

## Medical News

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### **Court Rules on Applicability of OSHA's Bloodborne Pathogen Rule on Dental Practice, Home Healthcare Settings, and Temporary Staffing**

A divided federal appeals court upheld OSHA's Bloodborne Pathogen Standard's applicability to three employee groups -- dentists, temporary medical personnel, and home health employers. The petitioners argued that OSHA's rule failed to establish a significant risk within their respective disciplines, failed to result in substantial benefit to healthcare workers, and lacked concern for protecting the consumer (dental patients and home healthcare patients), eg, by increasing healthcare costs.

The American Dental Association (ADA) represented dentists in the case, and the Home Health Service and Staffing Association (HHSSA) represented both of the other groups. Medical personnel firms supply healthcare workers on a temporary basis to hospitals and nursing homes, while home health firms supply such workers to patients at home.

The ADA specifically questioned the burdens of the 30-year recordkeeping requirements, the high laundering cost for reusable personal protective clothing not being included in OSHA's feasibility analysis, and the difficulty of complying with postexposure procedures. One issue raised by the HHSSA was the lack of employer control over the work environment in the home.

Two of the three judges disagreed with the petitioners and supported OSHA's rule, saying it is reasonable and is able to materially reduce the bloodborne pathogen risk to healthcare workers.

Although the main bloodborne pathogen rule was upheld, the court did vacate the rule, in part, as it applied to work sites not controlled by the employer, citing the branch of industry that supplies medical personnel to the home rather than those employers that supply medical personnel to hospitals, nursing homes, and other facilities that are required to comply

with the rule. Although this would not affect compliance with the parts of the rule related to providing hepatitis B vaccination, postexposure testing and treatment, and recordkeeping, the court said it would affect, for example, the employer's ability to comply with providing personal protective equipment and clothing.

In a dissenting opinion, Judge Richard Coffey argued that it is improper for OSHA's rule to apply uniformly to all settings since the risk of exposure is vastly different among various disciplines. He characterized the rule as being an attempt to "kill a fly with a sledgehammer" and that it was drafted partially in response to "public hysteria surrounding AIDS, created by the media's failure to balance their reporting with scientific data on transmission." Further, "The rule unduly burdens healthcare employees, including but not limited to dentists, doctors, and hospitals, while offering minimal benefit to their employees."

FROM: American Dental Association and Home Health Services and *Staffing Association, Inc. v Martin* (nos. 91-3865 and 92-1482), Seventh Circuit Court of Appeals, Jan. 28, 1993.

### **Joint Commission Will Begin Unannounced Surveys**

The Joint Commission on Accreditation of Healthcare Organizations soon will begin unannounced surveys of randomly selected accredited organizations to better gauge and ensure compliance with commission standards. The new survey process is likely to begin in July 1993, pending approval of the commission's executive committee. The survey will be conducted at the midaccreditation point of a 5% sample of all organizations, including hospitals, that participate in the three-year accreditation process. The one-day survey will focus on five performance areas in which hospitals generally have the most problems with compliance-safety management, life safety, medical staff appointments and privileging, infection control, and governance.

TABLE

ESTIMATED AVERAGE NUMBER OF EXTRA DAYS, AVERAGE AMOUNT OF EXTRA CHARGES PER INFECTION, AND DEATHS CAUSED BY AND CONTRIBUTED TO BY NOSOCOMIAL INFECTIONS-UNITED STATES

Type	Extra days	Extra charges <sup>†</sup>	Deaths directly caused by infections		Deaths to which infections contributed	
			Total	(%)	Total	(%)
Surgical wound infection	7.3	\$3,152	3,251	(0.6)	<b>9,726</b>	(1.9)
Lower respiratory tract infection	5.9	\$5,683	7,087	(3.1)	<b>22,983</b>	(10.1)
Bloodstream infection	7.4	\$3,517	4,496	(4.4)	8,844	(8.6)
Urinary tract infection	1	\$680	947	(0.1)	6,503	(0.7)
Other types	4.8	\$1,617	3,246	(0.8)	10,036	(2.6)
All types‡	4	\$2,100	19,027	(0.9)	<b>58,092</b>	(2.7)

<sup>†</sup>1992 dollars.

<sup>‡</sup>Some infections were weighted differently in computing these averages.

## Foodborne Outbreak of *Escherichia coli* O157:H7 Infections from Hamburgers -- Western United States, 1993

During January 1993, 230 persons in the state of Washington were reported to have culture-confirmed infection with *Escherichia coli* O157:H7 resulting in bloody diarrhea and, in some cases, hemolytic uremic syndrome. Preliminary investigations linked cases to consumption of hamburgers from one fast-food restaurant chain. *E coli* O157:H7 has been isolated from epidemiologically implicated lots of ground beef, and an interstate recall was initiated by the restaurant on January 18. Additional possible cases and the source of the contaminated meat are still under investigation.

*E coli* O157:H7 was first linked to human illness in 1982, and its importance as a human pathogen appears to be increasing. A spectrum of illnesses have been associated with this organism, including mild diarrhea, severe bloody diarrhea (hemorrhagic colitis), hemolytic uremic syndrome often leading to acute renal failure, and death. Infection with this organism has been associated with consumption of contaminated beef and raw milk. Measures to prevent spread include thorough cooking of beef, pasteurization of milk, and careful handwashing with soap.

Diagnosis of *E coli* O157:H7 infection in the laboratory requires specific culture of stool specimens for the organism on modified MacConkey medium containing sorbitol.

This outbreak illustrates how surveillance with rapid reporting and prompt investigation of cases can lead to timely public health action. Physicians and laboratories are encouraged to report cases of *E coli* O157:H7 infection to their county and state health departments.

FROM: Centers for Disease Control and Prevention. Foodborne outbreak of *Escherichia coli* O157:H7 infections from hamburgers. *MMWR*. 1993;42:85-86.

## CDC Summarizes Progress on Control of Nosocomial Infections

A recent report from the Centers for Disease Control and Prevention (CDC) in the *Morbidity and Mortality Weekly Report* examined the knowledge about the effectiveness of nosocomial infection surveillance, prevention and control, and cost-benefits. The report says the annual cost for nosocomial infections is more than \$4.5 billion and involves more than 2 million patients each year. Adverse consequences of nosocomial infections and their associated costs vary by type of infection (Table).

Findings from the CDC's "Study on the Efficacy of Nosocomial Infection Control" (SENIC), conducted in the early 1970s, was reviewed. SENIC found that hospitals reduced their nosocomial infection rates by approximately 32% if their programs included four components: 1) appropriate emphasis on surveillance activities and vigorous control efforts, 2) at least one full-time infection control practitioner per 250 beds, 3) a trained hospital epidemiologist, and 4) for surgical wound infections, feedback of wound infection rates to practicing surgeons.

SENIC established the effectiveness of infection control programs. However, other concerns regarding the cost-effectiveness and cost-benefit of such programs have emerged as the methods of reimbursement for U.S. hospitals have changed. Under the prospective payment system, virtually the entire cost of nosocomial infections represents an operating deficit. Thus, effective infection surveillance and control programs are the only way to reduce that cost.