



Our mission: protecting healthcare workers

Millions of healthcare workers around the globe face a daily risk of contracting life-threatening occupational infections, such as HIV, hepatitis B, and hepatitis C, from occupational exposures to patients' blood and body fluids.

The International Healthcare Worker Safety Center at the University of Virginia is dedicated to reducing this serious risk. Under the leadership of Janine Jagger, M.P.H., Ph.D., an internationally known expert in the prevention of needlesticks and occupational blood exposures, the Center has made major contributions to needle safety in the U.S. and many other countries.

More than a decade of research, publications and advocacy

Research

The International Healthcare Worker Safety Center has been devoted to research on the epidemiology and prevention of healthcare worker exposures to bloodborne pathogens for over a decade. Dr. Jagger and colleagues published a landmark study in the *New England Journal of Medicine* in 1988 on the characteristics of medical devices causing needlestick injuries. That groundbreaking research was instrumental in the development of a new generation of safer medical devices.

Dr. Jagger created the EPINet surveillance system in 1991 to provide healthcare facilities with a standardized program for tracking needlestick injuries and blood and body fluid exposures. It is now used by over 1,500 healthcare facilities in the U.S., and by many more in other countries. The dissemination of EPINet has resulted in a massive increase in data on the causes of needlesticks and blood exposures.

In 1992, Dr. Jagger established a voluntary data-sharing network of healthcare facilities using EPINet—the “EPINet network.” Participating healthcare facilities from across the U.S. annually send data to the Center that are merged into an aggregate database. With nine years of data from a cumulative total of 84 hospitals, it is the longest-standing database of healthcare workers' at-risk exposures to blood and body fluids in the U.S. EPINet data on the Center's website are regularly accessed by healthcare workers, government agencies, medical products manufacturers, and many others for benchmarking and research purposes.

The EPINet network is the foundation of the Center's research and advocacy, providing important support for new policies to improve healthcare worker safety. EPINet data have also provided valuable insight for product manufacturers as they develop new or better safety devices.

Publications

For over a decade, the Center's journal *Advances in Exposure Prevention* (AEP) was a leading source of information on the prevention of occupational exposures to bloodborne pathogens. It published exclusive research reports, widely used for benchmarking, from the EPINet network of U.S. hospitals; tracked new sharps safety devices and exposure prevention technology; covered groundbreaking policy and legislative efforts in the U.S.; and focused on the human dimension of occupational exposures by sharing accounts of occupationally infected healthcare workers. The last issue of AEP was published in June 2005.

The Center's book, *Preventing Occupational Exposures to Bloodborne Pathogens: Articles from Advances in Exposure Prevention, 1994-2003*, represented the culmination of its work on AEP. It includes over 25 EPINet data reports, personal accounts of occupationally infected healthcare workers, and other articles of interest that were published in AEP over its ten-year span, including a section dealing with legislative and policy issues.

The Center's staff publish regularly in peer-reviewed medical and nursing journals, including the *New England Journal of Medicine*, the *Journal of the American Medical Association*, *Nursing*, and *Infection Control and Hospital Epidemiology*.

International Healthcare Worker Safety Center (cont.)

Advocacy

The Center has played a leading role in promoting policies and regulations in the U.S. to better protect healthcare workers from occupational exposures, using EPINet data as a road map to guide its advocacy efforts. For example, in 1992 EPINet data revealed that one out of four needlesticks in the U.S. was caused by unnecessary needles used to access intravenous lines. To address this problem, the Center requested a national safety alert from the Food and Drug Administration (FDA) about the hazards created by these unnecessary needles. The FDA issued the alert, which resulted in a rapid transition to needleless technology and a clear reduction in injuries—documented in the EPINet data—in this device category.



Despite the development of innovative safety devices and regulatory action on the part of OSHA and the FDA, healthcare facilities were slow to adopt safer technology during the 1990s. Recognizing the need for a legislative mandate, Dr. Jagger and Center staff worked closely with state and federal lawmakers, using EPINet data to help fuel the drive for a national needlestick law. The Needlestick Safety and Prevention Act was signed into law by President Clinton on November 6, 2000; Dr. Jagger was present for the Oval Office ceremony and was recognized by Charles Jeffress, then-director of OSHA, for her contributions to needlestick prevention.

That landmark event—the passage of a national needle safety law—symbolizes what can be achieved globally. The Needlestick Safety Act sets a world standard, and challenges other countries to provide an equal level of protection to their healthcare workers.

International Collaborations

The Center's cooperative work with researchers from other countries is one of its strengths. From 2001 through 2005, the Center directed an innovative program in cooperation with Japanese colleagues, the Japan-U.S. Collaborative Program in Occupational Infection Control and Prevention. Funded by a group of medical products companies, the program's goal was to build a foundation for a national sharps safety movement in Japan. Selected Japanese fellows (physicians and nurses) were brought to the University of Virginia over a three-year period for intensive training in the epidemiology of occupational blood exposures, injury surveillance, and policy-oriented research. Fellows trained through the Center's program have helped conduct national surveillance, build consensus around sharps safety issues in relevant professional associations, and instituted protective measures in their facilities that are now in widespread use in Japan.

In 2007, the Center established the Global Training Program in Occupational Exposure Prevention to help disseminate its wealth of knowledge and experience to healthcare thought leaders in other countries. Modeled on the Japan program, it offers a concentrated, one-week course in the fundamentals of sharps injuries and the practical steps involved in establishing a regional- or national-level surveillance network. In choosing fellows, the Center focuses on four regions where it has established collaborative networks: sub-Saharan Africa, the Middle East, Latin America, and Asia Pacific.

Center staff have worked closely with colleagues in Canada, the U.K., Ireland, Spain, Germany, Uruguay, and many other countries to develop customized versions of EPINet. They have also lectured on topics related to healthcare worker safety in countries all over the world.

Recognition

In 2002, Dr. Jagger received one of the most prestigious awards in the U.S.: a MacArthur Foundation fellowship. The award is given to individuals who have shown “extraordinary originality” and dedication in their professional pursuits. The Advanced Medical Technology Association (AdvaMed), the largest medical technology trade association in the world, also honored Dr. Jagger by naming her “MedTech Hero” for March 2001, for her industry-wide contributions to advancing medical device safety technology. In addition, Becton Dickinson provided an endowed professorship to the Center in recognition of its contributions to improving health care worker safety.

International Healthcare Worker Safety Center (cont.)

How you can support the Center

The Center's financial support comes from government research grants and a diverse group of medical device manufacturers. Funding has been provided in the form of:



- general operational support
- support for specific activities, such as publication of the Center's journal, or development and distribution of EPINet
- grants for focused research projects
- fellowships for international researchers

For more information on how you can support the Center, please call Tim Redden, U.Va. Health System Development, at (434) 924-8432.

How to contact the Center

By mail:

International Healthcare Worker Safety Center
UVA Health System
P.O. Box 800764
Charlottesville, VA 22908-0764
or
1224 Jefferson Park Ave.
Suite 400, Blake Center
Charlottesville, VA 22903

By phone:

(434) 924-5159

By fax:

(434) 982-0821

Website: www.med.virginia.edu/epinet

E-mail: epinet@virginia.edu