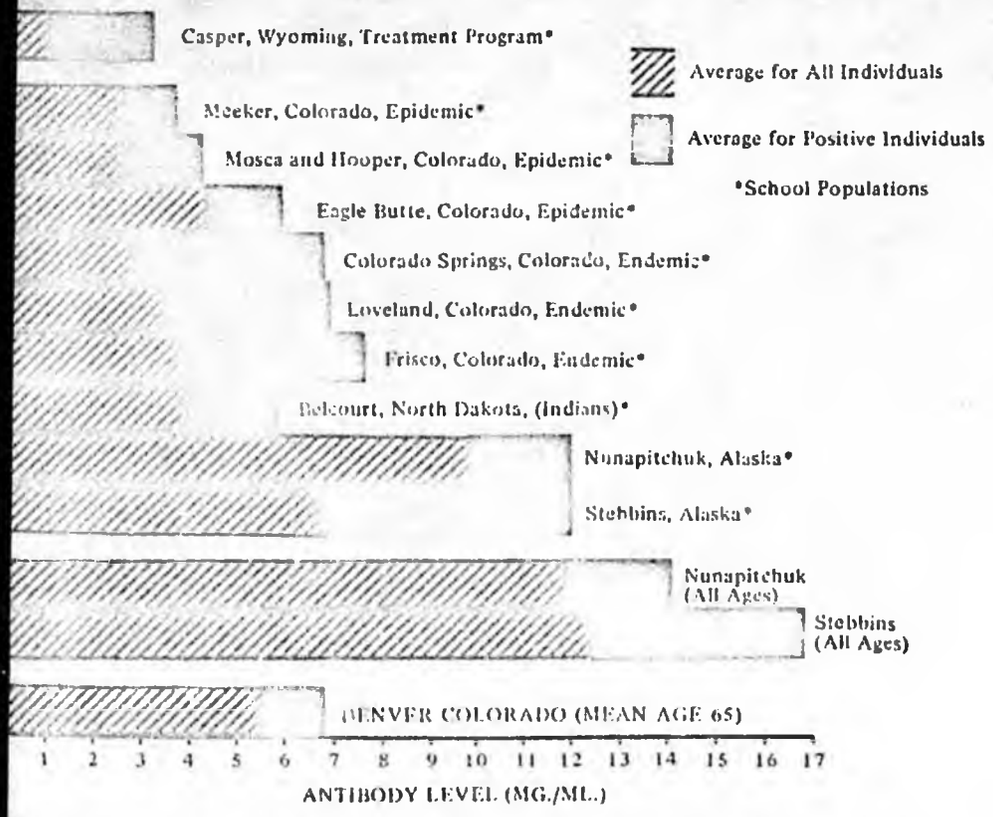
*Includes two with ages unknown.

TABLE IV. Final Throat Cultures Stebbins, Alaska May 4, 1971.

	Age		
	0—14	15+	Tot
Total Cultures	74	41	115
Per Cent Beta Hemolytic	58.1	14.6	42
Total Group A	2	—	2
Per Cent Beta Hemolytic Group A	2.7	—	1
M-typeable Per Cent of Group A	—	—	—
T-typeable Per Cent of Group A	50.0	—	50

Since half of the group A organisms were M-typeable and all these wer M-type 1, it is probable that an epidemic of this organism had just occurre Figure 1 shows the prevalence rates for each of the weekly school sampling There was a downward trend in group A prevalence until March 17. A that time, there was a slight rise that subsequently became abrupt, an because of increased M-typeability, we estimated that a new epidemic cause by M-type 6 organisms was in progress. It is probable that the initi group A M-type 6 organisms were introduced by members of a Nunapitchu family who provided the first isolates of this type on March 8 and March 2 By May one-half of the school children were positive for group A organism (Table II) and 84.7 per cent of these were typeable as M-type 6.

The age specific prevalence rates of beta hemolytic and group A streptococ for Stebbins in January and May are shown in Table III and IV. In thi village the majority of beta hemolytic organisms were group C and n group A with the proportion of group C isolates increasing from 55 pe cent in January to 88 per cent in May. Of all Stebbins villagers cultured January, there were 13 persons (9.2 %) with group A organisms and onl two persons (1.7 %) were positive for group A organisms in May. Figure shows the weekly prevalence rates for each of the Stebbins school sample Again, the majority of beta hemolytic organisms were group C. None o the school children with group C organisms acquired a group A infectio



igure 3. Group A streptococcal polysaccharide antibody levels in Alaska Eskimos compared ith other populations.

ABLE V. Type Specific Antibody Geometric Mean Titers — Alaska January 27, 1971.

	Village	
	Stebbins	Nunapitchuk
M-type 1	31	46
M-type 2	110	92
M-type 4	284	135
M-type 5	10	10
M-type 9	382	240
M-type 12	1254	1105

nd of four children found to have group A organisms three subsequently ost that infection and acquired group C organisms. No persons have had ultures positive for both group A and group C organisms at the same time.

During the three month period, only 10 persons in Nunapitchuk and six persons in Stebbins were cultured by the health aides because they complained of a sore throat. Of these 16 cultures, five persons (31 %) were positive for group A organisms.

Figure 3 compares the levels of antibody to group A streptococcal polysaccharide for both villages with those from other populations. Table V shows the geometric mean titers of type-specific antibody found in both villages in January.

Of 96 Nunapitchuk children tested, one had hematuria. This child whose culture had not been taken when scheduled was subsequently found to be positive for group A organisms. He was hospitalized and diagnosed as having resolving glomerulonephritis. No cases of acute rheumatic fever were discovered in either study village. However, in June a child from a village near Nunapitchuk was hospitalized with this diagnosis.

Discussion

A comparison of the culture results for the mass culturing periods and the weekly school samples shows that the rotating 25 per cent random sample was effective in tracking group A and M-type prevalence. Previous non-epidemic samplings performed in Bethel, Alaska, showed an average prevalence of group A organisms of 18.6 per cent, a value similar to levels found in many other geographic locations. In this study, group A levels were found to be unusually low in Stebbins in the face high group C prevalence.

Two periods of high group A prevalence occurred in Nunapitchuk. The first epidemic in this village, believed to be caused by M-type 1 organismis, was in progress in January when the study began. All persons with positive cultures were treated. This, along with weekly treatment of positives, was probably responsible for the reduction of prevalence to below five per cent in March. The second epidemic, caused by M-type 6 organisms, appears to be related to the probable introduction of the organism from outside the village. There were logistical delays of 23 and 15 days between the culturing and treatment of two siblings who were the first children detected with M-type 6 cultures. When it was verified that an epidemic was occurring, mass prophylaxis of school children was recommended and this was performed on May 13.

Serologic studies in both Eskimo villages revealed levels of antibody to group A polysaccharide higher than those previously reported. This non protective antibody is accumulative and reflects previous exposure to group A infection. Although the group A prevalence in Stebbins was quite low during the period of observation, the group A antibody levels in both villages are retrospective evidence of considerable experience with this organism. Since type-specific antibody titers do not persist indefinitely, it is not surprising that the levels measured in sera drawn in January in both villages are similar to those found elsewhere.

The rheumatic fever frequency in a population following a streptococcal epidemic has been thought to be three per cent of untreated infections. Therefore, it is likely that the original treatment of positives and the mass prophylaxis during the M-type 6 epidemic have prevented several cases. If the time between culturing and treatment is shortened, it should be possible through systematic treatment of positives to more consistently reduce group A prevalence to below five per cent and thus eliminate the need for mass prophylaxis.

Summary

A surveillance program to detect streptococcal pharyngitis and reduce the incidence of acute rheumatic fever and glomerulonephritis was initiated in two remote Eskimo villages in Alaska between January and May, 1971. Throat cultures were obtained from all age groups at the beginning and end of the study period and from symptomatic persons and a rotating 25 per cent sample of the school children each week. In one village, treatment of each person found to be infected with group A organisms was attempted. Two epidemics were documented in this village within a four month period. Although several cases of rheumatic fever may have been prevented, a treatment delay of 15 to 23 days apparently allowed the epidemic spread of virulent M-type 6 organisms. In a second village, streptococcal prevalence was monitored in an attempt to define early epidemics and allow mass prophylaxis with penicillin. Although no group A epidemics occurred in this village and no treatment was performed, group C prevalence increased during the period of surveillance. Patient reporting of pharyngitis was not helpful in detecting persons with streptococcal group A infection in either village. The randomly selected 25 per cent samples adequately reflected group A prevalence in the total school population. Serum antibody studies conducted in both villages suggest greater previous exposure to group A organisms than reported elsewhere. Treatment of those villagers found to be positive for group A organisms might prevent epidemic spread if the time between culturing, laboratory reporting, and treatment is shortened.

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Key words: antibodies; epidemiology; Eskimos; glomerulonephritis; rheumatic fever;
public health; streptococcal infections.

MATERNAL & CHILD/HEALTH PROPOSAL TO THE STATE OF ALASKA.

Yukon-Kuskokwim Health Corporation incoperation with Indian Health Service Hospital, Bethel and the Bethel Itinerant Public Health Nurses.

December, 1974

M.C.H. PROGRAM
-Outline-

Although the infant death rate is subsiding the infant morbidity rate remains high and is perhaps the prime reason for an MCH Program. The high morbidity and mortality are from infectious diseases such as viral pneumonias, bacterial meningitis, otitis, strep throat and bacterial pneumonias. Overcrowded and inadequate housing compounds the problem of the spread of infectious diseases. Inferior nutrition which is manifest in nutritional anemias, particularly iron deficiency anemia, has been reported to be up to 50% of all school children in some villages. There is inadequate patient understanding of intercurrent illnesses and in treatment of simple and more complicated diseases. Patients are unable to participate in caring for themselves because they have a significant lack of understanding of their own disease process and of the medications which are prescribed for them. Children with chronic diseases are sometimes lost to follow-up because parents did not understand the importance of medical follow-up for these conditions and because of a diversified medical system with an inadequate method for monitoring chronic illnesses in children. All of these problems result in increased hospitalization. The Bethel area has a high admission rate of 724 patient days per thousand persons ages 0-14. This is triple the US average. The hospitalization rate of children 0-5 is 10 times the rate experienced by the Kaiser Permanente Health System in California.

Maternal health, too, is below the norm. In a prenatal survey table 10&11 by the State of Alaska in 1973, it was noted that women hospitalized in the I.H.S. hospitals and women on public assistance have fewer prenatal visits before the third trimester of pregnancy. Indeed, there are many mothers who have delivered at Bethel hospital who have had no prenatal care in the first two trimesters of their pregnancy. Their first physical examination is usually conducted in the outpatient department of the hospital prior to their entering the Prematernal Home. This is usually 4 weeks or less before their estimated date of confinement.

There appears to be a greater number of high risk obstetrical patients in this area as compared to other areas. In July, of 1974, there were 65 persons classified as high risk. This accounted for 61% of the 107 prenatal patients at that time. More recently, the percentage of high risk prenatal patients has been approximately 52%. There are a large number of grand multiparous women who have had more than five pregnancies who are designated high risk patients. There are also a large number of women who are over 30 who are still bearing children; they too, are high risk. There are a significant number of women who have had previous problems with deliveries. Problems such as: breach presentations, premature births, toxemia and previous abortions are classified as high risk and are frequently found in the Bethel area prenatal patient population. Another major group of patients who are determined to be high risk are those that have postpartum complications. Postpartum bleeding is seen with particular frequency in grand multiparous women.

III. PRESENT MCH PROGRAM

In order to deal with the high infant mortality and morbidity and the large number of high risk pregnancies that exist in the Bethel Service Unit, a coordinated effort was undertaken by the PHS Hospital, YKHC, and Bethel Itinerant Nursing to try to respond to these needs. A Maternal & Child Health Program was established (See appendix ii outline of MCH System). It is coordinated by a Nurse Midwife who reviews charts of all pregnant patients and assigns risk according to the previous history and physical exam.

This history and PE may be done by the health aide or the itinerant nurse. Each month the health aide measures blood pressure, weight, hemoglobin and does a dip stick urinanalysis on pregnant patients in the village. She then sends the monthly report to the MCH Coordinator who reviews the findings. Any discrepancies or problems are brought to the attention of a doctor or a consultant in Anchorage and appropriate measures are taken to correct the deficiencies. Well babies are examined in the village. Results are sent to the MCH Coordinator who reviews them. Any problems are discussed with the pediatrician and appropriate actions are taken. One of the actions is to refer prenatal patients or well babies to the Public Health Nurse for further evaluation.

The Public Health visits the village about 3 or 4 times a year and administers follow-up care to these patients. In addition, she teaches health aides to conduct Well Baby and Prenatal examinations. Prenatal education is given in Bethel by the Public Health Nurse, by the MCH Coordinator and by the OB Nurse to ladies who are waiting in Bethel to have their babies. These educational sessions are given at the Prematernal Home, Hospital O.B. Ward, and also are given by the Bethel P.H.N. and are open to all who come.

Some MCH services are available in the hospital. Outpatient visits for prenatal care and consultations with doctors here or with obstetrical specialists in Anchorage are available in Bethel. Delivery of routine pregnancies and postpartum care is given in the hospital. The Public Health Nurse holds clinic in one of the buildings downtown. All Bethel mothers take their babies for Well Baby exams at this location. Bethel high risk infants are followed by the PHN and M.C.H. Co-ordinator.

Other MCH services are available in the village. Many of these services are administered by the PHN in the form of prenatal examinations and Well Baby follow-ups. The doctor visits the village once a year and when he is there, he will do prenatal examinations, also. The Female Care specialist visits the village periodically and provides contraceptive information and does physical examination of women. The health aide is the primary care person in the village but only a few of them are able to do the prenatal examination and Well Baby follow-ups. Most of their previous training has been in the area of acute care many are not equipped to deal with patient follow-up or with preventive Maternal & Child Health care, nor are they equipped to deal with patient education.

IV. UNMET NEEDS IN THE VILLAGE

1. Health aides' education concerning maternal and child health, specifically, Prenatal & Well Baby clinics.

2. Health aides' emphasis on early child care, ages of 0-5, concerning nutrition, RX-ing infections, normal growth and development, screening of eyes, ears, hemoglobin, height, weight and head circumference, and immunizations.

3. Getting more services or more health aide instructions into the villages.

4. Working out the administrative problems of McGrath PHN who covers upriver Bethel villages.

5. Village based education, teaching people how to take care of themselves in acute and chronic situations, when to go to the doctor, what the best practices are concerning nutrition, child rearing, child spacing, contraception, and general health education.

V. UNMET NEEDS IN BETHEL

1. The outpatient department is under staffed and crowded. More nurses are needed to deal with the increased load of prenatal patients and also of pediatric patients.

2. In-service MCH training for obstetrical nurses, LPN's, aides, physicians, health aide trainers, & P.H.N.'s Specifice MD training in ambulatory prenatal care, in obstetrical deliveries and in ambulatory pediatrics is required.

3. Training for Prematernal Home aides so that they are instructors and not only caretakers.

4. Adequate identification and follow-up of high risk infants and children of pre school age.

VI. GOALS OF THE MCH PROGRAM

In order to reduce the infant mortality and morbidity and in order to insure that prenatal women are kept in the best state of health during their pregnancy, the following goals have been established:

1. Early identification of pregnant women: 75% of pregnant women should be identified by the first trimester.

2. Determination of high risk pregnancies within 2 weeks of the above identification.

3. Insuring all prenatal patients have adequate follow-up care through the development of a plan of care for each prenatal patient.

4. Reducing home deliveries by encouraging pregnant women to come to Bethel hospital for delivery.

5. Postpartum and Well Baby follow-up care provided to 100% of all patients.

6. Education of patients in regards to their own health care, their children's health care, how to deal with acute and chronic illnesses and how to achieve the best state of nutrition possible with special attention to prenatal education.

7. Training health aides in Maternal & Child Health; specifically prepartum care, Well Baby Care and Health Education. It is hoped that health aides will be able to conduct adequate prenatal exams, adequate Well Baby exams, and it is hoped that health aides will be able to educate the people in their villages as to how to deal with problems concerning nutrition, acute and chronic illnesses and other problems of early childhood.

8. Training for health aides to manage emergency obstetrical problems and childhood emergencies. These problems would include deliveries, toxemia of pregnancy and also medical emergencies such as meningitis in children.

9. Development of an adequate record system in Bethel and in the village for prenatal, post partum, and childhood problems. Special emphasis on high risk prenatal and child health file.

10. Development of an effective co-ordinating and management system to insure that all necessary services are provided in a timely manner.

11. Establish a data base from which the M.C.H. program can be evaluated periodically.

12. There are additional goals which women have expressed since the program began. They are the following:

    (a) An increased awareness of information concerning family planning, female health and prenatal information. Specifically desired is knowledge of how to space children for batter maternal and child health.

    (b) Signs and symptoms of female cancer and other common female health problems.

    (c) Identification of pregnancy, self health surveillance activities.

    (d) Preparation of family prior travelling to the prematernal home. Patients have expressed the desire for support for their families while they're in the Prematernal Home waiting to have their babies.

    (e) Patients have expressed the desire to have pelvic exams done by females and to have their deliveries done by females.

VII. PROPOSAL

YKHC has funded the MCH coordinating and training functions of the inter-agency MCH Program for the past six months. It was the intention of the Board to establish it as a demonstration project with the intent of obtaining permanent funding from other sources. The YKHC program has specifically addressed the needs for coordination, for training, for identification of high risk patients, for developing a plan of care, and for monitoring mother and child development. A detailed description of the activities that will be performed by the YKHC segment of MCH program are shown in Appendix iii. Our proposal to the State is to fund our existing services as shown in Appendix iii and to expand it to include a full time equivalent itinerant PHN.

The expansion of the program to include another PHN position for the Bethel Servcie Unit area is mandatory to resolve the needs at the village level. Specifically to increase training of health aides in MCH activities and to allow more visits to villages by PHN's to assist the health aide in the provision of more services to children from 0-1 and to those children who continue to be high risk patients after age 1. The present training in Bethel is at a maximum given the aides rate of learning, the number of aides that can be taught at one time and the back log of aides who still have to receive the basic course. Additional training will have to take place in the village. Rather than having one person going around to train health aides in MCH it is proposed that YKHC through contract would hire a PHN who would work under the direction of the PHN nurse supervisor. In exchange the entire itinerant PHN field staff would be given additional time to spend on MCH training. Secondly the addition of a PHN would allow more frequent village visits giving the PHN's more time to focus on early childhood illnesses. The PHN already provide a number of MCH services and health training (see Appendix iv duties of PHN's). An additional PHN is required to serve the 50 villages in the Y-K area. The addition of another PHN rather than an MCH Field Trainer would not fractionate care but expand on the existing service system. From an administrative point of view the MCH Coordinator would work through a AD-HOC management group consisting of the supervisor of the Bethel PHN, and the clinical director of the IHS and the YKHC physician.

All field MCH training done by the PHN's would be coordinated by the MCH Coordinator. Initially the field MCH training could focus on maternal care. As the health aides acquire the skills necessary for maternal care the field MCH training could shift to infant care as diagrammed below:

MATERNAL CARE & EDUCATION	EARLY CHILDHOOD CARE & EDUCATION
a. Signs of pregnancy	a. Infant feeding and child nutrition
b. Surveillance - Blood Pressure - Weight - Urine - Swelling - Measure Womb - Hemoglobin	b. Child Raising
c. Explain minor disorder	c. Well Child Examination
d. Prenatal Education	d. High risk Children Identification and monitoring
e. Prepare family & mother for Prematernal Home & their separation	e. Immunizations
f. Postpartum Exam	f. Dental Care
g. Emergency Birth Procedures	

VIII. ESTIMATED BUDGET

In order to provide the services outlined in the proposal the following budget will be required:

PERSONNEL

M.C.H. Co-ordinator/Nurse Midwife	$19,428
P.H.N. (Level III)	19,428
Admin. Assistant (1/2 Time	5,579
Sub-total	$44,435
Fringe 13%	5,775
Total	$50,210

EXPENDABLE SUPPLIES

Office Supplies $100/Person	$200
Patient Records M.C.H.	I.H.S.
Patient Records P.H.N.	State
Health Supplies & Medications M.C.H.	I.H.S.
Health Supplies & Medications P.H.N.	State
Audio-Visual Health Education Films for ($250/Film) Prematernal Home, Hosp. & Villages.	$500
Sub-total	$700

CAPITAL EXPENSES

Office Furniture:

1.	Space Saver Desk (1)	$35
2.	Chairs (2)	$60
3.	Desk Lamp	$25
4.	File Cabinet 1 P.H.N. (2 Draw)	$110
	1 M.C.H. (2 Draw)	$110

Medical Furniture & Equipment

1.	P.H.N. Field Kit (Estimate)	$1000
2.	Clinical M.C.H.	I.H.S.
	Sub-total	$1340

TRAVEL

P.H.N. Field Clinics 7 Villages (3x)	
Air	2100
Perdiem (4d)	3360
M.C.H. Travel to Village 3 Trips	
Air	300
Perdiem (4d)	480
P.H.N. Conf. Training 1 Trip	
Air	200
Perdiem (5d)	215

Patient Travel 1st Prenatal Exam. to High Risk Patients (50% of 350 Births x $56)	$9800
Moving for New P.H.N.	700
Sub-total	$17,155

OTHER

Housing:

1. M.C.H. Co-ordinator	3000
2. P.H.N.	3000
3. Adm. Assist	1500

Office Space Rent:

M.C.H./F.H.P./P.H.N.	3000
Clinical Space:	I.H.S.
Moving (New P.H.N.) 2,500 Lbs. or $3,000 Which ever is less	3000

Malpractice Insurance:

1. M.C.H./Nurse Mid-Wife	260
2. P.H.N.	120
Sub-total	$13,980

ADMIN. OVERHEAD

Admin. (Contract Negotiation and management)	2,000
Postage	200
Zerox	200
Telephone	250
Total	2,650
	$85,935

APPENDIX I

THE BETHEL SERVICE AREA

The region which the Bethel Service Unit covers is an area of 75,000 square miles. The Villages we are dealing with are small in population and the number of Villages still remaining is large. There are 14 thousand natives in this region consisting mostly of Yupik Eskimos. There is a small number of Indians in the Northeastern part of the service unit. 31% of the total population are between the ages of 5 and 14 years old. 14% of the total population are less than 5 years old. The average growth rate of the Bethel Service Unit is 1.3% annually. If the population continued to increase at the same rate as in the past (1.3%), the population will exceed 16,500 by 1980. The median income for the whole Bethel Service Unit is $3,748 annually. The labor force of the region is 2,172 people which is 15% of the total population. 14% of the total labor force is unemployed. Public service or government employees account for 16% of the individuals employed in Alaska, but 25% of the employed population of Bethel. Education is also a big source of employment for Bethel area residents, with about 19% of the employees in the area in education. The other large sources of employment in the area are health and welfare services and religious and non-profit organizations.

Transportation is Difficult . . .

There is one hospital in the Bethel Service Unit which is located at Bethel. It can hold 42 patients at any one time. This hospital serves the Natives in 75,000 square miles in which there are over 14 thousand people. The hospital is understaffed, with seven doctors and nurses. The villages are visited an average of once annually by a doctor. Most of the work done in the villages is handled by the health aides. The bigger villages have small clinics from which the health aides can work out of. Public health nurses visit villages on an average of three times a year to assist the aides, to train them and to provide preventive health services.

All of the patients have to be flown into Bethel either by charter or scheduled airline services. The average cost of travel between Bethel and a village is $ 56.00. Transportation and communications problems prevent good use of the hospital at Bethel. The birth rate per 1,000 has been declining and was at 26 per 1,000 in 1970. That still exceeds the rate for the United States and the State of Alaska. The death rate is 4.9 per 1,000 which is lower than the 9.5 for U.S. as a whole, but this low figure is more of a reference to the numerous young in age rather than good health. For the infant death rate of less than 1 year olds, the Bethel area is still higher than Alaska and the U.S. as a whole. Accidents are the major causes of death in the service unit. Among diseases the next highest cause of death is malignant neoplasms, but accidental death is 3 times higher than that. Other diseases commonly reported in the area are: otitis media, pneumonia, colds and infections.

THE YUKON KUSKOKWIM HEALTH CORPORATION

The Yukon Kuskokwim Health Corporation (YKHC) was originally started in 1969 and has been funded by OEO until May of 1973 when it was shifted over to HEW. YKHC is controlled by 25 board members of which 17 are Yupik Eskimos. The purpose of YKHC is to provide better health care and to bring about consumer control of health care. It functions through 13 departments which are:

1) Community Liaison,
2) Community Health Representatives,
3) Health Aide Education
4) Dental Health Educators,
5) Eye Care
6) Mental Health
7) Administration

8) Female Health Practitioner

9) Health Education

10) Streptococcal Surveillance Program

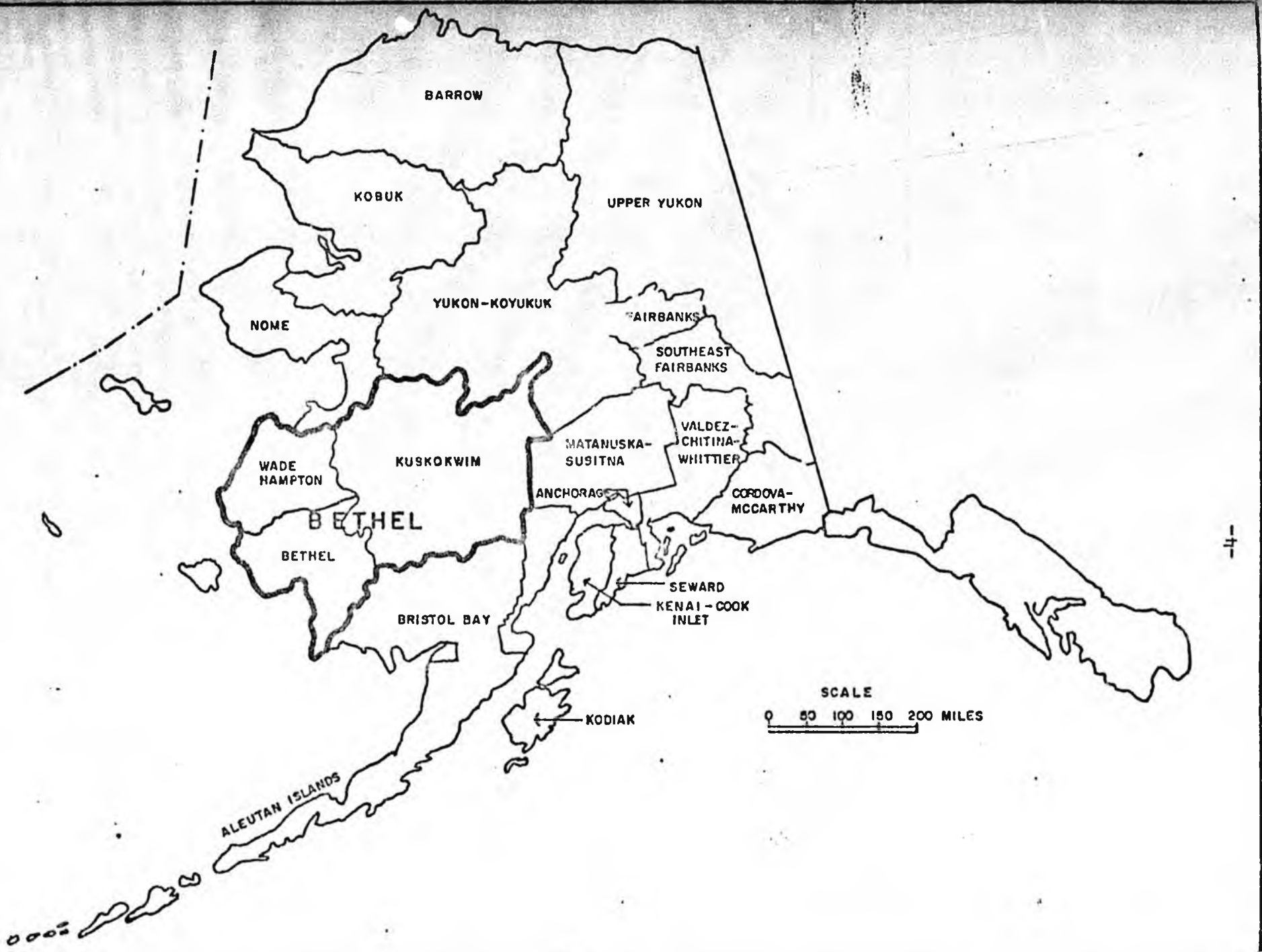
11) Maternal and Child Health

12) Prematernal Home

13) Child Care

The Training of Health Aides . . .

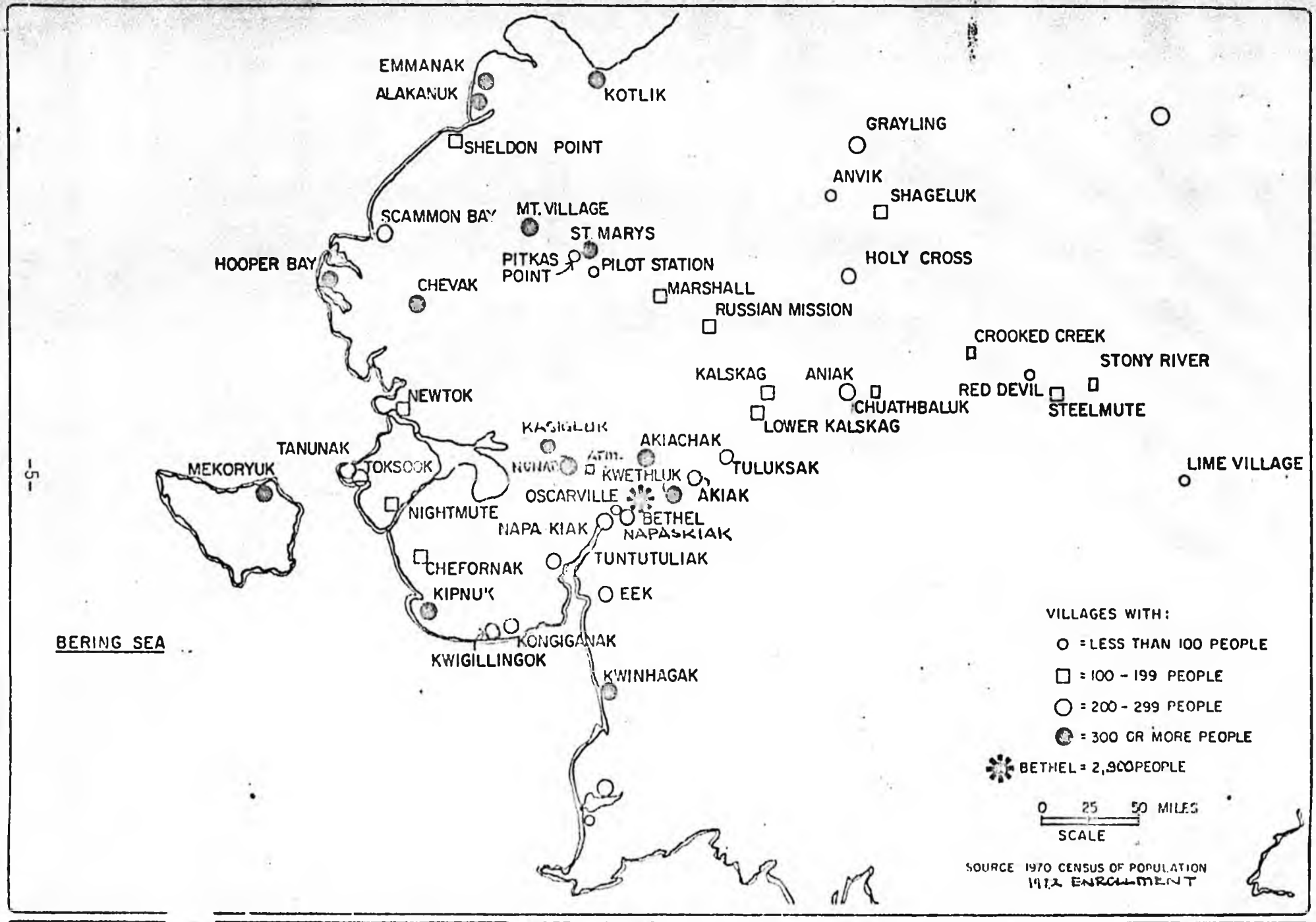
Since 1970, YKHC Field Trainers have been involved in training health aides. The goal at that time was to give basic care knowledge to one aide in each of the 49 native villages. To learn the basic care knowledge the aide must participate in 9 weeks of village and classroom training spread over a six month period. At present, 29 out of 59 aides have received this training. This means that 33 out of the 49 villages in the service unit now have a trained health aide. By the end of next fiscal year (June 30, 1976), it is projected that all the villages will have an aide who has received the basic care knowledge training. Concurrently with the introductory courses the training will continue in specific areas to those who have had the first nine weeks. There is 1 aide per 300 people plus one secondary aide in the villages, or 2 aides per 600 people.



BETHEL SERVICE AREA

LOCATION MAP

MAP 1



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BETHEL SERVICE AREA

POPULATION DISTRIBUTION 1972

MAP 2

TABLE 1
SELECTED DEMOGRAPHIC DATA
BETHEL SERVICE AREA
1970

COUNTY CENSUS DIVISION	Population		Ethnicity						Median Age	Average Number of Persons house
			White		Black		Other			
	Number	Percent	Number	Percent	Number	Percent	Number	Percent		
BETHEL (C.C.D.)	7,579	100.0	747	9.9	24	0.3	6,808	89,8	17.2	5.70
WADE HAMPTON (C.C.D.)	3,917	100.0	321	5.9	12	0.3	3,674	93.8	16.2	5.88
KUSKOKWIM (C.C.D.)	2,306	100.0	584	25.3	35	1.5	1,687	73.2	19.9	4.73
BETHEL SERVICE AREA – TOTAL	13,802	100.0	1,562	11.3	71	0.5	12,169	88.2		
ALASKA	300,382	100.0	236,767	78.6	8,911	3.0	54,704	18.2	22.9	3.52

Notes: C.C D. - County Census Divisions

Source: U. S. Department of Commerce, Bureau of the Census
1970 Census of Population, General Social and Economic Characteristics, Alaska, PC (1) - C3

TABLE 2

MARITAL AND FAMILY STATUS OF RESIDENTS OF BETHEL SERVICE AREA, 1970

	Number	% of Total
Number of Families	2,190	100.0%
With Children Under 18	1,691	77.2
With Children Under 16	1,062	48.5
Number of Individuals		
Total	13,802	100.0
Living in Households where they are not related to the head of the household	202	1.5
Number of Males Over 14 Years	4,320	100.0
Married	2,266	52.5
Single	1,849	42.8
Other	205	4.7
Number of Females Over 14 Years	3,567	100.0
Married	2,002	56.1
Single	1,254	35.2
Other	311	8.7

Source: U.S. Census of the Population, 1970.

TABLE 3

ECONOMIC INDICATORS[a]
BETHEL SERVICE AREA
1970

	BETHEL SERVICE UNIT				ALASKA
	Bethel *	Wade Hampton*	Kuskokwim*	TOTAL	
Family Income					
Per Capital Income	$1,336	$1,069	$1,670	-	$3,456
Median Income	4,085	2,655	3,744	-	12,296
% under $3,000	40%	45%	41%	42%	9%
% over $10,000	23%	9%	22%	18%	62%
Housing					
Median Rent	$ 108	$ 108	$ 74	-	$ 171
Median Home Value	$ 5,000	$ 5,000	$ 5,000	$5,000	$22,700
Civilian Labor Force[b]	1,380	450	341	2,191	98,286
Employed	1,208	400	275	1,883	89,236
Unemployed[b]	192	50	66	308	905
%	(7%)	(1%)	(20%)	(14%)	(9%)
Public Assistance					
% of Families with public assistance or public welfare.	33%	25%	20%	29%	5%

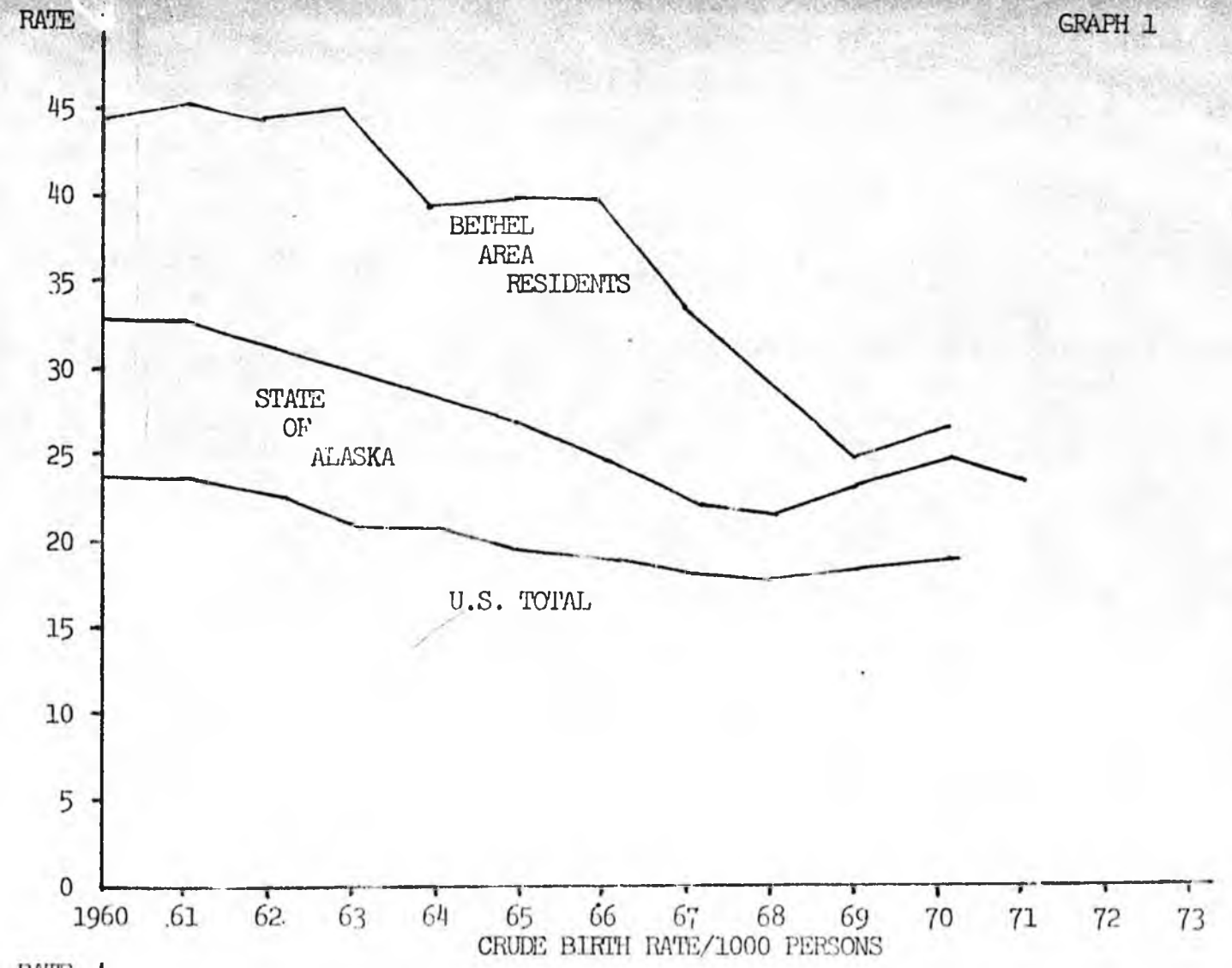
* County Census Divisions

Notes: a) Sample survey of 20% of 1970 census returns
b) 16 years and older, male and female labor force

Source: 1) U. S. Department of Commerce, Bureau of the Census
1970 Census of Population, General Housing Characteristics, Alaska, PC (1)-B3

2) U. S. Department of Commerce, Bureau of the Census
1970 Census of Population, General Social and Economic Characteristics, Alaska PC (1)-C3.

GRAPH 1


RATE
45
40
35
30
25
20
15
10
5
0
BETHEL AREA RESIDENTS
STATE OF ALASKA
U.S. TOTAL
1960
61
62
63
64
65
66
67
68
69
70
71
72
73
CRUDE BIRTH RATE/1000 PERSONS

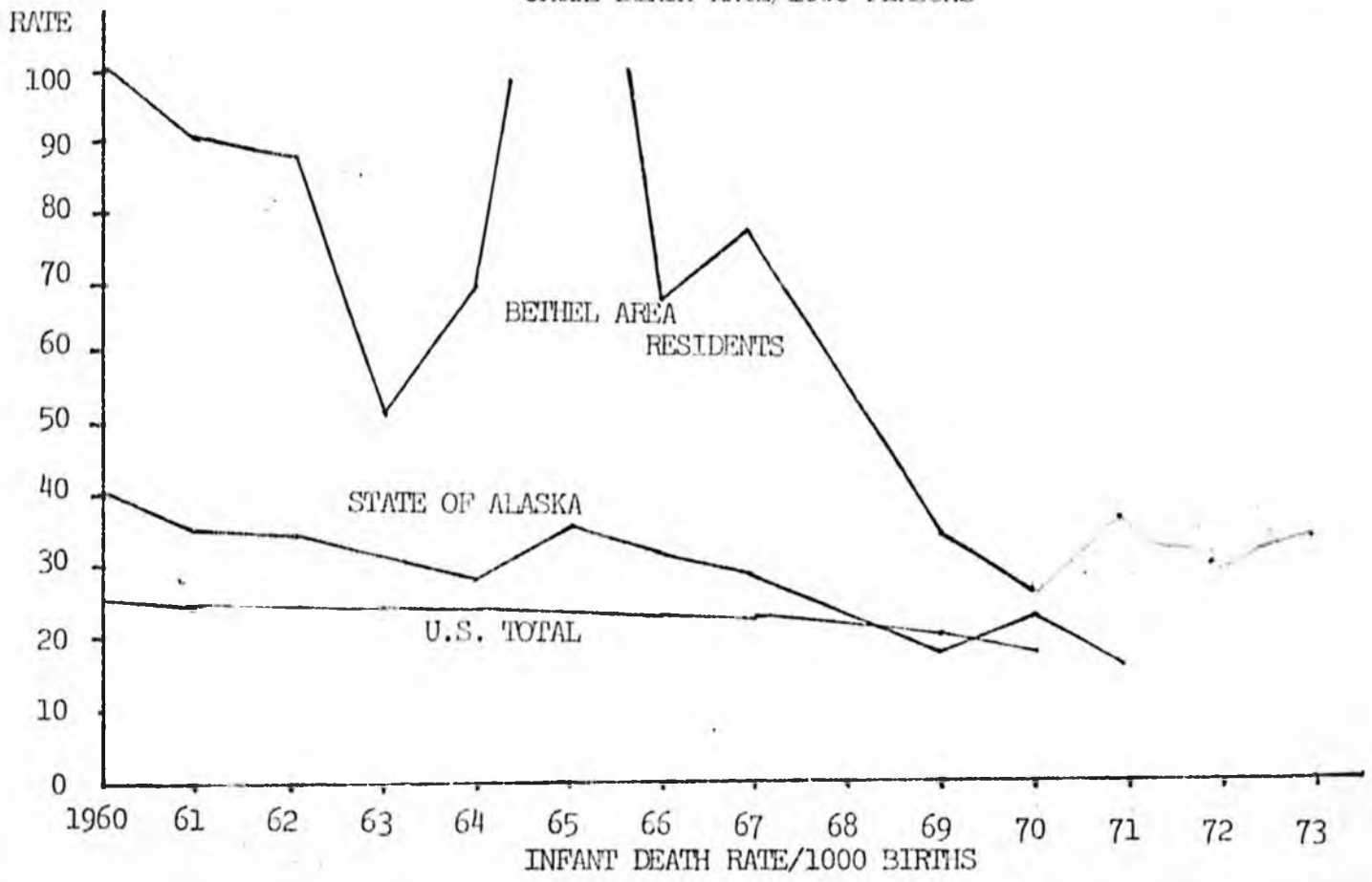

RATE
100
90
80
70
60
50
40
30
20
10
0
BETHEL AREA RESIDENTS
STATE OF ALASKA
U.S. TOTAL
1960
61
62
63
64
65
66
67
68
69
70
71
72
73
INFANT DEATH RATE/1000 BIRTHS

TABLE 4
POPULATION, BIRTHS, AND DEATHS
BETHEL SERVICE AREA, 1960 - 1970

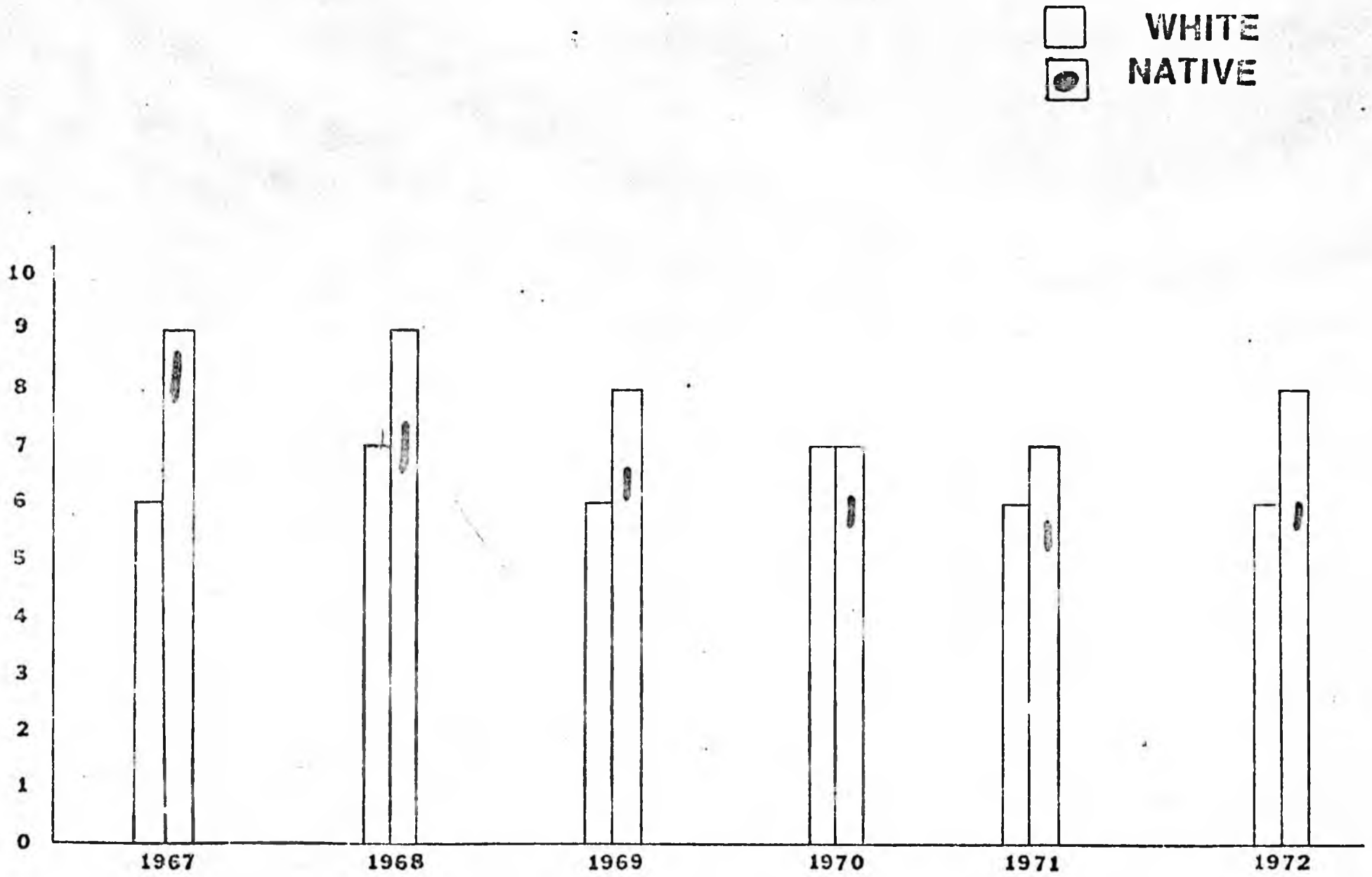
YEAR	ESTIMATED MID-YEAR POPULATION[1]	LIVE BIRTHS		CRUDE DEATHS		INFANT DEATHS	
		Number	Rate[a.]	Number	Rate[a.]	Number	Rate[b.]
1960	11,000	492	44.7	102	9.3	49	99.6
1961	11,287	534	47.3	123	10.9	49	91.8
1962	11,574	520	44.9	117	10.1	46	88.5
1963	11,861	539	45.4	107	9.0	28	51.9
1964	12,148	482	39.7	96	7.9	34	70.5
1965	12,435	501	40.3	139	11.2	73	145.7
1966	12,722	517	40.6	103	8.1	35	67.7
1967	13,009	438	33.7	102	7.8	34	77.6
1968	13,296	379	28.5	76	5.7	21	55.4
1969	13,583	336	24.7	76	5.6	12	35.7
1970	13,870	367	26.5	68	4.9	9	24.5

Notes:
1. Population estimate is straight line interpolation between 1960 and 1970 mid-year population estimates.
a. Rate per 1,000 mid-year population.
b. Rate per 1,000 live births.

Source: Alaska Department of Health & Social Services.

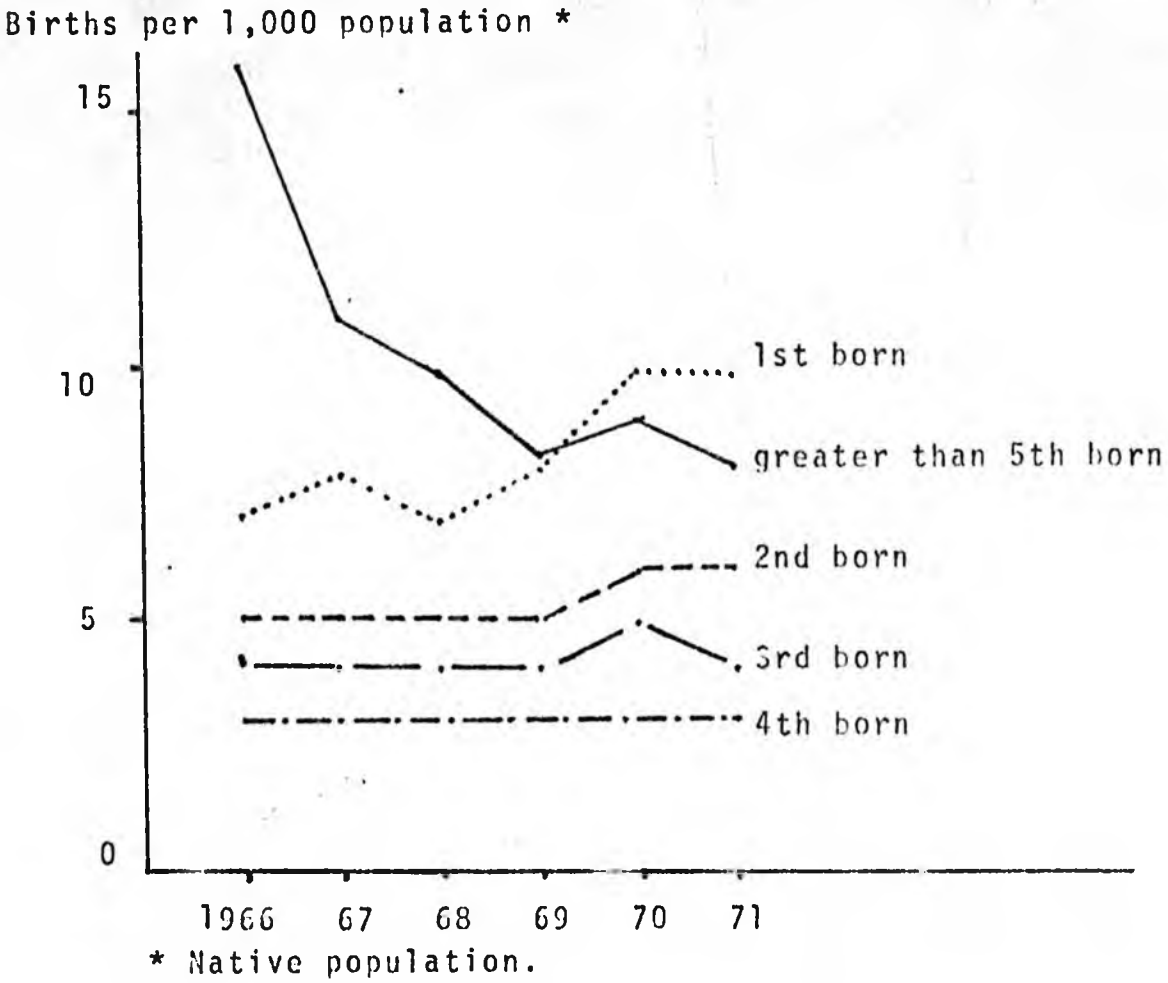
PERCENT OF BIRTHS 2500 GRAMS OR LESS
VERSUS
TOTAL NUMBER OF BIRTHS IN RACIAL CATEGORY

GRAPH 2



GRAPH 3

BIRTH RATE AND ORDER OF BIRTH



* Native population.

TABLE 5

FERTILITY RATE 1970

-COMPARITIVE FIGURES-

AREA	BIRTHS/1,000 WOMEN AGES 15-44
1. BETHEL TOTAL*	150.3
Native	155.8
White	65.0
2. STATE OF ALASKA*	
White	100
Native	158
3. U.S. TOTAL**	87.6

*Source State of Alaska Statistical Summary of Vital Statistics

**U.S. DHEW, Annual Summary for U.S. 1970, HSM 72-1121, September 21, 1971

TABLE 6

PEDIATRIC HOSPITALIZATION
-OPD AND INPATIENT-
BETHEL SERVICE UNIT HOSPITAL

	1968	1970	1973
1. Estimated Population/Total	13,300	13,820*	14,233
2. Child Under 15 Est.			
Number	5,985	6,269*	6,689
Percent	45%	46%*	47%
3. OPD Medical Visits Under 15			
Number	14,260		8,206
Percent of Total	60%		32%
Rate/Person	1.1		.6
4. Pediatric Admissions			
Number	1,056		560**
Percent of Total	42%		36%
Rate/1,000 Population	176.4		83.7
5. Patient Days Pediatric			
Number	?		4,844**
Percent of Total	-		43%
Rate/1,000 Population	-		724

*Actual 1970 Information From 1970 U.S. Census

**28 Days - 14 Years

SOURCE: 1. 1973 Direct Inpatient on Request Form 21 and APC Request Report 9, IHS.

2. Bethel Service Unit Study, Program Analysis, July 31, 1969.

TABLE 7

PEDIATRIC HOSPITALIZATION
-COMPARITIVE STATISTICS-

	BETHEL AREA[1]	KAISER N.C.R.	KAISER S.C.R.	ORANGE COUNTY	U.S. TOTAL
YEAR	1973	1969	1970	1970	1970
AGE GROUP	0-14	0-14	0-14	0-14	0-17
POPULATION SIZE	6,689	294,190	?	440,320	(?)
ADMISSION RATE/1000	83.7	40	4.1	55.7	70
PATIENT DAY RATE/1000	724	200	203	214	-
A.L.O.S.	8.6	5.0	4.9	3.9	-
O.P.D. RATE/PERSON	.6	-	.6	-	-

PEDIATRIC HOSPITALIZATION

AGE GROUP/PATIENT DAY RATE	BETHEL AREA	KAISER NORTH CALIF.
0-4 Patient Day Rate/1000	1,785	243
5-9 Patient Day Rate/1000	287	120
10-14 Patient Day Rate/1000		114

NOTE: 1. Excludes Hospitalization in ANMS. Therefore figures are low.

TABLE 8
LEADING CAUSES OF DE. I BY AGE GROUPS BY YEAR
BETHEL SERVICE AREA
1969

CAUSE OF DEATH EIGHTH REVISION NUMBER	TOTAL	DEATHS BY AGE GROUP			
		< 1 Yr.	1-14 Yrs.	15.64 Yrs	65+
All causes	76	12	25	16	23
Accidents (all types) 800-962	22	3	14	3	2
Malignant Neoplasma 140-205	9	0	1	5	3
Diseases of the Heart 410 443	7	0	3	4	0
Influenza and Pneumonia 480-483;490-493	7	1	1	0	5
Diseases of Early Infancy 760-776	6	6	-	-	-
Vascular Lesions, Central Nervious System 330-334	3	0	0	0	3
General Arteriosclerosis 450	1	0	0	0	1
Congenital Malformations 750-759	1	1	-	-	-
Suicide 963; 970-979	0	-	-	-	-
Other Circulatory Diseases (aneurysms, embolisms, thromboses) 441-458	0	-	-	-	-
Cirrhosis of the Liver 581.0; 581.1	0	-	-	-	-
Diabetes Mellitus 260	0	-	-	-	-
Emphysema 492	0	-	-	-	-
All Other Causes	20	1	6	4	9

Source: Alaska Department of Health and Social Services.

TABLE 9
LEADING CAUSES OF DEA.
BETHEL SERVICE AREA
1965, 1967, 1969

CAUSE OF DEATH EIGHTH REVISION NUMBER [a.]	1965		1967		1969	
	Number	Rate [1.]	Number	Rate [1.]	Number	Rate [1.]
All Causes [b.]	139	1117.8	102	784.1	76	559.5
Accidents (all types) 800-962	28	225.2	28	215.2	22	162.0
Malignant Neoplasma 140-205	6	48.3	8	61.5	9	66.3
Diseases of the Heart 410-443	13	104.5	10	76.9	7	51.5
Influenza and Pnuemonia 480-483;490-493	18	144.8	8	61.5	7	51.5
Diseases of Early Infancy [2] 760-776	6	48.3	13	99.9	6	44.2
Vascular Lesions, C.N.S. 330-334	1	8.0	2	15.4	3	22.1
General Arteriosclerosis 450	0	0	-	-	1	7.4
Congenital Malformations 750-759	5	40.2	4	30.7	1	7.4
Other Circulatory Diseases (aneurysms, embolisms, thromboses) 441-458	0	-	0	-	0	-
Cirrhosis of the Liver 581.0;581.1	1	8.0	0	-	0	-
Diabetes Mellitus 260	0	-	0	-	0	-
Emphysema 492	1	8.0	0	0	0	-

Notes:
1. Per 100,000 estimated mid-yeqr population
2. Per 1,000 live births
   a. International disease index
   b. By1969 rank

Source: Alaska Department of Health and Social Services

Table 10

Percentage Distributic . of Patients by Number of Medical Checkups and Date of First Checkup for Each Source of Payment for Hospitalization Prenatal Care Survey, Alaska, January-June, 1973

Date of First Checkup and Number of Checkups	Source of Payment						
	Self	Insurance	Govt. Hosp.	Pub. Asst.	Other	Not Reported	Total
Before 3rd Month	65.4	72.5	48.8	41.7	48.5	54.2	58.3
1-2	2.0	0.8	1.6	2.8	2.2	5.1	1.7
3-4	2.4	0.8	1.6	4.2	3.0	3.4	1.8
5 or more	59.3	70.0	43.2	33.3	42.5	45.7	53.6
Not reported	1.7	0.9	1.2	1.4	0.8		1.2
3rd-6th Month	33.1	26.5	45.7	43.0	43.2	28.8	37.2
1-2	0.7	0.2	3.8	2.8	3.7	1.7	2.1
3-4	3.7	0.8	4.8	9.7	6.7	1.7	3.7
5 or more	28.4	25.1	35.7	30.5	32.8	22.0	30.6
Not reported	0.3	0.4	1.4			3.4	0.8
7th Month or Later	1.5	1.0	2.8	11.1	5.3	3.4	2.5
1-2			0.6	2.8	1.5		0.4
3-4	0.3	0.2	1.3	6.9	3.0		0.9
5 or more	1.2	0.8	0.6	1.4	0.8	3.4	1.3
Not reported			0.3				0.1
Not Reported			2.7	4.2	3.0	13.6	2.0
0			2.1		2.2	8.5	1.4
1-2			0.1				0.1
3-4						3.4	0.1
5 or more			0.1				0.1
Not reported			0.4	4.2	0.8	1.7	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0