

AUTOCLAVING

I. TRANSPORTING PACKAGED MATERIAL TO THE AUTOCLAVE

When transporting material to be autoclaved, use a cart with guard rails. Ensure the use of a secondary leak proof closed container to collect any spillage should the cart be knocked or jarred during transport. Use the most direct but not heavily populated route. Surface decontaminate the container prior to transport, unless there is no risk of contamination. Transporting waste to outside waste bin should be done in a similar manner.

II. RECORD KEEPING

1. **Autoclave User Log: NOTE MUST BE FILLED OUT COMPLETELY BY EACH USER.** This log identifies the users, nature of the load (approximate weight), cycles used and exposure times? (user logs are located near autoclave)

III. FUNDAMENTALS OF LOADING TO ENSURE SUCCESS

1. Prior to autoclaving, place two strips of the temperature sensitive tape side by side across the red biohazard bag, and using a black sharpie please write the contact name, date, and lab number across the tape.
2. **SPECIAL NOTE ON SHARPS:** When autoclaving Sharps containers it is essential that you tape the container sufficiently with autoclave tape. Run the tape several times around the opening of the container, and using a black sharpie please write the contact number, date, and lab number across the tape.
3. Load the material in such a fashion to present the least resistant passage of air exchange through the load, from the top of the chamber to the bottom.
4. Place packages on their edges to enhance steam penetration, place a rack or other item against these items to prevent them from slipping.
5. Ensure containers do not touch each other, this will ensure all surfaces are sterilized.
6. No items should touch the top or sides of the autoclave container as the container is pushed inside.
7. A load of liquid filled containers should be of similar size, shape, content and volume; because exposure time is based on these characteristics.
8. Run material to be sterilized separate from those to be decontaminated.

IV. UNLOADING AN AUTOCLAVE

The greatest risk of personal injury occurs during the process of unloading the autoclave.

1. Wear all necessary personal protective equipment. Lab coat, glasses and use heat resistant gloves to remove hot containers)
2. The chamber pressure gauge of the autoclave should be zero before opening the autoclave's door.
3. Crack door slightly and stand back to allow steam to escape. To minimize the risk of accidents caused by steam escape, the person who opens the autoclave door should stand directly behind it.

4. Slowly open autoclave door. Opening the autoclave door too quickly may result in glassware breakage and/or steam burns to the skin.
5. Bring the lab cart to the chamber, using heat resistant gloves; carefully transfer the containers (pans) to the cart. Be careful not to jolt the containers as it could result in breakage.
6. If not already cool wait 10 minutes, prior to storing sterilized material or preparing autoclaved waste for disposal.
7. After every use, it is advised to close the autoclave door but do not seal the door as this will shorten the life span of the rubber gaskets on the door.
8. Verify that the temperature sensitive tape has changed color, or diagonal lines or the words "autoclaved" has appeared. If no change appears on the tape, the load is required to be re-autoclaved after placing new tape on the material.
9. Also verify the cycle log recorder to check the temperature and time attained. If minimum time and temperature is not attained on the second cycle, users should contact Barb Erwin or Jose Salazar to resolve maintenance issues.

V. DISPOSING OF AUTOCLAVED WASTE

1. Once the waste has been successfully autoclaved, the waste is no longer considered biohazardous. It is now important to alter the hazard awareness signage and symbols to reflect this.
2. When waste bag has cooled use a large felt marker deface the biohazard symbols.
3. Place a sterilized product label which indicates "*Treated Biomedical Waste*" (Labels and sharpies are located by autoclave). Use a black sharpie and record the date, user name and contact information clearly on the label.
4. Once this has been accomplished the defaced and labeled autoclaved waste bags should be placed inside a regular plastic trash bag (black) designed for domestic applications.
5. It is highly recommended to place only one or two biohazardous bags inside a single plastic trash bag (domestic applications) to prevent an overload and to minimize the risk of breakage.
6. Ensure the black bag is securely tied.
7. Waste may now be disposed of to the appropriate municipal waste stream (Building 535 use the trash bin near the railroad tracks) (Building 517 use the trash bin on the east side of the building.)
8. Remove waste promptly to outside trash bins.