ALASKA LEGISLATURE COMMITTEE FILES 1981-1982 8672

1509 SHESS SB 338 1509

APA has tested labs in country.

$45.00/sample

Problem w/ getting analysis done —

— what do you do when they cover more?

Ellen Greenberg
DEC - 2650 — 51
Samples analyzed
$22.00/ea

Utah Biomedical Lab in Salt Lake City.

Switching to Lab in Calif - to get info from Ray Jurgens

% of asbestos
% of other fibers (fiberglas) etc.

Lee Hayes 2947

UNITED STATES DEPARTMENT OF EDUCATION
WASHINGTON, D.C. 20202

ASSISTANT SECRETARY
FOR ELEMENTARY AND SECONDARY EDUCATION

November 20, 1980

MEMORANDUM TO CHIEF STATE SCHOOL OFFICERS

Subject: Preparation of the State Plan for the Asbestos School Hazard Detection and Control Act, Public Law 96-270

This is the second bulletin issued by the Department of Education. Its purpose is to provide guidance to State officials responsible for the preparation of State plans.

Section 4 of the statute requires all States to submit to the Secretary of Education a State plan not later than six months after the effective date of the Act. This date is December 15, 1980.

Although there presently are no Federal funds available to carry out the grant or loan program, States are still required by the statute to prepare and submit a plan by that date.

Section 4(a)(1) to (4) of Public Law 96-270 outlines the information that is required in State plans. This information has been clarified in Subpart H of Part 231 of ED's proposed regulations (NPRM) published September 17, 1980. In drafting these provisions we have made every effort to reduce the burden on the State in complying with the statutory requirements.

Please refer to Subpart H of Part 231, particularly section 231.70, for guidance as to what the State plan should contain. Although the contents of the State plan are statutorily mandated, the structure and format of the plan are left to the States' discretion.

If any change in the provisions for State plans now in the NPRM is made in the final regulations, a State will have an opportunity to amend its plan.

Herman R. Goldberg
Deputy Assistant Secretary
Office of Educational Support

UNITED STATES DEPARTMENT OF EDUCATION
WASHINGTON, D.C. 20202

JAN 6 1981

Honorable Marshall L. Lind
Commissioner Of Education
State Department of Education
Juneau, Alaska 99801

Dear Commissioner Lind:

This letter is to notify you that we have received your State Plan pursuant to P.L. 96-270 - Asbestos School Hazard Detection and Control Act of 1980.

Should there be any points in the Plan requiring clarification we will be in touch with your designated representative by telephone.

Thank you for fulfilling this part of the State Education Agency's responsibility as required by the Statute.

Sincerely,

Herman R. Goldberg

Herman R. Goldberg
Deputy Assistant Secretary
Office of Educational Support

December 5, 1980

Dr. Herman R. Goldberg
Deputy Assistant Secretary
Office of Educational Support
U.S. Department of Education
Room 2079
FOB-6, 400 Maryland Ave. SW
Washington, D.C.

RE: PL 96-270
State Plan

Dear Sir:

Please find enclosed the Alaska State Plan as required by the Abestos School Hazard Detection and Control Act, Public Law 96-270.

The Alaska Department of Education is quite willing and anxious to implement this plan.

Should you desire additional information on the state plan please do not hesitate to write.

Sincerely,

Marshall L. Lind
Commissioner of Education

Enclosure

ABESTOS SCHOOL HAZARD DETECTION AND CONTROL ACT OF 1980, PUBLIC LAW 96-270

STATE OF ALASKA PLAN

The Alaska Department of Education shall through the regular mail service distribute a certified letter to all local agencies containing copies of Federal Register V, dated Wednesday September 17, 1980 and Federal Register VI, dated Wednesday September 17, 1980. In addition to the Federal Registers a copy of EPA, Abestos Containing Material in School Buildings, part II, pages 1-2-11, 1-2-12 & 1-2-13, describing the dangers of abestos related diseases will be included in the materials sent to the local educational agencies.

The State will continue to revise and distribute to the local educational agencies changes in the Act. The State will continue to revise and distribute changes in the procedures and standards for conducting detection and control projects. The State will continue to revise and distribute additional information related to health hazards associated with exposure to abestos fibers.

The State will maintain a file of completed forms required by EPA, 30 CFR, part 763, subpart F.

These files will be located in the Department of Education, Facilities Section and a separate up-to-date file on each local educational agency will be maintained to include the required form as well as any pertinent information relating to the abestos detection program of that district.

The Facilities Section of Management, Law & Finance Division of the Department of Edcuation will be responsible for submitting the reports required under this Act.

The Department of Edcuation assures that the Facilities Section will continue to submit reports as required under this Act including the final report on or before June 15, 1982.

PLEASE NOTE: THE FOLLOWING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT

The Legislature finds that:

1) Exposure to asbestos fibers has been identified over a long period of time and bt reputable medical and scientific evidence as significantly increasing the incidence of cancer and other severe or fatal diseases;
2) medical evidence has suggested that children may be particularly vulnerable to environmentally induced cancers;
3) medical science has not established any minimum level of exposure to asbestos fibers which is considered to be safe to individuals exposed to the fibers;
4) substantial amounts of asbestos, particularly in sprayed form, have been used in school buildings and other public facilities especially during the period 1946 through 1972;
5) a partial survey of Alaskan schools has indicated that a) a number of building materials containing asbestos fibers have become damaged or friable, causing asbestos fibers to be dislodged into the air, and b) asbestos concentrations far exceeding normal ambient air levels have been found in school buildings containing such damaged materials;
6) the presence in school buildings and public facilities of friable or easily damaged asbestos creates an unwarranted health hazard to school children, employees, and the general public who are exposed to such materials;
7) there is no systematic program for identifying such hazardous conditions in school buildings and public facilities or for remediating those conditions.

It is the purpose of this Legislature to:

1) Provide quality testing and analysis for friable asbestos materials in school buildings and other public facilities;
2) provide information relating to health hazards

associated with exposure to friable asbestos fibers;
3) correct identified health hazards from friable asbestos materials in school buildings and other public facilities.

In compliance with PL 96-270, the Asbestos School Hazard and Control Act of 1980, the removal of friable asbestos materials from school buildings will be coordinated by the Department of Environmental Conservation with the cooperation of the Department of Education, the Department of Transportation and Public Facilities, and local school districts, REAAs, BIA schools , and private schools.

The Alaska Department of Education will:

1) continue to revise and distribute to local education agencies any changes in the procedures and standards for conducting detection and control projects of friable asbestos in school buildings;
2) continue to revise and destribute additional information related to health hazards associated with exposure to asbestos fibers;
3) maintain an up-to-date file on each local education agency as required by the EPA, 30 CFR, part 763, subpart F, to be stored in the Facilities Section of Management, Law and Finance Division;
4) submit reports required by this act including the final report on or before June 15, 1982.

The Department of Environmental Conservation will:

1) provide training materials for local school persons who will inspect and sample material for deteriorating friable asbestos according to 40 CFR Part 763;
2) distribute the EPA Guidance Manual on Asbestos Control in School Buildings, Parts I and II and supplemental videotapes to local school districts, central offices of the Regional Education Attendance Areas, Bureau of Indian Affairs agency offices and

private schools;

3) be responsible for the distribution, use, retrieval, and storage of asbestos training materials, as well as providing resource personnel to answer inquiries and assure quality control of sampling;
4) be responsible for collecting samples of suspected friable asbestos and have them analyzed by a reputable laboratory using polarized light microscopy;
5) evaluate the total results of analysis and send individual results to the respective school districts.

Each local School District, central office of the Regional Education Attendance Areas, Bureau of Indian Affairs agency office, and private school will:

1) select personnel for training in the detection and sampling for friable asbestos in their school buildings;
2) retain records of all inspections including sample dates, location, condition, and analysis of friable materials, notify employees of the location of friable asbestos materials and ways to reduce exposure, and notify the parent-teacher association of the inspection results;
3) mail inspection forms and samples to the Department of Environmental Conservation;
4) determine how extensive the potential or actual damage of asbestos materials, if a positive analysis is received, using the Exposure Assessment Algorithm in Appendix A of 34 CFR Parts 230 and 231;
5) administer bid processing and monitor construction activities of renovation.

The Dapartment of Transportation and Public Facilities will:

1) establish guidelines and provide technical assistance on cost-effective renovation techniques.

The Legislature finds that -

1) exposure to asbestos fiber has been identified over a long period of time and by reputable medical and scientific evidence as significantly increasing the incidence of cancer and other severe or fatal diseases;

2) medical evidence has suggested that children may be particularly vulnerable to environmentally induced cancers;

3) medical science has not established any "minimum" level of exposure to asbestos fibers which is considered to be safe to individuals exposed to the fibers;

4) substantial amounts of asbestos, particularly in sprayed form, have been used in school buildings and other public facilities especially during the period ~~of~~ 1946 through 1972;

5) a partial survey of Alaskan schools ~~has~~ indicated that A) a number of school buildings materials containing asbestos fibers have become damaged or friable, causing asbestos fibers to be dislodged into the air, and B) asbestos concentrations far exceeding normal ambient air levels have been found in school buildings containing such damaged materials;

and public facilities

6) The presence in school buildings of friable or easily damaged asbestos creates an unwarranted hazard to the health of school children, ~~and personnel~~ other employees & the general public who are exposed to such materials

7) There is no systematic program for identifying hazardous conditions in school buildings & public facilities or for remedying these conditions.

It is the purpose of this Legislature

1) to provide quality testing and analysis for friable asbestos materials in school buildings and other public facilities.

2) to provide information relating to health hazards associated with exposure to friable asbestos

3) to correct identified health hazards from friable asbestos materials in school buildings and other public facilities

In compliance with PL 96-270, the Asbestos School Hazard and Control Act of 1980, the removal of friable asbestos materials from school buildings will be coordinated by the Department of Environmental Conservation with the cooperation of the Dept. of Ed., ~~Asbestos School Hazard and Control Act of 1980 PL 96-270 S. 1039 June 14, 1980~~ Dept. of Trans. & PF and local school districts

The Alaska Department of Education, ~~in compliance with PL 96-270 will~~ will:

1) continue to review & distribute to local education agencies any changes in the procedures and standards for conducting detection and control projects of friable asbestos in school buildings
2) continue to review and distribute additional information related to health hazards associated with exposure to asbestos fibers
3) the Department of Education, Facilities Section of Management, Law & Finance Division will maintain an up-to-date file on each local education agency as required by the EPA 30 CFR, part 763, subpart F
4) the Facilities Section of Management Law and Finance Division will submit reports required under this Act including the final report on or before June 15, 1983.

The Department of Environmental Conservation will:

1) provide training materials for local school personnel who will inspect and sample material for deteriorating friable asbestos according to 40 CFR Part 763.

2) DISTRIBUTE the EPA Guidance Manual on Asbestos Control in School Buildings, Parts I and II and supplemental videotape ~~that will be distributed~~ to local school districts, central offices of the Regional Education Attendance ~~Areas~~, Bureau of Indian Affairs agency offices and private schools.

3) ~~He/She will~~ be responsible for the distribution, use, retrieval and storage of asbestos training materials; as well as providing resource personnel to answer school district inquiries and assure quality control that the sampling is done properly

4) will be responsible for collecting samples of suspected friable asbestos and have them analyzed by a reputable laboratory using polarized light microscopy.

5) will evaluate the lab results of analysis and send individual results

to the respective school districts

Each local School District, central office of the Regional Education Attendance Areas, Bureau of Indian Affairs agency offices and private schools

1) will select personnel for training in the detection and sampling for friable asbestos in school buildings.

2) will retain records of all inspections including sample dates, location & condition & analysis of friable materials; notify employees of the location of friable asbestos materials and ways to reduce exposure and notify the parent-teacher assoc. of the inspection results.

3) will mail inspection forms & samples to the Department of Environmental Conservation

4) will, if positive analysis is received, determine how extensive the potential or actual damage of asbestos materials is using the Exposure Assessment Algorithm in Appendix A of 34 CFR Parts 230 and 231.

5) will administer bid-processing and monitor construction activities

The Department of Transportation and Public Facilities will

1) establish guidelines and provide technical assistance on cost-effective renovation techniques

$12,250 - Training personnel for sampling & inspection and for analysis of suspected asbestos materials in schools

$15,500 - Training personnel for sampling and inspection and for laboratory analysis of suspected asbestos materials in local government buildings

$5,500 Provide training ~~personnel~~ materials for sampling and inspections and for laboratory analysis of suspected asbestos materials in privately owned buildings

$500,000 renovations in public schools

$500,000 renovations in state-owned facilities

$500,000 renovations in local govt buildings.

monies for training & sample analysis to DEC

Renovation monies to be administered by Community & Regional Affairs with recommendations from DOTPF on cost-effective techniques

State owned facilities - all have been surveyed except those in Anchorage by DOTPF with information in the Inventory & Condition Survey of Public Facilities. Asbestos hazards can be removed during routine maintenance

Inventory of Anch. facilities complete by DOTPF in FY 82. Because of size of buildings, there may be large areas needing removal of asbestos hazards. $500,000 indicated in State category is for Anch. work

PLEASE NOTE: [illegible] PRECEDING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT.

77102961
COHORT MORTALITY IN MEN MANUFACTURING CHRYSOTILE ASBESTOS PAPER
WEISS W
AM REV RESPIR DIS 115 (4 PART 2). 1977 251 Coden: ARDSB
Descriptors: ABSTRACT ASBESTOSIS LUNG CANCER GASTRO INTESTINAL CANCER INCREASED RISK STANDARDIZED MORTALITY RATIO
Concept Codes: SOCIAL BIOL/HUMAN ECOLOGY(05900), MINERALS(10069), PATHOLOGY-NECROSIS(12510), DIGESTIVE SYST-PATHOLOGY(14006), RESPIRATORY SYST-PATHOLOGY(16006), TOXICOL-ENVIRONMNTL,INDUSTR(•22506), NEOPLSMS/NEOPL AGNTS-PATH,CLINIC(•24004), NEOPLSMS/NEOPL AGNTS-CARCINOGENS(•24007), PUB HEALTH-ADMINISTR,STATISTICS(•37010), ENVIRON HEALTH-OCCUPATNL HEALTH(•37013), ENVIRON HEALTH-AIR,WATR,SL POLLN(37015), EPIDEMIOL-ORGANIC DIS,NEOPLASMS(•37054)
Biosystematic Codes: HOMINIDAE(86215)

77094713
THE PATHOGENESIS OF CANCER OF THE LOWER LIP
TAZUEV A SH
VESN DERMATOL VENEROL 10 1976 (RECD 1977) 68-71 Coden: VDVFA
Descriptors: HUMAN SMOKING SUN EXPOSURE HUMIDITY CHEMICAL CARCINOGENS OCCUPATIONAL EXPOSURE ASBESTOS EXPOSURE
Concept Codes: SOCIAL BIOL/HUMAN ECOLOGY(05900), RADIATION BIOL-RADTN,ISOTOP TECH(06504), RADIATION BIOL-RADTN EFF,PROTECTN(•06506), BEHAVIOR BIOL-HUMAN BEHAVIOR(07004), BIOCHEM STUD-GENERAL(10060), MINERALS(10069), EATING EFF-LIGHT,DARKNESS(•10804), INTEGUMENT SYST-PATHOLOGY(•18506), DENTAL/ORAL BIOL-PATHOLOGY(•19006), PSYCHIATRY-ADDICTION,TOBACCO SMOKING(•21004), TOXICOL-GEN/ESP STUDS,MISC(•22701), TOXICOL-ENVIRONMNTL,INDUSTR(•22506), NEOPLSMS/NEOPL AGNTS-CARCINOGENS(•24007), ENVIRON HEALTH-OCCUPATNL HEALTH(•37013), PLANT PHYSIOL-CHEM CONSTITUENTS(51522)
Biosystematic Codes: PLANTAE-UNSPECIFIED(•1000), HOMINIDAE(86215)

77057383
DISEASE POSSIBILITY CAUSED BY ASBESTOS
PLANTEVOE H ?
PROBST, J., E. JONASCH AND E. BAUR (ED.). HEFTE ZUR UNFALLHEILKUNDE. HEFT 126. 2. DEUTSCH OESTERREICHISCH SCHWEIZERISCHE UNFALLTAGUNG IN BERLIN, 20-22. NOVEMBER 1975. (SERIES ON ACCIDENT MEDICINE. VOL. 126. 2ND GERMAN-AUSTRIAN-SWISS ACCIDENT CONFERENCE. BERLIN, WEST GERMANY, NOV. 20-22, 1975.) (IN GER.) XXVIII+696P. ILLUS. SPRINGER-VERLAG: BERLIN, WEST GERMANY; NEW YORK, N.Y.; USA. ISBN 3-540-07892-4; ISBN 0-387-07892-4. 1976 (RECD 1977) 607-609 Coden: 05708
Descriptors: HUMAN ASBESTOSIS PLEURAL PLAQUES BRONCHIAL CANCER MESOTHELIOMA
Concept Codes: SOCIAL BIOL/HUMAN ECOLOGY(05900), MINERALS(10069), RESPIRATORY SYST-PATHOLOGY(•16006), TOXICOL-ENVIRONMNTL,INDUSTR(•22506), NEOPLSMS/NEOPL AGNTS-CARCINOGENS(•24007), ENVIRON HEALTH-OCCUPATNL HEALTH(•37013)
Biosystematic Codes: HOMINIDAE(86215)

77067462
PROBLEMS IN THE DETERMINATION OF SAFETY STANDARDS FOR ASBESTOS EXPOSED WORKERS
MCDONALD J C
PROBST, J., E. JONASCH AND E. BAUR (ED.). HEFTE ZUR UNFALLHEILKUNDE. HEFT 126. 2. DEUTSCH OESTERREICHISCH SCHWEIZERISCHE UNFALLTAGUNG IN BERLIN, 20-22. NOVEMBER 1975. (SERIES ON ACCIDENT MEDICINE. VOL. 126. 2ND GERMAN-AUSTRIAN-SWISS ACCIDENT CONFERENCE. BERLIN, WEST GERMANY, NOV. 20-22, 1975.) (IN GER.) XXVIII+696P. ILLUS. SPRINGER-VERLAG: BERLIN, WEST GERMANY; NEW YORK, N.Y.; USA. ISBN 3-540-07892-4; ISBN 0-387-07892-4. 1976 (RECD 1977) 603-607 Coden: 05708
Descriptors: PULMONARY FIBROSIS RESPIRATORY CANCER MALIGNANT MESOTHELIOMA GASTRO INTESTINAL CANCER
Concept Codes: SOCIAL BIOL/HUMAN ECOLOGY(05900), MINERALS(10069), DIGESTIVE SYST-PATHOLOGY(•14006), RESPIRATORY SYST-PATHOLOGY(•16006), TOXICOL-ENVIRONMNTL,INDUSTR(•22506), NEOPLSMS/NEOPL AGNTS-CARCINOGENS(•24007), PUB HEALTH-ADMINISTR STATISTICS(•37010), ENVIRON HEALTH-OCCUPATNL HEALTH(•37013)
Biosystematic Codes: HOMINIDAE(86215)

77067450
ASBESTOS SMOKING AND LUNG CANCER
NEWHOUSE M L
PROBST, J., E. JONASCH AND E. BAUR (ED.). HEFTE ZUR UNFALLHEILKUNDE. HEFT 126. 2. DEUTSCH OESTERREICHISCH SCHWEIZERISCHE UNFALLTAGUNG IN BERLIN, 20-22. NOVEMBER 1975. (SERIES ON ACCIDENT MEDICINE. VOL. 126. 2ND GERMAN-AUSTRIAN-SWISS ACCIDENT CONFERENCE. BERLIN, WEST GERMANY, NOV. 20-22, 1975.) (IN GER.) XXVIII+696P. ILLUS. SPRINGER-VERLAG: BERLIN, WEST GERMANY; NEW YORK, N.Y.; USA. ISBN 3-540-07892-4; ISBN 0-387-07892-4. 1976 (RECD 1977) 945-947 Coden: 05708
Descriptors: HUMAN
Concept Codes: BEHAVIOR BIOL-HUMAN BEHAVIOR(07004), BIOCHEM STUD-GENERAL(10060), RESPIRATORY SYST-PATHOLOGY(•16006), PSYCHIATRY-ADDICTION,TOBACCO SMOKING(•21004), TOXICOL-GEN/ESP STUDS,MISC(•22701), TOXICOL-ENVIRONMNTL,INDUSTR(•22506), NEOPLSMS/NEOPL AGNTS-CARCINOGENS(•24007), PLANT PHYSIOL-CHEM CONSTITUENTS(51522)
Biosystematic Codes: PLANTAE-UNSPECIFIED(•1000), HOMINIDAE(86215)

18027032
PREVENTING OCCUPATIONAL CANCER
RATES R R
NATL. INST. ENVIRON. HEALTH SCI., BETHESDA, MD. 20014, USA.
INTERNATIONAL CONFERENCE ON ENVIRONMENTAL CADMIUM, BETHESDA, MD., USA, JUNE 7-9, 1978. ENVIRON HEALTH PERSPECT 28 (0). 1979. 303-310. Coden: EVHPA
Language: ENGLISH
Descriptors: REVIEW HUMAN ANIMAL CARCINOGENESIS ASBESTOS CALORIC INTAKE SMOKING RADIATION
Concept Codes: RADIATION BIOL-RADIN EFF,PROTECT(06506), BEHAVIOR BIOL-HUMAN BEHAVIOR(07004), BIOCHEM STUD-GENERAL(10060), MINERALS(10069), NUTRITION-PATHOGENIC DIETS(13216), PSYCHIATRY-ADDICTION(INC SMOKNG)(21004), TOXICOL-GENL/EXP STUDS,METHS(22501), TOXICOL-FOOD,RESIDS,ADDIT,PRESRV(22502), TOXICOL-ENVIRONMNTL,INDUSTR(•22506), NEOPLSMS/NEOPL AGNTS-CARCINOGENS(•24007), NEOPLSMS/NEOPL AGNTS-THERAP,AGNT(•24008), ENVIRON HEALTH-OCCUPATNL HEALT(•37013), PLANT PHYSIOL-CHEM CONSTITUENTS(51522)
Biosystematic Codes: PLANTAE-UNSPECIFIED(11000), VERTEBRATA-UNSPECIFIED(85150), HOMINIDAE(86215)

18026705
REMOTE CHILDHOOD ODD JOB EXPOSURES ASSOCIATED WITH ADULT PULMONARY DISEASE
SINGH R; FAZZARO D D; AVVAZIAN L H
VETERANS ADM. MED. CENT., E. ORANGE, N.J., USA.
75TH ANNUAL MEETING OF THE AMERICAN LUNG ASSOCIATION HELD IN CONJUNCTION WITH THE 74TH ANNUAL MEETING OF THE AMERICAN THORACIC SOCIETY AND THE 47TH ANNUAL MEETING OF THE CONGRESS OF LUNG ASSOCIATION STAFF, LAS VEGAS, NEV., USA, MAY 13-16, 1979. AM REV RESPIR DIS 119 (4 PART 2). 1979. 235. Coden: ARDSB
Language: ENGLISH
Descriptors: ABSTRACT PULMONARY FIBROSIS MALIGNANT MESOTHELIOMA EPIDERMOID LUNG CANCER CARCINOGENESIS INSULATION ASBESTOS
Concept Codes: GEN BIOL-SYMPOSIA,PROCDNGS,REVW(00520), BIOCHEM STUD-GENERAL(10060), RESPIRATORY SYST-PATHOLOGY(•16006), BONE,JNTS,FASC,CONN/ADIP-PATHOL(18006), TOXICOL-ENVIRONMNTL,INDUSTR(•22506), NEOPLSMS/NEOPL AGNTS-CARCINOGENS(•24007), PEDIATRICS(•25000), ENVIRON HEALTH-OCCUPATNL HEALTH(37013)
Biosystematic Codes: HOMINIDAE(86215)

18019444
ASBESTOS IN SCHOOLS A PUBLIC HEALTH PROBLEM
SPONNER C M
GCA TECHNOL. DIV., ENVIRON. ENG. DEP., BEDFORD, MASS 01730, USA.
N ENGL J MED 301 (14). 1979. 782-784. Coden: NEJMA
Language: ENGLISH
Descriptors: HUMAN MASSACHUSETTS USA LUNG CANCER LUNG DISEASE ENCAPSULATION REMOVAL ENCLOSURE SMOKING
Concept Codes: GENL BIOL-TXTBKS,EDUCATN,AUD-VIS(•00514), BEHAVIOR BIOL-HUMAN BEHAVIOR(07004), ECOLOGY-BIOCLIMATOL,BIOMETEOROL(•07504), BIOCHEM STUD-GENERAL(10060), MINERALS(10069), BIOPHYS-BIOENGINEERING(•10511), METABOLISM-GENL STUD,METAB PATHW(13002), MINERALS(13010), RESPIRATORY SYST-PATHOLOGY(•16006) PSYCHIATRY-ADDICTION(INC SMOKNG)(21004), TOXICOL-GENL/EXP STUDS,METHS(22501), TOXICOL-ENVIRONMNTL,INDUSTR(•22506), NEOPLSMS/NEOPL AGNTS-CARCINOGENS(•24007), PUB HEALTH-ADMINISTR,STATISTICS(•37010), ENVIRON HEALTH-OCCUPATNL HEALTH(37013), ENVIRON HEALTH-AIR,WATR,SL POLLN(•37015), EPIDEMIOL-ORGANIC DIS,NEOPLASMS(•37054), PLANT PHYSIOL-CHEM CONSTITUENTS(51522), AGRONOMY-TOBACCO CROPS(52512)
Biosystematic Codes: SOLANACEAE(26775), HOMINIDAE(86215)

18016443
OCCUPATIONAL LUNG CANCER AND SMOKING A REVIEW IN THE LIGHT OF CURRENT THEORIES OF CARCINOGENESIS
CHOVIL A C
IND. MED. CONSULT., ONT. WORKMEN'S COMPENS. BOARD, 2 BLOOR ST. E., TORONTO, ONT. M4W 3C3, CAN.
CAN MED ASSOC J 121 (5). 1979. 548-550, 553-555. Coden: CMAJA
Language: ENGLISH
Descriptors: TOBACCO HUMAN ASBESTOS RADIATION NUTRITION GENETIC MUTATION
Concept Codes: GENETICS/CYTOGENET-HUMAN(•03508), RADIATION BIOL-RADIN,ISOTOP TECH(06504), RADIATION BIOL-RADIN EFF,PROTECT(06506), BEHAVIOR BIOL-HUMAN BEHAVIOR(07004), BIOCHEM STUD-GENERAL(10060), MINERALS(10069), NUTRITION-GENERAL DIET STUDIES(13214), RESPIRATORY SYST-PATHOLOGY(•16006), PSYCHIATRY-ADDICTION(INC SMOKNG)(21004), TOXICOL-GENL/EXP STUDS,METHS(•22501), TOXICOL-ENVIRONMNTL,INDUSTR(•22506), NEOPLSMS/NEOPL AGNTS-CARCINOGENS(•24007), ENVIRON HEALTH-OCCUPATNL HEALTH(•37013), PLANT PHYSIOL-CHEM CONSTITUENTS(51522), AGRONOMY-TOBACCO CROPS(52512)
Biosystematic Codes: SOLANACEAE(26775), HOMINIDAE(86215)

19040981
GARLAND SAFETY MANAGEMENT SERIES SOURCE BOOK ON ASBESTOS DISEASES MEDICAL LEGAL AND ENGINEERING ASPECTS
PETERS G A; PETERS B J
LOS ANGELES, CALIF., USA.
PETERS, G. A. AND B. J. PETERS. GARLAND SAFETY MANAGEMENT SERIES: SOURCEBOOK ON ASBESTOS DISEASES: MEDICAL, LEGAL, AND ENGINEERING ASPECTS. XIV+309P. GARLAND PUBLISHING, INC.: NEW YORK, N.Y., USA. ILLUS. ISBN 0-8240-7175-1. 0 (0). 1980. XIV+309P. Coden: 09016
Language: ENGLISH
Descriptors: HUMAN ASBESTOS TYPE ASBESTOSIS CANCER PROTECTION BIBLIOGRAPHY LEGAL ASPECTS RADIOGRAPHY
Concept Codes: GENL BIOL-BIBLIOGRAPHY(•00526), GENL BIOL-FORENSIC SCIENCE(•00531), PHOTOGRAPHY-METHS,MATLS,APPARAT(01012), COMPARATIVE BIOCHEM-GENL STUDIES(10010), MINERALS(10069), ANATOMY/HISTOL-RADIOLOGIC(11106), PATHOLOGY--DIAGNOSTIC(12504), MINERALS(13010), RESPIRATORY SYST-GENL STUD,METHS(16001), RESPIRATORY SYST-PATHOLOGY(•16006), TOXICOL-ANTIDOTES,PREVENTIVE(•22505), TOXICOL-ENVIRONMNTL,INDUSTR(•22506), NEOPLSMS/NEOPL AGNTS-CARCINOGENS(•24007), ENVIRON HEALTH-OCCUPATNL HEALTH(•37013), ENVIRON HEALTH-AIR,WATR,SL POLLN(37015)
Biosystematic Codes: HOMINIDAE(86215)

19026921
IDENTIFICATION OF ASBESTOS BY X-RAY DIFFRACTION
PLOWMAN C; HOBSON E
CENT. ELECTR. GENER. BOARD, N.-EAST. REG. SCI. SERV. DEP., HARROGATE HG3 1PR, YORKS., ENGL., UK.
AM IND HYG ASSOC J 41 (4). 1980. 299-304. Coden: AIHAA
Language: ENGLISH
Descriptors: NOTE ASBESTOSIS LUNG CANCER MESOTHELIOMA
Concept Codes: COMPARATIVE BIOCHEM-GENL STUDIES(10010), BIOCHEM METH-MINERALS(•10059), MINERALS(10069), BIOPHYS-GENERAL BIOPHYS TECH(10504), MINERALS(•13010), RESPIRATORY SYST-GENL STUD,METHS(16001), RESPIRATORY SYST-PATHOLOGY(•16006), TOXICOL-ENVIRONMNTL,INDUSTR(•22506), NEOPLSMS/NEOPL AGNTS-CARCINOGENS(•24007), ENVIRON HEALTH-OCCUPATNL HEALTH(37013), ENVIRON HEALTH-AIR,WATR,SL POLLN(37015), EPIDEMIOL-ORGANIC DIS,NEOPLASMS(37054)

19005679
CHEMI LUMINESCENT RESPONSE TO ASBESTOS FIBERS
GAUMER H R; CAIRO J; SALVAGGIO J E
DEP. MED., TULANE UNIV. SCH. MED., NEW ORLEANS, LA., USA.
ANNUAL MEETING OF THE AMERICAN FEDERATION FOR CLINICAL RESEARCH, WESTERN SECTION, CARMEL, CALIF., USA, FEB. 8-9, 1979. CLIN RES 27 (1). 1979. 37A. Coden: CLREA
Language: ENGLISH
Descriptors: ABSTRACT HUMAN POLYMORPHONUCLEAR LEUKOCYTE SERUM SUPER OXIDE DIS MUTASE CARCINOGENICITY 1 4 DI AZO 1 1 CYCLO 2 2 2 OCTANE INTERNATIONAL UNION AGAINST CANCER OXYGEN
Concept Codes: GENL BIOL-INSTITUT,ADMIN,LEGISLN(00508), GENL BIOL-SYMPOSIA,PROCDNGS,REVW(00520), CYTOLOGY/CYTOCHEM-HUMAN(02508), SOCIAL BIOL/HUMAN ECOLOGY(05500), BIOCHEM-GASES(10012), BIOCHEM STUD-GENERAL(10060), BIOCHEM STUD-PROTEINS,PEPTIDES,AMINO ACD(10064), MINERALS(10069), BIOPHYS-GENERAL BIOPHYS TECH(10504), ENZYMES-METHODS(10804), ENZYMES-PHYSIOLOGICAL STUDIES(•10808), MOVEMENT(12100), METABOLISM-GENL STUD,METAB PATHW(13002), MINERALS(•13010), BLOOD/BODY FLDS-GENL STUDS,METHS(15001), BLOOD/BODY FLDS-BLOOD,LYMPH STUD(15002), BLOOD/BODY FLDS-BLOOD CELL STUDS(•15004), BLOOD/BODY FLDS-LYMPHAT TISS,RES(•15008), TOXICOL-GENL/EXP STUDS,METHS(•22501), TOXICOL-ENVIRONMNTL,INDUSTR(22506), NEOPLSMS/NEOPL AGNTS-CARCINOGENS(•24007), ENVIRON HEALTH-OCCUPATNL HEALTH(37013), ENVIRON HEALTH-AIR,WATR,SL POLLN(37015)
Biosystematic Codes: HOMINIDAE(86215)

18060999
ATTITUDES TO ASBESTOS
CHISSICK S S
UNIV. LOND. KING'S COLL., STRAND, LONDON WC2R 2LS, ENGL., UK.
MICHAELS, L. AND S. S. CHISSICK (ED.). ASBESTOS, VOL. 1. PROPERTIES, APPLICATIONS, AND HAZARDS. XI+553P. JOHN WILEY AND SONS, LTD.: NEW YORK, N.Y., USA; CHICHESTER, ENGLAND. ILLUS. ISBN 0-471-99698-X. 0 (0). 1979. P115-170. Coden: 07863
Language: ENGLISH
Descriptors: REVIEW HUMAN EMPLOYMENT ASBESTOSIS CANCER RESPIRATORY PROTECTION MEDICAL EXAMINATIONS STANDARDS AIR POLLUTION STATISTICS
Concept Codes: GENL BIOL-INSTITUT,ADMIN,LEGISLN(00508), MATHEMATIC BIOL/STATISTIC METH(04500), BEHAVIOR BIOL-HUMAN BEHAVIOR(07004), ECOLOGY-BIOCLIMATOL,BIOMETEOROL(07504), MINERALS(10069), PATHOLOGY-DIAGNOSTIC(12504), MINERALS(13010), RESPIRATORY SYST-GENL STUD,METHS(16001), PSYCHIATRY-GEN,MED PSYCHL/SOCIOL(•21001), TOXICOL-ENVIRONMNTL,INDUSTR(•22506), NEOPLSMS/NEOPL AGNTS-CARCINOGENS(•24007), PUB HEALTH-ADMINISTR,STATISTICS(•37010), ENVIRON HEALTH-OCCUPATNL HEALTH(•37013), ENVIRON HEALTH-AIR,WATR,SL POLLN(37015)
Biosystematic Codes: HOMINIDAE(86215)

69004087
CYCLIC NUCLEOTIDE CONCENTRATIONS IN ASBESTOS INDUCED RAT PERITONEAL MESOTHELIOMA
STEVENS R H; WILL L A; COLE D A; MEEK E S; FRANK C W; DONHAM K J
RADIAT. RES. LAB., DEP. RADIOL., UNIV. IOWA, IOWA CITY, IOWA 52242, USA.
ENVIRON RES 19 (2). 1979. 442-448. Coden: ENVRA
Language: ENGLISH
Peritoneal mesotheliomas were induced through the i.p. administration of Rhodesian chrysotile A to weanling male Holtzman rats. The intracellular concentrations of c.cyclic.AMP and cGMP were significantly less than the levels measured in comparable control tissues obtained from age-matched animals that had been similarly administered charcoal instead of the asbestos. The calculated molar ratio of cAMP to cGMP was identical in tumors and control tissue implying that the 2 cyclic nucleotides were diminished by a constant factor in the tumor tissue. If tumorigenesis is related to cAMP/cGMP balance within the cancer cell, then in these apparently noninvasive lesions such an equilibrium exists as is found in cells of normal mesentery. These results indicate that asbestos-induced mesotheliomas are similar to other cancerous tissues of the digestive tract in that they contain less of the adenosine cyclic nucleotide than the normal tissue. The findings of this study suggest the possible loss of important cellular regulatory mechanisms in tumors induced by an important environmental carcinogen. Asbestos fiber is one of the environmental carcinogens that is readily dispersed into the air of cities and workplaces.
Descriptors: CARCINOGEN MESENTERY RHODESIAN CHRYSOTILE A DIGESTIVE SYSTEM CANCERS CYCLIC AMP CYCLIC GMP
Concept Codes: C ;OLOGY/CYTOCHEM-ANIMAL(02506 , SOCIAL BIOL/HUMAN ECOLOGY(05500), BIOCHEM STUD-GENERAL(10060), BIOCHEM STUD-NUCL ACD,PURNS,PYRM(10062), MINERALS(10069), CHORDATE BODY REGNS-ABDOMEN(11314), MINERALS(•13010), METABOLISM-NUCL ACD,PURINS,PYRIM(•13014), DIGESTIVE SYST-PATHOLOGY(•14006), RESPIRATORY SYST-PATHOLOGY(•16006), COELOM MEMBRANES,MESENTERIES,ETC(18200), ROUTES OF IMMUNIZ,INFECT,THERAP(22100), TOXICOL-ENVIRONMNTL,INDUSTR(•22506), NEOPLSMS/NEOPL AGNTS-PATH,CLINIC(•24004), NEOPLSMS/NEOPL AGNTS-BIOCHEM(•24006), NEOPLSMS/NEOPL AGNTS-CARCINOGENS(•24007), ENVIRON HEALTH-OCCUPATNL HEALTH(37013), ENVIRON HEALTH-AIR,WATR,SL POLLN(37015)
Biosystematic Codes: MURIDAE(86375)

19057285
IDENTIFICATION OF ADULTS AT HIGH RISK OF LUNG CANCER
MILLER A B
EPIDEMIOL. UNIT, FAC. MED., UNIV. TORONTO, MCMURRICH BUILD., 12 QUEEN'S PARK CRES., TORONTO, ONT. M5S 1A8, CAN.
CAN MED ASSOC J 122 (9). 1980. 985-987. Coden: CMAJA
Language: ENGLISH
Descriptors: NOTE HUMAN ASBESTOS POLY CYCLIC AROMATIC HYDROCARBONS NICKEL RADIO ISOTOPE: MUSTARD GAS CARCINOGEN OCCUPATIONAL HAZARD SMOKING SEX AGE
Concept Codes: GENETICS/CYTOGENET-SEX DIFFERENC(03510), RADIATION BIOL-RADTN EFF,PROTECT(•06506), BEHAVIOR BIOL-HUMAN BEHAVIOR(07004), BIOCHEM STUD-GENERAL(10060), MINERALS(10069), PATHOLOGY-DIAGNOSTIC(12504), RESPIRATORY SYST-PATHOLOGY(•1600-6), PSYCHIATRY-ADDICTION(INC SMOKNG)(21004), TOXICOL-GENL/EXP STUDS,METHS(•22501), TOXICOL-ENVIRONMNTL,INDUSTR(•22506), NEOPLSMS/NEOPL AGNTS-DIAGNS METH(•24001), NEOPLSMS/NEOPL AGNTS-CARCINOGENS(•24007), GERONTOLOGY(24500), ENVIRON HEALTH-OCCUPATNL HEALTH(•37013), PLANT PHYSIOL-CHEM CONSTITUENTS(51522)
Biosystematic Codes: PLANTAE-UNSPECIFIED(11000), HOMINIDAE(-86215)

19051357
REGULATORY ACTIONS AND EXPERIENCES IN CONTROLLING EXPOSURE TO ASBESTOS IN THE USA
NICHOLSON W J
ENVIRON. SCI. LAB., DEP. COMMUNITY MED., MT. SINAI SCH. MED., CITY UNIV. N.Y., NEW YORK, N.Y. 10029, USA.
HAMMOND, E. C. AND I. J. SELIKOFF (ED.). ANNALS OF THE NEW YORK ACADEMY OF SCIENCES, VOL. 329. PUBLIC CONTROL OF ENVIRONMENTAL HEALTH HAZARDS; INTERNATIONAL CONFERENCE, NEW YORK, N.Y., USA, JUNE 28-30, 1978. IX+405P. NEW YORK ACADEMY OF SCIENCES: NEW YORK, N.Y., USA. ILLUS. MAPS. PAPER. ISBN 0-89766-031-5. 0 (0). 1979 (RECD. 1980). P293-303. Coden: ANYAA
Language: ENGLISH
Descriptors: HUMAN WORKER ASBESTOSIS CANCER
Concept Codes: GENL BIOL-INSTITUT,ADMIN,LEGISLN(00508), GENL BIOL-SYMPOSIA,PROCDNGS,REVW(00520), SOCIAL BIOL/HUMAN ECOLOGY-(05500), MINERALS(10069), MINERALS(13010), RESPIRATORY SYST-GENL STUD,METHS(16001), RESPIRATORY SYST-PATHOLOGY(•1600-6), TOXICOL-ANTIDOTES,PREVENTIVE(•22505), TOXICOL-ENVIRONMNTL-,INDUSTR(•22506), NEOPLSMS/NEOPL AGNTS-CARCINOGENS(•24007), ENVIRON HEALTH-OCCUPATNL HEALTH(•37013), ENVIRON HEALTH-AIR,WATR,SL POLLN(37015)
Biosystematic Codes: HOMINIDAE(86215)

ASBESTOS CONTROL IN SCHOOL BUILDINGS

Alaska Department of Environmental Conservation
October, 1980

I. RECOMMENDATION

The Departments of Environmental Conservation (DEC), Labor (DOL), Health and Social Services (DHSS), Education (DOE), and Transportation and Public Facilities (DOTPF) should meet the week of October 13 to plan and coordinate their activities relating to asbestos control in public schools buildings. The following outlines DEC's recommended strategy of containment and/or removal of friable asbestos in Alaskan schools within two years.

1. The Department of Education should be designated as the lead agency to assure that continued sampling and testing as well as rehabilitation and possible on-going maintenance of schools with deteriorating friable asbestos will occur expeditiously.

2. The Department of Environmental Conservation should assist DOE by taking samples of any friable material in all schools built and /or remodeled between 1945 and 1978 that were not previously sampled unless DOE or the local school district assumes this responsibility in the local district.

3. The Department of Education should compile cost estimates of activities below no later than October 27. DOTPF and DEC should assist in this preparation.

   a. Complete sampling of all public schools built or remodeled between 1945 and 1978
   b. Analysis of all samples
   c. Partial correction of friable asbestos damage
   d. Complete removal of friable asbestos and renovation

4. ~~Two appropriation bills~~ FUNDS, which would cover, at a minimum, cost estimates provided in #3 above, and possibly estimates for renovation to be undertaken by DOTPF should be drafted by November 15 and recommended for the Governor's submittal to the Legislature. ~~One should be a Supplemental for activities undertaken during FY 81; the second should appropriate funds for FY 82.~~

5. Although the above recommendations pertain only to school buildings, other public buildings throughout the State may be equally in need of repair. DEC should encourage DOTPF to institute a program of detection and control for all public facilities in Alaska.

II. PURPOSE OF PROJECT

Asbestos is a general term for several fibrous minerals. Its most valuable property lies in the indestructable nature of products fabricated from its fibers. Fully contained asbestos fibers are not released into

the environment and cause no trouble. However, soft, easily crumbled asbestos, originally sprayed or trowled onto the receiving surface, releases fibers when damaged or subjected to age deterioration. Termed friable asbestos, it is this fibrous material which is the source of danger to human beings. When released, the tiny fibers lodge in lungs and tissues of the body, causing assorted malignant cancers and the debilitating lung disease asbestosis. As is the case with all known or suspected carcinogens, no exposure level has been established as a threshold. Illness from asbestos exposure usually doesn't appear until 15-40 years later.

Contractors generally used sprayed asbestos between 1945 and 1973 when its use for fireproofing and insulation was outlawed. In 1978, its use for all other purposes was outlawed. The Environmental Protection Agency under Section 112(b) of the Clean Air Act declared asbestos a hazardous air pollutant and set emission standards. EPA recently instituted its "Asbestos in School Buildings Control Program" under the Toxic Substances Control Act, primarily because of an Environmental Defense Fund citizen suit. EPA has chosen to limit its control efforts to public schools for several reasons: with limited funds EPA must limit its action to the most critical areas of concern; schools concentrate a large number of people in a small space daily; and children are apparently more susceptible to asbestos exposure than others. At this time the program is entirely voluntary. However, on September 17, EPA issued its draft regulations requiring all schools to take samples of friable asbestos by September, 1981.

III. SUMMARY OF PROJECT TO DATE

In March 1979, EPA contacted several agencies in the State alerting them to the dangers of friable asbestos, the institution of EPA's asbestos control program, and suggesting that Alaska be inventoried to determine whether, and to what extent, an asbestos problem exists in the State. Several Anchorage schools were in fact inventoried, with friable asbestos found in at least one. In late 1979, EPA contacted DEC, DHSS, DOE and DOTPF about establishing a sampling and control program within Alaskan schools. In December, 1979, a meeting was held with representatives of the above agencies and the Department of Labor to discuss the role of each agency in this new program.

The main conclusion of the meeting was that information was unavailable on whether Alaskan schools had a friable asbestos problem or, if so, of what magnitude. Participants agreed that if the problem were sufficiently large, the State might have to institute corrective measures, most likely through legislative action.

To make this determination, staff from the Environmental Health Section, then of DHSS, agreed to survey schools during their normal sanitary inspection duties. In January of 1980, Margo Partridge of EPA held workshops to train sanitarians and, between February 1 and May 8, 63 samples were taken. On May 14, 1980 the Department received test results from 35 samples throughout the state. A memo of June 19 summarized these results. Section IV summarizes the results of all the samples taken.

IV. SUMMARY OF SAMPLE RESULTS

A. Results

Of the 41 schools and public buildings sampled, 15 or 36.6% were found to have at least some asbestos. Thirteen or 37.1% of the schools 35 contained some asbestos. Samples tested ranged from less than 1% to greater than 70%. Nine samples, or 14.3% of the total samples contained 10% or more asbestos. Eight, or 12.7% of the total samples, contained 2% or less asbestos. With the exception of the Northward Building (1%) and the North Star Borough Building (<1%), both in Fairbanks, all samples with asbestos were from schools.

Geographically, samples were taken from schools in Juneau, Fairbanks, Nome, Tok, Matanuska-Susitna Borough, Kenai Peninsula Borough, Kodiak Island Borough, Old Harbor, Ouzinkie, Bethel, Delta Junction, Tetlin, Gakona, and Trapper Creek. However, both the greatest number of samples and, in this case, the greatest amount of asbestos was found in schools from the Matanuska-Susitna, Kenai Peninsula, and Kodiak Island Boroughs.

Appendix A lists all samples and results. Appendix B lists samples with asbestos geographically.

B. Qualifications

1. Sampling consistency was not maintained. While some sanitarians took samples of anything that looked even remotely like friable asbestos, others took samples only from material which they could almost positively assure contained asbestos.

2. The number of samples within a given region varied considerably. Southeast sanitarians sampled only one school and Southcentral sanitarians sampled 47 locations within 27 schools, while Northern sanitarians sampled 9 locations within 7 schools. If we assume that the possibility of finding asbestos is roughly proportional to the number of samples collected, it is no wonder that the largest number of samples with asbestos came from the Southcentral Region.

3. Anchorage schools were not sampled, because that school district has been conducting its own survey. Margo Partridge said that the Anchorage School District found asbestos in at least one school, but I have not spoken with its staff to obtain results.

V. CONCLUSION

In spite of the above qualifications, the results clearly prove that asbestos deterioration is a problem in at least some Alaskan schools. On June 14, President Carter signed the School Asbestos Hazard and Detection Act of 1980. The act requires all State educational agencies to prepare a plan by December 15, 1980 to show, among other things, how informational material on the asbestos detection and control program will be distributed to schools and how records on detection and control activities will be maintained. The federal Department of Education is

administering this part of the program as well as grants and loans; its proposed regulations were released September 17, 1980. The Alaska Department of Education only recently became aware of this task. While this act authorizes $97.5 million for detection grant and correction loan programs, the funds have not yet been appropriated by Congress. In the meantime, since the number of schools in Alaska built or remodeled between 1945 and 1978 is relatively small, the State should conduct a thorough sampling program to determine the exact magnitude and location of asbestos deterioration in public schools, if not in all schools. As for cleanup and rehabilitation, the extent of damage must be assessed on a school-by-school basis, using the Exposure Assessment designed by EPA and explained fully in Appendix A of DOE's draft regulations. An estimated cost should be extrapolated for all schools as total cost may require a legislative appropriation, bond package, and/or loans to local districts.

APPENDIX A

Results of Asbestos Sampling
Utah Biomedical Testing Laboratory

School/Building	City	Interior Location	Date Sampled	Date Tested	Results
Sherrod Elementary	Palmer		3-13-80	5-7 & 8-80	No
Wasilla High School	Wasilla		3-10-80	5-7 & 8-80	No
Wasilla Junior High	Wasilla		3-10-80	5-7 & 8-80	<1% chrysotile, ~40% amosite
Wasilla Junior High	Wasilla		3-10-80	5-7 & 8-80	No
Wasilla Elementary	Wasilla		3-10-80	5-7 & 8-80	~10% chrysotile ~30% amosite
Wasilla Elementary	Wasilla		3-10-80	5-7 & 8-80	No
Palmer High School	Palmer		3-13-80	5-7 & 8-80	No
Palmer High School	Palmer		3-13-80	5-7 & 8-80	No
Palmer Junior High	Palmer		3-13-80	5-7 & 8-80	No
Palmer Junior High	Palmer		3-13-80	5-7 & 8-80	No
Palmer Junior High	Palmer		3-13-80	5-7 & 8-80	1-2% chrysotile
Big Lake Elementary	Big Lake		3-10-80	5-7 & 8-80	No
Big Lake Elementary	Big Lake		3-10-80	5-7 & 8-80	No
Big Lake Elementary	Big Lake		3-10-80	5-7 & 8-80	No
SU Valley High	Talkeetna		3-11-80	5-7 & 8-80	No
SU Valley High	Talkeetna		3-11-80	5-7 & 8-80	No
SU Valley High	Talkeetna		3-11-80	5-7 & 8-80	No
Nome Elementary	Nome	Old Wing: boy's toilet	2-6-80	5-7 & 8-80	No
Nome Elementary	Nome	Hallway ceiling tile	2-6-80	5-7 & 8-80	No
Nome-Beltz High	Nome	Gym ceiling	2-6-80	5-7 & 8-80	No
Nome-Beltz High	Nome	Hallway ceiling	2-6-80	5-7 & 8-80	No
Main Junior High	Kodiak	1st & 2nd floor halls and classrooms	3-4-80	5-7 & 8-80	1-2% chrysotile
Main School Cafeteria	Kodiak	Pipe insulation in kitchen	3-4-80	5-7 & 8-80	5-10% chrysotile
Main School Cafeteria	Kodiak	Ceiling insulation	3-4-80	5-7 & 8-80	1-2% chrysotile
Main Elementary	Kodiak	Main hall ceiling tile	3-4-80	5-7 & 8-80	No
Main Elementary	Kodiak	Boy's restroom ceiling tile	3-4-80	5-7 & 8-80	No
East Elementary	Kodiak	Hall by office	3-4-80	5-7 & 8-80	No
Peterson Elementary	Kodiak	Woven material connecting 2 sections of a fresh-air duct: shop area for custodian	3-5-80	5-7 & 8-80	~50% chrysotile

School/Building	City	Interior Location	Date Sampled	Date Tested	Results
Peterson Elementary	Kodiak	Lining to safety blanket--auto mechanic shop	3-5-80	5-7 & 8-80	No
Kodiak High School	Kodiak	Lining to safety blanket--auto mechanic shop	3-5-80	5-7 & 8-80	~60% chrysotile
Kodiak High	Kodiak	All rooms & halls	3-5-80	5-7 & 8-80	No
Main School	Kodiak	Boiler room pipe insulation	3-5-80	5-7 & 8-80	No
Kodiak High	Kodiak	Cord from apron used in welding room	3-5-80	5-7 & 8-80	~60% chrysotile
State Office Bldg.	Juneau	Parking garage	3-19-80	5-7 & 8-80	No
Trapper Creek Elementary	Trapper Creek	Ceiling cover in bldg 18: library	2-28-80	5-7 & 8-80	~1% chrysotile
Living Word Academy	Tok	Boiler insulation near entrance to school	2-4-80	7-9 & 10-80	<1% chrysotile, 10±5%amosite
Gakona School	Gakona	Pipe insulation	2-12-80	7-9 & 10-80	No
Tetlin BIA School	Tetlin	Ceiling tile	2-12-80	7-9 & 10-80	No
Delta Junction	Delta Junction	Ceiling material on floor in furnace room	3-18-80	7-9 & 10-80	No
Alaska Land Civic Building	Fairbanks	Ceiling	4-29-80	7-9 & 10-80	No
Northward Building	Fairbanks	Ceiling cover of basement	4-30-80	7-9 & 10-80	<1% chrysotile
Federal Building	Fairbanks	Steel support beams & ceiling of mechanical room & parking garage	5-2-80	7-9 & 10-80	No
North Star Borough Building	Fairbanks	Support beams--air plenum	4-30-80	7-9 & 10-80	1% chrysotile
Rampart Mini-Mall	Fairbanks	Ceiling cover	4-30-80	7-9 & 10-80	No
Main School	Fairbanks	Pipe insulation	5-20-80	7-9 & 10-80	70±5% chrysotile
Homer Junior High	Homer		3-20-80	7-9 & 10-80	No
Homer Junior High	Homer		3-20-80	7-9 & 10-80	No
East Homer Elementary	Homer		3-27-80	7-9 & 10-80	10-20% amosite
Homer High School	Homer		3-21-80	7-9 & 10-80	No
Soldotna Junior High	Soldotna		3-18-80	7-9 & 10-80	No
Redoubt Elementary	Redoubt		3-12-80	7-9 & 10-80	1-2% chrysotile
Kenai Central High	Kenai		5-1-80	7-9 & 10-80	No
Susan B. English	Seldovia		4-1-80	7-9 & 10-80	No
Susan B. English	Seldovia		4-1-80	7-9 & 10-80	No
Susan B. English	Seldovia		4-1-80	7-9 & 10-80	No
South End High School	Ninilchik		3-19-80	7-9 & 10-80	30±5% chrysotile
Capital School	Juneau	kindergarten piping	11-5-79	7-9 & 10-80	No

School/Building	City	Interior Location	Date Sampled	Date Tested	Results
Kodiak High School	Kodiak		4-4-80	7-9 & 10-80	2-5% chrysotile
Kodiak High School	Kodiak		4-4-80	7-9 & 10-80	1-2% chrysotile
Old Harbor Elementary	Old Harbor		3-19-80	7-9 & 10-80	No
Ouzinkie School	Ouzinkie		3-7-80	7-9 & 10-80	No
Lower Kuskokwim (Kilbuck Elementary and Junior High)	Bethel	Ceiling of gym	4-24-80	7-9 & 10-80	No
Lower Kuskokwim (Bethel Regional High School)	Bethel	Ceiling tile from classroom bldg	4-25-80	7-9 & 10-80	No

APPENDIX B

Geographic Listing of
Samples Containing Asbestos

A. Mata[illegible]ka-Susitna Borough--17 samples: 3 with asbestos; 2 or 11.8% for asbestos above 40%

School/Building	City	Interior Location	Date Sampled	Date Tested	Results
Wasilla Elementary	Wasilla	Location unidentified	3-10-80	5-7 & 8-80	~10% chrysotile ~30% amosite
Wasilla Junior High	Wasilla	Location unidentified	3-10-80	5-7 & 8-80	<1% chrysotile, ~40% amosite
Palmer Junior High	Palmer	Location unidentified	3-13-80	5-7 & 8-80	1-2% chrysotile

B. Kodiak Island Borough--14 samples: 8 with asbestos; 4 or 28.6% with asbestos above 10%

School/Building	City	Interior Location	Date Sampled	Date Tested	Results
Peterson Elementary	Kodiak	Woven material connecting 2 sections of a mesh-air duct, shop area for custodian	3-5-80	5-7 & 8-80	~50% chrysotile
Main Junior High	Kodiak	1st & 2nd floor halls and classrooms	3-4-80	5-7 & 8-80	1-2% chrysotile
Main School Cafeteria	Kodiak	Pipe insulation in the kitchen	3-4-80	5-7 & 8-80	5-10% chrysotile
Main School Cafeteria	Kodiak	Ceiling insulation	3-4-80	5-7 & 8-80	1-2% chrysotile
Kodiak High School	Kodiak	Lining to safety blanket--auto mechanic shop	3-5-80	5-7 & 8-80	~60% chrysotile
Kodiak High School	Kodiak	Location unidentified	4-4-80	7-9 & 10-80	2-5% chrysotile
Kodiak High School	Kodiak	Location unidentified	4-4-80	7-9 & 10-80	1-2% chrysotile
Kodiak High	Kodiak	Cord from apron--used in welding room	3-5-80	5-7 & 8-80	~60% chrysotile

C. Kenai Peninsula Borough--11 samples: 3 with asbestos; 2 or 18.2% with asbestos above 10%

School/Building	City	Interior Location	Date Sampled	Date Tested	Results
East Homer Elementary	Homer	Location unidentified	3-27-80	7-9 & 10-80	10-20% amosite
Redoubt Elementary	Redoubt	Location unidentified	3-12-80	7-9 & 10-80	1-2% chrysotile
South End High	Ninilchik	Location unidentified	33-19-80	7-9 & 10-80	30%±5% chrysotile

D. Other schools--15 samples: 3 with asbestos; 2 or 13.3% with asbestos above 10%

School/Building	City	Interior Location	Date Sampled	Date Tested	Results
Living Word Academy	Tok	Boiler insulation near entrance to school	2-4-80	7-9 & 10-80	<1% chrysotile, 10±5% amosite
Main School	Fairbanks	Pipe insulation	3-20-80	7-9 & 10-80	70±5% chrysotile
Trapper Creek Elementary	Trapper Creek	Ceiling cover in bldg 18: library	2-28-80	5-7 & 8-80	~1% chrysotile

Dr. Bob Frazier (Anchorage)
pulmonary asbestosis, tumor

Dr Selikoff - not too highly
regarded by others in field

Dr ~~[illegible]~~, Boston Hosp/Harvard Med
School -
20 yrs heavy exposure)
40 " lighter " } latency

Dr. Ed Gaensler Boston City
Hosp. Chief Chest Div
(617) 247-6253

(2)

Endrey never responded back to McClintock.

SB 179 - funeral exp.; med. exp.; filed to employer rates increased.

3-6-81

Jacquelyn McClintock - Workman's Compensation (since 1977) Fbks. 1978
- for any given year

Asbestosis - covered as any other pulmonary disease; problems are the latency period, and finding which employer is responsible. (the last injurious exposure rule - the last employer is responsible)

AS 23.30.105 must be filed within 2 yrs after knowledge of disease. X-taking out the space of 4 yr. after injury - must file. Makes allowances for illness & latency period.

Are preparing booklet to send to those who file.

* FY82 budget to publicize that people can file.

Plumbers & Pipefitters Union - misunderstood regs.

Hearing teleconference - 4 people complained but only one had actually filed.

- Compensible for anything that worsens the condition.

12-4-80 - no recent hearings/claims on asbestosis

Jack Ensley - Int'l Heat & Frost Workers. List of names for Workman's Comp. Only one had filed. (Henry Moore) Sept 19, 1977 Then Moore filed a 3rd party claim. cannot file

George Thierry

Ellen Greenburg 20 St
Lee Hayes 2947

TO: SEN. PARR, CHAIRMAN, SENATE U.E.S.S.
FROM: BILL MILES
RE: SB 338, SB 339 - ASBESTOS HAZARD PROGRAM
DATE: APRIL 15, 1981

You asked for information re: S.B. 338 & S.B. 339 and how the proposed program might affect the Anchorage School District. The statistics provided by the District are as follows.

Thus far, the potential problem exists in 3 schools: Diamond, Bartlett and West. It can be treated for roughly $5.00 per sq. ft. The extent of the problems are as follows:

Diamond (pool area including lobby, mechanical room, rifle range, lounge). No immediate danger. 4,470 sq. ft.

Bartlett (entire ceiling area) No immediate danger. 363,390 sq. ft.

West (pool area including pool, stairs, locker rooms, ceiling) Severe immediate danger in locker rooms. 9,328 sq. ft.

377,188 sq. ft.
× $5

TOTAL COST $1,885,940

CANCER
Thomas H. Corbett

Asbestos - magnesium oxide & silicate compounded with water / Chemical breakdown of the type most commonly used in industry.

1st century - Greek geographer, Strabo, and Roman naturalist, Pliny the Elder, Both noted an illness in the lungs of slaves who wove asbestos into cloth.

3-10-81

Ellen Greenberg DEC 2650 3651

samples of friable asbestos analyzed $22.00 each:

Utah Biomedical Lab
Salt Lake City, Utah

- considering switching to a lab-ix calif. because it will give % asbestos as well as % other fibers (ex. fiberglas etc.)

- EPA has done a central study of many labs in the country to determine how their analysis compares with their central data.
- The lab in Arch. has not been tested by EPA and their prices are not competitive $40.00 ea.

Chemical & Geological Lab of Am.
Rene Yorkin V.P. 279-4014
Archie Green Pres.

TEST

Phase contrast - will not satisfy EPA / is not too accurate. EPA will test for quality assurance

polarized light microscope is needed → Lab has ordered equipment but has not arrived - will be 45.00 per sample

3/5/81

~~Susan Johnson~~ -

Darryl Miller -

only 2 inspectors in Ak. (Safety & compliance)
1 volunteer - inspects asbestos on request.

Industrial
Ray Jorgensen - Chief, Hygienist
super. people who are employed and inspect work sites.
did a study on identifying & evaluating asbestos → Tom Hannah. 10/12 entries on asbestos. Priority is haphazard, no specific program to look for asbestos.
priorities:
1. employee complain
2. agency referral
3. follow up inspections
* 4. programmed inspections (about 15 yr.) 2
only about 4/asbestos

must prove exposure in court require heavy documentation — much time.
demolition work - should be sampled first

Union - workers are aware of hazard
but frequently must provide own protection

Precautionary measures are possible.

- An effective control program would take more staff and several years.
- self-analysis plans
  - A. consultation
  - B. reimbursement for testing

Data - identifying establishments by region in State

Fed. OSHA - ~~Ships~~

~~Septa~~ DEC - train sanitation people
DOTPF - train people

Analysis / engineering control -

May need use a certain lab for legal means with acceptable. X ray diffraction microscopy to differentiate fibrous material / asbestos. Send to N.W. Environ. Health Services Richland Wash. (Boar Cert
One lab in Anch — Oil & Geological.

PLEASE NOTE: THE FOLLOWING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT

Shroud w/ advertising for asbestos

existing standard: 2 fibers per cubic ~~centimeter~~ centimeter of air TWA 8 hrs. = 2 Million fibers per cubic meter of air, worker may intake 8 cubic meters of air or more per day

existing technology allows, and NIOSH proposes 0.5 fibers per cubic centimeter of air level (see NIOSH publication) — pg. 1

Health hazards associated with exposure to friable asbestos in industrial situations has been a world-wide concern and a subject of major documentation, linking asbestos to many types of cancer.

There are 1,897 places of employment in Alaska where potential exposure to asbestos exists. Most of the responsibility for ~~protecting~~ alerting employees ~~from~~ to these hazards rests ~~with the~~ on the consciences of their employers, as the Division of Occupational Safety & Health has only two field employees for the entire state and can manage ~~only~~ approximately four site inspections per year related to asbestos.

Five new positions for Industrial Hygienists were approved with some funding for salaries and combined with adequate travel appropriations, have succeeded in making the site inspection program implemental.

My concern for the health protection of all employees prompts me to urge the funding of these positions as well as the Division's ~~request~~ travel budget request for FY82.

for Industrial Hygienists

Two new positions were approved without funding for salaries ~~and some~~ combined with inadequate travel funds, have succeeded in making the site inspection program ineffectual in protecting workers from many Health hazards.

Inadequate Travel Expenses

~~[illegible]~~ Duckworth/Bennett

Health hazards associated with exposure to friable asbestos in industrial situations has been a world-wide concern and subject of major documentation. Asbestos has been widely used since 1940, no "safe" levels of exposure have been determined and exposure to the damaged substance has been linked to many types of cancer. ~~[illegible]~~ ~~1,897 places of employment have potential~~ ~~identified as potential asbestos exposure~~ There are 1,897 places of employment in Alaska where potential exposure to asbestos exists. Only four of these establishments were selected for inspection by the Division of Occupational Safety and Health because only two industrial hygienists are employed to conduct ~~[illegible]~~ site inspections in the entire state.

— Concern for adequate protection of employees —

Health hazards associated with exposure to friable asbestos in industrial situations has been a world-wide concern and a subject of major documentation, linking asbestos to many types of cancer.

There are 1,897 places of employment in Alaska where potential exposure to asbestos exists. Approximately four site inspections for asbestos are done yearly by O.S.H. because of required priorities and lack of manpower. ~~Although~~ two positions for Industrial Hygienists have been approved but remain unfunded.

My concern for the adequate health protection of all employees prompts me to urge the funding of these positions and ~~fund~~ the Division's request for travel expenses for the Industrial Hygienists for FY 82.

(202) 755-2700 DIRECTOR E.P.A.

OFFICE OF SOLID WASTE (755-9170)

OFFICE OF TOXIC SUBSTANCE – 755-0310

(DIR.) RICHARD GUYMOND – 755-2196

ASBESTOS PROJECT

REGION X EPA

* Margo Partridge 206 442 5560

John Keller

~~Portland~~

nothing difficult about taking samples, as long as all training is the same.

– some instances people have not wanted to have whole core samples taken!

– good records must be kept on locations

– should be sure to take random samples (in different places) and mark samples well.

– most school districts have used maintence personnel

– should wear protective equipment.

PLEASE NOTE: THE PRECEDING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT.

magnesium oxide / silicate
compounded with water

Asbestos is the generic term for a number of naturally occurring fibrous mineral silicates, a mineral that is incombustible, flexible, and cannot be biologically destroyed easily. Since the mid-1970's concern has grown over the hazards of asbestos in schools, as loose, flaking asbestos material was discovered in schools in the country and medical evidence indicating linkage between asbestos and disease mounted.

Asbestos fibers are indestructible, and once inhaled into the lungs are never released. Asbestosis, a debilitating disease caused when the lungs are clogged with fibers, is only related to the exposure to asbestos, other related diseases are lung, esophagal, stomach and colon cancers, and mesothelioma, a cancer of the lining of the chest cavity so rare that prior to its linkage to asbestos it was not listed in the cancer registry.

For a generation, asbestos was hailed as a "miracle mineral" because of its fireproofing and insulating qualities. It found its way into over 4000 industrial uses ranging from brake-linings to floor tiles to modeling clay. Its use was mandated in local building codes and the word asbestos became a reassurance against fire and disaster. Following WW II and into the 50's asbestos was sprayed everywhere, school construction was at apeak with the "baby boom" and concern for fire safety in education was a national trend. Sources of asbestos in schools are sprayed-on insulation, decorative or acoustical products, reinforced cement and plaster products, pipe insulation, floor tiles and fireproof textiles.

When researchers linked the exposure to airborne asbestos fibers to cancer in the mid-60's, they turned a thriving industry into an industrial villain. Johns-Manville Corporation, the world's largest producer of asbestos, was marketing seven million tons of the material a year.

The most devastating fact about asbestos is that the latency period is extensive - up to 40 years. Little is understood about the physical capacity of the human body to withstand asbestos, but no level of exposure has been determined to be safe, with each individual physiology being different. Some people are susceptible to disease after minimal exposure, although incidence is highest with those who work directly with the material and inareas around shipyards andindustries. Joseph Califano HEW

It has been impossible for science to predict the hazard to the general public since comprehensive studies are years away. It has been determined that children are more apt to be affected by these carcinogens because of the growth process and the affect on cell development.

Hearings were begun in Congress in 1979 concerning asbestos hazards in schools after surveys in some states revealed an alarming amount of damaged asbestos and poor air quality in Eastern schools. The Asbestos School Hazard and Control Act of 1980 was the result of months of hearings. The Department of Education has complied with submitting state plans in accordance with the act, and planning has been followed through with the DEC, DOT/PP, and DOE working together to develop a plan to comply with P.L. 96-270. The Federal Asbestos act was to provide money to states to assist in detection and renovation, unfortunately this money was never funded for this program.

PLEASE NOTE: THE FOLLOWING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT

THE MOUNT SINAI MEDICAL CENTER
ONE GUSTAVE L. LEVY PLACE • NEW YORK, N.Y. 10029

Mount Sinai School of Medicine • The Mount Sinai Hospital

November 3, 1980

Environmental Sciences Laboratory
Cummings Basic Sciences Building
10 East 102 Street
New York, New York 10029
(212) 650-6173

Mr. Jack M. Endsley, Business Agent
Local 97 IAMFIAW
407 Denali Street
Anchorage, Alaska 99501

Dear Mr. Endsley:

Our investigation of deaths among members of Local 97 January 1, 1967-December 31, 1976 indicated that 10 men died of cancer;

Ed Kelly	Lung cancer	1967
Ed Campbell	Lung cancer	1968
Fred Moffit	Lung cancer	1968
Kenneth Wise	Peritoneal mesothelioma	1968
Lloyd Larson	Leukemia	1970
Willis Moore	Lung Cancer	1970
Bill C. Anderson	Lung Cancer	1975
Hoyt Gilley	Peritoneal mesothelioma	1975
Howard Kilpinger	Abdominal cancer	1976
Henry Moore	Lung cancer	1976

We have information concerning deaths 1977-1980 (to date) but I am not sure that this is yet complete. However, if such additional information would be of assistance to you, please write me.

With all best wishes.

Cordially,

Irving J. Selikoff, M.D.
Professor

IJS:jm
cc: Mrs. Janet S. Kaffenburgh

MOUNT SINAI SCHOOL OF MEDICINE
of The City University of New York
FIFTH AVENUE AND 100TH STREET • NEW YORK, N.Y. 10029

Department of Community Medicine

March 8, 1976

Mr. Jack N. Endsley, Business Agent
Local No. 97, IAHPIAW
407 Denali Street, Room 302
Anchorage, Alaska 99501

Dear Mr. Endsley:

Thank you very much for the information you have provided in the case of Hoyt B. Gilley of Local No. 97. This will be of great value to us, and I am most appreciative.

Our first information indicates that Mr. Gilley died of malignant mesothelioma. I call this to your attention since the question of the protection of the widow by workmen's compensation may arise. I realize that Mr. Gilley died in North Charleston, South Carolina but he was a member of your local.

With warm personal regards.

Sincerely yours,

Irving J. Selikoff, M.D.
Professor

IJS:ss
97-2223

THE MASON CLINIC
1100 NINTH AVENUE
P.O. BOX 900
SEATTLE, WASHINGTON 98111
TELEPHONE (206) 223-6600

DEPARTMENT OF MEDICINE
Section of Chest and Infectious Diseases
RICHARD H. WINTERBAUER, M.D.
JOHN D. ALLEN, M.D.
EDWARD H. MORGAN, M.D.
DAN E. OLSON, M.D., PhD.
NEELY E. PARDEE, M.D.

August 30, 1979

To Whom It May Concern:

Re: BARTHOLOMY, MILTON W.
Mason Clinic No. 30-76-84

It has been determined that Mr. Bartholomy has interstitial pulmonary fibrosis resulting from prolonged asbestos exposure, and this conclusion is confirmed by biopsy and microscopic studies of pulmonary secretions. Physiologic impairment is severe, and Mr. Bartholomy should be considered totally disabled on this basis. Any additional exposure to asbestos or to any other airborne dust or irritant fume will threaten Mr. Bartholomy's safety and future survival, and this fact should be taken into consideration in support of the conclusion that he has disability. Disability should be considered total and permanent.

Sincerely,

Neely E. Pardee, M.D.

NEP:mc

PERMANENT INK 75 – 53 – D

BUREAU OF VITAL STATISTICS

Field	Entry
1. Deceased — Name (First, Middle, Last)	BILL CALVIN ANDERSON
2. Sex	MALE
3. Race (White, Negro, American Indian, etc.)	CAUCASIAN
4. Date of Death (Month, Day, Year)	JANUARY 26, 1975
5a. Age — Last Birthday	47 YEARS
5b. Under 1 Year (Months, Days)	
5c. Under 1 Day (Hours, Minutes)	
6. Date of Birth (Month, Day, Year)	MARCH 3, 1927
Place of Death	ALASKA
7a. Recording District	ANCHORAGE
7b. City, Town or Location	ANCHORAGE
7c. Inside City Limits	☐ Yes ☐ No
7d. Hospital or Other Institution — Name	GLENMORE NURSING HOME
7e. Street and Number	4895 Cordova Street, Anchorage, Alaska
7f. Length of Stay in 7b	
8. State of Birth (If not in U.S.A. name country)	STILWELL, OKLAHOMA
9. Citizen of What Country	U.S.A.
10. Marital Status	☐ Married ☐ Never Married ☐ Widowed ☒ Divorced
11. Surviving Spouse (If wife, give maiden name)	NONE
12. Social Security Number	446-26-2973
13a. Usual Occupation (Give kind of work done during most of working life, even if retired)	ASBESTOS WORKER
13b. Kind of Business or Industry	CONSTRUCTION
14a. Residence — State	ALASKA
14b. Recording District or County	ANCHORAGE
14c. City, Town, or Location	ANCHORAGE
14d. Inside City Limits	☐ Yes ☒ No
14e. Street and Number	8241 SPRUCE ROAD,
14f. Length of Stay in 14c	28 YEARS
15. Father — Name (First, Middle, Last)	JAMES ANDERSON
16. Mother — Maiden Name (First, Middle, Last)	MILDRED LEE
17a. Informant — Name	JACK ENDSLEY
17b. Mailing Address — Street or P.O. Box No., City or Town, State, Zip Code	8241 SPRUCE ROAD, ANCHORAGE, AK.

Usual residence where deceased lived. If death occurred in institution, give residence before admission.

18. PART I. DEATH WAS CAUSED BY: (ENTER ONLY ONE CAUSE PER LINE FOR (a), (b) AND (c)) SEE REVERSE SIDE

If alcohol/narcotics significantly involved, indicate under item 18 or item 23.

Conditions, if any, which gave rise to immediate cause (a), stating the underlying cause last.

(a) Immediate Cause	[illegible]
(b) Due to, or as a consequence of	[illegible]
(c) Due to, or as a consequence of	

PART II. OTHER SIGNIFICANT CONDITIONS: CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO CAUSE GIVEN IN PART I(a)

19a. Autopsy ☐ Yes ☐ No

If violent death

Field	Entry
20a. ☐ Accident ☐ Homicide ☐ Suicide ☐ Undetermined	
20b. Date of Injury (Month, Day, Year)	
20c. Hour	
20d. How Injury Occurred	
20e. Injury at Work	☐ Yes ☐ No
20f. Place of Injury (At home, farm, street, factory, office building, etc.)	
20g. Location — Street and Number, City or Town, State, Zip Code	

Certification — Physician (See under 21a)

Death occurred at the place on the date and to the best of my knowledge due to the cause(s) stated.

Field	Entry
21a. Hour of Death	3:00 P.M.
21b. Dates of Attendance — From	1/1/75
21c. To	1/26/75
21d. Date Last Seen Alive	1/26/75

Certification — Medical Examiner or Coroner (See under 23a)

On the basis of the examination of the body and/or the investigation, in my opinion death occurred on the date and due to the cause(s) stated.

Field	Entry
Hour of Death	3:00 p.m.
Date Pronounced Dead	Jan. 26, 1975

Physician or other signing certificate

Field	Entry
22. Signature, Degree or Title	[signature]
22b. Name (Type or Print)	DAVID DIETZ, M.D.
22c. Date Signed (Month, Day, Year)	1-18-75
22d. Mailing Address — Street or P.O. Box, City or Town, State, Zip Code	825 L STREET, ANCHORAGE, ALASKA 99510
24a. ☐ Burial ☐ Removal ☒ Cremation	
24b. Date (Month, Day, Year)	1-30-75
24c. Cemetery or Crematory — Name and Location (City or Town, State)	SPENARD HEIGHTS CREMATORY, ANCHORAGE, ALASKA
Permit Issued By	ANCHORAGE
Funeral Director — Signature	[signature] LEE NOEGLEIN
Funeral Home — Name and Address	EVERGREEN MEMORIAL CHAPEL
27a. Registrar, Vital Statistics	[signature] Deputy Clerk
27b. Address	ANCHORAGE

CERTIFIED TRUE COPY
BUREAU OF VITAL STATISTICS
ANCHORAGE, ALASKA
January 30, 1975
[signature]
DEPUTY C.

ORIGINAL - STATE COPY

Bill C. Anderson

Joined Local #97 approximately July, 1951.

Application shows 2 years previous trade experience with Brower Insulation Company in Alaska.

Was issued a Withdrawal Card in January, 1954.
Withdrawal returned August, 1954.

Active membership in Local 97 during 1955, 1956, 1957, 1958, 1959, 1960.

Was issued a Traveler in December, 1960.

Traveler was returned May, 1961.

Traveler issued March, 1971 - returned Sept., 1971.

Traveler issued January, 1972. - returned July 1972.

RECORDER'S NO. 76 - 133 - D

ALASKA DEPARTMENT OF HEALTH AND WELFARE
BUREAU OF VITAL STATISTICS — JUNEAU, ALASKA 99801

DATE REGISTERED

DECEASED — NAME (1) FIRST: HENRY MIDDLE: CALLAWAY LAST: MOORE

(2) SEX: MALE (3) RACE: CAUCASIAN (4) DATE OF DEATH: MARCH 27, 1976

(5a) AGE — LAST BIRTHDAY: 72 YEARS (5b) UNDER 1 YEAR: MONTHS / DAYS (5c) UNDER 1 DAY: HOURS / MINUTES (6) DATE OF BIRTH: JUNE 7, 1903

(7a) PLACE OF DEATH: ALASKA RECORDING DISTRICT: ANCHORAGE (7b) CITY, TOWN OR LOCATION: ANCHORAGE (7c) INSIDE CITY LIMITS: ☒ YES ☐ NO

(7d) HOSPITAL OR OTHER INSTITUTION — NAME (IF NOT IN EITHER, GIVE STREET AND NUMBER): PROVIDENCE HOSPITAL (7e) STREET AND NUMBER: 3200 PROVIDENCE DRIVE

(7f) LENGTH OF STAY IN 7b: 27 YEARS (8) STATE OF BIRTH (IF NOT IN U.S.A., NAME COUNTRY): BASTROP, TEXAS (9) CITIZEN OF WHAT COUNTRY: U.S.A.

(10) MARITAL STATUS: ☒ MARRIED ☐ NEVER MARRIED ☐ WIDOWED ☐ DIVORCED (11) SURVIVING SPOUSE (IF WIFE, GIVE MAIDEN NAME): CLARA M. CROWE

(12) SOCIAL SECURITY NUMBER: 558-03-0068 (13a) USUAL OCCUPATION (GIVE KIND OF WORK DONE DURING MOST OF WORKING LIFE, EVEN IF RETIRED): RETIRED INSULATOR (13b) KIND OF BUSINESS OR INDUSTRY: CONSTRUCTION

(14a) RESIDENCE — STATE: ALASKA (14b) RECORDING DISTRICT OR COUNTY: ANCHORAGE

(14c) CITY, TOWN, OR LOCATION: ANCHORAGE (14d) INSIDE CITY LIMITS: ☒ YES ☐ NO (14e) STREET AND NUMBER: 1720 SCENIC WAY

(14f) LENGTH OF STAY IN 14c: 27 YEARS (15) FATHER — NAME FIRST MIDDLE LAST: DAN MOORE (16) MOTHER — MAIDEN NAME FIRST MIDDLE LAST: ETHEL CALLAWAY

(17a) INFORMANT — NAME: CLARA M. MOORE (17b) MAILING ADDRESS — STREET OR P.O. BOX NO., CITY OR TOWN, STATE, ZIP CODE: 1720 SCENIC WAY, ANCHORAGE, ALASKA 99501

(18) PART I. DEATH WAS CAUSED BY: (ENTER ONLY ONE CAUSE PER LINE FOR (a), (b) AND (c)) SEE REVERSE SIDE — APPROXIMATE INTERVAL BETWEEN ONSET AND DEATH

IMMEDIATE CAUSE (a) Bronchogenic Carcinoma

DUE TO, OR AS A CONSEQUENCE OF: (b) Asbestosis

DUE TO, OR AS A CONSEQUENCE OF: (c)

(MALFUNCTION OR DRINKING SIGNIFICANTLY INVOLVED. INDICATE UNDER ITEM 18 OR ITEM 20)

(CONDITIONS, IF ANY, WHICH GAVE RISE TO IMMEDIATE CAUSE (a), STATING THE UNDERLYING CAUSE LAST)

PART II. OTHER SIGNIFICANT CONDITIONS: CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO CAUSE GIVEN IN PART I(a): Atherosclerotic cardiovascular disease

(18a) AUTOPSY ☐ YES ☐ NO (18b) ☐ YES ☐ NO

VIOLENT DEATH

(20a) ☐ ACCIDENT ☐ HOMICIDE ☐ SUICIDE ☐ UNDETERMINED (20b) DATE OF INJURY (MONTH, DAY, YEAR) (20c) HOUR (20d) HOW INJURY OCCURRED (ENTER NATURE OF INJURY IN PART I OR PART II, ITEM 18)

(20e) INJURY AT WORK ☐ YES ☐ NO (20f) PLACE OF INJURY (AT HOME, CANNERY, ETC. SPECIFY) (20g) LOCATION — STREET AND NUMBER, CITY OR TOWN, STATE, ZIP CODE

(21a) CERTIFICATION — PHYSICIAN (SIGN UNDER 23a): DEATH OCCURRED AT THE PLACE ON THE DATE, AND TO THE BEST OF MY KNOWLEDGE, DUE TO THE CAUSE(S) STATED. (21a) HOUR OF DEATH (21b) DATES IN ATTENDANCE FROM 1972 (21c) TO 3-27-76 (21d) DATE LAST SEEN ALIVE BY PHYSICIAN: 3 27 76 (21e) BODY VIEWED AFTER DEATH BY PHYSICIAN: ☒ YES ☐ NO

(22a) CERTIFICATION — MEDICAL EXAMINER OR CORONER (SIGN UNDER 23a): ON THE BASIS OF THE EXAMINATION OF THE BODY AND/OR THE INVESTIGATION, IN MY OPINION, DEATH OCCURRED ON THE DATE AND DUE TO THE CAUSE(S) STATED. HOUR OF DEATH M. (22b) DATE PRONOUNCED DEAD MONTH DAY YEAR (22c) HOUR

OR OTHER FILING CERTIFICATE

(23a) SIGNATURE: Thomas C. Wood M.D. DEGREE OR TITLE (23b) NAME (TYPE OR PRINT): THOMAS C. WOOD, M.D.

(23c) DATE SIGNED (MONTH, DAY, YEAR): 3-29-76 (23d) MAILING ADDRESS — STREET OR P.O. BOX NO., CITY OR TOWN, STATE, ZIP CODE: 207 E. NORTHERN LIGHTS BLVD., ANCHORAGE, ALASKA

(24a) ☐ BURIAL ☐ REMOVAL ☒ CREMATION (24b) DATE (MONTH, DAY, YEAR): 3-31-76 (24c) CEMETERY OR CREMATORY — NAME AND LOCATION (CITY OR TOWN, STATE): SPENARD HEIGHTS CREMATORY, ANCHORAGE

(25) PERMIT ISSUED BY: ANCHORAGE — FUNERAL DIRECTOR — SIGNATURE: R.D. ROME — FUNERAL HOME — NAME AND ADDRESS (STREET OR P.O. BOX NO., CITY OR TOWN, STATE, ZIP CODE): EVERGREEN MEMORIAL CHAPEL, I

(27a) RECORDER-REGISTRAR: VITAL STATISTICS Deputy Clerk (27b) ADDRESS: ANC

CERTIFIED TRUE COPY
BUREAU OF VITAL STATISTICS
DEPUTY CLERK
April 1st, 1976

STATE FILE NUMBER COURTESY COPY

CERTIFICATE OF DEATH

STATE OF CALIFORNIA - DEPARTMENT OF PUBLIC HEALTH

LOCAL REGISTRATION DISTRICT AND CERTIFICATE NUMBER COURTESY COPY

DECEDENT PERSONAL DATA

1a. NAME OF DECEASED—FIRST NAME	1b. MIDDLE NAME	1c. LAST NAME	2a. DATE OF DEATH—MONTH DAY, YEAR	2b. HOUR
EDWARD	JOSEPH	KELLY	May 31, 1967	12:45

3. SEX	4. COLOR OR RACE	5. BIRTHPLACE (STATE OR FOREIGN COUNTRY)	6. DATE OF BIRTH	7. AGE (LAST BIRTHDAY)	IF UNDER 1 YEAR	IF UNDER 24 HR.
Male	White	Missouri	December 4, 1915	51 YEARS		

8. NAME AND BIRTHPLACE OF FATHER	9. MAIDEN NAME AND BIRTHPLACE OF MOTHER	10. CITIZEN OF WHAT COUNTRY	11. SOCIAL SECURITY NUMBER
Patrick Kelly, Ireland	Catherine Smith, Ireland	U.S.A.	493-09-3601

12. LAST OCCUPATION	13. NO. OF YEARS IN OCCUPATION	14. NAME OF LAST EMPLOYING COMPANY OR FIRM (GIVE ADDRESS)	15. KIND OF INDUSTRY OR BUSINESS
Pipe Coverer	14	E.J. Bartells Co.	Asbestos Pipe Construction

16. IF DECEASED WAS EVER IN U.S. ARMED FORCES, GIVE WAR OR DATES OF SERVICE	17. SPECIFY MARRIED, NEVER MARRIED, WIDOWED, DIVORCED	18a. NAME OF PRESENT SPOUSE	18b. PRESENT OR LAST OCCUPATION OF SPOUSE
World War II	Married	Doris Kelly	Housewife

PLACE OF DEATH

19a. PLACE OF DEATH—NAME OF HOSPITAL	19a. STREET ADDRESS—(GIVE STREET OR RURAL LOCATION. DO NOT USE P.O. BOX NUMBER)	
Veterans Administration Hospital	150 Muir Road	

19c. CITY OR TOWN	19d. COUNTY	19e. LENGTH OF STAY IN CITY OF DEATH	19f. LENGTH OF STAY IN CALIFORNIA
Martinez	Contra Costa	2 weeks	2 weeks

LAST USUAL RESIDENCE (WHERE DID DECEASED LIVE—IF IN INSTITUTION ENTER RESIDENCE BEFORE ADMISSION)

20a. LAST USUAL RESIDENCE—STREET ADDRESS (GIVE STREET OR RURAL LOCATION. DO NOT USE P.O. BOX NUMBER)	20b. IF INSIDE CITY CORPORATE LIMITS ☐ YES ☐ NO	IF OUTSIDE CITY CORPORATE LIMITS ☐ YES ☒ NO OR UNKNOWN	21a. NAME OF INFORMANT (IF OTHER THAN SPOUSE)
Mile 101 Seward Highway			Wife

20c. CITY OR TOWN	20d. COUNTY	20e. STATE	21b. ADDRESS OF INFORMANT (STREET AND NUMBER, CITY, STATE)
Bird Creek		Alaska	Same as 20a

PHYSICIAN'S OR CORONER'S CERTIFICATION

22a. PHYSICIAN (I HEREBY CERTIFY THAT DEATH OCCURRED AT THE HOUR, DATE AND PLACE STATED ABOVE, AND THAT I LAST SAW THE DECEASED ALIVE ON THE DATE STATED.)	22c. PHYSICIAN OR CORONER (SIGNATURE)	
Time of death 5/22/67	▶ s/ Michael L. [illegible]	M.D.
22b. CORONER (I HEREBY CERTIFY THAT DEATH OCCURRED AT THE HOUR, DATE AND PLACE STATED, AND THAT I VIEWED THE REMAINS OF DECEASED AS WELL AS THE CIRCUMSTANCES OF DEATH.)	22d. ADDRESS	22e. DATE SIGNED
	VAH, Martinez, [illegible]	May 31, 19[illegible]

FUNERAL DIRECTOR AND LOCAL REGISTRAR

23. METHOD OF DISPOSITION	24. DATE	25. NAME OF CEMETERY OR CREMATORY	26. SIGNATURE OF EMBALMER (LICENSE NO.)
Burial	6/2/67	Anchorage, Alaska	s/ Donald W. Oltman 301

27. NAME OF FUNERAL DIRECTOR (OR PERSON)	28. DATE ACCEPTED BY LOCAL REGISTRAR	29. LOCAL REGISTRAR (SIGNATURE)
Connolly & Taylor Inc. Martinez, California	▶	

MEDICAL AND HEALTH DATA

CAUSE OF DEATH

30. CAUSE OF DEATH

PART I. DEATH WAS CAUSED BY: (ENTER ONLY ONE CAUSE PER LINE FOR (a), (b), AND (c).)

IMMEDIATE CAUSE (a) Pulmonary Embolism — (APPROX. INTERVAL BETWEEN ONSET AND DEATH) hrs.

CONDITIONS IF ANY, WHICH GAVE RISE TO THE ABOVE CAUSE (a) STATING THE UNDERLYING CAUSE LAST.

DUE TO (b)

DUE TO (c)

PART II. OTHER SIGNIFICANT CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO THE TERMINAL DISEASE CONDITION GIVEN IN PART I.

Carcinoma of lung with pancoast tumor of right thorax

OPERATION AND AUTOPSY

31. OPERATION—CHECK ONE	32. DATE OF OPERATION	33. AUTOPSY—CHECK ONE
☐ NO ☒ YES	4/14/67	☐ YES ☐ NO

INJURY INFORMATION

34a. SPECIFY ACCIDENT, SUICIDE OR HOMICIDE	34b. DESCRIBE HOW INJURY OCCURRED
35a. TIME OF INJURY (MONTH, DAY, YEAR)	

35b. INJURY OCCURRED ☐ WHILE AT WORK ☐ NOT WHILE AT WORK	35c. PLACE OF INJURY (E.G., IN OR ABOUT HOME, FARM, STREET, OFFICE BUILDING, ETC.)	35d. CITY, TOWN OR LOCATION — COUNTY — STATE

DEPARTMENT OF PUBLIC HEALTH
VITAL STATISTICS SECTION

CERTIFIED COPY OF DEATH CERTIFICATE

WASHINGTON STATE DEPARTMENT OF HEALTH — BUREAU OF VITAL STATISTICS

CERTIFICATE OF DEATH

LOCAL FILE NUMBER | STATE FILE NUMBER

- DECEASED—NAME (First, Middle, Last): WILLIS W. MOORE
- SEX: Male
- DATE OF DEATH (Month, Day, Year): June 13, 1970
- RACE: White
- AGE—LAST BIRTHDAY (YEARS): 56
- DATE OF BIRTH (Month, Day, Year): April 22 1914
- COUNTY OF DEATH: King
- CITY, TOWN, OR LOCATION OF DEATH: Seattle
- INSIDE CITY LIMITS: Yes
- HOSPITAL OR OTHER INSTITUTION—NAME: The Doctors Hospital
- STATE OF BIRTH (If not in U.S.A., name country): Washington
- CITIZEN OF WHAT COUNTRY: U.S.A.
- MARRIED, NEVER MARRIED, WIDOWED, DIVORCED (Specify): Married
- SURVIVING SPOUSE (If wife, give maiden name): Lucille Fisher
- SOCIAL SECURITY NUMBER: 531-07-3184
- USUAL OCCUPATION: Pipe coverer
- KIND OF BUSINESS OR INDUSTRY:
- RESIDENCE—STATE: Wash.
- COUNTY: Snohomish
- CITY, TOWN, OR LOCATION: Edmonds
- INSIDE CITY LIMITS: Yes
- STREET AND NUMBER: 16011 52nd Ave. W.
- FATHER—NAME: Willis Tom Moore
- MOTHER—MAIDEN NAME: Libby Pilling
- INFORMANT—NAME: Lucille Moore (Wife)
- MAILING ADDRESS: 16011 52nd Ave. W., Edmonds, Washington

PART I. DEATH WAS CAUSED BY: (Enter only one cause per line for (a), (b), and (c)) — Approximate interval between onset and death

- (a) Immediate cause: Carcinoma left lung — Mar 10 70
- (b) Due to: Asbestosis, Obstructed pulmonary — [illegible] -68
- (c) Due to: [illegible] & failure — [illegible] 70

PART II. OTHER SIGNIFICANT CONDITIONS:

AUTOPSY (Yes or No): No

ACCIDENT, SUICIDE, HOMICIDE, OR UNDETERMINED: | DATE OF INJURY: | HOUR: | HOW INJURY OCCURRED:

INJURY AT WORK: | PLACE OF INJURY: | LOCATION:

CERTIFICATION—PHYSICIAN: I attended the deceased from Mar 4 68 to June 13 70; last saw him alive on June 13 70; did/did not view the body after death: [illegible]; Death occurred at 6:00A

CERTIFICATION—CORONER:

CERTIFIER—NAME: [illegible] H. HARDDICK MD — Signature: [illegible] MD — DATE SIGNED: June 15 70

MAILING ADDRESS: 1105 COBB BLDG Seattle WA

- BURIAL, CREMATION, REMOVAL: Cremation
- CEMETERY OR CREMATORY—NAME: Bleitz Crematory
- LOCATION: Seattle, Washington
- DATE: June 16, 1970
- FUNERAL HOME—NAME AND ADDRESS: Bleitz Funeral Home 316 Florentia ST. Seattle, Wash. 98109
- FUNERAL DIRECTOR: [signature]
- REGISTRAR: D. P. Wiman M.D.
- DATE RECEIVED BY LOCAL REGISTRAR: JUN 16 1970

I HEREBY CERTIFY, That the foregoing is a true, full and correct copy of the original Certificate of Death on file in this office.

[signature] M.D.
Seattle-King County Registrar

By S. Lyttle

JUN 18 1970

Seattle, Wash.

1. Fred Forrest Moffet | 2. male | 3. May 3, 1900

4. RACE (WHITE, NEGRO, AMERICAN INDIAN, ETC. (SPECIFY)): White | 5a. AGE—LAST BIRTHDAY (YEARS): 59 | 5b. UNDER 1 YEAR (MOS. / DAYS) | 5c. UNDER 1 DAY (HOURS / MIN.) | 6. DATE OF BIRTH (MONTH, DAY, YEAR): 11-2-1908 | 10. COUNTY OF DEATH: Clark

7. CITY, TOWN, OR LOCATION OF DEATH: Vancouver | 8. INSIDE CITY LIMITS (SPECIFY YES OR NO): Yes | 9. HOSPITAL OR OTHER INSTITUTION—NAME (IF NOT IN EITHER, GIVE STREET AND NUMBER): Vancouver Memorial Hospital

DECEASED

USUAL RESIDENCE WHERE DECEASED LIVED. (IF DEATH OCCURRED IN INSTITUTION, GIVE RESIDENCE BEFORE ADMISSION.)

11. STATE OF BIRTH (IF NOT IN U.S.A., NAME COUNTRY): Kansas | 12. CITIZEN OF WHAT COUNTRY: USA | 13. MARRIED, NEVER MARRIED, WIDOWED, DIVORCED (SPECIFY): Married | 14. SURVIVING SPOUSE (IF WIFE, GIVE MAIDEN NAME): Bernice I. Haden

15. SOCIAL SECURITY NUMBER: 522-05-7598 | 16. USUAL OCCUPATION (GIVE KIND OF WORK DONE DURING MOST OF WORKING LIFE, EVEN IF RETIRED): Asbestos Mechanic | 17. KIND OF BUSINESS OR INDUSTRY: ----

18. RESIDENCE—STATE: Washington | 18a. COUNTY: Clark | 18b. CITY, TOWN, OR LOCATION: Vancouver | 18c. INSIDE CITY LIMITS (SPECIFY YES OR NO): yes | 18d. STREET AND NUMBER: 2413 Howard St.

PARENTS

19. FATHER—NAME (FIRST MIDDLE LAST): Henry W. Moffet | 20. MOTHER—MAIDEN NAME (FIRST MIDDLE LAST): Emma McCullum

21. INFORMANT—NAME: Bernice I. Moffet | 21a. MAILING ADDRESS (STREET OR R.F.D. NO., CITY OR TOWN, STATE, ZIP): 2413 Howard St., Vancouver, Washington

CAUSES

PART I. DEATH WAS CAUSED BY: (ENTER ONLY ONE CAUSE PER LINE FOR (a), (b), AND (c).) | APPROXIMATE INTERVAL BETWEEN ONSET AND DEATH

22. IMMEDIATE CAUSE
(a) Carcinomatosis due to
DUE TO, OR AS A CONSEQUENCE OF:
CONDITIONS, IF ANY, WHICH GAVE RISE TO IMMEDIATE CAUSE (a), STATING THE UNDERLYING CAUSE LAST
(b) Probable mesothelioma owing from pleura
DUE TO, OR AS A CONSEQUENCE OF:
(c) Owing to asbestosis of the lung

PART II. OTHER SIGNIFICANT CONDITIONS: CONDITIONS CONTRIBUTING TO DEATH BUT NOT RELATED TO CAUSE GIVEN IN PART I (b) | 23a. AUTOPSY (YES OR NO): Yes | 23b. IF YES WERE FINDINGS CONSIDERED IN DETERMINING CAUSE OF DEATH: Yes

24a. ACCIDENT, SUICIDE, HOMICIDE, OR UNDETERMINED (SPECIFY) | 24b. DATE OF INJURY (MONTH, DAY, YEAR) | 24c. HOUR | 24d. HOW INJURY OCCURRED (ENTER NATURE OF INJURY IN PART I OR PART II, ITEM 22 OR 23)

24e. INJURY AT WORK (SPECIFY YES OR NO) | 24f. PLACE OF INJURY (AT HOME, FARM, STREET, FACTORY, OFFICE BLDG., ETC. (SPECIFY)) | 24g. LOCATION (STREET OR R.F.D. NO., CITY OR TOWN, STATE)

CERTIFICATE

25a. CERTIFICATION—PHYSICIAN: I ATTENDED THE DECEASED FROM: 7-20-61 | TO: 5-3-68 | 25b. AND LAST SAW HIM/HER ALIVE ON: 5-3-68 | 25c. DID/DID NOT VIEW THE BODY AFTER DEATH: Did not | 25d. DEATH OCCURRED (HOUR): 4:40 pM | AT THE PLACE, ON THE DATE, AND, TO THE BEST OF MY KNOWLEDGE, TO THE CAUSE(S) STATED

25e. CERTIFICATION—CORONER: ON THE BASIS OF THE EXAMINATION OF THE BODY AND/OR THE INVESTIGATION, IN MY OPINION, DEATH OCCURRED ON THE DATE AND DUE TO THE CAUSE(S) STATED. HOUR OF DEATH: M | 25f. THE DECEDENT WAS PRONOUNCED DEAD (MONTH, DAY, YEAR, HOUR)

25g. CERTIFIER—NAME (TYPE OR PRINT): Dennis H. Secoat, M.D. | SIGNATURE: Dennis H. Secoat, M.D. | DEGREE OR TITLE | DATE SIGNED (MONTH, DAY, YEAR): 5-7-68

25h. MAILING ADDRESS—CERTIFIER (STREET OR R.F.D. NO.): 3914 Main Street | CITY OR TOWN: Vancouver | STATE: Washington | ZIP: 98660

BURIAL

26a. BURIAL, CREMATION, REMOVAL (SPECIFY): Burial | 26b. CEMETERY OR CREMATORY—NAME: Evergreen Mem. Gardens, | 26c. LOCATION (CITY OR TOWN, STATE): Vancouver, Washington

26d. DATE (MONTH, DAY, YEAR): 5-7-1968 | 26e. FUNERAL HOME—NAME AND ADDRESS (STREET OR R.F.D. NO., CITY OR TOWN, STATE, ZIP): Vancouver Funeral Chapel, Vancouver, Wash. 98660

26f. FUNERAL DIRECTOR—SIGNATURE: Wm Stephens | 26g. REGISTRAR—SIGNATURE: [illegible] | 26h. DATE RECEIVED BY LOCAL REGISTRAR: MAY 10 1968

THIS IS TO CERTIFY, that the foregoing is a true copy (photographic) of a record on file with the Department of Health, Vancouver, Washington.

MAY 10 1968

Donald A. Champaign, M.D.
District Health Officer

SEAL

By Shirley Weiss
Clerk

Sacramento, Calif.
March 6, 1968
Arthur Williams
1829 8th Ave. Delta

Mr. Eugene C Rapp,
Business Agent, Loc.97,
Asbestos Workers Union,
Anchorage, Alas. 99501.

Dear Mr. Rapp: RE: Edward H. Campbell (Deceased)

Thank you for the prompt reply to my letter and I am sorry I caused the confusion. After receiving the official Death Certificate, and before forwarding it to you, I thought perhaps you may require a copy of Letters Testamentary from the Superior Court in the County where Mr. Campbell's Will is being probated which will be March 11, 1968.

I also appreciate the information regarding his employment in Alaska during 1967 for Income Tax purposes. I have received copies of forms W-2 and WR-500 from R.I. Lawler covering the Federal and State income tax information.

Enclosed is an official copy of Mr. Campbell's death Cert.

Very truly Yours,

Arthur Williams
Executor E.H. Campbell's Estate.

Enc/

NOTE: The Will omitted my middle Initial and was filed for probate as Arthur Williams

County of death: Yavapai	City: Prescott	Institution: VA Center
Date of birth: 7 8 1912	Age: 55	Marital status: [illegible]
Birthplace: Virginia	Citizen of what country: USA	Social Security No.: 526 07 [illegible]
Usual occupation: [illegible]		
Residence — State: Unknown	County: Unk.	City or town: Unk.
Street address: Unk.	How long lived in this town: Unk.	In state: Unk.
Previous place of residence: Unk.		
Father's name: Unk.	Mother's maiden name: Unk.	
Informant address: Prescott, Arizona		

Medical statement of cause of death

Part I. Death was caused by:

A. Immediate cause: Bronchopneumonia [illegible]

B. Due to or as a consequence of: [illegible]

C. Due to or as a consequence of:

Part II. Other significant conditions:

Date of death/[illegible]: 1 26 68 2

Signature: [illegible], Staff Physician

Address: VA Center, Prescott, Arizona

Date of disposition: [illegible] — Cemetery or crematory: VA Cemetery — Prescott, Arizona

Funeral home: [illegible] Funeral Home, 303 S. [illegible], Prescott, Ariz.

State file no.: 42 — Registrar's signature: [illegible] (Dep) — 131

CERTIFIED COPY OF VITAL RECORD

STATE OF ARIZONA)
ss
COUNTY OF MARICOPA)

Date Issued: [illegible]

This copy is a true and exact reproduction of the document officially registered and placed on file in the DIVISION OF VITAL RECORDS, ARIZONA STATE DEPARTMENT OF HEALTH, PHOENIX, ARIZONA.

Issued under the authority of ARS 36-341 and by direction of:

FENTON H. BUTLER
Deputy State Registrar

GEORGE SPENDLOVE, M. D., M. P. H.
Commissioner of Public Health
and State Registrar

THIS COPY NOT VALID UNLESS PREPARED ON SAFETY PAPER DISPLAYING [illegible] [illegible] IN COLOR AND IMPRESSED WITH RAISED SEAL OF ISSUING AGENCY

PATIENT [illegible] HOSP. NO. 67-1503

AGE 68 ROOM PATH. NO. S-68-27

PHYSICIAN Dr. Wain DATE

TISSUE OR ORGAN Autopsy page 3

CLINICAL HISTORY:

splenic pulp are collections of dark brown pigment consistent with hemosiderin. The capsule of the spleen is somewhat thickened and for the most part covered by thick layers of tumor as previously described. The kidneys are essentially normal. Bordering the capsules of the kidney are thick sheets of tumor showing areas of necrosis. Also scarce areas of fat necrosis. The adrenal glands are essentially normal except for occasional blood vessels within the cortex and medulla which are dilatated by recent to partially organized thrombi. The mucosa of the urinary bladder is flattened but otherwise intact. The muscle coat appears edematous. Bordering the muscle coat are thick sheets of tumor. The esophagus is lined by stratified squamous epithelium showing extensive areas of leukoplakia. In addition the mucosa is focally ulcerated or destroyed and replaced by large numbers of fibrin as well as neutrophil adjacent inflammatory cells. The submucosa is edematous throughout which are dilated blood vessels and variable numbers of chronic inflammatory cells. Sections of the pancreas reveal a few areas of intralobular fibrosis. The islet langerhans appear to be increased in number and larger than normal but otherwise is not remarkable. Islet appear normal. In the adjacent fat are scattered clusters of tumor cells and a few chronic inflammatory cells.

SUMMARY: Approximately 6 months prior to his last admission, this middle aged white man was admitted to Providence Hospital and underwent removal of mass in the right epididymis as well as an exploratory laparotomy which disclosed abdominal cavity to be covered by tumor both of which were subsequently diagnosed as a malignant mesothelioma. In spite of treatment including chemotherapy, he progressively deteriorated.

Autopsy disclosed extensive ascites and extensive upper involvement in which the entire serosal surface of the intestines, mesentery and peritoneal lit enamel and covered by thick layers of tumor. No evidence of invasion of the adjacent organs. There is evidenced mesenteric involvement the mesenteric lymph nodes in some areas the peritoneal area. In addition, the tumor nodules were found in the subcutaneous tissue of the abdomen probably due to implantation by previous paracenteses. Incidental finding included a number severe acute ulcerative esophagitis mainly in the region of the esophagogastric junction.

The case patient apparently had a history of prolonged contact with asbestos and death was the result of an extensive widespread involvement of all peritoneal surfaces of the abdominal cavity, and all serosal surfaces of the abdominal organs as a result of a malignant mesothelioma.

The current medical literature implicates asbestos as a significant factor/[illegible] of the mesotheliomas. The usual exposure period prior to the development of mesotheliomas varies from 15 to 40 years.

PATHOLOGIST

AGE 43 ROOM PATH. NO.

PHYSICIAN Dr. [illegible] DATE [illegible]

TISSUE OR ORGAN AUTOPSY - Page 2

CLINICAL HISTORY:

to be thickened and edematous. As previously mentioned the entire serosal surface of the stomach, small intestine, and large intestine are covered by thick to thin layers of friable grey-white tumor and limited to the serosal surface with no evidence of invasion of the underlying wall or evidence of obstruction. The stomach is empty, lined by an intact mucosa containing some clear mucus. The duodenum contains a small amount of yellow-grey liquid material. The large intestine contains some liquid fecal material, and gas. The majority of the surface of the right lobe of the liver is covered by sheets of tumor as is the gallbladder and porta hepatis. Serial sections through the liver reveals no evidence of metastatic tumor. The liver parenchyma is relatively firm and dark red. The gallbladder contains no calculi. The common duct appears to be slightly dilated, but is otherwise patent as are the hepatic ducts. The spleen is covered on all surfaces by abundant amount of soft, friable tumor, which by blunt dissection is freed from the capsule of the spleen. The spleen is of average size, relatively firm and dark red. The pancreas is encased by sheets of tumor which are removed by blunt dissection. Serial sections through the entire pancreas discloses no grossly recognizable lesions. Removal of the tumor from the surface of the peritoneum posteriorly discloses two normal sized, normal appearing adrenal glands. The kidneys are of average size and grossly not remarkable. The pelves and ureters are normal and of average size. The pelvic surface of the urinary bladder is covered by sheets of tumor. The urinary bladder is distended with approximately 100 cc. of clear yellow urine. The mucosa of the urinary bladder is somewhat congested but otherwise not remarkable. The prostate is of average size. The inferior and superior vena cava are widely patent as is the portal vein. The abdominal aorta and common iliac arteries are also patent and show evidence of mild [illegible] atherosclerosis. The entire mesentery fat is covered by layers of soft, grey-white tumor and within the mesenteric fat are scattered small, somewhat enlarged, firm grey-white lymph nodes. The periaortic lymph nodes, and retroperitoneal lymph nodes about the pancreas are enlarged, and grey-white.

Representative sections of the major organs are submitted for microscopic examination.
[illegible]:jes

MICROSCOPIC : Within the sections of the lungs, are variable numbers of [illegible] histiocytes and occasional asbestos bodies.
The lungs show evidence of moderate [illegible] with scattered subpleural [illegible]. [illegible] severe generalized congestion and some evidence of pulmonary edema. The myocardium of the heart is not remarkable. The epicardial fat and serosa shows severe serous atrophy. [illegible] and [illegible] are scattered nodules as well as small groups of neoplastic cells [illegible] consists of pale granular cytoplasm and enlarged oval nuclei which in general [illegible] chromatin and prominent nucleoli. The liver is moderately congested and on the capsule are sheets of tumor essentially identical to the tumor previously described within the [illegible] [illegible] are fairly large and contain [illegible] tumor cells. There is no direct extension into the liver and no evidence of metastatic nodules. The serosa of the stomach, the small intestine and large intestine in general are covered by thick sheet of identical tumor cells which appear to be limited to the serosa . No evidence of invasion of the underlying muscle coat. Throughout the serosa are dilated lymphatic vessels frequently filled with tumor cells. The adjacent mesenteric fat in addition is covered by similar sheets of tumor . Several mesenteric lymph nodes are also involved by identical tumor. The spleen is congested and throughout the

PATHOLOGIST

PHYSICIAN Dr. [illegible] DATE

TISSUE OR ORGAN

CLINICAL HISTORY: This middle aged white man was admitted to Providence Hospital on [illegible] for supportive care due to progressive and severe dehydration, anorexia, nausea, and weight loss as the result of carcinomatosis.

Approximately six months previous a mass in the right epididymis was excised, followed by an exploratory laparotomy which disclosed the peritoneal cavity to be rather [illegible] studded by tumor. In addition a small palpable mass was present in the omentum. The tumor within the epididymis and abdominal cavity were identical and subsequently diagnosed as a malignant mesothelioma. He was referred [illegible] for chemotherapy, and subsequently has been maintained on chemotherapy. He has progressively deteriorated in spite of treatment.

LABORATORY FINDINGS: WBC [illegible], normal differential. Hemoglobin [illegible] grams.

Supportive treatment was instituted along with chemotherapy, and periodic abdominal paracentesis. He rapidly deteriorated and expired on [illegible] at [illegible] A.M.

An autopsy permit was signed by the [illegible] of him.

[illegible]:

The autopsy was performed at the [illegible] on the morning of [illegible].

This is the body of a well developed and [illegible] white male appearing to be [illegible] than his stated age. [illegible]

The body is opened in the usual fashion. [illegible]

[illegible]

[illegible]
[illegible] Wade, Kenneth

cc: E. J. Bartells, Company
Employers Insurance of Wausau, Portland, Ore.
Trustees of Insulation & Asbestos Workers Welfare Trust
New York Life Insurance Company
Mr. Eric E. Wohlforth, Attorney at Law, [illegible] St., Anchorage, Alaska

General and Vascular Surgery

American Board of Surgery

207 E. Northern Lights Blvd.
Anchorage, Alaska [illegible]
Telephone [illegible]

February 16, 1969

Alaska Workman's Compensation Board
P. O. Box 1149
Juneau, Alaska 99801

Re: WISE, Kenneth -Group # [illegible]

Gentlemen:

The following is a summary on Mr. Kenneth Wise.

This 48-year old white male has had a 20-year exposure to asbestos fibers while applying asbestos as an insulating agent about pipes. Approximately, June 1968 he was admitted to the hospital because of abdominal distention and weakness. Evaluation revealed a malignant mesothelioma of his peritoneal cavity. Asbestos fibers were found in his sputum.

Consultation with the Cancer Research Institute at the University of California Medical Center, San Francisco, California, was obtained. Their recommendation was that he be maintained on Vincristine 1 mg. intravenously weekly. They agreed with the diagnosis and concurred that there appeared to be a causal relationship between the asbestos exposure and the malignant mesothelioma.

Mr. Wise was provided supportive care in Anchorage after his return from San Francisco. He was admitted to the hospital and passed away on December 12, 1968 as a direct result of the malignant mesothelioma.

Autopsy demonstrated extensive spread of the malignant mesothelioma through his peritoneal cavity and the contents. In addition, asbestos fibers were detected microscopically.

Current medical literature implicates asbestos as a significant factor in causation of mesotheliomas.

<u>IMPRESSION</u>: This 48-year old gentleman was exposed to asbestos for a prolonged period of time. As a natural course of this exposure he developed a malignant mesothelioma of his peritoneal cavity, and as a direct result of this expired.

Should other information be desired do not hesitate to communicate with me.

Sincerely yours,

Michael P. Hein, M.D.

MPH/nps
Enc: Autopsy Report

1. Edward M. Campbell | 2. Male | 3. White

Field	Entry
Place of Death: A. County	5. Yavapai
B. Town or City	Prescott
C. Hospital or Institution (if residence, give street address)	VA Center
D. In City Limits?	Yes [X] No [ ]
Date of Birth: Month / Day / Year	6. 7 8 1912
Age (years last birthday)	7a. 55
If under 1 year: Mos. / Days	—
If under 1 day: Hrs. / Min.	—
Marital Status	[ ] Married [ ] Widowed [ ] Never Mar. [ ] Divorced
Surviving Spouse (if wife, give maiden name)	9. —
Place of Birth (State or Country)	10. Virginia
Citizen of what country?	11. USA
Social Security No.	12. 526 07 4919
Usual Occupation	13a. Tile Layer
Type of Business	13b. Constr.
Usual Residence: A. State	14. Unknown
B. County	Unk.
C. Town or City	Unk.
D. Zip Code	Unk.
Street Address or R.F.D. (P.O. Box not acceptable)	14f. Unk.
In City Limits?	14g. Yes [ ] No [ ]
How long lived in Arizona? In this town	15a. Unk.
In state	15b. Unk.
Previous Place of Residence (City and State)	16. Unk.
Father's Name: A. First, B. Middle, C. Last	17. Unk.
Mother's Maiden Name: A. First, B. Middle, C. Last	18. Unk.
Informant's Signature	19a. VA Hospital Records (signature)
Relationship to Deceased	19b. None
Address	19c. Prescott, Arizona
Date Signed	19d. 2/6/68

20. MEDICAL STATEMENT OF CAUSE OF DEATH — FILL OUT CAREFULLY

ENTER IMMEDIATE CAUSE ON LINE A. OTHER PRECIPITATING CAUSES SHOULD BE GIVEN ON LINES B AND C RESPECTIVELY. LIST UNDERLYING CAUSE LAST.

PART I. DEATH WAS CAUSED BY: (ENTER ONLY ONE CAUSE ON EACH LINE)

	Cause	Estimated time between onset and death
A. Immediate cause	Bronchiogenic carcinoma	3 Mos.
B. Due to or as a consequence of:	with widespread metastases	
C. Due to or as a consequence of:		

If deceased was adult female, was she pregnant at death or any time in past year? Yes, No, Unknown. 21. Specify:

PART II. OTHER SIGNIFICANT CONDITIONS (Other conditions of significant medical importance contributing to death but not directly related to immediate cause):

Autopsy? 22a. Yes [X] No [ ]

If yes, were findings considered in determining cause of death? Yes or No 22b. Specify:

Manner of Death: [ ] Accident [ ] Suicide [ ] Homicide [X] Natural Causes [ ] Undetermined

Date of Injury: Mo. Day Yr. 24a. — Hour 24b. — M.

At work when injured? Yes, No, Unk. 25. —

How did injury occur? (Circumstances only—not cause) 26. —

Place of Injury (home, store, factory, street, etc.) 27. Specify: —

Where located? Street Address / City and State 28. —

CERTIFICATION—PHYSICIAN OR MEDICAL EXAMINER

VA attended (examined) the deceased (from) (on) 29a. 1 16 68 to 2 6 68

And (saw) (did not see) him/her alive last time on: 29b. —

I (did) (did not) view body after death: —

Death occurred at: 1:25 A.M.

On the date and at the place listed above and to the best of my knowledge and professional judgment due to the causes stated.

Signature: R. N. Denton, M.D. (signature) — Title

29c. (Type name here) R. N. Denton, Staff Physician

Mail Address: 30. VA Center, Prescott, Arizona

Date Signed: 2-8-68

CERTIFICATION—CORONER

From examination of the body and/or my investigation, in my opinion death occurred in the manner and under the circumstances stated.

Deceased was pronounced dead on: 32a. Mo. — Day — Year — Hour —

I (did) (did not) view body after death: —

Signature: — | Precinct or District: 33. —

32b. (Type name here)

Mail Address: 34. — | Date Signed: 35. —

Supplementary Entries: 36.

Disposition of body—burial, cremation or removal	Date of disposition	Cemetery or crematory name	Street address	City and state
37. Specify: Burial	38. 2-9-68	39. VA Cemetery		Prescott, Arizona

Funeral Home Name	Street Address, City and State	Funeral Director's Signature	Cert. No.
40. Ruffner Funeral Home	303 S. Cortez, Prescott, Ariz.	41. (signature)	42. 202

Date Registered	Reg. File No.	Registrar's Signature	Reg. District	Date Recd. in State Off.
43. 2/9/68	44. 38	45. Martha Schlichter (Dep.)	46. 1311	47. FEB 15 1968

VS-2 REV. MAY JUNE 1967

CERTIFIED COPY OF VITAL RECORD

STATE OF ARIZONA)
) ss
COUNTY OF MARICOPA)

Date Issued: FEB 19 1968

This copy is a true and exact reproduction of the document officially registered and placed on file in the DIVISION OF VITAL RECORDS, ARIZONA STATE DEPARTMENT OF HEALTH, PHOENIX, ARIZONA.

Issued under the authority of ARS 36-341 and by direction of:

Fenton H. Butler (signature)
FENTON H. BUTLER
Deputy State Registrar

GEORGE SPENDLOVE, M. D., M. P. H.
Commissioner of Public Health
and State Registrar

UNIVERSITY OF ALASKA, FAIRBANKS
Fairbanks, Alaska 99701
WAMI Medical Education Program
February 24, 1981

Senator Don Bennett
Alaska State Legislature
Pouch V
Juneau, AK 99811

Dear Senator Bennett:

The health hazards associated with asbestos contamination have been documented for you by the Alaska Health Care Advocates in consultation with Dr. Irving Selikoff, an acknowledged expert in the field. This group has, with the help of Alaska construction unions, brought together for you evidence to indicate that there is considerable asbestos exposure in the construction trades and in older buildings such as public schools. I thoroughly support the proposal by Alaska Health Advocates, and the similar resolutions by the Western Alaska Building and Construction Trades Council to support the funding of a 6-8 weeks assessment of the problem by a qualified, independent consultant who will contribute to the identification of corrective measures.

Sincerely,

Helen Anne Myers

Helen Anne Myers, Ph.D.
Assistant Professor of
Medical Science

HAM/bm

Wayne Myers MD.

406 "G" Street, Anchorage, Alaska 99501 (907) 272-2332

ALASKA LUNG ASSOCIATION, *Inc.*

February 26, 1981

Leo C. Kaye, *Executive Director*

Alaska State Legislature
Pouch V
Juneau, Alaska

The ALASKA LUNG ASSOCIATION is aware of, and extremely concerned about, the asbestos problem in Alaska. We frequently receive calls from workers who are concerned about asbestos exposure (as well as other types of occupational health hazards).

The problem is one which should be thoroughly studied, on all levels and the scope of the problem documented. The study should include the following:

1. How many workers in Alaska were exposed to asbestos in the past?

2. a) How many are exposed now?
   b) Are family members exposed (to dusty clothes)?

3. To what degree are workers exposed?

4. To what degree is the State Division of Occupational Safety and Health able to address occupational health hazards, including asbestos exposure?

5. How does Alaska Worker's Compensation law address occupational health hazards, specifically those related to asbestos exposure?

6. What is the feasibility of a medical surveillance program?

It has long been known that asbestos exposure causes fatal lung diseases including cancer(s), and the State should take a hard look at the problem immediately.

Additionally, the State should undertake a comprehensive effort to determine how many schools, hospitals, and other public buildings are contaminated by friable asbestos materials. Although the State Department of Education has filed a report with the federal government concerning asbestos exposure in the

schools and a detection program, there are a number of serious questions regarding the proposed guidelines which the state should study. For example, are there any enforcement policies regarding the detection program, or is it left to the discretion of the local educational agency? Further, the federal guidelines do not address the potential hazards in hospitals and other public buildings, and no State agency is addressing the serious problems and questions posed by Alaska Health Care Advocates regarding occupational health hazards in general, and asbestos exposure in particular.

The ALASKA LUNG ASSOCIATION strongly supports the intensive study proposed to the Legislature by Health Care Advocates, and urges the State to insure it is conducted in the immediate future.

Respectfully,

Leo C. Kaye
Executive Director

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PLEASE NOTE: THE PRECEDING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT.

THE MOUNT SINAI MEDICAL CENTER
ONE GUSTAVE L. LEVY PLACE • NEW YORK, N.Y. 10029

Mount Sinai School of Medicine • The Mount Sinai Hospital

Environmental Sciences Laboratory
Cummings Basic Sciences Building
10 East 102 Street
New York, New York 10029
(212) 650-6173

December 17, 1980

Ms. Susan Johnson
Alaska Health Care Advocates
P. O. Box 1037 D.T.
Anchorage, Alaska 99510

Dear Ms. Johnson:

I'm sorry the reprint wasn't included; here it is.

Insofar as fibrous glass is concerned, I don't think we are further along. The case described in Japan (by Professor Sano) was in a woman who worked in a fibrous glass plant - but when her lung tissue was examined, asbestos was also present; apparently, there hadn't been such exposure many years before. Therefore, it cannot be considered a "fibrous" case.

The matter is still open; cancer can easily be produced in animals with the material but we don't know anything of how human beings will react, one way or the other, because of inadequate studies so far.

Sincerely yours,

Irving J. Selikoff, M.D.
Professor

IJS:ss
Enc.

THE MOUNT SINAI MEDICAL CENTER
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OF THE CITY UNIVERSITY OF NEW YORK

Mount Sinai School of Medicine • The Mount Sinai Hospital

November 30, 1980

Environmental Sciences Laboratory
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10 East 102 Street
New York, New York 10029
(212) 650-6173

Ms. Susan Johnson, Director
Alaskan Health Care Advocates
P.O. Box 1037 D.T.
Anchorage, Alaska 99510

Dear Ms. Johnson:

Your letter of November 11, 1980 includes a number of important points. May I suggest the following:

1. Who has been exposed to asbestos? Workers in general, and their family contacts. Major groups include: asbestos miners, asbestos millers, asbestos products manufacturers, insulators, construction workers in a variety of trades, shipyard workers, brake repair and brake maintenance, power production and utilities, many railroad workers, maintenance and repair in a very large variety of facilities, etc.

2. Avoidance of victimization in surveillance: An important problem. Generally, it can be solved by having the personal physician certify that the worker has been examined, without giving any report of the findings. Confidentiality is essential.

3. Surveillance programs: I doubt whether any hard and fast rigid structure is useful--rather, the medical facilities that are available should be examined and judgments made how they might best be used. After that, the rest falls in line; physicians can readily define what should be done. They should be asked to do so, especially since they can obtain expert advice before making a proposal. The principal diseases for which prevention and early diagnosis are useful include: asbestosis, bronchogenic carcinoma, gastrointestinal cancer, cancer of the mouth and pharynx, larynx cancer, kidney cancer. There is very little we can do about mesothelioma if it occurs. A background for such approaches is contained in the attached reprint.

4. Surveillance should also include an important educational component; both with regard to smoking and the necessity to avoid further exposure.

Ms. Susan Johnson November 30, 1980

Insofar as the legislature is concerned, a simple statement can be made that the schedule of examinations and their content should be the responsibility of the State Department of Health, with consultation with the various worker groups involved.

5. With regard to the documentation concerning the nine men who died of asbestos-associated disease, I'm afraid Jack Endsley will have to work with you on that, although I can send him the death certificates. The other information was obtained on the basis of it being held confidential when doctors, hospitals, pathologists, etc. were contacted.

6. Thank you for sending me the Clinton Creek material. We have extensive photographs of the situation when it was operating.

Please give my warm regards to Jack Endsley!

Sincerely yours,

Irving J. Selikoff, M.D.
Professor

IJS:sa
Enc.

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November 4, 1980

Ms. Susan Johnson
Alaska Health Care Advocates
P.O. Box 1037 DT
Anchorage, Alaska 99510

Dear Ms. Johnson:

The litany of difficulties you are experiencing with regard to prevention of asbestos-associated disease is all too familiar and corrections all too scant.

First, on the surveillance side. Some good can be expected but how surveillance might be institutionalized is unsolved. Our medical care system in the United States developed as a method for diagnosis and treatment of gross clinical disease and, by and large, it can do a good ob. Moreover I would want to improve this, not substantially alter it since the diagnosis and therapy it makes available are valuable.

How to include preventive care is only now beginning to be examined. Until now, prevention was limited to broad public health measures such as sanitation, vaccination, educational advice. How to add surveillance of high risk groups?

It would appear to me, at this moment, that we have few options but to use the medical care system that exists. This has the advantage of it being in existence, and including much medical competence.

The scientific and medical contents of such a program would not be too difficult to work out and, if it became a practical problem, I would be willing to offer my judgments and ideas. However, the public health aspects at this time take precedence; how to identify those exposed in the past, who constitute the "high risk groups," how to offer them the continuing surveillance that could be of assistance, how to pay for this.

I don't know if there will be a single solution, or multiple local efforts. This is in flux at the moment.

With regard to the question of "standards": there is no known safe level for asbestos exposure. The Department of Labor Standards reflect a desire to decrease exposure as much as is feasible, with

with the understanding that this will simultaneously decrease risk, albeit not eliminating it. Five fibers per milliliter (5 million per cubic meter) is not "safe," nor are 2 million fibers per cubic meter nor are 1 hundred thousand fibers per cubic meter. But the latter will ultimately produce less disease than the first. Thus, there should be no avoidable exposure to asbestos.

How to do this with 25 million tons or more of asbestos in place in industries, institutions, industrial facilities, etc. in our country, needing repair, maintenance, removal? How to work with asbestos materials woven into the fabric of our industrial society and not easily removed or replaced with substitutes?

I sympathize with the State people who simply find it impossible to continually monitor the myriad of sites at which exposure might occur. And I am not sure that education and notice and information might not do more good than the monitoring. A worker aware of the potential danger can do much more to protect himself than the industrial hygienist hy his side with an air pump taking measurements. A protective respirator would be more useful than the air pump. For members of local 97, it will be uncommon to find asbestos materials used much in the future, but repair and maintenance and removal of asbestos-content insulation will continue to add to the risk engendered in the past. Knowledge of this will be valuable, in addition to knowing potential value of medical surveillance.

Jack Endsley is right about workers' compensation. Ultimately, on the overall, for the asbestos-related diseases, only about 1 in 10 receives compensation. Overall, too, it has turned out not to be a major source of continuing financial support even for widows.

Donald Spatz of our Laboratory is coordinating a research project on asbestos worker compensation. I expect that in about 3 to 4 months, much data will become available. Perhaps you should write to him here, to establish your line of communications in this regard. Work is being done for the U.S. Department of Labor and it will have nationwide relevance. Richard Fineberg may also find it useful to write to Don. Finally, Roy Steinfurth at the International has a great amount of very valuable firsthand experience in this regard;

Mr. Roy J. Steinfurth
Insulators Health Hazard Program
511 Machinists Building
1300 Connecticut Avenue, N.W.
Washington, D.C. 20036

(Conversely, do you think that Fineberg's data could be of assistance to us, in specific regard to Alaska?)

I've asked Dr. William J. Nicholson of our Laboratory to send you

material concerning the asbestos in schools problem; he is one of the country's experts on this and would be able to provide specific advice, should you write him.

Concerning asbestos information for workers; this is a matter of very great interest to WISH (Workers Institute for Safety and Health) who are preparing an asbestos meeting for the AFL-CIO and other unions at the beginning of December, in Washington. You may wish to write them.

Mr. Sheldon W. Samuels, Director
Occupational Safety & Health &
Environmental Health
Industrial Union Department, AFL-CIO
815 16th Street, N.W.
Washington, D.C. 20006

With all best wishes.

Cordially,

Irving J. Selikoff, M.D.
Professor

IJS:jm
cc: William J. Nicholson, Ph.D.
Donald Spatz

Insulators Health
Hazard Program

511 Machinists Building
1300 Connecticut Ave., N.W.
Washington, D.C. 20036
(202) 785-2150

April 23, 1976

Mr. Jack Endsley
407 Denali Street, Room 302
Anchorage, Alaska 99501

Dear Sir and Brother:

We were extremely sorry to hear of the unfortunate deaths of the following members: HOWARD H. KIPLINGER, REG. NO. 19251

Since his widow or some member of his family may be eligible for workmen's compensation benefits, as well as other benefits, we are offering our assistance if it is needed.

Due to the many different individual State Workmen's Compensation Act and the ambiguous wording in the Acts, many times speedy handling of these cases is extremely important. Even though there is a one or two year statute of limitation in filing for benefits, there is sometimes a thirty (30) day reporting or filing clause. This means that each application for workmen's compensation should be filed as soon as possible.

If the attorney selected for the case is not skilled or well versed in compensation laws, we at this office may be able to assist you by having another attorney aid him in preparing his case.

Please feel free to call at anytime, if our assistance is needed.

With best regards, I remain

Fraternally yours,

Roy J. Steinfurth

Roy J. Steinfurth
Insulators Health Hazard Program

RJS/bgm