

# *Treatment and Disposal of Biological Materials*

Proper treatment and disposal of cultures and items contaminated by potentially biohazardous agents is a vital step toward protection of laboratory and service personnel from infectious disease. This waste handling process is also necessary to prevent release of potentially infectious agents into the community at large. Treatment and disposal of biological waste is regulated by several federal and state agencies. General guidelines for handling this waste stream are provided below. Questions regarding these procedures should be directed to the Office of Research Safety at 2-4996 or tom@rags.kent.edu

## **Sharps**

Sharps are generally agreed to be the most hazardous items in the potentially infectious waste stream. A high degree of precaution must always be taken with any sharp item, contaminated or not. All sharps (hypodermic, intravenous, or other needles and syringes; pasteur pipettes; scalpel or razor blades; blood vials; glass microscope slides and coverslips; and any other broken laboratory glassware) must be placed immediately upon disposal into a sharps disposal container.

## **Cultures, stocks, & disposable labware**

All non-sharp laboratory materials utilized in experiments with biological materials (e.g., microorganisms, recombinant DNA, animal or human tissues, cell cultures, etc.) must be treated prior to disposal by an approved decontamination method such as autoclaving. If autoclaving is used, waste materials should be collected in an autoclavable bag that is stored in a container displaying the international biohazard label.

After autoclaving, any bag displaying the biohazard symbol must be overbagged with an opaque trash bag and sealed prior to disposal in the regular waste stream. Clear autoclave bags (without the biohazard symbol) do not require overbagging and may be sealed and placed in the regular waste stream. Bags with the biohazard symbol, **regardless of use**, must not be placed, without overbagging, in the regular waste stream.

Other methods for decontamination exist (e.g., decontamination by bleach, ethanol, etc.). Autoclaving may not always be a suitable method.

## **Research Animals**

All of the tissues or organs from small research animals (e.g., cats, dogs, rabbits, rats, mice, birds, etc.) **must be incinerated**.

There are no exceptions to this policy without prior notification and approval by the Biological Safety Committee.

## **Bedding**

Bedding from animals is to be treated and disposed by incineration. Package bedding as described above for pathological wastes. Materials not packaged or labeled properly may be refused.