Proceedings Report of Regional Workshop

Enhancing Regional Partnership Towards Strengthening Laboratory System in Accelerating GHSA’S Implementation: Detect 1

27-29 July 2016, Bangkok, Thailand
Enhancing Regional Partnership Towards Strengthening Laboratory System in Accelerating GHSA’s Implementation: Detect 1

Proceedings
Report of
Regional Workshop
Editorial Team

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<td>Bureau of Drug and Narcotic, Department of Medical Sciences</td>
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<td>Jintana Sriwongsa</td>
<td>Advisor on Global Health Security Agenda (GHSA), Department of Medical Sciences (DMSc)</td>
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<td>Kanate Temtrirath</td>
<td>Bureau of Quality and Safety of Food, Department of Medical Sciences</td>
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<td>Malinee Chittaganpitch</td>
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<td>Noppavan Janejai</td>
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<td>Panadda Dhepakson</td>
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<td>Patravee Soisangwan</td>
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<td>Raevadee Siritunyanont</td>
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<td>Supaporn Suparak</td>
<td>National Institute of Health, Department of Medical Sciences</td>
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ADVISORY GROUP

- Dr. Sukhum Karnchanapimai, Director General, Department of Medical Sciences
- Dr. Phichet Banyati, Deputy Director General, Department of Medical Sciences
- Dr. Somchai Sangkitporn, Director, National Institute of Health, Department of Medical Sciences
- Dr. Patravee Soisangwan, Director, Bureau of Laboratory Quality Standards, Department of Medical Sciences
- Ms. Warangkana On-coung, Director, Division of Planning and Technical Coordination, Department of Medical Sciences
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<tr>
<th>Acronym</th>
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<tr>
<td>AFRIMS</td>
<td>Armed Forces Research Institute of Medical Science</td>
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<td>ALDF</td>
<td>ASEAN Lab Directors Forum</td>
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<td>AMD</td>
<td>Advanced Molecular Diagnostics</td>
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<td>AMR</td>
<td>Antimicrobial Resistance</td>
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<tr>
<td>APSED</td>
<td>Asia Pacific Strategy for Emerging Diseases</td>
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<td>ASEAN</td>
<td>Association of Southeast Asian Nations</td>
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<tr>
<td>BLMT</td>
<td>Biosafety Laboratory Mapping Tool</td>
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<td>BMBL</td>
<td>Biosafety in Microbiological and Biomedical Laboratories</td>
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<td>BSC</td>
<td>Biosafety Cabinet</td>
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<td>CDC</td>
<td>Centers for Disease Control and Prevention</td>
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<td>DLD</td>
<td>Department of Live Stock Development</td>
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<td>DMSc</td>
<td>Department of Medical Sciences</td>
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<td>DRA</td>
<td>Designated Receiving Area</td>
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<td>EHR</td>
<td>Electronic Health Record</td>
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<td>EID</td>
<td>Emerging Infectious Diseases</td>
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<td>EQA</td>
<td>External Quality Assessment</td>
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<td>FAO</td>
<td>Food and Agriculture Organisation</td>
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<td>GHSA</td>
<td>Global Health Security Agenda</td>
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<td>IHR</td>
<td>International Health Regulations</td>
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<td>JEE</td>
<td>Joint External Evaluation</td>
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<td>JICA</td>
<td>Japan International Cooperation Agency</td>
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<td>LAB-TAG</td>
<td>Laboratory Technical Advisory Group</td>
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<td>LQMS</td>
<td>Laboratory Quality Management Systems</td>
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<td>LSS</td>
<td>Laboratory System Strengthening</td>
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<td>MBDS</td>
<td>Mekong Basin Disease Surveillance</td>
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<td>MOPH</td>
<td>Ministry of Public Health</td>
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<td>MOU</td>
<td>Memorandum of Understanding</td>
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<td>MRA</td>
<td>Material Release Agreement</td>
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<td>MSS</td>
<td>Mortality Surveillance Systems</td>
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<tr>
<td>Abbreviation</td>
<td>Full Form</td>
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<td>MTA</td>
<td>Material Transfer Agreement</td>
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<td>National Institute of Animal Health</td>
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<td>NGS</td>
<td>Next-Generation Sequencing</td>
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<td>NNDSS</td>
<td>Nationally Notifiable Disease Surveillance System</td>
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<td>OIE</td>
<td>World Organisation for Animal Health</td>
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<td>PEPFAR</td>
<td>President’s Emergency Plan for AIDS Relief</td>
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<td>POC testing</td>
<td>Point-of-Care testing</td>
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<td>PPE</td>
<td>Personal Protective Equipment</td>
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<td>PT</td>
<td>Proficiency Testing</td>
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<tr>
<td>PVS</td>
<td>Performance of Veterinary Services</td>
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<td>SAARC</td>
<td>South Asian Association for Regional Cooperation</td>
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<td>SOPs</td>
<td>Standard Operating Procedures</td>
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<td>TOR</td>
<td>Term of Reference</td>
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<td>TUC</td>
<td>Thailand MOPH-U.S. CDC Collaboration</td>
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<td>USG</td>
<td>U.S. Government</td>
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<td>USAID</td>
<td>United States Agency for International Development</td>
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<td>World Health Organisation</td>
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<td>WFD</td>
<td>Workforce Development</td>
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<td>WPRO</td>
<td>WHO Western Pacific Region</td>
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FOREWORD

The Global Health Security Agenda (GHSA) is a global effort to accelerate progress towards a world safe and secure from infectious disease threats; to promote global health security as an international priority; and to spur progress towards an implementation of the World Health Organisation (WHO), International Health Regulations 2005 (IHR), the World Organisation for Animal Health (OIE) Performance of Veterinary Services (PVS) pathway, and other relevant global health security frameworks.

During the Helsinki Meeting, the Royal Thai Government, through the Ministry of Public Health, announces its leadership in taking up the two Actions Packages including “Detect 1: National Laboratory System” and “Detect 5: Workforce Development (WFD)”. Thailand also volunteered and accepted to be a contributing country for “Prevent 1: Antimicrobial Resistance (AMR)”.

This first Regional Workshop: Enhancing Regional Partnership Towards Strengthening Laboratory System in Accelerating GHSA’s Implementation: Detect 1, convened during 27-29 July 2016, Bangkok, Thailand, indeed demonstrated commitments of concerned stakeholders in accelerating an implementation of GHSA Detect 1: National Laboratory System.

Prominent outputs resulting of the aforementioned workshop including challenges facing by participating countries, announcement of Strategic Roadmap on LSS [2016-2020], identified key regional activities, as well as issuance of specific recommendations have been elaborated in this proceeding report.

I hope that this report will not only record “proceeding” of the workshop, but also, serve as a guiding document to enhance our existing collaboration in enhancing the implementation of the GHSA: Detect 1.

With that note, I would like to congratulate the lead countries [USA, South Africa, Thailand], particularly the Department of Medical Sciences under leadership of Dr. Apichai Mongkol, Former Director General of the Department of Medical Sciences in organising such an important event.

Special thanks to all of delegations for active participation and contribution in making this successful workshop.

Dr Sukhum Karnchanapimai
Director General of the Department of Medical Sciences
Ministry of Public Health, Thailand
January 2017
ACKNOWLEDGEMENT

Regional Workshop: Enhancing Regional Partnership Towards Strengthening Laboratory System in Accelerating GHSA’s Implementation: Detect 1, was held from 27-29 July 2016 in Bangkok, Thailand was organised by Ministry of Public Health (MOPH), Thailand through Department of Medical Sciences (DMSc).

The Organising Committee would like to acknowledge a great support rendering from the United States Agency for International Development (USAID) through Food and Agriculture Organisation of the United Nations (FAO).

We would like to express sincere appreciation to all of resource persons for moderating the discussion, sharing their respective sessions and providing inputs, comments to the workshop. Gratitude and thanking give to hard-working rapporteur team in providing sessions’ report to be effectively delivered.

Gratefully and sincerely thanks to Dr. Apichai Mongkol, Former Director General of the Department of Medical Sciences in his excellent leadership.

The Workshop would not meet all expectations without active participation from all of delegations including USA, South Africa, Canada, Georgia, Japan, Switzerland, Cambodia, Indonesia, Lao PDR, Malaysia, Viet Nam, Myanmar, Sri Lanka, Bhutan and Nepal, as well as local and international development partners from FAO, OIE, WPRO, WHO SEARO, WHO Thailand Country Office, US CDC, USAID, Thailand MOPH – U.S. CDC Collaboration (TUC), AFRIM, MBDS, and JICA.

Special thanks convey to liaison team and the Organising Committee of the Department of Medical Sciences in making this workshop possible.
EXECUTIVE SUMMARY

Among others identified 11 Action Packages of Global Health Security Agenda (GHSA), led by South Africa, Thailand and USA, GHSA Detect 1, National Laboratory System aims to strive for “Real-time bio-surveillance with a national laboratory system and effective modern point-of-care and laboratory-based diagnostics”.

Working closely with key development partners and lead countries, Thailand hosted the 3-Day Workshop aiming for updating on national strategic plans on National Laboratory System Strengthening (LSS), presenting the Regional Strategic Roadmap on Laboratory System Strengthening (LSS), identification of key regional activities, and enhancing networking on LSS across regions.

The event was convened during 27-29 July 2016 at Berkeley Hotel, Bangkok, Thailand. Participants representing 2016 GHSA Chair (Indonesia), Lead Countries and Contributing Countries of Detect 1, ASEAN, SAARC, Timor Leste and key development partners have been fully engaged in this 3-Day Workshop.

Participating countries were of the views that GHSA is an enable platform in leveraging and maximising the existing efforts done by countries and key development partners such as an implementation of International Health Regulations (2005).

Key tangible achievements derived from the 3-Day Workshop include:

Realising that emerging and re-emerging diseases as a major global health concerns, but yet countries need to be better prepared;

Taking note on national updates as well as challenges facing by countries:

- Acknowledging of ongoing efforts made by key development partners including WHO, FAO, OIE, USAID, JICA, MBDS in order to strengthen national laboratory system both at national and regional levels;

- Emphasising on development of the Strategic Roadmap of Laboratory System Strengthening (LSS, 2016-2020) and its application of following up progress of the GHSA: Detect 1: National Laboratory System both national and regional levels;

- Prioritising of 6 key regional activities for 2016 - 2017 as well as identifying their implementing modalities such as leading countries, resource mobilisation, and key development partners; and

- Encouraging countries to utilise Joint External Evaluation (JEE) as one of planning tools.
Specific key recommendations are as follows:

- Communication between Public Health and Animal Health sectors is an essential key;

- Coordination among relevant partnership is vital;

- Avoiding duplication and parallel efforts – not reinventing the wheel must be taken into account; and

- Networking of the networks is recommended.

Face–to–face Meeting of lead countries and contributing countries were also convened as a side event. The Meeting echoed on significant role of the GHSA platform as a means to enhance collaborative efforts among key stakeholders. It is indeed demonstrated on political leadership and commitment. They expressed sincere appreciation to Thailand and lead countries in developing such an important document: Regional Strategic Roadmap on LSS (2016–2020). This document will be also used for following up progress of an implementation of the GHSA Detect 1.

The participants expressed sincere appreciation to the government of Thailand through the Department of Medical Sciences, Ministry of Public Health in hosting this important Workshop. It is indeed enhancing regional partnership in accelerating GHSA’s Implementation: Detect 1.

It was noted that the follow-up platform of Detect 1 will be duly organised in Thailand, subject to further announcement.
Launching of the Global Health Security Agenda (GHSA) in Washington DC and Geneva on February 13, 2014 and Helsinki Meeting in May 5-6, 2014 mark collectively global efforts in moving towards a safe and secure world from infectious threats, as well as promoting global health security as an international security priority. It is expected that GHSA will enhance and complement an implementation of International Health Regulations 2005 by addressing cross-sectoral approach. Eleven Actions Packages were identified to accelerate GHSA’s implementation and requested for commitments from all participating countries to accelerate and monitor progress of all identified elements.

During the Helsinki Meeting, the Royal Thai Government, through the Ministry of Public Health, announces its leadership in taking up the two Actions Packages including “Detect 1: National Laboratory System” and “Detect 5: Workforce Development (WFD)”. Thailand also volunteered and accepted to be a contributing country for “Prevent 1: Antimicrobial Resistance (AMR)”. High Level Meetings such as Steering Committee and Ministerial Meetings have been organised to monitor the progress of GHSA implementation.

In May 2015, the Royal Thai Government convened the GHSA Meeting “Step towards Regional Strategic Collaboration in Asia Pacific on Workforce Development, National Laboratory System Strengthening & Antimicrobial Resistance Prevention to Response to Global Challenge”.

The Meeting resulted in consensus on the relevance, feasibility and steps forward to enhance regional collaboration under the three aforementioned GHSA Action Packages. Key components of the Roadmap for laboratory system strengthening were formulated and agreed among participating countries.

Essential key components have been identified, among others, including:

1. Ensure National Lab Strategic Plan and Policy address disease surveillance and outbreak detection and response as well as one health approach;

2. Ensure legal framework for registering/licensing laboratories (public and private) in placed and enforced;

3. Strengthen biorisk management systems such as establish regional guidelines and training courses;
iv. Strengthen national diagnostic capacity for priority diseases (this includes specimen referral systems) possible regional activity including develop referral system policy across border;

v. Maintain and strengthen existing networks at regions (ASEAN and SAARC), establish Inter-regional linkage, and develop human-animal health laboratory networking should be done at initial phase of the plan;

vi. Strengthen laboratory quality management systems including establish regional EQA programme, and establish accreditation programme by utilising relevant International Standards; and

vii. Strengthen laboratory workforce, especially laboratory leaders and managers as Laboratory workforce development is a cross cutting issue in most action items, including outbreak response and management, quality assurance system, technical training and laboratory leadership management.

Working closely with other lead countries (USA and South Africa) and contributing countries, the Department of Medical Sciences, Ministry of Public Health, Thailand, has been tasked to oversee an implementation of the Detect 1: LSS.
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| 8 30 – 09 30 | Welcome Remarks by Dr. Phichet Banyati, Deputy Director General, Department of Medical Sciences, MOPH, Thailand  
Opening Remarks by Dr. Apichai Mongkol, Director General, Department of Medical Sciences |
| 09 30 – 10 00 | Photo Session, Followed by Coffee Break |
| SESSION I: Where are we? 10 00 – 11 00 | Plenary Session  
Chair: Dr. John MacArthur, Thailand MOPH – U.S. CDC Collaboration |
| | 1.1 GHSA Overview  
Speaker: Dr. John MacArthur, Thailand MOPH – U.S. CDC Collaboration |
| | 1.2 GHSA Updates  
Speaker: Dr. Siswanto, Indonesia, GHSA Chair of Steering Committee 2016 |
| | 1.3 Detect 1: National Laboratory System - Regional Roadmap on LSS [2016-2020]  
Speaker: Dr. Apichai Mongkol, Department of Medical Sciences, MOPH, Thailand |
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<td><strong>1. 4 National Progress</strong></td>
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<td><strong>Panel Discussion</strong>: Updates from participating countries focusing on national strategic plan on laboratory system strengthening &amp; progress.</td>
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<td><strong>Secretariat to present overall updates receiving from participating countries</strong></td>
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<td><strong>Chair</strong>: Dr. Supamit Chunsuttiwat, Department of Disease Control, Ministry of Public Health, Thailand</td>
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<td></td>
<td>- Dr. Leonard Peruski, CDC USA</td>
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<td>- Dr. Ranmini Kularatne, South Africa</td>
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<td>- Dr. Khebir Verasahib, Malaysia</td>
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<td>- Dr. Phichet Banyati, Thailand</td>
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<td>12 00 – 13 30</td>
<td><strong>LUNCH</strong></td>
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<td><strong>Chair</strong>: Dr. Khanchit Limpakarnjanarat, FAO, Regional Office for the Asia Pacific and GHSA Coordinator, MOPH, Thailand</td>
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<td><strong>Panelists:</strong></td>
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<td>- Dr. Kendra Chittenden, USAID</td>
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<td>- Dr. Filip Claes, FAO, Regional Office for the Asia Pacific</td>
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<td>- Dr. Franciscus Adrianus Jacobus Konings, WPRO</td>
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<td>- Dr. Moe Ko Oo, MBDS</td>
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<td></td>
<td>- Dr. Ikuma Nosaki, JICA</td>
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<td>15 00 – 15 30</td>
<td><strong>Coffee Break</strong></td>
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<td>Working Sessions to discuss on key regional activities and implementation modality.</td>
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<td><strong>Chair:</strong> Dr. Supamit Chunsuttiwat, Department of Disease Control, Ministry of Public Health, Thailand</td>
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<td><strong>Co-Chair:</strong> Dr. Filip Claes, FAO, Regional Office for the Asia Pacific</td>
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<td><strong>Group 2:</strong></td>
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<td><strong>Chair:</strong> Dr. Khanchit Limpakarnjanarat, FAO, Regional Office for the Asia Pacific and GHSA Coordinator, MOPH, Thailand</td>
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<td><strong>Co-Chair:</strong> Dr. Toni Whistler, Thailand MOPH - US CDC Collaboration</td>
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<td><strong>Groups’ Rapporteur</strong></td>
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<td><strong>Group 1:</strong></td>
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<td>Dr. Besa Seyoum, Ms. Noppavan Janejai</td>
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<td><strong>Group 2:</strong></td>
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<td>Dr. Sudarat Damrongwatanapokin, Mr. Christopher Chadwick</td>
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<td><strong>SESSION III:</strong></td>
<td>Groups’ presentations and Identification and agreement of key regional activities and implementing modalities [2016 – 2019]</td>
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<td>10 30 – 12 00</td>
<td><strong>Chair:</strong> Dr. Somchai Sangkitporn, Department of Medical Sciences, MOPH, Thailand</td>
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<td><strong>Co-Chair:</strong> Ms. Linda de Gouveia, South Africa</td>
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<td><strong>Commentators:</strong> JICA, FAO, OIE, WHO, MBDS, USAID</td>
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<td>15 minutes for each group</td>
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<td>Lunch</td>
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<td><strong>SESSION IV:</strong></td>
<td><strong>Panel Discussion</strong> on Joint External Evaluation: its application as a GHSA tool for planning and monitoring</td>
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<td>[13 15 – 14 30]</td>
<td><strong>Chair:</strong> Dr. Wantanee Kalpravidh, FAO Regional Office for the Asia Pacific</td>
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<td><strong>Panellists:</strong></td>
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<td></td>
<td>• Dr. Richard Brown, WHO Thailand</td>
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<td>• Dr. Pretty Multihartina Djoko Sasono, Indonesia</td>
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<td>• Dr. Buth Sokhal, Cambodia</td>
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<td>• Mr. Douglas Gorsline, US Department of Defense, USA</td>
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<td>[14 30 – 15 00]</td>
<td>Summary of key issues to be presented to the face to face Meeting for Lead Countries by Thailand</td>
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<td>Coffee Break</td>
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<td>16 30 – 17 50</td>
<td>Face to face Meeting of Lead Countries and Contributing Countries</td>
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<td>18 05 – 18 30</td>
<td>Press conference at Jubilee Ballroom A-B, all delegates will be invited</td>
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<td>19.00 – 21 00</td>
<td>Welcome Dinner</td>
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<td><strong>DAY 3  29 JULY 2016 [8 30 – 8 45]</strong></td>
<td>Wrap Up by Thailand</td>
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| **SESSION V:** Relevant Issues for LSS [08 45 – 09 30] | Real Time Biosurveillance  
Speaker: Dr. Leonard Peruski, US CDC |
| **SESSION VI:** Upcoming Regional Activities [2016 – 2017] [09 30 – 10 15] | Plenary Discussion  
Chair: Dr Ranmini Kularatne, South Africa  
Co – Chair: Dr. Leonard Peruski, US CDC |
| 10 15 – 10 30 | Coffee Break |
| 10 30 – 12 15 | Continued Session VI |
| 12 15 – 12 30 | Wrap Up and Next Step by Thailand |
| **CLOSING SESSION**  
12 30 – 12 40 | Closing Remarks by Dr. Phichet Banyati, Deputy Director General, Department of Medical Sciences, MOPH, Thailand |
| 12 40 – 13 40 | LUNCH |
| 14 30 – 18 00 | Social Programme for all delegates |

End of Day 3
Welcome Remarks

Dr. Phichet Banyati, Deputy Director General, Department of Medical Sciences, Ministry of Public Health, Thailand

Dr. Apichai Mongkol, Director General of the Department of Medical Sciences, Ministry of Public Health, Thailand.

Dr. Siswanto, Director General of National Institute of Health Research and Development, Representing Chair of GHSA Steering Committee, Ministry of Health Republic of Indonesia

Dr. John MacArthur, Director, Thailand MOPH – U.S. CDC Collaboration

Lead Countries of Detect 1: National Laboratory System [USA, South Africa]

Contributing Countries of Detect 1: National Laboratory System [Malaysia, Switzerland, Canada, Japan, Georgia, and Yemen]

Distinguished International Development Partners and Distinguished Delegates, Ladies and Gentlemen
On behalf of the Royal Thai Government, it gives me a great pleasure to extend our warm welcome, and to say how grateful we are to have your presence for this important regional workshop on the “Enhancing Regional Partnership Towards Strengthening Laboratory System in Accelerating GHSA’s Implementation: Detect 1” during 27 to 29 July 2016. I am pleased to inform you that there are 70 delegates gathering today representing their respective countries, and key development partners.

Distinguished Delegates, Ladies and Gentlemen

Launching of the Global Health Security Agenda (GHSA) on 13 February 2014 marks collectively global efforts in moving towards a secure world from infectious threats.

During the Helsinki Meeting 2014, the Royal Thai Government, through the Ministry of Public Health, announces its leadership on “Detect1: National Laboratory System.

Together with lead countries [USA and South Africa] and other 12 participating countries, the GHSA Detect 1: National Laboratory System aims to strive for “Real-time biosurveillance with a national laboratory system and effective modern point-of-care and laboratory-based diagnostics”.

Distinguished Delegates, Ladies and Gentlemen

Allow me to also inform all of you that, in May 2015, the Royal Thai Government organised the GHSA Meeting on “Step towards Regional Strategic Collaboration in Asia Pacific on Workforce Development, National Laboratory System Strengthening & Antimicrobial Resistance Prevention to Response to Global Challenge”. The meeting outcome consented to the relevance, feasibility and steps forward to enhance regional collaboration with the formulation of key components for the National Laboratory System Strengthening Roadmap.

In moving forward, based on the May 2015 meeting, the Royal Thai Government through the Ministry of Public Health, the Department of Medical Sciences, in collaboration with FAO and USAID, has convened this important three-day workshop aiming for:

• First, to update national strategic plans on National Laboratory System Strengthening.

• Second, to finalise regional roadmap and regional strategic plan on National Laboratory System Strengthening.

• And last but not least, to propose key regional activities and implementing mechanism.

Distinguished delegates, Ladies, and Gentlemen, without the great cooperative work among key development partners, resources person, and lead countries, this regional workshop could hardly takes place. I would like to also take this opportunity to thanks my staff - organising committee - for their entire efforts in organising this workshop.

On this auspicious occasion, may I have an honour to invite Dr. Apichai Mongkol, Director General of the Department of Medical Sciences, Ministry of Public Health Thailand, to deliver opening remarks for the Workshop.

Sir, please.
Opening Remarks

By Dr. Apichai Mongkol, Director General, Department of Medical Sciences, Ministry of Public Health, Thailand

Dr. Phichet Banyati, Deputy Director General, Department of Medical Sciences

Dr. Siswanto, Director General of National Institute of Health Research and Development, Representing Chair of GHSA Steering Committee, Ministry of Health Republic of Indonesia

Dr. John MacArthur, Director, Thailand MOPH – U.S. CDC Collaboration

Lead Countries of Detect 1: National Laboratory System [USA, South Africa]

Contributing Countries of Detect 1: National Laboratory System [Malaysia, Switzerland, Canada, Japan, Georgia, and Yemen]

Distinguished International Development Partners and Distinguished Delegates, Ladies and Gentlemen
Distinguished delegates, guests, ladies and gentlemen

It is indeed my great pleasure to presence today. I would like to extend my warm greetings and convey my warm welcome to all of you who participate today in this important 3 – Day Regional Workshop, hosted by the Thai Royal Government.

I would like to take this opportunity to express my sincere appreciation to the support of USAID and FAO in organising this important event.

The launching of GHSA in 2014 indeed marks one of the most significant global movements to underline nations’ capacity to prevent, detect, and respond to any of infectious diseases threats whether naturally or accidentally occurring.

As emphasised by Deputy Director General, Department of Medical Science, Dr. Phichet Banyati, GHSA Detect 1: National Laboratory System aims to strive for “Real-time biosurveillance with a national laboratory system and effective modern point-of-care and laboratory-based diagnostics”.

Under the leadership of the MOPH Thailand through the Department of Medical Sciences, I would like to first congratulate to lead countries of GHSA: Detect 1 and lead development partners in formulating the “Regional Strategic Roadmap for Laboratory System Strengthening” as a guiding document for all GHSA Members to localised it in their own context, especially, for national roadmap development. I hope that the three – day Workshop will deliberate further on how to materialise this important document through enhancing regional partnership.

Secondly, in order to encourage progress towards a world safe and secure from global health threats posed by infectious diseases, I would like to underscore that an accelerating of GHSA’s implementation is vital. Therefore, I encourage all of you to discuss and help each other to come up with key regional activities and implementing mechanism as this is indeed time for action.

Nevertheless, in doing so, strong networking across regions, joint collaborative efforts among leading countries, contributing countries and participating countries as well as development partners are utmost crucial. No matter how much we can do by ourselves at national level, it has never been sufficient to prevent infectious diseases. Only a spirit of true cooperation is the only hope to save all people and all nations.

Distinguished delegates, guests, ladies and gentlemen

I would like to conclude my remarks by drawing your kind attention on two aspects keywords: enhancing regional partnership and accelerating GHSA's implementation. I am confident that throughout the sessions, you will be able to meet the expectations.

May I take this opportunity to express my sincere thanks to my diligent team - the Department of Medical Sciences, lead countries of GHSA: Detect 1 [USA, South Africa, and Thailand], as well as experts from the Department of Disease Control, MOPH Thailand, FAO, USAID Thailand, Indonesia & Headquarter, WHO through WHO Thailand Country Office, US CDC, GHSA Working Level Support Team and Thailand MOPH-US CDC Collaboration (TUC) in preparing and organising the workshop. Special thanks for all resources person from international organisations and Member States such as ASEAN Partnership Laboratory from Malaysia, Mekong Basin Diseases Surveillance, and JICA.

XX
With my great pleasure, I now declare the opening of the Regional Workshop on “Enhancing Regional Partnership Towards Strengthening Laboratory System in Accelerating GHSA’s Implementation: Detect 1”.

I wish to thank all of you for your valuable presence. I would like you to not only spending time for discussion in the workshop, but also, bringing home a fond memories while staying with us in Thailand.

Thank you.
Press Release

THAILAND SUCCESSFULLY HOSTED THE REGIONAL WORKSHOP: ENHANCING REGIONAL PARTNERSHIP TOWARDS STRENGTHENING LABORATORY SYSTEM IN ACCELERATING GHSA’S IMPLEMENTATION: DETECT 1: 27-29 JULY 2016, BANGKOK

During 27-29 July 2016, an international workshop on Global Health Security Agenda (GHSA): Detect 1 [National Laboratory System] was held at Berkeley Hotel in Bangkok. The three – day regional workshop was hosted by the Ministry of Public Health Thailand, through the Department of Medical Sciences, in collaboration with USAID and FAO.

More than a hundred delegations from USA, South Africa and Thailand as lead countries of GHSA; as well as contributing countries and international development partners (See the list attached); and Indonesia as the Chair of GHSA Steering Committee were gathered to discuss on “facing health threats globally – happens anywhere but everywhere” - and how nations can hold hands for real – time detection of dangerous pathogens more effectively.

The Workshop has reached the expectations as highlighted below;

1. **Updating and sharing** on the progress of Laboratory Strengthening System (LSS) from participating countries;
2. **Supporting the utilisation** of the Regional Strategic Roadmap on Laboratory System Strengthening
3. **Discussion and agreement** on proposed regional activities to be implemented; such as:
   a) Bioengineering Training, External Quality Assurance programme (EQA);
   b) External Quality Assurance;
   c) Sharing experiences on Lab preparedness;
   d) Bioinformatics network, Specimen referral system;
   e) Identification of Focal Points for Public Health Lab in ASEAN and SAARC;
   f) Regional workshop to share 4-way linking experiences; and
   g) Workshop on QA experience, supply chain management, specimen collection and transport, perform laboratory assessments.
During the workshop, the Face-to-Face Meeting, a session to intensify joint collaborative efforts of the lead countries and contributing countries, was also conducted. The GHSA is seen as a promising platform to leverage and maximise the existing efforts of countries and partners. Communication between public health and animal health, coordination for partnership, and networking the network were also underscored to further avoid duplication and parallel efforts.

Launched in 2014 to promote global health security as an international security priority, GHSA aims to enhance and complement the implementation of the International Health Regulations 2005 through 11 Action Packages. Among others, Thailand takes leadership on the two Actions Packages including “Detect 1: National Laboratory System Strengthening” and “Detect 5: Workforce Development”.

**Contacted Person:** Mr. Kanate Temtrirath

Department of Medical Sciences,

Ministry of Public Health,

Tel. 02 589 0022, 02 951 000,

E-mail: kanate.t@dmsc.mail.go.th
The 3 – Day Workshop aims for the following:

a) To update on national strategic plans on national LSS;

b) To present regional strategic roadmap;

c) To propose key regional activities; and

d) To enhance networking on LSS across regions.
PARTICIPANTS

Representatives whom are responsible for national lab system or relevant officers designated from respective countries of the following countries have been participated in this event.

- Lead countries USA, South Africa, and Thailand
- Contributing Countries (Georgia, Japan, Malaysia, Canada)
- ASEAN (Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, Thailand, and Viet Nam)
- SAARC and others (Bhutan, Sri Lanka, Nepal, Timor Leste)
- International partners include FAO, OIE, WHO (WPRO, SEARO, WHO Thailand Country Office), USAID, CDC, MBDS, and JICA
- Local partners and governmental agencies including Permanent Secretary, Deputy Permanent Secretary, Director General of Department of Disease Control, Bureau of Epidemiology, Ministry of Foreign Affair (MOFA), Department of Livestock Development, NIAH, Thailand MOPH – U.S. CDC Collaboration (TUC), AFRIMS
- Other honour guests and resource person such as Chair of GHSA
- Organising Committee

List of participants appears as Annex.

Programme of the 3 – Day Workshop was further elaborated. Face to face meeting was also organised as a side meeting.
**Session I: Plenary Session**

**Chair:** Dr. John MacArthur, Thailand MOPH – U.S. CDC Collaboration

1.1 GHSA Overview  
**Speaker:** Dr. John MacArthur, Thailand MOPH – U.S. CDC Collaboration

1.2 GHSA Updates  
**Speaker:** Dr. Siswanto, Indonesia, GHSA Chair of Steering Committee 2016

1.3 Detect 1: National Laboratory System: Regional Roadmap on LSS [2016-2020]  
**Speaker:** Dr. Apichai Mongkol, Department of Medical Sciences, MOPH, Thailand
1.1 GHSA Overview

Speaker: Dr. John MacArthur, Thailand MOPH – U.S. CDC Collaboration

Summary

**Scene setting:** Currently there are threats from emerging viruses (Nipah outbreak, SARS, H5N1, H1N1, H7N9, MERS-CoV), increased antimicrobial resistance (AMR) and vector borne diseases such as Zika. In Asia there is also a large interface wild life-livestock-humans creating potential risk for disease spill overs to humans from wild life and livestock. Furthermore there is increased risk of diseases spreading through increased airline travel, livestock value chains and migration of labor in the ASEAN Economic Community.

**What are we doing?** Several of global frameworks exist. IHR started in 2005, but currently only 1/3 is prepared to detect and respond diseases at sufficient level. Regionally WHO developed the Asia Pacific Strategies on Emerging Diseases aims to reduce the risk of emerging diseases, to strengthen early detection, to strengthen rapid response, to enhance an effective preparedness and to build technical partnerships.

**Global Health Security Agenda [GHSA]:** 28 countries globally and OIE, FAO, WHO have launched the GHSA in February 2016 to complement existing global health frameworks. The GHSA is comprised of 3 key components: Prevent, Detect, and Respond. 11 Action packages have been identified to materialise these 3 components at technical level. Yet, these technical areas can only be implemented when there is sufficient political support and engagement.
1.2 GHSA Updates

Speaker: Dr. Siswanto, Indonesia, GHSA Chair of Steering Committee 2016

Summary

Up to date, there are 50 countries members of GSHA until April 2016. Meetings took place several times in 2016 between leading countries, contributing countries, as well as members to accelerate an implementation of GHSA and its 11 Action Packages. Next GHSA high level meeting will take place in The Netherlands in October 2016 to enlarge the scope of application of GSHA package with others sectors and to fix the objectives of global sustainable action plan.

To name a few, major achievements in 2016 included:

- The development of Joint External Evaluation (JEE) tool by WHO and key partners which has now been used in several countries;
- The Alliance for Country Assessment, led by Finland works to support WHO and JEE to facilitate engagement and networking between countries, international organisations, donors, and technical experts involved in the WHO’s assessment process, and will promote transparency in exchanging information on the results of assessments; and
- GHSA Next Generation and Private Sector Roundtable: GHSA Next Generation consists of professional young leaders across the world engaged in global health security issues. While GHSA private sector roundtable missions are to mobilise industry to help countries prepare for and respond to health-related crisis, and strengthen systems for health security.

In capacity of GHSA Chair in 2016, the government of Indonesia convened GHSA Meeting in June 2016 in Bali. Key transpired messages are as follows:

- Focusing on risk prevention and mitigation;
- Promotion of national self-reliance and engagement of communities across the whole society;
- Strengthening multisectoral approaches in all level to support GHSA programmes; and
- Required regional and international collaboration as well as political commitment and leadership.
Summary

As one of joint efforts among Lead countries of GHSA Detect 1, the Strategic Roadmap for Laboratory System Strengthening [2016 -2020] has been formulated. This prominent document aims to provide general guidance for GHSA member countries to develop their respective National Roadmap. It will used as a follow up tool to track the progress of GHSA: Detect 1, as well be a tool and framework for identification of regional activities.

Strategic components include Core and Cross-cutting components as shown in figures below.
Regional Strategic Roadmap on Laboratory System Strengthening 2016 - 2020

GOAL: Real-time biosurveillance with a national laboratory system and effective modern point-of-care and laboratory-based diagnostics

Strategic Components

Core Components
- Strategic Policy, Registering & Licensing
- Diagnostic Capacity
- Quality Management System
- Biorisk Management System

Cross-cutting Components
- Networking
- One Health
- Laboratory Workforce

Strategic Objectives
- Strengthening diagnostic capacity for outbreak of emerging diseases
- Establishing/Enhancing stepwise improvement toward EQA and accreditation program
- Enhancing capacity buildings
- Enhancing inter-regional health related networks
- Establishing/Enhancing national biosurveillance for priority zoonotic diseases
- Strengthening laboratory workforce

Measurable
- Capacity of conducting 10 core test
- Appropriately collecting, transporting and identifying outbreak specimens
- Accrediting 80% of laboratories

Desired Impact
- Effective use of nationwide laboratory system for detecting pathogens causing epidemic diseases

Regional Strategic Roadmap on Laboratory System Strengthening [LSS]

Preamble
- Regional Strategic Roadmap on LSS is one of joint collaborative effort of lead countries of GHSA – Detect 1: National Laboratory System aiming to provide general guidance for GHSA member countries in developing their respective National Roadmap on GHSA: Detect – 1: National Laboratory System.
- Identified key strategic components intend to reinforce the International Health Regulations [IHR 2005] as well as others relevant regional strategies such as Asia Pacific Strategy for Emerging Diseases [APSED].
- Noting different stages of national laboratory context, the roadmap will be further modified to be suitable for local circumstances as deemed appropriate.
- It will be also served as a tool/framework for follow up progress of the GHSA: Detect – 1: National Laboratory System and served as a framework for identification of regional activities.
- This document will be complement with other existing tools such as guideline for development of Roadmap, etc.
- Where appropriate, an implementation of national roadmap on LSS will be taking consideration on synergised efforts needed among inter – related of other GHSA Action Packages such as Zoonosis, etc.
- Joint External Evaluation involving a combination of domestic and independent experts will be promoted as a monitoring and evaluation tool for GHSA Action Packages members.

Background
- Led by three lead countries including USA, Thailand, and South Africa, the GHSA Action Package: Detect 1 aims to strive for “real-time biosurveillance with a national laboratory system and effective modern point-of-care and laboratory-based diagnostics”.
- In May 2015, the Royal Thai Government convened the GHSA Meeting Step towards Regional Strategic Collaboration in Asia Pacific on Workforce Development, National Laboratory System Strengthening & Antimicrobial Resistance Prevention to Response to Global Challenge. The Meeting resulted in consensus on the relevance, feasibility and steps forward to enhance regional collaboration under GHSA LSS and WPD initiatives.
- Key components of the Roadmap for LSS were agreed among participating countries of the said Meeting and served as a basis for formulating of this important document.
- Drafted by Thailand, the draft Strategic Roadmap on LSS was discussed among lead countries and key development partners including WHO and USAID during the 4th and 5th Package Conference (Video) Call hosted by Thailand on 31 May 2016 and 5 July 2016 respectively.
- There are two - pronged of strategic components include: Core Component and Cross Cutting Component as shown in the figure.
- Regional activities will be proposed by any of lead countries, contributing countries, as well as other GHSA Package Members. Implementing modalities will be in close collaboration with WHO, FAO, OIE as well as other regional organisations.
It is noted that regional activities will possibly be proposed by any of lead countries, contributing countries, as well as other GHSA Package Members. Implementing modalities will be in close collaboration with WHO, FAO, OIE, and other regional organisations.

**Q & A Session**

Q: Which assistance on lab can be obtained from GHSA platform?

A: Lead countries can support others members countries to participate in trainings as identified as regional activities (depending on funding availability); international organisations are requested to support regional activities.
1.4 National Progress

Panel Discussion: Updates from participating countries focusing on national strategic plan on laboratory system strengthening & progress.

Secretariat team presented overall updates receiving from participating countries

Chair: Dr. Supamit Chunsuttiwat, Department of Disease Control, Ministry of Public Health, Thailand

Panelists: Dr. Leonard Peruski, CDC USA
          Dr. Ranmini Kularatne, South Africa
          Dr. Khebir Verasahib, Malaysia
          Dr. Phichet Banyati, Thailand

Objective: To update on national progress from participating countries
Summary

Secretariat has presented the national progress using the compiled data from 13 countries on three main topics: updates on nation progress via seven strategic components, Challenges/ possible regional activities and acceleration for the country achievement by GHSA Detect 1.

The speakers representing lead countries of GHSA Detect 1 (South Africa, Thailand, and USA) and 1 lead country of GHSA Detect 1 (Malaysia – also representing lead country for ASEAN Partnership Laboratory Network Plus Three), have provided updates from their respective countries in details including challenges that they are currently facing such as:

- Legislative framework for laboratory is required in majorities of countries;
- Diagnostic capacity such as bio-banking and bioinformatics are needed;
- Quality control by EQA scheme and laboratory accreditation is needed by several countries in order to promote the reliability for laboratory testing;
- Monitoring & maintenance service for biomedical engineering equipment (such as biosafety cabinet);
- Upgrading for the high risk laboratory for biorisk management system;
- Shortage of skilled personnel and the limited resources for human resource development; and
- Linking information for human and animal health sectors.
Possible regional activities have been proposed, for example, regional workshops, EQA programmes for laboratories, production of quality-assured in-house culture media, equipment maintenance, etc. Most of participating countries have proposed for an establishment of regional database for sharing important information at regional level.

Networking is highlighted as one of key factors on the success of GHSA Detect 1.

**Conclusion from Chairs/Co – Chairs**

GHSA Detect 1 is able to raise profile of political commitment, stakeholder engagement, collaboration for animal and human sectors and the utilisation of GHSA roadmap & action plan. In addition, resources could be mobilised through GHSA platform including funding, sharing expertise and training opportunities, especially for those countries needed. As such, regional action plan development is very helpful.

Key suggestions of panel discussion are as follows:

- Developing sustainable systems & policies in line with national/regional priorities;
- Ensuring of no duplicated/parallel systems & policies; and
- Creating a path for integration of laboratory networks.
Session II: Ongoing collaborative efforts on laboratory system strengthening

Panel Discussion: Ongoing regional activities from key development partners to support Regional Strategic Roadmap on Laboratory System Strengthening

Chair: Dr. Khanchit Limpakarnjanarat, FAO, Regional Office for the Asia Pacific and GHSA Coordinator, MOPH, Thailand

Panelists
- Dr. Kendra Chittenden, USAID
- Dr. Filip Claes, FAO, Regional Office for the Asia Pacific
- Dr. Franciscus Adrianus Jacobus Konings, WHO WPRO
- Dr. Moe Ko Oo, MBDS
- Dr. Ikuma Nosaki, JICA
Summary

Session’s Chair emphasised that this session was allocated for key development partners to share with the Meeting for ongoing regional activities in supporting an implementation of the “Regional Strategic Roadmap on Laboratory System Strengthening, 2016-2020”.

10-minute presentation was requested to focus on organisations’ mandates in strengthening national laboratory; match their current activities with the 7 strategic components indicated in the said roadmap; and provide any recommendations on collaborative efforts, if any.

The representatives from five development partners (USAID, FAO, WHO WPRO, MBDS and JICA) presented their policies, strategic action plans and activities to support GHSA on LSS in the Regions. Challenges encountered as well as recommendations to the Regions for accelerating the implementation of GHSA Detect 1 on LSS have been elaborated.

A summary of collaborative efforts on LSS, presented by the development partners, are listed and categorised according to the LSS’s strategic components as follows:
Core component 1: Strategic Policy, Registering & Licensing

- Existence of strategic frameworks and policies for supporting the GHSA on LSS: Regional strategic framework for laboratory capacity building and networking in Southeast Asia (FAO), Asia Pacific Strategy for Emerging Diseases (APSED), Strategic policy for antimicrobial resistance, Asia strategic policy for health laboratory strengthening (WHO WPRO), Strategies for strengthening diagnostic capacity, laboratory workforce and management capacity, and joint scientific researches (JICA) and MBDS strategy (MBDS);

- Laboratory Capacity Building and Networking in Southeast Asia (ASEAN and SAARC); and

- Support for development of guidelines for laboratory policy (together with FAO HQ).

Core component 2: Diagnostic Capacity

- Development of Diagnostic SOPs for high impact diseases;
- Development of guidance for emerging diseases;
- Regional testing algorithms for Influenza A and swine diseases;
- Regional plan to strengthen bioinformatics;
- Procurement support of equipment and reagents;
- Upgrading the laboratory in National Health Laboratory and upgrading laboratory information system and data management;
- Coordinating research collaboration on antimicrobial resistance (AMR); and

- Technical support providing to countries such as development of laboratory-based surveillance, training on laboratory methods, outbreak investigations, development of biosafety guideline, regulation & legislation, and QA and biosafety to obtain accreditation.
Core component 3: Quality Management System

- Global and regional Quality Assurance Programme and EQA programme;
- Support with development of national proficiency testing programme;
- Regional and in-service training on lab management and Quality Assurance;
- Support implementation of Laboratory Quality Management Systems (LQMS);
- Support to stepwise implementation of internationally recognised standards towards accreditation;
- Support development of laboratory mapping and QA audits; and
- Procurement of and training on Personal Protective Equipment (PPE).

Core component 4: Biorisk Management System

Many of ongoing regional efforts on biorisk management system such as:

- Regional and national biosafety programme;
- Regional and in-service training for laboratory biosafety;
- Support to Biosafety Cabinet certification, maintenance & repair;
- Biosafety assessments (FAO B-LMT, BMBL, WHO), Biosafety TOOL BOX, WHO Biosafety manual, Biosafety & biosecurity webpage;
- Support development of biosafety manual;
- Provision of materials and training for the packaging and shipping of infectious substance;
- Support for strengthening national biosafety regulation;
- Support establishment of laboratory biosafety authorities;
- Biorisk assessment;
- Support training and mentorship programmes for laboratory officers; and
- Enhance pandemic preparedness.
**Cross-cutting Component 1: Networking**

Existing networks and regional forums include Laboratory Technical Advisory Group (LAB-TAG) and ASEAN Laboratory Directors’ Forum (ALDF), SAARC Laboratory Directors’ forum, Laboratory-epidemiology networks, and global, regional and national laboratory networks.

Development partners elaborated on supports provided on networking such as establishment of bioinformatic networks and strengthen linkages between national, regional and global laboratory networks.

**Cross-cutting Component 2: One Health**

Development partners also stressed on activities addressing “One Health” such as an existence of One Health approach for zoonoses and emerging pandemic threats, synchronised surveillance and joint analysis, joint risk assessment and training, data sharing at all level (FAO-OIE-WHO), and collaboration and coordination between human and animal sectors.

**Cross-cutting Component 3: Laboratory Workforce**

Many activities related to laboratory workforce were shared including regional and national (in-service) trainings for laboratory staff, advocacy to governments for sufficient laboratory staff (roles of laboratories in the system), and development of standards and licensing of laboratory professionals.

It was also noted that capacity building for laboratory workforce has been addressed under other strategic component as well. To name a few, there are supports on training and mentorship programmes for laboratory officers under core component: biorisk management system.
Recommendations and conclusion

- Key of success is enhancing communication between Public Health and Animal Health sectors;
- Regarding One Health approach, duplication and parallel work efforts should be avoided;
- Coordination for partnership is needed;
- Networking the networks is recommended; and
- Building upon existing systems, plans, strategies, trust as well as mutual understanding.
SESSION III: Possible Regional Activities and Implementation modalities

Working Sessions to discuss on key regional activities and implementation modality

Moderators:

Group 1:

Chair: Dr. Supamit Chunsuttiwat, Department of Disease Control, Ministry of Public Health, Thailand

Co-Chair: Dr. Filip Claes, FAO, Regional Office for the Asia Pacific

Groups’ Rapporteur: Dr. Beza Seyoum, Dr. Rick Brown, Ms. Noppavan Janejai

Group 2:

Chair: Dr. Khanchit Limpakarnjanarat, FAO, Regional Office for the Asia Pacific and GHSA Coordinator, MOPH, Thailand

Co-Chair: Dr. Toni Whistler, Thailand MOPH - US CDC Collaboration

Groups’ Rapporte: Dr. Sudarat Damrongwatanapokin, Mr. Christopher Chadwick
Summary

Based on inputs given, participants were divided into two groups to discuss on key regional activities and implementation modality. Outputs of discussion were presented in the following session.
SESSION III (continued): Groups’ presentations and Identification and agreement of key regional activities and implementing modalities [2016 – 2020]

Chair: Dr. Somchai Sangkitporn, Department of Medical Sciences, MOPH, Thailand

Co-Chair: Ms. Linda de Gouveia, South Africa

This session aimed to encourage participants to propose, discuss and come to agreement on possible regional activities based upon the seven components of the regional roadmap. All participants were divided into 2 groups. With same guideline for discussion, both groups discussed on challenges and needs, and then identified possible regional activities.
## Possible Regional Activities and Implementation Modalities

<table>
<thead>
<tr>
<th>Components of the Regional Roadmap</th>
<th>Activities identified by Group I</th>
<th>Activities identified by Group II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Policy, Registering and Licensing</td>
<td>Workshop for lessons learned on bio-risk regulation / legislation</td>
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</tr>
<tr>
<td>Diagnostic Capacity</td>
<td>Workshop on QA experience, supply chain management, specimen collection and transport</td>
<td></td>
</tr>
<tr>
<td>Quality Management System</td>
<td>- Expansion of current regional EQA programme</td>
<td>External Quality Assurance Programme</td>
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<tr>
<td></td>
<td>- Perform laboratory assessments</td>
<td></td>
</tr>
<tr>
<td>Biorisk Management System</td>
<td>- Regional trainings on Biorisk Management</td>
<td>Bioengineering Training</td>
</tr>
<tr>
<td></td>
<td>- Expansion of the BSC programme to other needed countries</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Regional workshop on biosafety guidelines and certification</td>
<td></td>
</tr>
<tr>
<td>Networking</td>
<td>Identification of focal point for public health labs in ASEAN and SAARC</td>
<td>Sharing Experience on Lab Preparedness, Lessons learned from EBOLA</td>
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<tr>
<td>One Health</td>
<td>- Regional simulation exercise (human health, animal health, lab, epidemiology)</td>
<td>Bioinformatics Network</td>
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<td></td>
<td>- Regional workshop to share 4-way linking experiences</td>
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</table>
Following the groups’ presentations, the data was compiled and presented again in order to get comments from International Organisations and other participants. Co-chair invited open discussion from all audiences.

In summary, a list of possible regional activities is re-grouped and consolidated in order to show inter-relationship among activities that will lead to desired outputs and outcomes.

*The final list of key regional activities is shown in the following table.*

<table>
<thead>
<tr>
<th>No.</th>
<th>Regional activities</th>
<th>Lead country</th>
<th>Contributors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bioengineering Training</td>
<td>Thailand</td>
<td>- US-CDC</td>
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<td></td>
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<td>- AFRIMS</td>
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<td>- FAO/USAID</td>
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<tr>
<td>2</td>
<td>External Quality Assurance Programme</td>
<td>South Africa / Thailand</td>
<td>- Thailand MOPH-US CDC Collaboration</td>
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<td>- FAO/USAID</td>
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<tr>
<td>3</td>
<td>Sharing Experience on Lab Preparedness; Lessons learned from EID outbreak</td>
<td>- Thailand</td>
<td>- FAO/USAID</td>
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<td></td>
<td></td>
<td>- South Africa</td>
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<tr>
<td>4</td>
<td>Bioinformatics Network</td>
<td>- Thailand</td>
<td>- Malaysia (Dengue)</td>
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<td>- FAO/USAID</td>
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<td>- US-CDC</td>
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<tr>
<td>5</td>
<td>Regional workshop to share 4-way linking experiences</td>
<td>Indonesia / Viet Nam</td>
<td>FAO /USAID</td>
</tr>
<tr>
<td>6</td>
<td>Workshop on QA experience, supply chain management, specimen collection and transport, perform laboratory assessments</td>
<td>Thailand / Sri Lanka / Indonesia</td>
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</tr>
</tbody>
</table>
**Additional Salient Points of Group Discussion to be noted**

**Group 1:**

- Recommend for Joint human / animal health activities;
- Focus on expansion / harmonisation of current programmes (rather than initiate new activities) for Regional activities for laboratory EQA. Comprehensive mapping of current activities is needed;
- Recommend for countries to undertaking a baseline laboratory assessment;
- Noting a number of tools availability that could be further used; and
- Conducting of JEE can be used as a more detailed self-assessment.

The Group also highlighted an importance of lab preparedness as one of the key components of outbreak / pandemic preparedness, including the related need for healthcare facility preparedness planning. Preparedness has been indicated as one of important components of the Asia Pacific Strategy for Emerging Diseases of which workplan is being developed for the new APSED III.

**Group 2 has additionally presented on main issues and needs associated with each of the core components and cross-cutting components of the Regional Roadmap on Laboratory System Strengthening (2016-2020).**

**Core Components:**

**Strategic Policy, Registering, and Licensing**

- Advocacy;
- Sustainable funding;
- Development of regional/country standard guidelines and standard operating procedures (SOPs);
- Policies on how to address public health emergencies;
- Policies on point-of-care (POC) testing; and
- Strengthening policy implemented to help with development of standards, guidelines, and SOPs.

**Diagnostic Capacity**

- Genetics and bioinformatics for influenza;
- Unified protocols;
- Sharing of test kits and consumables;
- Policies on specimen referral;
- Reliability of POC tests;
- Training for microbiological tests; and
- Antimicrobial resistance (AMR) surveillance system.

Quality Management System
- Training on laboratory quality management;
- Regional external quality assurance (EQA) programme;
- Step-wise accreditation; and
- Supply chain management.

Biorisk Management System
- Bioengineering and biosafety cabinet (BSC) training; and
- Biosafety and biosecurity training.

**Cross-Cutting Components:**

**One Health**
- National framework and policy dialogue that link human and animal health; and
- Support application and training between laboratory and field epidemiological staff from the human and animal health sectors.

**Workforce**
- Training;
- Human resource retention and recruitment; and
- Career development.

**Networking**
- Training programme for development of national accreditation programme;
- Unified system for private and public health laboratory reporting and early detection;
- Regional/sub-regional data sharing network on emerging infectious diseases and notifiable diseases; and
- Memoranda of understanding (MOUs) for cross-border cooperation on 10 emerging infectious diseases.
Following the identification of major issues and needs for the seven components, the group focused on identifying ongoing activities and potential regional activities for the members of the GHSA Action Package to address.

Four major potential activities and implementing modalities have been identified as follows:

I. Bioengineering Training

Objectives:

- To support the proper and correct maintenance of important basic laboratory equipment, including calibration and monitoring;
- To assess ongoing trainings and resources; and
- To train the trainer on BSC certification.

Ongoing activities:

- The US-CDC and AFRIMS currently deploy bioengineers to help certify BSCs in Viet Nam, Myanmar, Cambodia, the Philippines, and Nepal; and
- USAID FAO and Thailand provide trainings on biosafety/biosecurity and BSC certification.

Lead country: Thailand

Contributors: US-CDC, USAID

- US-CDC can provide BSC certification service;
- AFRIMS can provide experts; and
- USAID can facilitate the sharing of experiences with development of curriculum.

II. External Quality Assurance (EQA) Programme

Objectives:

- To support the quality management systems of the national laboratory; and
- To assess the current EQA programmes and providers as resources and link them together.

Ongoing activities:

- South Africa currently operates an EQA programme for Africa;
- USAID and FAO support an EQA programme for high impact pathogens in the animal laboratory;
WPRO supports an EQA programme for some diseases for the health laboratory; and

US-CDC develops an EQA sample for RNA, which is stabilised on filter paper.

Lead country: South Africa

Contributors: Thailand MOPH-US CDC Collaboration, USAID

It was noted that South Africa can provide guidance and experience on Expert MTB test. Furthermore, WHO has guidelines for setting up EQA programme and shipping of EQA samples.

III. Sharing Experience of Laboratory Preparedness/Lessons Learned from Ebola

Objectives:

- To support laboratory preparedness on emerging infectious diseases, including high threat pathogens.

Ongoing activities:

- South Africa has extensive experience from the Ebola outbreak; and
- Thailand has set up a designated received area (DRA) covering all parts of Thailand as a preparation for an Ebola outbreak and is proven to be useful for MERS-CoV.

Lead countries: Thailand and South Africa

Contributors:

- South Africa can provide expertise and share experiences; and
- Thailand will organise a workshop on how to set up DRAs.

IV. Bioinformatics Network

Objectives

- To support the network linking and information sharing between human and animal health laboratories under the One Health approach; and
- Utilise dengue, rabies, and influenza as existing examples.

Ongoing activities:

- Malaysia is preparing a framework for national bioinformatics and would like to share with the region; and
- FAO is currently facilitating the bioinformatics and information sharing among animal health networks.
Lead country: Thailand

Contributors: FAO/USAID, US-CDC, Malaysia

- Thailand will organise a workshop to help link animal and health information on influenza with support from FAO and Malaysia; and

- US-CDC can provide trainings on next generation sequencing and bioinformatics.

The group also identified other high priority issues that could be considered for the region. These included:

Quality Management System

- The group suggested that focusing on the WHO 12 components as one of enable platforms for countries to address individual components at a time; and

- Recommended countries to connect with their HIV laboratories so that PEPFAR and GHSA approaches could be better aligned.

Specimen Referral System

- The group suggested that a specimen referral system could be used not only for specimens but also reagents, panels, etc.;

- To be successful implementing in the region, policies and MOUs would be required; and

- There was a recommendation to consider logistics and identify a logistics system to facilitate the sharing.

NOTE: Concept notes of the aforementioned activities were formulated and presented in Session VI: Upcoming Regional Activities [2016 – 2017]
SESSION IV: GHSA's Planning & Monitoring: Panel Discussion on Joint External Evaluation: its application as a GHSA tool for planning and monitoring

Chair: Dr. Wantanee Kalpravidh, FAO Regional Office for the Asia Pacific

Panelists:  
- Dr. Richard Brown, WHO Thailand  
- Dr. Pretty Multihartina, Indonesia  
- Dr. Buth Sokhal, Cambodia  
- Mr. Douglas Gorsline, US Department of Defense, USA
Summary

Joint External Evaluation (JEE) is a voluntary, collaborative process to assess a country’s multi-sectoral capacity to prevent, detect, and rapidly respond to public health threats. In accordance with the agreed GHSA targets and in support of full implementation of the International Health Regulations (2005), JEE tool, was developed as a data-gathering instrument covering 19 technical areas according to the 3 core elements (Prevent, Detect and Respond). The process of evaluation is completed in two stages: (1) initial self-evaluation conducted by the country using the JEE tool and (2) a domestic evaluation conducted by a multi-sectoral external expert team, done in close collaboration with the country. Following the conclusion of the JEE mission, countries are able to utilise the data and lessons learned from the evaluation process in order to inform country-level planning and set priorities. To develop its plan of action, the country must be able to highlight gaps and needs for both current and prospective donors and partners in an effort to fill gaps with resources.
*JEE Experience in Cambodia*

Cambodia extended 2 more years for IHR implementation and has the “National Workplan for Emerging Diseases and Public Health Emergency to achieve IHR core capacity” from 2014 to 2016 and participate Global Health Security Agendas in 2016. National plan 2014-2016 progress was reviewed. Self-evaluation using JEE followed the process: addressing questions and gathering documents, scoring indicators, identifying gaps, and then creating a new strategic plan to address gap. Some notable identified gaps - less than 50% of the laboratories complied with IHR, include severe gaps in funding, and difficulties to retain personnel. The national plan, which was incorporated into the Health Strategic Plan 2016-2020, served as a “Funding Proposal” to donors to bridge the funding gaps, and will be monitored and evaluated in 2020 using the 2nd JEE.
National laboratory System JEE Assessment

Indonesia shared the experience for national laboratory system, JEE self-assessment that mapped to regional road map to diagnostic capacity, quality management system, biorisk management, networking and One Health. They prepared documents or evidence for level of capability.

The main achievements in the last 5 years including:

- Establishment WHO-EQA for Polio, Measles and Rubella, Influenza, Mers-coV, Dengue and Chikungunya;
- Providing regular trainings on biomedical engineering, biosafety and biosecurity; and
- Establishing EID Laboratory Network.
The main challenge in the last 5 years include

- Lack of positive control of emerging pathogens;
- Unavailability of laboratory SOP for emerging pathogens detection;
- Discontinuation of the specific laboratory equipment such as PCR machines; and
- High turnover of human resources.

**External Evaluation**

USA recently conducted a JEE which involved all USG agencies stakeholders in the process. The report is now being finalised and will be released publicly in the near future.

A short summary of the JEE recommendations:

- US government should investigate risks posed by fluctuations in federal/state funding;
- Review sample transportation protocols to ensure optimal coverage of geographically remote areas;
- Review supplier arrangements for contracted entities transporting class 1 Biological Select Agents and Toxins (BSAT) samples;
- Expanded use of culture-independent diagnostic tests for patient care;
- Institutionalise and codify partnerships among collaborating federal agencies to enhance federal-state-local information flows; and
- Conduct risk assessment for all health sectors on state level to improve testing and develop surge capacity requirements.

The USA is already following up on recommendations including rolling out more advanced molecular diagnostics (AMD) and next-generation sequencing (NGS) to the state laboratories and “regional” laboratories. The JEE process becomes stronger after each review so it is very important that many countries participate.
**Challenges for implementation of JEE:**

- Informal functional mechanisms exist in practice whereas some key areas require formal legal/legislative frameworks;
- Cross-sectoral collaboration is not easy;
- Difficulty to readily identify lead agency/focal points in coordination;
- Routine communications and systematic sharing of information is a challenge among Ministries;
- Funding gaps from the government in key areas; and
- Effective utilisation of work plans for successful negotiation with donors for directing funds to priority areas.

**Session’s Conclusions**

- JEE should be viewed valuable in the aspect of an opportunity as it brings together the multi-agencies and relevant health sectors together to discuss the capacities and preparedness of countries’ public health system for any emerging public health threats. It also provides information on areas for improvement based on the evaluation results.
- Indicators of JEE tool do not cover the areas of regional networking or One Health coordination which are principles of GHSA, specifically for Lab Action Package, there are no indicators measuring lab support to address AMR.
- JEE will continuously be updated to address these issues and take into account lessons learned from JEEs already conducted.
- The JEE process is a strong catalyst for in-country coordination and networking. Collaborative process opens up dialogue between the national experts and assessing team. A self - evaluation is an important part of the process (countries know best their capacity then external assessors add an unbiased view).
- JEE assessors: Need to build capacity of new assessors, expand roosters to include technical expertise in all related fields, utilise both external and internal qualified experts with experience in the systems.
- JEE results should be shared.
SIDE MEETING
FACE – TO – FACE MEETING OF LEAD COUNTRIES & CONTRIBUTING COUNTRIES

Key outputs:

- Shared views of Lead Countries & Contributing Countries;
- Demonstrated on political leadership on Detect 1;
- Appreciated on the development of Regional Strategic Roadmap for LSS; and
- Agreed that an implementation to be led by lead countries.

Opportunities for further collaboration

- USA: Resources catalog development – training availability – to be ready by October 2016;
- Canada: internet – based lab capacity mapping tools, Intelligence Electronic System;
- South Africa: leading in many activities such as PT & EQA System, Incidence Command, networking, sharing experiences/lessons learned; and
- Malaysia: simulation exercise, designated receiving area in the big hospitals, advancing bioinformatic, networking – need a platform such as website, laboratory assessment (simple tool).
Key Discussed Issues and recommendations

- Interface among the 11 GHSA Action Packages is proposed to be tabled in the August Meeting;
- Opportunities for collaboration from many countries such as technical support that countries can offer, tools availability;
- Communication – promote & encourage the video conference hosted by Thailand, contacted person is required;
- Consideration to expand the activities to other countries – global but to start from region first;
- Request for Thailand to present more details on DRA; and
- Commitments, lead countries roles, communication through teleconference.
Summary

The presenter provided a very US centric presentation on how US interprets biosurveillance, how it uses biosurveillance in its national context.

**Biosurveillance** defines as a process of gathering, integrating, interpreting, and communicating information related to human and animal disease or plant health. It aims to save lives by providing essential information for better decision making at all levels.

Its scope has addressed all hazards including biological, chemical, radiological substances, nuclear and explosives. These are defined by urgency and potential for multi-jurisdictional interest. The system includes notifiable conditions and non-specific and novel health events and contains also ad-hoc data, analysis, and application of information.

The functions are case/event detection, signal validation, event characterisation, notification and communication, quality control and improvement. The system’s function has been aligned with International Health Regulations (IHR 2005).

The priorities of the process are to strengthen and to expand information exchanges with healthcare and public health entities. The data and database should be exchanged between and among clinical and public health laboratories. The data must be structured (e.g. text and image) in a database format.
The strategy for biosurveillance of CDC is to improve data timeliness, availability and quality including:

- Utilising of electronic health records, mobile technologies, and cloud computing;
- Implementing Nationally Notifiable Disease Surveillance System (NNDSS);
- Enhancing the use of Electronic Health Record (EHR) systems;
- Strengthening National syndromic surveillance programme; and
- Enhancing Mortality Surveillance Systems (MSS).

Take home messages included:

- All hazards approach;
- Urgency;
- Notifiable an unknown;
- Ad hoc data and social media;
- Define functions of biosurveillance system; and
- Linkage with existing standard practices of IHR.
Session VI: Upcoming Regional Activities

Chair: Dr. Ranmini Kularatne, National Institute for Communicable Diseases (NICD), South Africa

Co-chair: Dr. Leonard Peruski, US-CDC

Summary

Based on agreed regional activities transpiring from groups’ discussion, draft concept notes of the six prioritised key regional activities have been presented by lead countries. Upcoming regional activities in the 2017, lead countries, and key contributors have been highlighted. Comments and suggestions from the meeting were also taken.
**Activity 1: Bioengineering training**

*Lead country:* Thailand

*Contributors:* US-CDC, AFRIMS, FAO/USAID

*Presenter:* Dr. Nusara Satproedprai, DMSc, Thailand

**Objectives:**

- To support the proper maintenance of important laboratory equipment;
- To assess ongoing activities; and
- To train the trainers on biosafety cabinet (BSC) certification.

Two activities are proposed for 2017:

- Introduction courses for BSC technology and for BSC certification; and
- Establishment of regional Biosafety network to facilitate exchange of knowledge, expertise, and documents among the regional network members.
Activity 2: External Quality Assurance Programme

Lead country: South Africa and Thailand

Contributors: Thailand MOPH-US CDC Collaboration, FAO/USAID

Speaker: Ms. Linda de Gouveia, NICD, South Africa

Objectives:

- To support the quality management system of the national laboratory;
- To assess the current EQA programmes and providers; and
- To establish and expand network.

It was noted on NICD’s experiences of providing proficiency testing to laboratories within South Africa and many laboratories in Africa. Regional activities will be further identified by lead countries.
Activity 3: Sharing Experiences on Lab Preparedness, Lessons learned from EID outbreak

Lead country: Thailand, South Africa

Speaker: Ms. Sukjai Pholampaisathit, DMSc, Thailand

A concept note of sharing experiences on lab preparedness, lessons learned from emerging infectious diseases (EID) outbreak resulting from a small group discussion was presented. The presenter underscored that sharing experiences from key affected countries will further enhance lab preparedness on emerging infectious diseases.

Experiences on an establishment of Designated Receiving Area (DRA) including steps taken during Ebola outbreak in Thailand were cited. The presenter further elaborated that an isolated area for lab worker in hospitals is requisite to handle dangerous specimens and confine the dangerous pathogens.

It was noted that experiences sharing on specific diseases such as Ebola, MERS CoV, Avian Influenza, and others will be shared in the next Workshop to be hosted by Thailand.

Comments

Dr. Apichai Mongkol, Director General of DMSc, emphasised an importance of setting-up DRA in the hospitals as an efficient investment in order to deliver real benefit to medical personnel, lab workers and patients.
Activity 4: Bioinformatics network

Lead country: Thailand

Contributors: OIE, FAO/USAID, US-CDC, Malaysia

Speaker: Ms. Malinee Chittaganpitch, DMSc, Thailand

A draft concept note of training course on Influenza/Dengue Basic Bioinformatics was presented. It was emphasised on the continuing emergence and re-emergence of novel and dangerous pathogens of epidemic potential remains a major challenge to public health and animal health communities. As such, there is a need to set up sequencing platforms in order to characterise and to confirm new pathogens. The exploring of more sequence data set and bioinformatics will enhance disease surveillance, detection, and response efforts.

In 2017, Thailand proposed to organise a 3-day training courses on Basic Bioinformatics aiming for:

- Improve knowledge and hand on genetic sequencing and analysis;
- Encourage participants to apply techniques for their work and research; and
- Enhance human health and animal health laboratories’ sectors in sharing timely information.

Suggestions

A representative from FAO Thailand informed the meeting that FAO can provide experts in bioinformatics in both human and animal health sectors. He noticed that 3-day workshop is very ambitious to fulfill the objectives of the training course and suggested for specific criteria for participants’ selection.
Activity 5: Establishment of Laboratory Quality Management System

Lead country: Thailand

Contributors: Malaysia (dengue), US-CDC, FAO/USAID

Speaker: Ms. Raevadee Siritunyanont, DMSc, Thailand

Thailand experiences on establishment of laboratory quality management system, lessons learned about development of quality standard called MOPH standard and step-wise accreditation were presented in this conference. Lessons learned from Thailand’s experiences will be benefit for other countries to set up a national standard prior to implement the ISO 15189 accreditation.

The Bureau of Laboratory Quality Standards (BLQS), a designated WHO Collaborating Centre for Strengthening Quality System in Health Laboratory will provide training courses in 2017 aiming:

- To share lessons learnt on appropriate standard set up;
- To share experience in establishment of quality management system and accreditation system; and
- To strengthen collaboration in quality laboratory networking among participating countries.
**Activity 6: Specimen Referral System**

*Lead country:* Thailand, Sri Lanka  
*Contributors:* Indonesia  
*Speaker:* Ms. Noppavan Janejai, DMSc, Thailand

**Objectives:**

- To strengthen regional diagnostic capacity by sharing knowledge, expertise as well as sharing existing resources; and
- To bridge the gaps among limited resource countries, contributing countries and interested parties.

**Suggested following steps to be taken:**

- Identify country/regional focal point; to study and harmonise the MOUs, TORs, legal framework, MTA/MRA;
- Identify reference laboratories among member states;
- Harmonise existing guidelines to be a Regional Guideline; and
- Provide trainings on packaging and transportation to concerned personals (Train-the-trainer, lab personnel, policy makers, etc.) and necessary supplies (boxes, triple packaging, etc.).

It was noted that Thailand will coordinate with all voluntary countries and development partners to duly formulate action plans.
Conclusion & Recommendations

Supported by USAID and FAO, the 1st Workshop of Detect 1 was able to meet its expectations as planned.

To leverage an understanding of GHSA, an overview presentation and updates of GHSA were presented to the audiences. It was then followed by a presentation of the Regional Strategic Roadmap on Laboratory System Strengthening [2016-2020] and its seven key strategic components. The document will serve as a guiding document for enhancing national laboratory system, a regional framework for regional cooperation as well as a tracing tool for progression of the Detect 1’s implementation.

In addition, the 3 – Day Workshop provided great opportunities for the participating countries to share their national progress as well as challenges facing on laboratory system. Invited countries including USA, South Africa, Thailand, and Malaysia have also shared and updated on their national laboratory system.

To synergy collaborative efforts, key development partners include USAID, FAO, WPRO, MBDS, and JICA have presented their ongoing activities that could be complement an implementation of the Regional Strategic Roadmap on Laboratory System Strengthening [2016-2020].

In order to overcome challenges, through groups’ discussion, prioritised regional activities have been proposed for the upcoming years. Implementation modalities such as lead countries and key partners were identified. These include:

- Bioengineering Training;
- External Quality Assurance [EQA];
- Sharing experiences on Lab preparedness;
- Bioinformatics network;
- Specimen referral system;
- Regional workshop to share 4-way linking experiences; and
- Workshop on QA experience, supply chain management, specimen collection and transport, perform laboratory assessments.

Joint External Evaluation and its application as a GHSA tool for planning and monitoring were tabled at panel discussion. Inputs from WHO and countries experiences and updates from Indonesia, Cambodia, and USA were highlighted. Furthermore, the presentation of Real-Time Biosurveillance was delivered to the Workshop.
Closing Remarks

By Dr. Phichet Banyati, Deputy Director General, Department of Medical Sciences, Ministry of Public Health, Thailand
29 July 2016

Director General of the Department of Medical Sciences, Dr. Apichai Mongkol

Pak Siswanto, Lead countries and contributing countries of Detect 1, Key development partners, Distinguished guests, colleagues, and friends

During 27-29 July 2016, an international workshop on Global Health Security Agenda (GHSA): Detect 1 [National Laboratory System] was held at Berkeley Hotel in Bangkok. The three – day regional workshop was hosted by the Ministry of Public Health Thailand, through the Department of Medical Sciences, in collaboration with USAID and FAO.

About 140 delegations from USA, South Africa and Thailand as lead countries of GHSA; as well as contributing countries from Canada, Georgia, Japan, Malaysia, Switzerland, international development partners; and Indonesia as the Chair of GHSA Steering Committee; local partners and Ministry of Public Health: and were gathered to discuss on “facing health threats globally – happens anywhere but everywhere” - and how GHSA Members can hold hands for real – time detection of dangerous pathogens more effectively under the GHSA Package Detect 1 [National Laboratory System].
Distinguished guests, colleagues, and friends

The three-day Workshop was deliberated through plenary session, panel discussion, interactive breakouts sessions, and presentations from prominent speakers.

I am pleased to inform you that with all of your hard work, the Workshop has met the expectations. Allow me to elaborate further that:

First, we have updated and shared on the progress of Laboratory Strengthening System (LSS) from participating countries.

Second, we have supported the development of the Regional Strategic Roadmap on Laboratory System Strengthening. It will be localised as a framework for national development roadmap, served as a tool for regional collaboration as well as served as a framework for follow up on implementation progress.

The most important is that our group has discussed and agreed on concrete regional activities and their implementation modality of which 7 regional activities have been prioritised to be implemented within next year. Allow me to reemphasise again.

- Bioengineering Training;
- External Quality Assurance [EQA];
- Sharing experiences on Lab preparedness;
- Bioinformatics network;
- Specimen referral system;
- Regional workshop to share 4-way linking experiences; and
- Workshop on QA experience, supply chain management, specimen collection and transport, perform laboratory assessments.

Distinguished guests, colleagues, and friends

In addition, the Face-to-Face Meeting, a session to intensify joint collaborative efforts of the lead countries and contributing countries, was also conducted. The GHSA is seen as a promising platform to leverage and maximise the existing efforts of countries and partners. Communication between public health and animal health, coordination for partnership, and networking the networks were also underscored to further avoid duplication and parallel efforts. Your recommendations and suggestions will be further discussed and followed up by lead countries.

I, once again, reaffirm that the Regional Workshop in the past today as well as tomorrow marks a crucial step to our commitment in striving our goal.

Distinguished guests, colleagues, and friends

The expected outputs were not made plausible without our collective efforts for the last 2 days. On behalf of DG Apichai Mongkol and my team, kindly accept our sincere appreciation for your hard work and dedication rendering during the workshop.
I was informed that you have had extensive and exhausted discussion in the breakout sessions, however, excellent results must have been satisfied you all. Allow me to quote again that “Individually, we are one drop. Together, we are an ocean.” It proved to all of us in the past three days.

I would like to also express our gratitude to support from USAID and FAO for organising this important Workshop.

Last but not least, my wholehearted thanked to the organising committee including executive management under leadership of DG Apichai, energetic liaisons, diligent rapporteur team, and other supporting team for their dedication in making this workshop more fruitful but yet memorable for all of us. I hope that all of you will bring home not only technical matters but also your lovely memories of our hospitality as well.

I would like to advance you that the next Regional Workshop hosted by Thailand in 2016 will be held in November 2016 to highlight any model development or best practices done by GHSA Action Packages Members of Detect 1. We will be in duly in touch with you.

Distinguished guest, colleagues, and friends, the Workshop has come to an end, but I trust that we will continue our bonding and networking which is the key for collaboration. On personal note,

I now declare an adjournment of the Workshop and wish you a pleasant afternoon. Have a safe journey home. We are looking forward to see you all again in November.

Thank you.
Social Programme
1. DMSc Order Organising Committee
2. List of Participants
3. List of Resource Persons
4. List of Rapporteurs
5. List of Liaisons
คำสั่งกรมวิทยาศาสตร์การแพทย์
ที่ ๒๕๔๗/๒๕๔๗
เรื่อง แต่งตั้งคณะกรรมการจัดประชุมระหว่างประเทศภายใต้แผนวนวิเคราะห์ภัยสุขภาพโลก

Regional Workshop: Enhancing Regional Partnership Towards Strengthening Laboratory System in Accelerating GHSA’s Implementation: Detect 1

เพื่อให้การดำเนินงานตามแผนงานระดับชาติและระดับภูมิภาคของประเทศไทยมีความต่อเนื่องต้าน
สุขภาพโลก ปี พ.ศ. ๒๕๔๗ – ๒๕๕๐ (National และ Regional Strategic Roadmap 2016-2019
(Global Health Security Agenda: GHSA Detect 1: National Laboratory System) ที่ประเทศไทยรับเป็น
ประเทศผู้นำ (lead country) และยืนยันให้กรมวิทยาศาสตร์การแพทย์เป็นหน่วยงานรับผิดชอบเกี่ยวกับการขุดต้น
ตามแผนงานดำเนินงานปี พ.ศ. ๒๕๔๗ กรมวิทยาศาสตร์การแพทย์เป็นเจ้าหน้าที่จัดประชุม
ระหว่างประเทศภายใต้แผนวิเคราะห์ภัยสุขภาพโลก “Regional Workshop: Enhancing Regional Partnership Towards Strengthening Laboratory System In Accelerating GHSA’s Implementation: Detect 1” ซึ่งจะจัดขึ้นระหว่างวัน ๑ ถึง ๔ ตุลาคม ณ โรงแรม เลสเซอร์เนท ประจวบคีรีขันธ์ กรุงเทพฯ และศึกษาสุขภาพที่ศูนย์บริการ
ทรัพยาส่วนพระมหากษัตริย์ ระหว่างวันที่ ๒๘ – ๓๐ กรกฎาคม พ.ศ. ๒๕๔๗

เพื่อให้สามารถดำเนินการเป็นไปด้วยความเรียบร้อย มีประสิทธิภาพ สำเร็จลุล่วงตามจุดประสงค์
ที่กำหนดไว้ และบันทึกผลลัพธ์การประชุม กรมวิทยาศาสตร์การแพทย์ จึงแต่งตั้งคณะกรรมการ ประกอบด้วย

1. นายแพทย์อภิชัย มงคล ประธาน
2. นายแพทย์ชัยวิทย์ บัญญัติ รองประธาน
3. ดร. อัศวิน หิรัญกุล กรรมการ
4. นายแพทย์สมชาย แสงกิจบรรทุก กรรมการ
5. นายการิน ทรัพยากร กรรมการ
6. ดร. อัศวิน สีหกุลสวัสดิ์ กรรมการ
7. เลขาธิการกรมวิทยาศาสตร์การแพทย์หรือผู้แทน กรรมการ
8. ผู้อำนวยการสำนักมาตรฐานแห่งปฏิบัติการหรือผู้แทน กรรมการ
9. ผู้อำนวยการศูนย์วิทยาศาสตร์การแพทย์ที่ 1 เชียงใหม่ หรือผู้แทน กรรมการ
10. ผู้อำนวยการกองแผนกและวิชาการหรือผู้แทน กรรมการ
11. ผู้อำนวยการศูนย์เทคโนโลยีสารสนเทศหรือผู้แทน กรรมการ
12. หัวหน้าฝ่ายคลีนิกหรือผู้แทน กรรมการ
13. หัวหน้าฝ่ายคลีนิกหรือผู้แทน กรรมการ
14. นางสาวธิดา แจ้งใจ หัวหน้าฝ่ายเลขานุการ
15. ดร. เกริกฤทธิ์ พุทธศิริ รองหัวหน้าฝ่ายเลขานุการ
16. นางสุใจ ผลอาไพลี ศึกษาเลขานุการ
ให้คณะกรรมการที่ได้รับแต่งตั้งมีหน้าที่ดังนี้

1. ติดต่อสื่อสารกับประเทศผู้บัญชาการ องค์การระหว่างประเทศที่สนใจ เข้าร่วมประชุม

ตามเป้าหมายที่กำหนดไว้

2. เตรียมการและจัดหาเอกสารข้อมูล สิ่งอำนวยความสะดวกต่างๆ ก่อนการประชุม แล้ว

3. จัดบันทึก จัดทบทวนรายงานการประชุม

4. ปฏิบัติตามที่อธิบดีฯ ที่มอบหมายและได้รับมอบหมาย

ทั้งนี้ ตั้งแต่บัดนี้เป็นต้นไป

สัญญา รันที

[ลายเซ็น]

(นายอภิชิต มงคล)

สมัชชาทหารสูงสุด ทหารพยัคฆ์

53
ล้านนา

คำสั่งบริหารกลางการแพทย์

ที่ ไปซภ/๒๔๙๓

เรื่อง แต่งตั้งคณะทำงานร่วมร่างความมั่นคงด้านสุขภาพโลก

(Global Health Security Agenda : GHSA) Detect 1 และ Prevent 1

เพื่อให้การดำเนินงานร่างความมั่นคงด้านสุขภาพโลก (Global Health Security Agenda : GHSA) Action Package Detect 1 : National Laboratory System และ Action Package Prevent 1 : Antimicrobial resistance ที่ประเทศไทยรับเป็นประเทศผู้นำ (Leading Country) และมอบหมายให้ กรมวิทยาศาสตร์การแพทย์เป็นเจ้าภาพ (Focal point) เป็นไปอย่างมีประสิทธิภาพ และบรรลุผลสำเร็จตามเป้าหมายที่กำหนดไว้ กรมวิทยาศาสตร์การแพทย์จึงแต่งตั้งคณะทำงาน ประกอบด้วย

1. นายแพทย์อภิศักดิ์ มอลกล
   ที่ปรึกษา
   อธิบดีกรมวิทยาศาสตร์การแพทย์

2. ดร. อัจฉรา หิรัญสิน
   ที่ปรึกษา
   ผู้ช่วยอธิบดีกรมวิทยาศาสตร์การแพทย์

3. นายแพทย์สมชาย แสงกิจพร
   ที่ปรึกษา
   ผู้ช่วยอธิบดีกรมวิทยาศาสตร์การแพทย์

4. นางสาวจินดา ศรีสวัสดิ์
   ที่ปรึกษา

5. ดร. ภูริทรัตน์ สร้อยสังเวศ
   ประธานคณะทำงาน

6. ดร. บัณฑิต นนทบุตร
   คณะทำงาน

7. ดร. สิริพร แสงอรุณ
   คณะทำงาน

8. ดร. นันติศร ไทยอินทารศร
   คณะทำงาน

9. ดร. เกษิรศักดิ์ คุลศรีสวัสดิ์
   คณะทำงาน

10. นายสุชาติ ผ่องอินทวัลย์
    คณะทำงาน

11. นางสาวสมันตี จิตตกานต์พิชย์
    คณะทำงาน

12. นายปริศน์ วานิชชานนท์
    คณะทำงาน

/ใต้ นางสาว...
13. นางสาววรรณ แจ้งใจ
14. ดร. สุภัชญา พูดสรรพ
15. ดร. ปณิทภัทร บุญญานันต์
16. ดร. นงนภา สัตย์ศรีกุล
17. ดร. สุภรณ์ สุภารักษ์
18. ดร. พีรเดช ยั่งยืนกฤช โยไกล
19. นายศรีชัย ระด้าพวง
20. นายสมคักติ สุนทรานันท์
21. นายวรวุฒิ วิทยานนท์
22. นายสมวงศ์ เติมไตรตรà

ให้คณะทำงานที่ได้รับแต่งตั้งมีหน้าที่ดำเนินการเกี่ยวกับ Action Package Detect 1 : National Laboratory System และ Action Package Prevent 1 : Antimicrobial resistance ดังนี้

1. จัดทำแผนแม่บทศาสตร์, Road map, Strategy ระดับชาติและระดับภูมิภาค
2. จัดเตรียมเอกสารข้อมูลและสรุปประเด็นที่เกี่ยวข้องกับการประชุมทางไกล และการเข้าร่วมประชุมทั้งระดับชาติและนานาชาติ
3. เตรียมเอกสาร และจัดการประชุมทางไกลและการประชุมสัมนาระบบการวิทยาศาสตร์การแพทย์เป็น เล่มภาพตามแผนงาน
4. ปฏิบัติหน้าที่อื่น ๆ ตามที่ได้รับมอบหมาย เพื่อสนับสนุนการจัดחברGHSA ทั้งนี้จัดแต่งตั้งเป็นต้นไป

ลงชื่อ วันที่  4 มีนาคม พ.ศ. ๒๕๖๐

(นายสมภัทร แสงขวัญ)
อธิบดีศูนย์วิทยาศาสตร์การแพทย์
ที่ ๑๐๔๔ / ๒๔๔๔

เรื่อง ผลิตภัณฑ์ทางการแพทย์ เทรทเม้นท์ ประสานงานด้านวิจัยและการท่าจะไป
ในการจัดประชุมระดับประเทศ ก่อนได้แผนการเรื่องบันทึกสุขภาพโลก

Regional Workshop: Enhancing Regional Partnership Towards Strengthening Laboratory System in Accelerating GHSA’s implementation: Detect 1

ตามที่กรมวิทยาศาสตร์การแพทย์ มีกำหนดเป็นข้อกำหนดประชุมระดับประเทศ ก่อนได้แผน

ประกาศกรมสุขภาพโลก Regional Workshop: Enhancing Regional Partnership Towards Strengthening Laboratory System in Accelerating GHSA’s implementation: Detect 1 ที่ประเทศไทยรับเป็นประเทศผู้นำ (lead country) ณ โรงแรมเคป แอนด์ เรสอร์ท กรุงเทพฯ ระหว่างวันที่ ๒๓ – ๒๕ กรกฎาคม ๒๔๔๔ นี้

ในการนี้ พร้อมให้การดำเนินงานขั้นบังคับของความรับผิดชอบ ต้องให้ความ

ความรับผิดชอบ กรมวิทยาศาสตร์การแพทย์ จึงจะมีผลต่อการทำงานให้ถูกทางเป็น เทรทเม้นท์ ประสานงาน

ด้านวิจัยและการท่าจะไป ประกอบด้วยผู้ที่มีนาม ดังต่อไปนี้

๑. นางอรุณธารา จันทร์แสง ประธานคณะทำงาน
   ๒. นายจักรพานิช สมบุญ คณะทำงาน
   ๓. นายสราวุฒิ ประดิษฐ์ คณะทำงาน
   ๔. นายสุธิพันธ์ ชินคำศิลป์ คณะทำงาน
   ๕. นางสาวสวัสดิ์ คุณประเสริฐี่ คณะทำงาน
   ๖. นางสาวสุร招商引 ประพันธ์ คณะทำงาน
   ๗. นางสาวนฤกษ์ สุทธิสาร คณะทำงาน
   ๘. นางสิริพร สุทธาสิน คณะทำงาน
   ๙. นางสาวทิชา ทวีศิริสุชาดา คณะทำงาน
   ๑๐. นางสาวทิชา ทวีศิริสุชาดา คณะทำงาน
   ๑๑. นางสาวทิชา ทวีศิริสุชาดา ที่ปรึกษา คณะทำงาน

๑๒. นางสาวทิชา...
โดยให้คณะทำงานมีหน้าที่ติดต่อกับ

1. ปรึกษานายกฯ ติดตามและอธิบายความตกลงในด้านต่าง ๆ สำหรับการประชุม
2. บริหารจัดการระบบลงทะเบียน
3. บริหารจัดการการใช้งานระบบจัดการประชุมและจัดทำบัญชีค่าใช้จ่าย
4. ประสานกับคณะทำงานฯ ในการเตรียมการจัดประชุมในวิชาการ
5. ปฏิบัติหน้าที่อื่น ๆ ตามที่ได้รับมอบหมาย

ทั้งนี้ ต้องแก้ไขข้อเป็นต้นไป

ลง ณ วันที่ 18 มกรานพ.ศ. 2545

[ลงชื่อ]
<table>
<thead>
<tr>
<th>Name</th>
<th>Designation/Organisation for invitation</th>
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<tbody>
<tr>
<td><strong>Group 1. Lead Countries</strong></td>
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<tr>
<td><strong>USA</strong></td>
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<td>Africa and SE Asian Regions</td>
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<td>Defense Threat Reduction Agency</td>
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<td>8725 John J. Kingman Road</td>
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<tr>
<td><strong>South Africa</strong></td>
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<tr>
<td>4. Dr. Ranmini Kularatne</td>
<td>Pathologist (Clinical Microbiology), Head of STI section, Centre for HIV and Sexually Transmitted Infections (CHIVSTI), National Institute for Communicable Diseases (NICD)</td>
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<tr>
<td><strong>Thailand</strong></td>
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<td>6. Dr. Apichai Mongkol</td>
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<td>8. Dr. Somchai Sangkitporn</td>
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<td><strong>Group 2. Contributing countries</strong></td>
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<tr>
<td><strong>Canada</strong></td>
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<tr>
<td>9. Dr. Theodore Kuschak</td>
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<tr>
<td><strong>Georgia</strong></td>
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</tr>
<tr>
<td><strong>Japan</strong></td>
<td>11. Dr. Yoshitsugu Miyasaki Director, Chairman, Director of Department of Chemotherapy &amp; Mycoses, Chairman-Reference committee for Laboratory Diagnosis, National Institute of Infectious Diseases, P O Box 162-8640 Toyama 1-23-1, Shinjuku-ku, Tokyo, Japan</td>
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<tr>
<td><strong>Group 3. Contributing International Organisations</strong></td>
<td></td>
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<tr>
<td><strong>FAO</strong></td>
<td>13. Dr. Béatrice Mouillé Laboratory Unit Deputy Coordinator and M&amp;E Officer, FAO/Animal production and Health Division/ Animal Health Service/Laboratory Unit, Vialle delle Terme di Caracalla-00153 Rome-Italy</td>
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<td>14. Dr. Katinka de Balogh FAO</td>
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<td>27. Dr. Masri Sembiring Maha</td>
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<td>32. Ms. Thu Huong Tran</td>
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<td><strong>Myanmar</strong> 33. Professor Htay Htay Tin</td>
<td>1. Deputy Director General ( Laboratory services ) National Health Laboratory, Myanmar&lt;br&gt;2. Professor &amp; Head of Department of Public Health Laboratory, University of Public Health, Myanmar&lt;br&gt;National Health Laboratory # 35, Hmaw Kon Deik Street, Dagon Township&lt;br&gt;PO: 11191, Yangon, The Union of The Republic of Myanmar</td>
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| **Bhutan** | 37. Sonam Wangchuk | Chief Laboratory Officer/Microbiologist, Royal Centre for Disease Control, Department of Public Health, Ministry of Health, Thimphu - Bhutan  
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| **US CDC Thailand** | 40. Dr. Toni Whistler | Director, The Strengthening Laboratory Capacity Program, The Strengthening Laboratory Capacity Program / Thailand MOPH. U.S. CDC Collaboration (TUC)  
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| **USAID USA** | 41. Dr. Kendra Chittenden | Senior Infectious Disease Advisor, USAID  
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<td>44. Dr. Besa Seyoum</td>
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| **JICA**  
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| **MOPH**  
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55. Dr. Prapohon Antrakool | Deputy Secretaries - General  
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| **DMSc**  
56. Dr. Salakchit Chutipongvivate | Senior Technical Office | |
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57. Ms. Suratchanee Savetsila | Director of Bureau of Drug and Narcotic | |
|  
58. Ms. Jaruwan Limsajjakul | Director of Bureau of Quality and Safety of Food | |
Short Biography of Resource Persons
Dr. SISWANTO
Director General, National Institute of Health Research and Development,
Ministry of Health, Republic of Indonesia

Education
- Diploma of Tropical Medicine, Nagasaki University, Japan (2001)
- Master of Health Planning, University of New South Wales, Sydney (1998)
- Medical Doctor, Airlangga University, Surabaya (1987)

Job experience
- Chair, National Commitee of Jamu Scientification
- Director, R&D Center of Applied Health Technology and Clinical Epidemiology, NIHRD, MOH RI
- Director, R&D Center of Food and Nutrition, NIHRD, MOH RI

Publications
- Reviving health posts as an entry point for community development: a case study of the Gerbangmas movement in Lumajang district, Indonesia. Social determinants approaches to public health, from concept to practice, World Health Organisation, 2011
- Trade-off analysis of Indonesian Health Reform, Journal of Health Service Management. Sep-Dec 2010
- Political approach as strategy in health development advocacy. The Indonesian Journal of Health Service Management.

Seminar articles:
- Meeting health system needs to achieve sustainability and quality of health care: a concept for a better amalgam between hospital care and primary health care as well as between conventional care and traditional complementary medicine). SOM 3, APEC Bali 2013
Dr. APICHAI MONGKOL  
*Director General, Department of Medical Sciences, Ministry of Public Health, Thailand*

**Education**
- Doctor of Medicine, Faculty of Medicine, Ramathibodi Hospital, Mahidol University
- Bachelor of Law Degree, Ramkhamhaeng University
- Bachelor of Public Administration, Sukhothai Thammatirat Open University

**Work Experience**
- 1991 – 1996 Deputy Director for Medical Service of Khon-Kaen Psychiatric Hospital
- 1996 – 1997 Director of Forensic Psychiatric Institute
- 1997 – 2002 Director of Khon-Kaen Psychiatric Hospital
- 2002 – 2008 Deputy Director General, Department of Mental Health
- 2008 – 2010 Inspector General, Ministry of Public Health
- 2010 – 2012 Director General, Department of Mental Health
- 2011 – 2012 Chair Person, ASEAN Mental Health Task Force
- 2012 – 2013 Deputy Permanent Secretary

**Research and Development Award Guarantee**

Distinguished Research and Development Awards of Ministry of Public Health:
- A Validity Study of a Psychotic Screening Test (1995)
- Best Presentation Award of Ministry of Public Health.
- Unit cost of Hospital Service: Khon-Kaen Psychiatric Hospital (2002)
- Best Research and Development of Department of Mental Health.

**Award Guarantee: 2011**

Prise: The Lee Award for Good Practices of Suicide Prevention
Subject: National Suicide Prevention Program (NSPP), Thailand
From: International Association of Suicide Prevention, Beijing 2011, CHINA
Dr. Supamit Chunsuttiwat is a technical advisor to the Department of Disease Control (DDC), Ministry of Public Health (MOPH) of Thailand. He advises on management of communicable disease control with emphasis on national immunisation and emerging infectious diseases programs. He had training in medicine, field epidemiology and public health. Since 1985, has been working in policy and strategy development and the coordination of national immunisation program and the control programs of several communicable diseases including dengue, diarrheal diseases, soonotic diseases and emerging infectious. For the national immunisation program, he had a leading role in the introduction several new vaccines including hepatitis B, Japanese encephalitis and measles-mumps-rubella, combined DTP-HB, and influenza. He led the coordination of national poliomyelitis eradication campaign for a number of years. Currently, he is a member of the National Vaccine Committee that drives policy for national capacity in vaccine. For emerging infectious disease control, since 1994 he has been involved in the development and coordination of policy and strategies for preparedness and response to emerging infectious diseases. He was involved in the development of the current National Strategic Plan on Preparedness and Response to Emerging Infectious Diseases. He is the current Chair of WHO’s South East Asia Regional Certification Commission for Poliomyelitis Eradication.
Atlanta, Georgia, USA Dr. Leonard Peruski directs laboratory operations of the Global Disease Detection Branch network within the Division of Global Health Protection of the US Centers for Disease Control and Prevention (CDC). From 2011-2015, he was Director, Global Disease Detection Regional Center for Central America (GDD-CAR) of the CDC. Previously, he was Laboratory Chief, International Emerging Infections Program, Thailand, of the CDC from 2005-2011. He joined CDC from the Indiana University School of Medicine, Northwest Center, where he was Associate Professor of Microbiology and Immunology (Infectious Disease) and Assistant Director for Research and Graduate Studies. Dr. Peruski did his Ph.D. at the University of Michigan, School of Medicine, followed by postdoctoral work at National Jewish Hospital in Denver, Colorado, and then joined the National Institutes of Health in Bethesda, Maryland. In 1994 he was commissioned in the U.S. Navy and stationed at Naval Medical Research Unit 3, Cairo, Egypt, where he led laboratory studies in diarrheal disease and trials of investigational vaccines and drugs. In 1999 he transferred to the Naval Medical Research Center in Silver Spring, Maryland, as Chief Scientist, Biological Defense Research Directorate. In addition to extensive experience with special pathogens and other infectious disease agents, he has worked on many field assignments domestically and internationally. Notably, he served as the commander of the US Department of Defense team that deployed to New York City with the CDC in the aftermath of the 2001 anthrax attack. In 2002 he again led a team of military scientists that provided rapid biological detection capability to the 2002 Winter Olympics in Salt Lake City. Dr. Peruski is also an adjunct faculty member at the Uniformed Services University of the Health Sciences in Bethesda, Maryland, and the Indiana University School of Medicine. He is an author over 60 peer-reviewed publications, textbook chapters, and patents in microbiology, public health and emerging infectious diseases.
Dr. Ranmini Kularatne heads the Sexually Transmitted Infections Section of the Centre for HIV and STIs at the National Institute for Communicable Diseases (NICD) in Johannesburg, South Africa.

Core surveillance activities of the STI Section include periodic aetiological surveillance of STI Syndromes at sentinel sites in the nine provinces of South Africa, in order to validate and update current syndromic management guidelines. Additionally, antimicrobial resistance profiles of Neisseria gonorrhoeae isolates are monitored in order to detect multi- or extensively drug resistant clones that will not respond to currently recommended therapy, and have the potential for national and international spread. The laboratory also serves as a reference centre for STI diagnostics, and offers WHO-funded technical support to SADC countries, in order to increase capacity building for regional surveillance activities.

Prior to taking up this post at the NICD, Dr Kularatne, a Clinical Microbiologist by training, headed a diagnostic Microbiology laboratory at a tertiary academic (university-affiliated) hospital in Johannesburg, which offers diagnostic services to academic hospitals, district hospitals and community health centres. She chaired the hospital Infection Control Committee and the Antimicrobial Sub-committee, and was involved in healthcare worker training and guideline drafting and implementation for hospital infection prevention and control as well as antimicrobial stewardship. She is a consultant in the Department of Clinical Microbiology & Infectious Diseases at the University of the Witwatersrand in Johannesburg, and lectures both undergraduate and postgraduate student at the Health Sciences faculty.
Dr. KHEBIR BIN VERASAHIB

Public Health Physician and Director of National Public Health Laboratory,

Ministry of Health, Malaysia

Dr. Khebir graduated as Medical Doctor (M.D.) in 1986 from Universiti Kebangsaan Malaysia (UKM), obtained SEAMEO-TROPMED postgraduate Diploma in Applied Parasitology and Entomology (D.A.P. & E.) in 1989, Master in Public Health (Epidemiology) from UKM in 1995. He has been gazetted as Public Health Specialist since 2001 by Ministry of Health Malaysia. He was conferred the Member of Academy of Medicine Malaysia in 2015.

He has served in various capacities with Johor State Health Department for 20 years (1986-2006) serving rural health clinics, district and state hospitals and District Health Offices. From 2006 to January 2010 he was posted to Sabah Health Department as Area Medical Officer of Health in charge of 8 districts in the state.

He joined Disease Control Division, Ministry of Health Malaysia (MOH) in 2010 as Head of Soonotic Sector and in April 2015 assumed the post of Director of National Public Laboratory (NPHL) Malaysia.

As Public Health Physician in state of Johor and Sabah, Malaysia he had investigated many public health outbreaks such as SARS, Nipah, Chikungunya, Pandemic Influenza A(H1N1) and also involved in prevention and control measures. In 2009, Dr Khebir received Certificate on Course of Pandemic Influenza: Containment & Buffer Sone Train-The – Trainer, conducted by US Centre of Excellence Hawaii & US Pacific Command. Dr Khebir is heavily involved in One Health initiatives with other agency such as Department of Veterinary Services, Wildlife Department, and Universities etc. He was past Executive Board Members of Malaysian One Health University Network (MyOHUN). Currently, he is a co-researcher for Study of Soonotic Infections among Persons Exposed to Wild Animals and Soonotic Disease Surveillance in Wildlife, a collaborative effort with Eco Health Alliance and Global Viral Forecasting Initiatives from United State of America under PREDICT programme. He is also involved in a research project “Multi-Year Prospective Cohort Study To Evaluate The Risk Potential Of MERS-CoV” a collaborative study with Tropical Infectious Disease Research & Education Centre (TIDREC) of the University of Malaya and funded by the U.S. Naval Medical Research Center - Asia (NMRC-A). He has published 5 scientific articles in peer reviewed journals and presented several papers at conferences. At international level, he is the second national Focal Point for ASEAN Expert Group on Communicable Diseases (AEGCD).
Dr. KHANCHIT LIMPAKARNJANARAT
Regional One Health Advisor, FAO, Regional Office for Asia and the Pacific
Regional GHSA Coordinator, Ministry of Public Health, Thailand

Dr. Khanchit Limpakarnjanarat is currently serving as Regional One Health Advisor to FAO, Regional Office for Asia and the Pacific and Regional GHSA Coordinator for Ministry of Public Health, Thailand.

He received a degree in Medicine from Chulalongkorn University in 1976, and graduated with the first cohort of the Thai Field Epidemiology Training Program (FETP) in 1980. He also completed the Epidemic Intelligence Service (EIS) training program, at CDC in 1982 and was awarded a Master degree in Public Health from Emory University. Upon his return to Thailand, he was responsible for the Thai FETP. Since 1987, Thailand became the first country to independently operate an FETP with close collaboration with WHO and CDC.

Dr. Khanchit was appointed as WHO Representative to Indonesia since January 2010 to March 2016. Prior to assignment to Indonesia, he served WHO as the Regional Advisor, Disease Surveillance and Epidemiology, Communicable Disease Department, WHO, SEARO in New Delhi, India from 2006-2009 to coordinate on regional activities on IHR (2005) implementation in the Southeast Asia Region.

During 1990-2006, Dr. Khanchit was an Adjunct Director for TUC, a joint collaboration between Thailand MOPH and the US CDC. Among others, he led TUC in providing technical assistance to the Thai MOPH in response to SARS and Avian Influenza outbreak as well as establishing population-based surveillance of Influenza.
Dr. KENDRA CHITTENDEN
Senior Infectious Disease and Laboratory Advisor,
Global Health Security and Development Team, USAID

Dr. Kendra Chittenden is a Senior Infectious Disease and Laboratory Advisor to the Global Health Security and Development team at USAID. Dr. Chittenden provides support for GHSA efforts in Indonesia and West Africa. Dr. Chittenden previously worked in Indonesia for five years as a USAID Senior Infectious Disease and Science & Technology (S&T) Advisor on the health team. Dr. Chittenden’s work in Indonesia focused on improving the public health capacity to combat infectious diseases including TB and emerging infectious diseases. Dr. Chittenden also worked closely with the Government of Indonesia to increase and incorporate science and technologies into the health, environment, economic growth, and education activities; and to create a new five year strategy for S&T partnership between USAID and Indonesia. Previously, at the Department of State, Dr. Chittenden was team chief for the Biological Engagement Program. The program supported activities in Russia, Middle East, many parts of Asia, Africa, and Latin America to establish public health and scientific research projects that enhanced international cooperation and best practices. Dr. Chittenden chairs the American Society for Microbiology (ASM) Committee on Sustainable Development. Dr. Chittenden has a doctorate degree in Molecular Virology and Microbiology from the University of Pittsburgh School of Medicine.
Dr. FILIP CLAES

Regional Laboratory Coordinator of the Emergency Center for Transboundary Animal Diseases (ECTAD), Food and Agriculture Organisation, the United Nations

Dr. Filip Claes is the Regional Laboratory Coordinator of the Emergency Center for Transboundary Animal Diseases (ECTAD) of the Food and Agriculture Organisation of the United Nations, Regional office for Asia and the Pacific since March 2015.

Dr. Claes holds a Bachelor of Science (BSc), a Master of Science (MSc), and a PhD in Applied Biological Sciences from the University of Leuven, Belgium.

Dr. Claes worked for over 10 years at the Institute of Tropical Medicine in Antwerp as a researcher specialised in molecular characterisation of pathogens and the development of diagnostic tests for tropical animal diseases. In 2010 he joined the Animal Health Division of FAO at the headquarters in Rome, where he worked as a virologist and laboratory expert, with focus on laboratory capacity building for emerging infectious diseases and the strengthening of lab networks in South and Southeast Asia.

In his current position, he coordinates the laboratory capacity building for animal health laboratories in Asia, including strengthening the diagnosis of emerging infectious diseases, quality assurance of laboratories, biosafety and bioinformatics development.
MOE KO OO

Regional Coordinator and Head of Secretariat, Mekong Basin Disease Surveillance Foundation

Moe Ko Oo, currently working as Regional Coordinator as well as Head of Secretariat in Mekong Basin Disease Surveillance Foundation. He has more than 20 years of experience in family health care, public health and infectious diseases, and communicable diseases. Apart from working as Medical Practitioner in his country, he also worked as Medical officer and Advisor at International Organisation. He joined MBDS in 2005 and work responsibilities include program management and technical guidance to project areas and staffs, set priorities and plan successful implementation of programs, monitor and evaluate program activities, and document and disseminate reports on the effectiveness of project strategies and intervention. He holds a M.Sc. in Emerging and Neglected Infectious Diseases from University of Edinburgh, as well as Master of Public Health from Mahidol University, Thailand and M.B, B.S. from University of Medicine 1, Myanmar.
Dr. IKUMA NOSAKI  
Adviser for Infectious Disease Control and Laboratory Services, JICA  

EDUCATION & CREDENTIALS  
**Pediatric Specialist:** Japan Pediatric Society (No. 23067), 2005  
**Ph.D.**, Kyorin University School of Medicine, Tokyo, Japan, 2013  
**M.D.**, Shinsyu University School of Medicine, Nagano, Japan, 2000  
**B.E.**, Chemical Engineering, Doshisya University, Kyoto, Japan, 1993  

Ikuma Nosaki is an expert on public health especially in the area of infectious disease control and laboratory services. He has belonged to National Center for Global Health and Medicine in Japan since 2000, which is a core institution of Japan’s international health cooperation. He has extensive experience in global health especially on policy making and management. His recent activities include technical adviser for Sambian Ministry of Health on ART expansion from 2007 to 2010 and Chief Adviser of JICA Major Infectious Disease Control Project in Myanmar from 2013 to 2015, those aimed to improve the quality of HIV care and blood transfusion services. Currently, he was assigned as JICA's Adviser for Infectious Disease Control and Laboratory Services in Myanmar since November 2015 for two years. One of his ToR is improvement of health information and accountability related to disease control and laboratory. In addition, he was seconded to the Ministry of Health, Labour and Welfare Japan in 2012, as a Deputy Director of International Affairs Division, to contribute for the policy making on global health. He also had an experience to join the Mid-term review team for Mongolian National Strategic Plan on HIV/AIDS and STIs in 2013 as WHO temporary adviser.

He received the B.E. degree in chemical engineering from the Doshisya University in 1993, the M.D. degree from Shisyu University School of Medicine in 2000, and Ph.D. degrees from the Kyorin University School of Medicine in 2013. He studied global health in Harvard School of Public Health as Takemi Fellow 2011-2012.

He was the recipient of the Japan Association for International Health, Young Professional Award in 2011, and Takemi Incentive Award in 2013, in recognition of his outstanding research work in the area of public health.
Dr. TONI WHISTLER
Director of the Strengthening Laboratory Capacity Program (SLCP),
Global Disease Detection Regional Center in Thailand

Dr. Whistler has been the Director of the Strengthening Laboratory Capacity Program (SLCP) in the Global Disease Detection Regional Center in Thailand since 2011. After receiving her PhD in Virology from the University of Witwatersrand Medical School in South Africa in 1990, she joined the US Centers for Disease Control and Prevention (CDC) as a National Research Council Post-doctoral Fellow in the Measles Virus Section. In 1994, she returned to South Africa as the Assistant Director and Head of the Department of Molecular Biology at the National Institute for Virology in Johannesburg, with an adjunct position in the Department of Medical Virology, at the University of the Witwatersrand. Her main research interest during this time was the molecular epidemiology of measles virus transmission. In 1996 Dr Whistler was appointed to a Staff Scientist position with the Pall Corporation in Port Washington, New York. In 1998 she returned to CDC in the Infectious Diseases Pathology Activity molecular biology section, and then in 2002 went to the Chronic Fatigue Syndrome research group, working on transcriptomics. Dr Whistler has a broad range of experience ranging from molecular diagnostics to vaccine development. As the Director of SLCP Dr Whistler works with Ministries of Health and Agriculture in Southeast Asia to improve to expand their public/animal health laboratory services and functions. One of the main areas of focus has been on biological safety cabinet certification. Dr Whistler has received a number of awards for her research, notably the HHS Secretary’s Award for Distinguished Service from the Department of Health and Human Services and has over 40 publications in peer-reviewed journals.
Dr. SOMCHAI SANGKITPORN  
Director, National Institute of Health, Department of Medical Science,  
Ministry of Public Health, Thailand

Education

- Medical Doctor, Chiang Mai University
- Higher Graduate Diploma (Clinical Medical Sciences), Mahidol University
- Diploma of Thai Board Clinical Pathology, Mahidol University

Work Positions

- 2001 – 2003 Director of Medicinal Plant Research Institute, Department of Medical Sciences, Ministry of Public Health
- 2004 – 2005 Acting Director, National Institute of Health, Department of Medical Sciences, Ministry of Public Health
- 2005 – 2011 Director of Clinical Research Center, Department of Medical Sciences, Ministry of Public Health
- 2012 – Present Director National Institute of Health, Department of Medical Sciences, Ministry of Public Health

Researches

- Development of Thalassemia Diagnosis Networking to support the prevention and control of Thalassemia
- The efficacy study of medicinal plants for HIV/AIDS patient treatment
- Development of Stem Cell Laboratory

Awards

- 1991 DMSc Awards: Title: “Drug contamination by breaking the ampoule”
- 1992 MOPH Awards: Title: “Extract of Clinacanthus nutans (Burm. f) for the treatment of recurrent Herpes simplex patients”.
- 1993 MOPH Awards: Title: “Detection of carriers of thalassemia and abnormal hemoglobin”.
- 1998 MOPH Awards: Title: Efficacy of Clinacanthus nutans (Burm. f) in the treatment of Herpes soster patients”.

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LINDA DE GOUVEIA
Centre for Respiratory Diseases and Meningitis,
National Institute for Communicable Diseases, South Africa

From 1982 – 1998 I worked in various routine microbiology diagnostic laboratories, where I gained experience in many facets of microbiology and infectious diseases. In 1999 I joined the pneumococcal surveillance laboratory, where a national, active, laboratory-based surveillance system in South Africa for vaccine-preventable bacterial diseases due to *Streptococcus pneumoniae*, *Haemophilus influenzae* and *Neisseria meningitidis* was initiated. In 2003, this surveillance work evolved into the current network (Group for Enteric, Respiratory and Meningeal Disease Surveillance in South Africa [GERMS-SA]), an internationally-respected source of African data related to the pathogens under surveillance. More recently surveillance of bacteria causing atypical pneumonia have been included. I currently hold the position of laboratory manager at the Centre for Respiratory Diseases and Meningitis (CRDM). As laboratory based national surveillance, my responsibilities include the day-to-day managing of a team of scientists and technologists, various projects and budgets and collaborating with national and international colleagues and institutions. I am an auditor of NICD accredited laboratories as per ISO:15189, and am often recruited by WHO-AFRO as a Laboratory Expert to train laboratory technicians in general diagnostic laboratory principles and techniques and preparing laboratories for bacterial meningitis surveillance.

As a Regional Reference Laboratory for the WHO Vaccine-preventable Invasive Bacterial Diseases (VP-IBD) of the WHO Coordinated Global Surveillance Network I conduct regular assessments and on-site training workshops for the southern Africa region.

As a member of the National Health Laboratory Services (NHLS) External Quality Assessments (EQA) team, which manages and co-ordinates the World Health Organisation (WHO)/NHLS EQA programme for National Public Health Laboratories throughout Africa, my responsibilities include the translation of material for the African Portuguese speaking countries.

I am passionate about bacteriology, and enjoy teaching and sharing my knowledge. I believe that over the years I have gained insight and skills in laboratory diagnostics for bacterial infections, and have more recently gained a good understanding of the complex issues of surveillance during the improvement of our national active laboratory-based surveillance in the documenting of burden of disease.
Dr. RICHARD BROWN
Programme Officer for Border Health, WHO Thailand

Dr. Richard (Rick) Brown is a Programme Officer for Border Health in WHO Thailand. He is a medical doctor with a background in Clinical Infectious Diseases and Public Health. After completing postgraduate training in Public Health in the UK, in September 2003 he took up a post for 2 years as an epidemiologist in the Western Pacific Regional Office of WHO. Working on Emerging Infectious Diseases. This was then followed by postings for a year with WHO Vietnam, 4 months with WHO Myanmar, and seven years with the South-East Asia Regional Office of WHO, including 3 years based in Thailand and nearly 4 years based in India, where he was the focal point for the International Health Regulations (IHR 2005).
PHARMACIST BUTH SOKHAL

Deputy Director, National Institute of Public Health, Ministry of Health, Cambodia

Pharmacist Buth Sokhal is the deputy director of National Institute of Public Health, Ministry of Health, Cambodia. From 1992-1997, he was work at Pasteur Institute of Cambodia as a laboratory analysis. Previously, he was the National Institute of Public Health Laboratory Chief. He had studying in pharmacist at the University of Health Science in Phnom Penh since 1991 and had training on laboratory management and Statistical Analysis of Health Research Data analysis at the University of the Philippines Manila in 1999. He is the lecturer of the University of Health Science where he was Assistant Professor of Microbiology.

Since 2007, he has been working as the country coordinator for Japanese encephalitis and measles-rubella project. He was involved in the development of the current National Laboratory Policy and National Laboratory Strategic Plan.
DOUGLAS GORSLINE

Program Manager, Cooperative Biological Engagement Program (Africa/Southeast Asia)

Douglas Gorsline joined DTRA in August 2000 as a linguist attached to the Chemical and Biological Weapons Team of the On-Site Inspection Directorate. During his time on this mission he supported BW infrastructure elimination at Stepnagorsk, Kazakhstan and Tabakhmela, Georgia; weapons elimination on Vos Island; and Chemical Weapons infrastructure elimination at Novocheboksarsk. The majority of his deployments were three month tours in which he was stationed in country.

Upon separation from the Navy, Douglas went to work for the A&AS contractor to DTRA (SAIC) as the coordinator for CTR Audits & Examination, as well as developing the first BTRP (CBEP predecessor) Test and Evaluation Plan for Georgia. In 2008 he was hired on the BTRP as the project manager for the Ukraine initiative. In 2011, he transitioned a fully capable and successful engagement in Ukraine to incoming personnel in order to assume engagement opportunities in Usbekistan.

In 2014, Mr. Gorsline received a promotion to the Deputy Program Manager position for CBEP operations in Europe and SE Asia, managing a team of 12 Project Managers pursuing CBEP initiatives from Ukraine to the Philippines. In 2015, Mr. Gorsline’s taskings were realigned to serve as the Chief of Operations for CBEP activities in Africa and SE Asia.

Presently, with the departure of Mr. D’Amour from the CBEP, Mr. Gorsline is serving as the interim Program Manager for CBEP’s portfolios in both Africa and SE Asia.

Douglas has a B.A. in International Relations from Ohio Wesleyan University and an M.A. in International Relations, Security and Politics from Tufts University. When not engaged in official business, Douglas used to play rugby, surf, SCUBA dive and fish; but now he spends all of his off time with his two girls, Maddie and Katie and wife, Melissa.
Ms. Jintana Sriwongsa is currently an Advisor on Global Health Security Agenda (GHSA), the Department of Medical Sciences, Ministry of Public Health, Thailand.

In addition, she is also an Advisor on ASEAN Risk Assessment Center on Food Safety, Ministry of Health Malaysia [under support of European Commission].

She was trained on public health and obtained two Master Degrees: Master of Public Health, University of New South Wales, Australia, under World Bank Scholarship focusing on International Health in 2003 and Master of Science in Community Medicine, Chulalongkorn University, Thailand in 1995.

She has had working experiences on various public health issues in many international organisations both in Thailand and ASEAN including:

- 6 years working at ASEAN Secretariat, Jakarta, Indonesia in ASEAN Health cooperation in many of regional health areas such as food safety, emerging infectious diseases, field epidemiology training programme, HIV and AIDS, pandemic preparedness and responses on public health emergency, tobacco control, mental health, pharmaceutical development, noncommunicable diseases, traditional medicine, Migrant Health, Maternal and Children Health, Reproductive Health, and Universal Health Coverage.
- 2 years working at UNFPA Thailand Country Office on Youth Sexual Reproductive Health;
- 4 years working with Family Health International, Thailand Country Office, on HIV and AIDS program for migrants and other hard-to-reach population;
- 1 year working with UNICEF, Thailand Country Office on Youth Sexual Reproductive Health.

She has spent almost 10 years working with Ministry of Public Health, Thailand both at central and provincial levels.
Dr. PATRAVEE SOISANGWAN
Director of the Bureau of Pathogen and Animal Toxin Act (BPAT)

Dr. Patravee Soisangwan is the Director of the Bureau of Pathogen and Animal Toxin Act (BPAT), Department of Medical Sciences (DMSc), Ministry of Public Health (MOPH), Thailand from 2012 until now.

She obtained B.Sc. (Medical Technology) from the Faculty of Associated Medical Sciences, Khon Kaen University in 1985 and Ph.D. (Tropical Medicine) from the Faculty of Tropical Medicine, Mahidol University in 1999. She also obtained the Diploma in Medical Microbiology (D. M. M.) from the Institute for Medical Research, Malaysia in 1992.

In 2014, She participated the Advanced Management Program (AMP) from Graduate School of Business, Columbia University, USA, as well as the Administrative Law for Executive Program of the Administrative Court, Thailand.

She has more than 29 years of experiences on the laboratory quality management system and biosafety and biosecurity as briefly described below:

- Laboratory inspector for national standard i.e. MOPH standard and international standards, i.e. ISO15189
- Law inspector under Sanatorium Act
- WHO temporary advisor on the External Quality Assessment Scheme for Medical Laboratory (EQAS) for SEARO.
- DMSc-EQAS quality establishment team that received ISO17043 accreditation from the National Association of Testing Authorities (NATA), Australia, being the first accredited organization in South East Asia.
- Law inspector of Pathogen and Animal Toxin Act
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Enhancing Regional Partnership Towards Strengthening Laboratory System in Accelerating GHSA’s Implementation: Detect 1

27-29 July 2016, Bangkok, Thailand