

# NTHRYS

OPC PVT LTD

SECTION • BSF

# Biosafety, Containment & Waste Management

Hands-on wet-lab training in working safely with biological agents — biosafety-level classification and risk assessment, containment equipment, personal protective practices, decontamination and sterilisation, biohazard waste management and emergency response.

06

CATEGORIES

30

PROTOCOLS

BSF

SECTION ID

2026

EDITION

# Categories & Protocols

Section **BSF** spans 6 category streams and 30 bench protocols. Every protocol carries a unique code for enrolment, tracking and certification.

|               |                                                                                                                  |           |
|---------------|------------------------------------------------------------------------------------------------------------------|-----------|
| <b>BSF-BL</b> | <b>Biosafety Levels &amp; Risk Assessment</b><br>BSL classification, agent hazard & exposure control             | <b>05</b> |
| <b>BSF-CB</b> | <b>Containment Equipment &amp; Engineering Controls</b><br>Biosafety cabinets, HEPA & negative-pressure controls | <b>05</b> |
| <b>BSF-PP</b> | <b>PPE &amp; Personal Protective Practices</b><br>PPE selection, respiratory protection & sharps safety          | <b>05</b> |
| <b>BSF-DS</b> | <b>Decontamination &amp; Sterilisation</b><br>Disinfectants, autoclave validation & surface decon                | <b>05</b> |
| <b>BSF-WM</b> | <b>Biohazard Waste Management</b><br>Segregation, treatment & disposal documentation                             | <b>05</b> |
| <b>BSF-EM</b> | <b>Emergency Response &amp; Spill Management</b><br>Spill response, exposure handling & incident reporting       | <b>05</b> |
| <b>TOTAL</b>  | <b>All training protocols in section BSF</b>                                                                     | <b>30</b> |

## CODE FORMAT

**BSF** • **CB** • **01**

**BSF** section

**CB** category

**01** protocol



■ CATEGORY · BSF-BL

## Biosafety Levels & Risk Assessment

BSL classification, agent hazard & exposure control



PROTOCOLS

CODE

TRAINING PROTOCOL

DESCRIPTION

BSF-BL-01

**Biosafety Level  
Classification**

BSL-1 to BSL-4 facility & practice tiers.

BSF-BL-02

**Biological Risk Assessment**

Hazard, route & likelihood evaluation.

BSF-BL-03

**Agent Hazard Group  
Classification**

Risk-group assignment of organisms.

BSF-BL-04

**Standard Microbiological  
Practices**

Core safe-handling work practices.

BSF-BL-05

**Exposure Control Planning**

Written exposure-control programme.

02

■ CATEGORY · BSF-CB

## Containment Equipment & Engineering Controls

Biosafety cabinets, HEPA & negative-pressure controls

05  
PROTOCOLS

CODE

TRAINING PROTOCOL

DESCRIPTION

BSF-CB-01

**Biosafety Cabinet  
Operation (I/II/III)**

Correct BSC use &amp; airflow practice.

BSF-CB-02

**BSC Certification & Airflow  
Checks**

Annual certification &amp; verification.

BSF-CB-03

**Fume Hood vs BSC  
Selection**

Choosing the right primary control.

BSF-CB-04

**HEPA Filtration & Negative  
Pressure**

Air handling &amp; directional flow.

BSF-CB-05

**Primary Containment  
Devices**

Sealed rotors, safety cups &amp; carriers.



■ CATEGORY · BSF-PP

## PPE & Personal Protective Practices

PPE selection, respiratory protection & sharps safety



PROTOCOLS

CODE

TRAINING PROTOCOL

DESCRIPTION

BSF-PP-01

**PPE Selection & Donning /  
Doffing**

Sequence & safe-removal technique.

BSF-PP-02

**Respiratory Protection**

Mask & respirator selection / fit.

BSF-PP-03

**Glove Selection & Use**

Material, double-gloving & change-out.

BSF-PP-04

**Hand Hygiene & Personal  
Conduct**

Washing & behaviour in the lab.

BSF-PP-05

**Sharps Handling & Safety**

Safe needle, blade & glass practice.

## 04

■ CATEGORY · BSF-DS

## Decontamination & Sterilisation

Disinfectants, autoclave validation &amp; surface decon

## 05

PROTOCOLS

CODE

TRAINING PROTOCOL

DESCRIPTION

BSF-DS-01

**Surface Disinfection & Agent Selection**

Choosing &amp; using disinfectants.

BSF-DS-02

**Autoclave Validation & Spore Testing**

Biological-indicator verification.

BSF-DS-03

**Chemical Decontamination**

Liquid &amp; vapour-phase methods.

BSF-DS-04

**Equipment Decontamination**

Decon before service or disposal.

BSF-DS-05

**Contact Time & Efficacy Checks**

Verifying disinfection effectiveness.



■ CATEGORY · BSF-WM

## Biohazard Waste Management

Segregation, treatment & disposal documentation



PROTOCOLS

CODE

TRAINING PROTOCOL

DESCRIPTION

BSF-WM-01

**Biohazard Waste Segregation**

Stream separation & labelling.

BSF-WM-02

**Sharps Waste Disposal**

Container use & safe disposal.

BSF-WM-03

**Liquid Waste Treatment**

Inactivation before discharge.

BSF-WM-04

**Autoclave Waste Processing**

Treatment cycles for solid waste.

BSF-WM-05

**Waste Records & Manifests**

Tracking & disposal documentation.



■ CATEGORY · BSF-EM

## Emergency Response & Spill Management

Spill response, exposure handling & incident reporting



PROTOCOLS

CODE

TRAINING PROTOCOL

DESCRIPTION

BSF-EM-01

**Biological Spill Response**

Spill-kit use & containment steps.

BSF-EM-02

**Exposure & Incident Response**

First aid & post-exposure action.

BSF-EM-03

**Eyewash & Safety Shower Use**

Emergency equipment operation.

BSF-EM-04

**Fire & Chemical Safety in BSL Labs**

Combined-hazard preparedness.

BSF-EM-05

**Incident Reporting & Investigation**

Documentation & root-cause review.

# Work safely with biological agents

Every protocol in Section BSF is delivered as hands-on training in safe laboratory conduct — from biosafety-level classification and containment-cabinet operation through PPE, decontamination, biohazard waste handling and emergency response. Build the safety discipline every molecular lab depends on.

**30** protocols

**6** categories

**BSF** section

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