



### What is the difference between an active safety device and a passive safety device?

An active device requires user activation of the safety mechanism. The clinician needs to do something above and beyond the normal use of the product for protection from the sharp tip of the contaminated needle. On the other hand, a passive device requires *no* user activation of the safety mechanism. It happens automatically during the normal use of the device.

### What are some examples of passive safety devices currently available on the market?

Examples of passive safety devices include hypodermic needles that automatically retract into the syringe after the injection is given, needle-less connectors for IV lines, and IV needles whose bevels are automatically covered when the needle is removed from the catheter. Passive devices most often feature an integrated design. The safety feature is an integral part of the device and cannot be removed.

### How do active safety devices work?

Active safety hypodermic needles include those in which the needle must be sheathed manually after use by the user, or those in which the contaminated needle must be covered by a hinged plastic cap. Active safety IV catheters include those that retract the contaminated needle when the user pushes a button, or those that must be sheathed by the clinician after use.

### What are the advantages and disadvantages of passive vs. active safety devices?

Many clinicians like the flexibility of active devices. They prefer to activate the safety mechanism manually. On the other hand, clinicians can forget to activate the mechanism, leaving the device as unsafe as a sharps device without a safety feature. The feature can also be inadvertently activated too soon. The clinician needs to start the procedure again with a new device. Facilities must be aware of the extra in-service time and consequences of non-activation when choosing an active safety device. Proper use of the active safety device by healthcare workers is the key to their effectiveness.

A compliance evaluation of 79 hospitals by Marion Gillen, RN, MPH, PhD, assistant professor at the University of California, San Francisco, School of Nursing, found there were many cases of needlestick injuries resulting from inactivated and improperly activated safety needles. According to Gillen, improper activation may reflect inadequate training on the use of the devices.<sup>1</sup>

Passive devices ensure safety with no user activation. The clinician is protected without changing technique.

Inadvertent activation, forgetting to activate, or choosing not to activate are not options. The healthcare worker and patient are always protected from the contaminated needle. No added in-service time is required because the clinician doesn't have to take extra steps to ensure safety. Passive safety devices are more likely to have a greater impact on prevention of needlestick injuries simply by the nature of their design.

### My facility's product selection committee has chosen an active safety syringe. How can we be sure clinicians are activating the safety mechanism?

Training is key. Be sure to document clinicians' attendance at all in-services. Remind healthcare workers of the consequences of a needlestick injury. Perform random checks of sharps containers throughout different areas of the facility. OSHA may do this during an inspection. Retrain clinicians in areas where containers hold a high percentage of inactivated safety devices. Using active safety devices requires vigilance on the part of the facility to ensure the devices are used correctly.

### My facility's GPO contract includes only an active safety IV catheter. My purchasing department told me we have to buy what's on the contract. I'd prefer the safety that a passive device guarantees. Do I have any options?

Yes. According to the OSHA New Compliance Directive-CPL 2-2.69 (Nov. 27, 2001), you may not limit the safety devices evaluated in your facility to those provided by your GPO. You must also evaluate safety devices from a variety of manufacturers, not only with those you have a current contract. You need to document all devices evaluated to prove you have given clinicians a variety of safety devices from which to choose. ✚

### Reference

1. Safe Needles Still Can Lead to Needlesticks, Hospital Employee Health, December 27, 2002.

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