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Clinician Advisory Aims to Minimize Medical Sharps Injuries

Most healthcare workers today understand that exposure to patients' blood can threaten their lives. Of the more than 2,000 American medical workers per day who suffer medical sharps injuries, some 2,500 per year will develop the potentially fatal hepatitis B or C, or AIDS.

What healthcare workers and the administrators and managers at their facilities may not realize is just how unnecessary many of these injuries are. *Primary prevention* in the form of innovative new technologies can now completely eliminate many sharps injuries. But professional and government bodies that oversee healthcare worker safety have yet to sufficiently encourage primary prevention, which reduces or eliminates the need to introduce a sharp into the medical workplace.

A new initiative by the National Alliance for the Primary Prevention of Sharps Injuries (NAPPSI) aims to close this information gap. NAPPSI—a non-profit organization of medical device makers, clinicians and healthcare organizations—is petitioning the federal Food and Drug Administration (FDA) and many other organizations to publish a Clinician Advisory (see accompanying text box). The advisory adds an important new dimension to earlier standards issued by National Institute for Occupational Safety and Health (NIOSH), the Occupational Safety and Health Administration (OSHA) and many state regulatory agencies.

The previous guidelines advised healthcare workers to avoid using needles and other sharps where safer alternatives were available; however, the advisories described those alternatives in vague, confusing language—for example, suggesting the use of “engineering controls.”

The NAPPSI-authored advisory distinguishes between “primary” and “secondary” prevention, a better way to communicate about safety options. One example of primary prevention is StatLock catheter securement devices by Venetec International (San Diego, Calif.), which replace traditional securement by tape or suture. The logic of primary prevention is that when you eliminate the needle, you eliminate the risk. NAPPSI estimates that primary prevention using catheter securement devices that eliminate suture alone could prevent at least 100 million IV needle usages per year.

Secondary prevention practices and technologies are those that make sharps safer. Examples include retractable needles and scalpels. NAPPSI supports secondary prevention and its advisory urges that primary and secondary prevention both be adopted to maximize worker protection.

NAPPSI is asking the FDA and others to include the advisory in all official documents that provide guidelines and alerts to clinicians. Clinicians can support the effort by urging professional organizations with which they are associated to circulate the advisory and adopt the standards it recommends. NAPPSI's better-known corporate members include B. Braun Medical Inc., BD, Cook Incorporated, and Abbott. Medical experts have long recognized primary prevention as the ideal form of infection prevention. But the lack of widespread primary prevention technology had kept the concept from being applied to sharps injuries. Now that

many primary prevention devices are available, safety standards should be updated accordingly. NAPPSI utilizes a monthly e-mail newsletter, a national speaker's bureau and other activities to inform the media, decision makers and opinion leaders about primary prevention.

Besides adding a new, easy-to-understand classification of sharps injury protection, the Clinician Advisory offers several other advantages over earlier guidelines:

- **Increased awareness of primary prevention.** The advisory spreads awareness of the most effective means of preventing sharps injuries.
- **Comprehensive approach.** The advisory implies a “best of both worlds” strategy: Eliminate sharps where you can with primary prevention devices and practices, and employ secondary prevention when sharps use can't be avoided.
- **Protection of patients as well as workers.** Some primary prevention devices also offer significant protections for patients. For example, by eliminating suture securement, the catheter securement devices protect patients from potentially fatal bloodstream infections, as well as pain and scarring. Indeed, it is estimated that widespread use of StatLock to secure central venous catheters can eliminate up to 4,500 bloodstream infections annually in the United States alone. At the same time, the devices protect healthcare workers from needlestick exposure, and can remove dangerous suture needles from the waste stream.
- **Clinically tested strategy.** Several clinical studies demonstrate the medical efficacy of primary prevention technologies. For example, in a study (summarized in *Nursing Management*, March 1994) that compared three needleless systems, the preferred primary prevention system reduced needlestick injuries by 75 percent.

The advisory has already garnered wide support. A number of significant healthcare organizations have agreed to issue the advisory or inform their members about it. These organizations include the National Association of Vascular Access Networks (NAVAN), American Association of Critical Care Nurses, National Association of Residents and Interns, the Health Industry Distributors Association, the Infusion Nurses Society (INS), and the Canadian Infusion Nursing Association. In addition, NAPPSI-founding member Venetec International is putting the advisory in all packages of its StatLock safety securement devices.

Mary Alexander, CEO of INS, makes the point that “quality care can be assured only when healthcare workers are safe from the risk of disease and death caused by unnecessary needlesticks” and adds, “INS vigorously supports NAPPSI’s petition.”

Lisa Black, RN, BSN, director-at-large of the Nevada Nurses Association, was infected with HIV and Hepatitis C through a sharps injury. She notes that “my injury and subsequent illnesses could have been entirely prevented with the implementation of available primary prevention technology. It is vitally important that we protect our nation’s healthcare workforce from preventable injury and disease.”

The continuing prevalence of medical sharps injuries—800,000 a year in the United States—demonstrates the inadequacy of current guidelines. Healthcare workers cannot allow this dangerous situation to continue. I invite all clinicians who agree with NAPPSI’s approach to help ensure that the Clinician Advisory is widely distributed and adopted by clinical and government organizations. †

NOTIFICATION TO CLINICIANS ON SHARPS INJURY PREVENTION

Healthcare workers who use or may be exposed to needles are at increased risk of needlestick injury. Such injuries can lead to serious or fatal infections with bloodborne pathogens such as hepatitis B virus, hepatitis C virus, or human immunodeficiency virus (HIV).

In order to prevent bloodborne pathogens exposure, clinicians are advised to utilize both primary and secondary sharps injury prevention techniques.

Primary prevention practices and technologies eliminate the need to introduce sharps into the workplace, thereby reducing the total number of sharps used.

Secondary prevention practices and technologies render safer those sharps that must be introduced into the workplace.

The combination of primary and secondary prevention maximizes healthcare worker safety with respect to bloodborne pathogens exposure from sharps injury.