

U n i v e r s i t y o f C a l i f o r n i a  
Environmental  
Health and Safety Biological Safety  
Update  
S a n F r a n c i s c o

**1999 REVISION OF THE CALIFORNIA  
BLOODBORNE PATHOGENS STANDARD**

pub# BSU7

On July 1, 1999, extensive revisions of the California Bloodborne Pathogens Standard (Title 8 California Code of Regulations, Section 5193) went into effect. Included are additional administrative requirements, additions and changes to the definitions relevant to the standard, and the addition of certain engineering controls and work practices. This Safety Update summarizes the changes most relevant to the research community.

A very significant change is the new requirement to use either needleless systems or devices that include "engineered sharps injury protection" instead of "standard" sharp devices, such as the disposable needles and syringes that have been in use for years. Currently, most available safety devices are butterflies or needle/syringe combinations that incorporate an integral sheath that can be extended to cover the exposed needle, a mechanism to retract the needle into the device body, or an internal blunt cannula that can be extended beyond the sharp needle tip. The standard requires that a regular sharp device be replaced with an enhanced safety device for any task that involves the possibility of bloodborne pathogen exposure. At UCSF, this means any procedure involving use of a sharp device with human or Old World primate source material (blood, OPIM, unfixed tissue, etc.) or cell cultures.

For all such applications in your laboratory, you should ask two questions:

**Do I need to use the sharp?**

Obviously, if you're gaining vascular access to inject a material, you need a sharp needle. But if you're resuspending a cell pellet, you can use a blunt cannula. If the sharp isn't absolutely needed, eliminate it. If it is needed, then ask ...

**Can I replace it with a safer sharp device?**

To answer this question, you must know what's available and how it works. Then you must determine whether any of the four exceptions in the Standard apply to your specific case. Finally, you must document your evaluation process and your decision not to adopt a safer device. The Compliance Decision Log form provides a means to do that. Copy the form and do the evaluation for every procedure involving sharps and human source materials or cell cultures. Keep copies of the compliance log forms in your Biological Safety Logbook in Section #8 (Health Surveillance/Special Programs). Repeat this assessment process periodically as new safe sharps products come onto the market and as objective performance data on the devices accumulates.

Of the several administrative changes to the standard, two are especially relevant to the research community. One is the creation of a "sharps injury log" to collect additional information regarding sharps injuries that



result in exposure incidents. This log will be maintained by the Blood and Body Substance Exposure Hot Line and will include information that has not been collected in the past. Individuals reporting a sharps injury resulting in an exposure should be prepared to provide not only the circumstances of the exposure but also the type, brand and model of sharp involved, whether it had an engineered sharps injury protection feature and whether the safety feature had been activated. The other administrative change is a set of additions to the UCSF Exposure Control Plan, including effective procedures for gathering and using Sharps Injury Log data, identifying and selecting appropriate engineering controls, and obtaining active involvement of employees in reviewing and updating the Exposure Control Plan. Also, updates to the Plan must include progress in implementing the use of safety devices and responses to any Plan deficiency. The Plan is available in the Environment of Care Manual on the EH&S web site at <http://www.ehs.ucsf.edu>.

Because of its increasingly recognized role as an occupational risk factor, hepatitis C virus (HCV) joins hepatitis B virus and HIV as named bloodborne pathogens. Finally, several changes have been made to wording of the standard for the purpose of clarification.