

Safe Needle Devices

A 1991 provision of the OSHA Bloodborne Pathogens Standard requires that employers document annual consideration and implementation of appropriate commercially available and effective safer medical devices designed to eliminate or minimize occupational exposure due to needle sticks.

Please contact EH&S for more information about this important rule.



One-handed operation covers needle for safety!

Training is the foundation of an injury-free workplace. For a schedule of EH&S training programs, please visit:

- <http://www.ehs.columbia.edu/Training.html>

rDNA Research: Important Things to Know

- The NIH rDNA “Guidelines” are **rules** that apply to all rDNA activities at Columbia, **regardless** of the funding source for a particular project.

- The NIH’s risk assessment criteria for most viral vectors give very little weight to ‘replication deficiency’ alone. This requires applying the same hazard assumptions as if wild type virus were being used, as well as commensurate biological safety procedures.

- All activities using rDNA must be described in a submittal to the University’s Institutional Biosafety Committee. The NIH defines protocols which are ‘exempt’ from submission requirements, but this category is narrower than most people assume and investigators must, at a minimum, submit an initial application for the IBC to make this determination.

To register your lab’s rDNA work:

- Go <https://www.rascal.columbia.edu>.
- Select ‘Hazardous Materials’ from the menu on the left side of the welcome screen
- Log in with your CU UNI and password
- Select and then complete **Recombinant DNA (Appendix A)** which can then be submitted online.

Biological Safety Training

EH&S provides Biological Safety/Bloodborne Pathogen training on the Medical Center and Morningside campuses monthly. Staff working with human blood/body fluids, any human cell lines, or viral vectors are required to attend. Schedules for EH&S trainings can be found at <http://ehs.columbia.edu/Training.html> for the Morningside and Medical Center campuses.



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Biological Safety Program Overview

Environmental Health & Safety



VISION STATEMENT

We provide expert guidance and timely service to the University Community through our commitment to health and safety.

Employing best practices and collaboration, and by building long term relationships, we promote a productive and safety conscious work environment.

Campus Contact Numbers:

Morningside Campus
212-854-8749



Columbia University Medical Center
212-305-6780

www.ehs.columbia.edu

Regulated Medical Waste

Regulated Medical Waste (RMW) must be managed to prevent laboratory-acquired infection, ensure environmental protection and comply with Federal, City and State regulations.

RMW containing BSL-2 organisms must be autoclaved or otherwise decontaminated prior to disposal

| Disposal Media | Appropriate Contents |
|---|---|
| <p>RED BAGS</p>  | <ul style="list-style-type: none"> • Disposable gloves • Test tubes, Eppendorf tubes, culture dishes, tissue culture flasks, bench-top liner • Cultures/stocks of infectious agents, any items contaminated with blood, body fluids, or any other infectious materials or microbial cultures |
| <p>SHARPS CONTAINER</p>  | <ul style="list-style-type: none"> • All used and unused: needles, syringes, scalpel/razor blades, serological / pasteur pipettes (glass & plastic), blood vials, slides and cover slips, micro-pipette tips • DO NOT fill sharps containers beyond ¾ of their capacity |

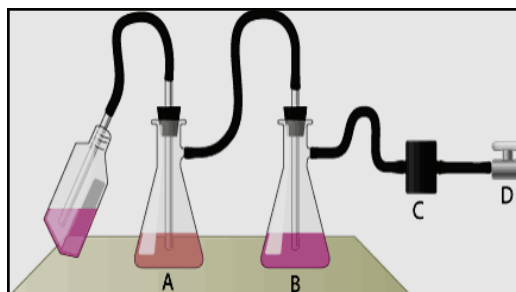
The following items **are not** RMW, and should be disposed of according to applicable standards:

- Empty, clean glassware
- Culture media bottles
- Chemicals, including formaldehyde

Biological Safety Cabinets

Biological Safety Cabinets (BSCs) are the primary engineering control used in laboratories to prevent personal exposure to biological aerosols and to protect cultures from environmental contamination.

- According to the CDC and NIH, in order to ensure that the BSC is operating properly, laboratories must contact a service vendor to certify the cabinet annually.
- In-line HEPA filters provide added protection for the house vacuum system and must be used whenever aspirating liquids in the BSC.
- Disinfect cabinet before/after use



Proper Collection Flask Set-up

The left suction flask (A) is used to collect contaminated fluids into a suitable decontamination solution; the right flask (B) serves as a fluid overflow collection vessel. A glass sparger in flask B minimizes splatter. An in-line HEPA filter (C) is used to protect the vacuum system (D)

Shipping Biological Materials

For shipping purposes, biological materials are divided into Category A (capable of causing life-threatening or fatal disease) and Category B (infectious substances that do not meet Category A criteria).

For a description of the training and other requirements for shipping biological materials and dry ice (also a “dangerous good” when shipped), please see:

<http://www.ehs.columbia.edu/transport.html>



Please, No Food or Drink in the Lab!

Eating, drinking, smoking, handling contact lenses, applying cosmetics, and storing food for human consumption are not permitted in laboratory areas.

