

5.11 Continuity and Emergency Preparedness Planning

5.11.1 General Policy

The **NAME OF LAB**..... identifies potential internal and external emergencies that could interrupt laboratory operations. The laboratory maintains a documented plan to ensure that essential services continue, data integrity is maintained, and patient safety is protected during and after an emergency.

5.11.2 Emergency Identification and Risk Assessment

The laboratory maintains an **Emergency Risk Register** that identifies and assesses the impact of potential disruptions, including:


- **Utility Failures:** Prolonged power outages, water supply contamination or shortages, and failure of medical gas supplies (e.g., CO₂ for incubators).
- **System Failures:** Major equipment breakdowns (e.g., Autoclaves, Automated Blood Culture systems) and LIMS/Network outages.
- **Supply Chain Disruptions:** Critical shortages of culture media, reagents, or personal protective equipment (PPE).
- **Workforce Disruptions:** Significant staff absences due to pandemics, strikes, or transport issues.
- **Disasters:** Fire, flooding, or civil unrest.

5.11.3 Continuity Response Protocols

For each identified risk, the laboratory maintains specific response protocols:

- **Alternative Testing Arrangements:** Formal agreements (MOUs) are maintained with external accredited laboratories to accept samples for "Critical Tests" during total service interruptions.
- **Resource Redundancy:** The laboratory ensures access to a backup generator (with fuel reserves), emergency water storage, and a "Safety Buffer Stock" of critical consumables.
- **Manual Workarounds:** In the event of automation failure, the laboratory maintains validated manual methods for essential testing (e.g., manual inoculation and reading of cultures).
- **Communication Plan:** A protocol exists to notify clinicians, public health authorities, and the hospital administration of any changes to service scope or turnaround times.

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| Title: Quality Manual | | | Code: MIC/HOSP/QM/1 | |
| Issue: 01 | Issue date: 30.03.2026 | Rev: | Rev date: | Page 1 of 2 |
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| | SUBJECT : Quality Manual | | <table border="1"> <tr> <td>PAGE</td> <td>:</td> <td>Page</td> </tr> <tr> <td></td> <td>:</td> <td></td> </tr> </table> | PAGE | : | Page | | : |
| PAGE | : | Page | | | | | | |
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5.11.4 Testing and Review

- **Periodic Testing:** The **Continuity and Emergency Preparedness Plan** is tested at least annually through drills or tabletop exercises to ensure staff familiarity.
- **Plan Evaluation:** Following any actual emergency or drill, a "Post-Action Review" is conducted to identify gaps.
- **Updates:** The plan is updated based on the review findings, changes in laboratory scope, or emerging external risks.

Reference Documents:

- **Continuity and Emergency Preparedness Plan** (..... NAME OF LAB...../SD/10)
- **Emergency Risk Register** (..... NAME OF LAB...../REC/5.11/ERR)
- **Standard Operating Procedure for Emergency Referral** (..... NAME OF LAB...../QSP/5.11/REF)
- **Records of Emergency Drills** (..... NAME OF LAB...../REC/5.11/DRL)

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