### Medical News

EDITIED BY GINA PUGLIESE, RN, MS; MARTIN S. FAVERO, PHD

### Correction: CDC's New HCV Exposure Guidelines

The July 1996 Medical News article on "New HCV Exposure Guidelines" listed an incorrect telephone number at the CDC to obtain a copy of the document "Issues and Answers: What Is the Risk of Acquiring Hepatitis C for Health Care Workers and What Are the Recommendations for Prophylaxis and Follow-Up After Occupational Exposure to Hepatitis C Virus?" (*Hepatitis Surveillance Report* No. 56; April 1996). The correct telephone number is 404-639-3048. We regret this error.

## Hospital Infections Program Home Page

The CDC's Hospital Infections Program (HIP) has established a home page on the Internet. The HIP's home page can be reached via the National Center for Infectious Diseases and the CDC's home pages or directly at http://www.cdc.gov/ncidod/hip/hip.htm.

The HIP's home page brings together in one location all of the CDC information related to hospital infection control. Major areas include antimicrobial resistance, bloodborne pathogens, CDC guidelines and recommendations, occupational health, management of outbreaks, sterilization and disinfection strategies, and surveillance.

For more information about HIP's home page, contact J. Shaw at CDC, Hospital Infections Program, MS A07, Atlanta, GA, 30333; telephone 404-639-6409 or e-mail JBS4@CIDHIP1.EM.CDC.GOV).

# Spontaneous Combustion of Exam Gloves

In the spring and summer of 1995, the spontaneous combustion of powder-free, chlorinated latex patient examination gloves caused four warehouse fires in different states. All of the gloves were labeled "made in China," and manufacturers' serial numbers indicate that they were manufactured between 1992 and 1994.

Because of the concern about the potential for future fires, the Food and Drug Administration (FDA) issued a Public Health Advisory to hospital administrators, hospital risk managers, hospital procurement managers, latex glove manufacturers, and glove distributors and importers. The advisory notes that the FDA, in collaboration with the Bureau of Alcohol, Tobacco, and Firearms and local fire departments, has identified the fires as having started within gloves stored in stacks on pallets. Having ruled out arson, the investigators concluded that the cause of the fires was spontaneous combustion linked to high warehouse temperatures that apparently accelerated an exothermic chemical reaction on the chlorinated gloves to ignite the latex. This raises concern for gloves stored in warehouses in very hot summer weather. In addition, there is concern that heating of gloves just short of the igniting temperature may cause the latex glove to deteriorate and lose its effectiveness as a barrier. The labeling on the gloves instructs that the gloves be stored in a cool, dry place. The two greatest risk factors for fires are the storage temperature and mass of the gloves. It is recommended that large quantities of gloves not be stored in conditions of extreme heat. One or more pallets stored in a warm to hot location should be considered a risk.

The FDA recommends the following precautions: (1) avoid a large inventory of powder-free latex gloves; (2) remove shrink wrap from pallets of stacked cartons; (3) break the stacked cartons on each pallet apart and restack or reconfigure to facilitate cooling ventilation; (4) periodically check powder-free latex gloves for characteristics suggesting deterioration, such as brittleness, tackiness, or an acrid chemical odor or stench; and (5) rotate your powder-free latex glove stock using "first-in-first-out" practices. If any glove characteristics are noted that suggest deterioration, contact the FDA district office, or call the FDA Emergency Operations at 301-443-1240. The FDA also encourages the voluntary reporting of any observations regarding the quality of examination or surgeons' gloves by telephoning the FDA-MedWatch Program at 1-800-FDA 1088 or by faxing to 1-800 FDA-1078.

FROM: Food and Drug Administration. Risk of spontaneous combustion in large quantities of patient examination gloves. *FDA Public Health Advisory*; June 27, 1996.

# CDC's NNIS System Evolves Into the 21st Century

The CDC's National Nosocomial Infections Surveillance (NNIS) System is a voluntary system of US acutecare hospitals that was initiated in 1970 to create a national database on nosocomial infections, in order to determine the quantitative and qualitative factors associated with nosocomial infections. Gradually, NNIS has become a worldwide gold standard.

Until 1986, the NNIS system offered only one method of surveillance of nosocomial infections: hospitalwide surveillance. Since 1986, three additional surveillance components that focus on specific groups of patients have been introduced, each of which allows for calculation of riskadjusted infection rates: the intensive-care unit (ICU), highrisk nursery, and surgical patient components. To study changes in the use of NNIS surveillance components since 1986, the CDC analyzed 1986 to 1995 NNIS data from the 231 US hospitals that participated in the NNIS system during this period. The number of hospitals participating in the NNIS system increased sixfold from 1986 to 1995. A parallel increase was noticed in the amount of surveillance data for all NNIS components, except for the hospitalwide component. The percentage of all hospitals reporting at least 1 calendar-month per year of data from the hospitalwide component decreased from 95% in 1986 to 31% in 1995. During this period, use of the hospitalwide component was greater among the hospitals whose first participation in the NNIS system occurred before 1987. Interest by NNIS hospitals in the hospitalwide component decreased from 1987 to 1995. These results suggest an evolution in the way in which NNIS hospitals conduct surveillance of nosocomial infections. The increased interest in surveillance using NNIS components that allow for risk adjustment and interhospital comparison of infection rates suggests that the feasibility and interest for such data are high.

When NNIS began in the 1970s, forms were filled out by hand by infection control personnel and sent to the CDC for analyses and publication of the surveillance data. In 1986, the CDC introduced software for NNIS hospitals, so that data could be entered and sent via floppy disk to the CDC. Beginning in 1991, the CDC distributed the first NNIS Semiannual Report that included comparative data with risk-adjusted nosocomial infection rates. Beginning in 1994, the CDC incorporated these comparative data directly into the software that all NNIS hospitals use. When a hospital calculates its infection rate for an ICU or a surgical procedure, the software automatically compares the hospital's rate with the aggregated NNIS rate, giving the hospital's percentile. In addition, the software performs an appropriate statistical test to help a hospital determine if their rate differs significantly from the pooled mean. As more data are collected at the CDC, aggregated updates are distributed to NNIS hospitals. In June 1996, the CDC implemented telecommunications facilities as a main feature of the NNIS software. This new system allows NNIS hospitals to transmit data to the CDC electronically via telephone lines, rather than by sending floppy disks. In addition, NNIS hospitals may communicate with the CDC via electronic mail, may receive computer assistance interactively, and may obtain software updates automatically.

Since the early 1990s, many US hospitals have attempted to use quantitative standards, or benchmarks, to evaluate the quality of care they provide to patients. Using these benchmarks in infection control has certain limitations, including the need for risk adjustment of infection rates. However, advances in data collection, analysis, dissemination, and technology has allowed the CDC to strengthen its role in aggregating data to evaluate quality of care in hospitals. These advances are helping to keep the CDC's NNIS system the leader in the use of quantitative standards for hospitals to evaluate their quality of care.

## Joint Commission Discusses Cooperative Accreditation Agreements

The Joint Commission has begun discussions with five additional accrediting bodies considered as potential candidates for cooperative accreditation agreements. These organizations include the American Association of Blood Banks, which accredits 2,150 transfusion centers; the Commission on Cancer, which accredits 1,405 hospitalbased cancer programs; and the Council on Accreditation of Services for Families and Children, which accredits 675 providers of social, community, and behavioral services. Initial discussions also have begun with two smaller accrediting bodies: the Foundation for Hospice and Homecare, which accredits 90 home care aid programs, and the Medical Quality Commission, which now accredits 30 prepaid medical groups and is growing.

FROM: Joint Commission on Accreditation of Healthcare Organizations. This month at the Joint Commission. Press releases for May 1996. Joint Commission Home Page: http://www.jcaho.org.

#### Needle-Swap Programs Debated

Although currently illegal in most states, needleexchange programs could prevent more than 11,000 new HIV infections by the end of the decade, two researchers reported at the 11th International Conference on AIDS. Dr. Peter Lurie of the Center for AIDS Prevention Studies at the University of California San Francisco and Ernest Drucker of Albert Einstein College of Medicine in New New York said that based on the results of the effectiveness of such programs, as many as 10,000 infections could have been prevented between 1987 and 1995 if clean-needle programs had been implemented. Other researchers praised the study—the first to estimate the national effect of needle exchanges—and said the figures may even underestimate the potential impact of the programs.

Needle exchange programs are controversial, because some people believe that they encourage the use of illegal drugs. Federal funds cannot be used to support the programs, and at least nine states prohibit the distribution of needles without a prescription.

FROM: Bennet A. Needle-swap programs spark lifeand-death debate. *Wall Street Journal* July 10, 1996;B1.

#### Animal to Human Transplants

In a new report from the Institute of Medicine (IOM), experts cautiously approve animal-to-human transplants, agreeing that the potential benefits of the technology outweigh the risks involved. The panel advises that human clinical trials should proceed only after a sufficient science base has been developed and federal guidelines and other safeguards have been established. The IOM committee issues its recommendations in the report "Xenograft Transplantation: Science, Ethics, and Public Policy," released July 17, 1996.

The transplantation of animal organs and tissue to humans, xenotransplantation, has grown in acceptance in recent years due to a shortage of human donors and a better understanding of the human body's rejection of foreign tissue. However, there has been concern that such transplants also may transfer infectious agents to humans and could endanger public health by introducing new diseases to the human population.