

Medical News

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CDC Issues Updated Postexposure Guidelines for HBV, HCV, and HIV

The CDC and the US Public Health Service recently published an update of the recommendations for the management of healthcare personnel (HCP) who have occupational exposure to blood and other body fluids that might contain hepatitis B virus (HBV), hepatitis C virus (HCV), or HIV. The recommendations for HBV postexposure management include initiation of the hepatitis B vaccine series to any susceptible, unvaccinated person who sustains an occupational blood or body fluid exposure. Postexposure prophylaxis (PEP) with hepatitis B immune globulin (HBIG) or hepatitis B vaccine series should be considered for occupational exposures after evaluation of the hepatitis B surface antigen status of the source and the vaccination and vaccine-response status of the exposed person. Guidance is provided to clinicians and exposed HCP for selecting the appropriate HBV PEP.

Immune globulin and antiviral agents (eg, interferon with or without ribavirin) are not recommended for PEP of HCV. For HCV postexposure management, the HCV status of the source and the exposed person should be determined; for HCP exposed to an HCV positive source, follow-up HCV testing should be performed to determine if infection develops.

Recommendations for HIV PEP include a basic 4-week regimen of two drugs (zidovudine and lamivudine [3TC]; 3TC and stavudine [d4T]; or didanosine and d4T) for most HIV exposures and an expanded regimen that includes the addition of a third drug for HIV exposures that pose an increased risk for transmission. When the source person's virus is known or suspected to be resistant to one or more of the drugs considered for the PEP regimen, the selection of drugs to which the source person's virus is unlikely to be resistant is recommended.

This report also outlines several special circumstances (eg, delayed exposure report, unknown source person, pregnancy in the exposed person, resistance of the source virus to antiretroviral agents, or toxicity of the PEP regimen) when consultation with local experts or the National Clinicians' Post-Exposure Prophylaxis Hotline ([PEPline] 1-888-448-4911) is advised. Occupational exposures should be considered urgent medical concerns, to ensure timely postexposure management and administration of HBIG, hepatitis B vaccine, or HIV PEP.

FROM: Centers for Disease Control and Prevention. Updated US Public Health Service guidelines for the management of occupational exposures to HBV, HCV, and HIV and recommendations for postexposure prophylaxis. *MMWR* 2001;50(RR-11):1-67.

Nosocomial Outbreak of Fluoroquinolone-Resistant *Salmonella*

Infection with fluoroquinolone-resistant strains of *Salmonella* is rare, as is nosocomial *Salmonella* infection. Olsen and colleagues from the CDC's Division of Bacterial and Mycotic Diseases describe the first recognized outbreak of fluoroquinolone-resistant *Salmonella* infections in the United States, which occurred in two nursing homes and one hospital in Oregon.

Medical staff were interviewed, and patients' charts and death certificates were reviewed. In nursing home A, a case-control study was conducted. Patients were defined as residents of the nursing home from whom fluoroquinolone-resistant *Salmonella enterica* serotype Schwarzengrund was isolated between February 1996 and December 1998; controls were defined as residents with similar medical conditions whose cultures did not yield *Salmonella*. Isolates were compared using pulsed-field gel electrophoresis and sequence analysis. Pharmacy records were compared on the use of fluoroquinolone among several nursing homes.

Eleven patients with fluoroquinolone-resistant salmonellosis were identified at two nursing homes. The index patient had been hospitalized in the Philippines and probably had acquired the infection there. Transmission probably was direct (from patient to patient) or through contact with contaminated surfaces. Treatment with fluoroquinolones during the 6 months before a culture was obtained was associated with a significant risk of *Salmonella* infection (four of five patients had taken fluoroquinolones, as compared with 2 of 13 controls). The patients were not significantly more likely than the controls to have taken other antibiotics. More fluoroquinolones were used at nursing home A than at similar nursing homes in Oregon. The isolates from the outbreak had similar patterns on pulsed-field gel electrophoresis and the same *gyrA* mutations. The isolates from the outbreak also were similar to the only previous isolate of fluoroquinolone-resistant *Salmonella* in the United States, which came from a patient in New York who had been transferred from a hospital in the Philippines.

This was a prolonged nosocomial outbreak of infection with fluoroquinolone-resistant *S enterica* serotype Schwarzengrund. More such outbreaks are likely in institutional settings, particularly those in which there is heavy use of antimicrobial agents.

FROM: Olsen SJ, DeBess EE, McGivern TE, Marano N, Eby T, Mauvais S, et al. A nosocomial outbreak of fluoroquinolone-resistant *Salmonella* infection. *N Engl J Med* 2001;344:1572-1579.