Preparing for the Future: Building Singapore's Pandemic Resilience

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Looking back on Singapore's COVID-19 response….

Communicable Diseases Agency
Singapore

Need to **strengthen resilience** (Surveillance, Supply chain, Healthcare system capacity) against shocks and disruptions

Consolidated public health functions under a newly established National Public Health Agency, the **Communicable Diseases Agency (CDA)**, for a more agile and coordinated response to emerging health challenges

Importance of a **dynamic yet flexible** pandemic preparedness & response strategy

1 Prioritise key dimensions
- Be clear whether to prioritise lives or livelihoods at each juncture
- Health protocols and Safe Management Measures (SMMs) should be practical and easy to implement

2 Strengthen resilience
- Review stockpiling strategies, diversify supply chains, and build local production capabilities for critical items
- Grow capabilities to detect disease outbreaks
- Design multi-use facilities that can be repurposed for accommodation and medical facilities

3 Improve partnerships across the public, people and private sectors
- More one-stop platforms for members of public to offer and seek support
- Establish partnerships with private sector to harness civilian resources
- Develop SG Healthcare Corps as a reserve for healthcare manpower

4 Strengthen public health expertise and organisational capacity
- Strengthen primary care as the first line of defence
- Expand Transition Care Facilities for right-siting of patients
- Plug into international technical and surveillance networks
- Establish a dedicated outfit to consolidate public health expertise and operations
- Review Infectious Disease Act (IDA) to support more flexible public health responses

5 Integrate science and technology in pandemic management
- Synergise research and strengthen clinical data exchange
- Invest in interoperable systems for quicker and better data sharing
- Enhance cybersecurity of critical systems

6 Improve forward planning capabilities and structures
- Conduct regular tabletop exercises
- Broaden range of baseline scenarios for pandemic planning
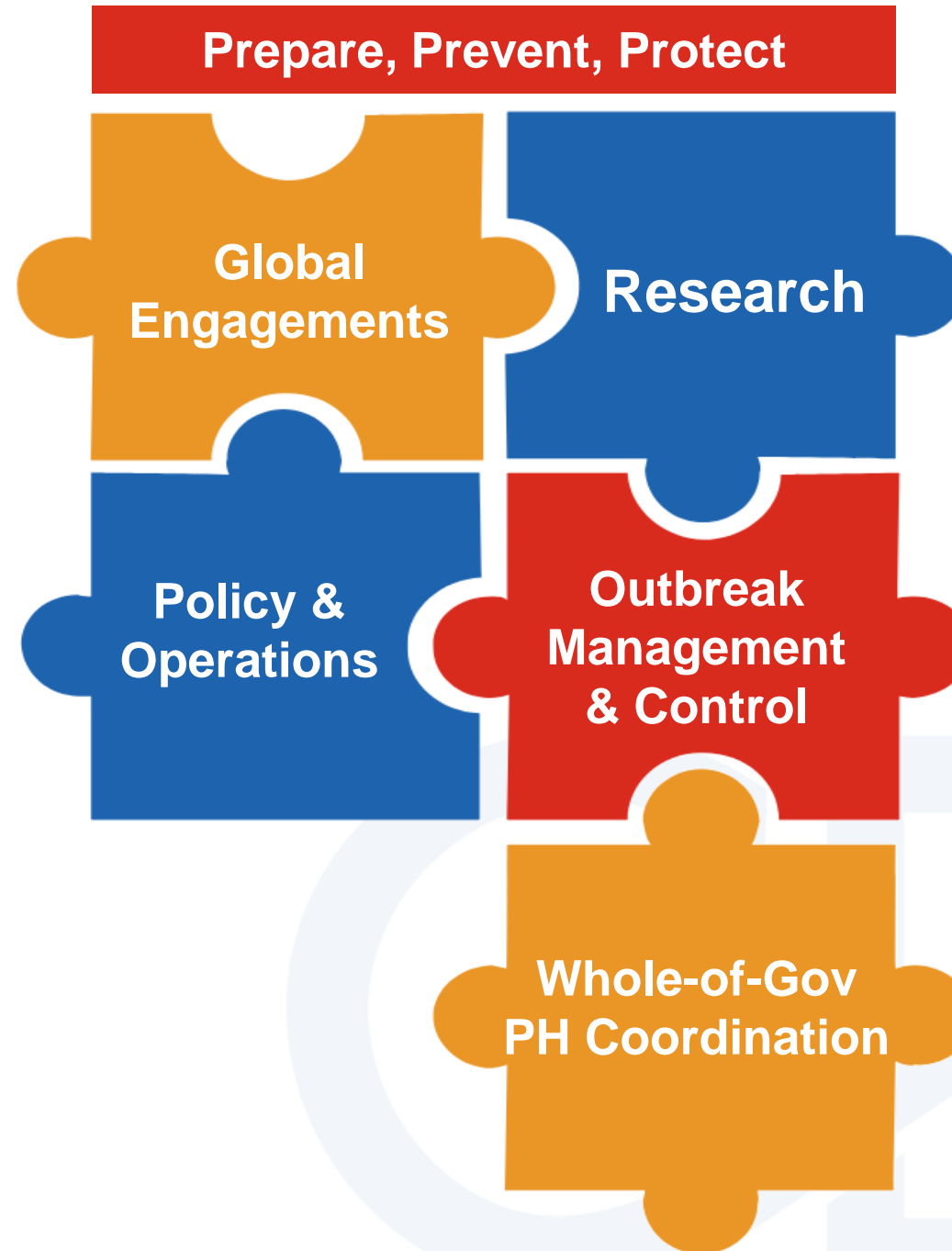- Appoint dedicated forward planning team during crisis to anticipate the next bound

7 Maintain clear and transparent public communication
- Maintain regular and open government communications to share decisions, manage public sentiments and shape national psyche

The Communicable Diseases Agency's integrated approach against disease threats

Prepare, Prevent, Protect

Global Engagements

Research

Policy & Operations

Outbreak Management & Control

Whole-of-Gov PH Coordination

Communicable Diseases Agency Singapore

Review of Infectious Diseases Act

Communicable Diseases Agency
Singapore
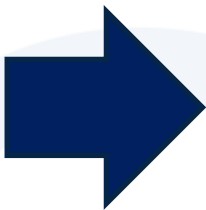
Infectious Diseases Act
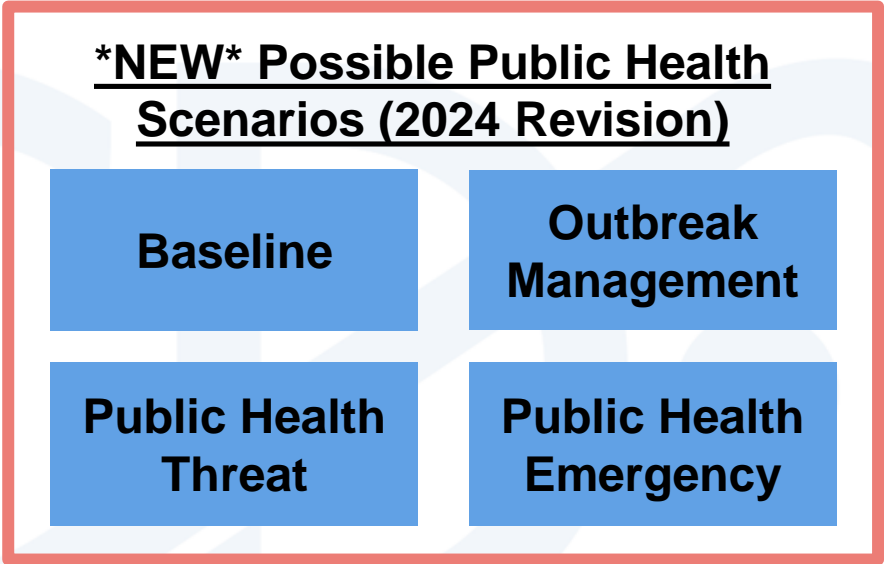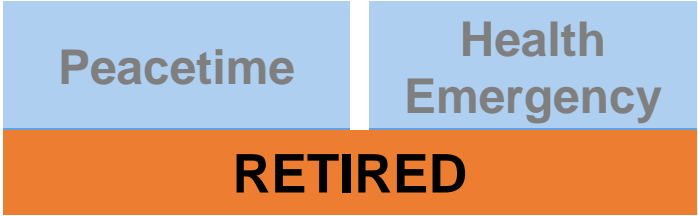
i.   Primary legislation to manage infectious diseases in Singapore
ii. Previously, a binary paradigm: Peacetime OR Health Emergency,
iii. Revised in 2024 for greater flexibility in responses

Disease Outbreak Response System Condition (DORSCON)

	GREEN	YELLOW	ORANGE	RED
Assessed public health impact	Negligible to Low impact	Low to Moderate impact	Moderate to High impact	Very High impact
Possible Scenarios	•Peacetime •Mild or self-	•Low virulence and high transmissibility	Severe & transmissible	Severe & transmissible
RETIRED				
		•High virulence but low transmissibility •Possible high virulence, high transmissibility but effective vaccines available	•High risk of spread to Singapore. **OR** •Sporadic cases/clusters in Singapore.	•Multiple clusters **OR** •Widespread community transmission

Possible Public Health Scenarios (IDA 1976)

Peacetime	Health Emergency
RETIRED	

NEW Possible Public Health Scenarios (2024 Revision)

Baseline	Outbreak Management
Public Health Threat	**Public Health Emergency**

Preparedness and Response

Droplet-borne disease plan using the "Plug-and-Play" approach

- Disease-agnostic modules can be selected and used for previously known diseases of the 5 major transmission modes, to form transmission-based plans

- Adopts a flexible, modular approach in responding to outbreaks

- Regular readiness exercises conducted to assess capabilities and gaps

Social distancing

Acute respiratory infection (ARI) reporting from primary care clinics

Pre-exposure prophylaxis

Mask-wearing

Vaccines

Supported by enablers

Official/Closed
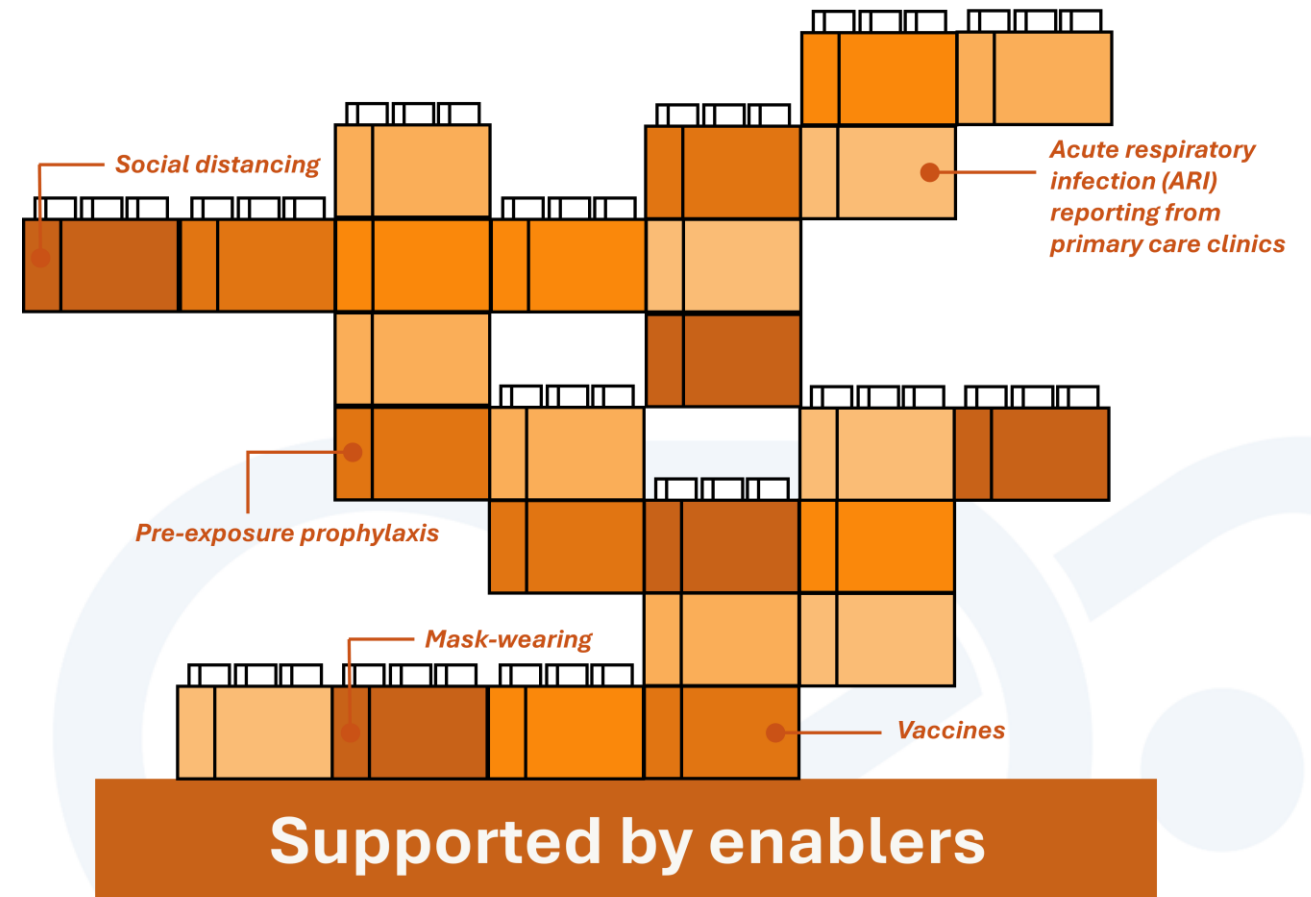
Strengthen supply chains and increase healthcare system capacities

Diversify supply chains, stockpiling strategies, build up local production capabilities for critical supplies

Raise, Train and Sustain a Healthcare Reserve Force (HRF) including collaboration with Whole-of-Government partners and volunteers

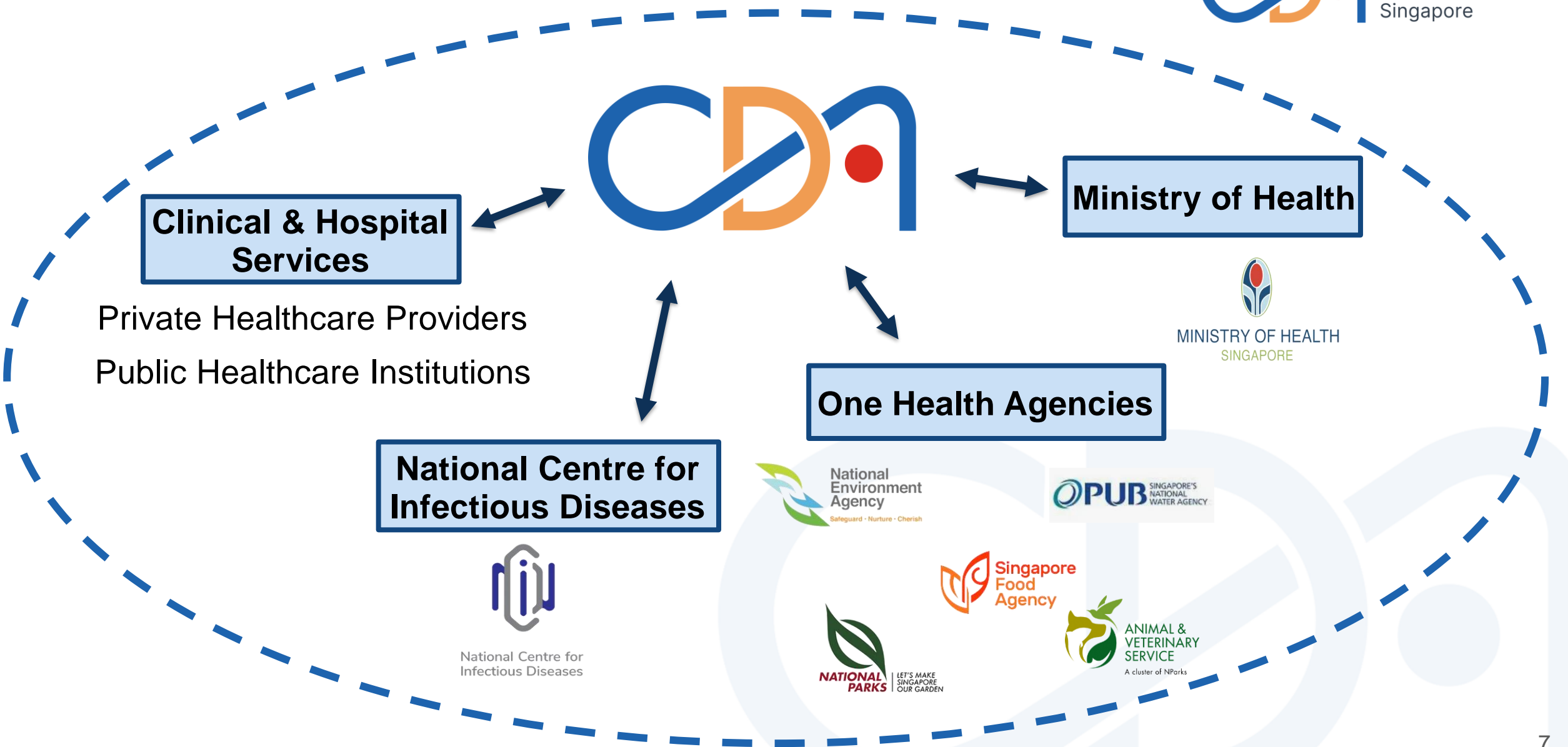**Strengthening our core resources for resilience**

Capability to build and sustain strategic medical resources, facility and logistic support; to stand up isolation/quarantine capacity as required

Strengthen healthcare institutes' preparedness and readiness

Singapore's public health ecosystem

Clinical & Hospital Services

Private Healthcare Providers

Public Healthcare Institutions

Ministry of Health

One Health Agencies

National Centre for Infectious Diseases