SB 261

HFIN

FILE

(11) HOUSE COMMITTEE REPORT

Date Referred to Committee: April 15, 2000 FURTHER REFERRALS:

Date of Committee Action: 4/17/00

The FINANCE Committee considered: CSSB 261(FIN)

CS FOR SENATE BILL NO. 261(FIN) PROTECTION FROM NEEDLE & SHARPS INJURIES

"An Act relating to needle stick and sharps injury protections and the use of safe needles by health care facilities and health care professionals; relating to the vaccination of health care workers against diseases transmitted by bloodborne pathogens; and providing for an effective date."

recommends it be replaced with the following committee substitute _____ [ ] the same title [ ] a new title

[ ] additional referral to _____ Committee
[ ] attached amendment(s)

ADOPTS: _____ Letter of Intent

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

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

3 [H] zero fiscal note(s) Labor [ ] zero fiscal note(s) _____
DOC, DHSS

SIGNING WITH RECOMMENDATIONS	DP	DNP	NR	AM
Therriault			X	
Bunde	—			
Davies	X			
Grussendorf	✓			
Moses	✓			
Davis	✓			
Williams	X			
Phillips	✓			
Foster	X			

CHAIR'S SIGNATURE _____

FISCAL NOTE

STATE OF ALASKA
2000 LEGISLATIVE SESSION

BILL NO. CSSB 261(HES)

Revision Date/Time (Note if correction):
Department Affected: Labor
Title: Protection from Needle and Sharps Injuries
BRU: Labor Standards and Safety
Component:
Sponsor: Senator Elton
Occupational Safety and Health
Requestor: Senate Finance
COMPONENT SERIAL NO. 970

EXPENDITURES/REVENUES: (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS & CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0
CAPITAL						
CHANGE IN REVENUE FUND SOURCE #						

FUNDING: (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipt						
1006 GF/MHTIA						
Other (Specify Type)						
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

Estimate of current year (FY00) impact: $ none

ANALYSIS: (Attach a separate page if necessary)

See Attached

Prepared by: Alan Dwyer, Director
Phone : 465-4855
Division: Labor Standards and Safety
Date/Time: 4/6/00 11:25 AM

Approved by Commissioner: Ed Flanagan, Commissioner
Agency: Department of Labor
Date: 4/6/00

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Fiscal Note:CSSB 261 - Protection from Needle and Sharps Injuries

This bill helps further clarify existing requirements for employers as it relates to devices covered in the bloodborne pathogen standard (29 CFR 1910.1030); provides reasonable requirements to evaluate, implement and prevent injuries with engineered safe devices; and provides clear guidance on evaluation of needlesticks and other sharps injuries in health-care settings. Health-care worker involvement and safety is enhanced by requiring employer policies that work with potential parties at risk for a common solution to injury prevention.

OSHA estimates sharps and needlestick injuries vary between 590,000 to 800,000 per year. Many of the bloodborne deseases are life-threatening and incurable. Risk analysis by the Centers for Disease Control estimates the risk of front-line health-care workers of contracting a bloodborne disease is three times that of the normal population, due to work in a health-care setting.

The Division of Labor Standards & Safety/Occupational Safety & Health Program is already in compliance with federal bloodborne pathogen safety standards, as required by the federal Occupational Safety and Health Administration's (OSHA) compliance directive of November 1999.

The Department does not anticipated increased operating expenses in connection with this legislation.

FISCAL NOTE

STATE OF ALASKA
2000 LEGISLATIVE SESSION

BILL NO. CSSB 261 (HES)

Revision Date/Time (Note if correction) _____ Dept. Affected Department of Corrections

Title "An Act relating to needle stick and sharps injury protection and the use of safe needles by health care..." BRU **Administration and Operations**

Component Inmate Health Care

Sponsor Senator Elton

Requester Senate Finance Component No. #0705

Expenditures/Revenues (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING EXPENDITURES	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006
Personal Services						
Travel						
Contractual						
Supplies						
Equipment						
Land & Structures						
Grants & Claims						
Miscellaneous						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0
CAPITAL EXPENDITURES						
CHANGE IN REVENUES ( )						

FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (Specify Type)						
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

Estimate of any current year (FY2000) cost: 0.0

POSITIONS

Full-time						
Part-time						
Temporary						

ANALYSIS: *(Attach a separate page if necessary)*

Prepared by: Candy Brower, Legislative Liaison Phone 465-3307

Division Commissioner's Office Date/Time 4/4/00 2:49 PM

Approved by Commissioner Margaret M. Pugh Margaret M. Pugh Date 4-4-00

Agency Dept. of Corrections

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STATE OF ALASKA **BILL NO. CSSB 261 (HES)**
2000 LEGISLATIVE SESSION

Revision Date/Time (Note if correction): _____ Dept. Affected: **Health and Social Services**
Title: **Relating to needle stick and sharp injury protections** BRU: **State Health Services**
Component: **Nursing**
Sponsor: **Elton** COMPONENT SERIAL NO. **288**
Requestor: **Senate FIN** See also (SN#): _____

Expenditures/Revenues: (Thousands of Dollars)

Note: Amounts do not include inflation unless otherwise noted below.

OPERATING	FY2001	FY2002	FY2003	FY2004	FY2005	FY2006
PERSONAL SERVICES						
TRAVEL						
CONTRACTUAL						
SUPPLIES						
EQUIPMENT						
LAND & STRUCTURES						
GRANTS, CLAIMS						
MISCELLANEOUS						
TOTAL OPERATING	0.0	0.0	0.0	0.0	0.0	0.0
CAPITAL EXPENDITURES						
CHANGES IN REVENUES ( )						

FUND SOURCE (Thousands of Dollars)

1002 Federal Receipts						
1003 GF Match						
1004 GF						
1005 GF/Program Receipts						
1037 GF/Mental Health						
Other (please specify)						
TOTAL	0.0	0.0	0.0	0.0	0.0	0.0

Estimate of any current year (FY2000) cost: $0.0

POSITIONS:

FULL-TIME						
PART-TIME						
TEMPORARY						

ANALYSIS: (Attach a separate page if necessary)

No fiscal impact.

Prepared by: Peter M. Nakamura, MD, MPH Phone: 465-3090
Division: Division of Public Health Date/Time: 3/30/00 1:37 PM

BT
Approved by Commissioner: Karen Perdue, Commissioner Date: 3/31/00
Agency: Department of Health & Social Services

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General Teamsters Local 959 State of Alaska

Affiliated with International Brotherhood of Teamsters

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April 17, 2000

Representative Eldon Mulder, Co-Chair
Representative Gene Therriault, Co-Chair
Representative Con Bundy, Vice-Chair
House Finance Committee
State Capitol
Juneau, AK 99801

Re: SB 261 Needle Stick and Sharps Injury Protection

Dear Representatives:

On behalf of health care workers we represent in the State, I want to convey our strong support of SB 261 Needle Stick and Sharps Injury Protection. We have joined with the Alaska Nurses Association, as well as other AFL-CIO unions who represent health care workers to address a risk these workers (nurses in particular) face in the daily performance of their jobs.

Health care workers are in immediate peril because of their contact with dangerous diseases. Accidental needle sticks spread blood transmitted diseases such as hepatitis B, hepatitis C and HIV. While health care workers in general are affected, it is a much more serious problem for those who provide direct patient care.

There is good news, however. Needle stick injuries are preventable. Safe needle devices have been on the market since the early 1970's. Unfortunately, it wasn't until 1992, the FDA issued an alert to all health care facilities to utilize non-needle IV systems where possible. It was not mandated and today only about 15% of the health care facilities use the devices available. I am pleased to say that our members at South Peninsula Hospital do have such choices available to them. We are fortunate to currently have a proactive, safety conscious administrator. I would remind you this is not presently mandated and could change with a new administrator in the future.

We have laws mandating seatbelts and child safety seats in motorized vehicles. We have laws requiring protective head gear and other worker safety devices on construction sites. Why then should we not mandate devices that have been proven to reduce health risks and save lives of health care professionals as well?

Some may argue the safe needle devices cost more money. I submit in the short term this is true, but health care facilities will save a tremendous amount of money by not having to pay for follow-up testing, lost time and disability payments in the long term. When a nurse is stuck but no infection occurs, the average cost is about $3000.00. When infection does occur the cost rises dramatically.

The bill before you will require employers to use non-needle systems as engineering and work practice controls. It includes front line health care workers evaluating and identifying safe needle devices, updating exposure control plans and recording exposure incidents. This bill is proactive worker safety which positively impacts all health care workers throughout the State. We ask your assistance and support in assuring its enactment

Sincerely,

TEAMSTERS LOCAL 959

Gerald L. Hood
Secretary-Treasurer

/lk
BHT\needlestick

cc: Representative Carl Moses, Representative Ben Grussendorf, Representative John Davies, Representative Alan Austerman, Representative Richard Foster, Representative Bill Williams, Representative Gail Phillips

HB 440/SB 261—Safer Needles Bill

Sponsor Statement

SB 261 brings needed protection to health care workers from accidental needlestick injuries.

Health care workers are at particular risk on the job because of the danger of disease transmission. Accidental needlesticks can transmit bloodborne diseases such as hepatitis B, hepatitis C, and human immunodeficiency virus (HIV). Nationwide, health care workers suffer between 600,000 and one million accidental needlesticks per year. Between 50,000 and 60,000 health workers have contracted serious diseases from needle sticks in the last decade, and on average one health care worker per week is exposed to HIV.[1] While HIV is the highest profile disease, experts now estimate that more health care workers will eventually die from exposure to hepatitis C than from HIV.[2] Medical workers are four times more likely than police officers to die from a job-related injury.[3]

A number of manufacturers currently produce safer needle devices with self-retracting needles, self-blunting tips, or other technology, and their effectiveness in reducing injuries has been demonstrated in evaluations by the Centers for Disease Control and Prevention. 250 such devices are FDA-approved, yet only 15% of hospitals use safer needles.[4]

Health care facilities have been slow to use safer needles because they are more expensive. But these devices save money in the long-term by reducing testing and care for workers accidentally exposed through needlesticks. The cost for testing following a high-risk needlestick injury is nearly $3,000, even when no infection occurs. A serious infection can cost upwards of $1 million when you include lost time and disability payments. In California, the first state to pass a safer needle law, hospitals and health care employers are expected to save $100 million per year thanks to reduced accidents. As ever more health care facilities use safer needles, prices can be expected to go down.[5]

SB 261 requires health care facilities to evaluate safer needle devices, and triggers new regulations requiring the use of safer needles when appropriate. The bill requires the Department of Labor to adopt regulations requiring health care facilities to:

- include safer needles as engineering and work practice controls (except in cases where a committee including frontline health care workers determines these devices will jeopardize safety);
- include a procedure for identifying safer needles in the facility's exposure control plan;
- update the exposure control plan as new technology is developed; and
- record exposure incidents in a sharps injury log.

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[1] Source: *San Francisco Chronicle*, 4/13/98, p. A1
[2] Washington State Legislature, Senate Bill Report for ESSB 6416
[3] Source: *San Francisco Chronicle*, 4/13/98, p. A1
[4] Source: American Nurses Association
[5] Source: *San Francisco Chronicle*, 12/18/98

In addition the Department of Labor may adopt regulations that include training and education requirements, measures to increase vaccinations, requirements for placement of sharps waste containers, and requirements for the use of personal protective equipment. The Department of Labor is required to compile a list of safer needle devices and to make the list available to employers. Finally, a needlestick injury fund is established which, subject to appropriation, may make grants for research, development, and product evaluation of safer needles.

Five states have already passed safer needle legislation and bills are pending in 20 states besides Alaska. In Washington, a similar bill recently passed the state senate by an overwhelming bipartisan margin. In Massachussetts, a safer needle bill was spurred on by testimony from the president of the Massachussetts Nurses Association, who acquired both HIV and hepatitis C from an accidental needlestick.

SB 261 is based on model legislation being used around the country. The American Nurses Association has led efforts to pass safer needle legislation at the state and federal level, and this bill is strongly supported by the Alaska Chapter of the ANA.

MEMORANDUM STATE OF ALASKA

DEPARTMENT OF LABOR & WORKFORCE DEVELOPMENT
Labor Standards & Safety Division

TO:	Alan Dwyer Division Director	DATE:	April 3 , 2000
		FILE:	sb261.doc
THRU:	Thomas Stuart Chief	PHONE:	269-4957
TCB FROM:	Timothy Bundy Assistant Chief Osh	SUBJECT:	Required enforcement of the BBP standard

Reference: Sb 261/ CSSB 261 as amended.

The Department of Labor and Workforce Development supports the implementation of CSSB 261, "**Needlestick and sharps injury protection for health care workers.**" The Bloodborne standard was first promulgated in 1991. Federal OSHA estimates sharps and needlestick injuries vary between 590,000 to 800,000 per year. Many of the bloodborne deseases are life threatening and incurable. Risk analysis by the Center of Desease Control estimates front line healthcare workers are at **three** (3) times the risk of contracting a bloodborne desease than the normal population due to work in a healthcare setting. This bill helps further clarify existing requirements for employers as it relates to devices covered in the bloodborne pathogen standard (29 CFR 1910.1030); provides reasonable requirements to evaluate, implement and prevent injuries with engineered safe devices; and, the bill provides clear guidance on evaluation of needlesticks and other sharps injuries in the healthcare settings. The requirements in CSSB 261 will enhance healthcare worker involvement and safety by requiring employer policies that work with potential parties at risk for a common solution to injury prevention. Federal OSHA issued a recent compliance directive on November 5, 1999. Subsequently, this directive was adopted by the Labor Standards & Safety/ Occupation Safety & Health Program as required by state-plan-states to remain "as effective as" federal Occupational Safety & Health Administration's enforcement policies.

OSHA National News Release

U.S. Department of Labor
Office of Public Affairs

National News Release
November 5, 1999
CONTACT: Bill Wright
PHONE: (202) 693-1999

Stresses employer use of new medical advances

OSHA REVISES BLOODBORNE PATHOGENS COMPLIANCE DIRECTIVE

A new directive issued today by the Occupational Safety and Health Administration will help minimize serious health risks faced by workers exposed to blood and other potentially infectious materials. Among the risks are human immunodeficiency virus (HIV), hepatitis B and hepatitis C.

The directive guides OSHA's compliance officers in enforcing the standard that covers occupational exposure to bloodborne pathogens and ensures consistent inspection procedures are followed. It updates an earlier directive issued in 1992 and reflects the availability of improved devices, better treatment following exposure and OSHA policy interpretations.

"We must do everything we can to protect workers who may be at risk of exposure to bloodborne diseases," said Secretary of Labor Alexis M. Herman. "This directive doesn't place new requirements on employers, but it does recognize and emphasize the advances made in medical technology. And it reminds employers that they must use readily-available technology in their safety and health programs."

The revised directive emphasizes the importance of an annual review of the employer's bloodborne pathogens program and the use of safer medical devices to help reduce needlesticks and other sharps injuries. OSHA does not advocate the use of one particular medical device over another. The directive also highlights basic work practices, personal protective equipment and administrative controls.

The emphasis on engineering controls results from OSHA's request last year for ideas and recommendations on ways to better protect workers from contaminated needles or other sharp objects.

"We received nearly 400 comments from health care facilities, workers and others," said OSHA Administrator Charles N. Jeffress. "They told us that safe medical devices already available are effective in controlling hazards and that wider use of such devices would reduce thousands of injuries each year."

The revised directive also includes detailed instructions to compliance officers on inspections of multi-employer worksites, such as home health services, employment agencies, personnel services, physicians and health care professionals in independent practices, and independent contractors.

Also included in the directive are decontamination requirements, guidelines on hepatitis vaccinations and post exposure treatments, and employee training.

OSHA issued a final regulation on occupational exposure to bloodborne pathogens in 1991 to protect nearly six million workers in health care and related occupations at risk of exposure to bloodborne diseases. Jeffress said the agency will review the standard to determine whether its revision is warranted.

The directive can be accessed from the OSHA home page at (http://www.osha.gov) under the "Directives" link. Copies can also be obtained from the agency's Publications Office by calling (202)

693-1888. (NOTE: A fact sheet providing highlights of the revised directive follows this release).

# # #

The text of this news release is on the Internet World Wide Web at http://www.osha.gov. Information on this news release will be made available to sensory impaired individuals upon request. Voice phone: (202) 693-1999.

Highlights of OSHA's Compliance Directive CPL 2-2.44D
Enforcement Procedures for the Occupational Exposure to Bloodborne Pathogens

OSHA first published the bloodborne pathogens standard in 1991 because of a significant health risk associated with occupational exposure to blood and other potentially infectious materials that may contain bloodborne pathogens-- or microorganisms -- that cause bloodborne diseases. The compliance directive detailing enforcement procedures for the standard was published on March 6, 1992 (the effective date of the standard).

During the past seven years, significant medical advances have occurred that help control bloodborne pathogens. In addition, OSHA has clarified the standard through written interpretations. The emerging technology, coupled with new information on the control of bloodborne pathogens, necessitated a revision in the compliance directive. Following is a summary of some of the key revisions.

- Annual Review of Exposure Control Plan -- employers must ensure that their plans reflect consideration and use of commercially available safer medical devices.
- Engineering Controls and Work Practices -- emphasizes the use of effective engineering controls, to include safer medical devices, work practices, administrative controls and personal protective equipment.
- Emphasizes that employers should rely on relevant evidence in addition to FDA approval to ensure effectiveness of devices designed to prevent exposure to bloodborne pathogens.
- Multi-Employer Worksites -- focuses on employment agencies, personnel services, home health services, independent contractors, and physicians in independent practice.
- Adds most recent guidelines from the Centers for Disease Control on vaccinations against the Hepatitis B virus. Incorporates CDC's guidelines on post exposure evaluation and follow-up for HIV and the Hepatitis C virus.
- Requires effective training and education for employees whenever safer devices are implemented. Stresses "interactive" training sessions rather than just the use of films or videos that do not provide the opportunity for discussion with a qualified trainer.
- Replaces and updates appendices. Includes the following: examples of committees in health care facilities; sample engineering control evaluation forms; an Internet resource list; a "fill-in-the-blanks" sample exposure control plan; and CDC guidelines pertaining to HIV exposure, control and prevention of hepatitis C, and hepatitis B vaccinations.

OSHA Occupational Safety & Health Administration U.S. Department of Labor

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OSHA Federal Register

Final Rule on Occupational Exposure to Bloodborne Pathogens - 56:64004

OSHA Federal Register - Table of Contents

- **Information Date:** 12/06/1991
- **Federal Register #:** 56:64004
- **Standard Number:** 1910 1030
- **Type:** Final
- **Agency:** OSHA
- **Subject:** Final Rule on Occupational Exposure to Bloodborne Pathogens
- **CFR Title:** 29
- **Abstract:** OSHA is promulgating a standard to eliminate or minimize occupational exposure to Hepatitis B Virus (HBV), Human Immunodeficiency Virus (HIV) and other bloodborne pathogens. The standard will become effective on 3/6/92. Based on a review of the information in the rulemaking record, OSHA has determined that employees face a significant health risk as the result of occupational exposure to blood and other potentially infectious materials because they may contain bloodborne pathogens, including hepatitis B virus which causes Hepatitis B, and human immunodeficiency virus, which causes Acquired Immunodeficiency Syndrome (AIDS). The Agency further concludes that this exposure can be minimized or eliminated using a combination of engineering and work practice controls, personal protective clothing and equipment, training, medical surveillance, Hepatitis B vaccination, signs and labels, and other provisions. FOR FULL TEXT OF THE STANDARD, SEE OSHA STANDARDS (OS) FILE; FOR FULL TEXT OF THE PREAMBLE, SEE OCIS FILE "1910.1030 (PREAMBLE) FILE" (BP). Any petitions for review must be filed not later than the 59th day following the promulgation of the standard. For information contact: James F. Foster, Telephone (202) 523-8151.

Abstract Only

OSHA Federal Register - Table of Contents

Questions and Answers
SB 261, the Safer Needles Bill

How many needlestick incidents occur in Alaska?
No state or national data on needlesticks is collected, so most studies reference the national estimate developed by the University of Virginia Health Care Worker Safety Center. That estimate is 600,000 to 1 million accidental needlesticks per year. An estimate of Alaska needlesticks based on Alaska's percentage of the U.S. population in the 1990 census is: 1,327 to 2,211 per year.

Why are needlesticks so dangerous?
Needlesticks can transmit serious bloodborne diseases such as HIV, Hepatitis B, and Hepatitis C. The dangers of HIV are well known. Less well known are the dangers of Hepatitis C, a chronic disease affecting 4 million Americans which can have serious effects on the liver. Hepatitis C infection is the leading indication for liver transplantation; 5-7% of those infected with HCV will die as a result of their infection. There is currently no vaccine for HCV. Experts estimate that more healthcare workers will eventually die due to complications from occupational exposure to Hepatitis C than exposure to HIV. Hepatitis B is a chronic disease affecting 1.25 million Americans which can also result in complications to the liver. Vaccinations for HBV are available to health care workers and are believed to be 90% effective.

How frequently are serious diseases contracted through a needlestick?
Chance of Infection if Exposed to Blood Containing Virus
Hepatitis B: 6-30% (national estimate)
Hepatitis C: 5% (national estimate)
HIV: 0.03% (Alaska estimate)

In Alaska, using rough estimates of needlestick occurrence, disease prevalence, and Alaska's share of US population, this translates into yearly infection numbers of:
Hepatitis B: 1-3 workers infected
Hepatitis C: 1-2 workers infected
HIV: very low--less than 1 worker infected

What are the costs of infection?
According to the State of Maryland's recent Health Care Worker Safety Act Study Group Report and SEIU data from Washington State:

- $500 to $750 for standard testing following a needlestick
- $2,000 to $3,800 for testing and treatment following a high-risk needlestick injury
- $20,000 to $30,000 avg. annual drug costs for HIV treatment
- $20,000 to $30,000 avg. annual drug costs for HCV treatment (liver transplantation can raise cost of HCV infection to $500,000)
- Up to $1 million--The American Hospital Association estimate of costs to treat a health care worker with a serious bloodborne pathogen disease, including treatment, follow-up, lost-time wages, and disability payments

Using rough estimates for Alaska needlesticks and the costs of testing and treatment, the cost to Alaska health care facilities just for standard testing each year is roughly $663,500 to $1,658,250. This cost, of course, rises with high-risk needlesticks and treatment in cases of infection.

How much more do safer devices cost?
This depends on the device. Good examples are offered in the Maryland report:

Purpose of Device	Device	Unit Price (conventional)	Unit Price (safer)	Annual Cost for 250-300 Bed Hospital		
				Conventional	Safer	Incremental
Venous Blood Draw	Vacuum tube Phlebotomy Needle	$0.10	$0.33	$6,500	$22,000	$15,500
	Butterfly Needle	$0.65	$0.90	$11,000	$15,000	$4,000
IV Access	IV Catheter	$0.75	$1.75	$25,000	$58,500	$33,500
IM/SQ Injection/ Fluid Transfer	Hypodermic Needle/Syringe	$0.05	$0.25	$16,500	$83,500	$67,000

Is insurance affected by use of safer devices?
At least one major insurance provider, PHTS of South Carolina, has rewritten their underwriting requirements to require facilities covered by their workers compensation policy to have a "sharp object injury prevention program". The new policy is a preventive measure developed because PHT recognized the emerging threat of HCV and HIV infection from accidental needlesticks.

How effective are safer needle devices?
Again, this depends on the device. The CDC and others have conducted studies showing that safer needles can reduce needlestick injuries by up to 76%. Other studies show a zero rate of needlestick injuries when using the newest self-retracting syringes.

Surveys conducted by the Maryland study group show that nearly every facility responding indicated that there was a reduction in injuries after introduction of safer medical devices. No facility has discontinued use after implementation.

Devices with integrated safety features are significantly safer than standard devices. However, SB 261 allows health care facilities to determine this for themselves: if an evaluation committee, at least half of whose members are frontline health care workers, determines that a device jeopardizes patient care or worker safety, it need not be used.

How does this legislation differ from OSHA's November 1999 Compliance Directive on the bloodborne pathogen standard?
The November 1999 compliance directive was updated to clarify the intent of the bloodborne pathogen standard and to incorporate medical advances. The key revisions include:

- Annual Review of Exposure Control Plan: employers must ensure that their plans reflect consideration and use of commercially available safer medical devices
- Engineering Controls and Work Practices: emphasizes use of effective engineering controls
- Emphasizes that employers should rely on relevant evidence in addition to FDA approval to ensure effectiveness of devices
- CDC guidelines for post-exposure evaluation and follow-up for HIV and HCV
- Requires effective training whenever safer devices are implemented

State legislation complements and augments the message prescribed by OSHA. The SEIU, the American Nurses Association, and the State of Maryland Health Care Worker Safety Act Study Group Report detail reasons why the 1999 Directive is not adequate on its own to protect health care workers:

- Decisions about what constitutes safer devices can rest solely with the employer under the directive. Under this legislation, front-line health care workers are given a significant role in evaluating and selecting safer needles.
- The OSHA regulatory process is predominantly complaint-driven. Only a small fraction of facilities will be visited due to complaints by workers or for other reasons.
- The compliance directive is subject to court challenge because it provides detailed procedures for enforcement of the 1991 standard.
- The compliance directive is this Administration's interpretation of the bloodborne pathogen standard; it could change with successive Administrations
- The legislation provides for a much more detailed and product-specific sharps injury log than required by the directive.
- The Maryland study group concluded that the directive "may not be adequate in guaranteeing sufficient use of engineered sharps injury protection." They also agreed that "a clear, unambiguous revision of the bloodborne pathogen standard [through legislation] is warranted and necessary to ensure the widespread adoption and use of engineered sharps injury protection."

What information is currently collected on needlesticks?
Employers are required to complete an OSHA-200 log when an employee requires workers' comp due to an on-the-job injury. The Department of Labor's inspectors have access to these logs, as do employee organizations upon request. These logs do not require information on the type or brand of device involved in needlestick incidents, or other information about engineered sharps injury protection.

A note: It is estimated that 39% of all exposures go unreported.

Are safer devices available?
A wide variety are available, including syringes, IV catheters, safer blood-drawing devices, lancets, and scalpels. The US Patent Office has approved over 1,000 patents for safer needle designs and the US FDA has now approved for marketing 250 products with integrated safety features

What are other states doing about needle safety?
Legislation similar to the model legislation has passed in four states: California, Texas, New Jersey, Tennessee. Maryland passed a bill calling for a study group on health care worker safety. Hawaii passed a resolution calling for use of safer needles. Legislation is pending in 20 states besides Alaska.

Legislation which has passed varies from state to state. Legislation in "state plan OSHA states" covers all health care facilities and employees; Alaska, California, and Tennessee fall into this category. Legislation for other states covers only public employees since private employees are covered by federal OSHA; New Jersey and Texas fall into this category.

What if a facility is already using safer devices?
SB 261 reinforces the policies of facilities already using safer devices, requires the involvement of frontline health care workers in selecting and evaluating safer devices, and requires annual updating of exposure control plans to reflect advances in safer devices. The legislation complements and augments the Nov. 1999 OSHA Bloodborne Pathogens Compliance Directive, which already emphasizes the use and consideration of safer needle devices, and which facilities should already be addressing in their safety practices.

Where do needlesticks occur?

Patient rooms	34%
Operating rooms	23%
Emergency departments	7%
Intensive care units	7%
Out-patient offices	5%
Clinical laboratories	5%
Others	18%

**from EPInet data network, 1996*

Which workers suffer needlesticks and in what proportions?

Nurses	46%
Medical technicians	23%
Doctors	15%
Housekeeper/ laundry workers	5%
Other	12%

**from EPInet data network, 1996*

How many facilities already use safer needle devices?

Nationally only 15% of hospitals use safer devices. The data on Alaskan health care facilities is not available and would require a survey.

Does this legislation mean that Dept. of Labor will mandate which devices to use?

No. These choices are made by health care facilities and their employees through an initial evaluation period of safer devices, and subsequent evaluation as appropriate. Each facility can develop its own procedure for selecting devices, subject to the requirements of the bill. DoL will be required to maintain a list of sources of information on safer needle devices to assist employers in complying with the bill.

Sources:

EPInet data network, see http://www.med.Virginia.EDU/medcntr/centers/epinet/
Service Employees International Union, see http://www.seiu.org/
American Nurses Association, see http://www.nursingworld.org/needlestick/nshome.htm#Legislation
State of Maryland Department of Health and Mental Hygiene Health Care Worker Safety Act Study Group, available at http://dhmh.state.mk.us/html/reprtk10.htm
San Francisco Chronicle "Deadly Needles" series, 4/13/98, 4/14/98, 4/15/98

Prepared by Senator Kim Elton's office

COSTS AND SAVINGS ASSOCIATED WITH NEEDLESTICK INJURIES AND THE USE OF SAFER NEEDLE DEVICES

Costs for Treating Injured Health Care Workers

- $500 – cost for initial testing following a needlestick injury
- $2,200-$3,800 – initial cost for testing and treatment with prophylactic drugs for a health care worker injured by a potentially HIV-contaminated needle, but the illness not yet confirmed
- $20,000-$30,000 – average annual drug costs for a health care worker who develops HIV as a result of a needlestick injury
- Up to $1 million – The American Hospital Association estimate of costs to treat a health care worker with a serious bloodborne pathogen disease, including treatment, follow-up, lost-time wages, and disability payments
- $20,000-$30,000 - average annual drug costs to treat Hepatitis C
- $500,000 – potential lifetime treatment costs for someone with Hepatitis C

Workers Compensation and Liability Costs

- A study of insurance costs for needlestick injuries, reported that a single needlestick injury can cost up to $500,000 in workers' compensation costs
- A physician at Yale-New Haven Hospital in Connecticut was awarded $12.2 million by a jury for a needlestick injury that resulted in him acquiring HIV

Costs to a Health Facility for Safe Needles

- 7 cents – the cost for a conventional syringe
- 24 cents – the median increase in the cost for a safer needle device
- $70,000 – the additional cost to equip a 300-bed hospital for a year with safe blood collection, hypodermic, and IV catheter devices

Savings Associated with the Use of Safe Needles

- The California Occupational Safety and Health Standards Board estimated that the state will have a net saving of $106 million each year as a result of implementing the use of safe needles in all health care facilities. Although employers will spend $185 million for the new, safer technology and for expenses associated with increased record keeping, there will be savings of $291 million on the costs for diagnosing and treating needlestick injuries.

From: SEIU, Washington State

From: SEIU, Washington State

SAN FRANCISCO CHRONICLE

DEADLY NEEDLES

First of Three Parts · The Emerging Crisis

MONDAY 4/13/98 P-A

Epidemic Ravages Caregivers

Thousands die from diseases contracted through needle sticks

By Reynolds Holding and William Carlsen
Chronicle Staff Writers

University of Wisconsin Hospital
Madison, Wis., 1978

Dr. Dennis Maki, chief of infectious diseases, was unnerved.

On a winter morning a few weeks earlier, a urology technician was inserting an intravenous needle into a patient's arm when the device slipped, piercing the 55-year-old medical worker's finger.

Not long after, the technician fell seriously ill with hepatitis B, and Maki suddenly realized his hospital — and perhaps the rest of the country — had a serious problem on its hands.

"This totally innocent victim had become sick," he said, "and we had to try to understand why."

So he and nurse Rita McCormick began to do some detective work. Their groundbreaking research would sound the first alarm over a deadly epidemic of needle sticks that was striking down health care workers at a startling rate.

Over the next 20 years, thousands of the nation's medical workers would die of AIDS, hepatitis and other blood-borne infections. Tens of thousands more would contract other devastating diseases. Hundreds of millions of dollars would be spent every year on replacing and treating dying and infected workers.

And now, researchers fear, a new needle stick threat has been discovered: Untold numbers of female health workers may have suffered serious birth complications from transmissions of incompatible blood.

But it didn't have to happen.

Needles with simple safety features — often costing just pennies more to make — were available at

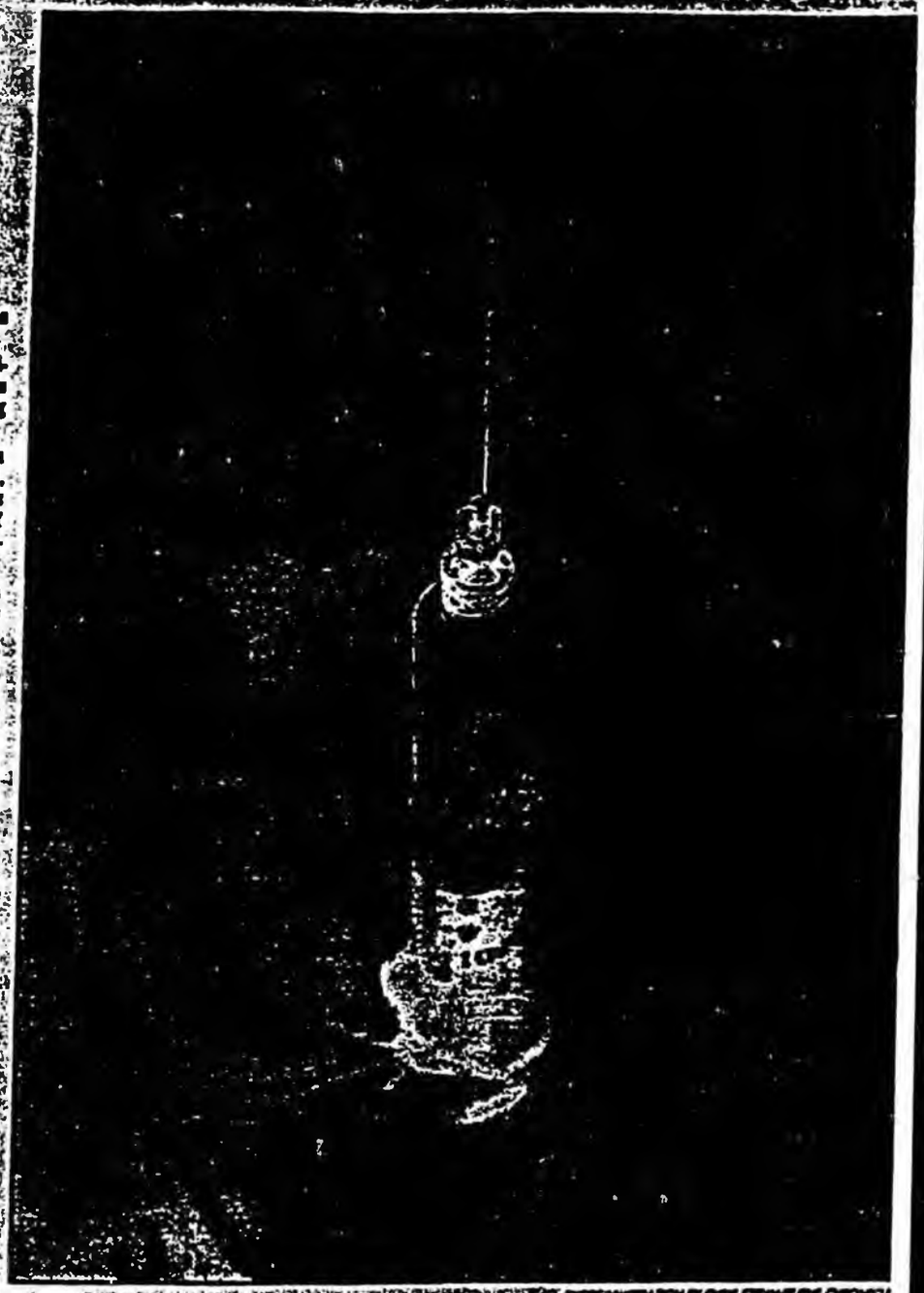
NEEDLE: *Page A8 Col. 1*

■ **Needle sticks each year:** 1 million

■ **Health workers infected:** At least 50,000-60,000 have contracted serious infectious diseases from needle sticks in the last decade.

■ **AIDS cases:** One health care worker a week, on average

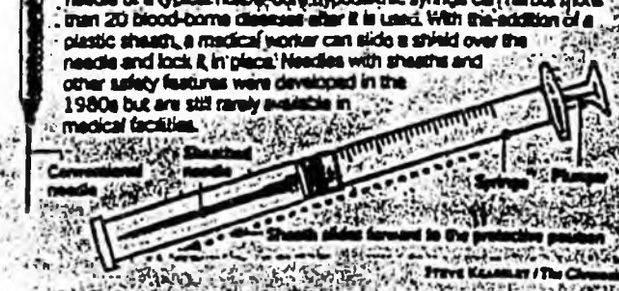
■ **Occupational risk:** Medical workers are four times more likely to die from a job-related injury than police officers.



PHOTOMANIPULATION BY CHRIS STEPHAN/THE CHRONICLE

SIMPLE SAFETY FEATURES

Today, needle sticks to health care workers can be reduced dramatically by using needles with safety features. The exposed needle of a typical hollow-bore hypodermic syringe can harbor more than 20 blood-borne diseases after it is used. With the addition of a plastic sheath, a medical worker can slide a shield over the needle and lock it in place. Needles with sheaths and other safety features were developed in the 1980s but are still rarely available in medical facilities.



Steve Kaarlet / The Chronicle

INSIDE

ABOUT THE SERIES

"Deadly Needles" is a three-part series about how the medical industry and government let deadly needle stick injuries run rampant among health care workers. Today's installment covers 1978 to 1987, when the needle stick epidemic becomes apparent to the medical establishment.

■ **DAY 1 (1978-1987):** A needle stick epidemic ravages health care workers — but no one takes action.

■ **DAY 2 (1987-1992):** Health care workers demand action, but the medical establishment delays.

■ **DAY 3 (1992-1998):** The medical industry and government break their promises to protect workers.

▸ Coordinated coverage on television and the Internet ▸ A8

Needle Stick Epidemic

From Page 1

least 10 years ago. Today, however, few have reached the hands of health care workers, even at the nation's most technologically advanced institutions.

In a six-month investigation, The Chronicle has uncovered a chilling pattern of indifference and neglect within the nation's medical industry.

Hundreds of interviews and thousands of pages of documents show that the nation's leading needle manufacturer suppressed the market for safer needles, at times using tactics that have raised serious legal and ethical questions.

Health care providers, under intense pressure to contain costs, balked at purchasing safer needles, calculating that it was cheaper to buy conventional needles than to save their workers' lives.

And, perhaps most troubling of all, government watchdog agencies failed to enact and enforce regulations that would have protected health care workers from danger.

"It's disgusting that we can allow people to die when we can easily prevent it," said Andrew Stern, president of the Service Employees International Union, the nation's largest health care workers' union.

"When a crane falls or a mine caves in, the government rushes to do something about it. But when health care workers are dying, it's invisible."

Two decades after Maki's unsettling discovery, the needle stick epidemic rages on. This year, the nation's 8.8 million nurses, doctors, laboratory technicians and hospital housekeepers will suffer 1 million needle injuries. Thousands of them will get hepatitis and other lethal diseases.

This is the story of an epidemic that could have been prevented — how it emerged, why calls for action went unanswered and how health care workers were betrayed by the people who were supposed to protect them.

Franklin Lakes, N.J.

Becton Dickinson and Company started as a small medical device import business in 1897, about 50 years after the first hypodermic syringe entered the market.

Even then, medical experts realized they had a problem: Blood-contaminated hollow-bore needles could transmit infectious diseases with deadly efficiency.

Researchers would soon report cases of diphtheria, malaria and syphilis contracted from needles. The variety of diseases would grow into the dozens, with herpes, tuberculosis, and others joining the list.

By the 1960s, executives of Becton Dickinson knew that hepatitis B could be transmitted by needles — through the reuse of contaminated needles and through accidental needle sticks.

"It was probably the reason Becton Dickinson is a $2 billion company today," said company executive Joseph Welch at a deposition eight years ago.

Welch explained that the soaring number of hepatitis B cases created a huge market for disposable syringes, which would make

1981: *Page A7 Col. 5*

From Page A6

reusable needles obsolete.

With cash raised from its first public stock offering in 1962, Becton Dickinson began producing tens of millions of the disposable products.

The new disposable syringes reduced infectious transmissions between patients but did nothing to decrease the accidental needle sticks that were spreading diseases to health care workers.

And the company's attention soon turned to making needles sharper, not safer.

The reason: In the late 1970s the Japanese firm Terumo had begun to flood the U.S. market with cheaper, sharper needles.

Within two years, Becton Dickinson overhauled its manufacturing facilities and was mass-producing razor-sharp needles that, in the words of a company advertisement, go through the skin "like butter. Every time."

Madison, Wis.

In 1981, Dr. Maki and nurse McCormick were ready to publish the first systematic study of needle sticks in the United States.

They had studied 316 reported needle stick injuries over a 47-month period between 1975 and 1979. They investigated how the injuries occurred, who the victims were and how the number of accidents could be reduced.

The researchers were stunned by the high rate of needle sticks at their hospital — an average of one out of every 12 workers reported being injured every year.

"But we believe," they wrote, "these figures underestimate the magnitude of the problem."

It was the first indication that needle sticks were a far more serious problem than anyone had suspected.

And, for the first time, health care workers were warned not to recap needles — a practice Maki and McCormick found frequently led to needle sticks.

Becton Dickinson Headquarters
Franklin Lakes, N.J.

Meanwhile, times were good for Becton Dickinson.

The company had overcome the threat from Terumo. Its strategy of signing needle distributors to exclusive, long-term contracts kept Terumo and other competitors at bay and helped establish Becton Dickinson as the world's largest needle manufacturer. It is a position the company maintains today with an estimated 70 percent share of the U.S. market.

But by the early 1980s the dangers of needle sticks had begun to spawn new ideas for making needles safer.

Becton Dickinson insists that it has led the push for safer needles.

"Becton Dickinson's long

tion in the safety arena," said company spokesman Ronald Jasper, "provides indisputable proof of our commitment to protecting health-care workers and other users of our products."

In 1981, Becton Dickinson engineer Michael Bennett filed a patent for a new needle shield. At the same time, his colleagues developed designs for oversized needle covers that make syringes easier to recap as well as devices for clipping off needle points.

But Becton Dickinson did not produce any of the devices, even though "the needle stick problem was obvious at that point," said former Becton Dickinson engineer Robert Stathopulos, an independent consultant who now works for rival manufacturers.

"The company thought that customers would not pay extra money for any of these safety measures, and they would just cut down on profitability."

In a 1990 suit filed by a needle stick victim, Becton Dickinson Medical Director Edward Duffie offered a candid assessment of the company's response to the needle stick epidemic:

"I don't think we did anything, specifically."

San Francisco General Hospital
San Francisco

Dr. June Fisher believes she would have been wasting her time if in the 1970s she had tried to convince hospital administrators that needle injuries were a problem.

"If we had had a meeting on sticks at that point, no one would have come," said Fisher, a medical device expert who set up a health and safety project at San Francisco General Hospital in 1978.

"The approach would have been to modify behavior," she said, "to tell health care workers to be careful, to take their time."

That attitude persisted across the nation throughout the decade, undermining efforts to measure the epidemic's scope and leading

FEDERAL: *Page A8 Col. 1*

From Page A7

employees to be more cautious — or worse, disciplining them if they stuck themselves.

Some critics insist that the epidemic was ignored because of who the victims were: mostly nonunionized female or minority nurses, housekeepers and orderlies with little power.

"We are not considered important," laundry worker and multiple-stick victim Gwyen Spruill told a congressional committee in 1992. "Our work is not considered anything at all."

Even medical workers with clout rarely complained of their injuries, let alone demanded protection.

"A stick has always been viewed as a rite of passage, a battle scar, a point of pride — as in, 'I've been stuck six times and never been infected,'" said Patricia Wetzel, a Texas doctor who contracted the AIDS virus from a needle stick in 1991.

"The attitude is that if you think about yourself and get protective equipment, you're a sissy."

Food and Drug Administration
Rockville, Md.

In 1976 lawmakers gave the FDA the authority to regulate medical devices. The agency's mandate was to ensure the "efficacy and safety" of such products.

But any items marketed before 1976 were exempt from review, which, in effect, allowed manufacturers to continue producing conventional needles.

"It's disgusting that we can allow people to die when we can easily prevent it."

ANDREW STERN,
Service Employees International Union president

By 1983 the agency knew conventional needles could be made to be safer, because entrepreneurs had begun asking the agency to review new syringes with safety features.

But the agency took no action to compel the manufacturers of conventional needles to make safer devices.

Administration
Washington, D.C.

OSHA issued voluntary guidelines on hepatitis B to the nation's health care employers in 1983.

The agency's notice described the viral disease in detail and recommended work practices including hand washing and the use of a new hepatitis B vaccine.

But OSHA failed to mention the hazards of recapping needles or to convey the urgency of the needle stick problem.

Centers for Disease Control
Atlanta

By the early 1980s, CDC officials knew they had a serious problem with accidental needle sticks.

Thousands of health care workers were contracting hepatitis B from needle sticks every year — and hundreds were dying.

In 1985, CDC officials came out with their recommendations to health care workers: Use gowns, gloves, masks and the hepatitis vaccine as protections against infection.

But by then, needle sticks were already spreading a new disease through hospitals and the ranks of health care workers — a mysterious infection with no known cure that was killing its victims with brutal, tragic efficiency.

The appearance of the AIDS virus did what the hepatitis crisis could not: It put the government and the medical industry on alert.

"Had AIDS not happened onto the scene," Duffie testified in a needle stick victim's 1990 lawsuit against Becton Dickinson, "little or nothing would have been made of the ... ongoing risks ... to the health care workers."

Sinai Hospital
Baltimore

In February 1982, a 33-year-old housekeeper at Sinai Hospital in Baltimore was taking out the garbage when a discarded needle pricked the palm of his hand.

Fourteen months later, he checked into the hospital's outpatient center complaining of fever, chills, shortness of breath and a cough that wouldn't go away.

Tests were run; his history was checked. The final diagnosis: He had AIDS, and the only way he could have gotten it was from the needle stick the year before.

On June 12, 1983, the house-

Federal Agencies Fail to Order Safer Needles for Health Workers

keeper died, leaving behind a 9-year-old child and a girlfriend six months' pregnant. A letter in the March 1984 issue of the medical journal Lancet noted dryly that he was the first health care worker known to have contracted the AIDS virus from a needle stick.

The news jolted the medical community. Hospitals and manufacturers began to rethink their passive responses to the dangers of conventional needles.

Still, Becton Dickinson was cautious. Standard needles had lifted the company to the top of the industry, and a sudden move toward alternative products could open the market to rival firms and erode Becton Dickinson's market share — or worse, expose the company to lawsuits over its unshielded needles.

Offices of Dr. David Atofi
Rossville, Ga.

On April 15, 1985, medical assistant Jenia Hamley was stuck in the left index finger while recapping a Becton Dickinson needle.

> Five months later, she tested positive for hepatitis B. Worse, Hamley had been five months' pregnant at the time of the stick, and she claimed the infection caused brain damage to her newborn son.

Hamley contended that she had merely followed the product's instructions, which recommended recapping before throwing the needle away. So she sued Becton Dickinson, arguing that its product was unreasonably dangerous.

The company responded that its instructions to recap the needle met industry guidelines in 1985 — even though four years earlier the study by Maki and McCormick had specifically warned that recapping was a leading cause of needle sticks.

The company also argued that Hamley was a trained medical expert who needed no warning because she knew the dangers of needles better than the company did. It is a defense the company uses to this day.

Becton Dickinson settled the case confidentially and denied liability.

"All of Becton Dickinson's products are safe when used as instructed," said company spokesman Jasper.

Administrative offices
San Francisco General

Managers at San Francisco General Hospital were in the forefront of treatment of AIDS patients, opening the nation's first full AIDS ward in 1985.

But they responded to employee concerns about contaminated needles by merely urging workers to use more caution around needles and to slow down.

"Here was the premier AIDS center in the world, and there was such resistance — they just kept downplaying the risk to health care workers," said John Mehring, a health and safety officer for the Service Employee International Union.

Mehring and his union, which represented more than half a million medical workers across the country, finally realized that the battle for greater needle safety would never be won piecemeal, hospital by hospital.

So in September 1986, with several other unions that represented health care workers, SEIU petitioned OSHA to issue emergency regulations that would force hospitals to provide greater protections for their employees.

Thirteen months would pass before the agency finally responded to the petition. On Oct. 22, 1987, Assistant Labor Secretary John Pendergrass rejected it, stating that there was insufficient data to grant the emergency request.

Instead, OSHA said it would develop tough new workplace regulations to protect health care workers — a process that would involve sending notices to 600,000 employers, gathering comments and holding public hearings.

The process would be lengthy, but health care workers were optimistic that the agency was at last paying attention to the needle stick epidemic.

ABOUT THE NUMBERS

The statistics for this series came from a number of sources:

The figure of 1 million needle sticks per year is an estimate from the International Health Care Worker Safety Center, based on data from 70 hospitals around the nation. Higher rates have been reported by the Centers for Disease Control and medical journals.

Estimates of the number of medical workers annually infected by the hepatitis B virus from needle sticks, which range from a high of 12,000 in the 1980s to the current figure of 1,000, have been reported by the Centers for Disease Control, the Occupational Safety and Health Administration and medical researchers. Death estimates of 200 to 300 a year in the 1980s are from the CDC and OSHA.

The number of workers contracting HIV from needle sticks — 50 to 60 a year — is an estimate by the International Health Care Worker Safety Center.

The hepatitis C needle stick cases have been poorly tracked, but most experts estimate the numbers to be in the thousands each year.

Ward 86
San Francisco General

In July 1987, a young nurse who asks to be identified only as Jane Doe was finishing the 11th hour of her 12-hour shift in the AIDS unit at San Francisco General.

She was exhausted as she withdrew an unsheathed needle from an intravenous line connected to a patient.

Safe line connectors with recessed needles were already in use at hospitals across the country. But they were unavailable at San Francisco General, where intravenous lines were still joined with a hypodermic needle held by adhesive tape.

As Jane Doe held up the intravenous fluid bag, the needle went through the bag and into her finger.

"I think I said, 'Oh, shit,' " she said, recalling the horror o moment. "I was struck by irony that in my three years nurse, I never had a needle st

Six weeks later, Jane Doe ed positive for the AIDS virus became the first documented of a medical worker at the ho to be infected with HIV throu needle injury.

She was the 13th confir case in the nation.

St. Joseph's Hospital
Orange, Calif.

Nurse Norma Sampson concerned about the constant posure of health care worker hepatitis B through needle stic

"Then, when I read ab AIDS," she recalled, "I thou 'Oh, boy, this is worse than hep tis. People will surely die.' "

So Sampson came up with own solution: A syringe with a s ple plastic shield, that could s over a needle. With the help of relatives and a South Carolina gineer, Sampson refined her p uct.

In 1987, Becton Dickin bought the rights to the device

The manufacturer now had technology in hand to produ safer product — one that co slash the number of needle st and save thousands of health c workers' lives.

Tomorrow: Years of Delay

RELATED COVERAGE ON TV AND INTERNET

For more about "Deadly Needles" and Ellen Dayton's story, watch NewsCenter 4 at 6 p.m. Chronicle staff writers Reynolds Holding and William Carlsen will also appear on "Take Issue" with Pete Wilson on BayTV (Channel 35 in most systems) at 8 p.m.

For more details and dialogue about the "Deadly Needles," log onto www.sfgate.com.

THE CAFE KRON BAY-TV

Nurse's Life Changed in a Moment

"I knew that everyone got needle sticks, but it's one of those things where you think it (an infection) is not going to happen to you."

ELLEN DAYTON

By Reynolds Holding
Chronicle Staff Writer

If you had to have your blood drawn at the University of California drug clinic here at 18th and Folsom streets, you wanted Ellen Dayton to do it. She was that good.

Not good enough, though, to avoid an accident that strikes health care workers more than a million times each year.

It happened March 20, 1996. Dayton, a nurse practitioner, had just finished drawing blood from a young cocaine and speed addict infected with HIV. Holding the needle in her right hand, she reached across with her left, moving reflexively to catch three blood-collection tubes as they rolled toward a counter's edge.

The needle, filled with infected blood, pierced the side of her left index finger.

"I felt scared and stressed and panicked," she says, recalling the fateful moment. "And at the same time, there was this other voice minimizing things, like, 'No, it's not going to happen to me. I'm not going to get HIV.' "

Two months later, she tested positive for hepatitis C. Within 13 months she learned that she had HIV, the virus that causes AIDS. Today, she can no longer take care of the weak and the sick and the drug addicted because she must take care of herself.

Most days she feels so ill she cannot leave her couch. Her better days are usually consumed by medical appointments and arduous hours of treatment. And though it is not a life that has turned out as she had hoped, it is still one that she does not regret.

"I knew that I was working with people with HIV, but that was the commitment," she says. "And even knowing how dangerous it is from where I sit today, I wouldn't choose to do it differently. ... That's what I came to California to do."

Dayton, 55, came from a farm in upstate New York, growing up so poor that she will not speak of her childhood. She fled after high school, bouncing from New York City to Berkeley to Buffalo, becoming a single mother, going on welfare, eventually coming out as a lesbian.

In the early 1970s, she got a job at a battered women's shelter in Buffalo and "found out that what I really wanted to do was work with people," she says. "It really seemed I was a natural."

Dayton took night courses in human services, found a job working with the mentally ill and confirmed her talent for counseling.

"I loved it because I was good at it," she says.

But as she raised a teenage daughter, she struggled to make ends meet. Then, in 1986, she came to San Francisco.

Hired first as a drug and alcohol counselor, she soon got a job with the AIDS health project at San Francisco General Hospital, where she was drawn to the nurses and doctors dedicated to fighting the deadly disease.

"I began asking them about becoming a nurse practitioner because I saw it as something that I wanted to do," she says, "and I never really had that — a real goal."

It would be a difficult process: She studied for three years in a select program at the University of California at San Francisco while working in her spare time at San Francisco General. "It was probably the hardest thing I've done with my life," she recalls.

"But I made it. And I felt great."

By December 1995, Dayton was working two jobs, one at San Francisco General and the other at the University of California drug clinic.

Ellen Dayton, who contracted hepatitis C and HIV from a needle stick two years ago, spends her days at medical appointments and resting at home. Most days she cannot leave her couch

She did well, making more than $60,000 a year and settling down with her partner. The possibility of contracting a disease from a needle stick was far from her mind.

"I knew that everyone got needle sticks," she says, "but it's one of those things where you think it (an infection) is not going to happen to you."

When it did happen, 10 weeks after she started her job at the clinic, Dayton was using a blood-drawing needle without a safety shield, the only device available. She calmly finished her work with the patient, reported the accident and within hours began taking AZT and other drugs to fend off the possibility of an HIV infection.

The powerful drugs made her nauseous almost immediately. Soon she was too ill to work. And then the guilt set in.

"I blamed myself in the beginning," she recalls. "And yet I knew I was good at drawing blood. I was really good. Lots of times when someone couldn't get into a (patient's) vein, they would call me in."

"And if there had been a needle with a safety shield on it, I would have used it, and the needle stick wouldn't have happened. So I don't blame myself now."

Instead, she blames the needle manufacturer — Becton Dickinson and Company — for selling a product that she contends in a lawsuit is unreasonably dangerous. Becton Dickinson denies liability.

But her life has changed forever.

"It's so horrid what my family and I have had to go through this last year and a half," she says, "and it's not like there's an end to this. It keeps going on and I don't know where it's going."

"I don't know if I'm ever going to get better, to feel the same again. I sort of feel like I'm probably not. And some days it's just, I just cry."

Safer Needles Save Money, Report Says

Lost work time, counseling, liability costs would drop

William Carlsen, Chronicle Staff Writer
Friday, December 18, 1998

URL: http://www.sfgate.com/cgi-bin/article.cgi?file=/chronicle/archive/1998/12/18/MN44912.DTL

California health care facilities could save more than $100 million a year by using safety needles to protect their workers from accidental needle sticks, according to a state study released yesterday.

The study by top state worker safety officials found that the new devices will cost more but that the cost will be offset by the savings from the reduced need for testing and treatment of needle injuries, which can transmit HIV, hepatitis and other serious diseases.

In September, California became the first state in the nation to pass legislation mandating the use of safe needle technology to prevent an epidemic of needle injuries that have struck down tens of thousands of health care workers over the past decade.

Yesterday, the seven-member Occupational Safety and Health Standards Board, the rule-making body for worker safety, formally adopted emergency regulations based on the legislation by Assemblywoman Carole Migden, D-San Francisco.

Migden introduced her bill after a series of stories by The Chronicle in April that found that 1 million health care and public safety workers each year are injured by needle sticks -- more than 100,000 of them in California.

Migden's bill requires state medical facilities to switch by August from conventional needles to syringes with safety features like sliding sheaths or self-blunting needles. Syringes with safety features have been on the market for years but have rarely reached the hands of workers.

The projected savings from the use of safety needles are considered ``conservative,'' the study said, because they do not account for the full cost of needle stick injuries -- ranging from the additional costs of emergency room visits, lost work time, counseling, lost productivity, managerial and personnel expenses and liability costs.

The state's landmark regulations could also result in a small increase in the num-

ber of health care personnel in the state, the board's staff said, ``as it becomes known that the California health care industry provides better worker protection than the rest of the nation.''

Under the emergency regulations adopted by the board yesterday, health care facilities will have to start next month to collect needle injury information, including the type and brand of needle involved.

The standards board, which unanimously approved the emergency regulations without discussion, will hold additional meetings next year, including a public hearing in February, before making the regulations permanent.

"This is a love-fest," said Shannon Sutherland of the California Nurses Association after representatives from the state health department and the hospital association praised the new regulations in comments before the board.

Roger Richter, who represented more than 600 hospital members of the California Healthcare Association, told the board that his group strongly supported the new regulations even though they "would add considerable costs."

Allan LoFaso, Migden's representative at the meeting, said afterward that the new regulation "will save a lot of lives in the workplace." Speaking for Migden, he said, "she hopes that other states and the federal government will now follow suit and protect workers throughout the country."

The report released yesterday estimates that each needle stick costs employers between $2,234 and $3,832, while the median increase in the cost of a safer needle device is 24 cents.

The agency estimated that over time, as the price of the safety devices falls because of their increased production, the savings benefits will increase.

The staff of the standards board estimated that the increased cost of the safer needle technology will cost employers about $104 million a year. Employers will also have increased record-keeping costs of $81 million a year for their required needle stick injury logs.

The savings on screening and treatment of needle stick injuries, however, were estimated at $291 million, for a net savings of $106 million each year.

The staff estimated that private businesses, such as hospitals, laboratories, nursing care facilities, dentist's offices and funeral services, will save about $95 million annually, while state and local hospitals and emergency services will save about $10 million.

ALASKA NURSES ASSOCIATION

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(907) 274-0827 FAX: (907) 272-0292

FOR IMMEDIATE RELEASE 19 March 2000

Anchorage, Alaska: Alaska's Registered Nurses are advocating for legislation which will protect them from diseases transmitted through accidental needle sticks and other sharp injuries in the workplace. Senate Bill 261, which outlines safe needle legislation, is a first step in providing nurses and other healthcare workers current technology to protection them from over 20 diseases spread from exposure to blood, including HIV, Hepatitis B and C, syphilis, and malaria, and herpes. "Alaska's nurses are on the frontlines providing care for their patients, putting themselves at risk every time they perform a procedure with conventional needle devices" states Wanda Katinszky, President, "yet even with the best techniques, needlestick injuries will occur which will prove devastating to those nurses and their families".

Between **800,000 to one million healthcare workers** suffer injuries from conventional needle and sharp devices annually. This results in up to **5,000** new cases of health care workers with HIV, Hepatitis C, or Hepatitis B due to occupational injury. Nurses suffer the majority of these needlesticks and other sharps exposures, and cost the employer up to **$3000** for follow-up tests when exposed to blood from a patient considered at high risk for bloodborne diseases. The American Hospital Association says that one case of serious infection by bloodborne pathogens can add up to **$1 million** or more in expenditures for testing follow-up, lost time and disability payments.

Although safe needle products have been available since the 1970's, and both OSHA and the FDA have issued alerts and/or and compliance directives since the 1980's, only 15% of U. S. hospitals use these safer needle devices to protect their workers. There are facilities in Alaska where these devices are not available. "It is unconscionable that safe devices exist, yet employers have not made these devices accessible to their employees", states Katinszky.

Six states have already passed similar legislation, and this bill, introduced by Senator *Kim Elton*, contains model language to require employers to:

- involve frontline health care workers in identifying and evaluating safe needle devices;
- provide training to frontline health care workers on proper use of the safe devices; and,
- ensure that needlestick and sharps injuries continue to be reported on OSHA 200 logs.

More information on this topic can be found at the website of the American Nurses Association: http://www.nursingworld.org/needlestick/nshome.htm.

For more information about SB261, contact Angie Schmitz at the office of Senator Kim Elton at 465-4947, or Wanda Katinszky at 345-3913.

TESTIMONY ON SB 261

My name is Carol Clausson. I am a registered nurse practicing in the State of Alaska. I suffered a needlestick in the past. The patient whose needle I stuck myself with was a high-risk patient because he had a history of drug use. This incident was very traumatic to me. I drove home from work that night in tears, wondering who would raise my young children should I have contracted a fatal bloodborne disease.

The area in which I work began using needleless access devices but later switched to and is now using a system that has needles. I was not involved in the decision making process that led to this change from a safe practice to an unsafe practice. I am a staff nurse and I speak in support of this legislation for the safe practice of my profession.

I think it is vitally important that the front line workers be involved in product evaluation of this nature.

I speak in support of this legislation and hope that the institution in which I work will "go needleless".

Thank you very much for your time and attention to this matter.

Carol Clausson, RNC
13200 Ridgeview Drive
Anchorage Alaska 99516
907 345-7912

Subject: testimony re: needle sticks in nursing
Date: Tue, 07 Mar 2000 15:57:02 -0900
From: Wendy Alward <"markus@gci.net"@gci.net>
Reply-To: "markus@gci.net"@gci.net
To: Angie_Schmitz@legis.state.ak.us
CC: polarmagic@webtv.net

Hello Angie,
I am an RN at Providence Alaska Medical Center and I would like to have my testimony included in the hearing tomorrow. I have been a nurse in an intensive care area for 9 years and have been stuck with contaminated needles, ie blood exposure at least 5 times, with numerous, 'near misses'. Most of these occurred when I was in a hurry due to staff shortages that resulted in high acuity assignments; Other times by coworkers.
I have been very fortunate in that I have not contracted HIV or any of the hepatitises thus far.
The fact that many other hospitals already have safe needless systems already in place confirms that this bill is very important.
What a relief it would be to be able to go to work and know that the risk of a serious exposure has been diminished substantially by having a needleless system in place.
Thank you for all of your time and effort in persuing this bill,
Sincerely, Wendy Alward RN BSN

TESTIMONY ON SB 261

I sustained a needle stick injury (my first), after 25 years of nursing, while working in the Emergency Department at Providence Alaska Medical Center. The "butterfly" device that I was using to draw blood did not have a safety sheathe. I recognize how important individual safety practices are in preventing any kind of injury, and most use these devices without problems, but the risk of life altering infections and diseases requires extra effort to protect those, who in a moment of rush or carelessness, might be exposed. My patient had Hepatitis C. I have been tested once and my test was negative, but the concern and stress until the final test at 6 months is negative has an impact on my husband and kids also.

The real cost to hospitals for using safety devices would be such a small fraction of the cost of giving safe, competent patient care. I do not know what expenses the hospital incurs when employees need follow-up testing and treatment, but I suspect the cost of just one incident of employee seroconversion would be greater by far than the added cost of safety devices.

Please support Senate Bill 261. Thank you.

Janice (Jay) Laxson, Registered Nurse
11901 Woodbourne Circle
Anchorage AK 99516-2554
907.345.3639

Subject: SB261
Date: Wed, 8 Mar 2000 14:52:18 EST
From: Neilson522@aol.com
To: Senator_Kim_Elton@legis.state.ak.us

As a registered nurse for over 16 years at Providence Alaska Medical Center, I am impacted by this issue every shift that I work , as are my esteemed colleagues. Thank you for introducing it. I encourage your continued support of this important legislation.

Sincerely,
Lori Neilson RN
Providence Alaska Medical Center
Neonatal Intensive Care Unit

Subject: [Fwd: SB251]
Date: Thu, 09 Mar 2000 08:25:50 -0900
From: Kim Elton <Senator_Kim_Elton@legis.state.ak.us>
Organization: Alaska State Legislature
To: angie Schmitz <Angie_Schmitz@legis.state.ak.us>

Subject: SB251
Date: Wed, 08 Mar 2000 07:37:07 -0900
From: Kathy Logan <kat@alaska.net>
To: Senator_Kim_Elton@legis.state.ak.us

Dear Senator Elton,

First, let me thank you for sponsoring SB261.

My name is Kathy Logan and I am a Registered Nurse at Providence Alaska Medical Center. I am what is called a float nurse, so on any night I can take care of the life of the newest Alaskan or one of it's Pioneers.

However, on any given night I risk my life by taking care of those patients because Providence chooses to use needles instead of a needleless system.

Four months ago I was accidentally stuck by a dirty needle doing an ordinary procedure. The patient had what is called a medicillin resistant staph areous (MRSA) infection which is very dangerous because most antibiotics will not work on it. Initially, I was just happy that the puncture site did not get infected. Now I am still in the series of post-stick tests and am still at risk for getting Hepatitis A, B, or C and HIV. From any of these I could die.

Although I feel that I should take some responsibility for the accident I cannot help but think that if Providence was made to look at the new needleless systems that it might not have happened. I should not have to risk my life to help and care for others.

Thank you so much for listening to my story.

Kathy Logan
1345 O Street #B
Anchorage, Alaska
99501

Subject: [Fwd: SAFER NEEDLE BILL—SB 261]
Date: Thu, 09 Mar 2000 08:31:37 -0900
From: Kim Elton <Senator_Kim_Elton@legis.state.ak.us>
Organization: Alaska State Legislature
To: angie Schmitz <Angie_Schmitz@legis.state.ak.us>

Subject: SAFER NEEDLE BILL—SB 261
Date: Wed, 08 Mar 2000 08:06:23 -0900
From: Connie <joeconni@alaska.net>

Dear Senators:

Thank you so much for going to the line for health care workers. I am a R.N. in a critical care unit. I personally know one R.N. who ended up with a liver transplant and 3 other R.N.'s that have contracted Hepatitis C from needle stick injuries. I personally contracted a viral Hepatitis and missed 3 months of work. I can't remember a specific needle stick that could have infected me. The problem is that we work at so fast a pace and at a high productivity rates required by our employers that we do not realize that we had a needle stick or scrape. Also, Nurses tend to under report needle stick injuries. You will hear them say " It was clean needle so I won't bother with the paperwork". This is after they have injected the medication into an IV port. Also, O.R. R.N.'s that get sticks during surgery don't want to report them as they do not want to get a surgeon in trouble.

Now it seems that health care corporations purchase products through the bid process. the nurses at the bedside have very no input on the new products. Senator Elton's proposed bill really puts teeth in the process. Thank you for your work.

I personally just finished my year of quarterly checks for HIV, Hep B, and Hep C. This was after a contaminated needle stick. I am still ok. Remember that there are twenty other disease transmitted by needle sticks that are not checked for post stick.

One other issue is that only needle sticks from known HIV positive patients allow the nurse to receive the anti viral drug within two hours of the injury. Unfortunately, patients are not screened for hepatitis or HIV as part of admission to our facility. Our lives are being based on statistics. How much is a life worth?

I personally have immunized myself against Hep A and B. Unfortunately Hep C is a major problem and thus far no vaccine has been invented for this terrible disease.

I can tell you that SB261 will be a huge issue that health care corporations will fight. I do hope that you can stand strong together.

Life is so valuable. Current trends tell me that health care workers are easily disposable. We need tough laws to protect us. We need you, we need OSHA and NIOSH fighting for those of us that remain working in the health care industry. Please do your best to protect all of us. Each person, laundry worker to nurse need to be able to work in as safe an environment as possible.

Thank you all for your dedication and service to the Alaskan people.

Sincerely,
Connie Federmann R.N.

2421 Tasha Dr.
Anchorage, AK 99502

Public Opinion Messages

Ms. Janice E ,
11901 Woodbourne Cir 11901 Woodbourne Cir
Anchorage, AK 99516
Phone: 345-3639
E-mail:

Constituency: N
Distribution:
Affiliation:
Reg Voter: U

Subject/Bill SB 261 Supports

I sustained a needle stick injury while working in the emergency department at Providence Hospital. The butterfly devise I was using to draw blood did not have a safety sheathe. The real cost to hospitals for using safety devises would be a small additional fraction of the cost over using unprotected needles. Please support SB 261.
Date Sent: 03/06/2000

Alaska Hepatitis C Coalition

5350 Little Tree Street
Anchorage, AK 99507
(907) 563-7675

Senator Kim Elton
State Capitol Room 504
Juneau, AK 99801-1182

March 1, 2000

Dear Senator Elton:

The Alaska Hepatitis C Coalition supports the passage of Senate Bill 261"An Act relating to needle stick and sharps injury protections and the use of safe needles by health care facilities and health care professionals." We believe that this legislation will significantly reduce the risk of occupational exposure to blood borne pathogens via accidental needle sticks or percutaneous exposure through other sharp instruments in the health care setting.

The Centers for Disease Control and Prevention (CDC) states in the October 16, 1998 Morbidity and Mortality Weekly Report (MMWR) issue entitled *Recommendations for Prevention and Control of Hepatitis C Virus (HCV) Infection and HCV-Related Chronic Disease*:

> Health care, emergency medical, and public safety workers should be educated regarding risk for and prevention of blood borne infections, including the need to be vaccinated against hepatitis B. Standard barrier precautions and engineering controls should be implemented to prevent exposure to blood. Protocols should be in place for reporting and follow-up of percutaneous or permucosal exposures to blood or body fluids that contain blood.

Senate Bill 261 will ensure that health care facilities provide a safer environment through careful product evaluation, enacting a formal exposure control plan and by implementing a sharps injury log.

It is conservatively estimated that 11,000 Alaskans are infected with HCV. It is not know how many of those individuals became exposed to the virus through accidental needle sticks while working in a health care facility, however several of our members believe that this was the source of their infection. Senate Bill 261 will provide additional protection to health care workers from becoming infected with the hepatitis C virus as well as other blood borne infections and we strongly encourage that it be passed into Alaska State Statue.

Sincerely,

Kendall Thomas, MS
President

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General Teamsters Local 959 State of Alaska

Affiliated with International Brotherhood of Teamsters

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March 29, 2000

Representative Norman Rokeberg
Chair
Representative Andrew Halcro
Vice Chair
Labor & Commerce Committee
State Capitol
Juneau, AK 99801

Re: HB 440 Needle Stick and Sharps Injury Protection

Dear Representative Rokeberg and Representative Halcro:

On behalf of health care workers we represent in the State, I want to convey our strong support of **HB 440** Needle Stick and Sharps Injury Protection. We have joined with the Alaska Nurses Association, as well as other AFL-CIO unions who represent health care workers to address a risk these workers (nurses in particular) face in the daily performance of their jobs.

Health care workers are in immediate peril because of their contact with dangerous diseases. Accidental needle sticks spread blood transmitted diseases such as hepatitis B, hepatitis C and HIV. While health care workers in general are affected, it is a much more serious problem for those who provide direct patient care.

There is good news, however. Needle stick injuries are preventable. Safe needle devices have been on the market since the early 1970's. Unfortunately, it wasn't until 1992, the FDA issued an alert to all health care facilities to utilize non-needle IV systems where possible. It was not mandated and today only about 15% of the health care facilities use the devices available. I am pleased to say that our members at South Peninsula Hospital do have such choices available to them. We are fortunate to currently have a proactive, safety conscious administrator. I would remind you this is not presently mandated and could change with a new administrator in the future.

We have laws mandating seatbelts and child safety seats in motorized vehicles. We have laws requiring protective head gear and other worker safety devices on construction sites.

Why then should we not mandate devices that have been proven to reduce health risks and save lives of health care professionals as well?

Some may argue the safe needle devices cost more money. I submit in the short term this is true, but health care facilities will save a tremendous amount of money by not having to pay for follow-up testing, lost time and disability payments in the long term. When a nurse is stuck but no infection occurs, the average cost is about $3000.00. When infection does occur the cost rises dramatically.

The bill before you will require employers to use non-needle systems as engineering and work practice controls. It includes front line health care workers evaluating and identifying safe needle devices, updating exposure control plans and recording exposure incidents. This bill is proactive worker safety which positively impacts all health care workers throughout the State. We ask your assistance and support in assuring its enactment.

Sincerely,

TEAMSTERS LOCAL 959

Gerald L. Hood
Secretary-Treasurer

cc: Representative Harris
Representative Murkowski
Representative Sanders
Representative Brice
Representative Cissna

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ALASKA STATE
HOSPITAL & NURSING HOME
ASSOCIATION

March 7, 2000

Senator Kim Elton
State Capitol
Juneau, Alaska 99801-1182

Dear Senator Elton:

I am writing in response to your letter of March 3, 2000, asking that ASHNHA submit its concerns, questions, and our position that we plan to take on SB 261. Our legislative committee plans to review this legislation at our March 10, 2000, meeting, so therefore, we do not have a formal position on it at this time. I am submitting information that I will be presenting to the committee. I have included the legislative update from the International Healthcare Worker Safety Center with a summary of the 5 states that have passed needlestick prevention legislation. It is the opinion of some members that since OSHA and the FDA currently have standards that address needles, passage of state legislation is redundant and therefore, unnecessary. Others feel that as healthcare providers, we must be ever vigilant of assuring worker and patient safety. I will get back to you following our discussion.

Following is an outline of the OSHA standard and a description of FDA regulations:

OSHA - The current Federal standard for addressing needlestick injuries among health care workers is the OSHA bloodborne pathogens standard [29 CFR 1910.1030; 56 Fed. Reg.[††] 64004 (1991)], which has been in effect since 1992. The standard applies to all occupational exposures to blood or other potentially infectious materials. Notable elements of this standard require the following:

- A written exposure control plan designed to eliminate or minimize worker exposure to bloodborne pathogens
- Compliance with universal precautions (an infection control principle that treats all human blood and other potentially infectious materials as infectious)
- Engineering controls and work practices to eliminate or minimize worker exposure
- Personal protective equipment (if engineering controls and work practices do not eliminate occupational exposures)
- Prohibition of bending, recapping, or removing contaminated needles and other sharps unless such an act is required by a specific procedure or has no feasible alternative
- Prohibition of shearing or breaking contaminated needles (OSHA defines *contaminated* as the presence or the reasonably anticipated presence of blood or other potentially infectious materials on an item or surface)

[††] *Federal Register*. See Fed. Reg. in references.

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- Free hepatitis B vaccinations offered to workers with occupational exposure to bloodborne pathogens
- Worker training in appropriate engineering controls and work practices
- Post-exposure evaluation and followup, including post-exposure prophylaxis when appropriate

OSHA also intends to act to reduce the number of injuries that health care workers receive from needles and other sharp medical objects [OSHA 1999a]. First, the agency has revised the compliance directive (guidance to be used in the field) accompanying its 1992 bloodborne pathogens standard [29 CFR 1910.1030] to reflect newer and safer technologies now available and to increase the employer's responsibility to evaluate and use effective, safer technologies [OSHA 1999b]. Second, the agency has proposed a requirement in the revised recordkeeping rule that all injuries resulting from contaminated needles and sharps be recorded on OSHA logs used by employers to record injuries and illnesses. Finally, OSHA will take steps to amend its bloodborne pathogens standard by placing needlestick and sharps injuries on its regulatory agenda.

FDA - Under the regulations of the Food and Drug Administration (FDA) application clearance process [FDA 1995], the manufacturers of medical devices (including needles used in patient care) must meet requirements for appropriate registration and for listing, labeling, and good manufacturing practices for design and production. The process for receiving clearance or approval to market a device requires device manufacturers to (1) demonstrate that a new device is substantially equivalent to a legally marketed device or (2) document the safety and effectiveness of the new device for patient care through a more involved premarket approval process. FDA has also released two advisories pertaining to sharps and the risk of bloodborne pathogen transmission in the health care setting [FDA 1992; FDA et al. 1999].

Currently, five States have adopted and more than two dozen are considering legislation to require additional regulatory actions addressing bloodborne pathogen exposures to health care workers. The recent California standard [State of California 1998] has several requirements that go beyond those currently required by OSHA. These requirements include stronger language for the use of needleless systems for certain procedures or (where needleless systems are not available) the use of needles with engineered sharps injury protection for certain procedures. of the preventable hazardous conditions and practices that can lead to needlestick injuries.

I hope the above information is of value to you.

Sincerely yours,

Laraine

Laraine L. Derr
President/CEO

Enc. (1)

Legislative Update

State Activity

States that have passed needlestick prevention legislation:

California's revised bloodborne pathogens regulation requiring the use of safety devices went into effect July 1, 1999. The enabling legislation for the revised standard was AB 1208, which was signed into law in September 1998. As of January 2000, four other states – Tennessee, Maryland, Texas and New Jersey – have also passed needlestick prevention legislation.

Tennessee's law, SB 1023, signed into law in March 1999, covers the public and private sectors; it calls for the state health and labor commissioners to review sharps injury prevention technology and determine those work settings "where standards require" that safety devices be implemented. It provides that safety devices will not be required where the employer can demonstrate that such technology is "medically contraindicated" or is "no more effective than alternative measures used by an employer to prevent exposure incidents." The bill also requires that written exposure control plans be revised to reflect improvements in sharps prevention technology. In January 2000, as a follow-up to SB 1023, the Tennessee Department of Labor issued a Notice of Proposed Rulemaking that addresses the issue of when sharps injury prevention technology must be used.

Maryland's law, HB 287, signed into law in May 1999, called for a study group to make recommendations for needlestick injury prevention by the end of December 1999. The group's resulting report called for a revision of the state's bloodborne pathogens standard to mandate the use of safer needles. As of February 2000, a bill, SB 553/HB 360, has been introduced to effect this change.

Texas' law, HB 2085, signed into law in June 1999, covers state or government-run health care facilities, which are not subject to federal OSHA standards. The law requires state agencies with employees at risk for bloodborne pathogen exposure to "implement needleless systems and sharps with engineered sharps injury protection," explain decisions not to use safety devices, and keep sharps injury logs. The data will be collected by the state and made available in aggregate form.

New Jersey's law, A 3546, signed into law on January 4, 2000, requires that within 12 months, health care facilities use "only needles and other sharp devices with integrated safety features . . . cleared and approved . . . by the Food and Drug Admininstration and . . . commercially available for distribution." The law allows 36 months for manufacturers of prefilled syringes to comply; it also provides for a waiver procedure allowing health care workers to use conventional (non-safety) devices if it can be shown that using a safety device would have a "negative impact" on patient safety or "the success of a specific medical procedure." This law appears to be the strongest state needlestick prevention legislation passed to date.

Pending legislation:

Legislation has been introduced and is pending in a number of states, including Pennsylvania and Ohio. The Pennsylvania legislation, HB 1570, which covers the public sector only, was introduced by Republican State Representative Dennis O'Brien in early June, passed the house by unanimous vote in October, and is pending in the senate. It requires the Pennsylvania Health Department to enforce the use of safe needles in all state health care facilities. The Ohio bill, SB 183, which also covers the public sector, was introduced by Democratic State Senator Dan Brady in September, has passed the senate, and will be considered by the house in February. It requires each public employer that employs public health care workers to develop an exposure control plan incorporating the use of needleless systems and sharps with injury protection features.

For a complete list of states, bill numbers, and introduction dates, click here.

Department of Health and Mental Hygiene Health Care Worker Safety Act Study Group Report

excerpts

Report to Georges C. Benjamin, MD

Secretary of DHMH

on

House Bill 287 (1999)

December 1999

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Members

Liza Solomon, MHS, Dr.PH, Chair	Director, AIDS Administration, Department of H Mental Hygiene
Carol Bragg, RN	Professional Staff Nurses Association
Bill Borwegen	Service Employees International Union, AFL-CI(
Eric Chaney, MS, NREMTP	Maryland Institute for Emergency Medical Servic Systems
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Gwen DuBois, MD	Medical & Chirurgical Faculty of Maryland (Mec
Elizabeth Fuss, MS, RN, CIC	Association of Professionals in Infection Control Epidemiology (APIC)
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Janet Hall, MS, CC (NRCC)	Clinical Laboratory Management Association
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Sue Thomson, CRNI	Maryland Nurses Association
Patricia Williams	Health Facilities Association of Maryland
Staff	

Staff	
Rebekah Blackston, BS, RN	DHMH, AIDS Administration
Kathy Chavis, Esq.	DHMH, AIDS Administration

Executive Summary

The Study Group on Health Care Worker Safety was convened by appointment of the Department of Health and Mental Hygiene (DHMH) Secretary, Georges C. Benjamin, in accordance with House Bill 287(1999). In consultation with stakeholders, Secretary Benjamin is required to submit a report to the Governor and to the General Assembly by January 1, 2000, on the establishment of a Bloodborne Pathogen Standard governing occupational exposure to blood and other potentially infectious materials.

Workplace needlestick injuries are associated with occupational exposure to Hepatitis B, Hepatitis C, and HIV and are a cause of morbidity and distress for workers and significant expense to the healthcare industry. The Study Group noted that the recent national response to address needlestick injuries has occurred in part because of the continuing high incidence of sharps injuries in health care settings. Engineered sharps injury protection (or saferty devices) have been developed to help prevent needlestick injuries. When, i used properly, these devices have been found to reduce the occupational exposure risk.

Key findings of the study group include:

- Although there is growth in the number of Maryland health care facilities that are using engineered sharps injury protection, 24% of facilities responding to the survey reported they did not use engineered sharps injury protection devices at all. Of the facilities utilizing engineered sharp protection, most are only using devices for intravenous therapy procedures.
- OSHA requirements for documentation of bloodborne pathogen exposure do not accurately reflect injuries caused by such exposures.
- Although the OSHA bloodborne pathogen standard includes language on the use of engineered sharps injury protection, it has not been an effective tool in promoting widespread use of engineered sharps injury protection .

The Study Group recommends the introduction of legislation amending the Bloodborne Pathogen Standard. The Study Group has provided draft legislation that includes key elements necessary to strengthen the standard. Such elements include a requirement for exposure control plans within facilities, procedures for identifying and selecting sharps prevention technology, a sharps injury log for recording all injuries, and training and vaccination protocols. Additionally, the group recognized that employers and the industry will need time to developadopt procedures and adopt technology, so reasonable time allowances should be made for implementation of new practices. Finally, due to recognized limitations in current sharps protection technology, four exceptions to the recommendations are proposed to ensure high standards of care for patient safety and comfort.

Introduction

The Study Group on Health Care Worker Safety was convened by Georges C. Benjamin M.D., Secretary of Health of the Department of Health and Mental Hygiene (DHMH) in accordance with House Bill 287(1999). House Bill 287 directed the Department of Health and Mental Hygiene to hold hearings and prepare a report on the establishment of a Bloodborne Pathogen Standard governing occupational exposure to blood and other potentially infectious materials. Secretary Benjamin is directed to submit a report on the results of the investigation and study, together with policy recommendations, to the Governor and to the

Upon the passage of any proposed legislation, it is clear that the regulatory process must be followed. The Annotated Code of Maryland, Labor and Employment Article authorizes the Commissioner of the Department of Labor, Licensing and Regulation (DLLR) upon recommendation from the Occupational. Safety and Health Advisory Board to adopt regulations. The Advisory Board may propose or recommend reasonable regulations to prevent conditions that are detrimental to safety and health in each employment or place of employment in the State and that the Board finds are necessary to protect and to improve the safety and health of employees on the basis of circumstantial evidence and information. Proposed legislation would require the Board to advise, consult with, propose, and recommend to the Commissioner of Labor reasonable regulations specific to establishment of a Bloodborne Pathogen Standard governing occupational exposure to blood and other potentially infectious materials.

The Study Group recognizes that the process can be lengthy. For that reason, the Study Group encourages the designated agencies to pursue adoption of regulations with due diligence. Additionally, the Study Groups recommends that any proposed legislation and subsequently drafted regulations specifically provide reference to a time for implementation by employers of no more than twelve months after the final approval and the adoption of the proposed regulations.

7) Scope of the Regulation

There are particular procedures that employees perform that were identified as the primary functions that subject health care workers to injury:

1. Withdrawal of body fluids.
2. Accessing vein or artery.
3. Administration of medications or fluids.
4. Any other procedure with potential for a sharps injury exposure incident.

The Study Group agreed that the revised Bloodborne Pathogen Standard should specifically apply to protection of personshealthcare workers who are licensed, certified, or otherwise authorized in Maryland to provide health care services in the course of their activitiesemployment in the health care setting. These individuals are most at risk for sharps injuries in the normal course of their activities whether as an employeeemployment or as a volunteer healthcare provider. This designation thereby excludes medications administered within the home by care providers such as family members and those self-administering medications.

8) Other revisions as needed

Any additional revisions to the Bloodborne Pathogen Standards to prevent sharps injuries or exposure incidents should be based on continuing development of technology, prevention and treatment techniques.

Conclusion

It is evident that occupational exposure to Hepatitis B, Hepatitis C, and HIV are associated with workplace needlestick injuries and are a cause of significant morbidity for workers and expense for healthcare facilities. There continues to be a high incidence of sharps injuries in health care settings although engineered sharps injury protection devices are now available on the market for use in many procedures. The devices have been shown to help prevent needle-stick injuries, iIf used properly, these devices have been found to reducethe occupational exposure risks. Although there is a growth in the number of Maryland health care facilities that are using engineered sharps injury protection , for some procedures,

24% of facilities responding to the survey reported they did not use any engineered sharps injury protection devices. Although the Bloodborne Pathogen Standard includes language on the use of engineered sharps injury protection and has been revised to enhance enforcement efforts, it has not been an effective tool in promoting widespread use of engineered sharps injury protection. Therefore, the Study Group recommends the introduction of legislation amending the Bloodborne Pathogen Standard to better address healthcare worker safety in Maryland.

Reference List

1. California Code of Regulations, Title 8, §5193 Bloodborne Pathogens.
2. Centers for Disease Control and Prevention. "Evaluation of Safety Devices for Preventing Percutaneous Injuries Among Health-care Workers During Phlebotomy Procedures-Minneapolis, St. Paul, New York City, and San Francisco, 1993-1995". *Morbidity and Mortality Weekly Report*, 46(2): 21-29, 1997.
3. Chiarello, L.A. "Selection of Needlestick Prevention Devices: A Conceptual Framework for Approaching Product Evaluation". *American Journal of Infection Control* 23(6):386-395, 1995.
4. ECRI. "Needlestick Prevention Devices: The Risk and Prevention of Needlestick Transmitted Infections". *Health Devices* 20: 154-180, 1991.
5. ECRI. "Needlestick-Prevention Devices". *Health Devices* 27(6): 184-235, 1998.
6. Finkelstein, L. E., Solomon, R., and Mendelsohn, M. H. "Choosing Needlestick Prevention Devices". *American Journal of Nursing* 96: 18-19, 1996.
7. Jagger, J. and Bentley, M. "Injuries from Vascular Access Devices: High Risk and Preventable". *Advances in Exposure Prevention* 3(4): 1;44-47, 1998.
8. Jagger, J., Bentley, M., and Juillet, E. "Direct Cost of Follow-up for Percutaneous and Mucocutaneous Exposures to At-Risk Body Fluids: Data from Two Hospitals". *Advances in Exposure Prevention* 3(3): 1;34-35, 1998.
9. L'Ecuyer, Paul B., Schwab, E.O., Iademarco, E., Barr, N., Aton, E. A., and Fraser, V. J. "Randomized Prospective Study of the Impact of Three Needleless Intravenous Systems on Needlestick Injury Rates". *Infection Control and Hospital Epidemiology* 17(12): 803-808, 1999.
10. McConnell, Edwina A. "Pointed Strategies for Needlestick Prevention". *Nursing Management* 30(1): 57-60, 1999.
11. Occupational Safety & Health Administration, Directorate of Technical Support, Office of Occupational Health Nursing. "Safer Needle Devices: Protecting Health Care Workers", 1997.
12. Occupational Safety & Health Administration. "CPL 2-2.44D, Enforcement Procedures for the Occupational Exposure to Bloodborne Pathogens", 1999.
13. Occupational Safety & Health Administration. "Insurer Estimates Workers' Comp Costs from Needlestick Injury Can Reach $500K". *OSHA Guide for Health Care Facilities* 5(9), 1999.
14. Occupational Safety & Health Administration. "Record Summary of the Request for Information on Occupational Exposure to Bloodborne Pathogens Due to Percutaneous Injury", 1999.
15. Pugliese, G., and Salahuddin, M. *Sharps Injury Prevention Program: A Step-by-Step Guide.* American Hospital Association, 1999.
16. Service Employees International Union. "Model Legislation for State Plan States", 1999.
17. Service Employees International Union. *Guide to Preventing Needlestick Injuries. 3rd Edition*, 1998.
18. Smith, S. M., Haiduven, D. J., and Stevens, D. A. "Safety Product Evaluation: Six years of Experience". *American Journal of Infection Control*, 317-322, 1995.
19. Solomon, L., Thompson, C., Squiers, L., Wulff, K., and Benjamin, G. "Occupational Exposure and Voluntary Human Immunodeficiency Virus Testing: A Survey of Maryland Hospitals". *Infection*

SAMPLE
SHARPS INJURY LOG

49872

Injury ID (Please leave blank.) Facility ID (Please leave blank)

Please complete a Log for each employee exposure incident involving a sharp.

Fill in the one circle corresponding to the most appropriate answer. Use block print and avoid touching lines.

Institution: Department:

Address: Page # of

City: State: Zip code:

Date filled out: by: Phone number: ( )

Facility injury ID#

Date of injury: month / day / year

Time of injury: O am O pm

optional — Sex: O Male O Female; Age

Description of the exposure incident:

Job classification:
- O MD O Nurse
- O Medical assistant
- O Phlebotomist /lab tech
- O Housekeeper/Laundry
- O CNA/HHA
- O Student,type_____
- O Other_____

Department/Location:
- O Patient room O Emergency dept
- O Operating room O Procedure room
- O CCU/ICU O Home
- O Clinical laboratory
- O Medical/outpatient clinic
- O Service/utility area (disp rm./laundry)
- O Other_____

Procedure:
- O Draw venous blood O Heparin/saline flush
- O Draw arterial blood O Cutting
- O Injection, through skin O Suturing
- O Start IV/set up heparin lock
- O Unknown/not applicable
- O Other_____

Did the exposure incident occur:
- O During use of sharp O Disassembling
- O Between steps of a multistep procedure
- O After use and before disposal of sharp
- O While putting sharp into disposal container
- O Sharp left, inappropriate place (table,bed,etc)
- O Other_____

Body part:
(check all that apply)
- O Finger O Face/head
- O Hand O Torso
- O Arm O Leg
- O Other_____

Identify sharp involved:
(if known)

Type: _____

Brand: _____

Model: _____

e.g. 18g needle/ABC Medical/"no stick" syringe

Did the device being used have engineered sharps injury protection?

O yes O no O don't know

Was the protective mechanism activated?

O yes-fully O yes-partially O no

Did the exposure incident occur:

O Before O During O After activation

Exposed employee: If sharp had no engineered sharps injury protection, do you have an opinion that such a mechanism could have prevented the injury? O yes O no

Explain: _____

Exposed employee: Do you have an opinion that any other engineering, administrative or work practice control could have prevented the injury? O yes O no

Explain: _____

Based on proposed revisions to 8CCR 5193 effective 1/15/99 & 8/1/99

Sharps Injury Control Program (Sharps)
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