

Evaluation of the BRM Systems between KKPHL and NPHL Leading to Harmonisation of the Malaysian Public Health Laboratories Network



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Introduction

Biosafety and biosecurity are crucial aspects of ensuring the safe and secure handling of biological materials in the Public Health Laboratories of Malaysia. Currently, Malaysia has a Laboratory Biosafety and Biosecurity Policy and Guideline which is an essential document developed by the Ministry of Health of Malaysia. While it is not a regulatory document, it offers valuable guidance to laboratory managers when handling biological materials safely. By mapping the opportunities for improvement this project aims to harmonize the BRM system to improve compliance among public health laboratories in Malaysia by delivering timely and consistent information under the highest quality and safety standards. In addition, this will facilitate the establishment of a formal biosafety officer network within PHL in Malaysia to improve communication and collaboration, strengthen biosafety and biosecurity culture among PHLs, and will provide a leadership structure for biorisk management.

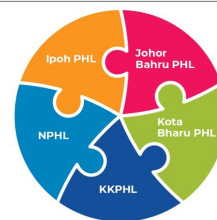
This project was involved with the Regional Public Health Laboratory Network (RPHLN) Twinning Project, 4th March to 13th September 2024.



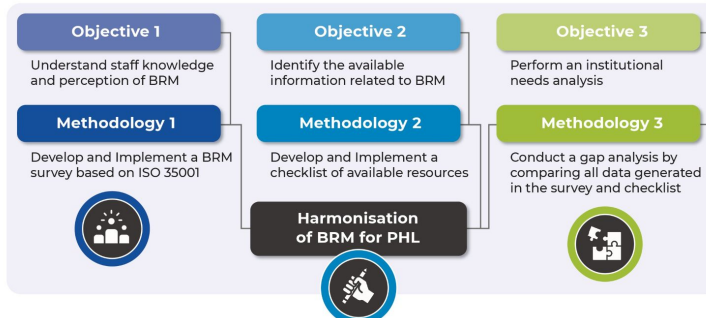
NPHL	KKPHL
Located centrally in Sungai Buloh, Selangor	Located in Kota Kinabalu, Sabah
Large facility (multiple different lab settings BSL-2, BSL-3, abim-type lab)	Smaller facility with multiple labs (BSL-2)
Large workforce (lab, admin and support staff)	One third (lab, admin and support staff)
More established BRMS	BRMS under development
More funding and resource availability for BRM implementation	Less funding and resource availability for BRM implementation
IBBC team consisting of more than 1 trained Biosafety Officer	1 trained Biosafety Officer

Project Importance and Impact

- By mapping the opportunities for improvement, this project aims to harmonize the BRM system to improve compliance among public health laboratories in Malaysia by delivering timely and consistent information under the highest quality and safety standards.
- In addition, this will facilitate the establishment of a formal biosafety officer network within PHL in Malaysia to improve communication and collaboration, strengthen biosafety and biosecurity culture among PHLs, and will provide a leadership structure for BRM.



Goals, Objectives & Methodology



Results

1 TEAM MALAYSIA
RPHL Twinning Project
Borang Soal Selidik

Penilaian sistem BRM antara MKAKK dan MKAK yang Membawa kepada penyaluran sistem BRM Rangkaian Makmal Kesihatan Awam Malaysia (PHLN) untuk mengukuhkan amalan biokeSELAMATAN dan biosekuriti

2 TEAM MALAYSIA
RPHL Twinning Project
Feedback Form

Maklumbalas dan Pengesahan Kehadiran Continuous Education dan Projek Biorisk Management Systems Di Bawah RPHL Network Twinning Program

The form Maklumbalas dan Pengesahan Kehadiran Continuous Education dan Projek Biorisk Management Systems Di Bawah RPHL Network Twinning Program is no longer accepting responses

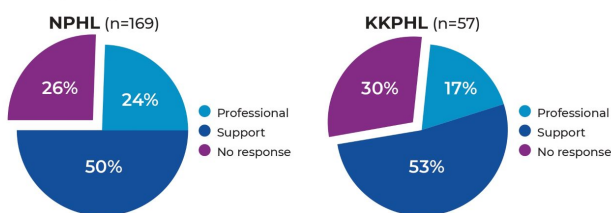
1st STEP

- Survey details (1st step)
- Anonymous
- 50 questions, 7 BRM areas and 34 sub-areas
- Google form
- ISO 35001
- Dual language (2 separate forms)

2nd STEP

- Google form
- Feedback
- Dual language (combined in 1 form)
- Upload survey completion screenshot
- Submit to gain Continuous Education certificate

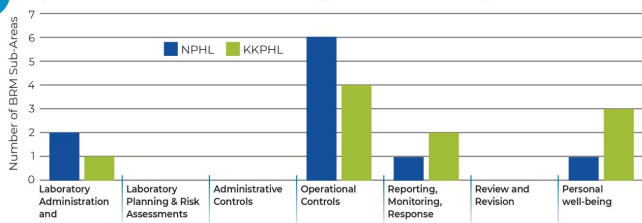
2 Survey Respondents from PHL



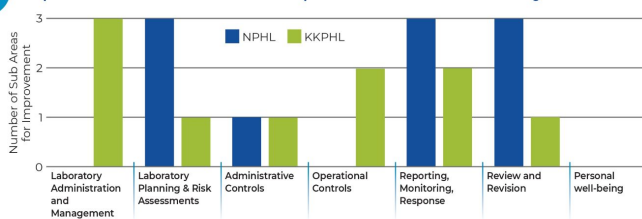
3 IBBC Meeting to Complete the PHL Checklist of the Project



4 Top 10 BRM Sub-Areas of Strength for the PHL by BRM Areas



5 Top 10 BRM Sub-Areas For Improvement in the PHL by BRM Area



6 Matrix of Survey Comments

Lab Section

BRM Area	Operational Controls	Reporting, Monitoring, Response	Review and Revision	Personal well-being
Administrative Controls	1	1	1	1
Laboratory Planning & Risk Assessments	1	1	1	1
Laboratory Administration and Management	1	1	1	1

99 received comments
25% of comments mentioning training

Conclusion

Both PHLs have:

- BRM in place with varying degrees of implementation.
- dedicated leadership committed to lab biosafety and biosecurity.
- trained Biosafety Officer(s).
- BRM resources (training, SOPs, documents, etc.).
- essential roles as reference laboratories in Malaysia.
- strengths areas and priorities for improving BRM.
- identified the need for having a BRM policy.
- laboratory personnel that are keen to obtain more training in BRM.

The final report we generated will provide a roadmap and goals for improving BRM harmonisation in the coming years for PHL in Malaysia.

Recommendations for BRM improvements at national level

Priority	How to achieve that...
Establish the biosafety and biosecurity officers network among PHL in Malaysia	Establish a working group, contact information, terms of reference
Development of BRM policy (including performance metrics)	Creation of KPIs to determine compliance and effectiveness of BRM implementation
Harmonise BRM core documents among all PHLs in Malaysia	Review and harmonise the BRM documents from PHLs in Malaysia
Provide BRM training to lab staff of other PHLs in the country	Develop, update and deliver biosafety and biosecurity training for PHL lab staff

Acknowledgements

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