Autoclaving Category A Biohazard Waste

Some research groups across the UC Davis campus work with organisms that are Category A infectious substances [view list of Category A organisms, page 5]. Category A organisms may cause permanent disability, life-threatening, or fatal disease in otherwise healthy humans or animals if exposure occurs.

Stericycle, the medical waste disposal company that provides service to UC Davis, does not accept waste that has untreated Category A infectious substances.

The most common worked with organism that will be impacted are pure cultures (agar plates and liquid cultures) of verotoxigenic (AKA shigatoxigenic) Escherichia coli. Mixtures of this organism with food or tissue cultures are exempt and can go straight into the medical waste stream.

FAQs

What does this mean? Biohazardous waste that contains cultures of Category A materials will be transported and pretreated in the autoclave rooms in each respective department. These materials should be handled in ways that minimize the risk of exposure or cross contamination. Once treated in the autoclave, this waste will then be discarded as medical waste in a Stericycle container, not in the normal waste stream.

How can this be accomplished? These items can be autoclaved in red, biohazard bags sealed (but not tightly!) with autoclave tape. These bags must then go in appropriate autoclavable containers. Large steel/aluminum steamer pots, complete with lids, have been found to work very well. Rectangular autoclave pans can work, but have found to be very messy. Autoclave this waste for at least 60 min., use a spore indicator to ensure effective sterilization. An SOP for this procedure is in the works should you wish to use it.

If you do not work with this organism or any biohazardous material, then continue to autoclave your non-hazardous waste in clear autoclave bags and dispose of it in the normal waste stream after autoclaving.

Does this mean all autoclave waste needs to go into a red biohazard bag? NO. Only wastes that are contaminated with (or potentially contaminated with) BSL2 organisms need to go into red biohazard bags.

Does this mean I can autoclave my biohazard waste and throw it in the trash? NO. Our autoclaves are not registered with California Department of Public Health as a terminal medical waste treatment autoclave. After autoclaving, the Category A waste must be disposed of in the medical waste stream that is collected weekly by Stericycle.