

H B

291

POSITION PAPER/Department of Health and Social Services

POSITION PAPER
HOUSE BILL NO. 291

For an Act entitled: "An Act providing for tuberculosis examinations and quarantines."

This Bill provides the Department of Health and Social Services with authority to require an individual suspected of having an active case of pulmonary tuberculosis to submit to an examination and to order the quarantine of a person with active pulmonary tuberculosis for a period of six months, when such action is necessary to preserve and protect public health.

While tuberculosis is not the enormous health problem it was in the 1950s, a large number of persons infected in earlier years are at risk of re-activation of their disease and of being capable of spreading the disease to others. Over the past ten years, new active cases have numbered between 75 and 100 cases per year, placing Alaska among the five states with highest incidence.

Most persons with active tuberculosis are highly motivated to comply with treatment recommendations intended to render them non-infectious and to inactive their infections. A very few people, however, refuse to submit to examination or to accept treatment recommendations. Such individuals are a hazard to themselves, their families, communities and the general public.

The existing authority of the Department to require examination, isolation or treatment of individuals with communicable disease who may threaten the health of the public is not clear.

It is expected that the authority contained in this Bill would be exercised infrequently. Based on past experience, the estimate is that orders for examination may be required three times per year. Quarantine orders would be used even less frequently, perhaps not even one per year as the public becomes aware of a statutory provision which could compel quarantine.

The Department anticipates that on the rare occasions when quarantine may be required, it would be accomplished by restricting the individual's movements within his or her own home.

The Department supports passage of this Bill. Over the past few years, many cases of tuberculosis could have been avoided, including one near-fatal infection, had the source of infection been prevented from spreading the disease to others.

Recommended by: E. S. Rabeau
E. S. Rabeau, M.D., Director

Date: March 31, 1983

Approved by: Robert London Smith
Robert London Smith, Ph.D.
Commissioner
Department of Health & Social Services

Date: 4/4/83

I. REQUEST
 Bill/Resolution No.: House Bill No. 291
 Title: "Tuberculosis examinations & treatment"
 Sponsor: Harbert
 Requestor: House HESS

II. FISCAL DETAIL
 Agency Affected: Health & Social Service
 Program Category Affected: Health
 ECU, Program of Subprogram(s) Affected:
 Communicable Disease Control

EXPENDITURES/REVENUES: (Thousands of Dollars)

	FY 83	FY 84	FY 85	FY 86	FY 87	FY 88
OPERATING	0	0	0	0	0	0
100 PERSONAL SERVICES						
200 TRAVEL						
300 CONTRACTUAL						
400 COMMODITIES						
500 EQUIPMENT						
600 LANDS & STRUCTURES						
700 GRANTS, CLAIMS, ETC.						
TOTAL OPERATING	0	0	0	0	0	0
CAPITAL	0	0	0	0	0	0
REVENUE	0	0	0	0	0	0

FUNDING: (Thousands of Dollars)

	FY 83	FY 84	FY 85	FY 86	FY 87	FY 88
GENERAL FUND						
FEDERAL FUNDS						
OTHER (Specify Source)						
	0	0	0	0	0	0

POSITIONS:

	FY 83	FY 84	FY 85	FY 86	FY 87	FY 88
FULL-TIME						
PART-TIME						
TEMPORARY						
	0	0	0	0	0	0

III. SOURCE OF FUNDS TO OFFSET FISCAL IMPACT OF BILL:

IV. ANALYSIS: Attach a separate page for any Analysis

Prepared By: Dean F. Tirador, H.D. Phone: 465-2113
 Division: Public Health Date: 3/30/83
 Approved by Commissioner: Robert Gordon Smith Date: 4/4/83
 Department: Health and Social Services

Distribution:

- Original to Legislative Finance
- Copy to Office of Management and Budget (for Legislature introduced bills)
- Copy to Department (for Governor introduced bills)
- Copy to Sponsor
- Copy to Requestor (if different from Sponsor)

3/8/83

HOUSE BILL 291

MY NAME IS JIM FARMER, AIDE TO REPRESENTATIVE HURLBERT.

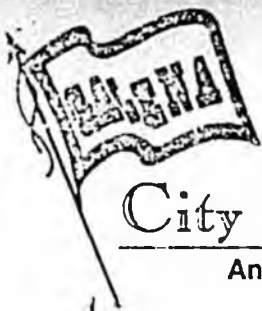
THIS LEGISLATION WAS INTRODUCED BY REQUEST.

IN YOUR PACKET IS A LETTER AND RESOLUTION FROM THE CITY OF GALENA OUTLINING THEIR PROBLEM. I'M HAPPY TO SAY THE INFECTED PERSON WAS FINALLY PERSUADED TO ENTER A COURSE OF TREATMENT, BUT THIS DOES NOT RELIEVE THE UNDERLYING PROBLEM OF SEGREGATING THE INFECTED FROM THE UNINFECTED. AS THE POSITION PAPER FROM DEPARTMENT OF HEALTH AND SOCIAL SERVICES SHOWS THE INCIDENCE OF NEW ACTIVE TB CASES IN ALASKA APPEARS TO BE CLIMBING. THE ONE INDIVIDUAL IN GALENA CAUSED ABOUT 39 OTHER PEOPLE TO NEED EXAMINATION OR TREATMENT.

MOST OF YOU MAY REMEMBER OR MAY HAVE HEARD OF THE MASSIVE PROBLEM ALASKA HAD IN THE PAST WITH TUBERCULOSIS. WE CANNOT ALLOW THIS TO HAPPEN AGAIN.

THIS LEGISLATION WILL HELP ENSURE THE MEDICAL PEOPLE A TOOL THAT MAY BE NEEDED TO SLOW OR REDUCE THE INCIDENCE OF TB WITHIN THE STATE.

THANK YOU.



City of Galena

Antoski Hall • P.O. Box 149 • Galena, Alaska 99741 • Telephone (907) 656-1281

December 20, 1982

Rep. Vernon Hurlbert
Pouch V
Mailing Stop 3100
Juneau, AK 99811

Dear Rep. Hurlbert,

The City Council of Galena is very concerned about the lack of legislation to control communicable disease in Alaska. Here in Galena we have currently and have had in the recent past outbreaks of tuberculosis. The problem becomes particularly serious when an individual refuses treatment. This individual can then infect others, and the community has no protection as there is currently no law to force the individual to seek treatment (according to our attorney, Mary Nordale, and as we understand it from the opinions of the State Attorney General's office).

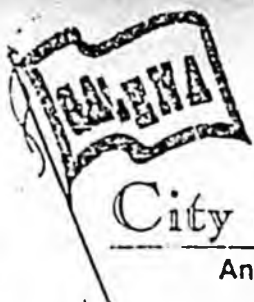
Tuberculosis is a disease that can be eliminated if infected individuals follow-through on treatment. We urge the State to provide legislation to give the necessary basis to force individuals with communicable diseases, particularly tuberculosis, to seek treatment.

Enclosed is a resolution from the Galena City Council supporting this issue.

We appreciate your attention to this problem and interest.

Sincerely,

Pat Myers
City Manager



City of Galena

Antoski Hall • P.O. Box 149 • Galena, Alaska 99741 • Telephone (907) 656-1281

Resolution 82-22

A RESOLUTION ENCOURAGING LEGISLATION SUPPORTING ENFORCEMENT OF TREATMENT OF COMMUNICABLE DISEASES, PARTICULARLY TUBERCULOSIS, IN ALASKA.

WHEREAS, the City Council of Galena is the duly authorized governing body of the City of Galena, and;

WHEREAS, the City of Galena has experienced an ongoing problem with tuberculosis and a recent outbreak of the disease, and;

WHEREAS, the City is experiencing an incident where one individual who has active tuberculosis is refusing treatment, and;

WHEREAS, the nature of the tuberculosis disease is that it can be highly contagious and endanger a whole community, and;

WHEREAS, the disease can be prevented with adequate treatment, and;

WHEREAS, there is no legislation to enforce treatment, and;

WHEREAS, the City of Galena has a strong committment to protect the citizens, and;

NOW, THEREFORE, Be It Resolved That the City Council of Galena requests the legislators to enact legislation to require individuals to obtain treatment for tuberculosis and other communicable disease.

PASSED AND APPROVE this 16th day of December ,1982

ATTEST:

Vernon White
Mayor

Pat Myers
City Manager

18.35.135 INVESTIGATION AND EXAMINATION OF SUSPECTED TUBERCULOSIS
CASES - ISOLATION - QUARANTINE.

(1) Whenever the Public Health Medical Officer shall determine on reasonable grounds that an examination of any person is necessary for the preservation and protection of the public health, he shall issue a written order directing said medical examination, setting forth the name of the person to be examined, the time and place of the examination, and such other terms and conditions as he may deem necessary. A copy of such an order shall be served upon the patient. Such an examination shall be made by a licensed physician of the examinee's own choice under such terms and conditions as the health officer may specify.

(2) Any person who depends exclusively on prayer for healing in accordance with the teachings of any well recognized religious sect or denomination, and claims exemption on such grounds shall nevertheless be subject to examination and provisions of this article concerning isolation and quarantine which apply when there is probable cause to suspect such a person is infected with tuberculosis in a communicable stage. Such person shall not be required to submit to any medical treatment or be confined in a hospital or other medical institution if he can safely be quarantined or isolated in his own home or other suitable place of his choice.

18.35.136 QUARANTINE OR ISOLATION ORDER

(1) Whenever a Medical Officer of the Division of Public Health shall determine that quarantine or isolation in a particular case is necessary for the preservation and protection of the public health, he shall make an isolation or quarantine order in writing, setting forth the name of the patient to be isolated and the initial period of time, not to exceed six months, during which the order shall remain effective; the place of isolation or quarantine; and such other terms and conditions as may be immediately necessary to protect the public health. A copy of such order shall be served upon the patient. The patient shall be re-examined at the time the initial order expires, or at any other time the patient so requests, to ascertain whether his tuberculosis continues to be infectious. Whenever it shall be medically determined that the patient is no longer infectious and communicable and that the patient has received sufficient treatment of his disease, the patient shall be relieved from all further liability or duty imposed by this article.

(2) Upon the receipt of information that any examination, quarantine, or isolation order, made and served as herein provided, has been violated, the Public Health Medical Officer shall advise the District Attorney of the pertinent facts relating to the violation.

18.35.137 VIOLATION AND PENALTY

(1) Any person who, after service upon him of an order of the Division of Public Health Medical Officer directing his isolation or examination as provided in 18.35.135 and 18.35.136, violates or fails to

comply with same or any provisions thereof is guilty of a misdemeanor and in addition to any penalties which may be imposed by law upon such convictions, the court may now make an appropriate order providing for isolation, quarantine or treatment.

November 1, 1979

DIVISION OF PUBLIC HEALTH
STATE OF ALASKA
DEPARTMENT OF HEALTH AND SOCIAL SERVICES
EPIDEMIOLOGY OFFICE
3601 - C Street
Anchorage, Alaska 99502-0333
(907) 561-4406

BULLETIN # 10 WEEK ENDING MAY 20, 1983
TUBERCULIN CONVERSIONS AMONG STAFF OF AN INTENSIVE CARE UNIT

On September 16, 1982, the Epidemiology Office was asked by the infection control committee of an Alaskan hospital to investigate the tuberculin-PPD conversion of four intensive care unit staff members who had been in contact with a known tuberculosis patient two months before. The four converters had been identified on screening tests performed by the hospital infection control nurse on all staff members thought to have been in contact with the known case.

Our initial recommendation included:

1) additional case finding by retesting all tuberculin negative ICU staff members 90 days after exposure to the tuberculosis patient, and 2) environmental sampling to determine direction and extent of air flow from the ICU room occupied by the patient with active tuberculosis - the presumed source of tubercle bacilli.

The patient who was the presumed source of the five tuberculin conversions was admitted on July 1, 1982 with an initial diagnosis of "sepsis". Although initially dehydrated, with intravenous rehydration her general condition improved considerably, and she began to cough copiously. Chest X-Ray taken on admission showed bilateral cavitary disease, and sputum smears showed tubercle bacilli too numerous to count. Sputum culture grew Mycobacterium tuberculosis. The concentrations of tubercle bacilli in her sputum fell rapidly within three days of the start of anti-tuberculous chemotherapy.

On the second round of skin tests, one more ICU nurse was identified as a tuberculin converter. All five converters had worked in the intensive care unit during the July stay of the sputum-positive patient. Four were nurses; one was a ward clerk. When compared to non-converters, the five tuberculin converters had worked shifts during the earlier part of the patient's stay in the ICU - before and during treatment with antituberculosis chemotherapy. The ward clerk claimed never to have been in direct contact with the patient. Three of the four nurses were said to have been wearing masks during direct patient contact.

In the intensive care unit, a central nursing desk is surrounded by individual patient rooms. The room occupied by the tuberculosis patient was directly opposite and about 15 feet away from the seat occupied by the ward clerk. Testing conducted by the hospital confirmed that air pressure was greater inside the patient's room than in the central ICU corridor. Air flow studies using the tracer gas, sulphur hexafluoride, were conducted by engineers from the University of Alaska, Fairbanks. These tests showed that tracer gas released in the patient's room flowed towards the nursing desk with the room door closed or open. With the door open, 66% of the gas released was measured at the nursing station after only twenty minutes.

In this outbreak, the vigilance of an infection control committee and an infection control nurse detected tuberculin conversions among exposed intensive care unit staff before pulmonary disease had time to develop. All converters were treated with isoniazid (INH).

Recommendations

Based on this investigation of tuberculin conversions among ICU staff, we recommend that:

- 1) sputum-positive tuberculin patients should be cared for in a room at negative or neutral pressure with respect to the corridor until adequate therapy renders them noninfectious, and
- 2) on the identification of a sputum positive patient, the tuberculin status of attendants should be reviewed and skin tests should be performed 30 and 90 days after exposure.

2601 - C Street
Anchorage, Alaska 99502-0333
(907) 561-4406

BULLETIN # 11 Week Ending May 27, 1983
Typhoid Fever--Kobuk River Valley

In late December, 1982, the Epidemiology Office was informed by Chris Swartz, RN, Infection Control Nurse, Alaska Native Medical Center that an inpatient was passing copious amounts of Salmonella typhi in his urine. This patient was a cousin of a 32-year old man who died at ANMC six months before with the post-mortem diagnosis of typhoid fever. Both patients were residents of communities in the Kobuk River Valley east of Kotzebue. The patient from whose urine Salmonella typhi was identified is a 62 year-old trapper who lives alone. He claimed never to have had symptoms of typhoid fever. Longstanding renal calyceal damage was thought to represent a focus for continued carriage of Salmonella typhi. This patient was treated with long-term trimethoprim-sul hamethoxazole; so far, urine has been negative on follow-up.

The 32-year old cousin of this patient had been admitted to Alaska Native Medical Center in April-May 1982. Initial symptoms included lower gastrointestinal bleeding, and daily fever spikes to 101°F. Blood and stool cultures did not grow Salmonella. Rose spots were not observed. About four weeks after onset of illness, the patient developed fever to 104°F., severe abdominal pain, and died with fulminant hepatitis. Massive liver necrosis was demonstrated at autopsy as were Peyer's patches and generalized lymphadenopathy. The post-mortem diagnosis was typhoid fever, without bacteriologic confirmation.

In association with Marcha Stewart, PHN, Manilaq Association, and Nellie Griest, and May Bernhart, health aides from Shungnak and Kobuk, an epidemiologist interviewed friends and close associates of these two patients and secured samples of their stool for bacteriologic culture. Review of medical records revealed four individuals who between April 1981-October 1982 suffered clinical illness characterized by fever, but without specific diagnosis. These four were considered to have been possible cases of typhoid fever, and each had some connection with either the 32 year-old or 62 year-old identified patients. A program of surveillance was initiated in Kobuk River communities and in Kotzebue to detect expeditiously possible future cases of typhoid fever so as to offer the maximum chance of cure.

Typhoid fever is an illness characterized by sustained fever, headache, malaise, anorexia, and relative bradycardia, along with enlargement of spleen, and lymphoid tissue, and constipation more commonly than diarrhea. Many mild and atypical infections occur. Complications include ulceration of Peyer's patches of the large bowel producing intestinal hemorrhage or perforation, and hepatitis. The usual fatality rate was 10% in the era before antibiotic treatment, and with antibiotics is considered to be 1% or less. Infection can be transmitted by acute cases, and by the 3-5% of those acute cases who become chronic carriers of Salmonella typhi. The incidence of cases of typhoid fever, and the prevalence of Salmonella typhi carriers have both declined considerably in Alaska in recent years. The last clinical cases of typhoid fever were reported in 1973.

Scombroid Fish Poisoning Alert

In Bulletin No. 17 (Week ending September 10, 1982), we reported on two outbreaks of hives, nausea, and tachycardia occurring 30-60 minutes after eating raw fish. While this syndrome, known as scombroid fish poisoning, has been well documented in southern waters, these were the first such outbreaks reported after the consumption of Alaskan fish (in this case raw cod, flounder, and salmon). Since the publication of Bulletin No. 17, we have heard of similar illness which occurred last summer in patients who ate raw fish from Prince William Sound. In order that illness related to scombroid fish poisoning can be characterized, we ask that physicians seeing patients who develop symptoms of histamine release after eating raw fish contact the Epidemiology Office at 561-4406 and urge their patients to refrigerate samples of the fish eaten until samples of the fish for scombrotoxin can be arranged.