

Document Code:	DPOTMH-E-60-P05	
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Department/Section:	Molecular Laboratory	
Document Title:	MOLECULAR LABORATORY WASTE DECONTAMINATION	

PURPOSE:

To identify the area of waste generation and describe the detailed workflow for decontamination and final disposition of the corresponding waste.

LEVEL:

Laboratory Aide, Medical Technologist, Receptionist, Rotating Pathology Resident, Pathologist, and Servicing Engineers

DEFINITION OF TERMS:

- 1. *Infectious waste.* Waste suspected to contain pathogens (bacteria, viruses, parasites, or fungi) in sufficient concentration or quantity to cause disease in susceptible hosts.
- 2. General Waste. Comparable to domestic waste. Waste generate from administrative and housekeeping functions.
- 3. *Sharps*. Include needles, syringes, scalpels, saws broken glass, pipette tips and any other items that can cut or puncture wounds whether they are infected, such items are considered highly hazardous health care waste.
- Chemical Waste. Chemical wastes consist of discarded solid, liquid, and gaseous chemicals.
- 5. *Biosafety officer*. An individual designated to oversee facility or organizational biosafety (and possibly biosecurity) program.
- 6. *BioRisk Management Team*. An institutional committee created to act as an independent review group for biosafety issues, reporting to senior management. The membership of the biosafety committee should reflect the different occupational areas of the organization as well as its scientific expertise.
- 7. Decontamination. Reduction in the number of viable biological agents or other hazardous materials on a surface or object(s) to an acceptable level by chemical and/or physical means, often in combination with cleaning or physical removal of contaminants.



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- 8. **Disinfectant.** Agents capable of reducing the number of viable biological agents on surfaces or in liquid waste. These will have varying effectiveness depending on the properties of the chemical, its concentration, shelf life and contact time with the agent.
- 9. Biosafety Cabinet (BSC). Agents capable of reducing the number of viable biological agents on surfaces or in liquid waste. These will have varying effectiveness depending on the properties of the chemical, its concentration, shelf life and contact.

POLICY:

- 1 Waste decontamination is a process wherein waste is treated as needed and disposed. Proper identification, segregation, and disposal of wastes are necessary to prevent dispersal of biological agents.
- 2 All potential waste streams that will be generated from each procedure shall be assessed and an appropriate process shall be placed prior to the procedure from being done.
- 3 Shall ensure that containers are properly labeled, not leaking and are suitable for every type of waste.
- 4 Untrained staff shall not be allowed to handle hazardous waste. Personal Protective Equipment (PPE) shall be used when handling waste based on risk assessment.
- 5 A record book of the type of waste and estimated quantity shall be filled out prior to autoclaving.



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- 6 Users must wear the appropriate PPE depending on the items they are handling and the procedures they are doing.
- 7 All persons entering the facility must wear appropriate personal protective equipment and shall change street shoes to dedicated laboratory shoes/boots.

WASTE, MATERIALS & EQUIPMENTS FOR WASTE HANDLING

Personal Protective Equipment Matrix			
Type of waste generated and corresponding area	AREA	Prescribed PPE	Type of Disinfection
Paper towels/wipes used to disinfect transport box surfaces (infectious waste) Dedicated ballpens &markers Gloves and, Biological Bag PPE	Reception Area	Head cover, Surgical Face Mask, Face Shield, Double Gloves, Scrub Suit, Water Impermeable Gown, Lab Boots, Shoe Cover	All paper towels/wipes, gloves, PPE and biological bag will undergo steam sterilization. Ball pens, markers and key board and work surfaces will be cleaned by 10% hypochlorite wipes and followed by 70% alcohol.



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Biological bags
Paper towel/wipes
Primary containers
Secondary containers
Absorbent materials
Aliquots (biosecurity
documentation)
Pipettetips (sharps
hanling transport box)
Gloves
Ballpens and markers

Receiving/ Inactivation Area Head cover, Fit-Tested N95/N100/P100, Goggles/Face Shield, Double Gloves, Scrub Suit, Disposable Cover All, Lab Boots, Shoe Cover All paper towels/wipes, gloves, PPE, Primary and secondary container, absorbent pads and biological bag will undergo steam sterilization.

Pipette tips must be decontaminated by 10% hypochlorite solution, drained and rinsed with water prior steam sterilization.
Ballpens and markers will be cleaned by 10% hypochlorite wipes followed by 70% Alcohol.

Positive template control is considered potentially infectious. Need to protect reagents from contamination.



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Biobags	RNA	Head cover, Fit-	All paper
Paper towels	Extraction Area	Tested	towels/wipes, gloves,
PCR tubes	Extraction 7 fred	Tested	PPE, PCR Tubes, Spin
Spin column tubes		N95/N100/P100,	Column tubes and
Pipette tips (sharp		Goggles/Face	biological bag will
handling)		Shield, Double	undergo steam
Cold block (re-use		Gloves, Scrub Suit,	sterilization.
Cold block (re-use		Disposable Cover	Stermzation.
		Disposable Cover	Pipette tips must be
		All Lab Poots	decontaminated by
		All, Lab Boots, Shoe Cover	10% hypochlorite
		Shoe Cover	solution, drained and
			rinsed with water
			prior to steam
			sterilization.
			Surfaces must be
			wiped by 10%
			hypochlorite followed
			by 70% alcohol.
			by roto alection
			Cold block will be
			soaked to 10% freshly
			prepared hypochlorite
			solution.
Gloves	Mastermix	Head cover, Fit-	All paper
Water impermeable	Preparation/Re	Tested	towels/wipes, gloves,
gown	agent Room		PPE, reagent empty
Boot covers		N95/N100/P100,	vials and biological
Surgical mask		Goggles/Face	bag will undergo
Paper towel/wipes		Shield, Double	steam sterilization.
Reagent empty vials		Gloves, Scrub Suit,	



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Reagent boxes and inserts. Pipette tips (sharps handling)		Disposable Lab Gown, Lab Boots, Shoe Cover	Pipette tips must be decontaminated by 10% hypochlorite solution, drained and rinsed with water prior to decontamination. Surfaces must be wiped by 10% hypochlorite followed by 70% alcohol.
Gloves Water impermeable gown Boot covers Surgical mask Paper towel/wipes Pipette tips (sharps handling)	Template Adding Room	Head cover, Fit- Tested N95/N100/P100, Goggles/Face Shield, Double Gloves, Scrub Suit, Disposable Lab Gown, Lab Boots, Shoe Cover	All paper towels/wipes, gloves, PPE and biological bag will undergo steam sterilization to inactivate highly infectious waste. Pipette tips must be decontaminated by 10% hypochlorite solution, drained and rinsed with water prior to steam sterilization. Surfaces must be wiped by 10% hypochlorite followed by 70% alcohol



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Gloves	PCR	Head cover, Fit-	Gloves, Boot covers,
Water impermeable	I CIK	Tested	surgical mask, water
		N95/N100/P100,	impermeable gown,
gown Boot covers		Goggles/Face	paper towels and PCR
Surgical mask		Shield, Double	waste will undergo
Paper towel/wipes		Gloves, Scrub Suit,	steam sterilization to
raper tower, wipes		Disposable Lab	inactivate amplicons.
		Gown, Lab Boots,	macuvate ampheoris.
		Shoe Cover	Surfaces must be
		Shoe cover	wiped by 70% alcohol
Gloves	Clean Write	Surgical Face Mask,	Surfaces will be wiped
	Shop	Face Shield, Lab	by 10% hypochlorite
Laboratory gown	Shop	Gown,	followed by 70%
Surgical Mask Papers (sort		Gowii,	alcohol (surfaces
confidential reports for			decontamination)
shredding)			accontamination
sinedding)			Gloves, Surgical mask
			will undergo steam
			sterilization.
			stermzation.
			Laboratory gown will
			be decontaminated by
			colored safe bleach or
			Oxy-bleach detergent
			prior to laundry.
Gloves	Doffing Area	Surgical face mask,	All waste PPEs
Water impermeable	O	Gloves, dedicated	generated per area at
gown		shoe	doffing will undergo
Boot covers			steam sterilization.
Surgical mask			



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Paper towels/wipes	Laboratory aide
Hazmat/coveralls	will surface
Dedicated working	decontaminate
Boots	the doffing are
Face shields /goggles	by 10%
	hypochlorite
	solution
	followed by
	70% alcohol.
	Dedicated boots
	must wiped or
	decontaminated
	by 70% alcohol.

REFERENCES:

- 1. UP-NIH-NIMBB-SOP-FOR-SARSCOV2-TESTING-21 MAY2020
- 2. https://www.cdc.gov/coronavirus/2019-ncov/hcp/using-ppe.html
- 3. https://drive.google.com/file/d/1bLUFrSkGzy3a54zDQuZV-hU1kzE5F1EG/view
- 4. https://www.who.int/csr/resources/publications/putontakeoffPPE/en/
- 5. https://apps.who.int/iris/bitstream/handle/10665/331138/WHO-WPE-GIH-2020.1-eng.pdf



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