

OSHA FactSheet

Securing Medical Catheters

What are medical catheters?

Medical catheters are tubes used in healthcare to deliver intravenous fluids and medications or to drain body fluids. Examples include vascular access devices and chest drainage tubes.

What hazards do medical catheters pose to healthcare workers?

Catheters used for vascular access must be inserted with a needle. Inserting a catheter exposes the healthcare worker to the risk of a needlestick. Sharps with engineered sharps injury protection (SESIPs) reduce workers' risk of needlesticks, but, unless they are effectively secured, intravenous catheters may migrate or become dislodged and require reinsertion.

Some vascular access devices and chest drainage tubes have traditionally been secured with sutures. This process directly exposes the healthcare worker to the risk of a needlestick injury from the suture needle. Therefore, for healthcare workers using medical catheters, the process of suturing these devices presents needlestick hazards.

Who is at risk?

Healthcare workers who insert and suture in place medical catheters such as vascular devices and chest tubes face needlestick risks. These workers may include physicians, nurses, physician assistants, and emergency responders.

What are the options for securing medical catheters?

Generally, OSHA does not require the use of specific engineering controls or work practices. OSHA relies on the professional judgment of healthcare workers who insert and secure catheters to assess each situation and determine the appropriate methods and work practices to secure catheters and minimize risk of dislodgment.

Healthcare workers have customarily used tape or sutures to secure medical catheters. Typically, they use sutures for central venous catheters, arterial

catheters, and chest tubes. Engineering controls, such as improved adhesive products and securement devices, may decrease or eliminate the need for sutures and thus directly reduce needlestick risk.

For catheters that do not require sutures for securement, such as peripheral intravenous catheters, healthcare workers typically use tape. Careful and thorough catheter securement is essential since ineffective securement may result in catheter dislodgment. A variety of tapes, adhesive products, and catheter securement devices are available. Appropriate products and effective work practices are essential to provide increased catheter stability. Such products and work practices may reduce catheter dislodgment and the necessity of reinsertion with its associated needlestick risk.

What OSHA requirements cover medical catheters?

OSHA's bloodborne pathogens standard (29 CFR 1910.1030) requires that employers of workers with occupational exposure to blood or other potentially infectious materials annually consider and implement appropriate, available, and effective safer medical devices designed to eliminate or minimize that exposure [See 29 CFR 1910.1030 (c)(1)(iv)(B)]. Engineering controls that reduce the potential for needlesticks by eliminating the need to suture medical catheters in place are one option for healthcare employers to consider. As part of their annual review of methods to reduce needlesticks, employers must review options for securing medical catheters and consider appropriate engineering and work practice controls.

In this review, employers must include the input of non-managerial employees responsible for direct patient care who are potentially exposed to injuries from contaminated sharps in the identification, evaluation, and selection of effective engineering and work practice controls [See 29 CFR 1910.1030(c)(1)(v)].

How can I get more information?

Information on needlestick hazards, including the full text of OSHA's bloodborne pathogens

standard, is available on OSHA's website at <http://www.osha.gov/SLTC/bloodborne pathogens/index.html>

This is one in a series of informational fact sheets highlighting OSHA programs, policies or standards. It does not impose any new compliance requirements. For a comprehensive list of compliance requirements of OSHA standards or regulations, refer to Title 29 of the Code of Federal Regulations. This information will be made available to sensory impaired individuals upon request. The voice phone is (202) 693-1999; teletypewriter (TTY) number: (877) 889-5627.

