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

			Deaths directly caused by infections		Deaths to which infections contributed	
Type	Extra days	Extra charges†	Total	(%)	Total	(%)
Surgical wound infection	7.3	$3,152	3,251	(0.6)	**9,726**	(1.9)
Lower respiratory tract infection	5.9	$5,683	7,087	(3.1)	**22,983**	(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)	**58,092**	(2.7)

†1992 dollars.
‡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.

Even though the methodologies to measure cost-benefit of infection surveillance and control programs are varied, the report says that all available studies have benefited the hospital.

FROM: Centers for Disease Control and Prevention. Public health focus: surveillance, prevention, and control of nosocomial infections. *MMWR 41:783-87;1992.*

Court Orders AIDS Patient to Pay Exposed Healthcare Worker

In the first lawsuit of this type in the nation, the jurors in a Los Angeles Superior Court decided that a patient must pay $102,500 for fraud and negligent infliction of emotional distress for concealing AIDS from a surgical technician who was exposed to her blood. The exposure occurred in 1991 when a plastic surgeon's scalpel inadvertently cut the technician's finger during a follow-up procedure for suture removal after a breast reduction. The technician was not wearing gloves during the procedure. The patient testified that she falsely stated on a medical form that she was not being treated for any illness or taking any medication, when in fact she was taking several medications for AIDS. She was diagnosed as HIV-infected in 1987.

The patient's defense centered on the failure of the breast center, where the procedure was performed, to enforce universal precautions, such as wearing of gloves. The court agreed with this and divided the blame for the injury—60% to the patient, 26% to the plastic surgeon, and 13% to the breast center. Although the patient's liability was only 60%, she was liable for the entire award because she was also found guilty of fraud -- the first time that the law of fraud has been applied to the physician-patient relationship.

A number of patients have sued doctors and other healthcare practitioners for not disclosing they had AIDS, but this is the first case in which a healthcare worker is suing a patient. The concern is that this court decision may now shift the burden for healthcare workers' safety to patients.

AIDS activists charge that this is one more reason HIV-infected individuals will avoid seeking testing. Plans have been made to appeal the verdict (*Boulais v Lustig,* BC038105).

Federal TB Funding Increased for 1993

American Lung Association President Lee Reichman announced that there had been a significant increase in federal funding for tuberculosis (TB) -- up from $40 million to $105 million this year. This increase is attributed, in part, to greater media attention to TB. Speaking at the second annual meeting of the National Coalition to Eliminate Tuberculosis, Reichman said that the $105 million is still far below the $515 million that is needed to fully implement the National Action Plan to Combat Multidrug-Resistant Tuberculosis. This plan, released by the CDC in 1992, calls for a series of activities to contain multidrug-resistant TB, including surveillance, laboratory diagnosis, patient management, screening, infection control, and information dissemination.

Some are concerned that state legislatures may misinterpret increased federal funding as a waiver of local funding. Experts warn that there must be a state infrastructure for TB control and additional funding will be needed.

AHA Issues Revised AIDS/HIV Recommendations

The American Hospital Association (AHA) has revised its recommendations for hospitals on AIDS and HIV infection to account for developments that have occurred since the initial policy was developed in 1988.

Topics highlighted in *AIDS/HIV Infection: Recommendations for Healthcare Practices and Public Policy* include patient testing, managing HIV-infected healthcare workers, patient notification (lookback) programs, informed consent for HIV testing, preventing percutaneous injuries in healthcare workers, and the role of the public and private sector in financing AIDS care. Concerning patient testing, the AHA urges healthcare providers to incorporate patient risk assessment into standard procedures for taking medical histories and offering voluntary HIV testing to individuals at risk. In areas with a high HIV seroprevalence, some hospitals may wish to routinely offer HIV testing and encourage their patients to be voluntarily tested.

Regarding management of HIV and HBV-infected healthcare workers, the recommendations call for a case-by-case determination of fitness for duty within existing worker impairment programs. These recommendations do not advise that HIV-infected healthcare workers who have received clearance to practice from an expert panel disclose their HIV status to patients.

The AHA also advises against routine retrospective notification of patients who have been treated by an HIV-infected healthcare worker and advises a case-by-case evaluation to determine the likelihood of transmission.

To order the booklet, call the American Hospital Association, Order Processing, at 1-800-AHA-2626 (catalog no. 094691).