ALASKA LEGISLATURE COMMITTEE FILES 1991-1992 8672
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(e) The department shall seek consistency in the application of disciplinary sanctions, and significant departure from prior decisions involving similar situations shall be explained in findings of fact or orders.

Sec. 08.89.100. LICENSE OR CERTIFICATION REQUIRED IF DESIGNATION USED. An individual who is not licensed or certified under this chapter or whose license or certification is suspended or revoked, or whose license or certification has lapsed, who knowingly uses in connection with the individual's name the words or letters "L.R.T.," "Licensed Radiologic Technologist," "C.R.T.," "Certified Radiologic Technician," or other letters, words, or insignia indicating or implying that the individual is licensed or certified as a radiologic technologist or radiologic technician by this state or who in any way, orally or in writing, directly or by implication, knowingly holds out as being licensed or certified by the state as a radiologic technologist or radiologic technician in this state is guilty of a class B misdemeanor.

Sec. 08.89.900. DEFINITIONS. In this chapter,

(1) "certificate" means a legal authorization to apply radiation for diagnostic purposes to specific body parts of a person;

(2) "department" means the Department of Commerce and Economic Development;

(3) "direct supervision" means the licensed practitioner that has authorized the application of radiation is in the office, personally authorizes the application of radiation, and before dismissal of the patient evaluates the performance of the individual applying the radiation;

(4) "general supervision" means the licensed practitioner has authorized the application of radiation and it is being carried out in accordance with the licensed practitioner's diagnosis and treatment plan;

(5) "indirect supervision" means a licensed practitioner is in the medical facility, authorizes the application of radiation, and remains in the medical facility while the procedures are being performed by the person applying the radiation;

(6) "license" means a legal authorization to apply radiation for diagnostic or therapeutic purposes to a person;

(7) "licensed practitioner" means an individual licensed or otherwise authorized by law to practice medicine, dentistry, podiatry, osteopathy, or chiropractic in the state;

(8) "radiation" means ionizing radiation including gamma rays and x-rays, alpha

particles, beta particles, electrons, neutrons, protons, and other nuclear particles, but not sound or radio waves or visible, infrared, or ultraviolet light;

(9) "radiologic technician" means an individual who applies radiation to specific parts of the human body for diagnostic purposes;

(10) "radiologic technologist" means an individual who applies radiation to persons for diagnostic or therapeutic purposes;

(11) "radiologic technology" is the application of radiation to persons for diagnostic or therapeutic purposes.

* Sec. 3. AS 44.62.330(a) is amended by adding a new paragraph to read:

(57) Department of Commerce and Economic Development concerning the licensing and regulation of radiologic technologists and radiologic technicians under AS 08.89.

* Sec. 4. This Act takes effect January 1, 1993.

DIVISION OF LEGAL SERVICES

LEGISLATIVE AFFAIRS AGENCY
STATE OF ALASKA

(907) 465-3867 or 465-2450
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Mail Stop 3101

240 Main Street, Suite 500
Juneau, Alaska 99801-2101

MEMORANDUM April 28, 1992

SUBJECT: Radiologic Technology - CSSSHB 337( ) (Work Order No. 7-LS1354\G)

TO: Representative Terry Martin
Attn: Tom Anderson

FROM: Jerry Luckhaupt
Legislative Counsel

Attached is the draft CS you requested concerning the regulation of the field of radiologic technology. I incorporated a number of the suggested changes. I did not include a board to regulate the field as you were not sure you could sell that to the administration.

You also asked me to address some of the questions raised by Catherine Reardon in the memoranda you submitted to me.

1. What type of certification is required by AS 08.89.010(4)? The type of certification required shall be as required by the Department of Commerce and Economic Development. I assume that the department will require some direct communication with previous licensing, educational, and law enforcement agencies. This is the language used for various other boards.

2. What courses of study exist which the department may choose to approve? I personally do not know what courses of study exist or where they are available. The department is given the authority by regulation to determine what educational levels are appropriate. This is the approach used in California, Arizona, and Wyoming, among states I looked at.

3. How can the bill be amended to allow simple or emergency x-rays in rural areas? I have provided a new section in the bill draft granting the department the authority to issue special permits in emergencies and rural areas. The question though is difficult to understand; does it mean that authority is desired for nonphysicians to have the authority to prescribe an X-ray in emergencies and rural areas? If so, I

seriously question the wisdom of such a procedure, such would be akin to providing dental hygienists with the authority to prescribe and administer drugs.

4. Can a lower level of X-ray technician be created? I have included in the new draft certification of radiologic technicians in addition to technologists.

5. How can a travelling X-ray technician comply with the requirement to post a license at each place of business? The draft provides that radiologic technologists and technicians may receive duplicates of their license or certificate.

6. What does "specific direction" mean? I have changed the term in the new draft to "direct supervision." "Direct supervision" is used in other licensing provisions to require some specific, direct oversight of the person.

7. Must X-rays and X-ray treatments be prescribed? The treatment or diagnosis of a person with radiation certainly appears to me to involve the practice of medicine so as to require the decision of a physician to administer it.

8. Why should U.S. Government employees be exempted? The state has no authority to require an employee of the federal government to obtain a state license or submit to a state regulatory scheme under the supremacy clause of the United States Constitution.

9. Will dental assistants be able to conduct X-rays? Dental assistants are defined by statute. The only statutory reference to dental assistants is in AS 08.36.070(a)(11), which provides that the Board of Dentistry may issue permits and certificates to dental assistants for specific procedures that require specific education and training. The application of X-rays would appear to be a specific proceeding requiring specific training. We could provide a broader exception to include an individual licensed as a dental hygienist, or permitted or certified by the board of dentistry to perform diagnostic dental X-rays or we could include all dental x-rays performed under the direct or indirect supervision of a dentist, regardless of who performs the x-rays.

10. How do the grounds for disciplinary sanctions compare to other licensed professions. The disciplinary sections of the current draft are similar to those used in the midwifery bill (HB 382). The Director of the Division of Occupational Licensing has recently testified regarding the disciplinary sections that they are the best she's seen. The disciplinary sections from the previous draft were lifted from the disciplinary schemes of other professions in AS 08.

11. Does the term licensed professional include all medical professionals who currently take x-rays? The term licensed professional deals with individuals who may prescribe radiation treatment or diagnosis. I do not believe that nurses (other than

certified nurse practitioners, in limited situations) have the authority to prescribe x-rays or radiation treatment.

If you have questions, please contact me at your convenience.

GPL:lmb
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Enclosure

POSITION PAPER

STATE OF ALASKA ★ DEPARTMENT OF HEALTH & SOCIAL SERVICES

POSITION PAPER

HOUSE BILL NO. 337

A Bill for an Act entitled: "An Act providing for the licensing of radiologic diagnostic technologists and radiologic therapeutic technologists; and providing for an effective date."

House Bill 337 would amend AS 08.01.010 by adding the licensing of radiologic technologists to the occupations now regulated by the Department of Commerce and Economic Development. The Bill outlines the personal, educational, experience, and examination requirements for licensure of individuals who apply radiation for diagnostic or therapeutic purposes to individuals under the direction of persons licensed to prescribe diagnostic examinations or radiologic treatments. Under existing practice, persons may function as radiology technicians as long as they work under the supervision of the medical staff of the institution where they are employed or under the supervision of the person authorized to prescribe radiologic examination or treatment. Under the Bill, any person who is not licensed under the provisions of the chapter or specifically exempted from licensing (i.e., certain students of the healing arts, licensed practitioners of medicine, dentistry, podiatry, osteopathy, and chiropractic, licensed dental hygienists, and employees of the United States government) would be prohibited from applying radiation for diagnosis or treatment.

COMMENTS

Licensing of technicians has been found to enhance the quality of care and reduce levels of radiological exposure to patients and personnel by assuring that the technicians are properly trained in the use of x-ray equipment. In Alaska, the Department of Health and Social Services licenses approximately 2,000 sources of ionizing radiation and provides regular on-site inspections. Often the problems identified in the course of these inspections have been the result of improperly trained staff operating the equipment.

Approximately 15 states currently have implemented licensing of radiologic technicians. Some states have established sub-categories of licensure allowing individuals to perform certain limited categories of radiologic technology. The current version of the Bill does not allow for practice of limited types of examinations which are typically carried out in small rural health centers and hospitals by appropriately trained individuals including physician assistants, nurses, laboratory technologists, etc. Provisions of this sort may be particularly appropriate for rural Alaska with training and licensing requirements commensurate with the scope of practice authorized for any given sub-category.

New Federal Medicare requirements for reimbursement for mammography which are due to become effective in 1992 will require that personnel performing mammographic examinations be licensed by the state or certified by a national accrediting body such as the American Registry of Radiologic Technologists. Unless institutional personnel meet this requirement, federal reimbursement for this important public health service will be denied.

There is currently no organized program of training for radiology technologists in Alaska although it is our understanding that Providence Hospital has considered establishing one.

RECOMMENDATION

The Department endorses the concept of HB 337 as a method of enhancing the quality of care. However, it recommends that some means be found to provide limited licensing of persons working in small institutions and rural clinics who meet training and experience requirements appropriate to the level of radiology service provided by such institutions and clinics. The Division of Occupational Licensing may be familiar with how such programs operate in other states and how licensing programs are administered.

POSITION

The Department of Health and Social Services supports HB337 with the above mentioned recommendation.

Recommended:

Peter M. Nakamura, MD, MPH
Director
Division of Public Health

Approved:

Theodore A. Mala, MD, MPH
Commissioner
Health and Social Services

Wyoming Statute

(ix) "Search and rescue" means persons organized, trained and equipped to provide assistance to patients, such assistance being primarily limited to location, initial treatment and removal from imminent danger and transportation to a medical facility;

(x) "Emergency medical technician" means a person who has graduated from a division approved training program for emergency medical technicians;

(xi) "This act" means W.S. 33-36-101 through 33-36-113. (Laws 1977, ch. 168, § 1; W.S. 1957, § 33-445; Laws 1991, ch. 221, § 2.)

The 1991 amendment, effective April 1, 1991, rewrote subsection (a)(v), which read "'Division' means the division of health and medical services, department of health and social services."

Editor's notes. — There is no subsection (b) in this section as it appears in the printed acts.

CHAPTER 37

Radiologic Technologist Licensing

Sec.
33-37-102. Acceptable practices.

Stated in Paravecchio v. Memorial Hosp., 742 P.2d 1276 (Wyo. 1987).

§ 33-37-102. Acceptable practices.

(a) A licensed radiologic technologist may apply radiation to persons for diagnostic or therapeutic purposes under specific direction of a person licensed to prescribe the examinations or treatment.

(b) A licensed radiologic technician may select technique, position patients, critique films and apply radiation to persons for diagnostic purposes under specific direction of a person licensed to prescribe the examinations. Restricted licenses shall state the procedures the radiologic technician may perform which shall not include more than three (3) body areas.

(c) A license is not required for a student attending a school or college of medicine, osteopathy, podiatry, dentistry, dental hygiene, chiropractic or radiologic technology, who applies radiation to persons under the direct supervision of a person licensed to prescribe the examinations or treatments.

(d) This act does not apply to:

(i) Licensed practitioners; and

(ii) Allied dental health professionals and dental assistants solely because they expose radiographs for dental diagnosis. (Laws 1985, ch. 206, § 1; 1986, ch. 13, § 1; 1988, ch. 20, § 1.)

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CHAPTER 37

Radiologic Technologist Licensing

Sec.
33-37-101. Definitions.
33-37-102. Acceptable practices.
33-37-103. Board of radiologic technologists examiners; composition; terms; removal.
33-37-104. Meetings; quorum.
33-37-105. Rules.
33-37-106. Applicants; qualifications.
33-37-107. Examinations; fees.
33-37-108. Licenses.
33-37-109. Existing operators.
33-37-110. Expiration of license; renewal.
33-37-111. Revocation of license.
33-37-112. Competency evaluation.
33-37-113. Violations; penalties.

Cross references. — As to licensing generally, see chapter 1 of this title.

§ 33-37-101. Definitions.

(a) As used in this act:

(i) "Allied health professional" is a person certified or licensed in one (1) of the following fields: dental hygiene, dietary, medical technology, respiratory therapy, physical therapy or hospital administration;

(ii) "Board" means the board of radiologic technologist examiners;

(iii) "License" means a legal authorization to apply ionizing radiation to persons;

(iv) "Licensed practitioner" means a person licensed or otherwise authorized by law to practice medicine, dentistry, podiatry, osteopathy or chiropractic;

(v) "Radiation" means ionizing radiation including gamma rays and x-rays, alpha particles, beta particles, electrons, neutrons, protons and other nuclear particles but not sound or radio waves or visible, infrared or ultraviolet light;

(vi) "Radiologic technologist" means a person other than a licensed practitioner who applies ionizing radiation or radiopharmaceutical agents to humans for diagnostic or therapeutic purposes;

(vii) "Restricted license" means an authorization which may be granted by the board to apply ionizing radiation to humans when an applicant's qualifications do not meet standards required for issuance of a license. Persons receiving a restricted license shall be designated as radiologic technicians;

(viii) "This act" means W.S. 33-37-101 through 33-37-113. (Laws 1985, ch. 206, § 1.)

Editor's notes. — There is no subsection (b) in this section as it appears in the 1985 printed act.

§ 33-37-102. Acceptable practices.

(a) A licensed radiologic technologist may apply radiation to persons for diagnostic or therapeutic purposes under specific direction of a person licensed to prescribe the examinations or treatment.

(b) A licensed radiologic technician may select technique, position patients, critique films and apply radiation to persons for diagnostic purposes under specific direction of a person licensed to prescribe the examinations. Restricted licenses shall state the procedures the radiologic technician may perform which shall not include more than three (3) body areas.

(c) A license is not required for a student attending a school or college of medicine, osteopathy, podiatry, dentistry, dental hygiene, chiropractic or radiologic technology, who applies radiation to persons under the direct supervision of a person licensed to prescribe the examinations or treatments.

(d) This act does not apply to:

(i) Licensed practitioners; and

(ii) Allied dental health professionals solely because they expose radiographs for dental diagnosis. (Laws 1985, ch. 206, § 1; 1986, ch. 13, § 1.)

The 1986 amendment rewrote and restructured subsection (d), which formerly read "This act shall not apply to licensed practitioners."

Laws 1986, ch. 13, § 2, makes the act effective immediately upon completion of all acts necessary for a bill to become law as provided by art. 4, § 8, Wyo. Const. Approved March 13, 1986.

Meaning of "this act". — For the definition of "this act," referred to in the introductory language of subsection (d), see § 33-37-101(a)(viii).

§ 33-37-103. Board of radiologic technologists examiners; composition; terms; removal.

(a) The board of radiologic technologists examiners is created. The board shall consist of three (3) members who are citizens of the United States and residents of Wyoming appointed by the governor. One (1) member shall be a radiologic technologist who is registered or who possesses suitable equivalent qualifications, one (1) member shall be a licensed practitioner in radiology and one (1) member shall be from the general public. Vacancies in unexpired terms shall be filled by the governor for the remainder of the term. The governor may remove any board member as provided in W.S. 9-1-202.

(b) The terms for each member are:

(i) One (1) radiologic technologist for one (1) year;

(ii) One (1) licensed practitioner in radiology for three (3) years;

(iii) One (1) general public member for two (2) years. (Laws 1985, ch. 206, § 1; 1987, ch. 175, § 1.)

The 1987 amendment added the last sentence of subsection (a).

Laws 1987, ch. 175, § 2, makes the act effective immediately upon completion of all acts necessary for a bill to become law as provided by art. 4, § 8, Wyo. Const. Approved March 9, 1987.

§ 33-37-104. Meetings; quorum.

The board shall meet quarterly and elect a chairman at the first meeting of each year. Two (2) board members constitute a quorum. (Laws 1985, ch. 206, § 1.)

§ 33-37-105. Rules.

The board shall adopt rules to carry out this act. (Laws 1985, ch. 206, § 1.)

Meaning of "this act". — For the definition of "this act," referred to in this section, see § 33-37-101(a)(viii).

§ 33-37-106. Applicants; qualifications.

(a) The board shall grant a license to an applicant who is at least eighteen (18) years of age and who has completed a course of study in radiologic technology approved by the board or has otherwise met the requirements of this act.

(b) The board shall grant a restricted license to an applicant who is at least eighteen (18) years of age and is capable of performing as a radiologic technician. (Laws 1985, ch. 206, § 1.)

Meaning of "this act". — For the definition of "this act," referred to in subsection (a), see § 33-37-101(a)(viii).

§ 33-37-107. Examinations; fees.

(a) The board shall establish examinations for each class of license.

(b) The board shall administer examinations at intervals of not less than six (6) months.

(c) The board shall set a nonrefundable examination fee which shall not exceed fifty dollars ($50.00) for each type of examination.

(d) An applicant failing the examination shall be charged a similar nonrefundable re-examination fee. An applicant is not eligible for re-examination until six (6) months after the failed examination.

(e) The board may accept in lieu of its own examination any certification by other states or professional certifying groups whose requirements are at least as stringent as those set forth by rules adopted in accordance with this act.

(f) Fees collected by the board shall be paid into the state treasury and credited to an account which shall be used by the board to defray costs incurred in the administration of this act. (Laws 1985, ch. 206, § 1.)

Meaning of "this act". — For the definition of "this act," referred to in subsections (c) and (f), see § 33-37-101(a)(viii).

§ 33-37-108. Licenses.

(a) The board shall issue a license to each applicant who meets the requirements of this act.

(b) The board may issue a restricted license to an applicant not qualifying for issuance of a license under this act, but who demonstrates to the satisfaction of the board the capability of performing x-ray examinations without endangering the public health and safety. Restricted licenses may be renewed under the provisions of original issuance.

(c) Applicants meeting minimum requirements for a license shall be issued a temporary license to work as a radiologic technologist. The temporary license shall expire fifteen (15) days after the date of the first opportunity for examination.

(d) The board shall issue a special license to an uncertified person to practice as a radiologic technologist if necessary because of regional hardship or emergency condition. The board shall not grant more than one (1) special license to a person. Special licenses shall expire in twelve (12) months. (Laws 1985, ch. 206, § 1.)

Meaning of "this act". — For the definition of "this act," referred to in subsection (a), and in the first sentence in subsection (b), see § 33-37-101(a)(viii).

§ 33-37-109. Existing operators.

(a) An applicant who has not met the requirements for a license but who has at least three (3) years experience in the four (4) years before July 1, 1985 and who can demonstrate proficiency shall be issued the appropriate license.

(b) An applicant who is engaged in a course for radiologic technology on July 1, 1985 who completes the course or has completed a twenty-four (24) month course in radiologic technology within two (2) years before July 1, 1985 and can demonstrate proficiency shall be issued a license. (Laws 1985, ch. 206, § 1.)

§ 33-37-110. Expiration of license; renewal.

(a) General licenses expire two (2) years from date of issuance. A restricted license expires twelve (12) months from the date of issuance and may be renewed under the provisions of original issuance.

(b) All licenses issued pursuant to this act with the exception of a special license shall be renewed by the board provided that the licensee has conformed with the provisions of this act and submits a renewal fee determined by the board not to exceed fifty dollars ($50.00).

(c) A radiologic technologist who has been licensed in Wyoming, whose license has not been revoked or suspended and who has ceased activities as a

radiologic technologist for not more than eighteen (18) months, may apply for a license and be evaluated by the board. (Laws 1985, ch. 206, § 1.)

Meaning of "this act". — For the definition of "this act," referred to twice in subsection (b), see § 33-37-101(a)(viii).

§ 33-37-111. Revocation of license.

(a) A person licensed pursuant to this act may have his license revoked by the board for any of the following causes:

(i) Conviction of a felony or high misdemeanor involving moral turpitude;

(ii) For renting or loaning to any person his license to be used as a license for such person;

(iii) Violation of the Wyoming Controlled Substances Act;

(iv) Violation of any rule promulgated by the board;

(v) Negligent or incompetent use of radiation or radiopharmaceutical agents.

(b) All complaints shall be in writing, verified by some party familiar with the facts charged and shall be filed with the board. Upon receiving the complaint, the board if it determines the complaint sufficient, shall proceed as in a contested case under the Wyoming Administrative Procedure Act. Upon revocation of any license, the fact shall be noted upon the records of the board and the license shall be returned to the board and marked cancelled upon the date of its revocation. (Laws 1985, ch. 206, § 1.)

Meaning of "this act". — For the definition of "this act," referred to in the introductory language of subsection (a), see § 33-37-101(a)(viii).

Wyoming Administrative Procedure Act. — See § 16-3-101(a), (b)(xi) and notes thereto.

Wyoming Controlled Substances Act. — See §§ 35-7-1001 and 35-7-1002(a)(xxviii).

§ 33-37-112. Competency evaluation.

After receipt of a complaint filed in accordance with W.S. 33-37-111 concerning compliance with this act or the competency of radiologic technicians the board or the radiological health services, health and medical services may evaluate technicians or their job performance and otherwise investigate. (Laws 1985, ch. 206, § 1.)

Cross references. — As to the department of health and social services and its divisions, see § 9-2-101.

Meaning of "this act". — For the definition of "this act," referred to in this section, see § 33-37-101(a)(viii).

§ 33-37-113. Violations; penalties.

(a) Any person who applies ionizing radiation or radiopharmaceutical agents to humans without a valid license to do so shall be guilty of a

misdemeanor punishable by imprisonment for not more than six (6) months, a fine of not more than seven hundred fifty dollars ($750.00), or both.

(b) Any person licensed pursuant to this act who violates the provisions of this act is guilty of a misdemeanor punishable by imprisonment for not more than six (6) months, a fine of not more than seven hundred fifty dollars ($750.00), or both. (Laws 1985, ch. 206, § 1.)

Meaning of "this act". — For the definition of "this act," referred to twice in subsection (b), see § 33-37-101(a)(viii).

Issues In Professional Regulation

A Special Study Report On State Compliance With The Consumer-Patient Radiation Health And Safety Act Of 1981

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To Rep. Finkelstein	From Tom Bringer
Co.	Co. CLEAR
Dept.	Phone 231-1901
Fax 407-465-3442	Fax 609-231-1743

Council of State Governments

Submitted to the

U.S. Department of Health and Human Services
Health Resources and Services Administration

under

Contract #HRSA 91-320(P)

by

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Enforcement and Regulation

and

The Council of State Governments
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EXECUTIVE SUMMARY

COMPLIANCE BY THE STATES WITH THE CONSUMER-PATIENT RADIATION HEALTH AND SAFETY ACT OF 1981

The Consumer-Patient Radiation Health and Safety Act, as adopted by Congress in 1981, provides for standards for the accreditation of educational programs for personnel who perform radiologic procedures as well as standards for the certification of such individuals. The Act (Title IX of Public Law 97-35) calls for periodic review of state compliance with these standards, and this document has been prepared by The Council of State Governments and the Council on Licensure, Enforcement and Regulation to facilitate such a review.

The standards required by the Consumer-Patient Radiation Health and Safety Act were initially issued by the Secretary of Health and Human Services as a Notice of Proposed Rulemaking (NPRM) on July 12, 1983. They were published in the *Federal Register* on December 11, 1985, after the incorporation of minor changes.

The standards are intended to assist those states and territories (here after referred to as "states") which desire to regulate the education of radiologic personnel and the conduct of radiologic procedures. However, the Act preserves the traditional prerogative of the states to approve educational programs and regulate personnel, and neither prescribes nor authorizes penalties for non-compliance. States remain free to establish their own approval processes, to utilize any approval processes already established by existing, voluntary accrediting agencies and examining boards or to take no action of any kind.

The Act does provide a particular basis for action by states. The Final Rule includes standards for the five occupations specifically identified by the Act: radiographers, radiation therapy technologists, nuclear medicine technologists, dental hygienists and dental assistants. These are the occupations responsible for the great majority of radiologic procedures, and they are occupations for which voluntary organizations have developed broadly accepted standards based on a thorough analysis of each occupation.

This year's report continues to review compliance with the Act and historical trends by compiling information on state regulation of the radiological health professions and the dental professions. Current licensure requirements for radiologic technologists, radiation therapy technologists and nuclear medicine technologists are presented in table I. Historical requirements over the past eight years are presented in graph I. The levels of supervision by licensed dentists for dental assistants and dental hygienists required by each state are shown in table II and on maps of the United States to illustrate regional trends within each regulated occupation. The education and examination requirements for dental assistants to perform radiographs are also displayed state-by-state in table III.

Currently, 27 states license radiographers, 21 states license radiation therapy technologists and 15 states license nuclear medicine technologists. This includes Tennessee which has a law that applies only to radiographers and radiation therapy technologists employed in physicians' and chiropractors' offices as well as Wisconsin which has a law that only applies to radiographers in chiropractors' offices. Three states have enabling legislation that would require radiographers to be licensed, five states have enabling legislation to license radiation therapy technologists and four states have enabling legislation to license nuclear medicine technologists.

As specified in earlier reports on state compliance with the Consumer-Patient Radiation Health and Safety Act, all states license dental hygienists and include standards for dental radiography in their accreditation and examination programs for dental hygienists.

Dental assistants are permitted to expose and process dental radiographs for diagnostic purposes in all states except the District of Columbia. Thirty-five states require that dental radiography be carried out under the direct supervision of a dentist, and another 12 states require at least indirect or general supervision.

Puerto Rico is the only state to license dental assistants while 30 states require a certificate be issued before dental assistants may perform radiographic procedures. Only Texas and Vermont require registration of dental assistants. In 19 states, regulation of dental assistants is indirect with the dentist being responsible for the duties of his/her dental assistant.

In states that regulate dental assistants, training and examination requirements vary greatly. Thirty-six states regulate the radiographic duties of dental assistants through requirements for specialized training and/or written and practical examinations.

As with last year's report, each state was provided this year with information on regulation reported in the previous year's report in order to clarify the information and facilitate updating procedures. (Appendix A contains the letter and form provided to each state for the radiologic technology professions, and Appendix B contains the letter and form provided for dental hygienists and assistants.) State officials who found discrepancies between the information provided in last year's report and state regulations were asked to send modifications in writing. Where this method resulted in changes not attributable to recent legislative changes, the discrepancy is noted in the report narrative. And, of course, legislative changes that have occurred since last year are also included.

The project director for this report is Douglas J. Olberding of The Council of State Governments. Writing and research was provided by Julie A. Cencula of The Council of State Governments.

The project officer is Elizabeth Coleman Santucci, Bureau of Health Professions, Health Resources and Services Administration, U.S. Department of Health and Human Services. The Council of State Governments and the National Conference on Licensure, Enforcement and Regulation gratefully acknowledge the Health Resources and Services Administration's support under Contract #HRSA 91-320(P) without which this project could not have been undertaken.

INTRODUCTION

Regulating the quality of education and practice in the health professions is a complex matter which involves an intricate series of inter-relationships among voluntary, non-governmental organizations and their governmental counterparts. As a result of the complexity of the issue, varying meanings, mechanisms and practices have come into use in the different states. While the intent of the standards adopted is largely the same, the terminology and usage is not.

In order to encourage the adoption of uniform standards specifically in the area of radiography, Congress adopted the Consumer-Patient Radiation Health and Safety Act of 1981. The Act (Title IX of Public Law 97-35) provides voluntary standards for accreditation of educational programs for radiologic personnel and standards for the certification of persons who perform radiologic procedures. Adoption of these standards by the states[1] is voluntary. The Act neither prescribes nor penalizes states that do not comply with the standards published by the Department of Health and Human Services.

Standards for both accreditation of radiologic education programs and certification of radiologic personnel were published in the *Federal Register* on December 11, 1985. The Final Rule addresses the five occupations specifically identified by the Act: radiographers, radiation therapy technologists, nuclear medicine technologists, dental hygienists and dental assistants. These are the professionals responsible for conducting the great majority of radiologic examinations and procedures.

The standards are included in Part 75 to Title 42 of the Code of Federal Regulations, entitled "Standards for the Accreditation of Educational Programs for and the Certification of Radiologic Personnel." Exempted from the Final Rule are licensed practitioners of medicine, osteopathy, dentistry, pharmacy, podiatry and chiropractic.

Section 981(d) of the Act requires the Secretary of Health and Human Services to report to the Congress each January 1 on state compliance with the recommended standards. This report describes the current status with regard to state compliance with the Consumer-Patient Radiation Health and Safety Act.

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[1] As specified by Section 987(7) of the Act, the term state means the several states, the District of Columbia, Puerto Rico, the Northern Mariana Islands, the Virgin Islands, Guam and American Samoa.

THE TERMINOLOGY OF PROFESSIONAL CREDENTIALING

While professional credentialing is carried out in all states, the formal mechanisms vary and the terminology used in different situations is not always consistent. For the purposes of this report, the following definitions are used, *even though the terminology of the state credentialing agency may differ.*

Accreditation is the process by which an agency or organization evaluates or recognizes an educational institution or a program of study as meeting certain predetermined qualifications regarding education or service.

The degree to which state governments involve themselves in accreditation of educational programs varies and in many cases, is strictly limited. Commonly, state agencies accept the accreditation standards of voluntary organizations or establish working relationships with those organizations to jointly survey educational institutions and their programs. In approving programs, state agencies generally do not specify in detail what must be taught.

Certification and licensure refer to methods of regulating personnel. *Certification* is commonly defined as the process by which a non-governmental agency or association grants recognition to an individual who has met certain predetermined qualifications specified by that agency or association. Thus, certification is a voluntary and non-governmental process, yet it can be an effective means of controlling the competency of personnel to the extent that standards are rigorously developed and closely related to actual knowledge, skills and competencies necessary for performance on the job. Certification by voluntary associations is common in the health professions and is widely accepted by employers as indicative of competence in the occupations discussed in this report.

The Act refers to "certification" as a state function. While an occasional state may use the terms "certification" or "registration," the more commonly used term for state authorization to practice is "licensure." When states truly "certify" personnel, they simply protect the use of a specific title, but do not prohibit other individuals from working in the profession or occupation.

Licensure is commonly defined as the process by which an agency of government authorizes an individual to engage in a given occupation and use a specific title. Licensure laws include specific educational and examination requirements and restrict practice only to those persons actually licensed. The law usually provides penalties for those practicing without a license. The federal government does not license health professionals because licensure of health personnel is a state prerogative.

REGULATION OF RADIOLOGIC PERSONNEL

A great range of individuals and occupations is in some way involved in the administration of radiation to patients, in the control and monitoring of radiologic equipment or in the use and handling of radioactive materials in the health industry.

Physicians who specialize in some aspect of radiation use include radiologists, nuclear medicine physicians, radiotherapists and clinical pathologists, particularly specialists in isotopic pathology. Other physicians and practitioners such as dentists, podiatrists and chiropractors also carry out radiologic procedures.

A large number of professional and technical personnel administer radiologic procedures under the supervision of licensed practitioners. These include radiographers, radiation therapy technologists, nuclear medicine technologists, dental hygienists and dental assistants. Voluntary certification exists for dental assistants and a steadily growing proportion of the work force is becoming certified. In the other above-mentioned professions, voluntary credentialing programs are commonplace and certification is generally required by employers.

STATE LICENSURE OF RADIOLOGIC PROFESSIONS CONTINUES TO INCREASE

A decade after the passage of the Consumer-Patient Radiation Health and Safety Act, radiologic associations and state legislators continue to work on legislation enabling the licensure of allied professions in radiology. As illustrated in Graph I, the number of states with licensure requirements has increased over the past eight years, peaking at 27 states in 1991.

In addition to states which currently license radiologic professions, others are considering legislative proposals including Arkansas, Colorado, Kansas, Michigan, Missouri, North Carolina, Pennsylvania, Rhode Island, South Carolina and Washington D.C.

Legislative proposals to license radiologic personnel have been unsuccessful in some states, partly because of lobbying efforts by medical and hospital associations. For example, a licensure bill was presented to the Missouri Legislature, but was unsuccessful in obtaining the necessary number of votes to pass.

Other license attempts have survived legislative processes but have not been implemented. The Minnesota Legislature, for example, passed enabling legislation to license allied health professions and formed a committee to write rules and regulations for radiologic occupations. But, the committee has since been dismantled, so the means for implementation no longer exist.

Some professional radiologic associations support licensure because they see it as one way of attaining professional status for their members. In their view, each state adopting legislation to license radiologic technologists is a step toward being accepted as professionals, according to the American Society of Radiologic Technologists (ASRT). Technological professions are generally defined as technical, rather than professional, even though they require educational degrees similar to some professional occupations, such as registered nurses.

In order to move toward a professional status and to keep members abreast of technological advances, the American Registry of Radiologic Technologists (ARRT), which grants certificates of radiography, will incorporate continuing education into their recertification process. By January 1993, continuing education will be voluntary for individuals to renew radiography certification through the ARRT and by January 1997, it will be mandatory.

The ARRT hopes its educational requirements for recertifying radiologic professions will encourage more states to adopt educational components into their licensure requirements. Eight states currently require continuing education in their licensure renewal processes including Florida, Illinois, Iowa, Kentucky, Maryland, New Mexico, Oregon and Texas.

RADIOGRAPHERS (MEDICAL RADIOLOGIC TECHNOLOGISTS)

Radiographers are professionals who perform diagnostic radiographic procedures employing generating ionizing radiation. They also are responsible for shielding patients and staff from unnecessary radiation, for appropriately exposing radiographs and for other procedures that contribute to the determination of the site or dosage of the ionizing radiation to which a patient is exposed. There is a wide scope of such procedures, and individual radiographers may perform varying types of radiography.

As the term is commonly used, radiographers are distinguished from other individuals whose use of ionizing radiation is limited to a few specific body sites or to a set of standard procedures. They also are distinguished from personnel in other clinical specialties who occasionally may be called upon to assist in diagnostic radiology.

Voluntary Organizations/Certification

There are two major national registries of radiologic technologists: the American Registry of Radiologic Technologists (ARRT), which reported 169,741 certificate holders as of January 1, 1991; and the American Registry of Clinical Radiologic Technologists (ARCRT), which reported as of 1990 approximately 1,580 certificate holders who are actively working in the field and another 6,620 inactive certificate holders, with an additional 100 persons currently working towards certification. Accreditation of educational programs in this field is conducted by the American Medical Association's Committee on Allied Health Education and Accreditation (CAHEA).

The ARRT grants certificates in radiography to individuals who successfully complete an examination and who meet prescribed educational requirements. However, the organization also reviews the qualifications, on a case-by-case basis, of other applicants whose education and experience meet or exceed those of graduates from CAHEA-accredited programs. The ARRT is an independent organization with four trustees appointed by the American College of Radiology, and four appointed by the American Society of Radiologic Technologists (ASRT).

The ARCRT grants certificates to individuals who pass its examination and who meet prescribed prerequisites of education and experience. Before taking the examination, applicants must have graduated from a 24-month program in radiography accredited by CAHEA, have completed an approved military program in radiography or have the equivalent of four years of full-time clinical experience. In addition, the ARCRT will certify individuals who hold current certificates issued by the ARRT and individuals licensed in radiography by states with standards equivalent to those of the ARCRT.

Accreditation

Virtually all educational programs for radiographers are accredited by CAHEA which is recognized as an accrediting agency by the U.S. Department of Education and the Council on Post-secondary Accreditation (COPA). The American College of Radiology and the ASRT cooperate with CAHEA in the accreditation process and collaborate in developing the *Essentials* and *Guidelines* for accredited programs. They also appoint members to the Joint Review Committee on Education in Radiologic Technology (JRCERT), which evaluates programs and recommends accreditation decisions to CAHEA. Accreditation is reviewed at least every five years, and more frequently, if warranted.

State Regulation

Currently, 27 states license radiographers which is an increase of five states since last year including Delaware, Maryland, Nebraska, Virginia and Wisconsin (see Table 1). This number includes Tennessee's law which regulates radiographers employed in private physicians' and chiropractors' offices and Wisconsin's law which regulates only those radiographers employed in chiropractors' offices.

As mentioned previously, other states are considering legislative proposals to license radiologic professions including Arkansas, Colorado, Kansas, Michigan, Missouri, North Carolina, Pennsylvania, Rhode Island, South Carolina and Washington, D.C.

Changes from last year's table are due to new legislation, except for Wisconsin's law which had not been reported in the past. Last year, it was incorrectly reported that Utah licensed radiographers when it only had enabling legislation and that South Carolina had enabling legislation when legislation was only pending.

Although only 27 states regulate radiographers, these states make up 64 percent, or about two-thirds, of the U.S. population.

Graph I presents a eight-year historical trend of licensure requirements. The number of states that require licensure for radiographers has increased slowly, but steadily since 1984, from 15 in 1984 to 27 in 1991. That is an overall increase of 80 percent in states requiring licensure of radiologic technologists.

Michigan, Minnesota and Utah have enabling legislation which authorizes programs to regulate radiographers. However, Michigan's legislation applies only to persons performing mammography. Utah is currently developing the administrative rules and regulations necessary to implement licensing. In Minnesota, no action has been taken recently toward developing the necessary administrative regulations, therefore, regulatory activities are not likely in the near future.

Regulatory functions include examination standards, continuing education requirements and regulations concerning reciprocity. While the examination standards of the ARRT and the accreditation standards of JRCERT are universally recognized, state regulatory programs, in effect, vary in many respects. Some states offer limited licenses or permits while others do not. In Tennessee, the law applies only to radiographers who assist chiropractors and physicians and in Wisconsin, only to those assisting chiropractors. However, the standards applied are in most cases comparable, and sometimes identical, to the voluntary certification standards of the ARRT.

RADIATION THERAPY TECHNOLOGISTS

Radiation therapy technologists, who work from a prescription and with a radiotherapist, are professionals who utilize equipment that generates ionizing radiation for therapeutic purposes on human subjects. Using x-ray equipment, sealed radioactive sources and electron beam equipment, they expose specific areas of the body to prescribed doses of ionizing radiation, assist in tumor localization and dosimetric procedures and assist in the proper operation of controlling devices and in radiation protection for patients and clinical personnel.

Voluntary Organizations/Certification

The American Registry of Radiologic Technologists (ARRT) provides a voluntary national system for certification of radiation therapy technologists and awards certificates to individuals who successfully complete an examination and meet prescribed educational requirements. In general, graduation from a formal educational program in radiation therapy technology accredited by the American Medical Association's Committee on Allied Health Education and Accreditation (CAHEA) is required to take the examination. However, the ARRT reviews the qualifications of other applicants, on a case-by-case basis, whose education and experience meet or exceed those of graduates of CAHEA-accredited programs. The ARRT reported 7,116 certificate holders as of January 7, 1991. Although exact figures are not available, approximately two-thirds of the work force is certified.

Accreditation

Educational programs for radiation therapy technologists are accredited by CAHEA, with the cooperation of the American College of Radiology, the American Society of Radiologic Technologists (ASRT) and the Joint Review Committee on Education in Radiologic Technology (JRCERT). Virtually all programs in radiation therapy technology are accredited and, accreditation is reviewed at least every five years.

State Regulation

Twenty-one states license radiation therapy technologists (see Table I). There are four new entries in this year's table including Delaware, Maryland, Nebraska and Tennessee. Tennessee's legislation applies only to radiation therapy technologists in physicians' and chiropractors' offices. Last year, it was incorrectly reported that Utah licensed radiation therapy technologists when it only had enabling legislation and that South Carolina had enabling legislation when legislation was only pending.

Although only 21 states regulate radiation therapy technicians, these states make up 54 percent, or over one-half, of the U.S. population.

Graph I presents a eight-year history of licensure requirements. The number of states requiring licensure for radiation therapy technologists has risen significantly, from 10 in 1984 to 21 in 1991, an overall increase of 110 percent.

Another five states have enabling legislation, but have not yet adopted regulations including Indiana, Iowa, Kentucky, Minnesota and Utah. Of these states, Indiana, Iowa and Utah are currently developing the administrative rules and regulations necessary to begin the licensure of radiation therapy technologists. Although Kentucky and Minnesota have enabling legislation in place, they have no plans to regulate radiation therapy technologists in the immediate future.

NUCLEAR MEDICINE TECHNOLOGISTS

Nuclear medicine technologists are professionals who conduct *in vivo* or *in vitro* detection and measurement of radioactivity for medical purposes and who administer radiopharmaceuticals to human beings.

In vivo procedures involve the administration of radioactive tracer chemicals to the patient. In one type of procedure, the tracer is administered, and after a period of time, instruments are employed to measure the radioactivity emitted from the body in the vicinity of the organ in question. To accomplish this, the tracer must emit gamma radiation powerful enough to affect recording devices, but because tracers have short half-lives, irradiation of patients' tissues continues only briefly after the recording has been completed. In another type of *in vivo* procedure, a tracer is administered to the patient and after a specified period of time, a sample of body tissue or fluid is removed, and the amount of tracer in the sample is measured.

In vitro procedures do not require exposure of the patient to radioactive materials. *In vitro* tests are performed by clinical laboratory personnel as well as nuclear medicine technologists and clinical chemists.

Voluntary Organizations/Certification

Two non-governmental organizations currently certify nuclear medicine technologists. The Nuclear Medicine Technology Certification Board (NMTCB) reported roughly

12,500 certificate holders as of October 1990. The NMTCB, an independent agency, was formed in the mid-1970s, with encouragement from the Society of Nuclear Medicine, Technologist Section. The NMTCB gives an exam twice a year. The American Society of Clinical Pathology gave its last certification examination in August 1983 and has signed an agreement under which the NMTCB will administer a single examination.

The American Registry of Radiologic Technologists (ARRT) reported 10,105 certificate holders as of January 7, 1991. Their examinations are given three times a year. A large majority of individuals are certified by both organizations. Although exact figures are not available, more than three-fourths of the work force is certified.

Both organizations award certificates to individuals who have successfully completed an examination and meet prescribed educational requirements. Examinations offered by these agencies differ somewhat, and eligibility requirements for those individuals who have not graduated from accredited educational programs also differ. In general, both organizations require graduation from a program accredited by the American Medical Association's Committee on Allied Health Education and Accreditation (CAHEA), although alternative pathways exist to allow individuals with other prescribed combinations of training and experience to take the examination.

Accreditation

Educational programs for nuclear medicine technologists are accredited by CAHEA in cooperation with the American College of Radiology, the American Society of Medical Technology, the American Society of Clinical Pathologists, the American Society of Radiologic Technologists and the Society of Nuclear Medicine, Technologist Section. The program review committee is the Joint Review Committee on Educational Programs in Nuclear Medicine Technology, which includes two members of the Society of Nuclear Medicine (two physicians), two members of the Society of Nuclear Medicine, Technologist Section (two technologists) and two members from each of the other professional associations listed above. Virtually all educational programs for the professions are accredited. To maintain accreditation, programs are resurveyed every five years or more frequently, if warranted.

State Regulation

Fourteen states regulate nuclear medicine technologists (see Table I). This is an increase of three states including Delaware, Maryland and Nebraska. Last year, it was incorrectly reported that Utah licensed nuclear medicine technologists when it only had enabling legislation and that South Carolina had enabling legislation when legislation was only pending.

Although less than one-fourth of the states regulate nuclear medicine technologists, these states make up 39 percent, or about two-fifths of the U.S. population.

Graph I presents an eight-year history of the number of states requiring licensure. The number of states with licensure requirements for nuclear medicine technologists has risen dramatically, from four in 1984 to 14 in 1991. This is a 250 percent increase in the number of states with licensure requirements.

Four states have enabling legislation that allows for the regulation of nuclear medicine technologists. Utah is currently developing the administrative rules and regulations necessary to begin the licensure of nuclear medicine technologists. At present, however, Iowa, Kentucky and Minnesota are not promulgating administrative rules and do not intend to begin licensure in the near future.

All states that regulate nuclear medicine technologists accept graduation from a CAHEA-accredited program as fulfilling the eligibility requirement to take the licensure examination.

TABLE I

STATE REGULATION OF ALLIED PROFESSIONS IN RADIOGRAPHY

STATE	R	RTT	NMT	LIMITED LICENSES[1]	YEAR IMPLEMENTED	CITATION
ARIZONA	L	L		Yes	1978	ARS 32-2801 et seq
CALIFORNIA	L	L	L	Yes	1970	CA HSC 25660 et seq
DELAWARE	L	L	L	Yes	1990	16 Del. C. S 7406
FLORIDA	L	L	L	Yes	1979	Part IV, Ch 486
HAWAII	L	L		No	1978	HRS Ch 466J
ILLINOIS	L	L	L	Yes	1984	IRS Ch 11-½-Z14
INDIANA	L	*		Yes	1982	410 IAC 5-11
IOWA	L	*	*	Yes	1987	Iowa Code Ch 136 C
KENTUCKY	L	*	*	Yes	1978	KRS 211.870
LOUISIANA	L	L	L	No	1985	LRS 37:3200
MAINE	L	L	L	Yes	1984	Ttl 32, Ch 103
MARYLAND	L	L	L	No	1990	Sec 14-705.1
MASSACHUSETTS	L	L	L	Yes	1986	116 CMR 2.0
MICHIGAN	*[2]			Yes	N/A	MCL 333.13521
MINNESOTA	*	*	*	N/A	N/A	MS 214.0
MONTANA	L			Yes	1977	MCA 37-14-101
NEBRASKA	L	L	L	No	1991	Art. 35, 71-3515
NEW JERSEY	L	L	L	Yes	1968	NJSA 26:2D-24 et seq
NEW MEXICO	L	L	L	Yes	1989	Ch 317
NEW YORK	L	L		No	1965	NY PHL Art. 35
OREGON	L	L		Yes	1965	ORS 453.605-745
TENNESSEE	L[3]	L[3]		Yes	1983	TCA 63-6-223
TEXAS	L	L	L	Yes	1987	TCS 4512m
UTAH	*	*	*	Yes	1989[4]	Utah Code 58-54
VERMONT	L	L	L	Yes	1978	26 VSA 51:2901
VIRGINIA	L			N/A	1991 (Proposed)	SEC 54.1 2956 PARTS 6.7 & 8
WEST VIRGINIA	L	L		No	1978	WVC Chp 30:23
WISCONSIN	L[5]			Yes	1988	Chir 4.04 (1), (2)
WYOMING	L	L	L	Yes	1985	WS 23-27-101-113
PUERTO RICO	L	L		No	1963	PRLA TITLE 20:361
TOTAL LICENSURE	27	21	14			

KEY

R	Radiographer or Radiologist Technician
RTT	Radiation Therapy Technologist
NMT	Nuclear Medicine Technologist
L	Licensure
*	Enabling Legislation
N/A	Not Applicable (Not Available)

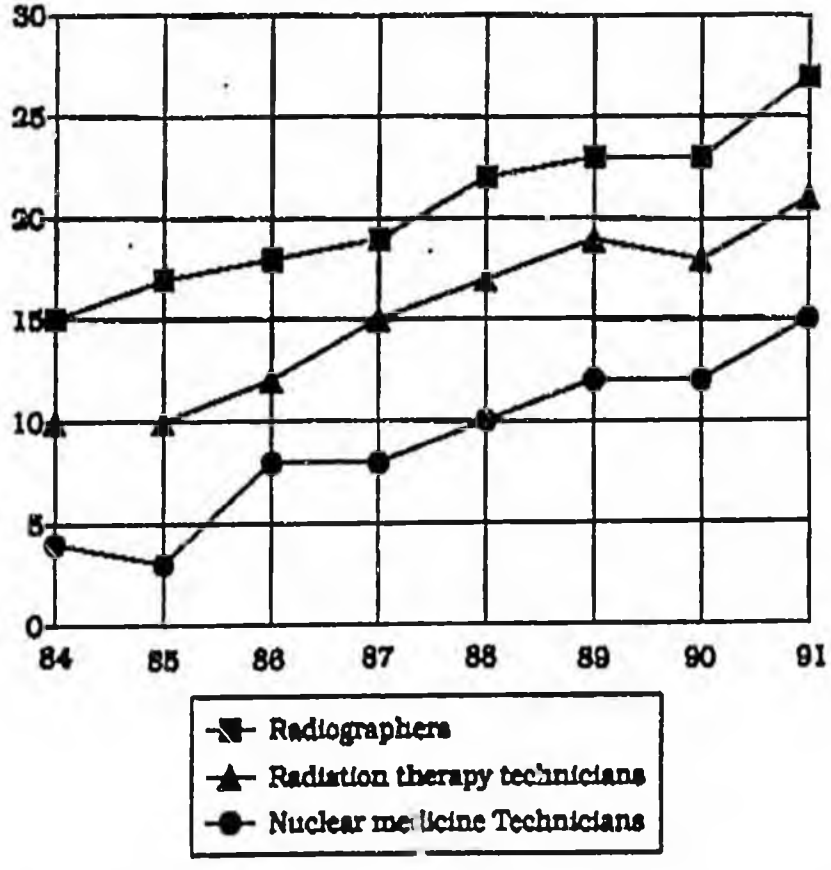
FOOTNOTES

1. Granted to individuals whose use of ionizing radiation is limited to specific body sites or a set of standard procedures.
2. Legislation applies only to persons performing mammography.
3. Legislation applies only to radiographers and radiation therapy technologists in physicians' and chiropractors' offices.
4. Revised in 1991.
5. Legislation applies only to radiographers in chiropractors' offices.

GRAPH I

HISTORICAL LICENSURE REQUIREMENTS FOR ALLIED PROFESSIONS TO PERFORM RADIOGRAPHS

(June 1984 - June 1991)



Twenty-seven states currently license radiographers. States requiring licensure for radiographers has increased from 15 states in 1984 to 27 in 1991, an 80 percent increase.

Twenty-one states require licensure for radiation therapy technologists in 1991. The number of states requiring licensure has risen significantly, from 10 in 1984 to 21 in 1991. This is a 110 percent growth overall. The number of states requiring licensure for 1985 is not available; therefore, it is assumed that the 10 states that regulated radiation therapy technologists in 1984 also regulated them in 1985.

The number of states with licensure requirements for nuclear medicine technologists has risen dramatically, from four in 1984 to 14 in 1991. This is a 250 percent increase in the number of states with licensure requirements.

MAMMOGRAPHY QUALITY ASSURANCE

A leading cause of death in the U.S., breast cancer will strike one in 10 women during their lifetime. Approximately 150,000 American women will be diagnosed with breast cancer this year, and more than 44,000 will die of the disease.

Chances for survival are greatest when breast cancer is detected early. According to the American Cancer Society, up to 30 percent of the deaths due to breast cancer can be prevented through appropriate screening procedures that combine physical examinations and mammograms. Survival rates approach 100 percent when breast cancer is detected before reaching one centimeter in size. Mammography is capable of detecting cancer at this stage, often long before a tumor can be felt through manual screening.

However, the quality of the equipment used and the technique of the equipment operator (as well as the skill level of the person reading the mammogram) can significantly impact the effectiveness of mammography screening. For this reason, the American College of Radiology (ACR) has developed a voluntary Mammography Accreditation Program to ensure that women receive optimum mammographic examinations with the lowest possible risk. (A copy of the ACR standards is attached.)

At the state level, there appears to be a growing interest in mammography quality assurance programs among public policy makers. Previously, most legislative activity dealt with the issue of insurance coverage for mammography screening. However, a few states are looking at the type of equipment used for mammography and the qualifications of those who perform and interpret mammograms.

Michigan pioneered mammography quality assurance legislation after a survey of 52 machines (21 percent of all machines in the state) found that more than half had significant problems with image quality and radiation levels. Signed into law in 1989, Michigan's Act 45 (also attached) specifies that:

* Mammography equipment must meet the ACR accreditation criteria to receive state authorization to perform the procedure.

* The state department of public health must promulgate rules specifying the minimum training and performance standards for non-physician machine operators. (Until the rules are final, non-physician equipment operators are required to demonstrate that they are specifically trained in mammography.)

* The equipment must be specifically designed to perform mammography and used exclusively for mammography examinations.

At least three other states (Arkansas, Rhode Island and Virgina) have passed legislation pertaining to mammography quality assurance. Most commonly, the ACR standards are used as the basis for rule promulgation.

As a leading manufacturer of medical diagnostic imaging technology, GE has assisted providers of breast cancer screening in complying with the mammography quality assurance criteria developed by the ACR. We believe the Michigan bill would serve as an effective model for other states interested in developing standards in this area.

For more information, contact:

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GE State Government Relations Operation
(414)797-4982

House
Legislative
Analysis
Section

Manufacturer's Bank Building, 12th Floor
Lansing, Michigan 48909
Phone: 517/373-6466

MAMMOGRAPHY REGULATION

House Bill 4074 as enrolled
Second Analysis (7-11-89)

Sponsor: Rep. Maxine Berman
House Committee: Public Health
Senate Committee: Health Policy

THE APPARENT PROBLEM:

More than 5,000 women are diagnosed with breast cancer each year in Michigan (for example, in 1986, the figures were 5,095 women and 26 men), and more than 1,500 Michigan women die of breast cancer each year (the 1986 figures are 1,546 women and 12 men). Despite studies which show that a 30 percent reduction in deaths is possible through appropriate screening (that is, mammography combined with a physical examination), a Michigan survey suggests that less than one-third of the women who should be screened are currently getting annual mammograms and physical examinations. And although the risk of breast cancer increases with age, state and national surveys show that the likelihood of women getting appropriate screening actually decreases in the older age groups.

The effectiveness of using mammographies in breast cancer screening depends not only on the training of the physician who reads the mammogram, but also on the quality of the mammography machine and on the training of the person who operates the machine (a radiological technologist). Unfortunately, however, the quality of mammography machines and the training of the machine operators cannot be guaranteed at this time in Michigan.

All radiology (X-ray) machines are required to be registered with the Department of Public Health (DPH); as of January 1989, there were 391 registered facilities, using 448 machines to perform mammography. The Division of Radiological Health inspects mammography facilities, but due to staffing limitations the division is able to inspect mammography machines only every three to five years. And even when the department identifies problems during inspections of mammography facilities, it currently has authority only to order—but not enforce—recommended corrective actions. Inspections by the Division of Radiological Health have revealed significant problems with both mammography machines and with machine operators' techniques. In a 1988 survey of 96 mammography machines (21 percent of all of the machines in the state at that time), 52 of the machines—or 54 percent of the machines inspected—revealed significant problems in the areas of image quality and radiation levels. The American College of Radiology (ACR) recently initiated a voluntary accreditation program for mammography facilities, but by the end of January 1989, only 58 Michigan facilities (only half of the facilities which even applied for voluntary accreditation) had met ACR accreditation standards. And the ACR has found that in 64 percent of the facilities nationwide that failed to obtain accreditation failed to do so due to faulty technique used by the people operating the machines.

Although 23 states have radiological technologist licensing laws, Michigan currently has no specific requirements for accreditation, training, experience, or licensing of radiologic technologists, including those who perform mammography. (There is a voluntary national accreditation program offered by the American Association of Radiological Technicians, but this

program does not include specific training or credentials for mammography.) The Department of Public Health estimates that there are between 1,000 and 2,000 people performing mammography in Michigan, including not only trained radiological technologists but also staff in physicians offices (including secretaries, receptionists, and nurses) and in unlicensed free-standing "mammography clinics."

Because breast cancer is a leading cause of death of women and because mammograms can significantly reduce the number of deaths from breast cancer, legislation has been proposed to educate the general public about the importance of appropriate breast cancer screening, require training for non-physician mammography machine operators, and allow the Department of Public Health to better regulate mammography machines.

THE CONTENT OF THE BILL:

The bill would amend the Public Health Code to establish education programs and a grant program to reduce breast cancer deaths, to prohibit the use of unauthorized mammography machines, to regulate (and establish fees for) mammography machines, and to require the Department of Public Health to promulgate rules specifying the minimum training and performance standards for people operating mammography machines.

Breast Cancer Program. The bill would create a Breast Cancer Mortality Reduction Program in the Department of Public Health (DPH). The program would include:

* education programs for health professionals to develop state-of-the-art skills in breast cancer screening, diagnosis, referral, treatment, and rehabilitation;
* programs to help the public understand the benefits of regular breast cancer screening; how to best use the medical care system for breast cancer screening, diagnosis, referral, treatment, and rehabilitation; and what the available options were for the treatment of breast cancer;
* an applied research and community demonstration grant program for local communities to demonstrate and evaluate methods to reduce illness and deaths from breast cancer and economical and effective ways of providing access to breast cancer screening, diagnosis, referral, treatment and rehabilitation services for those at higher than normal risk of breast cancer.

The DPH would be required to report every two years to the House and Senate committees dealing with public health. The report, which would evaluate the effectiveness of the Breast Cancer Mortality Reduction Program, would have to include information on the rate of illness and death from breast cancer in the state and the extent of participation in breast cancer screening.

Mammography machine operators. The bill would require the department to promulgate rules specifying the minimum training and performance standards for anyone (other than licensed physicians) using radiation machines for mammography.

Regulation of mammography machines. Beginning 60 days after the effective date of the bill, in order for someone to use a radiation machine for mammography, the machine would have to be registered with the DPH under its rules for registration of radiation machines and be specifically authorized under the bill for doing mammography. A mammography authorization would be effective for three years, and would be required for each radiation

machine used for mammography.

Mammography radiation machine standards: The DPH would authorize a radiation machine for mammography if the machine met all of the following standards:

* it met the mammography accreditation standards set by the American College of Radiology (ACR);
* it met DPH requirements for radiation machines and was used according to DPH rules on patient radiation exposure and dose levels;
* it was specifically designed for mammography and was used only for mammography;
* it was used in a facility that met DPH requirements for radiation machines and that was evaluated annually by a qualified consulting radiation physicist (and that kept records of the annual consultations for at least seven years);
* it was operated only by a physician or by someone who could demonstrate to the DPH that he or she could meet the standards established by rule for operating mammography machines (until the department established these rules, the non-physician operator would have to be able to demonstrate that he or she was specifically trained in mammography).

Application for authorization. If an applicant for authorization of a mammography machine needed more than 60 days after the effective date of the bill to submit satisfactory evidence to the DPH that the machine met the bill's standards, the department could issue a nonrenewable temporary authorization. For the first 18 months after the bill's effective date, a temporary authorization would be effective for up to 12 months; after that it would be effective for no more than six months. In any case, the department could withdraw a temporary authorization at any time if the machine failed to meet one or more of the required standards.

The DPH would have to process and respond to an application for authorization within 30 days of receiving the application and would have to inspect a machine within 60 days of its initial authorization (except for the first year after the bill took effect, during which the department could take more than 60 days) and at least once a year thereafter. The department would have to make "reasonable efforts" to coordinate mammography machine inspections with any other inspections it did of the facility in which the machine was located.

The department would issue a "certificate of registration" for each authorized machine, and after each satisfactory inspection the department would issue a "certificate of radiation machine inspection" ("or a similar document") which identified the facility and machine inspected and which provided a record of when the machine had been inspected. The facility would have to post this information near the machine.

Loss of authorization and reinstatement. The department could withdraw authorization for a machine if the machine failed to meet one or more of the required standards, and would have to provide an opportunity for a hearing if it did withdraw an authorization. If necessary, the department could issue emergency orders summarily withdrawing mammography authorization and would have to hold a hearing within five working days after the order was issued. If the department withdrew authorization of a mammography machine, the machine could not be used for mammography.

An application for reinstatement of a machine from which authorization

had been withdrawn would be made in the same way as an application for initial authorization. The DPH could not issue a reinstated certificate of mammography registration until it had received the reinspection fee, inspected the machine (within 60 days of receiving the application for reinstatement), and found that the machine met all of the required standards.

Penalties. Someone who used an unregistered and unauthorized radiation machine to do a mammography would be guilty of a misdemeanor punishable by a fine of up to $2,000 and imprisonment for up to 180 days for each violation (though total fines for violations could not be more than $10,000). In addition, the department could impose an administrative fine of up to $500 a week for each week the machine were in violation of the bill. If a violation continued for more than two weeks, the department also would post a conspicuous notice (both on the unauthorized machine and at the entrance to where the machine was located) warning the public that the facility was doing mammography with a machine that was a substantial hazard to the public health.

Fees. The bill would establish the following fees for inspection and evaluation of mammography machines: $100 per machine for each initial inspection, each annual inspection, and each reinspection for reinstatement of mammography authorization; and $500 for the DPH to evaluate a machine for compliance with the American College of Radiology's criteria for it's Mammography Accreditation Program ($400 for each additional machine). The evaluation fee could be waived if an applicant submitted an evaluation report issued by the American College of Radiology that showed compliance with the college's Mammography Accreditation Program criteria.

MCL 333.13501 et al.

FISCAL IMPLICATIONS:

The Department of Public Health estimates that the Breast Cancer Program (which would include 4 FTE positions) would cost $767,000, the community demonstration projects (grants for improving access for minority and other underserved women) would be $1,000,000, and costs of the radiological program (which would include 4 FTE positions and cover the mammography machine registration, inspections, and enforcement provisions of the bill) would be $233,000, for a total cost of $2 million. In addition, there would be additional, indeterminate costs to the department to implement the minimum training and operating standards for mammography technicians. (3-21-89)

ARGUMENTS:

For:

Breast cancer is the leading cause of cancer death among Michigan women, and the American Cancer Society estimates that one in ten women will develop breast cancer at some point in their lives. African American women have a higher death rate from breast cancer than white women, even though the disease occurs more frequently in white woman. African American women tend to have their cancers discovered at later stages than white women, and have lower survival rates than white women of the same age and stage of diagnosis.

Breast cancer imposes enormous costs to individuals, their families, and the state, both in terms of suffering and in terms of economic loss. If each of the 1,500 Michigan women who die of breast cancer each year reached their full life expectancy, more than 29,000 years of potential life and nearly $147,000 in future earnings would be saved every year.

Large, long-term studies have demonstrated that up to 30 percent of deaths due to breast cancer can be prevented through screening procedures that combine physical examinations and mammograms, and survival may approach 100 percent when breast cancers are detected before they reach one centimeter in size. Mammography is capable of detecting such cancers, yet a 1987 Michigan survey showed that less than one third of the women in the appropriate age groups followed the American Cancer Society (ACS) and National Cancer Institute guidelines for breast cancer screening, while a 1984 ACS study suggested that as few as eleven percent of physicians routinely advised their patients to follow the ACS screening guidelines.

The bill would encourage early detection of breast cancers through educating women about the importance of early detection through mammography and physical examinations and through providing for professional education to encourage physicians to perform breast examinations and refer women for routine mammography. It would further address the issue of breast cancer among minority and other underserved women by providing for community grants to help these women receive the services necessary for early detection and treatment of breast cancer.

House Bill 4076 (7-11-89)

For:

Encouraging women to get regular, appropriate screening for breast cancer will not help reduce the number of deaths from breast cancer if mammography equipment is deficient or if the machine operators are not skillful and well trained.

The Investigation and Compliance Section of the Division of Radiological Health did a survey of 96 mammography machines and facilities in 1988, with disturbing results. As many as 54 percent of the machines inspected were deficient, exhibiting significant problems with image quality or with radiation levels (this included both high radiation exposure at skin entrance as well as high patient mean glandular doses). This survey included hospitals, radiology offices, and medical offices. The bill would significantly improve regulatory control over mammography X-ray equipment and its use, require annual inspections (the department's current staff can only inspect the machines once every three to five years), and establish improved procedures for enforcing compliance with standards of safety and effectiveness.

Currently in Michigan there are no training, experience or proficiency requirements for non-physicians who perform mammography. And since the state does not regulate, through licensure or certification, mammography technologists, anyone can claim to be licensed or certified, regardless of their training or background. To protect the public from unqualified technologists, the bill would set, through rules promulgated by the Department of Public Health, minimum training and operating standards for non-physician operators of mammography machines.

Against:

The inspection requirements of the bill could be unnecessarily burdensome on hospitals and could wind up increasing health care costs with no perceivable benefits. Hospitals routinely use people who have obtained training as radiological technologists through certified educational programs and who have passed national exams to become registered radiological technicians. Hospitals also routinely have the safety of their radiological equipment tested by qualified radiation physicists, and have a good safety

track record. If there were to be minimum training and operating standards for mammography technologists, currently practicing technicians conceivably could demand higher compensation for the same job they are now doing, while the bill's inspection requirements could also add more costs for the hospitals. Hospitals have become deluged with inspections from one organization or another, and the unnecessary duplication of these inspections ends up simply adding to health care costs with no additional benefits. Supervision by radiologists of mammography technicians using dedicated mammography equipment (that is, radiology machines used only for mammography) should provide sufficient protection to patients, and the bill should at least specify that the proposed machine inspections not duplicate those already conducted for certification by the American College of Radiology.

Response:

The bill would require the DPH to make "reasonable efforts" to coordinate its inspections, but that such inspections of mammography machines in hospitals is needed is evident from a survey conducted by the department in 1988. Of the 103 Michigan facilities that had voluntarily applied for accreditation by the American College of Radiology (ACR) by December, 1988--those facilities, that is, that believed they were likely to receive accreditation--only 54 were approved, and it was the technique used by the radiological technologist (that is, the machine operator) that was identified as the cause of faulty image production by 61 percent of the facilities that failed to obtain accreditation. Clearly there is a wide variation among facilities in the quality of their mammography machines and in the ability of their mammography technicians, even among those facilities that consider themselves to be most qualified for ACR accreditation. Since properly calibrated equipment and skillful technicians are crucial to the safe and accurate delivery of mammograms, the bill clearly is needed for the protection of Michigan citizens.

Against:

Instead of singling out operators of mammography machines for some kind of minimum training and operating standards, the bill should address the larger issue of regulating all X-ray technologists. Surely citizens have a right to be assured that the technologist who X-rays their elbows or prostrates is as qualified to do so as the technologist who X-rays their breasts. People die from many kinds of cancers other than breast cancer, and the diagnostic equipment and operators should all be required to meet minimum standards.

Response:

It is, indeed, desirable to assure patients that diagnostic X-ray equipment and technologists be minimally adequate, and legislation to regulate radiologic technologists in general may soon be proposed. However, mammograms are the only X-rays that are routinely done in the absence of any suspicion of disease. Given the number of deaths due to breast cancer that could be prevented by appropriate screening, it would be penny wise but pound foolish to delay assuring that this vital preventative screening technology meets the purpose for which it is done. And since any exposure to X-rays is potentially damaging, it is imperative that this potentially life-saving use of X-rays be made as safe and effective as possible.

ACR MAMMOGRAPHY ACCREDITATION PROGRAM

The ACR Mammography Accreditation Program offers radiologists the opportunity for peer review and evaluation of their facility's staff qualifications, equipment, quality control and quality assurance programs, image quality, breast dose, and processor quality control.

This voluntary program is directed by the ACR Committee on Practice Accreditation of the Commission of Radiologic Practice. The ACR Task Force on Breast Cancer and a Physics Subcommittee assisted in developing this program.

The impetus for the program came as a result of the concerns of radiologists, other national medical organizations, the government, and the public that qualified personnel perform and interpret mammograms and that dedicated mammographic equipment be used to ensure that women receive optimum mammographic examinations with the lowest possible risk.

Each facility must complete an application questionnaire concerning the qualifications of personnel including radiologists, radiologic physicists, and radiologic technologists. To more specifically address the need for high quality mammography, the physician supervising and/or interpreting mammography will be required to meet the following minimum criteria:

Have had two months of documented, formal training in reading mammograms with instruction in medical radiation physics, radiation effects, and radiation protection with evidence of a formal examination in these subjects.

OR

Certified by the American Board of Radiology or the American Osteopathic Board of Radiology.

AMERICAN COLLEGE OF RADIOLOGY
1891 Preston White Drive Reston, Virginia 22091 (703) 648-8900

In addition, the physician must also:

Read a minimum of 480 mammograms per year.

AND

Maintain record concerning outcome data for correlation of positive mammograms to biopsies done and the number of cancers detected.

AND

For the initial accreditation, must have documented 40 hours of Continuing Medical Education Credits in mammography. Time spent in residency specifically devoted to mammography will be accepted, if documented, in writing, by the radiologist. At the time of re-accreditation, each radiologist must have documented 15 hours of Continuing Medical Education Credits in mammography in the three years since the original accreditation.

The radiologic technologists must have American Registry of Radiologic Technology certification or the equivalent state license. The technologist should also have had special training in mammography, either in their training curriculum or through special courses. The mammogram must be performed only on dedicated mammographic equipment, or equipment adequately modified in the case of xerography, and have adequate device for compression. Information will also be collected on the quality control and quality assurance program which is in place. The radiologic physicist should calibrate the unit at installation and then at least annually. Additionally, information is collected on follow-up procedures, data collection, and record and film retention.

If the facility fulfills the criteria related to the application form, then image quality and breast dose data is obtained. Image quality, dose, and half value-layer evaluation will be obtained using a specially designed breast phantom and thermoluminescent dosimeter which will be exposed in the same exposure. The image of the phantom as well as two sets of clinical films, one of a fatty and one of a dense breast, will be submitted for scoring to a review panel of radiologists and radiologic physicists. Each set will consist of two views of each breast totaling four films for each type of breast. The committee set standards for the number or sizes of fibrils, specks, and masses which must be visualized on the phantom image, as well as determine the

parameters which will be scored on the clinical images. These include:

Positioning
Compression
Exposure level
Resolution
Contrast
Noise
Exam Identification
Artifacts

The average glandular dose as determined by the dosimeter may not exceed 0.4 rads per view. Finally, processor quality control for a thirty (30) day period must be submitted for evaluation.

The phantom must be purchased for use in the accreditation program and for use in the institution's ongoing quality control program.

Those institutions meeting the criteria will be awarded a three-year accreditation, a certificate for each approved mammography unit, and listing on the American Cancer Society's referral list of approved mammographic centers. Recommendations for improvement will be made for those not meeting the criteria.

The fee for accreditation is $550 for the first unit and $450 for each additional unit regardless of the location. The discounted charge for the phantom is $355 plus applicable taxes and handling charges and is paid directly to the manufacturer.

The ACR office in Reston, Virginia should be contacted for further information (703) 648-8900, extension 4997.

acr

TECHNICAL SPECIFICATIONS FOR MAMMOGRAPHY ACCREDITATION

BREAST PHANTOM:

The lucite breast phantom with a wax insert containing fibrils, specks, and masses is of a thickness to simulate a 4.5 cm compressed breast.

The test objects are:

Fibrils	1.56 mm in diameter
	1.12 mm
	0.89 mm
	0.75 mm
	0.54 mm
	0.40 mm
Specks	0.54 mm in diameter
	0.40 mm
	0.32 mm
	0.24 mm
	0.16 mm
Masses	2.00 mm thick
	1.00 mm
	0.75 mm
	0.50 mm
	0.25 mm

2. Dosimeter

Information obtained from the dosimeter will include filter thickness, exposure (mR), average exposure, and a calculated half-value layer value.

A computer program will use this information to calculate an average glanduar dose for each mammographic unit.

acr

CORRECTION

THIS DOCUMENT
HAS BEEN REPHOTOGRAPHED
TO ASSURE LEGIBILITY

02-576(2/77)

TECHNICAL SPECIFICATIONS FOR MAMMOGRAPHY ACCREDITATION

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acr

HB

348

[redacted]ate: 5/19/91

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[redacted] 96	FY 97
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(7)

[redacted]OUSE COMMITTEE REPO[redacted]

Date Referred: May 19, 1991 FURTHER REFERRALS: State Affairs, Judiciary

Date of Committee Action: 2/25

The LABOR AND COMMERCE Committee considered: HB 348

HOUSE BILL NO. 348 GROUP HEALTH & LIFE INS: STATE EMPLOYEES

"An Act relating to the provision of group life and health insurance for state employees by means of self-insurance; and to payment of administrative costs of providing group health and life insurance for state employees."

RECOMMENDATIONS: [ ] the same title
be replaced with _____ [ ] a new title

[ ] have attached amendments(s)
[ ] do pass
[ ] do not pass
[X] no recommendations
[ ] individual recommendations
[ ] additional referral to the _____ Committee

ADOPTS: _____ letter of Intent

ATTACHES NEW FISCAL NOTE(s): (Dept) APPROVES PREVIOUS: (Dept/Date)

[ ] fiscal impact _____ [ ] fiscal note(s) _____

[X] zero fiscal note Administration [ ] zero fiscal note(s) _____

SIGNING DO PASS	DP	OTHER RECOMMENDATIONS	DNP	NR	AM
	✓			✓	
				✓	
				✓	

CHAIRMAN'S SIGNATURE

FISCAL NOTE

BILL NO. HB 348

STATE OF ALASKA
1992 LEGISLATIVE SESSION

Revision Date:

Title: An Act relating to the provision of group life and health insurance for state employees by means of self-insurance

Department Affected: Administration
BRU: Retirement & Benefits

Component: Retirement & Benefits

Sponsor: House Rules Committee
Requestor: Governor

COMPONENT SERIAL NO. 64

Expenditures/Revenues: (Thousands of Dollars)

OPERATING	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98
PERSONAL SERVICES	0	0	0	0	0	0
TRAVEL	0	0	0	0	0	0
CONTRACTUAL	0	0	0	0	0	0
SUPPLIES	0	0	0	0	0	0
EQUIPMENT	0	0	0	0	0	0
LAND & STRUCTURES	0	0	0	0	0	0
GRANTS, CLAIMS	0	0	0	0	0	0
MISCELLANEOUS	0	0	0	0	0	0
TOTAL OPERATING	0	0	0	0	0	0
CAPITAL	0	0	0	0	0	0
REVENUE FUND SOURCE:	0	0	0	0	0	0

FUNDING: (Thousands of dollars)

GENERAL FUND	0	0	0	0	0	0
FEDERAL FUNDS	0	0	0	0	0	0
OTHER FUND SOURCE	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0

POSITIONS

FULL-TIME:	0	0	0	0	0	0
PART-TIME:	0	0	0	0	0	0
TEMPORARY:	0	0	0	0	0	0

Estimate of current year impact: None

ANALYSIS: (attach a separate page if necessary.) This bill would authorize the Department of Administration to utilize self funding for health insurance in addition to the competitive bid process for insurance carriers. Self-insurance could then be undertaken assuming that savings or other advantages could be demonstrated.

Prepared By: Gary Bader Gary M. Bader
Division: Retirement and Benefits
Phone: 465-4470
Date: 12.12.91

Approved by Commissioner: Nancy Bear Usera
Agency: Department of Administration
Date: 1/27/92

Distribution (by preparer): Legislative Finance, Legislative Sponsor, Requestor, OMB & Impacted Agency(ies).

FISCAL NOTE

STATE OF ALASKA
1992 LEGISLATIVE SESSION

BILL NO. HB 348

Revision Date:
Title: An Act relating to group life and health insurance for State employees by means of self-insurance.
Sponsor: Rules Committee
Requestor: Governor

Department Affected: Administration
BRU: Risk Management
Component: Risk Management

COMPONENT SERIAL NO. 0 0 7 1

Expenditures/Revenues: (Thousands of Dollars)

OPERATING	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98
PERSONAL SERVICES	0	0	0	0	0	0
TRAVEL	0	0	0	0	0	0
CONTRACTUAL	0	0	0	0	0	0
SUPPLIES	0	0	0	0	0	0
EQUIPMENT	0	0	0	0	0	0
LAND & STRUCTURES	0	0	0	0	0	0
GRANTS, CLAIMS	0	0	0	0	0	0
MISCELLANEOUS	0	0	0	0	0	0
TOTAL OPERATING	0	0	0	0	0	0
CAPITAL	0	0	0	0	0	0
REVENUE FUND SOURCE:	0	0	0	0	0	0

FUNDING: (Thousands of Dollars)

GENERAL FUND	0	0	0	0	0	0
FEDERAL FUNDS	0	0	0	0	0	0
OTHER FUND SOURCE:	0	0	0	0	0	0
TOTAL	0	0	0	0	0	0

POSITIONS:

FULL-TIME	0	0	0	0	0	0
PART-TIME	0	0	0	0	0	0
TEMPORARY	0	0	0	0	0	0

Estimate of current year impact: 0

ANALYSIS: (Attach a separate page if necessary.)

See attached.

Prepared by: Donald J. Hitchcock
Division: Risk Management
Phone: 465-2180
Date: 12.11.91

Approved by Commissioner: Nancy Bear Usera
Agency: Administration
Date: 1/27/92

Distribution (by preparer): Leg. Fin., Legislative Sponsor, Requestor, OMB/DBR, Gov. Legis. Ofc., & Impacted Agency(ies).

Rev 10/07/91
9/1/FN/346018.KP/1

CONTINUATION OF FISCAL NOTE ANALYSIS
House Bill No. 348

This bill is enabling legislation to allow the State to self insure state employee medical and/or life insurance benefits. It is anticipated that any possible increased state administrative costs for such a program should be more than offset through increased income from cash flow and other cost savings. In other words a self insurance program would be implemented only if cost savings is possible.

Potential benefits of a self insurance program would be elimination of certain insurance company charges; positive control of the insurance program which might include use of employee incentives to reduce costs; and increased competition from bidders for administration and/or aggregate loss (excess) insurance policies.

The present medical benefits program for active state employees costs the State approximately $65,000,000. a year therefore cash flow and interest earnings may become an important fiscal consideration.

Possible problems due to a catastrophic increase in claims costs for any one year may be controlled through purchase of aggregate loss policies to pay excess costs either on an individual claim basis or in the aggregate.

Passage of this enabling legislation is fundamental to making all options available to the State in the administration and implementation of a cost effective group health and life benefits plan for its employees.

Department of Administration

HB 348
Sectional Analysis

February 14, 1992

"An Act relating to the provision of group life and health insurance for state employees by means of self-insurance; and to payment of administrative costs of providing group health and life insurance for state employees."

Section 1. Current law requires DOA to obtain health coverage from an insurance company or HMO licensed in Alaska.

The proposed language extends the "licensed in Alaska" requirement to the procurement of excess loss insurance. Excess loss insurance is commonly used in self-insurance situations.

Section 2. Current law requires the State to request bids from Alaska licensed insurance carriers for health coverage at least every five years and that the carrier with the lowest responsible bid shall be the winning bidder.

The proposed language would mandate the same five year bid cycle and "licensed in Alaska" requirement for excess loss coverage procured in the event of self insurance.

Section 3. Current law requires the health insurance benefits to be provided by insurance companies as outlined in Section 2.

The proposed language authorizes DOA to self-insure health insurance benefits as an alternative to using insurance companies. The language also requires that any excess loss coverage be procured the same as health insurance.

Section 4. AS 39.30.095

(a) Current law establishes the group health and life benefits fund as a special account in the general fund to provide carrier insured health and life coverage. Current language describes what money the fund shall consist of and requires the commissioner of administration to maintain accounts and records for the fund. Inasmuch as payment of premium has been made directly to insurance carriers, this fund has not been used. However, it would be necessary under a self-insurance arrangement.

Proposed language would expand the purposes of the fund to include self-insurance arrangements.

(b) Current law requires the commissioner to obtain an actuarial determination of the estimated cost of the insured coverages and to set the contribution rate to the fund for both employer and employee. The current language further requires that premiums and claims for carrier insured benefits be paid with money in this fund.

The proposed language broadens the kinds of payments that can be made from the fund to include self-insurance arrangements. The proposed language would also allow administrative costs of the health program to be paid from the fund.

(c) Current law allows the State to receive reimbursement of its administrative expenses from insurance carriers.

The proposed language would allow the department to contract with a third party administrator to pay claims and payments. A third party administrator is normally used in a self-insurance situation.

(d) Current law allows the commissioner to have the surplus of the fund or some part of it invested by the commissioner of revenue.

The proposed language would allow administrative costs to be included in the makeup of the fund when determining whether a surplus existed. This fund would become more relevant if the State were to implement self-insurance.

The Governor's transmittal letter, dated May 19, 1991, appears below:

"Dear Speaker Grussendorf:

Under the authority of art. III, sec. 18, of the Alaska Constitution, I am transmitting a bill that would authorize the state to provide group life and health insurance for its employees by means of self-insurance.

Over the last several years, it has become clear that the state must act to contain the cost of its employee health benefits. The state has considered self-insurance, but the current statute, AS 39.30.090, does not authorize it. See 1989 Inf. Op. Att'y Gen. (March 14; 663-89-230). This legislation is proposed to permit the state to self-insure, thereby increasing its flexibility in addressing the cost of group life and health insurance for its active employees.

The bill also authorizes self-insurance administrative costs to be paid from the group health and life benefits fund, and makes clear that the administrative costs of purchasing insurance are also to be paid from the fund.

Among the potential beneficial effects of self-insurance are (1) the reduction or elimination of insurance charges, (2) positive control of the medical plan by the state (including the use of incentive programs) rather than by the commercial insurance market, and (3) increased competition from medical benefits providers, which could result in decreased premiums and administrative costs.

We believe that this bill will significantly increase the ability of the state to keep the cost of employee benefits under control, and increase as well the state's bargaining power when it negotiates with its insurers. In view of its importance to approaching reviews of insurance policy renewal proposals, we urge your prompt and favorable action on this measure.

Sincerely,

/s/

Walter J. Hickel
Governor"

MEMORANDUM

State of Alaska
Department of Law

TO: Honorable John Andrews
Commissioner
Department of Administration

DATE: March 14, 1989

FILE NO: 663-89-0230

TEL NO: 465-3600

SUBJECT: Authority for self-insurance and cafeteria plan

FROM: Virginia B. Ragle
Assistant Attorney General
Governmental Affairs-Juneau

You have asked whether the Department of Administration (the department) has authority to provide group health insurance coverage for state employees by self-insuring or through cafeteria plan policies. There is no clear statutory authority for the department to provide the coverage by self-insuring. We recommend that legislation be introduced, or that a pending bill be amended, to establish authority for self-insurance, if the department chooses to pursue that method of providing group health coverage. We conclude that the department currently has authority to obtain a policy that provides insurance coverage through a cafeteria plan. However, depending upon how the cafeteria plan is implemented, regulatory and statutory changes may be required.

I. Self-insurance

The department is authorized by AS 39.30.090 to provide group insurance for employees. Under that statute, the department may obtain a policy or policies of group insurance for state employees, retirees, and employees of other participating governmental units. The statute sets out the kinds of coverage that may be provided in a policy, the persons who must be covered by a policy (unless exempt under regulations), and the manner in which the department must obtain the policy from insurance carriers.

The statute neither specifically prohibits nor specifically authorizes provision of group health coverage through self-insurance. However, the statute includes mandatory language such as, "The Department of Administration shall obtain the insurance policy from any insurer authorized to transact business in the state," and also requires that an opportunity to bid to provide the insurance benefits be made available to insurance carriers at least every five years. These provisions indicate that the legislature contemplated that liability for group coverage for state employees would be insured under policies obtained from insurance companies, with rates established competitively.

AS 39.30.095 requires the commissioner of administration to establish a group health and life benefits fund. The language of AS 39.30.095 does not clearly authorize self-insurance. Although this statute provides that the department shall pay premiums and claims from the fund, the department is required to make the payments in accordance with insurance policies in effect under AS 39.35.090 and under the Supplemental Benefits System (SBS).

Legislative history does not shed much light on the purpose of AS 39.30.095. We have traced the origin of that section to "housekeeping" legislation requested by the department in 1980. Dept. of Law file no. J-77-054-81. The department explained that the fund would

> eliminate the advantage the insurance company now has to the interest earned from the funds it holds. The language is permissive rather than mandatory; the state could still allow the insurance company to hold the funds. [1/]

The section-by-section analyses that accompanied the bills in which the provisions of AS 39.30.095 appeared during the 1981 and 1982 legislative sessions (HB 121, SB 121, and SB 827) explained that the section was

> included at the urging of the State's benefits consultants. The existence of a fund will provide the flexibility needed to negotiate for and procure more favorable terms from insurance companies. Our consultants inform us that such added flexibility has led to substantial savings in other systems.

The private consultants have advised us that it was their intention that in recommending establishment of the fund, in addition to earning interest on the fund, the state would gain the flexibility to self-insure. The consultants' initial recommendation or language for the section included specific reference to self-insurance. However, no such specific reference was included in any draft of the bills that we have found. Furthermore, the section was not explained to the legislature as having the effect of authorizing self-insurance. In testimony to legislative committees, representatives of the division of retirement and benefits

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1/ October 30, 1980 memorandum from Director of Administrative Services Crondahl to Commissioner Hudson.

included the section with provisions of the bills that were characterized as "strictly housekeeping." 2/

Because the statutes provide for provision of group health coverage through policies obtained from insurance companies and there is no specific authorization for provision of group health coverage by self-insurance, or even an indication that the legislature ever considered self-insurance as an option, we recommend that legislation be pursued to provide specific authority for alternatives to conventional insured plans, such as self-insurance. We note that last year the Washington legislature passed legislation, known as the Washington State Health Care Reform Act of 1988, which includes specific authority for self-insurance of state employee health benefits. A copy of the Washington statutes, RCW 41.05, is enclosed.

II. Cafeteria plan

There are no provisions in AS 39.30.090 that prescribe the level of health insurance coverage that must be provided in the policy or policies obtained by the department, the amount of deductable that a policy may require covered individuals to pay, or the manner in which premiums to insurance companies must be paid. The department has broad authority to determine the terms and structure of the insurance policies it obtains. 3/ Provision of health insurance coverage under a "cafeteria plan" qualified under 26 U.S.C. 125 would be within the scope of that authority, and would not conflict with any provision of AS 39.30.090. 4/

2/ March 18, 1982 testimony of Director Paul Arnoldt on SB 827 to Senate State Affairs Committee; May 12, 1982 testimony of Deputy Director Ken Humphreys on SB 121 to House Health, Education, and Social Services Committee.

3/ Of course, some issues regarding employee health benefits are subject to collective bargaining under the Public Employment Relations Act, AS 23.40.070 -- 23.40.260. See 1978 Op. Att'y Gen. No. 3 (Jan. 23); 1988 Inf. Op. Att'y Gen. (Jan. 1; 366-356-83).

4/ The advantage of such a plan is that, if any of the benefit options offered by the plan require payment of part of the premium by the employee, the employee's part of the premium could be paid by a voluntary reduction of pretax wages, which would reduce the employee's federal income taxes. Nothing in AS 39.30.090 precludes the department from offering insurance options that require employees to contribute to premiums.

Depending upon how the department chooses to implement the cafeteria plan, regulatory and statutory changes may be needed. For example, since AS 30.30.090 requires the group policy to cover state employees, their spouses, and their dependent children unless exempt under regulation, if the plan allows an employee to elect individual or family coverage, a regulation must be adopted to permit exemption of coverage for family members upon election by the employee.

Some mention has been made of a plan that would allow employees to choose between receipt from the state of cash or of various levels of health insurance coverage. Cash received by employees from the state under the plan would constitute taxable income under the Internal Revenue Code. If this kind of provision is included in a cafeteria plan chosen by the department, statutory changes may be needed to clarify that cash received under the plan does not constitute "compensation" for purposes of determining employees' contributions to the state's retirement systems or SBS or determining the amount of employees' retirement benefits. Legislative authorization may also be needed to allow cash to be paid under the cafeteria plan to state employees who are subject to the state pay plan under AS 39.27.

Please let us know if we can provide further advice in this matter.

VBR/pjg

Enc.

cc: Sally Smith, Director
Division of Retirement and Benefits
Department of Administration

HB

356

FISCAL NOTE

STATE OF ALASKA
1992 LEGISLATIVE SESSION

BILL NO : CSHB 356 ( )

Revision Date:
Title: " An Act relating to construction involving freon systems..."
Sponsor: Representative Bruckman
Requestor: House Labor & Commerce

Department Affected: Labor
BRU: Labor Standards & Safety
Component: Occupational Safety & Health
COMPONENT SERIAL NO. 970

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98
PERSONAL SERVICES	8.6	32.1	32.1	32.1	32.1	32.1
TRAVEL	3.6	4.0	4.0	4.0	4.0	4.0
CONTRACTUAL	14.0	6.5	6.5	6.5	6.5	6.5
SUPPLIES	0.3	0.9	0.9	0.9	0.9	0.9
EQUIPMENT	1.3					
LAND&STRUCTURES						
GRANTS,CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	27.8	43.5	43.5	43.5	43.5	43.5
CAPITAL						
REVENUE FUND SOURCE:		45.5 PR #1005	45.5 PR #1005	45.5 PR #1005	45.5 PR #1005	45.5 PR #1005

FUNDING: (Thousands of Dollars)

GENERAL FUND	27.8					
FEDERAL FUNDS						
PROGRAM RECEIPTS		43.5	43.5	43.5	43.5	43.5
TOTAL	27.8	43.5	43.5	43.5	43.5	43.5

POSITIONS:

FULL-TIME						
PART-TIME	0.25	0.5	0.5	0.5	0.5	0.5
TEMPORARY						

Estimate of current year impact: None

ANALYSIS: (Attach a separate page if necessary)

See attached

Prepared by: Richard Arab, Deputy Director — Phone : 465-4855
Division: Labor Standards & Safety — Date : 4/14/92

Approved by Commissioner: C. W. Mahlen
Agency: Department of Labor — Date: 4/14/92

Distribution (by preparer): Legislative Finance, Legislative Sponsor, Requestor, OMB, & Impacted Agency(ies).

Fiscal Note Analysis for:
"An Act relating to construction involving freon systems...."

This bill would place additional responsibilities on the Occupational Safety & Health (OSH) component of the Department of Labor. OSH would be required to develop a training and certification program for persons who construct, install, alter, maintain, or repair refrigerating systems. The department would contract with the University of Alaska's Mining and Petroleum Training Service to assist in developing the training program at a cost of $10,000.

During the first year, this bill would require the addition of a part time Data Processing Clerk for six months ($8,600). The Data Processing Clerk would provide needed clerical support during development of the program.

Additional travel funds would also be required. We estimate an existing Regulation Specialist would be required to make four trips around the state at a cost of $900 per trip ($3,600) to work with the University of Alaska's Training Service in development of the training program and to hold hearings regarding the program.

Additional contractual ($4,000) and commodity ($300) expenses would also be incurred for printing of training applications and certification forms, advertising, postage, phones, space rent, and other average per employee costs.

Equipment consisting of a desk and chair ($1,300) would also be required and would be a one time cost.

In the second year existing staff would perform the certification inspections. This would entail costs for: inspector and supervisory time ($15,000), travel ($4,000), contractual ($500), and supplies ($300). The Data Processing Clerk will be required part time for twelve months to provide clerical support and perform the data entry involved with tracking the inspections and certifications.

Program receipts would be generated as a result of charging a fee for the training and certification, the department estimates that 650 certifications would be issued at a cost of $70. This would fund the program from the second year on. During the first year development period of the program no certifications would be issued so that general funds are required.

An effective date of July 1, 1992 is assumed.

Position Title	No.of Positions	Range/Step	Barg. Unit
Data Processing Clerk II	1	9A	GGU

Time Status	Staff Months	Location	Election District
Part Time	3	Anchorage	7

Type of Expenditure		Amount
1	2	3
Salary	$5,900	
Benefits	2,700	
Premium Pay		
Other		
Total Personal Services		$8,600
Travel		
Contractual		2,000
Commodities		300
Equipment		1,300
Other		
Total Cost		$12,200

Funding Source for Total Cost	
Federal Receipts 1002	
G. F. Match 1003	
General Fund 1004	12,200
GF Program Receipts 1005	
Other	

Justification

This position will provide the data entry and clerical support for this program.

Contractual costs include postage, phone, space rent, and other average per employee costs.

Commodities cover normal office supplies for this position.

Equipment is for a desk and chair and is a one time cost.

Request For New Position

Agency Labor

BRU Labor Standards & Safety

Component Occupational Safety & Health

FISCAL NOTE

STATE OF ALASKA
1992 LEGISLATIVE SESSION

BILL NO : CSHB 356 ( )

Revision Date:
Title: " An Act relating to construction involving freon systems..."
Sponsor: Representative Bruckman
Requestor: House Labor & Commerce

Department Affected: Labor
BRU: Labor Standards & Safety
Component: Occupational Safety & Health
COMPONENT SERIAL NO. 970

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98
PERSONAL SERVICES	66.1	31.0	31.0	31.0	31.0	31.0
TRAVEL	7.2	4.0	4.0	4.0	4.0	4.0
CONTRACTUAL	14.6	6.9	6.9	6.9	6.9	6.9
SUPPLIES	2.1	1.8	1.8	1.8	1.8	1.8
EQUIPMENT	2.8					
LAND&STRUCTURES						
GRANTS,CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	92.8	43.7	43.7	43.7	43.7	43.7
CAPITAL						
REVENUE FUND SOURCE:		45.0 PR #1005	45.0 PR #1005	45.0 PR #1005	45.0 PR #1005	45.0 PR #1005

FUNDING: (Thousands of Dollars)

GENERAL FUND	92.8					
FEDERAL FUNDS						
PROGRAM RECEIPTS		43.7	43.7	43.7	43.7	43.7
TOTAL	92.8	43.7	43.7	43.7	43.7	43.7

POSITIONS:

FULL-TIME						
PART-TIME	1.25	0.5	0.5	0.5	0.5	0.5
TEMPORARY						

Estimate of current year impact: None

ANALYSIS: (Attach a separate page if necessary)

See attached

Prepared by: Richard Arab, Deputy Director
Phone : 465-4855
Division: Labor Standards & Safety
Date : 4/2/92

Approved by Commissioner: C. W. Mahlen
Agency: Department of Labor
Date: 4/2/92

Distribution (by preparer): Legislative Finance, Legislative Sponsor, Requestor, OMB, & Impacted Agency(ies).

Fiscal Note Analysis for:
"An Act relating to construction involving freon systems...."

This bill would place additional responsibilities on the Occupational Safety & Health (OSH) component of the Department of Labor. OSH would be required to develop a training and certification program for persons who construct, install, alter, maintain, or repair refrigerating systems.

During the first year, this bill would require the addition of two part time positions, one Industrial Hygienist ($44,600) and one Data Processing Clerk ($16,000). The Industrial Hygienist would be needed to provide the professional technical experience required to assist existing staff in developing the certification program and regulations. While the Data Processing Clerk would provide needed clerical support during development of the program. In addition to these personal services costs there would be at least one man month of the Deputy Director's and Regulation Specialists time which we estimate would cost $5,500.

Additional travel funds would also be required. We estimate the Industrial Hygienist would be required to make eight trips around the state at a cost of $900 per trip to work with industry and labor representatives in development of the training program.

Additional contractual and commodity expenses would also be incurred for printing of training applications and certification forms, advertising, postage, phones, space rent, and other average per employee costs.

Equipment consisting of desks and chairs would also be required and would be a one time cost.

In the second year the Industrial Hygienist would not be required as existing staff would perform the inspections. This would entail costs for: inspector and supervisory time ($15,000), travel ($4,000), contractual ($500), and supplies ($300). The Data Processing Clerk will still be required for clerical support and data entry involved with tracking the inspections and certifications.

Program receipts would be generated as a result of charging a fee for the training and certification the department estimates that 1,000 certifications would be issued at a cost of $45. This would fund the program from the second year on. During the first year development of the program no certifications would be issued so that general funds are required.

An effective date of July 1, 1992 is assumed.

Position Title	No.of Positions	Range/Step	Barg. Unit
Data Processing Clerk II	1	9A	GGU

Time Status	Staff Months	Location	Election District
Part Time	6	Anchorage	7

Type of Expenditure		Amount
1	2	3
Salary	$11,700	
Benefits	4,300	
Premium Pay		
Other		
Total Personal Services		$16,000
Travel		
Contractual		6,400
Commodities		1,500
Equipment		1,500
Other		
Total Cost		$25,400
Funding Source for Total Cost		
Federal Receipts 1002		
G. F. Match 1003		
General Fund 1004		25,400
GF Program Receipts 1005		
Other		

Justification

This position will provide the data entry and clerical support for this program.

Contractual costs include postage, phone, space rent, and other average per employee costs.

Commodities cover normal office supplies for this position.

Equipment is for a desk and chair and is a one time cost.

Request For New Position

Agency: Labor

BRU: Labor Standards & Safety

Component: Occupational Safety & Health

Revised Date

FY 92

Position Title	No.of Positions	Range/Step	Barg. Unit
Industrial Hygienist	1	19A	GGU

Time Status	Staff Months	Location	Election District
Part Time	9	Anchorage	7

Type of Expenditure		Amount
1	2	3
Salary	$33,700	
Benefits	10,900	
Premium Pay		
Other		
Total Personal Services		$44,600
Travel		7,200
Contractual		8,200
Commodities		600
Equipment		1,300
Other		
Total Cost		$61,900
Funding Source for Total Cost		
Federal Receipts 1002		
G. F. Match 1003		
General Fund 1004		$61,900
GF Program Receipts 1005		
Other		

Justification

This position will provide the professional technical experience to existing staff in developing the certification program and regulations. The position would only be needed in the first year development stage of the program.

Travel costs would cover eight trips around the state to work with industry and labor representatives in development of the program.

Contractual costs include the printing of training application & certification forms, postage, phone, space rent, and other average per employee costs.

Commodities cover normal office supplies for this position.

Equipment is for a desk and chair and is a one time cost.

Request For New Position

Agency: Labor

BRU: Labor Standards & Safety

Component: Occupational Safety & Health

Revised Date

FY 92

FISCAL NOTE

STATE OF ALASKA
1992 LEGISLATIVE SESSION

BILL NO : HB 356

Revision Date:
Title: " An Act relating to construction involving freon systems..."
Sponsor: Representative Bruckman
Requestor: House Labor & Commerce

Department Affected: Labor
BRU: Labor Standards & Safety
Component: Occupational Safety & Health
COMPONENT SERIAL NO. 970

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 93	FY 94	FY 95	FY 96	FY 97	FY 98
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND&STRUCTURES						
GRANTS,CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0
CAPITAL						
REVENUE FUND SOURCE:						

FUNDING: (Thousands of Dollars)

GENERAL FUND						
FEDERAL FUNDS						
OTHER						
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

Estimate of current year impact: None

ANALYSIS: (Attach a separate page if necessary)

Prepared by: Richard Arab, Deputy Director
Phone : 465-4855
Division: Labor Standards & Safety
Date : 3/31/92

Approved by Commissioner: C. W. Mahlen
Agency: Department of Labor
Date: 3/31/92

Distribution (by preparer): Legislative Finance, Legislative Sponsor, Requestor, OMB, & Impacted Agency(ies).

Rev 10/7/91

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ALASKA STATE HOUSE

LABOR & COMMERCE

STATE AFFAIRS

REPRESENTATIVE BETTY BRUCKMAN

Sponsor Statement

HB 356

"An Act relating to refrigerating systems"

On May 20, 1991 a major Freon leak occurred in the Freon compressor room of the Dimond Ice Chalet in the Dimond Mall in Anchorage. Three employees, untrained in proper safety procedure, entered the room to try and shut off the leak. All three collapsed. One, William Temple, a likeable 24 year old engaged to be married, died.

The Ice Chalet had no formal or written safety program. William Temple died because his employers did not give him the safety information he needed to work with refrigerant gases. HB 356 ensures that another friendly, hardworking young Alaskan will not needlessly die. Safety training for all but the most qualified refrigeration workers will now be mandatory.

HB 356 will require workers who construct, alter, repair, or maintain refrigeration systems to attend a Department of Labor approved safety training program unless they have two years of recent experience as a journeyman in refrigeration or are a graduate of an accredited college or trade school in refrigeration. HB 356 ensures the safety of refrigeration workers; it does not seek to regulate the wider refrigeration industry. If another leak does occur, HB 356 makes sure workers will know how to protect themselves from death or injury.

HB 356 protects more than refrigeration workers: it also safeguards the general public. During the Dimond Mall incident several people swimming in a nearby health club were rescued from the bottom of the pool after inhaling Freon that had accumulated on the surface of the water. A day care center for children was also nearby. Two firefighters who attempted to resuscitate Mr. Temple late received hospital treatment for the effects of Freon inhalation. If refrigeration workers understand proper safety procedure, refrigerant leaks such as the one at Dimond Mall will be less likely to spread to areas where the general public is harmed.

HB 356 will not add hardship to an already overburdened state budget. The Department of Labor will be required to establish program fees that meet the cost of safety training. Program fees will be limited to a reasonable amount. An efficient and cost effective safety training program will therefore be necessary. This provision is in line with the current state budget crisis; the Department will be required to operate efficiently and those who use the service will help defray its cost.

HB 356 will save Alaskan lives. Not only will refrigeration workers be protected from death or injury by deadly refrigerant gases, the safety of the general public will also be enhanced. Reflecting declining state revenues, HB 356 also mandates an efficient and cost effective training program. If HB 356 had been passed a year ago, William Temple would be alive today.

7-LS1412\P
Bannister
3/27/92

CS FOR HOUSE BILL NO. 356 ( )

IN THE LEGISLATURE OF THE STATE OF ALASKA

SEVENTEENTH LEGISLATURE - SECOND SESSION

BY

Offered:
Referred:

Sponsor(s): REPRESENTATIVES BRUCKMAN, Gruenberg, Koponen, B.Davis, Donley

A BILL

FOR AN ACT ENTITLED

"An Act relating to refrigerating systems; and providing for an effective date."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF ALASKA:

* Section 1. AS 18.60 is amended by adding new sections to read:

ARTICLE 13A. REFRIGERATING SYSTEMS.

Sec. 18.60.860. REFRIGERATING SYSTEM STANDARDS. The Department of Labor shall adopt regulations under AS 44.62 (Administrative Procedure Act) establishing standards for the construction, installation, alteration, maintenance, and repair of refrigerating systems in buildings. The standards constitute the official minimum standards in the state.

Sec. 18.60.863. ADMINISTRATION. (a) The department is responsible for the administration of the standards.

(b) The department may inspect refrigeration work that is subject to the standards.

(c) The department shall maintain a record of all inspections performed by it under this section.

Sec. 18.60.865. ENFORCEMENT OF COMPLIANCE. (a) The department shall give

written notice of each violation of the standards to

(1) the owner of the building containing the refrigerating system on which refrigeration work is being performed; and

(2) the contractor performing the refrigeration work, unless the owner of the building is performing the refrigeration work.

(b) The notice of the violation must accurately describe the violation, identify the provision of the standards being violated, and describe the changes necessary to correct the violation.

Sec. 18.60.867. MUNICIPAL REGULATION. Notwithstanding AS 18.60.860 - 18.60.865, a municipality may establish by ordinance, administer, and enforce a code for the municipality that is at least as stringent as the standards.

Sec. 18.60.870. CERTIFICATE REQUIRED. (a) A person who owns a refrigerating system located in a building shall require an individual who constructs, installs, alters, maintains, or repairs the system to provide the person with a copy of a refrigeration work certificate issued to the individual under AS 18.60.873. In this subsection, "individual" includes an individual who is

(1) an employee of the owner;

(2) an independent contractor; or

(3) an employee of an independent contractor.

(b) An individual who owns a refrigerating system located in a building may not personally construct, install, alter, maintain, or repair the system unless the person has been issued a refrigeration work certificate under AS 18.60.873.

Sec. 18.60.873. REFRIGERATION WORK CERTIFICATES. (a) The department shall issue a refrigeration work certificate to an individual who submits to the department an application for the certificate, an application fee established by the department, and proof satisfactory to the department that the applicant

(1) has within 30 days preceding the submission of the application successfully completed a training program approved by the department under AS 18.60.875;

(2) has had practical experience at a journey level in refrigeration for at least two of the three years immediately preceding the submission of the application; or

(3) is a graduate of an accredited college or trade school in refrigeration.

(b) A certificate issued under this section is valid for two years.

(c) An individual may renew a certificate by submitting an application to the department, the renewal fee established by the department, and proof satisfactory to the department that the applicant

(1) has within 30 days preceding the submission of the application successfully completed a training program approved by the department under AS 18.60.875;

(2) has had practical experience at a journey level in refrigeration for at least two of the three years immediately preceding the submission of the application; or

(3) is a graduate of an accredited college or trade school in refrigeration.

(d) An application under this section must be on the form and contain the information required by the department.

Sec. 18.60.875. TRAINING PROGRAMS. The department shall establish guidelines for programs to train individuals how to perform refrigeration work safely. Upon request and payment of a fee established by the department, the department shall approve a training program if the program complies with the guidelines.

Sec. 18.60.877. FEES. The fees established by the department under AS 18.60.860 - 18.60.890 by regulation must reflect the department's approximate or projected costs for implementing AS 18.60.860 - 18.60.890.

Sec. 18.60.880. PENALTIES. (a) A person is guilty of a class A misdemeanor if the person knowingly violates AS 18.60.870.

(b) The owner of a refrigerating system is guilty of a class A misdemeanor if a provision of the standards is violated during the performance of refrigeration work on the refrigerating system, and if the owner knowingly fails to correct the violation within 60 days after the owner receives notification under AS 18.60.865 of the violation.

(c) A contractor who performs work for an owner of a refrigerating system is guilty of a class A misdemeanor if the contractor, an employee of the contractor, or a subcontractor of the contractor violates a provision of the standards during the performance of the contractor's refrigeration work on the refrigerating system, and if the contractor knowingly fails to correct the violation within 60 days after the contractor receives notification under AS 18.60.865 of the violation.

Sec. 18.60.883. EXCLUSION. AS 18.60.860 - 18.60.890 do not apply to a refrigerating

system that

(1) is a complete, factory-assembled and tested system that is shipped in one or more sections and does not have refrigerant-containing parts that are joined in the field by other than companion or block valves;

(2) contains 22 pounds or less of refrigerant;

(3) is powered by 10 kilowatts or less; and

(4) has been tested and is identified as acceptable by an approved, nationally recognized testing laboratory.

Sec. 18.60.885. REGULATIONS. In addition to the regulations specifically required under AS 18.60.860 - 18.60.890, the department may adopt regulations to implement AS 18.60.860 - 18.60.890.

Sec. 18.60.890. DEFINITIONS. In AS 18.60.860 - 18.60.890,

(1) "building" does not include a structure that is used, or capable of being used, on water;

(2) "certificate" means a refrigeration work certificate issued under AS 18.60.873;

(3) "department" means the Department of Labor;

(4) "refrigerant" means a substance used to produce refrigeration by the expansion or vaporization of the substance;

(5) "refrigerating system" means a combination of interconnected refrigerant containing parts that

(A) constitutes a closed refrigerant circuit in which a refrigerant is circulated for the purpose of extracting heat; and

(B) is included in Table 1, Refrigeration Classification and Amounts, of the Board of Standard Review/ASHRAE 15-1989R Proposed American National Standard Safety Code for Mechanical Refrigeration First Public Review Draft March 1991, published by the American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc.;

(6) "refrigeration work" means the construction, installation, alteration, maintenance, or repair of a refrigerating system;

(7) "standards" means the standards adopted by the department under AS 18.60.860.

* Sec. 2. The Department of Labor shall adopt the initial refrigerating system standards required by AS 18.60.860, enacted by sec. 1 of this Act, within 90 days after the effective date of this section.

* Sec. 3. AS 18.60.860 - 18.60.867, 18.60.880(b) - (c), and 18.60.883 - 18.60.890, enacted by sec. 1 of this Act, do not apply to

(1) the construction, installation, alteration, or repair of a refrigerating system, unless the construction, installation, alteration, or repair begins on or after January 1, 1993; or

(2) the maintenance of a refrigerating system, unless the maintenance occurs on or after January 1, 1993.

* Sec. 4. AS 18.60.860 - 18.60.867, 18.60.885, except for subsection (a), and 18.60.883 - 18.60.890, enacted by sec. 1 of this Act, and secs. 2 - 3 of this Act take effect immediately under AS 01.10.070(c).

* Sec. 5. AS 18.60.870 - 18.60.885(a), enacted by sec. 1 of this Act, take effect January 1, 1993.

Answers to questions about HB 356:

1. Why do we need this bill? On May 20, 1991 William Temple died in the Freon compressor room of the Dimond Ice Chalet in the Dimond Mall. After Mr. Temple's death many facts came to light. The Ice Chalet had no formal or written safety program. Safety meetings had been held for only three months before the accident. Mr. Temple attended two of them. Mr.Temple worked on the company's Freon system and had requested maintenance manuals to learn more about the system. No other training on the freon system is known to have been provided to Mr. Temple by his employer. William Temple died because his employers did not give him the safety information he needed to work with refrigerant gases. HB 356 seeks to prevent another such death.

2. What kind of refrigeration systems will be included in the domain of HB 356? Factory assembled systems (home refrigerators, coolers, etc.) will be exempted. Other refrigeration systems that fall within the ratio guidelines specified by the American Society of Heating, Refrigerating and Air-Conditioning Engineers of refrigerant to room space will be included in the jurisdiction of HB 356. This excludes systems, such as those at Carr's and Safeway stores, in spaces such that if a leak did occur the refrigerant would be harmlessly dispersed over a very large area.

3. What kind of training will be required under HB 356? Safety training. The intent of HB 356 is to save refrigeration system workers from death due to ignorance of proper safety procedures. HB 356 does not seek to train workers on all aspects of refrigeration system installation, retrofitting, repair or maintenance. Rather, if a leak does occur, HB 356 will ensure that workers know what to do to protect themselves from death or health damage. HB 356 mandates only safety training, it will not affect any other aspect of refrigeration work.

4. What are the current training requirements for those who work with refrigerating systems? Only those who do work within the scope of the mechanical administrators license are required to have training. Installation, alteration, or retrofitting of refrigeration equipment must be supervised by a mechanical administrator. Those who actually do the installation, alteration, or retrofitting however, are not currently required to attend safety training. Particularly vulnerable to death and health damage are those repair and maintenance workers unaware of proper safety procedures, who are now legally allowed to work without

supervision or knowledge of the danger of suffocation and other effects from a refrigerant leak.

5. Who is exempted from the training requirement? People with two years of recent refrigeration experience at a journey level and anyone who has attended an accredited college or trade school in refrigeration.

6. Will a person be required to prove their refrigeration experience and education? Yes, the bill only states that the Department must require proof. The proof currently required for the Mechanical Administrator's license in Refrigeration is probably similar to the standard that will be used.

The current proof required for the Mechanical Administrator's License in Refrigeration (12 AAC 39) includes the following: 1) a completed application, on a form provided by the department , that identifies the license category for which the applicant is applying; 2) the fees required by the department by regulation; 3) official transcripts from any regionally accredited college, university, or trade school attended by the applicant and sent directly to the department by that college, university, or trade school; 4) a complete resume detailing the applicant's experience and education in the license category for which the applicant is applying; and 5) a notarized certificate, in support of the applicant's experience and qualifications for licensure as a mechanical administrator, from each of three persons who are employed in the mechanical industry in any state, who have direct personal knowledge of the applicant's work and qualifications, and who submit the certificate directly to the department.

7. What is "journey level" refrigeration work? Work under supervision of a mechanical administrator, Refrigeration Category, installing, altering, or retrofitting refrigeration equipment and systems including the installation of domestic water piping from an existing valved connection to the system, tower and condensing water piping, and chilled water piping, limited to the refrigerant cycle, controls and related appurtenances. Also, work supervised by a mechanical administrator installing, altering, retrofitting all pneumatic or electric controls and control wiring of 48 volts or less necessary for the operation of refrigeration systems. (12 AAC 39.270)

8. Is requiring program receipts to reflect the cost of the program a realistic requirement?
The State budget is overburdened. There are too many calls on state revenue and many programs are run without regard to state budget

realities. Requiring program receipts to reflect program costs is not just a good idea - in these times of fiscal hardship it is a necessary one.

Two examples of programs that already do this are: the Electrical Examiners and Mechanical Administrators programs. Both have program receipts which in fiscal years 1991 and 1992 exceeded costs. The total yearly expenditure for the Electrical Examiners Program in FY 91 was $59,237. The average yearly program receipts for FY 91 and FY 92 were $84,270. The total yearly expenditure for the Mechanical Administrators Program in FY 91 was $62,941. The average yearly program receipts for FY 91 and FY 92 were $97,165. Thus, in both cases program receipts met and in fact exceeded program costs.

In these times of fiscal hardship it is essential that those who will benefit from the new training program contribute, through program receipts, toward defraying its costs. Such "user fees" are an example of the responsible state spending our declining revenues require.

9. What kind of chemicals fall in the category of refrigerants? Substances used to produce refrigeration by their expansion or vaporization. These can include refrigerants such as Trichlorofluoromethane, Dichlorodifluoromethane, Chlorotrifluoromethane, Bromotrifluoromethane, Tetrafluoromethane, Dichlorogluoromethane, Methylene chloride, Trichlorotrifluoroethane, Dichlorotetrafluoroethane, Chloropentaluoroethane, Octafluorocyclobutane, Dichlorodifluoromethane, Chlorodifluoromethane, Carbon Dioxide and Ammonia.

10. Are there any other training programs for hazardous substances? Yes. There are two successful hazardous substance programs currently being run by the State of Alaska: the asbestos program and the hazardous paint program.

11. What are the penalties for violating the standards set out in HB 356? An individual, company, contractor or subcontractor who knowingly violates HB 356 even after an initial notice of violation has been given, will be guilty of a Class A misdemeanor. This entails: a $5,000 maximum fine for an individual, a $200,000 maximum fine for an organization (company for example), or if the violation results in a death, a maximum fine of $500,000 for an organization. An individual can be sentenced to a maximum of one year in jail for a Class A misdemeanor.

Since violations of standards set out in HB 356 can put those performing the work as well as the general public in danger of injury or death, these penalties are appropriate.

12. Who is culpable for violations of standards set out in HB 356? An owner or contractor who knowingly allows his or her employees to perform refrigeration work without a certificate and an owner or contractor who performs refrigeration work him or herself, without a certificate.

HB 356 ensures that employers will require all refrigeration workers to have certification. If an employer knows that he or she will be held accountable for refrigeration work performed without a certificate, he or she will be likely to require all employees to have one. This puts responsibility for worker safety where it belongs: with the owner or contractor. The Dimond Mall incident is an example of what can happen if employers take no responsibility for their employees' safety.

DIVISION OF LEGAL SERVICES

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MEMORANDUM March 27, 1992

SUBJECT: Sectional summary of draft CSHB 356 ( )
(7-LS1412\P, dated 3/27/92)

TO: Representative Betty Bruckman
Attn: Heather

FROM: Theresa L. Bannister TB
Legislative Counsel

You have requested a sectional summary of the above described bill.

As a preliminary matter, note that a sectional summary of a bill should not be considered an authoritative interpretation of the bill and the bill itself is the best statement of its contents.

Section 1 establishes a new article in the safety chapter. Establishes certain requirements regarding the construction, installation, alteration, maintenance, and repair of refrigerating systems.

Sec. 18.60.860 directs the Department of Labor ("department") to establish standards for the construction, installation, alteration, maintenance, and repair of refrigerating systems in buildings.

Sec. 18.60.863 makes the department responsible for administering the standards. Authorizes the department to make inspections. Requires the department to maintain a record of its inspections.

Sec. 18.60.865 authorizes the department to enforce compliance with the standards. Directs the department to notify certain persons when there is a violation of the standards. Indicates what the notice of the violation must contain.

Sec. 18.60.867 states that the state's standards and state enforcement don't preempt municipal regulation that is at least as stringent as the standards.

Sec. 18.60.870(a) obliges the owner of a refrigerating system to require that the individual performing refrigeration work on the system show the owner a copy of the individual's refrigeration work certificate.

Sec. 18.60.870(b) requires an individual who owns a refrigerating system to have a refrigeration work certificate before personally performing refrigeration work on the system.

Sec. 18.60.873 directs the department to issue a two-year refrigeration work certificate to applicants who satisfy certain requirements. Establishes the requirements for renewing the certificate.

Sec. 18.60.875 directs the department to establish guidelines for training programs on how to safely work on refrigerating systems. Directs the department to approve those programs that comply with the guidelines.

Sec. 18.60.877 directs that the fees charged under the new article reflect the costs of implementing the article.

Sec. 18.60.880 establishes criminal penalties for certain violations of the new article, including violations of the refrigerating system standards.

Sec. 18.60.883 excludes certain self-contained refrigerating systems from the coverage of the new article.

Sec. 18.60.885 authorizes the department to adopt regulations to implement the new article.

Sec. 18.60.890 defines certain terms for the new article.

Section 2 directs the department to adopt the initial refrigerating system standards by a certain date.

Section 3 states that the standards provisions of the bill and certain general provisions only apply to refrigeration work performed on or after January 1, 1993.

Section 4 states that the standards provisions of the new article and certain general provisions take effect immediately.

Section 5 states that certain provisions of the new article take effect January 1, 1993.

If I may be of further assistance, please advise.

TLB:pl
92-218.plm

BILL NO: House Bill No. 356 **DATE:** April 1, 1992

TITLE: "An Act relating to construction involving freon systems;..." **CONTACT:** Arbe Williams 465-2700

House Bill No. 356 would require the Department of Labor to adopt regulations establishing standards for construction of freon systems in buildings. The bill would allow a municipality the option to develop standards that are as effective as state standards and to provide for enforcement within the jurisdiction of the municipality.

House Bill No. 356 would also require the department to inspect the installation, removal and alteration or replacement of freon systems. A person who fails to correct a violation identified by the department may be charged with a class A misdemeanor.

There are 11 ice skating rinks in Alaska that have large capacity freon refrigerating systems. There are also numerous small capacity freon systems used by such establishments such as grocery stores and other food and beverage wholesalers and retailers.

The Department's Occupational Safety and Health program places a priority on the inspection of high hazard industries. A special emphasis has been placed on the inspection of ice skating rinks in Alaska. Consequently, it is not anticipated that regulating small capacity freon systems would affect the operation of the Department's Occupational Safety and Health Section.

APPROVED:

C. W. Mahlen, Commissioner
Department of Labor

POSITION PAPER/Department of Labor

INSPECTION FINDINGS OF ICE SKATING RINKS

Sullivan Arena managed by Ogden Facility Management:

Findings: The freon system did not have an emergency remote switch located outside of the room and there was no ventilation switch located outside of the compressor room. In addition to these mechanical deficiencies, the employer did not have a hazard communication program, did not have a lock out/ tag out program, nor an accident prevention program.

Ben Bock Ice Arena managed by Ogden Facility Management:

Findings: The freon system lacked tight fitting seals on the door leading in and out of the compressor room. In addition to this mechanical deficiency, the employer did not have a hazard communication program, did not have a lock out/ tag out program, nor an accident prevention program.

Fire Lake Recreation Center:

Findings: The freon system lacked tight fitting seals on the door leading in and out of the compressor room and did not have a metal name plate identifying the emergency shut off valve. In addition to these mechanical deficiencies, the employer did not have a written hazard communication program and there were also open containers of hazardous chemicals in the work site.

University of Alaska - Anchorage:

Findings: The freon system lacked tight fitting seals on the door leading into the compressor room.

Matanuska-Susitna Ice Arena managed by Mat-Su Borough:

Findings: The freon system lacked tight fitting seals on the door leading in and out of the compressor room and lacked a fresh air intake fan. In addition to these mechanical deficiencies, the employer did not have a hazard communication program.

Soldotna Sports Arena managed by Ogden Facility Management:

Findings: The freon system lacked tight fitting seals on the door leading in and out of the compressor room. In addition to this mechanical deficiency, the employer did not have an adequate hazard communication program.

Dempsey Anderson Ice Arena managed by Ogden Facility Management:

Findings: The compressor room doors of the freon system opened inward instead of outward and there was no metal sign to identify the emergency cut off switch.

Big Dipper Ice Arena managed by the North Star Borough:

Findings: The emergency ventilation switch was located inside the freon compressor room rather than being on the outside as required by the industry standard. The doors to the compressor room opened inward instead of opening outward and the doors were lacking tight fitting seals.

Carlson Acting Center managed by Ogden Facility Management:

Findings: The freon system lacked tight fitting seals on the door leading in and out of the compressor room.

Patty Center Ice Rink managed by the University of Alaska, Fairbanks:

Findings: The doors to the compressor room opened inward instead of opening outward and there were no tight fitting seals on the doors. Also the compressor room did not have an exhaust system nor emergency shut down switches, and the alarm system was located inside rather than outside the compressor room.

Outline of Video Training:

Safety training video is cost-effective and efficient. Eliminates cost difference between urban and rural. Training could be done continuously.

- **Video could be mailed out** to a proctor in rural areas or shown on rural television networks. In urban areas (79%) it could be shown to large groups.

- **A safety booklet** would accompany the video. The first page would have important numbers such as poison control and OSHA and an "800" number to call with questions after the video. The worker could keep the booklet afterwards for safety reference.

- The last page of the booklet would be a tear out test. The applicant would take the test open book and then the video and completed test would be sent back to the proctor.

- **The video and training program could be contracted out.** Applicants would pay a minimal certification fee and then, if required to go to training, would pay the training company another fee.

- **Training could be done continuously.** If only one person in a rural area were certified and that person left the area, a replacement worker could quickly complete the certification requirements.

- **There would be no hardship for rural areas.** Their only extra cost would be postal expenses. Since training could be done continuously, if only one person in a rural area were certified and that person left the area, a replacement worker could quickly get a certificate.

State-wide safety training for refrigeration workers:

The Department of Labor identifed the following S.I.C. codes of businesses that would be affected by the requirements of H.B. 356: S.I.C. 7623, Refrigeration and Air Conditioning Service and Repair; S.I.C. 2097, Manufactured Ice; S.I.C. 1711, Plumbing and Heating; S.I.C. 2091, Canned and Cured Seafoods; S.I.C. 2092, Fresh or Frozen Seafoods; and S.I.C. 7999, Ice Rinks.

More than 90% of the locations listed under these S.I.C. codes would be within 2 hours travel time of the proposed training locations.

NOTE: All businesses would not necessarily have employees that would be required to attend safety training. The majority of refrigeration workers would qualify by experience or education for a training exemption. In a given year many training locations might not be needed.

Suggested Training Locations:

Barrow
Prudhoe Bay
Nome
Fairbanks
Bethel
Anchorage*
Kenai/ Soldotna/ Homer
Valdez/Cordova
Kodiak
Juneau / South East
Dillingham
King Salmon
Alakanuk
Bristol Bay

79% of all businesses affected by HB 356 are in urban areas.

37% of all urban businesses affected by HB 356 are located in Anchorage.

* For many businesses it will be much easier to fly to Anchorage than to attend training at a geographically closer location. For example: Unalaska, Adak, Port Moller, and Unimak Island usually fly through Anchorage to reach another location in the area. Anchorage would also be a more convenient training location for the Iliamna Lake region than King Salmon or Dillingham.