MINUTES

MONTANA SENATE
54th LEGISLATURE - REGULAR SESSION

COMMITTEE ON PUBLIC HEALTH, WELFARE & SAFETY

Call to Order: By **CHAIRMAN JIM BURNETT**, on March 1, 1995, at 3:30 PM.

ROLL CALL

Members Present:
Sen. James H. "Jim" Burnett, Chairman (R)
Sen. Larry L. Baer (R)
Sen. Sharon Estrada (R)
Sen. Mike Sprague (R)
Sen. Dorothy Eck (D)
Sen. Eve Franklin (D)
Sen. Terry Klampe (D)

Members Excused: Sen. Steve Benedict, Vice Chairman
Sen. Arnie A. Mohl

Members Absent: None

Staff Present: Susan Fox, Legislative Council
Karolyn Simpson, Committee Secretary

Please Note: These are summary minutes. Testimony and discussion are paraphrased and condensed.

Committee Business Summary:
Hearing: HB 333, HB 334, HB 184, HB 252
Executive Action: HB 333, HB 334, HB 252

HEARING ON HB 333

Opening Statement by Sponsor:

REP. BETTY LOU KASTEN, HD 99, Brockway, said HB 333, a repealer of the mattress regulation law, which has been on the statutes since 1915. Its original purpose was to upgrade the bedding product standards that the lodging establishments had. At that time, they used recycled materials for stuffing, so, there had to be assurances that there were no vermin in the mattress stuffing. Because things have changed, the public is protected under many of the codes on the books. She asks that this unnecessary legislation be repealed.

Proponents' Testimony: None

Opponents' Testimony: None

Questions From Committee Members and Responses:

SENATOR FRANKLIN asked if that means, she doesn't have to look at the mattress tags anymore.

REP. KASTEN said that's another entirely different statute.

Closing by Sponsor:

REP. KASTEN made no further remarks in closing.

HEARING ON HB 334

Opening Statement by Sponsor:

REP. BETTY LOU KASTEN, HD 99, Brockway, said HB 334, which repeals the act regulating flour and bread by the Department of Health and Environmental Sciences. This is a duplication because there are Flour and Bread Enrichment standards, which are on the books. The original purpose of this law, enacted in 1971, was to define bakery products from Montana milled flour, which, after milling, had a reduced nutrient content. Repealing this law will cause no harm to consumers because the Flour and Bread Enrichment standards law is on the books.

Proponents' Testimony:

SENATOR J.D. LYNCH, SD 19, Butte, said people may wonder why, with all the important issues, is the Legislature dealing with this issue. The reason is, the Department of Health still has to read these statutes, and it takes an act by the Legislature to take them off the books.

Opponents' Testimony: None

Questions From Committee Members and Responses: None

Closing by Sponsor:

REP. KASTEN made no further remarks in closing.

EXECUTIVE ACTION ON HB 333

Motion/Vote: **SENATOR FRANKLIN moved HB 333 BE CONCURRED IN. The motion CARRIED UNANIMOUSLY.**

EXECUTIVE ACTION ON HB 334

Motion/Vote: **SENATOR FRANKLIN moved HB 334 BE CONCURRED IN. The motion CARRIED UNANIMOUSLY**

HEARING ON HB 184

Opening Statement by Sponsor:

REP. ROGER DeBRUYCKER, HD 89, Choteau and Liberty Counties, said HB 184 is a housecleaning bill, which cleans up the language in a few places. He referred to page 2, line 11.

Proponents' Testimony:

Dr. Evan Lewis, Ph.D, psychologist at the VA Hospital in Helena, read his written testimony in support of HB 184. **EXHIBIT 1.**

Gloria Hermanson, representing the Montana Psychological Association, spoke briefly in support of HB 184.

Opponents' Testimony: None

Questions From Committee Members and Responses:

SENATOR KLAMPE referred to page 2, Section 2, and asked how this coordinates with the new Board bill.

Carol Grell, Attorney, Department of Commerce, said this is a problem seen with bills that affect the Board. If that bill passes, this will be taken care of under the Uniform Act.

SENATOR KLAMPE asked what criteria or entering into an agreement means.

Carol Grell said the reason for amending this section is, they are currently dealing with an endorsement scheme and there's a national movement to enact a reciprocity scheme, through the National Association of State Judicial Psychology Boards, allowing free movement between states that are participating.

SENATOR SPRAGUE asked about reciprocity state-to-state, and if it will also be country-to-country, and nation-to-nation.

Carol Grell said Canada was added, specifically, because Canadian jurisdictions are equivalent to the United States. As part of this agreement, they want Canadian graduates coming to the United States. This is the one country that is part of this reciprocity agreement, state-to-state and Canadian jurisdiction. Anyone else trained in other countries would fall under the new section, Section 4, page 2, which are foreign-trained applicants.

SENATOR SPRAGUE asked if the reverse reciprocity, whether Montana psychologists can go to Canada to work.

Carol Grell said, under those types of agreements, Montana psychologists could go to Canadian jurisdictions that are part of the agreement.

SENATOR SPRAGUE asked for clarification of "part of that agreement."

Carol Grell said it's a nationwide movement by a group called Association of State and Provincial Psychology Boards, who are working on an agreement among the provinces and states. Ontario qualifies to be part of this agreement, so Montana psychologist could freely go there. Alberta does not, so that province does not qualify. The provinces would be treated the same as the states.

SENATOR KLAMPE asked about the meaning of criteria.

Carol Grell said if an applicant comes from a jurisdiction, either province or state, that has not entered this agreement, he would have to be evaluated under the endorsement type scheme. The criteria would be how they were licensed in their original place, whether they took the proper exam, the proper degree from an approved school.

Closing by Sponsor:

REP. Debruycker said he needs someone to carry the bill.

SENATOR BURNETT said if no one volunteers, he will appoint someone to carry the bill.

HEARING ON HB 252

Opening Statement by Sponsor:

REP. CAROLYN SQUIRES, HD 68, Missoula, said HB 252 addresses a problem found to exist in medical facilities throughout the country. One assumes, when hooked up to a medical gas pipeline, such as oxygen, in a medical facility, that we are breathing exactly what we have been told is in the pipe. But, there have been many cases of contaminated pipes, with the contamination so bad that the consequences are potentially fatal.

If a non-endorsed person installing the pipe, without the benefits of the highly technical training specific to modern medical gas pipe installation standards, the gas in the pipe may not be what is assumed to be in the pipe. Risks to the patient and liability to health care providers can be lessened when someone with the credentials for installation of the gas pipe.

This endorsement is rapidly becoming the norm throughout the country and is required in bid specifications for facilities being remodeled, rebuilt, or upgraded. It is a necessary requirement to meet industry standards.

She said plumbers have a license, and the endorsement will be a stamp on the license, which will be established by the Board of Plumbers.

She discussed an amendment. **EXHIBIT 2.**

Proponents' Testimony:

Duane Steinmetz, representing United Association of Pipe Fitters and Plumbers, said several states have preceded Montana in adopting Med Gas Installer certification. In accordance with the National Fire Protection Agency Code 99C, 1993 edition, inspections, in the last few years, have many hospitals and medical facilities have been operating with faulty and potentially hazardous med gas piping systems. A number of accidental deaths and mishaps have resulted in malpractice suits from piping systems. He passed out information regarding studies showing bacterial contamination cross connections and the current code book adopted by the Joint Commission on Accreditation of Hospitals. **EXHIBITS 3 & 4.**

John Flink, Montana Hospital Association, said they support HB 252 and want to do everything they can to make sure hospitals are a safe environment for patients.

Opponents' Testimony: None

Questions From Committee Members and Responses:

SENATOR SPRAGUE asked when this will be implemented.

Duane Steinmetz said he thinks it will be in 1996.

SENATOR SPRAGUE said, if the implementation date is January, 1996, it will be a financial hardship or unfunded mandate to hospitals.

Duane Steinmetz said, right now, all new hospital work in Montana is required in the specifications that the med gas installers be certified by a third party testing agency, prior to pipe installation.

SENATOR BENEDICT came in to hearing.

Closing by Sponsor:

REP. SQUIRES said passage of this bill is vital for the protection of the consumers. Specifications require the installers to be certified, and is a building requirement for free-standing clinics, doctors's offices, etc. There will be no

cost because the fees charged for certification will be commensurate with the costs.

EXECUTIVE ACTION ON HB 252

Motion/Vote: SENATOR FRANKLIN moved the AMENDMENTS to HB 252 DO PASS. The motion CARRIED UNANIMOUSLY.

Motion/Vote: SENATOR FRANKLIN moved HB 252 BE CONCURRED IN AS AMENDED. The motion CARRIED UNANIMOUSLY.

ADJOURNMENT

Adjournment: 4:05 PM

JIM BURNETT, Chairman

KAROLYN SIMPSON, Secretary

JB/ks

MONTANA SENATE
1995 LEGISLATURE
PUBLIC HEALTH, WELFARE AND SAFETY COMMITTEE

ROLL CALL DATE 3/1/95

NAME	PRESENT	ABSENT	EXCUSED
LARRY BAER	X		
SHARON ESTRADA	X		
ARNIE MOHL			X
MIKE SPRAUGE	X		
DOROTHY ECK	X		
EVE FRANKLIN	X		
TERRY KLAMPE	X		
STEVE BENEDICT, VICE CHAIRMAN			X
JIM BURNETT, CHAIRMAN	X		

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SENATE STANDING COMMITTEE REPORT

March 2, 1995

MR. PRESIDENT:

We, your committee on Public Health, Welfare, and Safety having had under consideration HB 333 (third reading copy -- blue), respectfully report that HB 333 be concurred in.

Signed: Jim Burnett
Senator Jim Burnett, Chair

Amd. Coord.
Sec. of Senate

SEN. LYNCH
Senator Carrying Bill

491101SC.SPV

SENATE STANDING COMMITTEE REPORT

March 2, 1995

MR. PRESIDENT:

We, your committee on Public Health, Welfare, and Safety having had under consideration HB 334 (third reading copy -- blue), respectfully report that HB 334 be concurred in.

Signed: _____
Senator Jim Burnett, Chair

Amd. Coord.
Sec. of Senate

SEN LYNCH
Senator Carrying Bill

491103SC.SPV

SENATE STANDING COMMITTEE REPORT

March 2, 1995

MR. PRESIDENT:

We, your committee on Public Health, Welfare, and Safety having had under consideration HB 252 (third reading copy -- blue), respectfully report that HB 252 be amended as follows and as so amended be concurred in.

Signed: Jim Burnett
Senator Jim Burnett, Chair

That such amendments read:

1. Page 2, line 22.
Insert: "NEW SECTION. **Section 5. Coordination instruction.** If [this act] and House Bill No. 518 are both passed and approved and if House Bill No. 518 repeals 37-69-320, then the repeal of 37-69-320 in House Bill No. 518 is void."

-END-

Amd. Coord.
Sec. of Senate

SEN. FRANKLIN
Senator Carrying Bill

SENATE HEALTH & WELFARE
EXHIBIT NO. 1
DATE 3/1/95
BILL NO HB 184

HOUSE BILL 184

TESTIMONY BY DR. EVAN LEWIS, PH.D.
BOARD OF PSYCHOLOGISTS

Mr. Chairman and Members of the Committee, for the record my name is Dr. Evan Lewis. I am a psychologist at the VA Hospital here in Helena and a current member of the Board of Psychologists. I am here today to testify in support of House Bill 184 which the Board of Psychologists has requested. I will briefly go through the proposed changes.

Section 1 37-17-302 APPLICATION - QUALIFICATIONS

Changes on page 1, lines 16-19 are gender neutralization and grammar clarifications made to the statute performed by Legislative Council drafting personnel.

Page 1, lines 20-21 delete the residency requirement for licensure as it has been found unconstitutional by the US Supreme Court in unrelated challenges to residency requirements.

Page 1, lines 22-30 are grammar changes.

Page 2, lines 2-4 clarify that of the required postdoctoral year of supervised experience, no more than six months may be in teaching and/or research. A license as a psychologist is issued so that an individual may offer psychological services to the public. The Board felt that at least six months of the postdoctoral supervised experience should be in actual clinical practice.

Section 2 ADMISSION OF LICENSEES FROM OTHER STATES OR JURISDICTIONS

Page 2, lines 7-11 provide that licensees from other states or a Canadian jurisdiction may be licensed without a written exam if they meet the criteria established by the Board. This change will allow the Board to move away from requiring reciprocal agreements with other states and the need to perform equivalency evaluations of other states laws and rules.

Section 3 DEPARTMENT TO PUBLISH LIST OF LICENSEES

Page 2, lines 15-18 will clarify that a list of licensees will not need to be sent to the Secretary of State. Copies of the list will continue to be furnished to the public who meet the requirements listed in Section 2-6-109, MCA (attached). This change will resolve a conflict between these two statutes, one of which requires mailing lists and one which prohibits release of mailing lists.

Section 4 FOREIGN-TRAINED APPLICANTS

Page 2, lines 20-25 will grant authority for the licensure of foreign-trained psychologists who have their credentials evaluated by a Board-designated agency and who meet equivalent

educational standards as reviewed by the Board. Foreign-trained applicants will s... be required to take both the written and oral examinations and meet the supervi... requirement. The Board currently has no statutory authority in this area and does ... foreign-trained candidates seeking licensure. Also with the passage of the North Americ... Free Trade Agreement (NAFTA), it is desireable to have standards in place ... foreign-trained candidates.

Section 5 LICENSURE OF SENIOR PSYCHOLOGISTS

Page 2, lines 27-30 and page 3, lines 1-6 provide for licensure of individuals who h... a doctoral degree and great amount of practical experience but who may not have t... the national examination as it was not in existence at their time of licensure. Th... requirements for licensure of these individuals, in addition to the doctoral deg..., would be that they have been licensed as a psychologist in another jurisdiction fo... least 20 years with no disciplinary action against their license, that they have 10 y... of clinical experience within the last 15 years prior to filing the application, and pass the Montana oral examination. The Board has had several such applicants who wa... to offer their services to the public in Montana but did not meet current requirem...s for licensure, such as passage of the national exam.

Mr. Chairman and Members of the Committee, I am available along with the Board's Le... Counsel and administrative staff to answer any questions you may have concerning ...is bill. I would like to thank the Committee for the time it has spent on this matter and urge you to pass House Bill 184.

History: En. Sec. 1121, Pol. C. 1895; re-en. Sec. 428, Rev. C. 1907; re-en. Sec. 461, R.C.M. 1921; Cal. Pol. C. Sec. 1015; re-en. Sec. 461, R.C.M. 1935; R.C.M. 1947, 59-531; Sec. 2-6-305, MCA 1979; redes. 2-6-107 by Code Commissioner, 1979.

2-6-108. Attachment and warrant to enforce. The execution of the order and delivery of the books and papers may be enforced by attachment as for a witness and also, at the request of the plaintiff, by a warrant directed to the sheriff or a constable of the county, commanding him to search for such books and papers and to take and deliver them to the plaintiff.

History: En. Sec. 1122, Pol. C. 1895; re-en. Sec. 429, Rev. C. 1907; re-en. Sec. 462, R.C.M. 1921; Cal. Pol. C. Sec. 1016; re-en. Sec. 462, R.C.M. 1935; R.C.M. 1947, 59-532; Sec. 2-6-306, MCA 1979; redes. 2-6-108 by Code Commissioner, 1979.

2-6-109. Prohibition on distribution or sale of mailing lists — exceptions — penalty. (1) Except as provided in subsections (3) through (7), in order to protect the privacy of those who deal with state and local government:

(a) no agency may distribute or sell for use as a mailing list any list of persons without first securing the permission of those on the list; and

(b) no list of persons prepared by the agency may be used as a mailing list except by the agency or another agency without first securing the permission of those on the list.

(2) As used in this section, "agency" means any board, bureau, commission, department, division, authority, or officer of the state or a local government.

(3) Except as provided in 30-9-403, this section does not prevent an individual from compiling a mailing list by examination of original documents or applications which are otherwise open to public inspection.

(4) This section does not apply to the lists of registered electors and the new voter lists provided for in 13-2-115 and 13-38-103, to lists of the names of employees governed by Title 39, chapter 31, or to lists of persons holding driver's licenses provided for under 61-5-126.

(5) This section shall not prevent an agency from providing a list to persons providing prelicensing or continuing educational courses subject to Title 20, chapter 30, or specifically exempted therefrom as provided in 20-30-102.

(6) This section does not apply to the right of access either by Montana law enforcement agencies or, by purchase or otherwise, of public records dealing with motor vehicle registration.

(7) This section does not apply to a corporate information list developed by the secretary of state containing the name, address, registered agent, officers, and directors of business, nonprofit, religious, professional, and close corporations authorized to do business in this state.

(8) A person violating the provisions of subsection (1)(b) is guilty of a misdemeanor.

History: En. Sec. 1, Ch. 606, L. 1979; amd. Sec. 6, Ch. 683, L. 1985; amd. Sec. 1, Ch. 663, L. 1989; amd. Sec. 2, Ch. 289, L. 1991.

Cross-References

Misdemeanor — no penalty specified, 46-18-212.

EXHIBIT 1
DATE 3-1-95
HB 184

Amendments to House Bill No. 252
Third Reading Copy

Requested by Representative Squires
For the Committee on

Prepared by Greg Petesch
February 28, 1995

1. Page 2, line 22.
Insert: "NEW SECTION. **Section 5. Coordination instruction.** If [this act] and House Bill No. 518 are both passed and approved and if House Bill No. 518 repeals 37-69-320, then the repeal of 37-69-320 in House Bill No. 518 is void."

SENATE HEALTH & WELFARE
EXHIBIT NO. 3
DATE 3/1/95
BILL NO. HB252

medical gas services
Systems Testing and Certification

August 7, 1989

Jerome Hendrickson
P.I.P.E.
Suite 405
501 Shatto Pl.
Los Angeles, CA 90020

Dear Mr. Hendrickson:

I wish to express my appreciation for the time you made available to discuss the recent Reeves Journal article dealing with your Medical Gas Lab.

As promised, enclosed is a summary of the types and frequency of problems I have encountered during testing of medical gas systems since 1978.

Once again, should you have any questions or if there is any information at my disposal that would be of interest, please do not hesitate to call on me.

Sincerely yours,

Reginald Nease

9430 Gillette / P.O. Box 14264 / Lenexa, Kansas 66215 / (913) 492-5436

medical gas services
Systems Testing and Certification

The following is a summarization of problems encountered in medical gas systems during the testing of approximately 250,000 outlets.

1. 205 instances of cross connections.
   - 34 Air to Vacuum
   - 70 Oxygen to Air
   - 8 Nitrous Oxide
   - 47 Oxygen to Vacuum
   - 36 Oxygen to Nitrous Oxide
   - 9 Nitrous Oxide to Nitrogen
   - 1 Oxygen to Nitrogen

2. 104 installations Water in Air system
   15 installations Water in Oxygen system
   3 installations Water in Nitrous Oxide system

3. 580 instances of leakage in piping systems.

4. 87 instances of improperly wired alarm panels.

5. 120 instances of main laterals being plugged with solder or rubber plugs.

6. 188 instances of improper delivery pressures for gases.

7. 233 instances in which the alarm panels had not been installed in accordance with NFPA 56F.

8. 76 instances of systems contaminated with oil.
   - 55 Air systems
   - 13 Oxygen systems
   - 8 Nitrous Oxide systems

9. 156 instances of improper installation of supply systems as defined by NFPA 56F. A predominant number of these discrepancies has been associated with the Medical Air system.

10. 10 instances of Oxygen systems exhibiting undersizing of the control system at the bulk installation.

9430 Gillette / P.O. Box 14264 / Lenexa, Kansas 66215 / (913) 492-5436

Anaesthesia, 1986, Volume 41, pages 148–150

Bacterial contamination of compressed air for medical use

P. BJERRING AND B. ØBERG

Summary

The present study demonstrates a previously unnoticed source of bacterial contamination of locally manufactured compressed air for medical use. Air samples were drawn into a specially constructed device, and bacterial contents were identified from growth on agar plates. Various factors contributing to bacterial contamination of compressed air during production are mentioned and preventive measures are discussed.

Key words

Equipment: compressed air.
Contamination: bacterial.

During the last 25 years, a number of authors have investigated respiratory tract colonisation by bacteria, in patients undergoing anaesthesia or ventilator treatment in operating rooms and intensive care units (ICU). These investigators, however, have focussed exclusively on the aetiological role of ventilator tubing,[1,2] humidifiers,[3] anaesthetic apparatus,[4–7] mechanical ventilators,[8] resuscitation apparatus,[9] and lack of clinical cleanliness by medical and nursing staff.[10] The aim of the present study was to determine whether air compressors, air storage tanks, pipelines and connectors might be incriminated as sources of microbial contamination. To our knowledge, no investigators have dealt with possible contamination of compressed air.

Air for medical use (AM, Aer Medicinalis) is manufactured locally, in the hospital's Technical Department and has to meet certain quality requirements specified in the Pharmacopoeia Nordica,[11] but these regulations deal with the chemical composition only. Surprisingly, no limitations are laid down for any possible microbial contamination, nor does the International Standards Organisation have any recommendations.

Methods

Air samples were collected into a specially constructed device, from pipeline outlets in operating rooms and ICUs throughout the hospital. During each period of sampling, 18 litres of air/minute were drawn into a Bourdillon slit sampler[12] in which a 14 cm Petri dish (10% blood agar) was slowly rotating. During the 10 minute sampling time, the turntable holding the Petri dish rotated once. The construction of the slit sampler ensured close contact between the air samples and Petri dishes. Prior to each sampling, all accessible parts of the device were carefully cleaned with 62% ethanol and the

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Correspondence should be addressed to Dr B. Øberg, Department of Anaesthesia, Aarhus Kommunehospital, DK-8000 Aarhus, Denmark please.

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Table 1. Micro-organisms found in central air compressors and peripheral air outlets

Contaminants	Central (n = 7)	Peripheral (n = 27)	
	Number of plates with the micro-organism (%)	Number of plates with the micro-organism (%)	Average number of micro-organisms in positive samples 1000 litres of air
Pseudomonas aeruginosa	2 (29)	0 (0)	
Staphylococcus albus	2 (29)	16 (59)	9
Corynebacterium species	1 (14)	3 (11)	10
Micrococcus species	0 (0)	5 (19)	9
Bacillus species	1 (14)	8 (30)	6
Moulds	1 (14)	5 (19)	16
Plates without growth	2 (29)	5 (19)	
Percent positive samples	71	81	

whole system was flushed with the air to be collected, at a rate of 65 litres/minute. Samples were also drawn from a sterile laminar flow cabinet to provide negative controls. The Petri dishes were then submitted to the Regional Department of the Danish State Serum Institute for culture and identification of bacteria and fungi.

Specimens of condensed water were also taken from the compressed air storage tanks in the hospital's technical department which supplied the investigated peripheral outlets. Bacterial and fungal contamination was again determined from growth on agar plates.

Results

Table 1 lists the micro-organisms. A total of 34 samples were analysed, seven from central installations and 27 from peripheral air outlets. In positive samples, the number of micro-organisms varied from 6 to 16/1000 litres of air. No other contaminants were found, other than the above mentioned micro-organisms.

Discussion

The results show a previously unnoticed source of infectious agents. A possible explanation for apparently uncontaminated plates may well be impaction of bacteria between the air intake and the slit sampler, and inability of the slit sampler to trap all bacteria present. The values in Table 1 must therefore be minimum figures, and the problem is undoubtedly underestimated in this study.

Other investigators have examined anaesthetic systems after use[13] or storage[2] and demonstrated a possible route of infection from patient to patient. This, indeed, is of great significance, and has resulted in numerous methods of disinfection of anaesthetic apparatus and ventilators.[14–16] It is equally important, however, that patients in ICUs and postoperative patients may be exposed to pathogens via high-flow air–oxygen mixtures (Y-systems) or ventilator systems. Even if the presence of bacteria in the inspired air does not necessarily mean that patients will become infected, it certainly increases the likelihood of that event.

The bacterial flora isolated from peripheral air outlets, which in our investigation is virtually the same as that found in the central air-generating installations, is a mixture of pathogens and normal skin bacteria. However, when supplied directly into the tracheas of seriously ill patients, no sharp distinction between pathogenic and non-pathogenic bacteria can be maintained. Furthermore, the mucociliary transport system may be impaired by high oxygen tensions in the inspired air,[17] or by drugs such as atropine[18] acetylsalicylic acid[19] and morphine.[20] The stagnation of bronchial secretions is a well-known complication in ICU patients, and the presence of bacteria in air inspired via a tracheal tube may add to the problem. Whereas a general medical or surgical patient has a 6% risk of becoming infected during his hospital stay, the ICU patient has an 18% risk.[21]

Air for medical use is rich in condensed water, and the oil aerosol from the compressor makes air storage tanks favourable media for the proliferation of bacteria. In the present investigation, *Pseudomonas aeruginosa* were found in oil–water emulsions from AM storage tanks. Oil–water aerosols may also cover the inner surfaces of the pipeline system and act as a growth medium for micro-organisms. In extensive pipeline systems,

EXHIBIT 3
DATE 3-1-95
HB 252

special attention must be paid to blind loops and other locations suitable for trapping and proliferation of bacteria.

The source of the bacteria is either the lubricating oil for the compressors or the ambient air being taken into the compressors without interposition of a bacterial filter. The solutions to this problem would be the use of sterile oil, reduction of oil in the AM, and the addition of bacterial filters to the compressors' air intakes. Inhalation by patients of mineral oil aerosol contained in AM is limited to 5 mg/cu m air;[11] whether long term exposure to such aerosols during ventilator treatment may lead to lipid pneumonia remains an unsolved problem.

Until sterile air can be supplied, we also recommend filters in ventilators and all other equipment driven by or requiring AM, but the efficiency of bacterial filters contaminated with oil must be questioned. Users of AM, as well as producers (Hospital Authorities), are urged to focus on this possible source of bacterial contamination of seriously ill patients receiving different types of ventilatory assistance.

It may be necessary to set limits to the maximum bacterial content of medical air. Regular quality control by Health Authorities must prevent the air from being a constant source of bacterial contamination, which would otherwise significantly reduce the value of sterilisation efforts directed at equipment closer to the patient. Medical air is a pharmaceutical specialty, registered in the pharmacopoeias, and the usual high standard of quality control should include this product as well..

Acknowledgments

The authors are indebted to Dr med. P. Bülow, Regional Department of the Danish State Serum Institute in Aarhus for contributing his microbiological expertise, and to Professor, Dr med. B. Juhl, Department of Anaesthesiology, Aarhus University Hospital for helpful discussions and critical revision of the manuscript.

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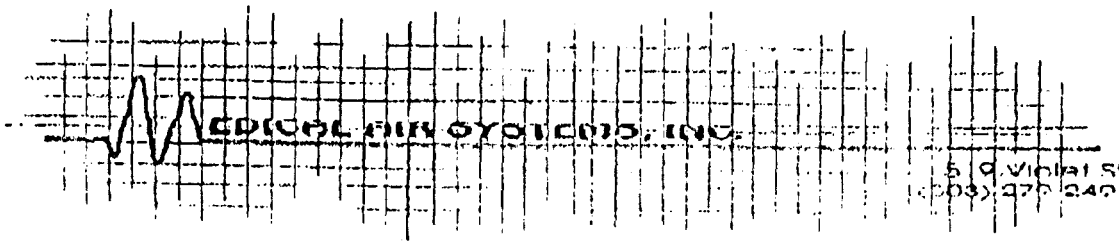


5 9 Vidal St. • Golden, CO 8040
(303) 279-2401 FAX (303) 279-713

January 20, 1995

Bruce Simon - Chairman
Capital Station
Helena, MT 59620

Reference: HB252 - Medical Gas Installers Endorsement

Dear Mr. Simon:

My company is involved in independent, third party certification of medical gas piping systems in healthcare facilities. We support the proposed HB252, you are presently considering.

The hospital industry in your state, and the people of Montana will benefit from the training and testing those receiving the endorsement will be subjected to.

Also, it should be noted, that the Joint Commission that provides nationwide accreditation for hospitals, has adopted NFPA 99 (1993), and requires certain qualifications for installers of medical gas systems.

Respectfully,

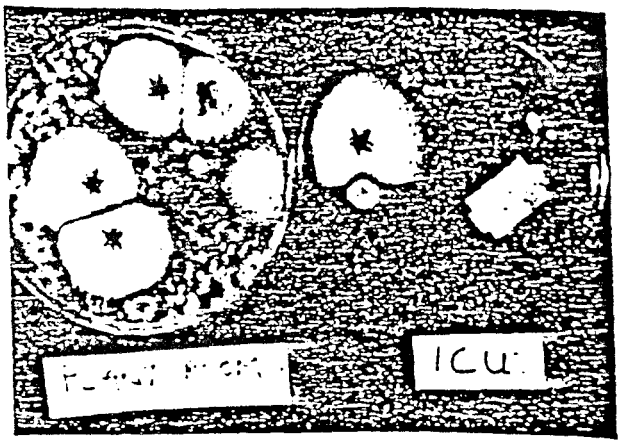
MEDICAL AIR SYSTEMS, INC.

R. Scott Jussel

R. Scott Jussel
President

RSJ/bem

EXHIBIT 3
DATE 3-1-96
HB 252



Penicillium spp identified in air from compressed air plant and from ICU.

— LETTER —

MEDICAL GRADE COMPRESSED AIR

SIR,—Equipment for producing compressed air does not include special antibacterial filters, and in the UK at least no such requirement has been identified. UK plants should, however, comply with Hospital Technical Memorandum no 22. Hospitals have central air-compressor systems supplying pipelines. The area that concerns us most is the intensive care unit (ICU) where some ventilators are air-driven and where some equipment delivers compressed air to the patient's lungs. Like Berg and Bierring[1] we have on occasion demonstrated microbial contamination in the air, although it is very difficult to separate this from contamination in room air, unless the compressed air is collected directly and separately into an air sampler. The medical air compressor uses outdoor air, and the main steps in "conditioning" are oil removal and desiccation, and then coarse filtration to prevent particles of desiccant entering the pipework.

The dewpoint of the end product is so low that *Pseudomonas* spp would find it hard to survive. However, we did find gram-negative bacilli in both ICU air and in the discharge of the compressed air receiver (upstream of the conditioning equipment) on one occasion. A drain had blocked, possibly due to excess oil, leaving water in the compressed air receiver. It is difficult to envisage how skin bacteria could be found in the air, and we wonder if those reported[1] were artefacts of the collecting method.

By a careful technique, in which 1800 litres of air was taken from the compressed air plant test point in a hospital basement into a sterile impinger containing collection fluid, and a similar volume of ICU air was sampled into another impinger, *Penicillium* spp (see plate) was found in both. Fungi (especially *Aspergillus* spp) are likely contaminants since they may be found in atmospheric air. Such a finding might be of major importance for immunosuppressed patients. Rhame et al[2] noted the importance of atmospheric air as a vehicle for transport of *Aspergillus* spores, and have noted the value of an air-filtered air supply for reduction of infection in bone-marrow transplants.

A research programme has been set up by the Department of Health and Social Security's Health Building Directorate to investigate the potential microbiological problems of medical compressed air using a trial compressor which is being subjected to microbial challenges, and to which various types of HEPA filter are being added. Pending the outcome of this work any compressed air used for ventilating or humidifying patients should be filtered at the point of use.

Department of Bacteriology,
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Cambridge CB2 2QQ

R. E. WARREN
S. W. B. NEWSOM
J. A. MATTHEWS

DHSS Health Building Directorate,
London NW1

L. W. M. ARROWSMITH

1. Berg B, Bierring F. Pneumatic surgical instruments and postoperative infection. *Lancet* 1985; ii: 1436.
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MONDAY, DECEMBER 4, 1989 ★

LOS ANGELES TIMES

ILLINOIS

Hospital Quality Comes Under Fire

More than a third of U.S. hospitals failed to meet quality standards for surgery, blood transfusions and treatment in coronary and intensive care units, according to a report in the Chicago Tribune. In addition, the newspaper said, more than 40% of hospitals surveyed were cited for violations of safety standards, ranging from inadequate electrical wiring to improper disposal of hazardous waste. The report was based on data collected from 1986 to 1988 by the Joint Commission on Accreditation of Healthcare Organizations, which sets national standards of quality for health-care facilities. "Compliance problems mean that there is a greater risk of a bad outcome, such as infection in the hospital, or a transfusion reaction or a surgical misadventure," said Dr. Dennis O'Leary, president of the commission. "We consider that to be serious." The commission, which usually does not release its studies, said it had not analyzed the data to determine how many violations were major.

EXHIBIT 3
DATE 3-1-95
HB 252

CLINICAL SAFETY & PRODUCT HAZARDS

KAISER HOSPITAL ACTS TO PREVENT RECURRENCE OF NURSERY AIR POLLUTION

A compressor piston cracked, lubricating oil leaked out, became heated and entered the air lines to the intensive-care nursery as mist. This is how Kaiser Hospital officials (Sacramento, CA) summarized an incident occurring September 12-13, 1984, which brought state involvement and the development of procedures to prevent a recurrence.

None of the babies in the hospital's intensive-care nursery at that time suffered ill effects, a hospital spokesperson verified for this Newsletter. The spokesperson, Susan Pieper, stated that the hospital's "plan of correction" had recently been sent to the state and it "consisted of things pretty much already done."

One thing singled out by the state was that the hospital had no established plan to handle a major disruption of medical air systems. Pieper stated that while plans did exist, they needed to be formalized to meet the state requirements and that this task was now in the draft stage. Another key decision, not yet made, was whether to move away entirely from compressors which use oil. While compressors generally have safety features, the hospital is seriously examining "oil-less" compressors "to see if they are as safe and reliable as what we have now," according to Pieper. It was pointed out that the current air system contains two compressors that work together. Reportedly, at the time of the breakdown one of the compressors (the one that malfunctioned ultimately) had been laboring.

The state had also noted that the hospital did not have adequate preventive maintenance, and Pieper commented that the hospital was "strengthening up procedures on problems that were found." She pointed out that there had been "a scheduled shut down to inspect it" (the faulty compressor) but the incident occurred first. The new procedures call for shutdowns to be accomplished more quickly.

One part of the plan to handle disruptions will probably be to have enough air regulators on hand to use with individual bottles of compressed air. Such bottles were used with individual incubators on the day of the accident, however there was a shortage of air regulators. Pieper stated that the hospital had to send a taxi to U.C. Medical Center to get a couple of regulators.

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R. Scott Jussel
President

RSJ/bem

NFPA 99C Gas and Vacuum Systems 1993 Edition

(Excerpted from NFPA 99, 1993 Edition)

National Fire Protection Association, 1 Batterymarch Park, PO Box 9101, Quincy, MA 02269-9101

DATE 3/1/95

SENATE COMMITTEE ON Public Health

BILLS BEING HEARD TODAY: HB 184, HB 333
HB 334, HB 252

< ■ > PLEASE PRINT < ■ >

Check One

Name	Representing	Bill No.	Support	Oppose
Duane Steinmetz	United Assc Plumbers Pipefitters	252	✓	
Dale Taliaferro	MDHES	HB334 HB333	✓	
Evan Lewis	Board of psychologists	HB 184	✓	
Gloria Hermanson	MT Psych. Assoc	HB184	✓	
John Flink	MHA	HB252	✓	

VISITOR REGISTER

PLEASE LEAVE PREPARED STATEMENT WITH COMMITTEE SECRETARY