

Frederick National Laboratory for Cancer Research <small>sponsored by the National Cancer Institute</small>	HPV Serology Laboratory Standard Operating Procedure	
Use and Maintenance of -20°C Freezer in the HPV Serology Laboratory		
Document ID: HSL_EQ_016	Version 2.0	Page 1 of 5

Released by/Date Effective:

Author Name	Title	Signature/Date

Approver Name	Title	Signature/Date

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1. PURPOSE

- 1.1. The purpose of this procedure is to describe the proper use and handling of the -20°C freezer.

2. SCOPE

- 2.1. This procedure applies to the HPV Serology Laboratory located at the Advanced Technology Research Facility, Room C2007.

3. REFERENCES

- 3.1. HSL_EQ_016.01: -20°C Freezer Use and Maintenance Form
- 3.2. HSL_EQ_016.02: -20°C Freezer Temperature Monitor Log Form
- 3.3. Thermo Fisher -20°C Freezer user manual
- 3.4. HSL_GL_001: Waste Disposal at the Advanced Technology Research Facility
- 3.5. HSL_GL_002: Equipment Qualification and Calibration in the HPV Serology Laboratory
- 3.6. HSL_GL_003: Good Documentation Practices for the HPV Serology Laboratory
- 3.7. HSL_GL_007: Reagent and Chemical Expiry in the HPV Serology Laboratory
- 3.8. HSL_GL_008: Laboratory Flow and Gowning Procedures for the HPV Serology Laboratory
- 3.9. HSL_GL_009: HPV Serology Laboratory BSL-2 Procedures
- 3.10. HSL_GL_010: Control and Request of Documents in the HPV Serology Laboratory

4. RESPONSIBILITIES

- 4.1. The Research Associate, hereafter referred to as analyst, is responsible for reviewing and following this procedure.
- 4.2. The Scientific Manager or designee is responsible for training personnel in this procedure and reviewing associated documentation.
- 4.3. The Quality Assurance Specialist is responsible for quality oversight and approval of this procedure.

5. REAGENTS, CHEMICALS AND EQUIPMENT

- 5.1. Thermo Fisher -20°C Freezer.

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- 5.2. Ster-ahol (Fisher, Cat # 19-546-862 or equivalent)
- 5.3. Wypalls paper towel (Warehouse, Cat # 79300335 or equivalent)
- 5.4. Freezer Verification Thermometer (VWR, Cat # 89495-970 or equivalent)

6. HEALTH AND SAFETY CONSIDERATIONS

- 6.1. Proper safety precautions should be taken while working in a laboratory setting. This includes, but is not limited to, proper protective equipment such as lab coats, safety glasses, closed-toe shoes, and non-latex gloves.
- 6.2. Refer to the respective SDS when working with any chemicals.
- 6.3. Refer to “HSL_GL_001: Waste Disposal at the Advanced Technology Research Facility” regarding waste disposal processes at the ATRF.

7. DEFINITIONS

Term	Definition
FME	Facilities, Maintenance and Engineering
HPV	Human Papillomavirus
HSL	HPV Serology Laboratory
SDS	Safety Data Sheets
SOP	Standard Operating Procedure

8. OPERATION

- 8.1. The markings on the thermostat knob range from 1 through 6, with 1 being the warmest setting and 6 being the coldest setting.
- 8.2. When the unit is turned on for the first time (or after defrosting), set the control to its maximum position, 6, and leave it for at least two hours before introducing the material to be stored. Confirm temperature has been reached via a calibrated NIST thermometer.
- 8.3. After 24 to 48 hours, adjust the temperature control to the setting that best suits your needs.

9. MAINTENANCE

- 9.1. Biennial Cleaning Maintenance
 - 9.1.1. Empty the unit.
 - 9.1.2. Disconnect power cord from its outlet.
 - 9.1.3. Set the temperature control to the **OFF** position.

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9.1.4. Line the bottom of the freezer with absorbent pads. Allow the unit to thaw for at least 12 hours, then start cleaning procedure.

9.1.5. Spray the internal unit with Ster-ahol and wipe with a clean low-lint wipe.

9.1.6. Document the maintenance was performed on HSL_EQ_016.01: -20°C Freezer Use and Maintenance Form.

9.2. Daily Temperature Record

9.2.1. Daily Monday – Friday (except holidays), the temperature will be recorded on HSL_EQ_016.02: -20°C Freezer Temperature Monitor Log Form via a calibrated NIST thermometer.

10. ATTACHMENTS

10.1. Not applicable

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11. REVISION HISTORY

Revision Start Date	Version #	Changes	Reasons
21Mar17	New	New SOP for use and maintenance of -20°C Freezer	Currently no SOP
10Aug17	1.0	Remove Date column from Form .02.	Redundant.

-20°C Freezer Use and Maintenance Form

Form ID: HSL_EQ_016.01

Associated SOP: HSL_EQ_016

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Equipment ID:

Calibration Date:

Calibration Due Date:

Date	Initials	Disinfectant Used/ Lot Number	Activity Performed	Comments
		<input type="checkbox"/> N/A <input type="checkbox"/> Ster-ahol, Lot #:		<input type="checkbox"/> N/A
		<input type="checkbox"/> N/A <input type="checkbox"/> Ster-ahol, Lot #:		<input type="checkbox"/> N/A
		<input type="checkbox"/> N/A <input type="checkbox"/> Ster-ahol, Lot #:		<input type="checkbox"/> N/A
		<input type="checkbox"/> N/A <input type="checkbox"/> Ster-ahol, Lot #:		<input type="checkbox"/> N/A
		<input type="checkbox"/> N/A <input type="checkbox"/> Ster-ahol, Lot #:		<input type="checkbox"/> N/A
		<input type="checkbox"/> N/A <input type="checkbox"/> Ster-ahol, Lot #:		<input type="checkbox"/> N/A
		<input type="checkbox"/> N/A <input type="checkbox"/> Ster-ahol, Lot #:		<input type="checkbox"/> N/A
		<input type="checkbox"/> N/A <input type="checkbox"/> Ster-ahol, Lot #:		<input type="checkbox"/> N/A
		<input type="checkbox"/> N/A <input type="checkbox"/> Ster-ahol, Lot #:		<input type="checkbox"/> N/A
		<input type="checkbox"/> N/A <input type="checkbox"/> Ster-ahol, Lot #:		<input type="checkbox"/> N/A

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-20°C Freezer Temperature Monitor Log Form

Form ID: HSL_EQ_016.02
Associated SOP: HSL_EQ_016

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Equipment ID: _____ Month/Year: _____

NIST Thermometer S/N: _____

Day	Temp (°C)	Analyst Initials	Comments
<input type="checkbox"/> N/A 1			<input type="checkbox"/> N/A
<input type="checkbox"/> N/A 2			<input type="checkbox"/> N/A
<input type="checkbox"/> N/A 3			<input type="checkbox"/> N/A
<input type="checkbox"/> N/A 4			<input type="checkbox"/> N/A
<input type="checkbox"/> N/A 5			<input type="checkbox"/> N/A
<input type="checkbox"/> N/A 6			<input type="checkbox"/> N/A
<input type="checkbox"/> N/A 7			<input type="checkbox"/> N/A
<input type="checkbox"/> N/A 8			<input type="checkbox"/> N/A
<input type="checkbox"/> N/A 9			<input type="checkbox"/> N/A
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<input type="checkbox"/> N/A 30			<input type="checkbox"/> N/A
<input type="checkbox"/> N/A 31			<input type="checkbox"/> N/A

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