

HB

230

Alaska State Legislature



Representative Eugene Kubina

Chairman
State Affairs
Committee

Legislative Council

Transportation
Committee

During Session:
State Capitol
P.O. Box V
Juneau, Alaska 99811
(907) 465-4859

During Interim:
P.O. Box 2463
Valdez, Alaska 99686
(907) 835-2111

SPONSOR STATEMENT

Sponsor: Representative Gene Kubina
Subject: House Bill 230 - Hepatitis Testing
Date: 23 March 1991

HB 230 is intended to amend Alaska Statute 18.15, adding new section 18.15.250. Under this amendment, the Department of Health and Social Services would establish a program to provide hepatitis B testing and vaccination at no charge to all volunteer emergency and rescue personnel in the state.

Rationale: Hepatitis B is widespread in many parts of Alaska. It poses a great risk to individuals who participate in such services as emergency medical response and rescue.

Individuals who participate as volunteers to assist their state, their communities, and their neighborhoods, should not have to risk contracting this highly infectious disease while performing their duties.

Providing Hepatitis B testing and vaccination will help encourage the volunteerism the state needs to foster as it moves into fiscally leaner times.

— DISTRICT SIX —

• Chenega Bay • Chitina • Cooper Landing • Cordova • Hope • Moose Pass • Seward • Tatitlek • Valdez • Whittier •

Sponsor Statement

CORDOVA MEDICAL CLINIC

APR 02 1991

Larry A. Ermold, M.D.

Oliver S. Osborn, M.D.

P.O. Box 310
Cordova, Alaska 99574
(907) 424-8200

March 25, 1991

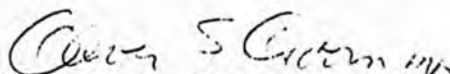
Gene Kubina
House of Representatives
P.O. Box V
Juneau, AK. 99811

Dear Representative Kubina:

I understand that Senator Menard has introduced a bill to provide for Hepatitis B vaccinations for emergency medical services providers. I wanted to let you know that I support this bill, and I think it is a wise idea.

Here in Cordova we have an active volunteer ambulance crew who are occasionally exposed to potentially infective bodily fluids, and they certainly deserve the support of the city and of the state in their work. They certainly should be offered free Hepatitis B vaccinations.

Sincerely Yours,


Oliver S. Osborn, M.D.

OSO/jsk

cc: Senator Curt Menard

Backup

Homer Volunteer Fire Dept., Inc.

604 EAST PIONEER AVENUE • HOMER, ALASKA 99603

(WE CARE) PHONE (907) 235-3155 (WE SERVE)

To: Tom Van Brocklin
Representative Kubina

From: Robert Purcell, Fire Dept Admin

I am writing this letter to support your efforts to provide free Hep-B vaccinations for volunteers. It is absolutely necessary that we protect our volunteers. It is my position that our society has the obligation to protect these volunteers who, without compensation, protect the public. To date we have spent $\approx \$7,500^{00}$ to provide free vaccinations to our volunteers. You can imagine the burden this has been on our budget. Many smaller departments do not have the resources we do and their volunteers are at risk. I very much appreciate your efforts on our behalf.

Robert

NATION



DON RYAN / The Associated Press

ne on Thursday. An uncommonly warm February

Officials urge hepatitis shield for children

By GINA KOLATA
The New York Times

Frustrated by the widespread reluctance of adults to be vaccinated against hepatitis B, a leading cause of serious illness and death, a federal panel has recommended that all children be vaccinated instead.

It is the first time that the Immunization Practices Advisory Committee of the Public Health Service has recommended vaccinating children for a disease whose victims are almost always adults.

Although the committee cannot compel parents to have their children vaccinated, state health officials normally require schoolchildren to be immunized according to its guidelines.

A vaccine for hepatitis B was licensed a decade ago, but it has found little use, even among health workers, drug users, the sexually promiscuous and others at high risk of developing the disease.

Since most Americans who get hepatitis B are infected as teenagers or adults, the benefits of a hepatitis vaccine program will not be apparent for about 20 years.

"This approach to immunize children to prevent a serious chronic adult disease has never been tried before," said Harold Margolis, the chief of the hepatitis branch at the federal Centers for Disease Control.

He and other hepatitis experts said they thought it was an important step, and pediatricians said they believed the vaccination of children would be accepted by doctors in their field.

If children are required to have hepatitis vaccinations, this would be sixth childhood vaccine introduced since the late 1940s. The first was the single vaccine for

diphtheria, pertussis and tetanus.

The hepatitis virus, like the AIDS virus, is spread by contact through sexual intercourse and by contact with contaminated blood.

About 300,000 Americans become infected with the hepatitis B virus each year.

Most victims get better on their own, but one in 10 develops a chronic infection where the virus smolders in the liver, often leading to cirrhosis or liver cancer.

About 1.25 million Americans have chronic infections, and many do not know it because they may have few or no symptoms with their initial infection.

Despite the advent of the hepatitis vaccine, which Jules Dienstag, a specialist in the disease at the Massachusetts General Hospital in Boston calls "one of the triumphs of medicine," the incidence of hepatitis B has soared in the past decade, increasing by more than 60 percent, according to the Centers for Disease Control.

As many as half the cases of hepatitis B occur in people who are not in high risk groups.

"We just don't know how it is occurring, but we suspect a lot of it is sexually," Dienstag said.

Richard Aach, a hepatitis expert at Mount Sinai Medical Center in Cleveland, said he favored the strategy of vaccinating children because the vaccine "has not been well received" among adults. "Our strategies just have not worked," he said.

And Carol Phillips, a pediatrician at the University of Vermont who is a member of the American Academy of Pediatrics' committee on infectious diseases, said, "Pediatricians will endorse hepatitis B vaccinations."

ortion, foes say

family and not politi-

The United for Life sur-
ocused largely on what
abortion right entails
how people feel about
ions under particular
stances, rather than
her abortions should be
ed by law.

For example, 42 percent
rose questioned said
thought the 1973 ruling
abortion legal only
ng the first three
hs of pregnancy.

Roe vs. Wade, the court
a woman's decision to
an abortion during the
three months of preg-
y must be left to her
er doctor. It said states
impose certain regula-
during the second tri-

mester to protect the
woman's health, and may
take steps to protect fetal
life in the third trimester.

Ramsey said her organiza-
tion's new poll should en-
courage abortion opponents
to begin a campaign to edu-
cate the public and convince
state legislatures to limit —
if not outlaw — abortion.

"We haven't focused
enough on public relations,"
she said. "Our opponents
have been skillful in choos-
ing words" to define the
national debate.

She said the "empty slo-
gan" abortion rights sup-
porters coined to win public
support — "Who decides?" —
must be challenged. "The
answer is, 'we all decide,'"
she said.

ig Five also spotlights the Other 95

/ DONALD M. ROTHBERG
s Associated Press

raised more than \$1.1 million for prostate cancer and al-
verages out to raising money at a steady has announced he won't run

Alaska State Legislature

Legislative Research Agency



P.O. Box Y
Juneau, AK 99811-3100
Phone: (907) 465-3991
Fax: (907) 463-3351

April 3, 1991

MEMORANDUM

TO: Representative Gene Kubina

FROM: Maureen Weeks ^{MW}
Legislative Analyst

RE: < Incidence of Hepatitis B in Alaska >
Research Request 91.214

You asked for information about the dangers of hepatitis B, as well as for information about the incidence of the disease in Alaska. The first part of this memorandum describes hepatitis B and the risks faced by its victims. The second part provides information about hepatitis B in Alaska.

Background

< The Hepatitis B Virus is Second Only to Tobacco as a Cause of Cancer >

Hepatitis B was first identified in 1968 at the Institute for Cancer Research in Philadelphia. It is a liver disease caused by a virus, known as the hepatitis B virus. Worldwide, this virus is second only to tobacco as a known cause of cancer. There is no treatment for hepatitis B infection, according to the Centers for Disease Control.

The virus causes inflammation of the liver. It is transmitted by direct contact with the blood of an infected person, by sexual contact with an infected person or from an infected mother to an infant. Positive diagnosis of hepatitis B can be made only with lab tests.

Manifestations of the disease range from the innocuous to the fatal.¹ Many people who have hepatitis B develop no symptoms and are unaware they are infected. Others become ill but recover completely. Ninety percent of people who contract hepatitis B develop an immunity to the disease. However, some

¹Information about the forms taken by the disease, as well as its risks are drawn from Pat Coleman, M.D., hepatitis branch of the Centers for Disease Control, Atlanta, Georgia, personal communication April 3, 1991; Pierre Tiollais and Marie-Annick Buendia, "Hepatitis B Virus," *Scientific American*, April 1991, pp. 116 - 123; and from David E. Larson, M.D., ed., *Mayo Clinic Family Health Book*, William Morrow and Company, Inc., New York, pp. 650 - 653.

hepatitis B patients develop a chronic condition and face an increased risk of liver cancer. "Carriers," who appear healthy but hold the virus in their livers, are capable of passing the disease on to others for years or even for a lifetime. In rare cases, hepatitis B victims develop virulent liver disease and die.

The several manifestations of hepatitis B are described below:

- **Asymptomatic hepatitis B.** Many people affected with the hepatitis B virus never know it because symptoms never develop; in these patients the disease is permanently asymptomatic.
- **Acute hepatitis B.** In this form, the virus incubates for 40 to 180 days (the average is 120 days) before it causes symptoms such as abdominal pain, jaundice, fatigue, nausea, vomiting and low-grade fever. These patients usually recover completely. The victim is infectious for one to two months before symptoms begin and up to four months afterwards, according to the Centers for Disease Control.
- **Chronic hepatitis B.** Up to ten percent of victims of hepatitis B develop chronic hepatitis. This may lead to cirrhosis of the liver and finally to hepatocellular carcinoma (cancer of the liver). Usually, this cancer does not develop until after a 30- to 50-year latency period.
- **Fulminant hepatitis B.** In one percent of the cases, the infection causes fulminant hepatitis, which can be fatal because it destroys entire sections of the liver.
- **Carriers.** In some patients, the virus survives in the liver; the patient appears healthy but transmits the disease through intimate or sexual contact (hepatitis B virus is found in blood, saliva and semen). Some carriers never have symptoms of hepatitis B; others have symptoms but recover. Carriers are capable of passing the infection on to others for several years or for a lifetime. About 25 percent of carriers develop a chronic liver disease. Chronic carriers run a 100 times greater risk of acquiring hepatocellular carcinoma than do other people.

◁ Hepatitis B is More Contagious than AIDS ▷

Because the disease is passed from person to person through body fluids, hepatitis B spreads easily within families or in small communities. Certain groups are considered high-risk. They include persons in direct contact with chronic carriers or with their blood (nurses, physicians and dentists); people who receive blood or blood products (hemophiliacs and patients who receive transfusions or dialysis treatments); intravenous drug users who share

contaminated needles; and persons with multiple sex partners. According to experts in the disease at the Pasteur Institute in Paris, the epidemiology of hepatitis B is very similar to that of acquired immunodeficiency syndrome (AIDS), but it is far more contagious than AIDS.

Almost 300 million people worldwide are infected with chronic hepatitis B infections. Three-quarters of them live in Asia. In Southeast Asia and tropical Africa, where people are most likely to develop hepatitis B as infants, carriers make up ten percent or more of the total population. In the Third World, the virus is frequently transmitted from an infected mother to her baby, often during birth. If the infected baby is female, she will likely become a chronic carrier and transmit the virus to her own children.

The Centers for Disease Control estimates that 300,000 Americans become infected with hepatitis B each year and 5,000 die of complications from the disease. Most American victims get the disease as teenagers or adults.

<The Vaccine for Hepatitis B is Recent>

The federal Food and Drug Administration licensed a vaccine for hepatitis B in the early 1980s. The Centers for Disease Control (CDC) in Atlanta characterizes the vaccine as "safe and effective." Despite this, people appear reluctant to be vaccinated against the disease and the incidence of hepatitis B has increased by more than 60 percent since 1980, according to the Centers for Disease Control. Dr. Pat Coleman, hepatitis B expert at the CDC, says as many as half the cases occur in people who are not in high-risk groups. He adds that the incidence of the disease in the U.S. increased steadily until 1986, when it levelled off and even declined slightly. He attributes the leveling off to a change in behavior from fear of AIDS.

The vaccine is made from the blood plasma of recovered hepatitis patients or by recombinant genetic technology (not using the blood of formerly infected persons). <It produces long-lasting immunity.> Because of this, <a federal advisory committee has recommended that all children be vaccinated for hepatitis B.> The Immunization Practices Advisory Committee of the Public Health Service made the recommendations to the CDC earlier this year.

The vaccine is administered in three separate doses in the upper arm. Booster shots are not routinely recommended. The Centers for Disease Control recommends vaccines for the following groups:

- high-risk groups such as Alaska Eskimos and Native Pacific Islanders;
- health care workers exposed to blood at least once a month;
- heterosexually active people with more than one sexual partner within a six-month period;

- homosexually active men;
- household members of those with the disease;
- international travelers who will be in areas where the disease is common (such as Southeast Asia and some areas of Africa) for more than six months;
- users of street drugs;
- recipients of blood products;
- developmentally disabled persons and the staff who care for them;
- prison inmates;
- infants born to infected mothers; and
- people who receive dialysis treatments.

Hepatitis B is highly endemic among Alaska Native according to the CDC, and within this population group, transmission occurs primarily during childhood. The federal Immunization Practices Advisory Committee recommends that all Alaska Native infants be vaccinated against hepatitis B to prevent transmission of the disease during childhood.²

< Hepatitis B in Alaska >

More than <753 new cases of acute hepatitis B were reported in Alaska> between 1973 and July 1990 (excluding 1986). This is an average of about <49 new cases reported per year.> This number <does not include carriers who have the virus in their livers and are contagious but have no symptoms,> nor does it include people suffering from on-going, chronic hepatitis B infections.

<The actual number of new hepatitis B cases may be higher,> according to Dr. Carl Li, epidemiologist with the state Department of Health and Social Services, Division of Public Health. He lists why the disease may be underreported:

- The state encourages, but does not require, physicians and nurses to report acute cases of hepatitis B to the state Epidemiology section of the Division of Public Health.

²"Protection Against Viral Hepatitis: Recommendations of the Immunization Practices Advisory Committee," U.S. Department of Health and Human Services, Atlanta, Georgia, Volume 39, February 9, 1990, p. 16.

Representative Kubina
April 3, 1991
Page 5

- Victims may suffer symptoms but decide not to see a doctor and therefore not be reported.
- Blood samples sent to private, rather than public, medical laboratories for analysis may not be reported.

Incidence in Urban and Rural Alaska

A little more than half (54 percent) of all hepatitis B cases reported in Alaska between 1973 and 1985 were in urban areas (defined as Anchorage/Matanuska-Susitna region, Fairbanks-North Star Borough areas, Juneau, and the Kenai Peninsula Borough area). These urban areas contained between 71 percent and 76 percent the state's population between 1973 and 1985. Approximately 47 percent of reported cases were in rural Alaska, which includes about one-fourth of the state's population. The attached table shows the location and number of reported hepatitis B cases in Alaska between 1973 and 1985.

Incidence by Race

The Centers for Disease Control reports that between five and fifteen percent of Alaska Natives (and Pacific Islanders) have hepatitis B antigens in their blood. This means they have acute or chronic hepatitis B, according to Dr. Carl Li of the state Division of Public Health. Between 40 and 70 percent of Alaska Natives (and Pacific Islanders) have hepatitis B antibodies in their blood, which means they have had the infection at some time in their lives, Dr. Li says.³

I hope this information is useful to you. Attached are several articles about hepatitis bill and a list of reported hepatitis B cases between 1973 and 1985 by Alaska community. If you have any questions or would like additional information, please contact this agency.

Attachments

³The body reacts to antigens (substances on the surface of the hepatitis B virus) by creating proteins called antibodies. Antibodies create immunity to antigens.

**INCIDENCE AND RATE OF HEPATITIS B DISEASE
REPORTED IN ALASKA 1973 - 1985**

Region	Number of Cases	Percent of all Cases
URBAN		
Anchorage	177	34.0
Elmendorf AFB	17	3.27
Eagle River	4	.77
Ft. Richardson	5	.96
Wasilla	4	.77
Palmer	2	.38
Fairbanks	41	7.9
College	1	.19
Eielson AFB	1	.19
Ft. Wainwright	1	.19
North Pole	3	.58
Juneau	10	1.92
Kenai-Soldotna	9	1.73
RURAL		
Bethel	51	9.8
Kodiak	12	2.3
Ketchikan	10	1.92
Hooper Bay	9	1.7
Emmonak	8	1.5
Kwethluk	7	1.4
Chevak	7	1.4
Akiachak	6	1.2
Nunapitchuk	5	.96
Upper Kalskag	5	.96
6 villages with 4 cases	24	4.62
10 villages with 3 cases	30	5.77
17 villages with 2 cases	34	6.54
37 villages with 1 case	<u>37</u>	<u>7.12</u>
Total	520	100.0

Note: (Percentages may not add due to rounding)

Source: Number of cases provided by Carl Li, M.D., epidemiologist, Division of Public Health, Alaska Department of Health and Social Services.

Prepared by the Legislative Research Agency, April 1991.



Note: In the interest of brevity, the Williams-Steiger Occupational Safety and Health Act of 1970 may be referred to as the "Job Safety and Health Act" or as "the Act." The Occupational Safety and Health Administration may be referred to as "OSHA."

Technical Note #23

March 1, 1990

OSHA CLARIFIES DIRECTIVE ON INSPECTION OF HEALTH CARE FACILITIES, INCLUDING FREE HEPATITIS B VACCINATIONS FOR HIGH RISK WORKERS

OSHA today clarified its directive on inspections of health care facilities by stating that employers must furnish free hepatitis B vaccinations to all health care workers who are at substantial risk of exposure to the hepatitis B virus.

In its revised directive, the agency entered the words "free of charge" to its instructions that the vaccine "be offered" to the employees who are at substantial risk of direct contact with body fluids.

The clarification is one of several in the directive which OSHA's enforcement personnel follow when conducting inspections for compliance with OSHA standards covering health care and other workers potentially exposed to the hepatitis B and AIDS viruses.

Previously, it was not spelled out that an employer, under OSHA's general duty clause, should provide this vaccine at no cost to the employee. The general duty clause requires an employer to provide a safe and healthful workplace for his employees and vaccination was one of the methods recommended for abating the exposure hazard to the hepatitis B virus.

Other clarifications state that:

--employers are required to record needlesticks on OSHA form 200 if medical treatment is required as a result;

--the use of fluid-proof or fluid-resistant gowns instead of impervious gowns is permitted when splashes of body fluids onto skin or clothing are likely to occur;

--and the use of resheathing instruments or other mechanical devices for recapping needles is permitted.

Those occupations with high risk for blood-borne infections due to increased exposure to body fluids from potentially infected patients include but are not limited to physicians; pathologists; dentists and dental technicians; phlebotomists; emergency room, intensive care and operating room nurses and technicians; and laboratory and blood bank technologists and technicians.

Other health care workers who may be exposed to such body fluids depending on their work assignments include housekeeping personnel, laundry workers, orderlies, morticians, research laboratory workers, paramedics, and medical examiners.

Employees in any occupation where they are exposed to body fluids are considered to be at substantial risk of occupational exposure to the bloodborne diseases.

Ward clerks and administrators who do not have contact with blood are at no greater risk of contracting blood-borne diseases than other members of the general population.

The section in the revised OSHA enforcement procedures referring to hepatitis B vaccination reads:

"The facility's IC (infection control) policy regarding hepatitis B vaccination shall address all circumstances warranting such vaccinations and shall identify employees at substantial risk of directly contacting body fluids."

"All such employees shall be offered hepatitis B vaccination free of charge in amounts and at times prescribed by standard medical practice."

OSHA is relying on guidelines published by the Centers for Disease Control as a widely recognized and accepted standard to be followed by employers in carrying out their responsibilities under the Occupational Safety and Health Act.

Single copies of the document containing the revised enforcement procedures may be obtained from OSHA Publications, Room N-3101, 200 Constitution Ave. NW, Washington, D.C., by sending a self-addressed mailing label.

Copies also are available from local and regional OSHA offices (listed under the U.S. Department of Labor in government telephone directory listings).

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THE FOLLOWING DOCUMENT MAY NOT FILM
LEGIBLY BECAUSE OF THE POOR QUALITY OF THE
ORIGINAL

JOINT ADVISORY NOTICE

Protection Against Occupational Exposure To Hepatitis B Virus (HBV) And Human Immunodeficiency Virus (HIV)

I. Background:

Hepatitis B (previously called serum hepatitis) is the major infectious occupational health hazard in the health-care industry, and a model for the transmission of blood-borne pathogens. In 1985 the Centers for Disease Control (CDC) estimated [1] that there were over 200,000 cases of hepatitis B virus (HBV) infection in the U.S. each year, leading to 10,000 hospitalizations, 250 deaths due to fulminant hepatitis, 4,000 deaths due to hepatitis-related cirrhosis, and 800 deaths due to hepatitis-related primary liver cancer. More recently [2] the CDC estimated the total number of HBV infections to be 300,000 per year with corresponding increases in numbers of hepatitis-related hospitalizations and deaths. The incidence of reported clinical hepatitis B has been increasing in the United States, from 6.9/100,000 in 1978 to 9.2/100,000 in 1981 and 11.5/100,000 in 1985 [2]. The Hepatitis Branch, CDC, has estimated (unpublished) that 500-600 health-care workers whose job entails exposure to blood are hospitalized annually, with over 200 deaths (12-15 due to fulminant hepatitis, 170-200 from cirrhosis, and 40-50 from liver cancer). Studies indicate that 10% to 40% of health-care or dental workers may show serologic evidence of past or present HBV infection [3]. Health-care costs for hepatitis B and non-A, non-B hepatitis in health-care workers were estimated to be \$10 - \$12 million annually [4]. A safe, immunogenic, and effective vaccine to prevent hepatitis B has been available since 1982 and is recommended by the CDC for health-care workers exposed to blood and body fluids [1,2,5-7]. According to unpublished CDC estimates, approximately 30-40% of health-care workers in high-risk settings have been vaccinated to date.

According to the most recent data available from the CDC [8], acquired immunodeficiency syndrome (AIDS) was the 13th leading cause of years of potential life lost (82,882 years) in 1984, increasing to 11th place in 1985 (152,595 years). As of August 10, 1987, a cumulative total of 40,051 AIDS cases (of which 558 were pediatric) had been reported to the CDC, with 23,165 (57.8%) of these known to have died [9]. Although occupational HIV infection has been documented [10], no AIDS case or AIDS-related death is believed to be occupationally related. Spending within the Public Health Service related to AIDS has also accelerated rapidly, from \$5.6 million in 1982 to \$494 million in 1987, with \$791 million requested for 1988. Estimates of average lifetime costs for the care of an AIDS patient have varied considerably, but recent evidence suggests the amount is probably in the range of \$50,000 to \$75,000.

Infection with either HBV [1,2] or human immunodeficiency virus (HIV, previously called human T-lymphotrophic virus type III/lymphadenopathy-associated virus (HTLV III/LAV) or AIDS-associated retrovirus (ARV)) [11,12]

can lead to a number of manufacturing conditions, etc. Therefore, exposure to HBV and HIV should be reduced to the maximum extent feasible by engineering controls, work practices, and protective equipment. (Engineering controls are those methods that prevent or limit the potential for exposure at or as near as possible to the point of origin, for example by eliminating a hazard by substitution or by isolating the hazard from the work environment.)

II. Modes Of Transmission:

In the U.S., the major mode of HBV transmission is sexual, both homosexual and heterosexual. Also important is parenteral (entry into the body by a route other than the gastrointestinal tract) transmission by shared needles among intravenous drug abusers and to a lesser extent in needlestick injuries or other exposures of health-care workers to blood. HBV is not transmitted by casual contact, fecal-oral or airborne routes, or by contaminated food or drinking water [1,2,13]. Workers are at risk of HBV infection to the extent they are exposed to blood and other body fluids; employment without that exposure, even in a hospital, carries no greater risk than that for the general population [1]. Thus, the high incidence of HBV infection in some clinical settings is particularly unfortunate because the modes of transmission are well known and readily interrupted by attention to work practices and protective equipment, and because transmission can be prevented by vaccination of those without serologic evidence of previous infection.

Identified risk factors for HIV transmission are essentially identical to those for HBV. Homosexual/bisexual males and male intravenous drug abusers account for 85.4% of all AIDS cases, female intravenous drug abusers for 3.4%, and heterosexual contact for 3.8% [9]. Blood transfusion and treatment of hemophilia/coagulation disorders account for 3.0% of cases, and 1.4% are pediatric cases. In only 3.0% of all AIDS cases has a risk factor not been identified [9]. Like HBV, there is no evidence that HIV is transmitted by casual contact, fecal-oral or airborne routes, or by contaminated food or drinking water [12-14], and barriers to HBV are effective against HIV. Workers are at risk of HIV infection to the extent they are directly exposed to blood and body fluids. Even in groups that presumably have high potential exposure to HIV-contaminated fluids and tissues, e.g., health-care workers specializing in treatment of AIDS patients and the parents, spouse, children, or other persons living with AIDS patients, transmission is recognized as occurring only between sexual partners or as a consequence of mucous membrane or parenteral (including open wound) exposure to blood or other body fluids [10,11,13,16]

Despite the similarities in the modes of transmission, the risk of HBV infection in health-care settings far exceeds that for HIV infection [13,14]. For example, it has been estimated [14,17,18] that the risk of acquiring HBV infection following puncture with a needle contaminated by an HBV carrier ranges from 6% to 30%—far in excess of the risk of HIV infection under similar circumstances, which the CDC and others estimated to be a less than 1% [10,13,16].

Health-care workers with documented percutaneous or mucous-membrane exposures to blood or body fluids of HIV-infected patients have

ALDEZ : 4- 3-91 : 9:30AM : SHERI BUEN-
cal masks, specified in pertinent OSHA, workers performing category I tasks
need not be wearing protective equipment, but they should be prepared to
put on appropriate protective garb on short notice.

Medical

In addition to any health-care or surveillance required by other rules, regulations, or labor-management agreement, the employer should make available at no cost to the worker:

1. Voluntary HBV immunization for all workers whose employment requires them to perform Category I tasks and who test negative for HBV antibodies. Detailed recommendations for protecting health-care workers from viral hepatitis have been published by the CDC [1]. These recommendations include procedures for both pre- and post-exposure prophylaxis, and should be the basis for the routine approach by management to the prevention of occupational hepatitis B.
2. Monitoring, at the request of the worker, for HBV and HIV antibodies following known or suspected parenteral exposure to blood, body fluids, or tissues. This monitoring program must include appropriate provisions to protect the confidentiality of test results for all workers who may elect to participate.
3. Medical counseling for all workers found, as a result of the monitoring described above, to be seropositive for HBV or HIV. Counseling guidelines have been published by the Public Health Service [1, 2, 36].

Recordkeeping

If any employee is required to perform Category I or II tasks, the employer should maintain records documenting:

1. The administrative procedures used to classify job tasks. Records should describe the factors considered and outline the rationale for classification.
2. Copies of all SOPs for Category I and II tasks, and documentation of the administrative review and approval process through which each SOP passed.
3. Training records, indicating the dates of training sessions, the content of those training sessions along with the names of all persons conducting the training, and the names of all those receiving training.
4. The conditions observed in routine surveillance of the workplace for compliance with work practices and use of protective clothing or equipment. If noncompliance is noted, the conditions should be documented along with corrective actions taken.
5. The conditions associated with each incident of mucous membrane or parenteral exposure to body fluids or tissue, an evaluation of those conditions, and a description of any corrective measures taken to prevent a recurrence or other similar exposure.

KATHERINE WEST, DSN, MSEd, CIC
Infection Control Consultant
Springfield, Virginia

REDUCING THE RISKS

It is not only the patient but also the health care provider who needs protection from infection and communicable disease. This author recommends a common-sense approach to self-protection.

INFECTION CONTROL POLICIES AND PROCEDURES designed to protect patients have been a basic part of hospital care for many years. Not until the mid-1980s and the AIDS epidemic did infection control for the protection of health care providers gain a focus.

Health care workers—nurses, physicians, police, fire fighters and rescue personnel—have always been considered

at risk for acquiring infectious or communicable diseases during patient care. For a time, however, concern about acquiring infection seemed to diminish among health care providers, largely because of the availability of vaccines and antibiotics. The recent appearance of a disease for which there is no cure has brought back the realization that health care providers are still at risk in some situations. This reaffirmation is good. We must be aware of the potential risks, and we must know how to protect ourselves.

The risks

The major risk to everyone in health care today is hepatitis B viral infection. It is estimated that 300,000 cases per year occur in this country and that 20,000 health care providers develop hepatitis B infection each year. Approximately 200 health care providers die each year as a result of hepatitis B viral infection.^{1,2}

Compare this to the incidence of human immunodeficiency virus (HIV) infection. About 74,000 cases of AIDS have been reported since 1981. The total number of health care workers testing positive for exposure to HIV is 12; none has died.³

The major factor that places fire fighters and rescue personnel at risk is needle-stick injury. A contaminated needle-stick injury presents a higher degree of risk than any other type of exposure. The risk of acquiring hepatitis B as a result of such an injury is 6 percent to 30 percent. The risk of acquiring HIV from a needle-stick injury is listed as 0.5 percent.³

Because needle-stick injuries present the greatest risk, prevention of such injuries is paramount. A decrease in the occurrence of these injuries can be accomplished by taking the following precautions:

- Handle needles and "sharps" carefully.
- Do not recap needles.
- Do not bend, break, or cut needles.
- Dispose of needles and sharps in leak-proof, puncture-resistant containers.

All contaminated needle-stick injuries need to be followed up, even in those persons who have received hepatitis B vaccine. Why? Because the vaccine protects only against hepatitis B; therefore, there is still the risk of NANB (non-A, non-B hepatitis) and possibly HIV. It also has been documented that approximately 10 percent of those receiving the vaccine do not develop measurable levels of protective antibodies. Therefore, an antibody titer should be drawn to determine the current antibody level.⁴

The flow chart in Table 1 illustrates the post-vaccine needle-stick protocol to be followed.

The second most important means of self-protection is the adoption of "uni-



versal precautions." These precautions include the use of gloves whenever there is direct contact with blood or with certain other body fluids, including semen and vaginal secretions. Gloves also should be used when handling equipment or surfaces covered with blood. Other body fluids, such as tears, sweat, saliva, urine, feces, vomitus, nasal secretions, and sputum, do not present a risk for HIV or hepatitis B, unless they contain visible blood.⁴

Clarification of which body fluids pose risks brings common sense to the workplace. It also offers an opportunity to reduce the cost associated with the inappropriate use of gloves. It should be noted that gloves are not a substitute for washing one's hands. Gloves prevent gross soiling of the hands, while hand washing removes organisms from the hands. In field situations, waterless hand cleaning solutions such as Alcare, Hibistat and CalStat offer health care providers the opportunity to wash their hands in any situation.^{6,7}

A major question to be addressed is, what type of glove is protective—latex or vinyl? It depends on the procedure to be performed. Both latex and vinyl gloves protect against HIV. Vinyl gloves may be used for routine procedures, while latex may be used for invasive procedures, such as intubation and childbirth.^{7,8} A recent study shows that wire mesh gloves do not decrease needle-stick injuries.

Immunizations

Another key component in self-protection is participation in recommended immunization programs that offer vaccines for hepatitis B, flu, measles, mumps, and other communicable diseases. Maintaining our own health is a means of self-

protection. The healthier we are, the less susceptible we are to infection.^{1,2}

Gowns

The use of gowns is a confusing issue. The Centers for Disease Control's (CDC's) guidelines often are taken too literally and are not applied realistically to each work situation. Fire fighters involved in an exposure incident while wearing protective clothing are well protected. But using full protective clothing for basic infection control is not the answer to risk reduction. This clothing is expensive, and there are no clear guidelines for cleaning it properly without damaging the materials used in it. To date, there is no documentation that clothing spreads disease; therefore, cover gowns are not necessary or practical in all field situations. Bacteria and viruses cannot penetrate skin; there must be a break in the skin to permit their entry. Broken skin should be covered when working. Soiled clothing should be removed as soon as possible and washed in the usual manner. The CDC's statement on handling soiled laundry supports this recommendation.

Protective eyewear

Here, again, confusion reigns. Protective eyewear should be used primarily for invasive procedures (intubation, field delivery, arterial bleeding situations) where blood splatter is likely. Fire fighters should consider the use of OSHA safety glasses. Prescription glasses offer protection to those who wear them.⁵

Cleaning blood spills

Blood presents the major risk to health care providers, and the greatest risk from contacting blood is hepatitis B infection. The hepatitis B virus has been shown to survive from days to weeks on surfaces, whereas HIV does not survive well outside the human body. To clean a blood spill, wear gloves and soak up the spill. Cleanse the area with a hospital-approved detergent and/or disinfectant, or with a fresh solution of bleach and water at a dilution ratio of 1:65 (¼ cup of bleach to 1 gallon of water).⁹

Compliance

Health care providers clearly have many questions regarding the risks involved in their jobs. But what are they doing to seek the answers? In Virginia, a recent statewide study showed that even though most hospitals offer hepatitis B vaccine programs, only 36 percent of employees having frequent blood contact participated in the programs.¹

Fire, rescue, and law enforcement agencies are just beginning to develop such programs despite the recommendations for such programs that were published in

1983.

With regard to AIDS, it appears that fire personnel and other health care workers are not accepting the challenge to learn about this disease. There are still misconceptions and fear which affect the way we work and the quality of care we give patients. These concerns need to be addressed. In October 1987, the Occupational Safety and Health Administration (OSHA) issued regulations on personal protection in the health care workplace. A major component of the regulations focuses on educational efforts relating to hepatitis B and HIV infection.²

Employers' responsibilities

In August 1987, when the CDC republished its guidelines for the prevention of HIV and hepatitis B in the workplace, the specific responsibilities of employers were included in a new section. This section states that employers are responsible for ensuring that supplies for self-protection are available, and that education regarding hepatitis B and HIV is conducted and documented. This is in keeping with OSHA's recent statement to employers citing the "general duty clause" as applicable in the enforcement of compliance. OSHA and the CDC consider a comprehensive response to be: offering the hepatitis B vaccine, furnishing personal protective attire, and following up on exposures.^{1,2}

Employers also are being told that they have a responsibility to monitor employee compliance with current recommenda-

tions; to develop standard operating procedures (SOPs); and then to document education, training, and compliance with SOPs. In other words, if the employer furnishes protective attire, is it being used and is it used properly? The improper use of protective attire could lead to exposure or possibly to a lawsuit.

During this time of concern and questioning, it is important to pay particular attention to items that are purchased. Are they necessary? Is the need based on scientific rationale or on a salesperson's claims? Request scientific study data before purchasing.³

Seek verification of any new information relating to infectious/communicable diseases. The only effective way to stop rumors and confusion is to insist on reliable scientific references. Fire fighters need to reflect on the reasons they selected this profession. True, patient care may not have been part of the job as it is today, but risk was always part of the job. Occupational health risks are present, but they can be prevented by following some very basic, common-sense measures. Learning about these risks and practicing self-protection are the fire fighter's responsibility. Administration can supply the tools, but you alone walk in your shoes.^{1,10,11}

Mortality Weekly Report, June 19, 1987; 36(23):353-360.

2. Joint Advisory Notice: Department of Labor/Department of Health and Human Services; HBV/HIV. Federal Register; 52(210), October 1987; 41812-41822.

3. Gerberding J.L., et al. "Risk of transmitting human immunodeficiency virus, cytomegalovirus, and hepatitis B virus to health care workers exposed to AIDS and AIDS related conditions," *Journal of Infectious Diseases*, 1987; 156:1-6.

4. Update, Universal precautions for prevention of human immunodeficiency virus, hepatitis B, and other blood-borne pathogens in health-care settings, *Morbidity and Mortality Weekly Report*, June 1988; 37(24):377-385.

5. Lynch P., Jackson M., et al. "Rethinking the role of isolation practices in prevention of nosocomial infections," *Annals of Internal Medicine*, 1987; 107:243-246.

6. West K.H. *Infectious Disease Handbook for Emergency Care Personnel*, J.B. Lippincott, Philadelphia, 1987; 29-30.

7. FDA. "Latex, vinyl gloves offer the same protection against HIV," *AIDS Alert*, December, 1987; 210.

8. McPherson D.C., Jackson M.M. "Isolation precautions for a changing environment: a new approach," *Journal of Health Care Materials Management*, September, 1987; 28-30.

9. Standard guidelines for cardiopulmonary resuscitation (CPR) and emergency cardiac care (ECC), *Journal of the American Medical Association*, June 6, 1986; 255(21):2927.

10. Krupf, M. "As AIDS hysteria spreads, so does need for cool headed education," *Occupational Health and Safety*, April 1988; 20-26.

11. McDermott, Will and Emory. *Health Law Update*, AIDS-New CDC Guidelines and OSHA's Action Plan to Protect Health Care Workers, September 1987; 4(2).

For more information

Contact the author at 8631 Tuttle Road Springfield, VA 22152.

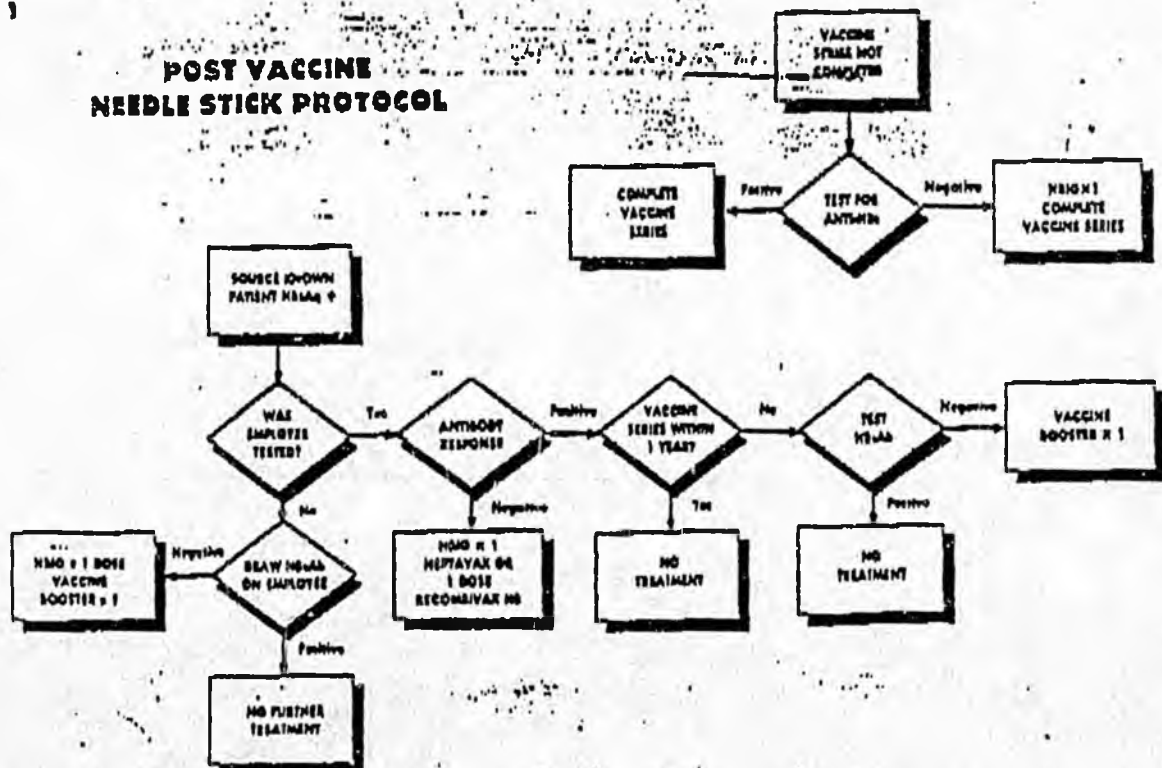
Footnotes

1. Update on hepatitis B prevention, *Morbidity and*

Katherine West has been a consultant to fire/rescue and police groups since 1978. She is the author of the infection control chapter of the DOT Areomedical Training curriculum and of a handbook, "Infectious Disease Handbook for Emergency Care Personnel."

TABLE 1

POST VACCINE NEEDLE STICK PROTOCOL



SENT BY: CITY OF VALDEZ

4-3-91 9:36AM

SHERI BUEN

#15

Health care personnel and controls participating in a survey of hepatitis B exposure at an urban teaching hospital in Boston, Massachusetts*

Occupational category	No. of potential participants	No. (%) participating	Exposure to blood	Exposure to patients
Emergency ward nurses	33	30 (91)	Frequent	Frequent
Pathology residents	21	15 (71)	Frequent	Frequent
Pathology technicians	12	11 (92)	Frequent	Frequent
Blood bank technicians	50	39 (78)	Frequent	None
Laboratory technicians	127	85 (67)	Frequent	None
Intravenous nurses	40	28 (70)	Frequent	Frequent
Intravenous technicians	52	40 (77)	Frequent	Frequent
Surgical house officers	80	66 (83)	Frequent	Frequent
Medical intensive care unit nurses	70	50 (71)	Occasional	Frequent
Surgical intensive care unit nurses	76	44 (58)	Frequent	Frequent
Medical house officers	90	89 (99)	Occasional	Frequent
General ward nurses	122	76 (79)	Occasional	Frequent

*Adapted from Dienstag and Ryan

Source: West, K.H., "Hepatitis B: The Dilemma," JORR, December 1982, p. 10.

Hepatitis B Risk Profile

The Risk of Hepatitis B in Physicians

Evidence of Past Infection in Physicians (Hepatitis B Surface Antibody)		
Specialty	Percent Positive	Number Tested
Surgery	28%	176
Pathology	27%	37
Pediatrics	21%	63
Internal medicine	18%	259
Anesthesiology	17%	59
Obstetrics/ Gynecology	16%	63
Family practice	16%	341
Volunteer blood donors	3.5%	

Adapted from Denes, A. E. et al.: Hepatitis B infection in physicians: Results of a nationwide seroepidemiologic survey, JAMA 239(3):210-212, January 16, 1978.

The Risk of Hepatitis B in Hospital Staff and Employees

Evidence of Past or Present Infection (Prevalence of Serologic Markers) in Hospital Staff		
Health-Care Group	Percent Positive	Number Tested
Emergency ward nurses	30%	30
Pathology staff	27%	26
Blood bank personnel	25%	39
Laboratory technicians	24%	85
Intravenous team	22%	68
Surgical house officers	17%	66
Intensive care nurses	10%	94
Medical house officers	8%	89
General ward nurses	5%	76
Dieticians	5%	19
Volunteer blood donors	5%	462

Adapted from Dienstag, J.L. and Ryan, D.M.: Occupational exposure to hepatitis B virus in hospital personnel: Infection or immunization?, Am. J. Epidemiol. 115(1):26-39, January 1982; and West, K.H.: The dilemma— hepatitis B: What is it all about?, J. Op. Res. Inst. 2(12):8-12, December 1982.

The Risk of Hepatitis B in Dental Personnel

Prevalence of Hepatitis B Serologic Markers among Dental Professionals		
Specialty	Percent Positive	Number Positive
Oral surgeons	24.0%	6/25
Prosthodontists	17.2%	10/58
General dentists	15.9%	37/233
Dental hygienists	16.9%	10/59
Lab technicians	14.2%	22/155
Dental assistants	12.9%	45/350

Adapted from Schiff, E.R. et al.: VA cooperative study on hepatitis and dentistry, Hepatology 2(5):688, 1982.

Groups at Increased Risk of Contracting Hepatitis B Infection (due to occupations or lifestyles)


Healthcare Personnel

- Physicians
- Emergency room staff
- Nursing personnel
- Medical technologists
- Operating room staff
- Phlebotomists
- Intravenous therapy nurses
- Surgeons
- Pathologists
- Oncology staff
- Dialysis unit staff
- Dental professionals (dentists, oral surgeons, dental hygienists)
- Laboratory and blood bank technicians
- Staff of institutions for the mentally handicapped

Others

- Morticians and embalmers
- Clients of institutions for the mentally handicapped
- Hemodialysis patients*
- Homosexually active males
- Users of illicit injectable drugs
- Recipients of certain blood products
- Household, sexual, and other contacts of hepatitis B virus carriers
- Alaskan Eskimos, Asians, Indochinese, and Haitian refugees
- Inmates of long-term correctional facilities
- Infants born to mothers carrying the hepatitis B virus
- Sexual and household contacts of acute hepatitis B cases

If you are a member of one of the above groups,
consult your doctor to find out if one of these vaccines is right for you.


Recombivax HB[®] and **Heptavax-B[®]**
(Hepatitis B Vaccine [Recombinant] | MSD) (Hepatitis B Vaccine | MSD)

*RECOMBIVAX HB is not indicated in hemodialysis or immunocompromised patients but is otherwise interchangeable with HEPTAVAX-B.

MSD
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SHARP
DOHME

L1420-83-0901 PRINTED IN U.S.A.

3 April 1991

Representative Gene Kubina
P O. Box V
Juneau, Alaska 99811



Re: House Bill 230

Dear Representative Kubina:

The Alaska Fire Chiefs Association strongly supports your efforts in developing House Bill 230.

Hepatitis B Virus (HBV) is a major infectious occupational health hazard in emergency services. The virus is transmitted by contact with blood, body fluids or tissues. The effects of the virus are devastating and often fatal after a long term illness.

HBV far exceeds HIV (AIDS) in risk of infection by accidental needle stick or exposure to blood products - 30% chance of HBV versus less than 1% chance of HIV. As a result, emergency medical care workers are far more concerned about HBV than HIV.

Although all responsible emergency services are taking precautions to avoid exposure, rescue operations continually expose the firefighter or EMT to the virus. In a typical motor vehicle accident, extracting a victim involves working around broken glass and torn metal splashed with blood. Cuts and bruises to firefighters and EMTs during rescues are a common occurrence.

For this reason, the Center for Disease Control recommends voluntary HBV immunization for all personnel involved in tasks or procedures that involve a potential for contact with blood, body fluids or tissues.

Employers of full time or career emergency services personnel are required to provide an immunisation program to employees. However many volunteer services are working with limited funds and immunization of volunteers is not an option.

We need to develop and implement an immunization program that is accessible to all volunteer rescue and emergency care workers. Your House Bill will go a long way in providing this program.

Sincerely,

Charles E. Lundfelt
Fire Chief
President
Alaska Fire Chiefs Association

cc: File

91-0052.F1

*****TRANSMITTAL*****

FAX TRANSMITTAL MEMO

TO: Gene Kubina - Rep

DEPT: _____ FAX #: 465-2287

FROM: Lundfelt PHONE: 825-4560

CO: Valdez Fire Dept FAX #: 835-2992

Post-it brand fax transmittal memo 7671

NO. OF PAGES
1



Alaska State Legislature
House of Representatives
COMMITTEE ON HEALTH, EDUCATION
AND SOCIAL SERVICES

OFFICIAL BUSINESS

POUCH V
JUNEAU, AK 99811
465-3759

M E M O R A N D U M

TO: REP. GEORGIANNA LINCOLN, CO-CHAIR
REP. PATRICK CARNEY, CO-CHAIR
REP. BETTYE DAVIS, VICE-CHAIR
REP. CHERI DAVIS
REP. JOHN GONZALES
REP. MARK HANLEY
REP. MARY MILLER
PAT JACKSON
CAROLINE LOMBARD
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HOUSE HEALTH, EDUCATION AND SOCIAL SERVICES COMMITTEE

FR: PATTI, HESS COMMITTEE SECRETARY *Patti*

DT: APRIL 4, 1991

RE: HESS HEARING, 4/4, HB 230

THE ATTACHED DOCUMENT WAS RECEIVED BY OUR COMMITTEE AFTER THE HEARING OF HB 230. APPARENTLY, THE TESTIMONY WAS SENT TO REP. MACLEAN BY MISTAKE ON APRIL 3RD....REP. MACLEAN FORWARDED THE FAX TO US ON APRIL 4TH AT ABOUT 1PM.

THIS COPY OF THE TESTIMONY IS SENT TO YOU FOR YOUR HESS FILE REGARDING HB 230.

IF THERE ARE ANY QUESTIONS, FEEL FREE TO CONTACT ME AT X4923.

SOUTHEAST REGION

EMERGENCY MEDICAL SERVICES COUNCIL
207 MOLLER DRIVE RM. 113 • SITKA, ALASKA 99835
TELEPHONE 907-747-8005

Southeast Region EMS Fax Cover Sheet
Fax # (907) 747-1406

Date: 4/3/91

To: REPRESENTATIVE MACLEAN, CHUCK HESS

From: SHAWN NEWELL

Number of pages including cover: 2

If you have any problems receiving, please contact person sending right away.

PLEASE ENTER INTO THE RECORD
THE FOLLOWING TESTIMONY TO
THE HOUSE HEALTHED SOCIAL SVCS
COMMITTEE. HB 230

SOUTHEAST REGION**EMERGENCY MEDICAL SERVICES COUNCIL
207 MOLLER DRIVE RM. 113 • SITKA, ALASKA 99835
TELEPHONE 907-747-8005**

Representative MacLean
P.O. Box V
Juneau, AK 99811

April 3, 1991

Dear Representative MacLean,

This year, two significant bills have been introduced into both houses of the legislature that support Alaska's emergency medical service volunteers. One would provide Worker's Compensation insurance coverage for EMS volunteers; that hearing is going on in the Senate this afternoon. The other is HB230, a bill providing hepatitis B vaccinations at no charge to active EMS volunteers. HB230 is the subject of this letter.

Emergency medical care is an essential service which is mandated by the state of Alaska. There is a total of roughly 2500 EMS volunteers working in the state. We are all very fortunate that people choose to give their time to provide a service that would conservatively cost over \$4.5 million dollars if we paid them directly. Providing these people safeguards for their own health while they are performing a service for this state for free, is our responsibility, and a very small price to pay for the return.

As liason between the people of Southeast Alaska involved in EMS and their legislature, we are fully behind HB230 and the philosophy behind it-- supporting our volunteers.

Sincerely,



Shawn Newell
Executive Director

House Bill 230

For An Act Entitled: "An Act relating to Hepatitis B vaccinations for volunteer emergency personnel; and providing for an effective date."

HB230 will require the Department of Health and Social Services to establish a program to make hepatitis B testing and vaccinations reasonably accessible at no charge to all volunteer emergency medical and rescue personnel in Alaska.

Discussion

Hepatitis B infection is caused by the hepatitis B virus. The incubation period of hepatitis B is long - 45 to 160 days; average 120 days. The virus is transmitted by percutaneous (intravenous, intramuscular, subcutaneous, and intradermal) and permucosal exposure to infective body fluids, as may occur in needle sticks, perinatal exposure, or sexual exposure. Only blood, saliva, semen, and vaginal fluids have been shown to be infectious.

Illness can range from no symptoms to severe illness and death. Clinical symptoms include loss of appetite, malaise, nausea, vomiting, abdominal pain, and jaundice. Skin rashes, joint pain, and arthritis can also occur. The case-fatality rate is approximately 1.4%. Some individuals who become infected with Hepatitis B virus will become chronically infected with the virus. The likelihood of becoming a carrier is higher in newborns and infants and much less in adults.

The frequency of hepatitis B infection and patterns of transmission vary markedly in different parts of the world and in different areas of Alaska. The finding of very high infection rates in some parts of Alaska, especially Alaska Eskimos in southwestern Alaska, led to a major, highly successful, statewide Hepatitis B control program in 1983 to 1986. The program resulted in blood testing more than 125,000 Alaskans and vaccinating against hepatitis B approximately 100,000 Alaskans at a state and federal cost of about \$6 million. In 1986, the state program was substantially reduced but hepatitis B vaccine has been available from the Alaska Division of Public Health to those who are at high risk and have no other source to pay for the vaccine.

Since the statewide hepatitis B control program was completed, transmission has been substantially reduced. During the past three years, an average of 58 cases per year were reported occurring mostly in individuals at high risk, especially IV drug users and through sexual contact.

Excellent guidelines exist to provide information and recommendations on prevention of hepatitis. One of the best is "Protection Against Viral Hepatitis, Recommendations of the Immunization Practices Advisory Committee (IPAC)," MMWR 1990;39S-2.

The guidelines are "designed to maximize the interruption of hepatitis B virus transmission in accordance with local patterns of transmission." Both nationally and in Alaska the present strategy for hepatitis B prevention is to vaccinate those individuals at high risk of infection. The major deterrents include lack of knowledge about risk of the disease, lack of public sector programs, inability to access most of the high risk populations, and the cost of the vaccine.

Without conducting a statewide screening program, it is impossible to know how many emergency medical service providers in Alaska are seropositive for hepatitis B, and it is even more difficult to determine how many may have been infected while providing patient care.

One study conducted in Illinois in 1988 found 7.1% prevalence of hepatitis B markers in a group of suburban paramedics, but couldn't find solid evidence that these people were infected on the job.

Another study conducted in St. Louis, Missouri in 1987 reported 44 needlestick injuries among emergency medical service providers during a 38 month period, and two employees developed clinically apparent hepatitis B during the study period. This study concluded that EMS personnel are at high risk of exposure by needlestick to blood potentially infectious for hepatitis and other pathogens.

A similar study of paramedics in Seattle, Washington in 1985 tested 59 paramedics and found evidence of anti-body to hepatitis B surface antigen or antibody to hepatitis B core antigen in 25% of the paramedics, a rate five times that of a similar Seattle population.

However, some researchers suggest that urban paramedics have much more frequent exposure to high risk groups than EMT's in small towns and rural areas. Also basic EMT-I's do not use IV therapy are thus are at little or no risk of needlestick injuries, although they may be at some risk for exposure to blood or other body fluids through a laceration.

In February 1990, the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) released an OSHA Instruction on "Enforcement Procedures for Occupational Exposure to Hepatitis B Virus (HBV) and Human Immunodeficiency Virus (HIV)." This instruction required employers of health care workers, including emergency medical services personnel, to offer to each employee, of substantial risk of directly contacting bodily fluids, HBV vaccinations free of charge, and appropriate equipment as recommended by the Centers for Disease Control. This requirement took effect in February 1991. However, the Alaska Department of

Labor states that our OSHA laws do not apply to volunteers in this state.

A central issue in hepatitis B vaccine policy is the high cost of the vaccine. If the vaccine were inexpensive, then national and state public health professionals would recommend universal vaccination of all persons. However, the high cost of the vaccine (\$33.00 per dose, 3 doses per person or a minimum of \$99.00 per person plus testing and administrating costs) has required the vaccine to be targeted at those at highest risk of infection.

Although we believe that the risk for volunteer emergency medical responders to be infected with hepatitis B while providing emergency medical care is low, we cannot say that there is no risk at all. We also note that many emergency medical responders have Worker's Compensation coverage and the cost of lost work time and disability benefits for an EMT who gets hepatitis B in the emergency care setting could easily exceed \$ 20,000, even if the disease does not progress to the acute carcimona state. Also, in Alaska, if an employee applies for Worker's Compensation, the employee is presumed to have become sick or injured on the job unless the employer can prove otherwise.

Volunteer EMT's who are not currently covered under Workers Compensation could have to endure significant personal financial hardship if they get injured or sick in the course and scope of providing patient care.

While recognizing the importance of the volunteer emergency personnel and their concerns regarding hepatitis B, the department has concerns about the policy effects of this bill upon the state vaccination program. If special consideration is granted to volunteer emergency medical services personnel, it can be anticipated that all public safety personnel and other health care workers who are similar risk would advocate for equal coverage. If similar coverage were to be provide to all such individuals, it is anticipated that the cost to the state could be as much as \$1,100.0 per year for the vaccines.

Recommendation

The Department of Health and Social Services supports the intent of HB230, but we recommend that it be amended to require incorporated cities and boroughs to provide hepatitis B screening and vaccinations to all emergency medical responders within their jurisdiction, and the state would provide this service to all volunteer emergency medical service providers outside of

incorporated cities and boroughs.

We believe the intent of this bill can be met at reduced cost to the state if the bill is amended to require that incorporated cities and boroughs provide hepatitis B screening and vaccinations to all active emergency medical responders within their jurisdiction, whether paid or volunteer. The state could provide screening and vaccinations to those volunteer emergency medical responders outside incorporated cities and boroughs, of which there are about 200 to 250. This would reduce the cost to the state to implement this program to about \$25,000 (250 x \$100 = \$25,000).

Position

The Department of health and Social Services supports the intent of HB230, but raises the concerned about the potential cost of implementing this bill and subsequent increase demand for equal coverage for other health care and public safety workers which could amount to approximately \$1,100.0 per year.

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

Date: 4/3/91

Approved by: Theodore Mala
Theodore Mala, MD, MPH
Commissioner
Dept. of Health & Social Services

Date: 3 Apr 1991

HOUSE COMMITTEE REPORT

(7)

Date Referred: March 21, 1991

FURTHER REFERRALS:

Finance

Date of Committee Action: 4-4-91

The HEALTH, EDUCATION AND SOCIAL SERVICES Committee considered:

HB 230

HOUSE BILL NO. 230

HEPATITIS B TESTING AND VACCINATIONS

"An Act relating to hepatitis B testing and vaccinations for volunteer emergency personnel; and providing for an effective date."

- RECOMMENDATIONS: the same title
 be replaced with _____ a new title
 have attached amendments(s)
 do pass
 do not pass
 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 DASS _____

fiscal note(s) _____

zero fiscal note _____

zero fiscal note(s) _____

SIGNING <u>DO PASS</u>	DP	<u>OTHER RECOMMENDATIONS</u>	DNP	NR	AM
<i>Cheri Davis</i>	✓				
<i>Mary Miller</i>	✓				
		<i>Mark Hanley</i> HANLEY		X	
<i>Betty Davis</i>	✓				
<i>J. J. Gonzales</i>	✓	GONZALES			
<i>John Carney</i>	X	CARNEY			
<i>Lincoln</i>	✓	LINCOLN			

[Signature]
CO-CHAIRMAN'S SIGNATURE

REQUEST: FISCAL NOTE

Revision Date: _____ Agency Affect: Health & Social Services
 Title: An Act Relating to Hepatitis B BRU: State Health Services
 Sponsor: Kubina, Koponen Components: Epidemiology
 Requester: House HESS

EXPENDITURES/REVENUES: (Thousands of Dollars)

OPERATING	FY 91	FY 92	FY 93	FY 94	FY 95	FY 96
Personal Services						
Travel						
Contractual						
Supplies	213.1	213.1	213.1	213.1	213.1	213.1
Equipment						
Land & Structures						
Grants, Claims						
Miscellaneous						
TOTAL OPERATING	213.1	213.1	213.1	213.1	213.1	213.1

CAPITAL	0.0	0.0	0.0	0.0	0.0	0.0
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REVENUE	0.0	0.0	0.0	0.0	0.0	0.0
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FUNDING: (Thousands of Dollars)

General Funds	213.1	213.1	213.1	213.1	213.1	213.1
Federal Funds						
Other						
TOTAL	213.1	213.1	213.1	213.1	213.1	213.1

POSITIONS

Full-Time	0	0	0	0	0	0
Part-Time	0	0	0	0	0	0
Temporary	0	0	0	0	0	0

ANALYSIS: (attach a separate page if necessary)

SUPPLIES

Laboratory screening of 2000 persons @ \$8.84/person. As a result of the screening 5% will only receive the initial Hepatitis vaccine @ \$33.70/shot. The remaining 1900 individuals will receive the series of three shots @ \$101.10/series.

Prepared By: Peter N. Nakamura, M.D., MPH *PNN*
 Division: PUBLIC HEALTH

Phone: 465-3090
 Date: 04/03/91

Approved By Commissioner: Theodore Mala, M.D., MPH *T. Mala*
 Agency: HEALTH & SOCIAL SERVICES

Date: 04/03/91

Distribution (by preparer):
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