





University of Ottawa Autoclave Procedures

LABORATORIES - ROLES & RESPONSIBILITIES	
Autoclave Facility	
Location: Faculty/Department: Building/Room:	Service Hours:
Items for Autoclaving	
CAN	CANNOT
<ul style="list-style-type: none"> - Cultures & stocks. - Culture dishes & related devices. - Discarded live & attenuated vaccines. - Contaminated solid items. (Petri dishes, Eppendorf tips, pipettes, gloves, paper towel.) - Items for sterilization such as glassware, media, water, equipment. 	<ul style="list-style-type: none"> - Materials containing solvents, volatile or corrosive chemicals. - Material contaminated with chemotherapeutic agents. - Radioactive material. - Sharps (syringe, needles, blades, broken glasses, etc.)
Packaging	
<ul style="list-style-type: none"> - Use only approved autoclave bags. - Containers must be heat resistant. - Do not overfill autoclave bags or containers. (Do not fill beyond 75% of holding capacity.) - Do not compress material – sufficient space is required to ensure steam penetration. - Dry material should be separated from liquid material. - If outside bag is contaminated, apply a second autoclave bag. 	
	
Transport & Labeling	
<ul style="list-style-type: none"> - Surface decontaminate prior to transport. - Use secondary containers. - Use a cart with guard rails. - Flasks must be capped with at least aluminum foil. - Use a direct but not heavily populated route. - Bags should be closed for transport. 	<ul style="list-style-type: none"> - All material to be autoclaved must be labeled with a complete uOttawa hazardous waste label.
Cycle Instructions	Disposal
<ul style="list-style-type: none"> - Instructions about type of cycle the user wishes to run must accompany all materials. 	<ul style="list-style-type: none"> - Ensure your waste was autoclaved to specifications. Autoclaved waste will have the biohazard symbol defaced, an 'Autoclaved Biomedical Waste: Non-Hazardous' sticker affixed, as well as heat sensitive tape. - Place bag inside a black garbage bag, close & dispose in the regular garbage.
Training Requirements	For more information
<p>All lab personnel must</p> <ul style="list-style-type: none"> - Read the 'Guidelines for the Safe Use of Autoclaves'. - Complete the Autoclave Safety Training. 	<ul style="list-style-type: none"> - Email: bio.safety@uottawa.ca

AUTOCLAVE OPERATORS - ROLES & RESPONSIBILITIES	
Autoclave Facility/Owner	
Location:	Service Hours:
PPE: <div style="display: flex; justify-content: center; gap: 20px;">    </div>	
Loading	Operation
<ul style="list-style-type: none"> - Ensure material is acceptable for autoclaving. - Separate similar loads _____ _____ - Use secondary containers. - Load material to ensure steam penetration. - Ensure all containers & bags are well vented. - Add 250ml of water when necessary. 	<ul style="list-style-type: none"> - Ensure autoclave is operating properly before commencing cycle. - Ensure cycle is appropriate for the load. - Check cycle log recorder to ensure autoclave attains desired temperature; pressure; and duration.
Unloading	Disposal
<ul style="list-style-type: none"> - Wait until chamber pressure gauge reaches zero before opening the door. - Open door slightly to allow any remaining steam to dissipate (protect yourself from the steam). - Remove waste safely wearing heat resistant gloves (avoid spillage, use a trolley). - Verify heat sensitive tape. 	<ul style="list-style-type: none"> - Allow containers to cool off and move to pick-up site (draft free area). - Deface biohazard symbol & affix a 'Autoclaved Biomedical Waste: Non-Hazardous' sticker. - Ensure waste is picked up within _____
Record Keeping	Quality Control
<ol style="list-style-type: none"> 1. Daily Autoclave Use Log (fill in for every load) must be kept for a period of 5 years. 2. Validation Records (Biological Indicator results) must be kept for a period of 5 years. 3. Performance Records (record any problems encountered and the remedial action) must be kept for a period of 5 years. 4. Cycle log recorder print-outs must be kept for a period of 5 years. <p>! Records must be available for review by ORM and regulatory bodies (Ministry of the Environment, Public Health Agency of Canada or Canadian Food Inspection Agency)</p>	<ul style="list-style-type: none"> - Biological indicator test (validation testing) must be conducted every six operating days and the results recorded. Test schedule: _____ Biological Indicator: _____ - Heat sensitive tape should be applied to all loads.
Maintenance	Training Requirements
<ul style="list-style-type: none"> - Check gaskets every _____ - Disinfect exterior surfaces every _____ - Clean interior every _____ - Annual inspections and maintenance <p>Contact: _____</p>	<p>All staff must:</p> <ul style="list-style-type: none"> - Read the 'Guidelines for the Safe Use of Autoclaves'. - Complete the Autoclave Safety Training.