

OSHA Hazard Information Bulletins Potential for Occupational Exposure to Bloodborne Pathogens From Cleaning Needles Used in Allergy Testing Procedures

September 21, 1995

MEMORANDUM FOR:

REGIONAL ADMINISTRATORS

THROUGH:

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Directorate of Technical Support

FROM:

SUBJECT:

Hazard Information Bulletin¹: Potential for Occupational Exposure to Bloodborne Pathogens From Cleaning Needles Used in Allergy Testing Procedures

The purpose of this safety and health Hazard Information Bulletin is to alert field personnel to the possible safety and health risks which may arise with the practice of a procedure performed in allergy testing known as "prick and wipe" or "scratch and wipe". The [29 CFR 1910.1030](#), Occupational Exposure to Bloodborne Pathogens standard applies where occupational exposure to blood or other potentially infectious materials (OPIM) can be reasonably anticipated [2(a); 2(b)]. It is estimated that numerous physicians, allergists, dermatologists, pediatricians, family practitioners, and their employees use this traditional allergy testing method.

The "prick & wipe" type allergy testing procedure provides many opportunities for inadvertent occupational exposure of the health care worker (HCW) to a percutaneous exposure with a contaminated sharp. As described by practicing allergists, the procedure requires the HCW to introduce allergenic extract or control solutions into the skin by piercing or scratching the skin with a device, such as a hypodermic or bifurcated needle. Bleeding at the site may occur during the application of the test solutions. If only one device per patient is used to apply multiple allergenic extract solutions (50-60 applications may be performed on a single patient), the **cleaning of the sharp** to remove the previously introduced test solution and any body fluids is required. Most

typically this is accomplished **using a two-handed technique**. This practice of cleaning the sharps device has the potential for a bloodborne pathogens exposure incident.



In general, [29 CFR 1910.1030](#), Occupational Exposure to Bloodborne Pathogens standard requires the employer to use engineering and work practice controls as the primary method to eliminate or minimize employee exposure [[29 CFR 1910.1030, \(d\)\(2\)\(i\)](#)]. Traditional procedure has been to **clean the sharps device** with one hand holding the testing device and the other hand holding the cleaning apparatus, e.g., cotton ball soaked in isopropyl alcohol (See illustration). Alternative controls to using this two-handed technique are currently available to the employer at little or no additional expense. Examples of these controls include the following:

1. The use of engineering controls, e.g., disposable, one-time, single-allergen use, skin test devices, currently available from several manufacturers. These should not be re-used but discarded after the allergenic extract solution is applied.
2. Altering the task itself to accommodate safer work practice. Although its cleaning and re-use is not preferred, a single-handed technique of cleaning the sharp can be implemented which reduces the employee's potential of direct percutaneous contact with a contaminated sharp.
 - a. Place the cleaning solution-soaked apparatus on a rigid surface, e.g., metal tray. Using a one-handed technique, pass the contaminated sharp through the apparatus using a holding device.
 - b. Hold the cleaning-solution soaked apparatus with an instrument, e.g., forceps or hemostat, in one hand. Pass the contaminated sharp through the apparatus using a holding device.

In general, personal protective equipment (PPE), i.e., gloves, is not necessary when performing allergy skin testing as long as hand contact with blood or OPIM is not reasonably anticipated. However, where occupational exposure remains, PPE shall also be used [[29 CFR 1910.1030, \(d\)\(3\)\(i\)](#)]. Notably however, most medical use gloves will not prevent an employee needle puncture. The engineering and work practice controls suggested above would be effective in preventing such an exposure.

OSHA recommends that the engineering and work practice controls implemented in cleaning the needles used for allergy testing procedures be carefully evaluated to determine their effectiveness in eliminating or minimizing potential occupational exposure to bloodborne pathogens through the percutaneous route.

Please distribute this bulletin to all Area Offices, State Plan States, Consultation Projects and appropriate local labor and industry associations.

¹ The Directorate of Technical Support issues **Hazard Information Bulletins (HIB)** in accordance with OSHA Instruction CPL 2.65 to provide relevant information regarding unrecognized or misunderstood health hazards, inadequacies of materials, devices, techniques, and safety engineering controls. HIBs are initiated based on information provided by the field staff, studies, and concerns expressed by safety and health professionals, employers, and the public. Information is compiled based on a thorough evaluation of available facts, and in coordination with the appropriate parties.