Needlestick injuries can expose workers to a number of bloodborne pathogens that can cause serious or fatal infections. The pathogens that pose the most serious health risks are Hepatitis B virus (HBV), Hepatitis C (HCV), and Human Immunodeficiency Virus (HIV) — the virus that causes AIDS. According to the National Institute for Occupational Safety & Health (NIOSH), it is estimated that 600,000 to 800,000 needlestick injuries occur annually among health care workers. Since needlesticks and other sharps injuries are a major cause of bloodborne pathogen exposure in the healthcare industry, the Occupational Safety and Health Administration (OSHA) established the Bloodborne Pathogens Standard. The Bloodborne Pathogens Standard requires employers with employees who have occupational exposure to blood or other potentially infectious materials to use preventative methods such as universal precautions, personal protective equipment, and engineering and work practice controls to reduce employee exposure to bloodborne pathogens. The Needlestick Safety & Prevention Act requires employers to select safer needle devices and involve employees in identifying and choosing the devices.

The OSHA Bloodborne Pathogens Standard (29 Code of Federal Regulations, 1910.1030, 2006) defines a contaminated sharp as “any contaminated object that can penetrate the skin including, but not limited to, needles, scalpels, broken glass, broken capillary tubes, and exposed ends of dental wires.” These items must be handled safely and disposed of properly and immediately after use. Needlestick injuries are related to certain work practices such as:

- Administering injections
- Drawing blood
- Recapping needles
- Suturing materials
- Disposing of needles
- Handling trash and dirty linens

The OSHA standard prohibits the bending, recapping, or removing of contaminated needles and other sharps unless the employer can demonstrate that there is no feasible alternative, or that such action is required for a specific medical procedure. If bending, recapping, or removing contaminated needles is required by a medical procedure, this must be done by using a one-handed technique or using mechanical means such as forceps.

Never pick up sharps with your hands, even when wearing gloves. Personal protective equipment such as latex gloves provide a barrier to protect skin and mucous membranes from contact with blood and blood products, however, most personal protective equipment is easily penetrated by sharps. Employees should always use mechanical means such as tongs, forceps, or a brush and dust pan to pick up dropped needles, sharp medical instruments, or broken glass. Research has shown that as many as one-third of all sharps injuries have been related to the disposal process. Most needlestick injuries result from unsafe needle devices. The Centers for Disease Control (CDC) estimates that 62 to 88 percent of sharps injuries can be prevented by the use of safer medical devices. Syringes with self-sheathing needles have been shown to significantly reduce needlesticks and exposures to bloodborne diseases. A safer needle device has built-in safety controls to reduce needlestick injuries before, during, or after use. Implement safer needle devices when possible.

Contaminated sharps must be discarded immediately in containers that are closeable, puncture resistant, leakproof, and labeled or color-coded. Containers for reusable sharps should be lined with a wire basket for easy removal of the contents during reprocessing or tongs or forceps should be used to remove the sharps container.

Containers should be easily accessible to personnel and located as near to the point of waste generation as feasible. Containers should be available wherever sharps may be found, including laundry and trash disposal areas. No furniture or other obstacles should be between the site of use and the container. Sharps containers should be inspected and replaced routinely and never allowed to overfill.
When the container is ready to be discarded, the lid should be securely closed. If leakage is possible, the container should be placed in a secondary leak resistant, closable, and labeled or color-coded container.

Many medical devices have been developed to reduce the risk of needlesticks and other sharps injuries. These devices replace sharps with non-needle devices or incorporate safety features designed to reduce injury. By using medical devices designed to reduce needlesticks and incorporating safer work practices, employees can decrease the risk of infection with a bloodborne disease. Always report any sharps injury to your supervisor and document the injury as soon as possible.

*Remember to practice safety, don’t learn it by accident.*

For additional information refer to the following websites:

http://www.tdi.texas.gov/wc/safety/employers.html
http://www.cdc.gov
http://www.osha.gov
http://www.dshs.state.tx.us