



**JOHNS HOPKINS**  
BLOOMBERG SCHOOL  
*of* PUBLIC HEALTH

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**Center for Health Security**

**SOUTHEAST ASIA STRATEGIC DIALOGUE ON BIOSECURITY**

With participation from Indonesia, Malaysia, the Philippines,  
Singapore, Thailand & the United States

*Hosted by*

The Johns Hopkins Center for Health Security

16 – 18 April 2024

W Hotel Singapore in Sentosa Cove, Great Room 2  
Singapore

# SOUTHEAST ASIA STRATEGIC DIALOGUE ON BIOSECURITY

## DAY 1 · 16 APRIL 2024

9:00 – 9:20

### Welcome & Meeting Goals

*Tom INGLESBY, Director, Johns Hopkins Center for Health Security, USA*

*Anita CICERO, Deputy Director, Johns Hopkins Center for Health Security, USA*

9:20 – 9:30

### Opening Remarks

*Andrew HOLLANDS, Indo-Pacific Division Chief, Biological Threat Reduction Program, Defense Threat Reduction Agency, US Department of Defense*

9:30 – 10:30

### Participant Introductions

Each participant will introduce herself/himself, including their current position and organization, the principal focus of their work, and the biosecurity challenge they are most concerned about.

*Please limit introductions to 90 seconds each.*

For this dialogue, we define “biosecurity” as the policies, programs, and actions taken to prevent, prepare for, and respond to biological threats, whether they are natural, accidental, or deliberate.

10:30 – 11:00

### Coffee & Tea Break

11:00 – 12:30

### Dialogue Session One: Biothreat Overview & National Biosecurity Priorities

In this level-setting dialogue session, a representative from each country will kick off the discussion with relevant, high-level updates from their country or the region. Potential topics include:

- What are the most concerning biological threats in your country right now, including natural, accidental, and deliberate? What emerging or future risks and threats are the highest priority?
- What is your country’s risk assessment process for biological threats?
- What are the major efforts your country is making to address these priority threats? How is your country allocating resources to combat these threats?

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- What has changed since the 2023 dialogue meeting?

*Opening remarks (3-5 minutes each), followed by group discussion.*

**Opening Remarks:** KWA Chong Guan, CHONG Chee Kheong, Irma MAKALINAO, Chandresh HARJIVAN, Tikki PANGESTU, Suwit WIBULPOLPRASERT

**12:30 – 1:30**

**Lunch at The Kitchen Table**

**1:45 – 3:00**

**Dialogue Session Two: The Road to Resilience Against Future Threats**

As COVID-19 shifts toward an endemic state, governments and communities around the world are already looking ahead to the next threat. Another pandemic will emerge at some unknown point in the future, so it is critical to establish appropriate programs, capacities, and policies today to develop and maintain resilience against future pandemics and other threats.

- What are your government's or organization's priorities in terms of building future pandemic resilience? What activities are currently underway to address gaps identified during the COVID-19 pandemic?
- How have your country's surveillance and early detection strategies changed since the COVID-19 pandemic?
- In addition to national-level solutions, what is being done at the regional level to improve collaboration on pandemic preparedness and response?
- Beyond pandemics, what is your government or organization prioritizing in terms of developing biosecurity or health security capacity for other health threats?
- Are there examples from past dialogue sessions of activities, programs, capacities, or policies that you have found useful to your country in building resilience to these threats?

*Opening remarks (3-5 minutes each), followed by group discussion.*

**Opening Remarks:** Tanarak PLIPAT, Ratna SITOMPUL, Julie FISCHER, Jose EMBANG

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- 3:00 – 3:30**      **Coffee & Tea Break**
- 3:30 – 4:15**      **Presentation: Establishing Singapore's Communicable Diseases Agency**  
*Marc HO, Head of Transition, Communicable Diseases Agency Planning  
Office, Ministry of Health, Singapore*  
*Presentation, followed by Q&A.*
- 4:15**              **Day 1 Adjourns**
- 6:00**              **Dinner at W Lawn**

# SOUTHEAST ASIA STRATEGIC DIALOGUE ON BIOSECURITY

## DAY 2 · 17 APRIL 2024

9:00 – 10:30

### **Dialogue Session Three: The Convergence of Biology & Emerging Technologies**

Rapid and revolutionary advancements in biology are colliding with rapid and revolutionary advancements in other technical fields, including computing, which compounds the magnitude and scope of their impact. Rapid progress in biotechnology is making advanced tools and capabilities, such as gene synthesis, cheaper and more widely available. One area for potential growth is microbial forensics, which could provide critical tools, processes, and standards for investigating the origins of outbreaks or epidemics, including those suspected of being deliberate.

Emerging technologies in the field of advanced computing, such as machine learning and artificial intelligence (AI), are enabling scientists to unlock novel capabilities across the broad scope of biology, including potential breakthroughs in diagnostics, disease risk screening, and vaccine and therapeutic development. And as biology becomes more reliant on computing capabilities, governments, organizations, and researchers are increasingly looking to cybersecurity to protect facilities and data against nefarious actors.

But like other biology and biotechnology tools, these amazing new capabilities come with risks, such as an improved ability by non-experts or malicious actors to modify and synthesize novel pathogens. In the absence of international treaties or other global agreements, national governments are responsible for implementing oversight and regulatory systems to mitigate the risk of misuse, which has resulted in an inconsistent patchwork of policies and programs.

- What is the current state of cutting-edge biotechnology in your country, including the convergence of biology and advanced computing?
- What are the most promising trends and projected national benefits in this area?

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- How is your government or organization working to leverage these capabilities and mitigate the associated risks, including accidental and deliberate misuse?
- Is your government requiring the use of tools such as gene synthesis screening or cybersecurity to ensure the appropriate use of biological data, pathogens, and capabilities?
- Are there regional efforts—including through ASEAN—to improve biosafety/biosecurity for emerging biotechnologies?

*Opening remarks (3-5 minutes each), followed by group discussion.*

**Opening Remarks:** Sazaly ABU BAKAR, Amin SOEBANDRIO, May ONG, Novia KUSWARA, Natalie DEGRAAF

**10:30 – 11:00**      **Coffee & Tea Break**

**11:00 – 12:30**      **Dialogue Session Four: Medical Countermeasures Development, Production Capacity & Stockpiling Strategies**

The COVID-19 pandemic illustrated the critical importance of rapidly scaling up development and production capacity for novel medical countermeasures (MCMs). During the pandemic, only a small handful of countries or regions were able to establish production capacity to meet domestic needs, while the rest of the world essentially had to wait until those countries fulfilled their own demand before being able to access vaccines and other drugs. In the absence of formal international agreements, countries may have to fend for themselves in a future pandemic.

- What efforts are ongoing or planned—nationally or regionally—to establish MCM research and development programs or production capacity?
- Are there formal agreements in place—or planned—to coordinate and allocate limited supply of vaccines or other MCMs during future health emergencies?
- What other steps can the Southeast Asia region take to accelerate the development, regulatory authorization, and availability of novel vaccines or other MCMs in a future health emergency?

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- Is your country working to establish or expand stockpiles for vaccines and other MCMs to combat specific disease threats? Are there coordinated efforts to establish regional stockpiles?
- What are your views of the ongoing negotiations to establish a new international pandemic agreement?

*Opening remarks (3-5 minutes each), followed by group discussion.*

**Opening Remarks:** Wisit TANGKEANGSIRISIN, Cyrell VALENTIN, Mely CABALLERO-ANTHONY, Gerald PARKER

**12:30 – 1:30**      **Lunch at The Kitchen Table**

**1:45 – 4:30**      **Site Visit: Singapore National Centre for Infectious Diseases (NCID)**

***\*\*We will go straight from NCID to the Asia CHS launch event. We will not return to the W Hotel- Sentosa Cove until after dinner.\*\****

**1:45**      **Board Shuttle to NCID**

**2:30**      **Welcome & Group Photo**

**2:40**      **NCID Presentations**

NCID Overview, Formation of the Communicable Disease Agency & NCID Outbreak Management

*Vernon LEE, Executive Director, NCID*

*Shawn VASOO, Clinical Director, NCID*

**3:10**      **Discussion and Q&A**

**3:40**      **NCID Tours**

High-Level Isolation Unit & NCID Gallery

*Poh Lian LIM, Director, High-Level Isolation Unit, NCID*

**4:30**      **Board Shuttle to Asia CHS Launch Event**

**5:00 – 9:00**      **Launch Event for the Asia Centre for Health Security (Asia CHS)**

*One Farrer Hotel, Level 6, Wisteria & Camellia Villa. Hosted by Asia CHS.*

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- 5:00**      **Cocktail Hour**
- 6:00**      **Dinner**
- 9:00**      **Launch Event Concludes**
  
- 9:15**      **Board Shuttle & Return to W Hotel- Sentosa Cove**



# SOUTHEAST ASIA STRATEGIC DIALOGUE ON BIOSECURITY

## DAY 3 · 18 APRIL 2024

9:00 – 9:30

**Presentation:** WHO Laboratory Biosecurity Guidance, 2<sup>nd</sup> Edition  
*Kazunobu KOJIMA, Biorisks & Health Security Protection Unit, WHO*

As biological technologies and capabilities continue to expand rapidly around the world, governments are struggling to keep pace with regulation and oversight of high-consequence research. Technical guidance exists—such as the WHO Laboratory Biosecurity Guidance, which is expected to be updated soon with a 2<sup>nd</sup> edition—to support national governments in these efforts, but governments around the world face many barriers to establishing and implementing appropriate risk mitigation frameworks to address associated accidental and deliberate risks.

*Presentation, followed by Q&A.*

9:30 – 10:30

**Dialogue Session Five: Laboratory Biosafety & Biosecurity**

As countries seek to leverage rapid advances in biology, for both health and economic purposes, many are establishing new laboratory capacity, including for potentially high-consequence research. Many new priority categories of research—such as dual-use research of concern (DURC) or enhanced potential pandemic pathogens (ePPP)—can be conducted in a variety of laboratory settings, including high-containment facilities (eg, BSL-3, BSL-4) or lower levels of containment. The COVID-19 pandemic put laboratory biosafety and biosecurity under the microscope, as a result of rapidly expanding high-containment laboratory capacity in countries around the world, intense speculation regarding the origin of the SARS-CoV-2 virus, and a broader awareness of the potential impact of biological threats.

- What is your country's strategy for investing in new laboratory capacity?  
What threats will this new capacity address?
- What biosafety/biosecurity guidance or regulatory systems does your country have in place to mitigate the risk of high-consequence research, such as DURC or ePPP?
- Does your country have personnel reliability policies or programs to address insider threats, particularly for high-consequence research?

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- Are particular ministries (eg, MOH, MOD) or agencies in your country addressing the governance of advanced life sciences research to reduce risks around DURC?
- What guidance or support does your organization or government need from WHO, in order to leverage high-consequence research for legitimate purposes while mitigating associated risks of misuse?

*Opening remarks (3-5 min each), followed by group discussion.*

**Opening Remarks:** Gladys TAN, Rachel LEVINSON, Soawapak HINJOY

**10:30 – 11:00**      **Coffee & Tea Break**

**11:00 – 12:15**      **Dialogue Session Six: Ministry of Defense Approaches to Biosecurity & Priorities in Southeast Asia**

Ministries of Defense (MODs) are not historically responsible for health issues in many countries; however, public health emergencies can lead to national security threats. MODs have important roles to play in responding to large-scale outbreaks and other biological events, particularly those with national security implications. The security sector's involvement, however, is complicated by the diversity of government agencies that have some degree of responsibility and authority for various issues at the intersection of health and security.

- What is your MOD's role in preparedness and response for natural, accidental, and deliberate biological threats, including in conducting biosurveillance? Is there dedicated and sufficient funding for these endeavors?
- How well does your MOD coordinate with other relevant government agencies involved in the prevention, detection, response, and recovery related to biological events?
- What is the extent of regional or international cooperation between militaries on biosecurity threats, including to share biosurveillance data?
- Is your MOD monitoring advances in the life sciences that could be deliberately misused to create biological weapons?

*Opening remarks (3-5 minutes each), followed by group discussion.*

**Opening Remarks:** Arshil bin MOIDEEN, Wei Ting LEE, Daniel TJEN

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### **12:15 – 12:45**      **Roundtable Discussion & Final Thoughts**

This closing discussion invites participants to convey valuable takeaways or insights from this meeting. It also encourages them to consider and propose future work this dialogue group can do together, both in the dialogue meetings and other collaborations between meetings.

- What key insights stood out to you from this year's dialogue session? Are there examples of new programs or policies presented here that might make sense in your country?
- What topics, threats, capabilities, or priority themes should be included in future dialogue meetings?
- What opportunities do you see for this group in terms of collaborating outside of dialogue meetings?

### **12:45**                      **Dialogue Adjourns**

Lunch available at The Kitchen Table.