



ANRS | MIE Scientific Days in Vietnam

Towards ending epidemics

15th to 16th of November, 2023

Pandemic preparedness in the Asia-Pacific

Sangjun Moon

WHO Viet Nam



Promote health

Keep the world safe

Serve the vulnerable



Health Security Threats in the Asia Pacific

Health Security is a Priority

1. **Asia Pacific** is a diverse, rapidly changing, highly connected region and **prone to various health hazards** that constantly pose health security threats, often causing broad impact beyond health.
2. Region is a **hotspot for emerging infectious diseases (EIDs)**— interactions at the animal-human-environment interface are common.
3. **Investment in health security**, including in preparedness and response capacity for dealing with EIDs and ReEIDs, is **essential** to protect people's lives, and social and economic activities. **The challenges require longer term solutions to more effectively manage health security threats.**

These public health emergencies can be triggered by a wide range of hazards



Infectious diseases

- E.g. Cholera, dengue, influenza



Emerging zoonotic diseases

- E.g. avian influenza, MERS, Ebola, COVID-19



Antimicrobial resistance



Geophysical

- E.g. earthquake, tsunami, volcanic eruption



Hydro-meteorological

- E.g. flood, landslide, typhoon, dzud, wildfire



Food safety

- E.g. Contamination, foodborne illness



Human-induced

- E.g. armed conflict, humanitarian



Chemical

- E.g. chemical spill, gas leak



Radiological

- E.g. nuclear reactor event, transportation event

Major public health emergencies can impact on all aspects of health, economy and society



HEALTH

Significantly impact health system capacity and disproportionately affect vulnerable groups, widening health inequalities

SOCIAL

Consequences such as unemployment, discrimination, domestic violence, alcohol and substance abuse cause injury and increase inequities.

EDUCATION

Disruption to schooling can negatively impact student mental health and well-being, education and earning potential

ECONOMIC

Disruption to travel and trade can lead to reduced household and government incomes, business closure, disrupted global supply-chains

SECURITY

Can also threaten national security by causing civil unrest and political instability.

Promote health

Keep the world safe

Serve the vulnerable



Anticipating the next pandemic: Are we better prepared?

Anticipating the next pandemic: When?

- Emergence is random- but we know it will occur
- Emerging infectious diseases (EIDs) are a significant and growing threat to global health, global economy and global security
- Analyses of their trends suggest that their frequency, severity and economic impact are increasing
- Majority of EIDs (and almost all recent pandemics) originate in animals, mostly wildlife, and their emergence often involves dynamic interactions among populations of wildlife, livestock, and people within rapidly changing environments
- The mechanisms underlying this process are likely complex, and poorly understood

Anticipating the next pandemic: Where?

- Modelling and mapping used to predict EID emergence
- South East Asia identified as potential 'hotspot'
- New pandemic could begin anywhere where there is close interaction of people and either domesticated or wild animals.

Geographic distribution of 88 reported spillover events since 1960



Source: Metabiota, Human Epidemic Database, 2021 IN Smitham and Glasman CDG 2021

© Britannica

Anticipating the next pandemic: What?

- There are a few known pathogens– either viruses or bacteria – that can cause pandemic or epidemic-prone diseases.
- Respiratory infections represent one of the highest risks of an epidemic or pandemic after emergence and human-to-human spread
- Viruses
 - Influenza
 - Coronaviruses
 - Ebola
 - Monkeypox

Promote health

Keep the world safe

Serve the vulnerable



WHO New Asia-Pacific Strategy for Health Security

In the Asia Pacific countries, WHO and partners have utilized a common Asia Pacific strategic framework and collaborative approaches

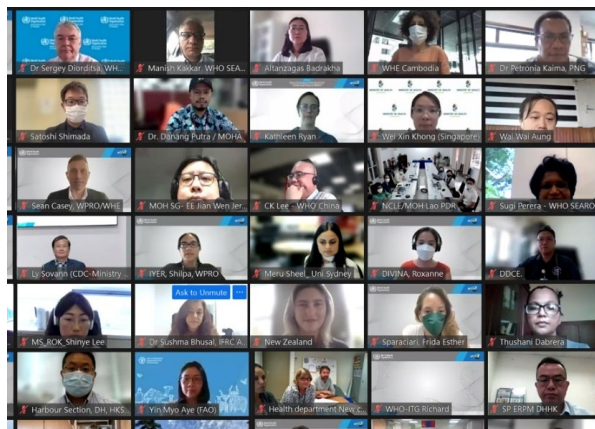
- Strengthen capacities to detect, report and respond to **multi-hazard** public health emergencies
- Implement the revised **International Health Regulations** (2005)
- Support multisectoral collaboration and **One Health** approaches



Asia Pacific Health Security Action Framework
(**APHSAF**): 2023

Asia Pacific Strategy for Emerging Diseases and Public
Health Emergencies (**APSED**): 2005, 2010, 2016

The strengths of this approach and investment were demonstrated by rapid and effective response of countries in the Region to COVID-



Better than global averages

The Asia Pacific has performed better than global averages for key COVID-19 indicators (*The Lancet COVID-19 Commission*)

Guided responses

Responses in the region guided by annual APSED Technical Advisory Group (TAG) meeting discussions and recommendations

Learning and improving

Countries have shared challenges, achievements and lessons to learn and improve from each other.

Laboratory technicians testing for viral respiratory pathogens at the National Centre for Communicable Diseases, Mongolia 2023.

Why we need new framework?



Papua New Guinea Defense Force (PNGDF) Training on COVID-19, Port Moresby.

But more needs to be done to be ready for the next pandemic or major public health emergency

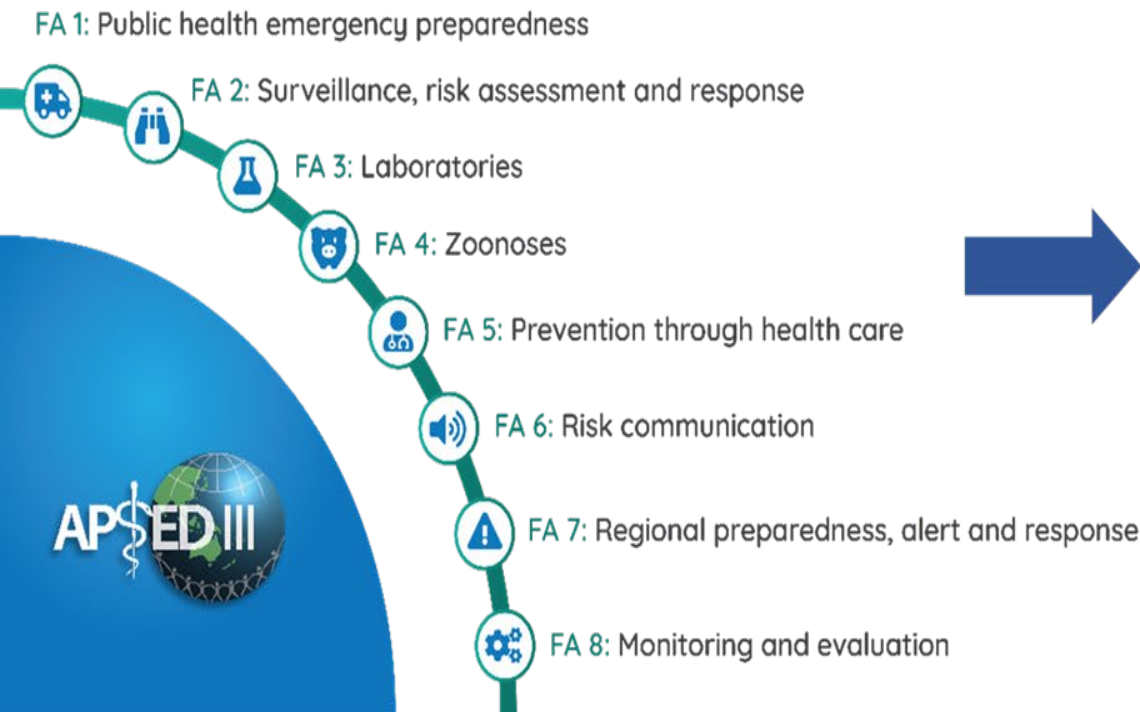
- The impact of major public health emergencies goes far beyond health – they can affect all aspects of life, society and economy.
- Forward-looking, multi-hazard, multisectoral and integrated approaches are needed to develop comprehensive health security systems.
- Small island developing states – including Pacific island countries and areas – face a complex mix of geographic, economic and environmental challenges and are particularly vulnerable to public health emergencies.

Vision of APHSAF

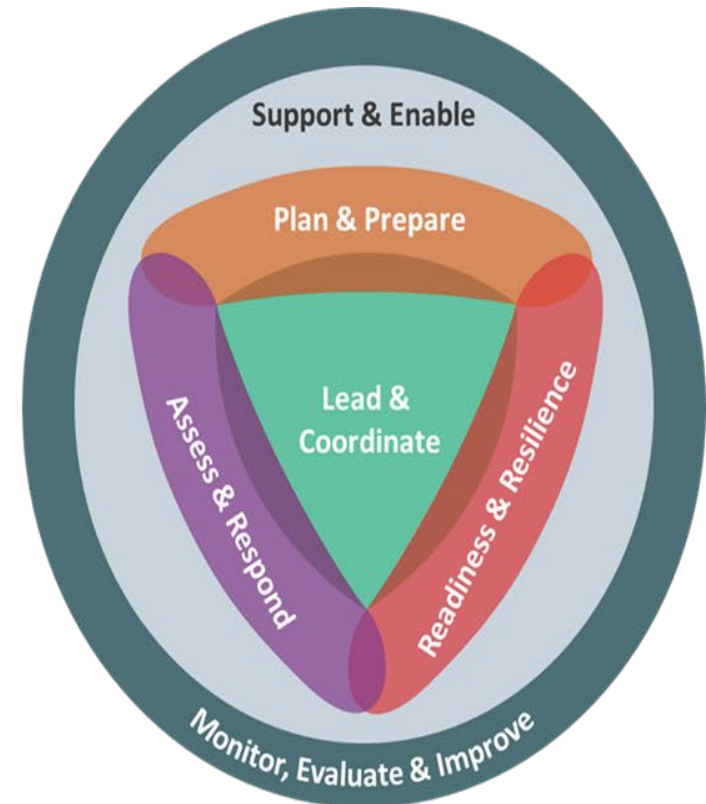
Our vision is of an Asia Pacific Region that is prepared for and resilient to public health emergencies through collective action and that contributes to global health security



Moving from focus areas to a 'domain approach'



APSED III focus areas



APHSAF domains

Six interconnected domains for effective health security in the Asia Pacific region

LEAD AND COORDINATE

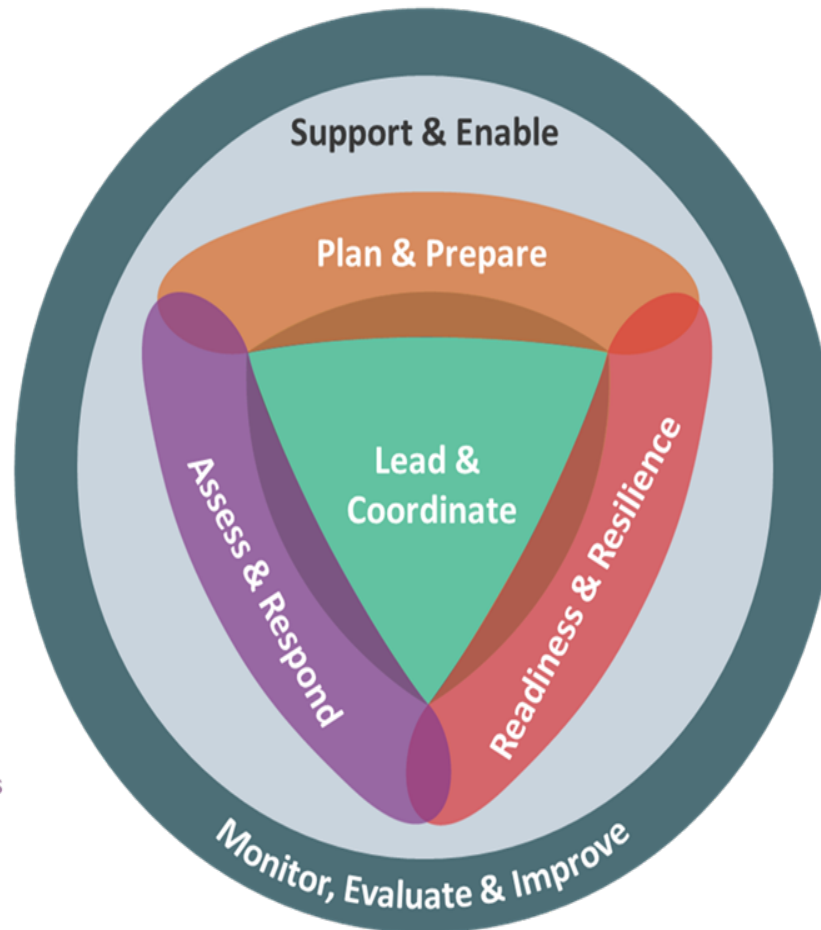
- Leadership, governance and partnerships
- Multisectoral coordination
- International cooperation and information sharing
- Coordinating regional health security

PLAN AND PREPARE

- Legal and regulatory frameworks
- Health security planning and preparedness
- Health information systems
- Forecast public health events and potential impact

ASSESS AND RESPOND

- Risk assessment and readiness actions
- Detect, report and monitor new and unusual events
- Rapid response to limit impact and spread



READINESS AND RESILIENCE

- Prevention and risk reduction
- Deliver essential and emergency health care
- Prioritize measures for groups at risk and with vulnerabilities
- Risk communication and community engagement

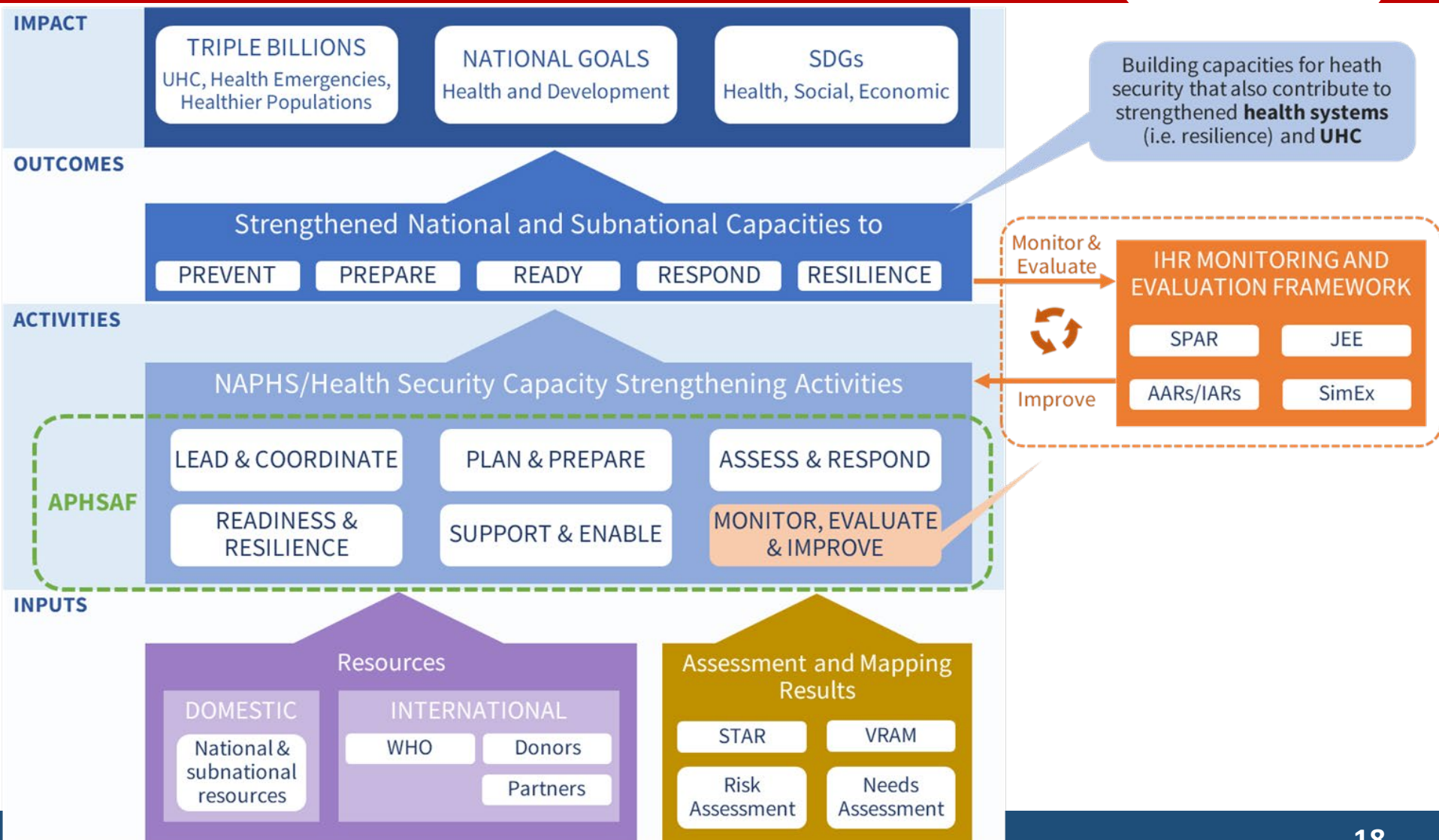
SUPPORT AND ENABLE

- Develop and sustain the health security workforce
- Financing health security
- Optimize logistics and operations management
- Strengthen and promote research, technology and innovation

MONITOR, EVALUATE AND IMPROVE

- Assessing health security capacities
- Exercise and test emergency plans and functions
- Learn and improve

Using the Framework to guide health security strengthening



Summary and way forward

- The Region continues to face **health security threats** – which are **increasingly** more frequent and larger in size, and their consequences becoming **more complex**.
- **Emerging** and **Re-emerging Infectious Diseases** continue to be major causes of public health emergencies
- Continuous health security threats reiterate importance of our collective efforts and innovation to further strengthening:
 - ✓ **Core public health systems** that can address all-hazard approach to health emergencies
 - ✓ **Whole-of-society approach** that effectively engages non-health sectors and communities
 - ✓ **Risk-based approach** for appropriate response, while reducing impact on systems/society
- **New Asia-Pacific Health Security Action Framework (APHSAF)** is developed and expected to contextualize the global solutions into regional and country solutions.
 - ✓ Built upon the Asia Pacific Strategy for Emerging Diseases and Public

Thank you



For more information, please visit: <http://www.wpro.who.int/vietnam>



[facebook.com/WHOinVietnam](https://www.facebook.com/WHOinVietnam)