COVID-19 Cases Rise Across Southeast Asia as Governments Step Up Damage Control

Authorities recommend more telework, masks, and quarantine to stop the pandemic from getting worse.

As COVID-19 cases rise, WHO asks countries to scale up surveillance and protective measures

COVID-19 pandemic triggers 25% increase in prevalence of anxiety and depression worldwide

With over 25,000 new patients, Asean sees big jump in Covid cases

Soaring Myanmar COVID-19 Cases Test Long-Neglected Health Care System

COVID-19 Cases Surge in Southeast Asian Countries, as Officials Call for Renewed Attention to Prevention

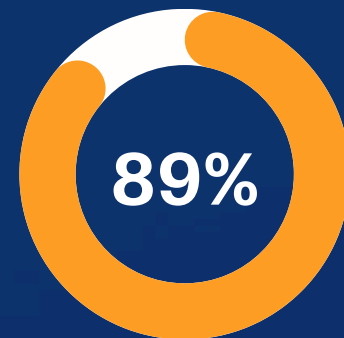Covid-19 cases rise in Southeast Asia, Middle East and Europe: WHO report

Source: WHO, Business Standard and RFA

Impact of Covid-19 Pandemic on the Global Scale

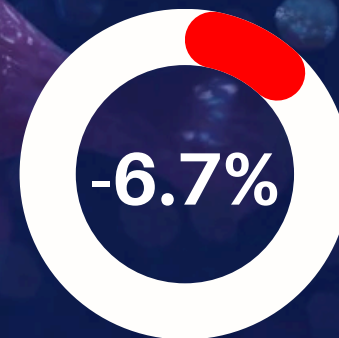## 775 million of infected cases
7.1 million deaths

Children and youth out of school due to Covid-19 closures

89%

of the world's student population

1.52 billion

Loss of full-time jobs in the second quarter of 2020

-6.7%

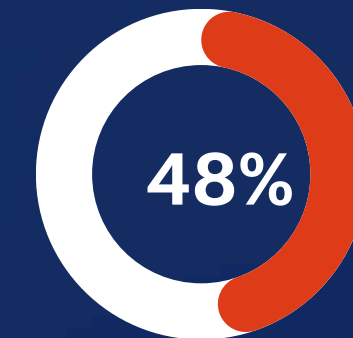across the globe in terms of working hours

195 million

Drop in income caused by the Covid-19 pandemic
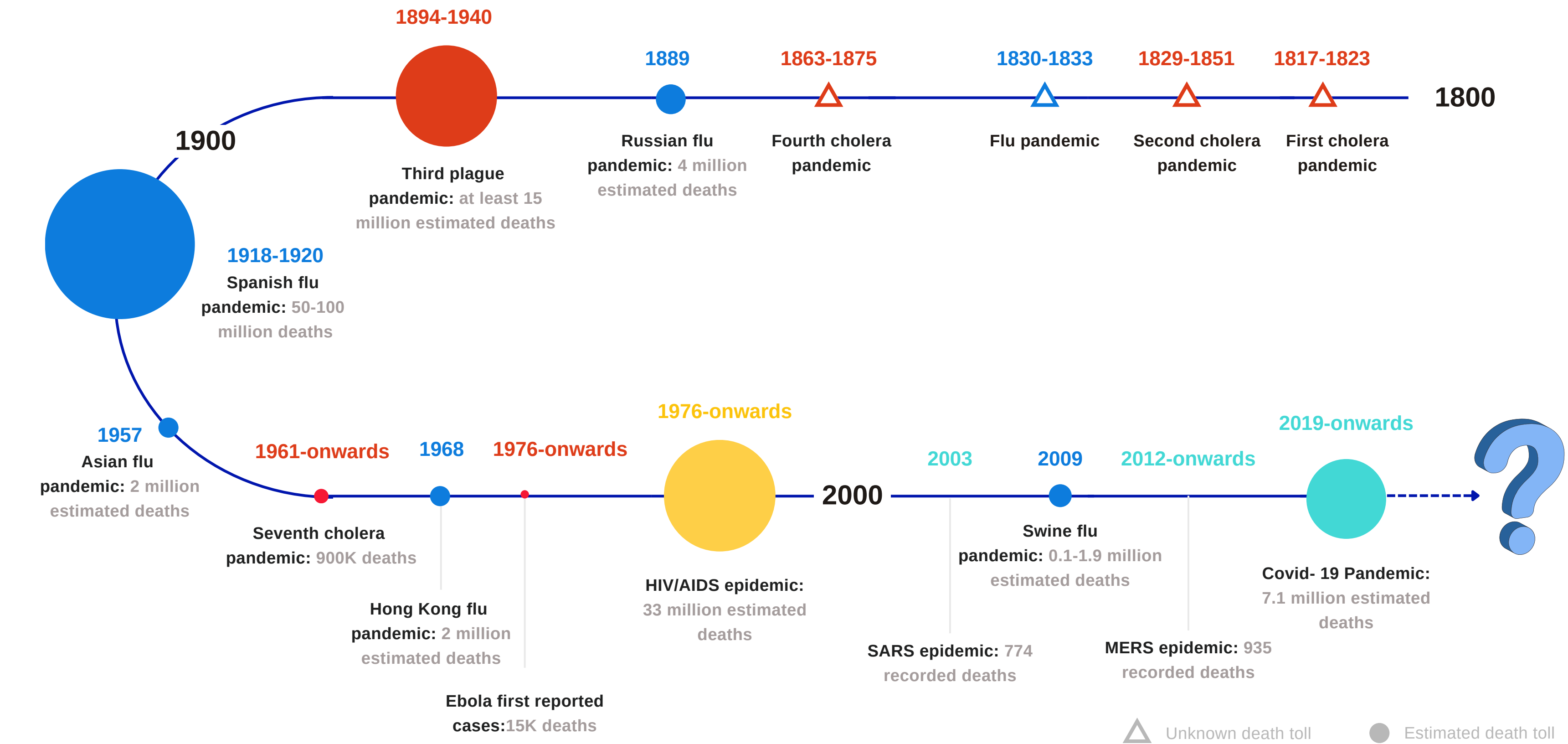
-20%

pushed half a billion people into poverty

548 million

People under lockdowns in April of 2020

48%

of the world population

3.9 billion

Data Source: Our World in Data, Wikipedia, WHO

Pandemics Worldwide since the 19th century (including epidemics)

1894-1940
Third plague pandemic: at least 15 million estimated deaths

1889
Russian flu pandemic: 4 million estimated deaths

1863-1875
Fourth cholera pandemic

1830-1833
Flu pandemic

1829-1851
Second cholera pandemic

1817-1823
First cholera pandemic

1800

1900

1918-1920
Spanish flu pandemic: 50-100 million deaths

1957
Asian flu pandemic: 2 million estimated deaths

1961-onwards
Seventh cholera pandemic: 900K deaths

1968
Hong Kong flu pandemic: 2 million estimated deaths

1976-onwards
Ebola first reported cases: 15K deaths

1976-onwards
HIV/AIDS epidemic: 33 million estimated deaths

2000

2003
SARS epidemic: 774 recorded deaths

2009
Swine flu pandemic: 0.1-1.9 million estimated deaths

2012-onwards
MERS epidemic: 935 recorded deaths

2019-onwards
Covid-19 Pandemic: 7.1 million estimated deaths

△ Unknown death toll   ● Estimated death toll

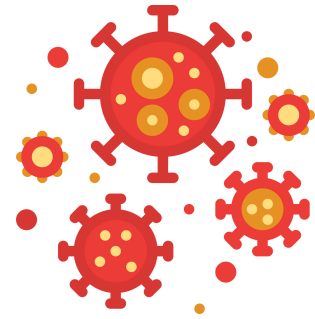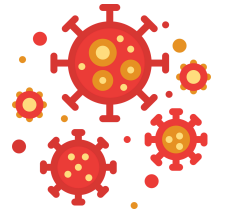*Data Source: Our World in Data Historical Pandemics Database (2023)*

So, the question is...

Are we (ASEAN) prepared for

THE NEXT PANDEMIC?

How can we take lessons from COVID-19 pandemic to improve future responses?

3 GOOD HEALTH AND WELL-BEING

11 SUSTAINABLE CITIES AND COMMUNITIES

13 CLIMATE ACTION

Are we prepared for the next pandemic?

Recent Covid-19 pandemic have highlighted ASEAN's vulnerability to global health crises, causing significant economic and public health impacts. The inevitability of future outbreaks necessitates proactive measures to minimize damage. Inadequate medical supplies due to limited data on disease spread patterns have underscored the urgent need for digital solutions. Our innovative approach aims to strengthen data collection and healthcare system resilience in ASEAN countries, enabling swift and effective responses to emerging health threats. By leveraging advanced technologies, we can enhance preparedness, protect public health, and ensure ASEAN's ability to withstand future pandemics.

Team IT Nerds

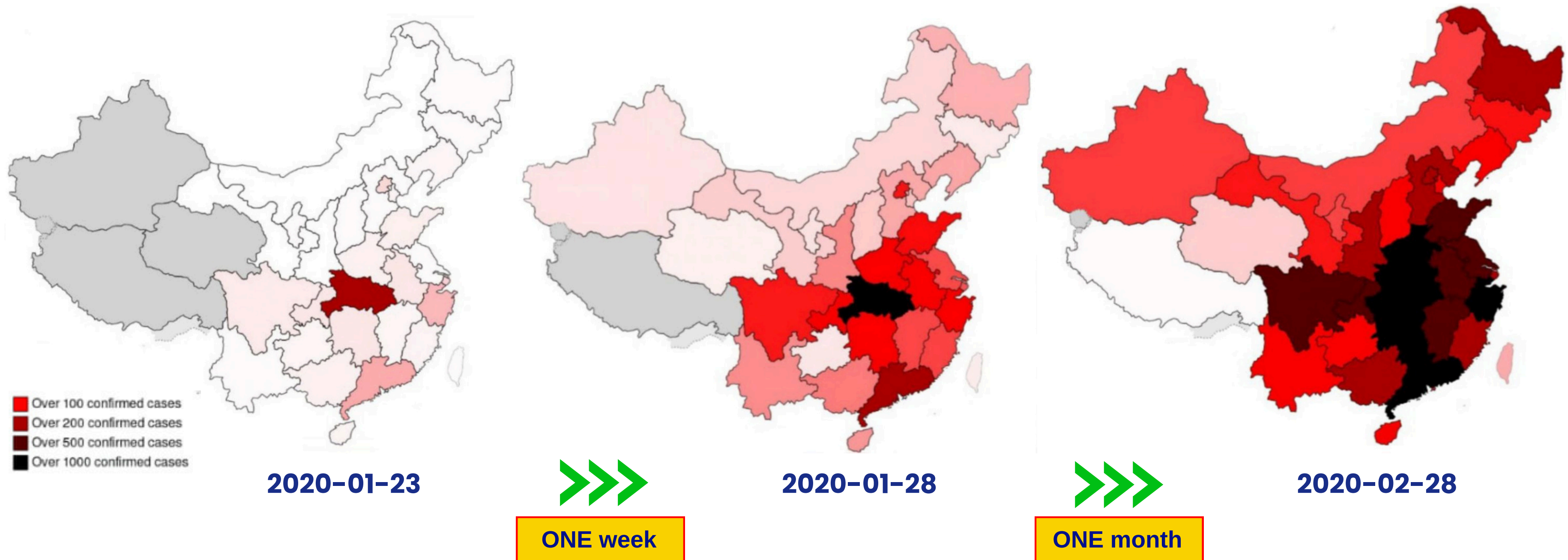Sein Lae Lae Hlaine, Yoon Ya Mone Naing

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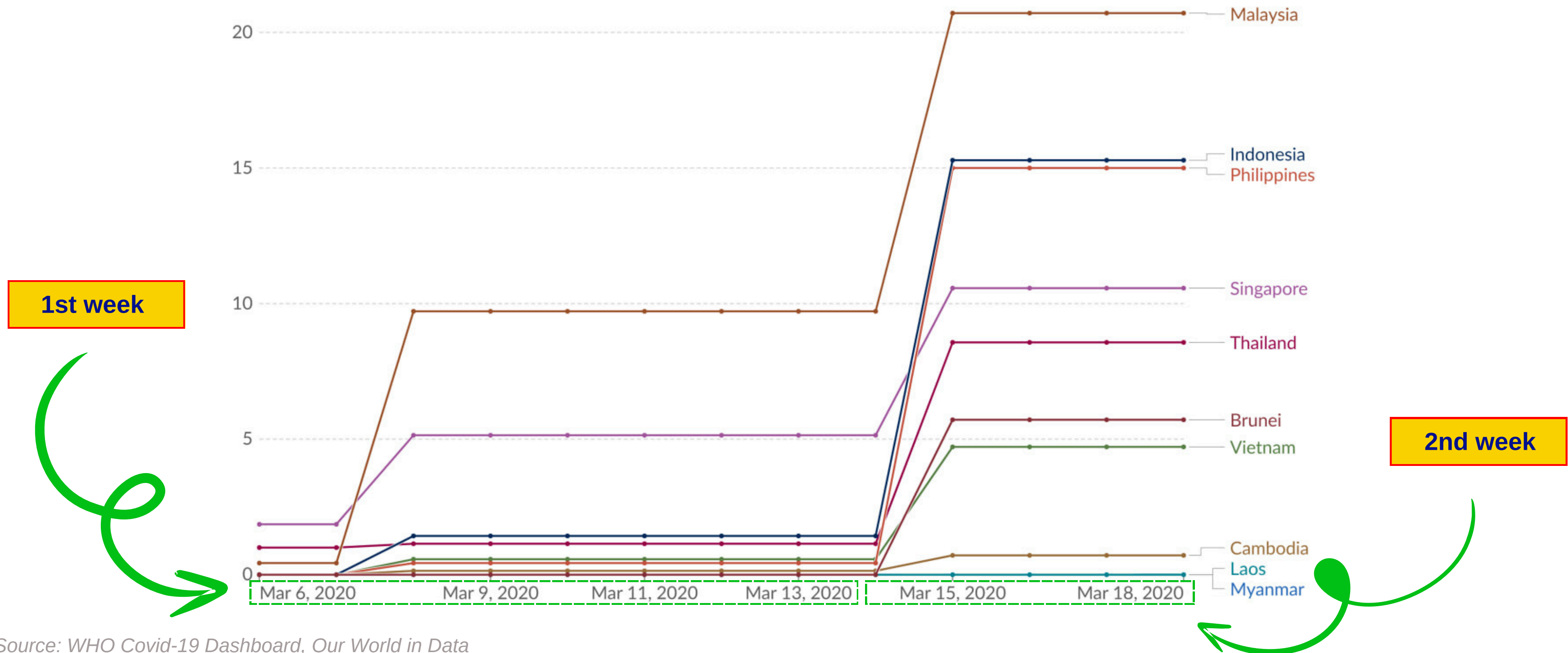Sein Lae Lae Hlaine, Yoon Ya Mone Naing

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Are we prepared for the next pandemic?
Sustainable Development Goals 3, 11 & 13

3 GOOD HEALTH AND WELL-BEING
11 SUSTAINABLE CITIES AND COMMUNITIES
13 CLIMATE ACTION

Insights into Pandemic Spread Patterns

Covid-19 Confirmed Cases in Wuhan, China , 2020 [Around The Start of Pandemic]

Over 100 confirmed cases
Over 200 confirmed cases
Over 500 confirmed cases
Over 1000 confirmed cases

2020-01-23　　　　　>>> ONE week　　　2020-01-28　　　　>>> ONE month　　　2020-02-28

Data Source: Wikipedia, github.com

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Insights into Pandemic Spread Patterns

COVID-19 Confirmed Cases in ASEAN Countries in March, 2020

1st week

2nd week

Data Source: WHO Covid-19 Dashboard, Our World in Data

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How to Lower and Delay Pandemic/ Epidemic Peak

Impact of Early Protective Measures

Delay epidemic

Reduce peak burden on hospitals and infrastructure

Healthcare system capacity

Without measures

With measures

Number of infections

Time since first case
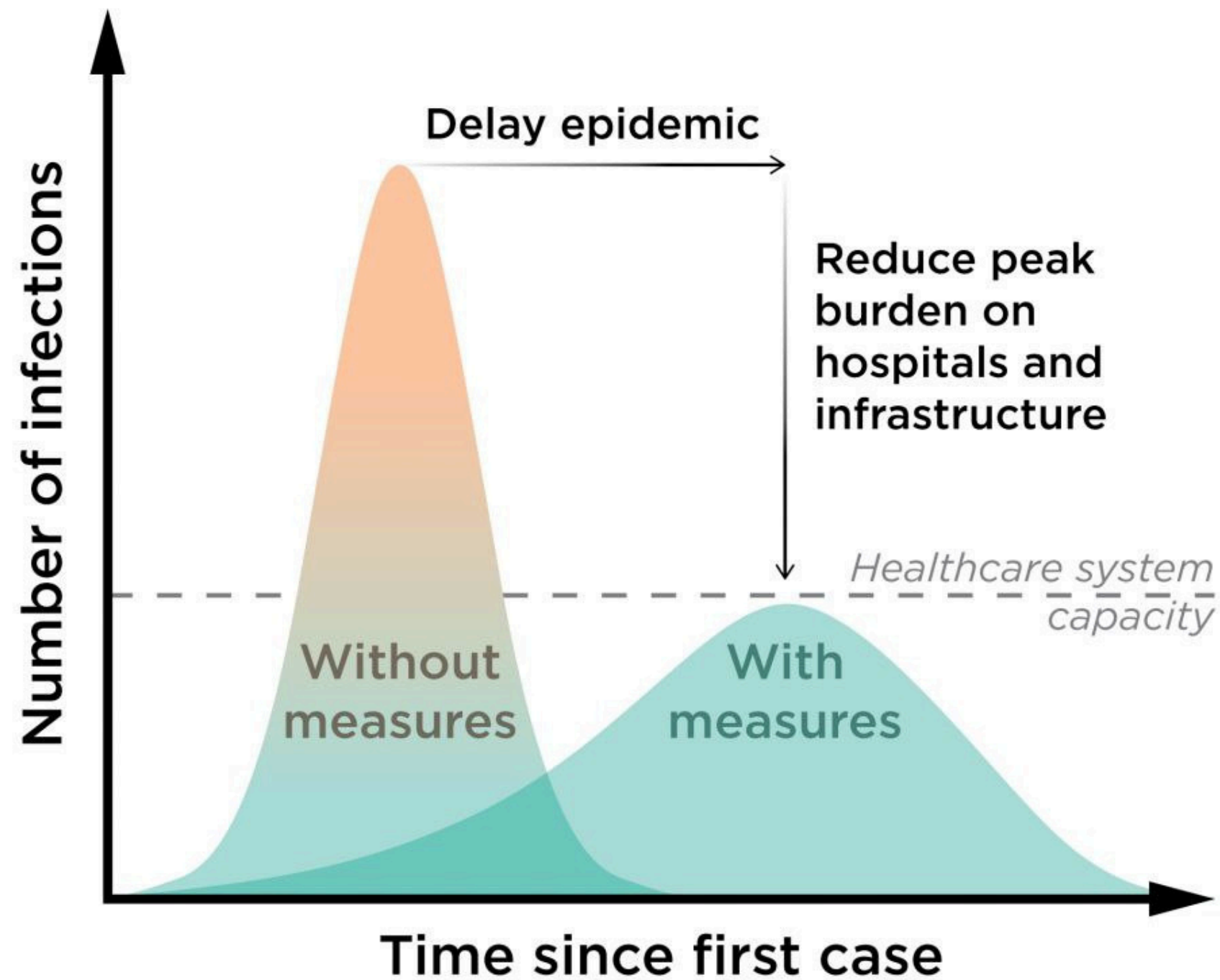
Data Source: CDC, Data Stories, The Economist

How can we **maintain** this situation during **pandemics?**

Next

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Imapct of Covid-19 Pandemic in ASEAN Countries

COVID-19 Deaths Reported per ASEAN Country (Cumulative Total)

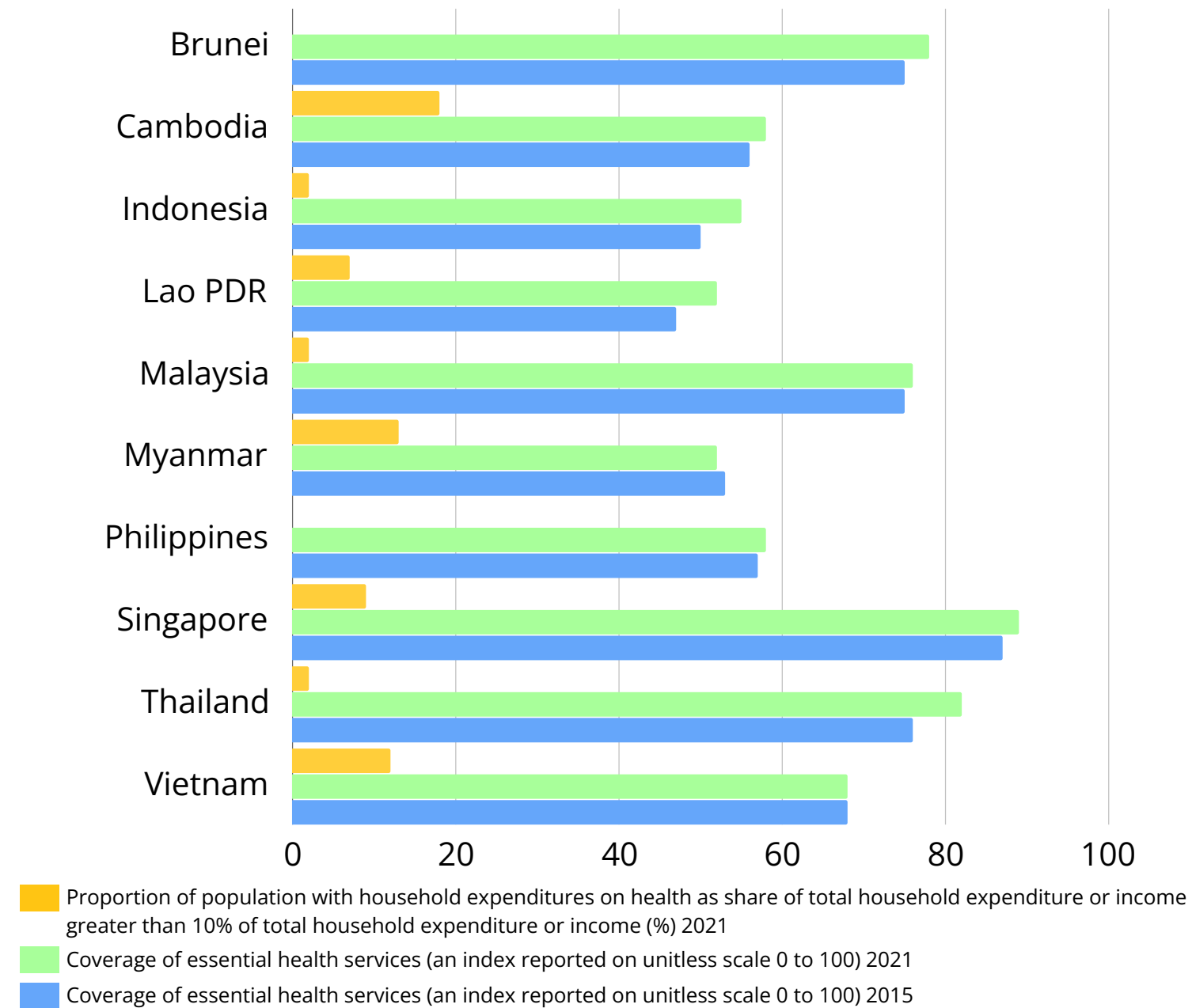178 3,056 162,058 671 37,350 19,494 66,864 2,024 43,206

Brunei, Cambo..., Indonesia, Laos, Malaysia, Myanmar, Philippi..., Singap..., Thailand, Vietnam
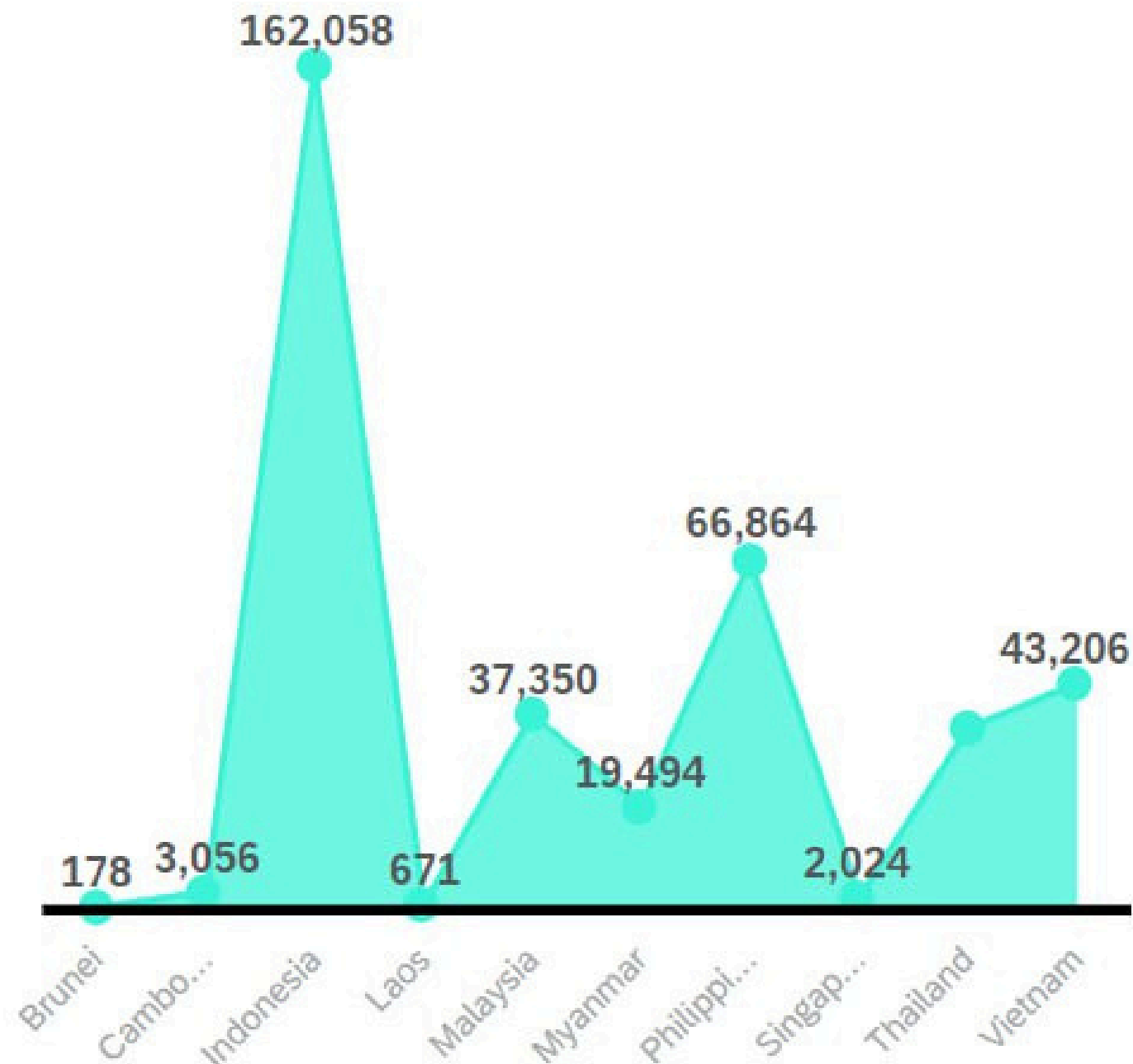
Data Source: World Health Organisation

COVID-19 Cases Reported per ASEAN Country (Cumulative Total)

Legend: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Vietnam

0.93% 0.38% 0.59% 14.28% 1.74% 11.19% 8.12% 12.92% 31.41%

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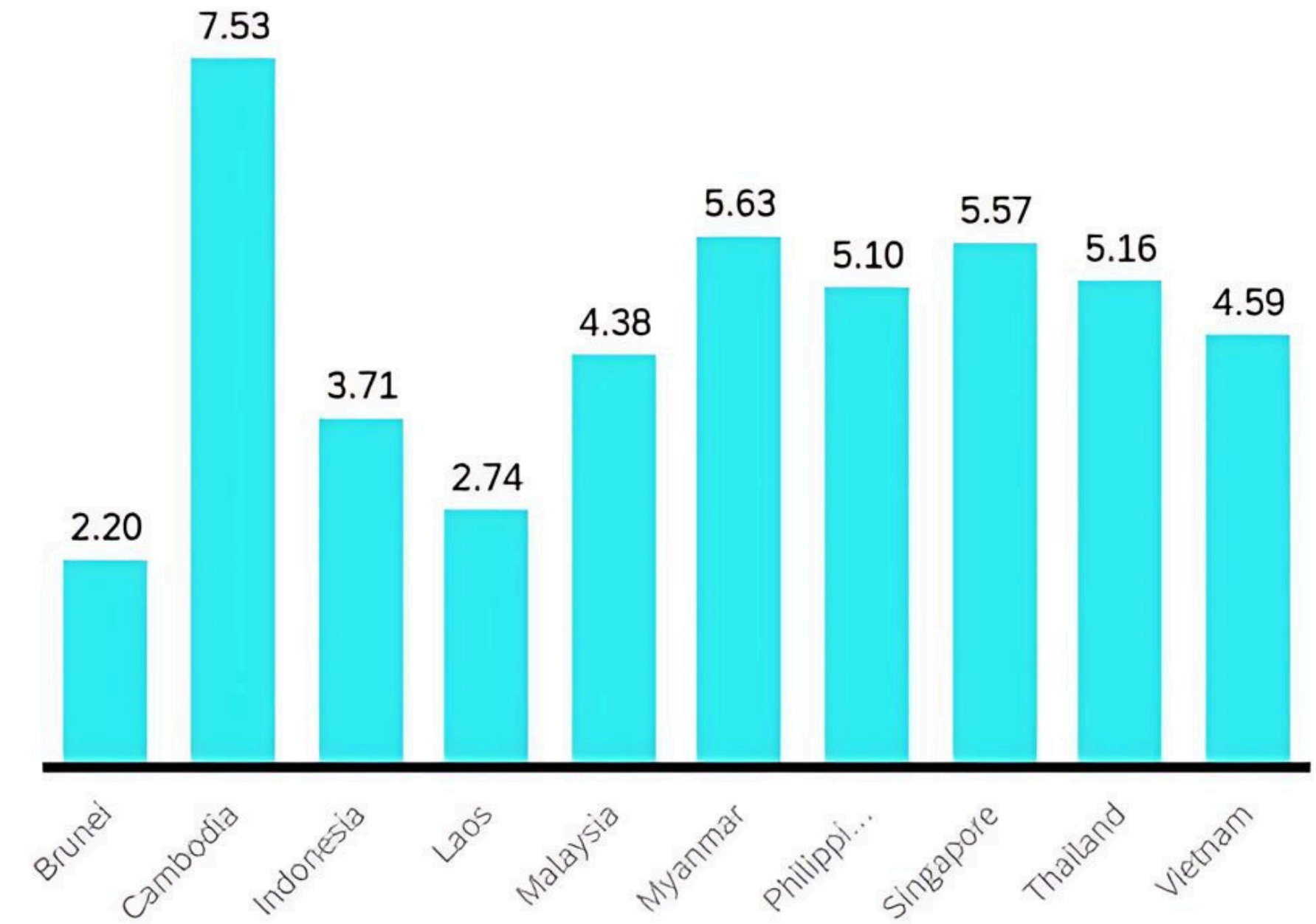3 GOOD HEALTH AND WELL-BEING | 11 SUSTAINABLE CITIES AND COMMUNITIES | 13 CLIMATE ACTION
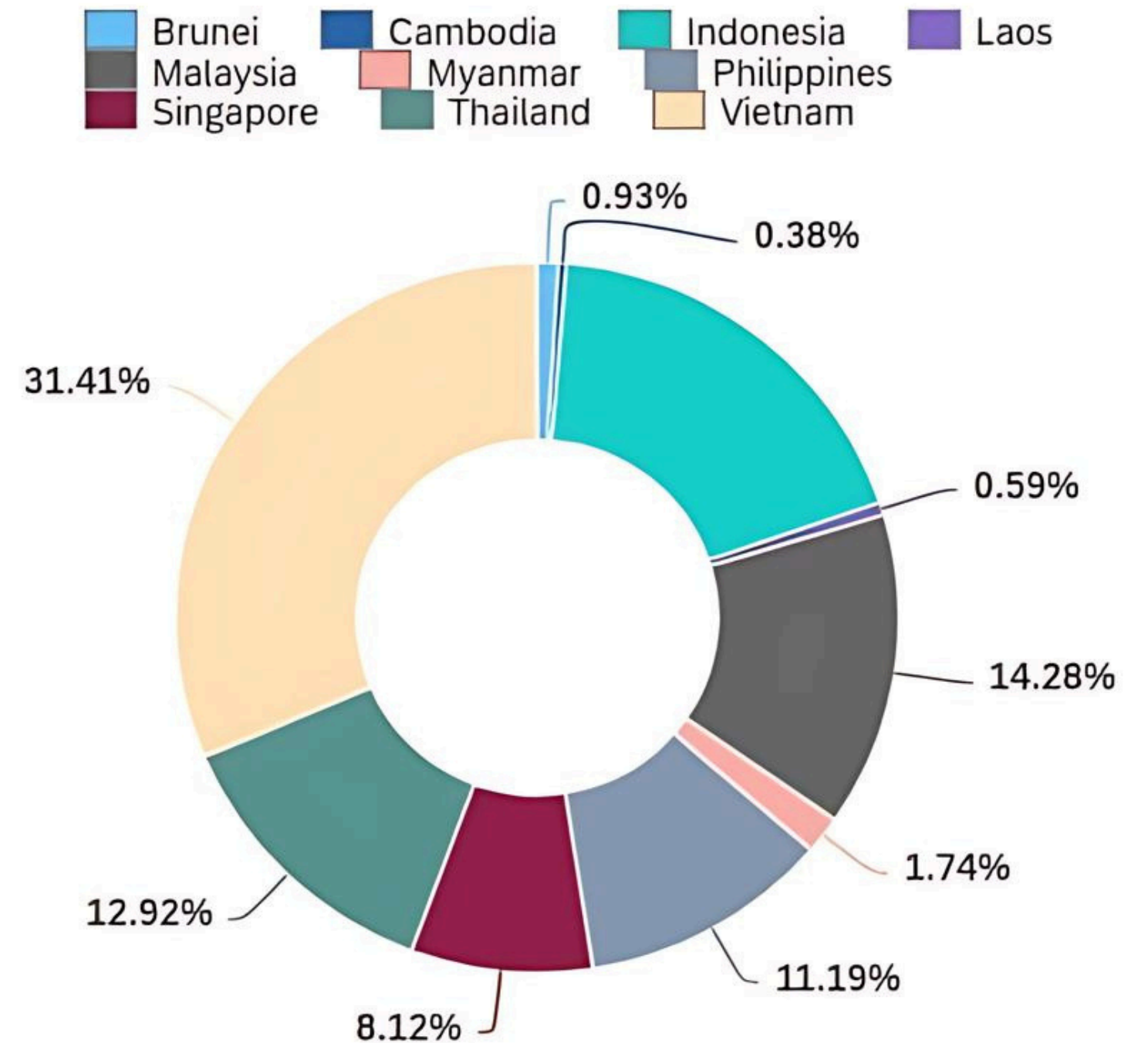
HealthCare Sector in ASEAN Countries

Indicators to Track Progress in Achieving Universal Health Coverage (UHC)

Legend:
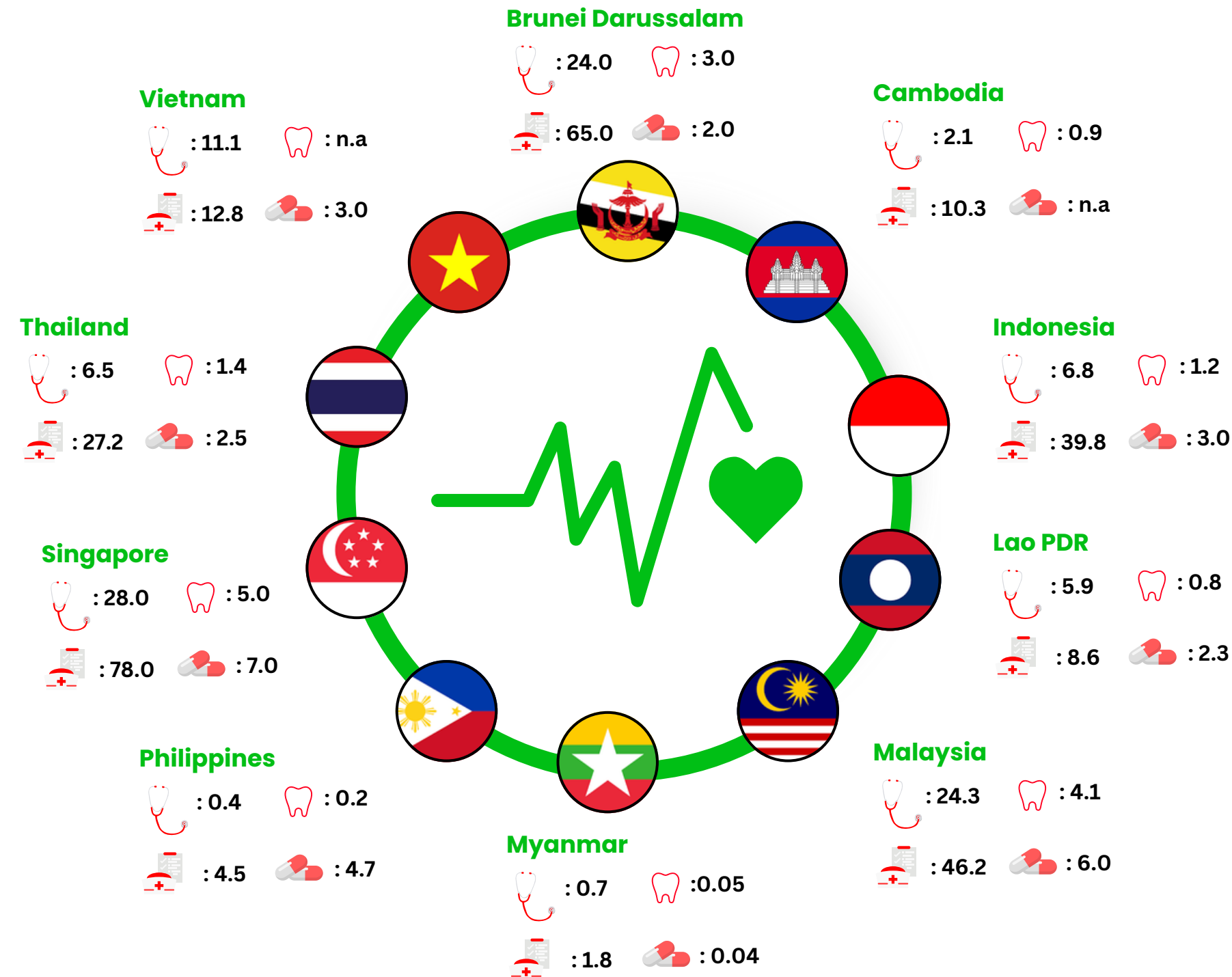- Proportion of population with household expenditures on health as share of total household expenditure or income greater than 10% of total household expenditure or income (%) 2021
- Coverage of essential health services (an index reported on unitless scale 0 to 100) 2021
- Coverage of essential health services (an index reported on unitless scale 0 to 100) 2015

Health Expenditure (%GDP) per ASEAN Country in 2021

- Brunei: 2.20
- Cambodia: 7.53
- Indonesia: 3.71
- Laos: 2.74
- Malaysia: 4.38
- Myanmar: 5.63
- Philippi...: 5.10
- Singapore: 5.57
- Thailand: 5.16
- Vietnam: 4.59

Data Source: ASEAN Statistical Brief Volume VI, March 2024, World Health Organisation

HealthCare Sector in ASEAN Countries

## ASEAN Health Worker Density (per 10,000 population), 2022

Brunei Darussalam
: 24.0   : 3.0
: 65.0   : 2.0

Cambodia
: 2.1   : 0.9
: 10.3   : n.a

Vietnam
: 11.1   : n.a
: 12.8   : 3.0

Indonesia
: 6.8   : 1.2
: 39.8   : 3.0

Thailand
: 6.5   : 1.4
: 27.2   : 2.5

Lao PDR
: 5.9   : 0.8
: 8.6   : 2.3

Singapore
: 28.0   : 5.0
: 78.0   : 7.0

Malaysia
: 24.3   : 4.1
: 46.2   : 6.0

Philippines
: 0.4   : 0.2
: 4.5   : 4.7

Myanmar
: 0.7   : 0.05
: 1.8   : 0.04

Legend:
- Medical Doctors
- Dentists
- Nursing and midwifery personnel
- Pharmacists

Data Source: ASEAN Statistical Brief Volume VI, March 2024

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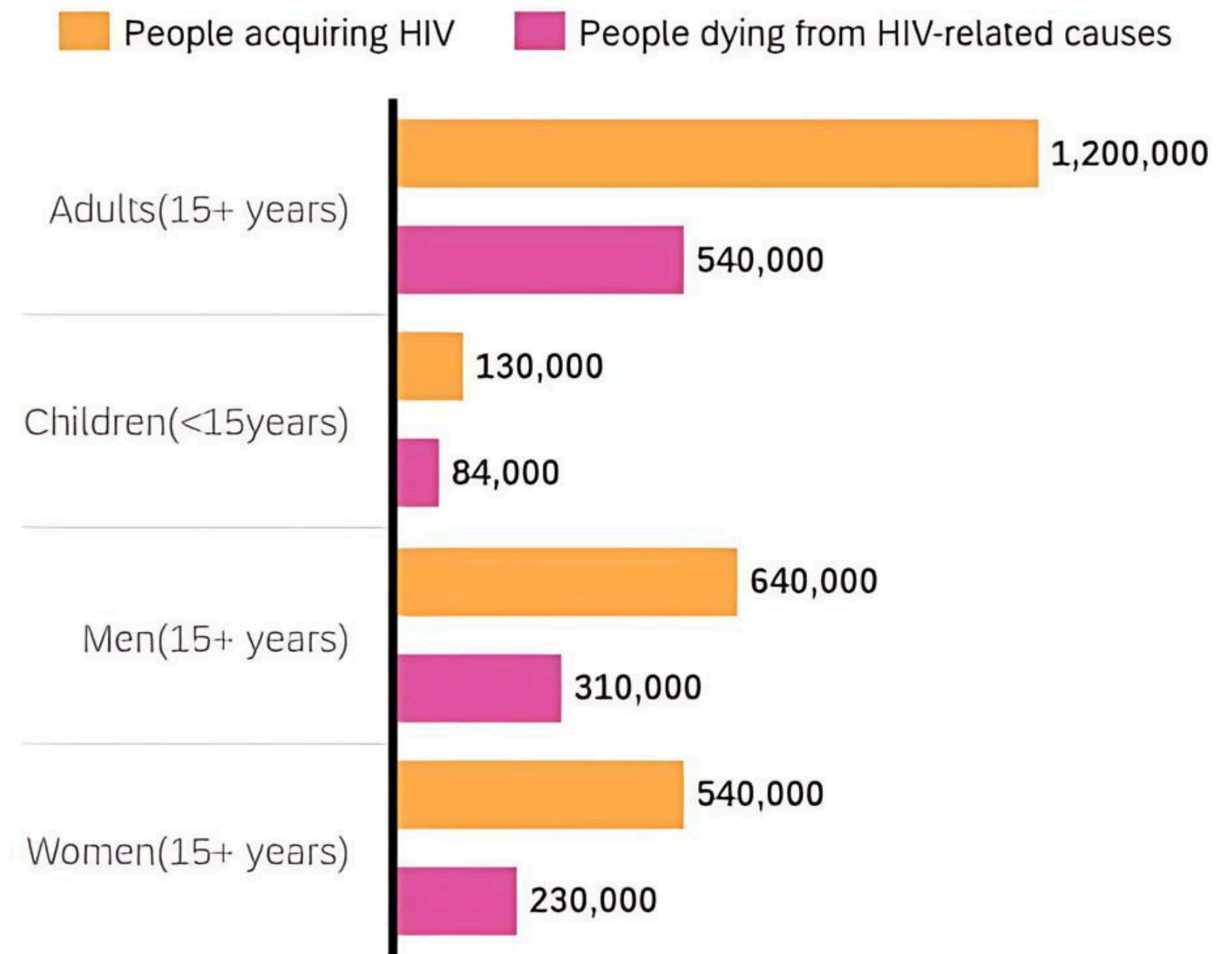# Imapct of Other Ongoing Pandemics/ Epidemics

Total Number of People per Types of Situations for Actual

Legend:
- People aquiring HIV
- People dying from HIV-related causes
- People living with HIV

3.18%
1.54%
95.28%
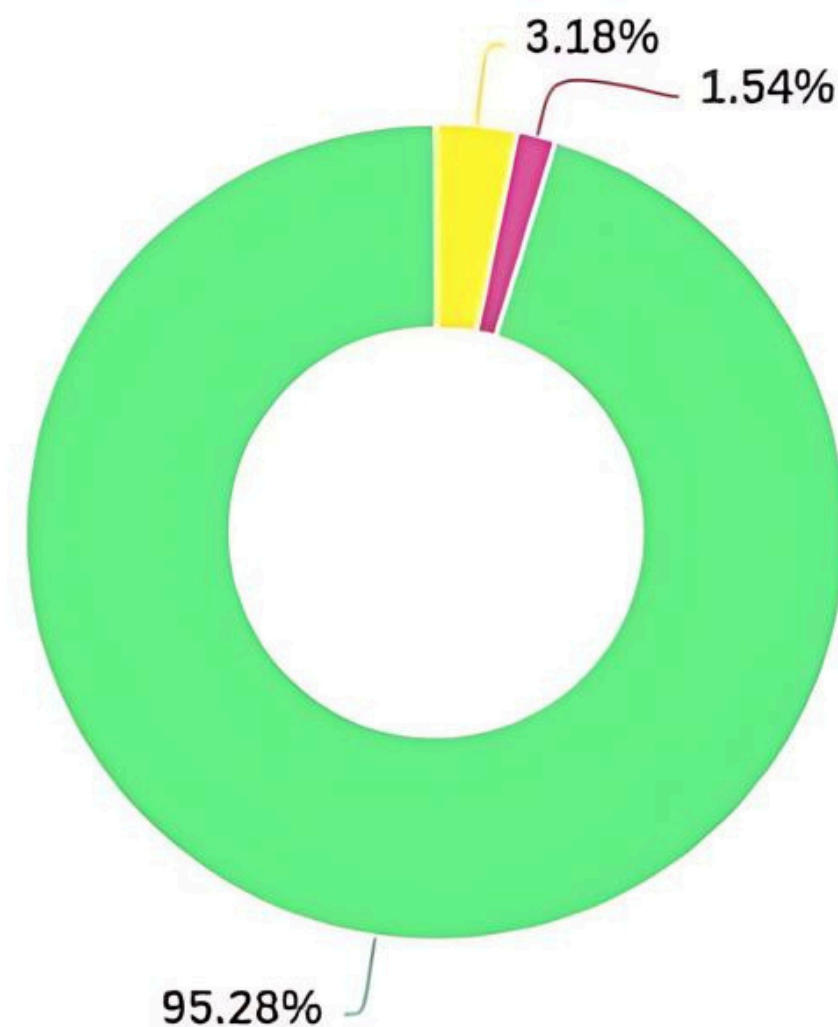
Data Source: World Health Organisation

People Acquiring HIV, People Dying from HIV-related Causes per Age Groups in 2022

Legend:
- People acquiring HIV
- People dying from HIV-related causes

Age Group	People acquiring HIV	People dying from HIV-related causes
Adults(15+ years)	1,200,000	540,000
Children(<15years)	130,000	84,000
Men(15+ years)	640,000	310,000
Women(15+ years)	540,000	230,000

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3 GOOD HEALTH AND WELL-BEING

3.3

By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases

3.4.2

Suicide mortality rate

3.8.1

Coverage of essential health services

3.d.1

International Health Regulations (IHR) capacity and health emergency preparedness

11 SUSTAINABLE CITIES AND COMMUNITIES

11.5.3

(a)

Damage to critical infrastructure and

(b)

number of disruptions to basic services, attributed to disasters

13 CLIMATE ACTION

13.3

Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

THE GLOBAL GOALS

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ASEAN SOCIO-CULTURAL COMMUNITY BLUEPRINT 2025

B.2.

xii. Promote a community that is healthy, caring, sustainable and productive, and one that practices healthy lifestyle resilient to health threats and has universal access to healthcare

xiii. Promote increased accessibility for persons with disabilities and other vulnerable groups in keeping with the universal design facilities.

D.1.

i. Enhance regional mechanisms and capacities to enable ASEAN to respond together to disasters within and outside the region;

ii. Promote regional standards, including methodologies and tools to assess, record, calculate the disaster losses and damages, and share non-sensitive data and create common information system, to enhance interoperability, ensure unity of action, and strengthen resilience;

iii. Promote local communities' resilience by integrating principles of resilience in risk reduction, preparedness, response, recovery, and rehabilitation measures;

ASEAN ECONOMIC COMMUNITY BLUEPRINT 2025

C.7.

iii. Promote sectors with high-growth potential such as health tourism and e-healthcare services, which will not have negative impact on the healthcare system of each ASEAN Member State;

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"All your HEALTH needs in ONE app"

Info HEALTH

- Official Digital HealthCare Application for ASEAN countries

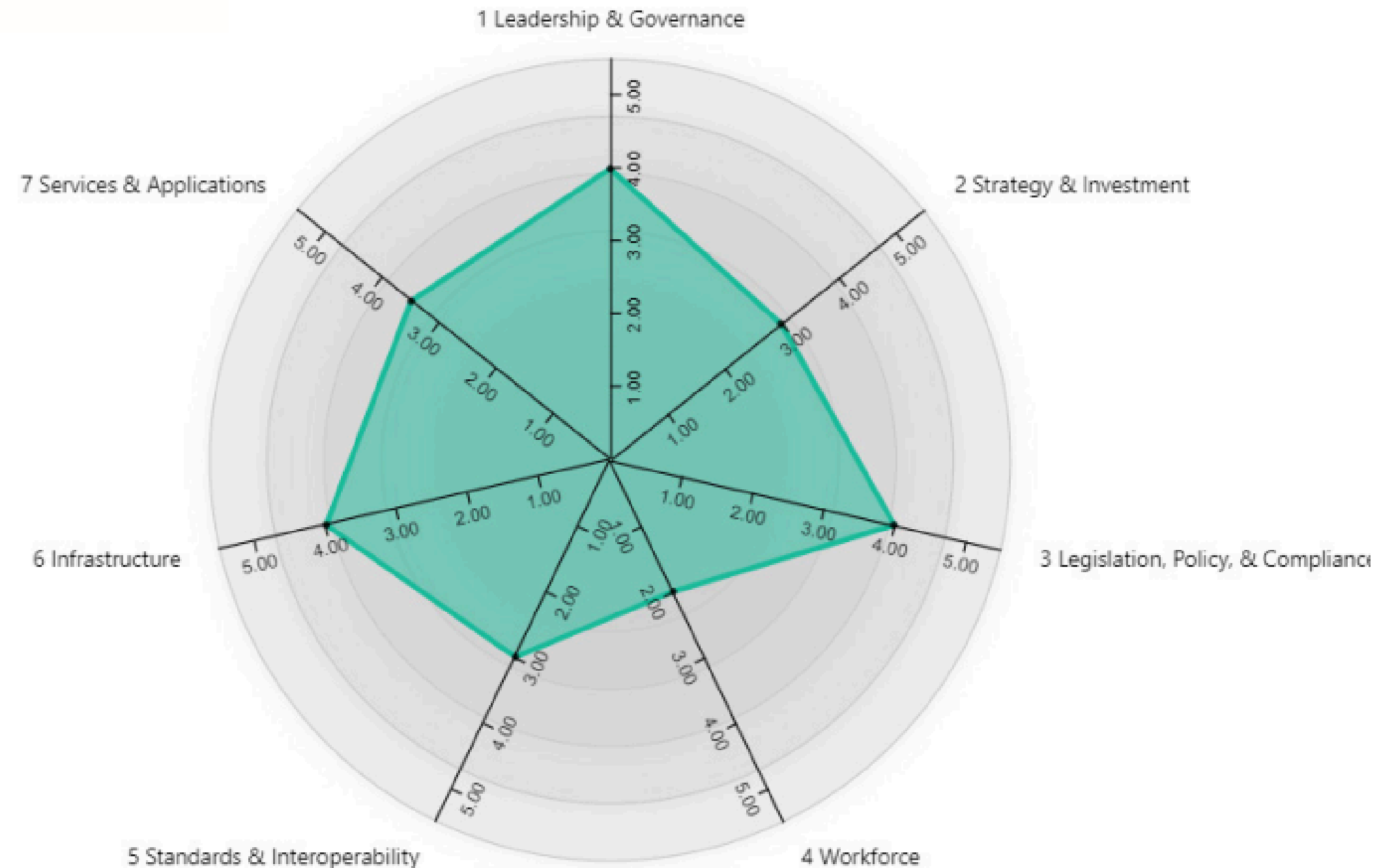- User-friendly for all demographic groups

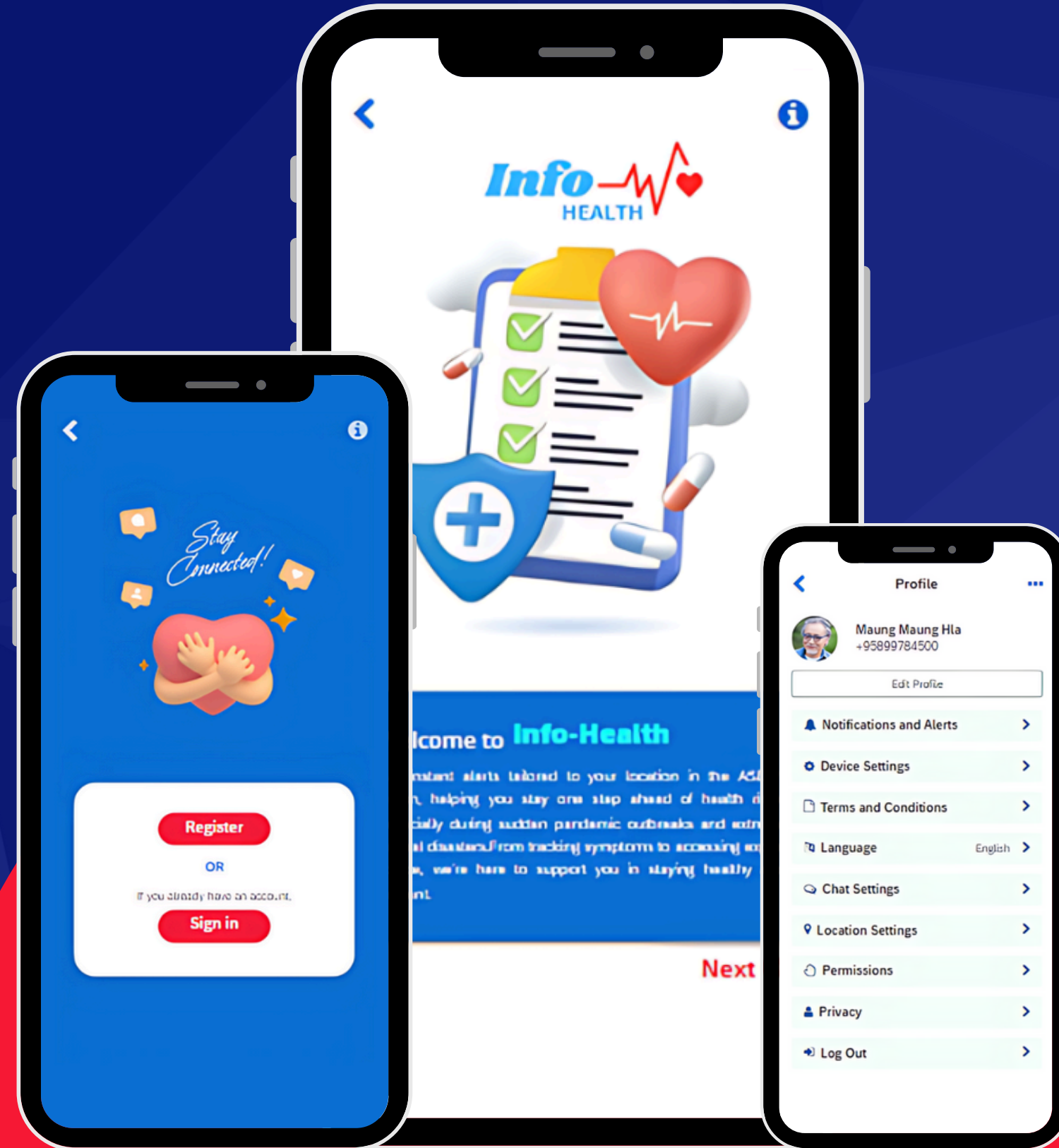- Promotes proactive measures and informed decision-making both for government and citizens

- Immediate alerts on potential health risks and emergencies

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DIGITAL HEALTH READINESS AMONG ASEAN COUNTRIES

ASEAN Average Data

Data Source: Assessing Digital Health Adoption in ASEAN, ASEAN-JAPAN CENTRE 2024

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Introducing **Our Solution**

Info-Health

Our application, Info-Health, is dedicated to enhancing early warning systems for health risks in the ASEAN region, specifically to mitigate the impact of potential future pandemics. Using advanced technology and real-time data, it keeps users informed and enables proactive protection. By assisting ASEAN governments in rapidly collecting and visualizing data, Info-Health helps to reduce damage and support effective public health responses during emergency situations.

Developed by SAP Build Apps

Customized Versions for Each ASEAN Country
(Managed by Respective Governments)

Info-Health Myanmar
文A Burmese

Info-Health Thailand
文A Thai

Info-Health Singapore
文A English

Info-Health Malaysia
文A Malay

Info-Health Laos
文A Lao

Info-Health Cambodia
文A Khmer

Info-Health Vietnam
文A Vietnamese

Info-Health Brunei
文A Malay

Info-Health Philippines
文A Filipino

Info-Health Indonesia
文A Indonesian

Confidential Data

ASEAN Foundation

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Sein Lae Lae Hlaine, Yoon Ya Mone Naing   ASEAN DATA SCIENCE EXPLORERS   SAP   **Are we prepared for the next pandemic?**
Sustainable Development Goals 3, 11 & 13   3 GOOD HEALTH AND WELL-BEING 11 SUSTAINABLE CITIES AND COMMUNITIES 13 CLIMATE ACTION

Comprehensive Data Flow Framework

(ASEAN Scale)

5 — *Regional Reporting*
Aggregated data from the hybrid server is shared with the ASEAN Foundation for regional analysis and coordination.

4 — *Data Visualization*
The hybrid server processes and visualizes the data, providing insights and alerts to users and authorities for each country.

3 — *Hybrid Server Processing*
Collected data is sent to a central hybrid server, where it is securely partitioned and processed for each ASEAN country.

2 — *Data Collection*
The app collects users' health data, symptoms, and geolocation information securely.

1 — *User Registration*
Users (citizens) register on the Info-Health App with their phone number and personal information.

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Important User Policies

Each user account is linked to a single phone number and NRC card, ensuring unique and secure access for every individual. Changing the phone number requires contacting official Info-Health offices.

The app is managed by respective government agencies, providing a guarantee of reliability and trustworthiness.

User data is managed and protected in strict accordance with privacy standards, ensuring the confidentiality and security of personal information.

In emergency situations, users are required to follow government instructions. Non-compliance may result in penalties as mandated by government regulations.

Users must consent to the collection of their location data during emergencies to facilitate efficient response efforts. Privacy will be rigorously safeguarded, with data retained exclusively within the government.

Special Considerations for Vulnerable Groups (For children, the elderly, and individuals with disabilities.)

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Important User Policies

Accessibility for Users with Disabilities	Ensure compatibility with popular screen readers to assist visually impaired users.	Implement voice command capabilities to aid users who may have difficulty with touch interfaces.	Ensure that all functionalities are accessible via keyboard navigation for users with motor disabilities.
Support for Elderly Users	Use clear, simple navigation with large buttons and icons to accommodate those who may not be tech-savvy.	Offer step-by-step tutorials and guided assistance within the app to help elderly users understand and use the app effectively.	
Safety and Privacy for Young Users	Implement parental control settings to ensure that young users can safely use the app under the supervision of their guardians.	Ensure that all content provided to young users is age-appropriate, with a focus on educational resources about health, hygiene, and mental well-being.	Adhere strictly to data privacy regulations, such as COPPA (Children's Online Privacy Protection Act), to protect the personal information of young users.
General Policies	Actively seek and incorporate feedback from users with disabilities, elderly users, and young users to continually improve the app's accessibility and usability.	Offer dedicated customer support channels that can assist users with disabilities, elderly users, and young users. Support should be available through various means, including phone, chat, and email.	Commit to an inclusive development process by involving representatives from these user groups in the design and testing phases of the app.
Compliance and Standards	Conduct regular accessibility audits to identify and address any barriers to access for users with disabilities, the elderly, and young users.	Continuously update the app to improve accessibility features and ensure that it remains user-friendly for all demographic groups.	

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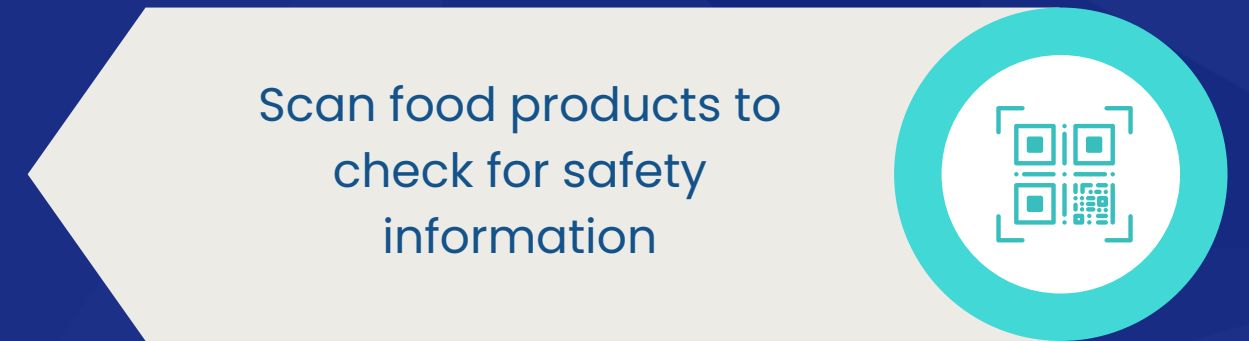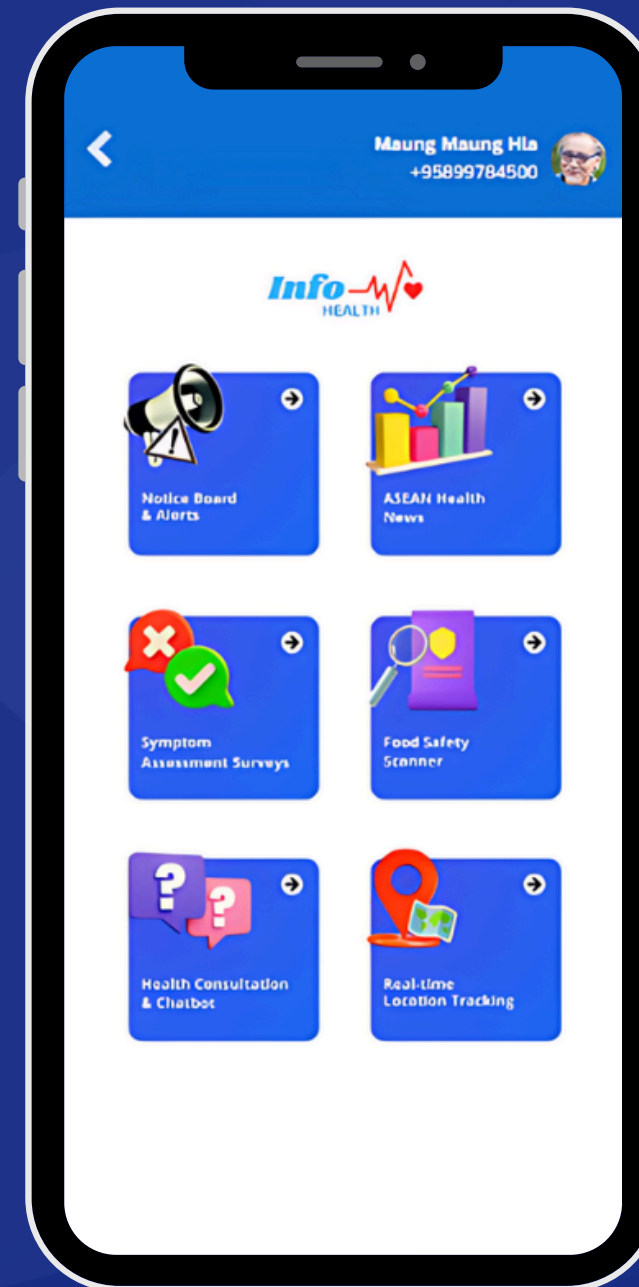
Application Features Overview

Receive immediate official alerts about health risks in your area

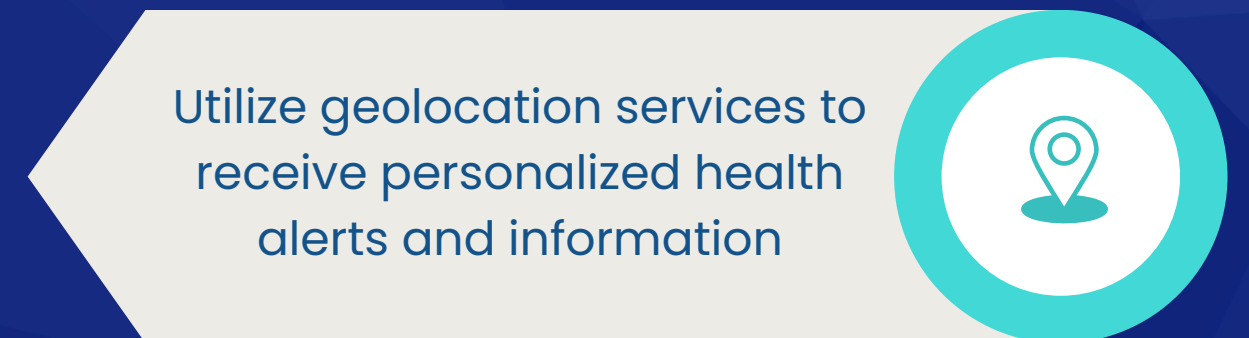Access the latest health news and updates from across ASEAN countries

Evaluate your symptoms through structured surveys and receive guidance

Scan food products to check for safety information

Access expert advice and comprehensive support for all your health needs

Utilize geolocation services to receive personalized health alerts and information

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Challenges Faced During the Pandemic

1
Delays in receiving official announcements about infectious health risks led to increased exposure and spread.

2
Abundance of confusing news and information on social media platforms caused more panic among the public.

3
The lack of comprehensive symptom data made it challenging for health authorities to identify hotspots and manage resources effectively.

4
Concerns about food safety and potential contamination increased due to disruptions in supply chains and varying safety standards.

5
Limited access to healthcare professionals and mental health support exacerbated health concerns and increased stress levels among the population.

6
Difficulty in avoiding high-risk areas and accessing medical facilities heightened concerns about exposure to infections and delays in receiving necessary medical care.

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Application Expected Outcomes

90%

Pandemic Prepareness

> Monitors disease spread patterns for prompt and informed actions.

> Immediate alerts about potential outbreaks call for swift protective measures.

> Ensures resources are distributed effectively to reduce damage.

> Helps users avoid high-risk zones, enhancing safety during pandemics.

85%

Daily Health Use

> Provides real-time alerts about natural disasters, severe weather, and environmental hazards.

> Keeps users informed about regional health trends and public health initiatives.

> Encourages users to take necessary precautions and stay proactive about their well-being.

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Notice Board and Alerts

The Importance and Function of This Feature

Pandemic Prepareness

Daily Use

Sample Situation: Pandemic Response with **Info-Health** Application [Government Perspective]

Suitable for countries with limited resources and health workers density

The Start of Pandemic

Info ✚ HEALTH

Confirmed Infected Citizens
[Info-Health Registered Users]

ON

Government officers **open location tracker history of infected citizens** to let other users see the routes they have previously travelled.

Take Wuhan as a sample city
Imagine that there are **tens of cases** of Infectious Disease Reported on **1st Dec, 2020**

WUHAN

Beijing · Shenyang
Qingdao
Nanjing · Shanghai
Chengdu
Hangzhou
Shenzhen

Reduce Disease Spread Within ONE Week

Government officers get to know which **areas** they should **focus more on providing healthcare**, and thus are able to make informed decisions to allocate resources efficiently.
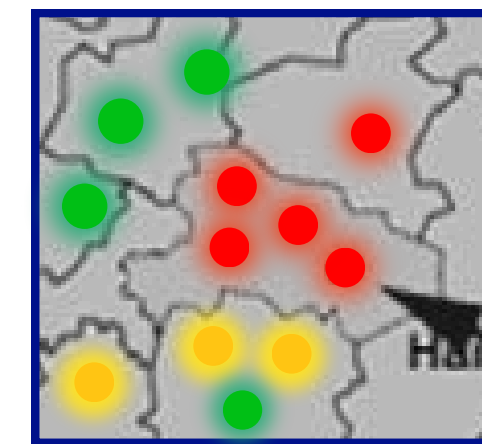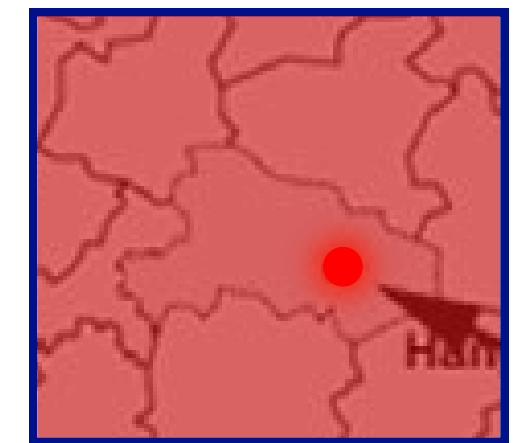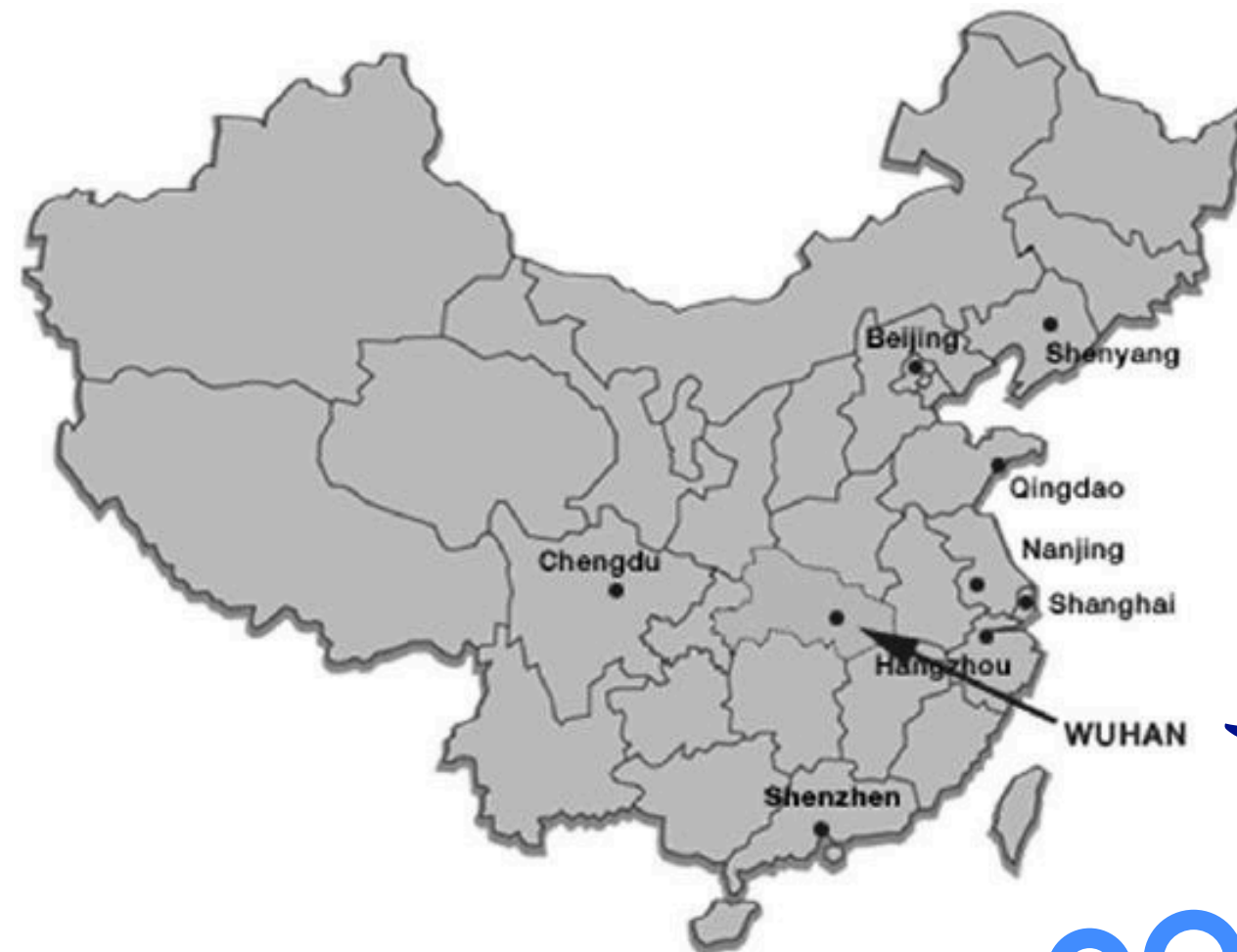**6th Dec, 2020**

Survey Results automatically **appear** on the map, showing high, medium and low intensities and disease spread pattern in these cities **within just 2 days.**
**5th Dec, 2020**

Government officers send **pandemic alerts** attached to the **Symptom Assessment Survey** of that disease to other users living in the city where the pandemic broke out and the cities around it [High Risk Zones].
3rd Dec, 2020

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Sample Situation: Pandemic Response with **Info-Health** Application [User Perspective]

The Start of Pandemic

Info HEALTH
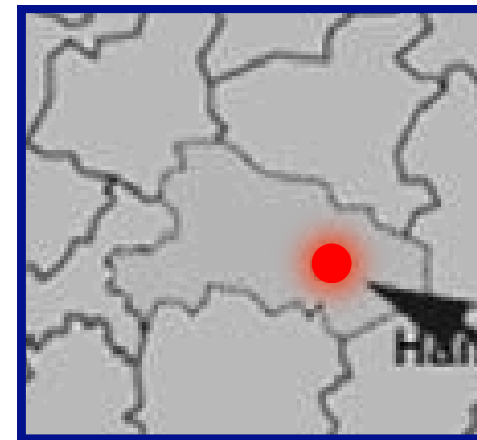
Registered citizens living in High Risk Zones receive pandemic alerts and survey. 3rd Dec, 2020

They have to fill out the Sympton Assessment Survey in two days. Failing to do so, might result in penalties.

Take Wuhan as a sample city

Imagine that there are **tens of cases** of Infectious Disease Reported on **1st Dec, 2020**

WUHAN

Beijing　Shenyang
Qingdao
Nanjing
Shanghai
Chengdu
Hangzhou
Shenzhen

The results came out with recommendations.

■ **High potential to be infected**
Consult with doctors and book for an appointment at the nearest hospital (as quick as possible)

■ **Medium potential to be infected**
Consult with doctors and book for an appointment at the nearest hospital

■ **Low potential to be infected**
Consult with doctors (if necessary) and isolate yourself from others

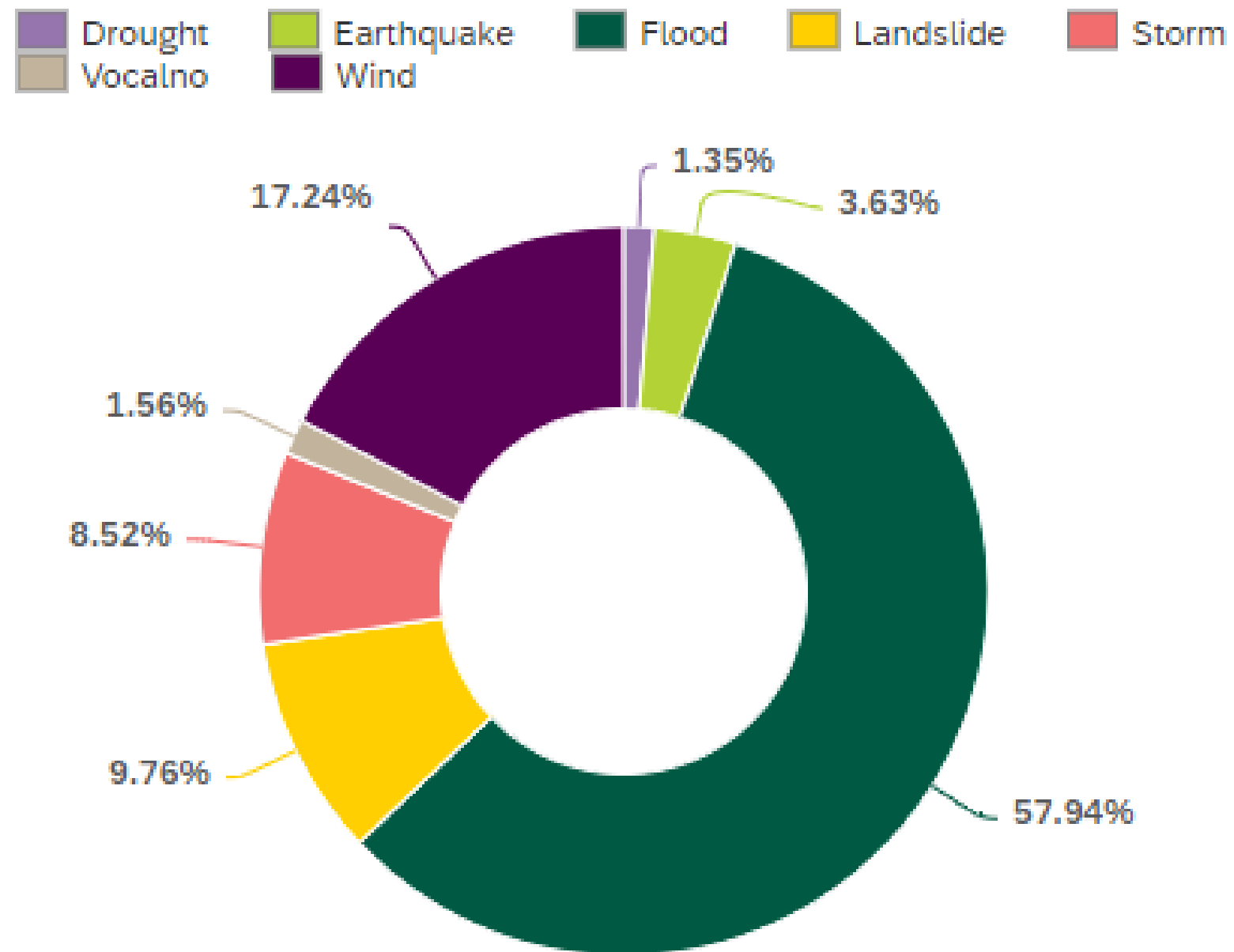**Use data visualization map and avoid the routes** that have previously been traveled by **confirmed infected patients** if possible

Check Notice Board & Alerts frequently for official announcements and keep oneself updated with ASEAN and regional health news

Healthy Citizens

Reduce Disease Spread Within ONE Week

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Sustainable Development Goals 3, 11 & 13

3 GOOD HEALTH AND WELL-BEING　11 SUSTAINABLE CITIES AND COMMUNITIES　13 CLIMATE ACTION

Number of reported disasters in ASEAN during January 2012 to July 2017 (ADInet, 2017)

Legend:
- Drought
- Earthquake
- Flood
- Landslide
- Storm
- Vocalno
- Wind

Donut chart values:
- 1.35%
- 3.63%
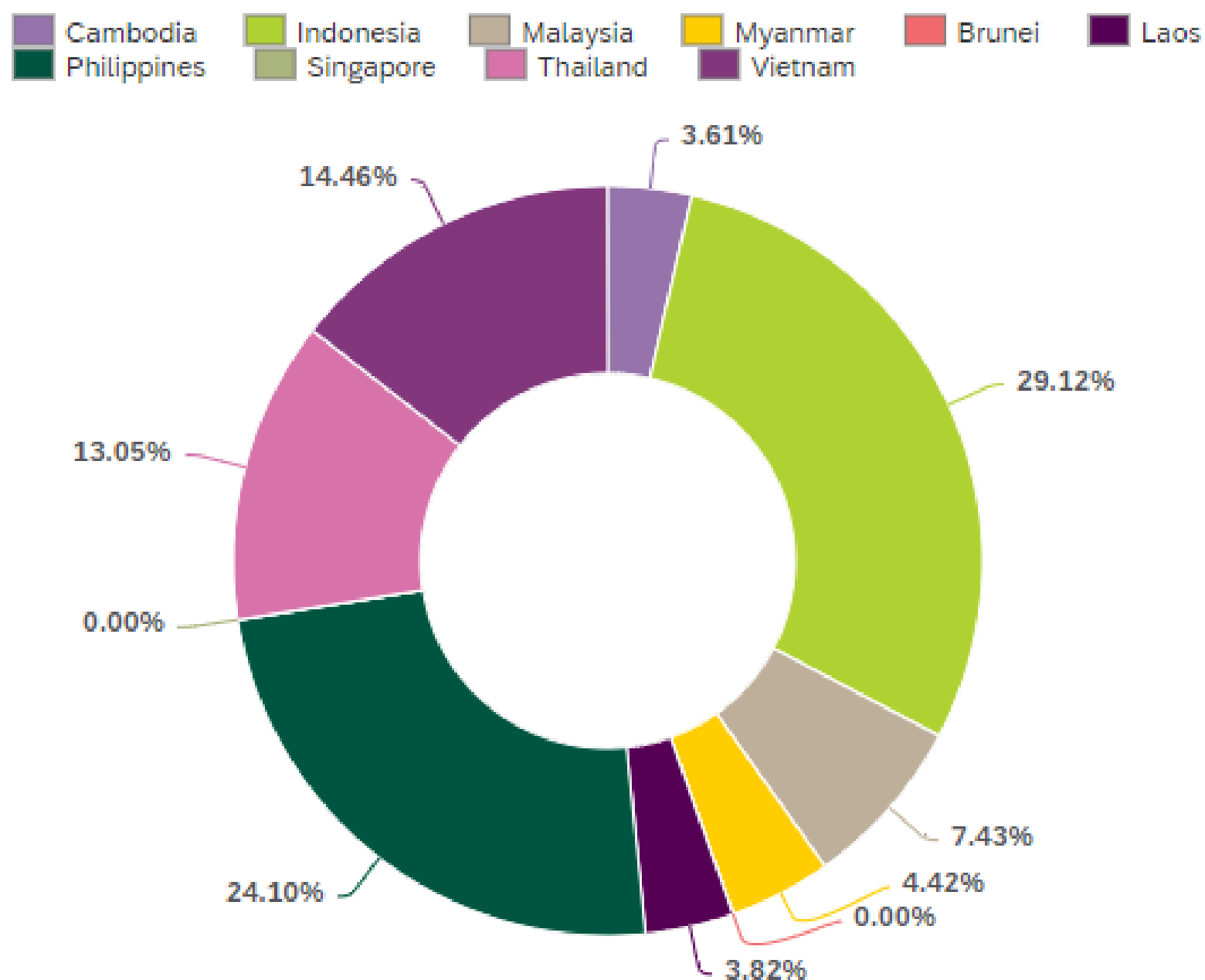- 17.24%
- 1.56%
- 8.52%
- 9.76%
- 57.94%

Data Source: Disaster Management Research Roadmap for the ASEAN Region, 2017

Overview of Reported Disasters Per ASEAN Country during January 2012 to July 2017

Map values: 7, 38, 58, 6, 2, 22, 40, 26, 9, 63, 47, 11, 38, 41, 105, 12, 7, 49, 12, 6, 16, 254, 16

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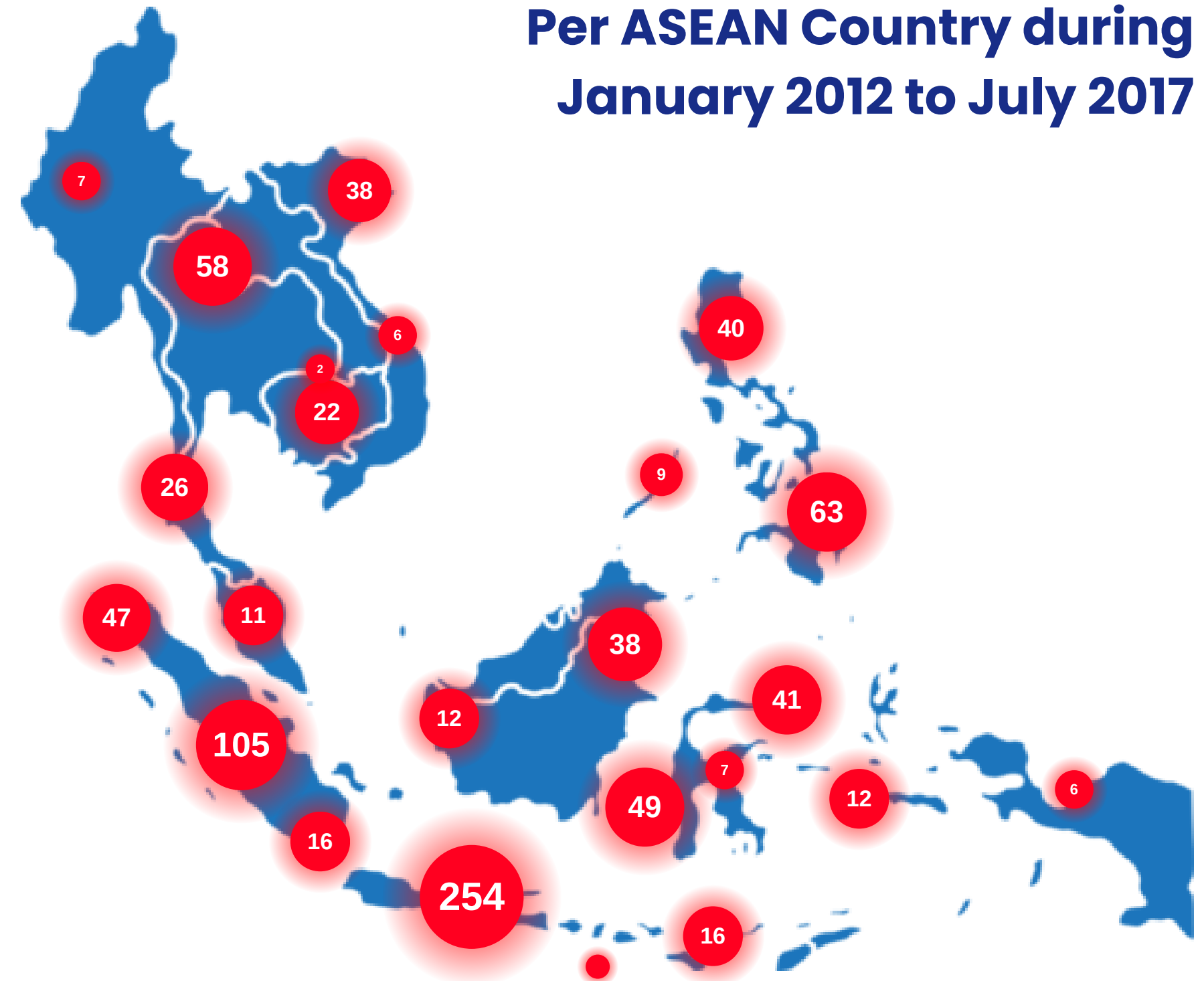
Overview of Three Commonly Occurring Disasters in ASEAN

Flood Statistics during 1987-2016

Legend: Cambodia, Indonesia, Malaysia, Myanmar, Brunei, Laos, Philippines, Singapore, Thailand, Vietnam

- 3.61%
- 14.46%
- 29.12%
- 13.05%
- 0.00%
- 7.43%
- 24.10%
- 4.42%
- 0.00%
- 3.82%

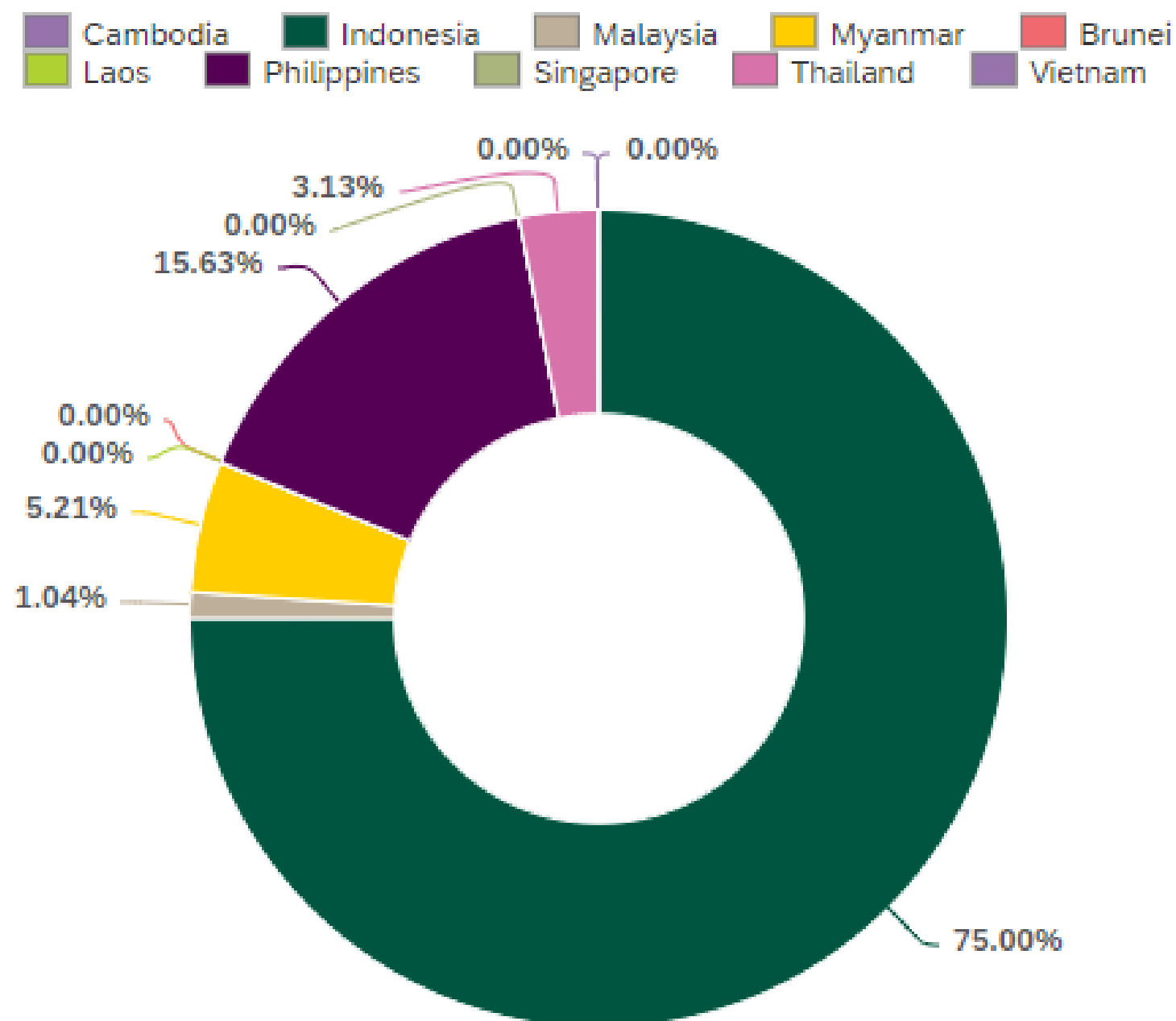*Data Source: Disaster Management Research Roadmap for the ASEAN Region, 2017*

Total Affected People by Flood during 1987-2016

Legend: Cambodia, Indonesia, Malaysia, Myanmar, Brunei, Laos, Philippines, Singapore, Thailand, Vietnam

- 13,275,587
- 7,494,336
- 865,899
- 3,536,342
- 0
- 3,907,011
- 26,926,207
- 0
- 48,666,009
- 24,873,245

Total Affected (persons)

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Overview of Three Commonly Occurring Disasters in ASEAN

Earthquake Statistics during 1987–2016

Legend: Cambodia, Indonesia, Malaysia, Myanmar, Brunei, Laos, Philippines, Singapore, Thailand, Vietnam

- 0.00%
- 0.00%
- 3.13%
- 0.00%
- 15.63%
- 0.00%
- 0.00%
- 5.21%
- 1.04%
- 75.00%

Total Affected People by Earthquake during 1987–2016

Legend: Cambodia, Indonesia, Malaysia, Myanmar, Brunei, Laos, Philippines, Singapore, Thailand, Vietnam

- 0
- 7,968,448
- 10
- 24,075
- 0
- 0
- 5,552,800
- 0
- 17,539
- 0

Total Affected (persons)

Data Source: Disaster Management Research Roadmap for the ASEAN Region, 2017

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Overview of Three Commonly Occurring Disasters in ASEAN

Typhoon Statistics during 1987–2016
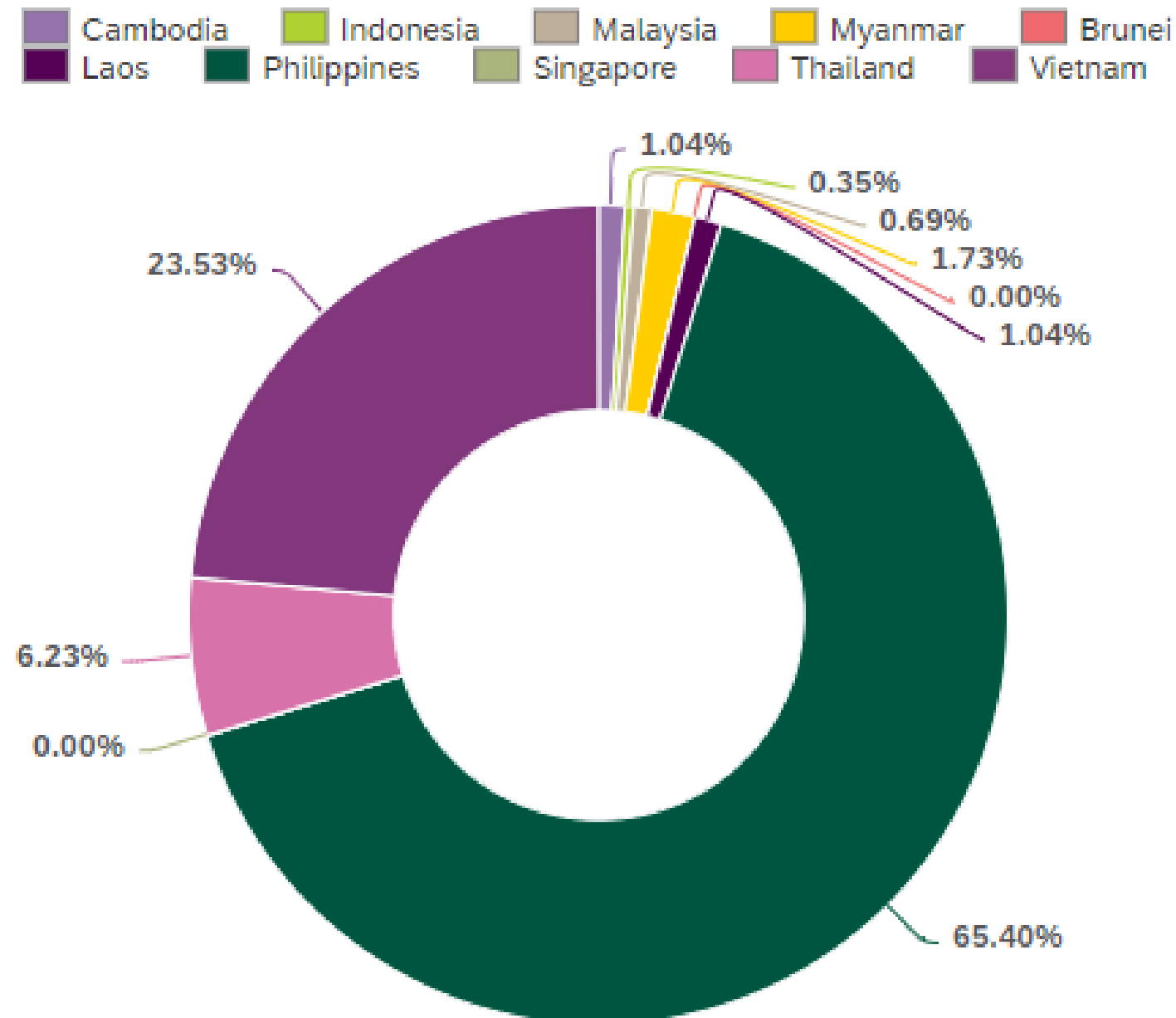
Total Affected People by Typhoon during 1987–2016

Legend: Cambodia, Indonesia, Malaysia, Myanmar, Brunei, Laos, Philippines, Singapore, Thailand, Vietnam

Pie chart values: 1.04%, 0.35%, 0.69%, 1.73%, 0.00%, 1.04%, 65.40%, 0.00%, 6.23%, 23.53%

Bar chart values (Total Affected persons): 178,091; 1,315; 6,291; 2,830,125; 0; 1,397,764; 134,033,748; 0; 3,816,896; 25,443,955

Data Source: Disaster Management Research Roadmap for the ASEAN Region, 2017

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Severe Weather Conditions in ASEAN countries

Serious Danger of Heat Stress Since April, 2023

Thermal comfort index
Daily highest feels-like temperature, averaged over April 1 — May 25

40°C (40°F) — 0 (32°F) — 50°C (122°F)

Very high and extreme heat stress

Max. feels-like temperature
Naypyidaw 43°C MYANMAR
Hanoi 46.4°C VIETNAM
Vientiane 46.4°C LAOS
Phnom Penh 42.1°C CAMBODIA
Bangkok 43.7°C THAILAND
Kuala Lumpur 40°C MALAYSIA

38°C (100°F)   40   42   44   46°C (115°F)   48

Very high heat stress — *Extreme*

April 1 2023 — April 15 — May 1 — May 15

Thailand
The country had a streak of extremely hot weather, reaching nearly 50°C two days in a row

Cambodia

Myanmar
Peak temperatures averaged 45°C until a devastating cyclone brought relative relief

Vietnam
Vietnam's all-time heat record was broken on two consecutive days in May

Laos

Malaysia

Data Source: Copernicus Climate Change Service, CNN.

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Severe Weather Conditions in ASEAN countries

0   50   100   150   200   250   300   350

Number of Days Projected to Exceed Potentially Deadly Heat Levels per Year by 2100
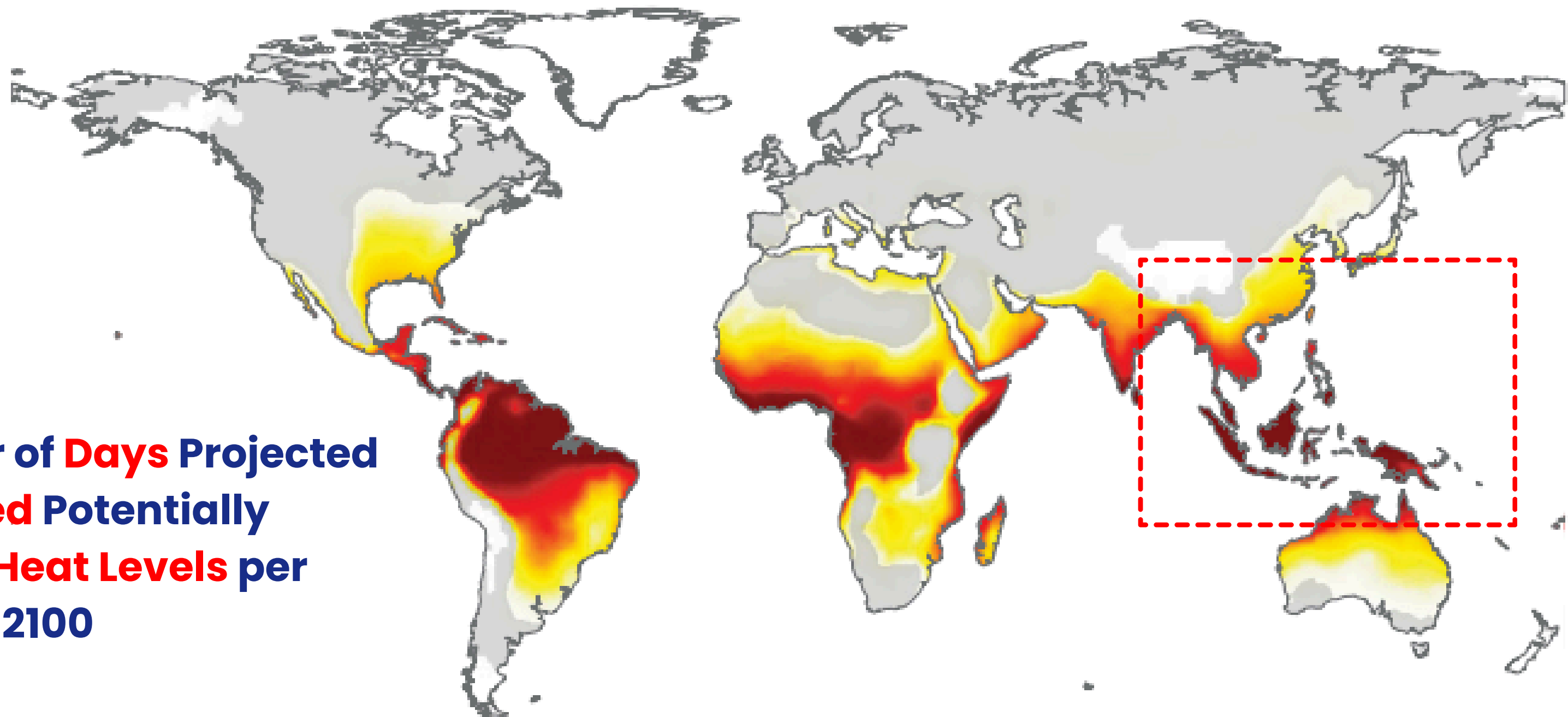
Data Source: Mora, C., Dousset, B., Caldwell, I. et al. Global risk of deadly heat. Nature Clim Change 7, 501–506 (2017).
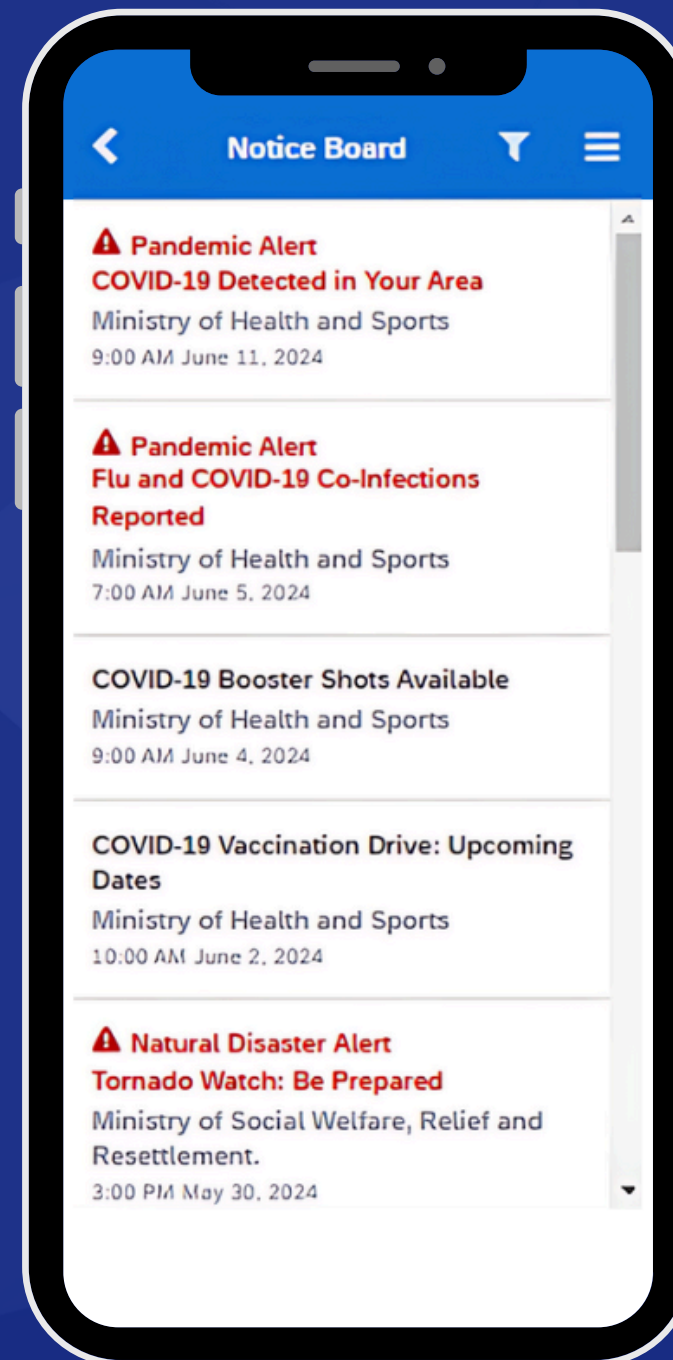
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Notice Board & Alerts

⚠ Pandemic Alerts

⚠ Natural Disaster Alerts

⚠ Severe Weather Alerts

📝 Official Announcements

Notice Board

⚠ **Pandemic Alert**
COVID-19 Detected in Your Area
Ministry of Health and Sports
9:00 AM June 11, 2024

⚠ **Pandemic Alert**
Flu and COVID-19 Co-Infections Reported
Ministry of Health and Sports
7:00 AM June 5, 2024

COVID-19 Booster Shots Available
Ministry of Health and Sports
9:00 AM June 4, 2024

COVID-19 Vaccination Drive: Upcoming Dates
Ministry of Health and Sports
10:00 AM June 2, 2024

⚠ **Natural Disaster Alert**
Tornado Watch: Be Prepared
Ministry of Social Welfare, Relief and Resettlement.
3:00 PM May 30, 2024

✅ Reduce health risks by providing real-time pandemic alerts

✅ Minimize disaster impact with natural disaster alerts

✅ Lower weather-related injuries through severe weather alerts

✅ Decrease misinformation by sharing official information from health authorities

2

Info
HEALTH

ASEAN
Health News

The Importance and Function of This Feature

Pandemic Prepareness   Daily Use
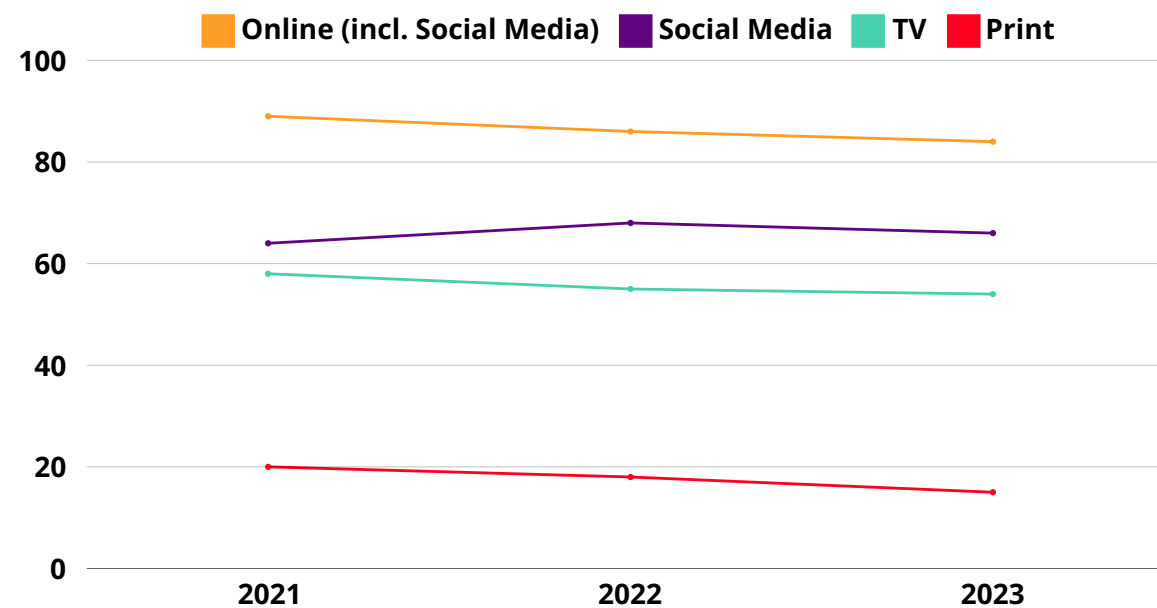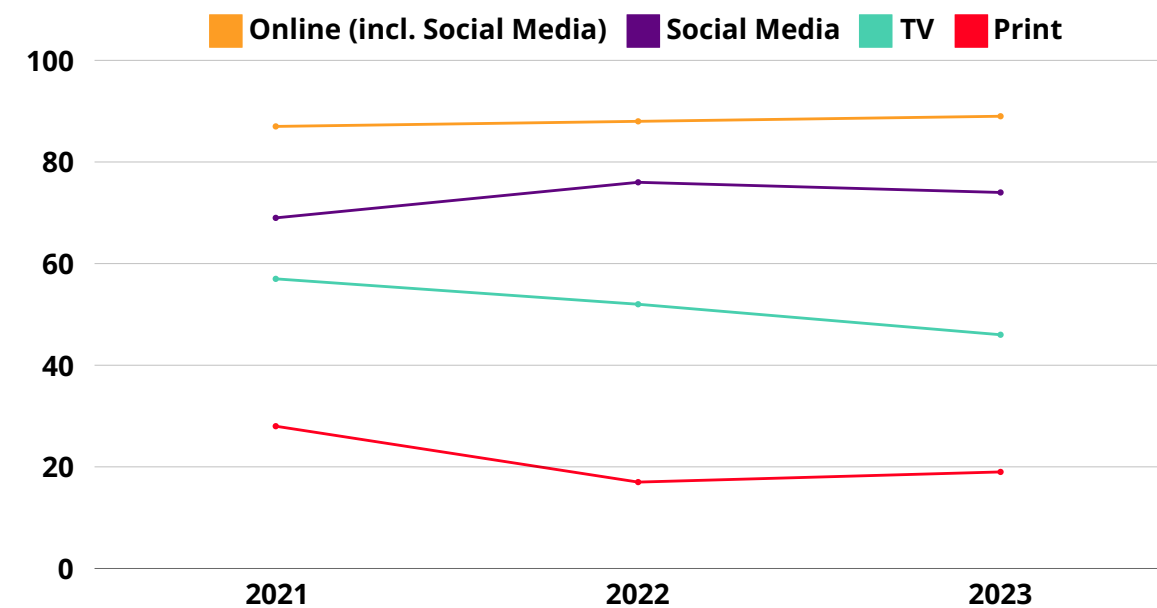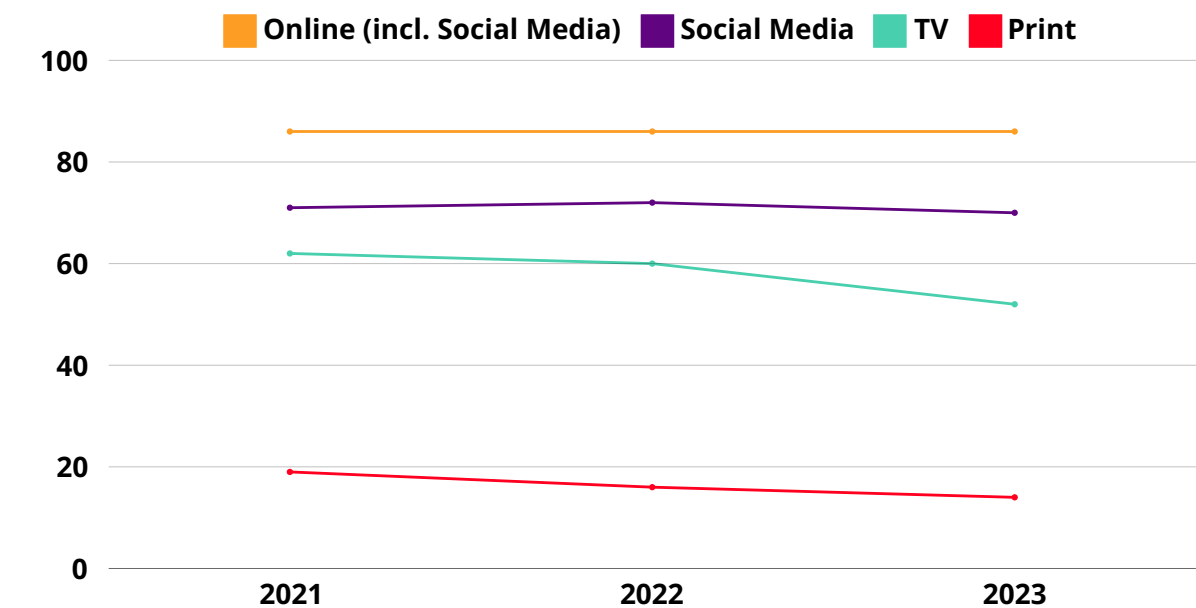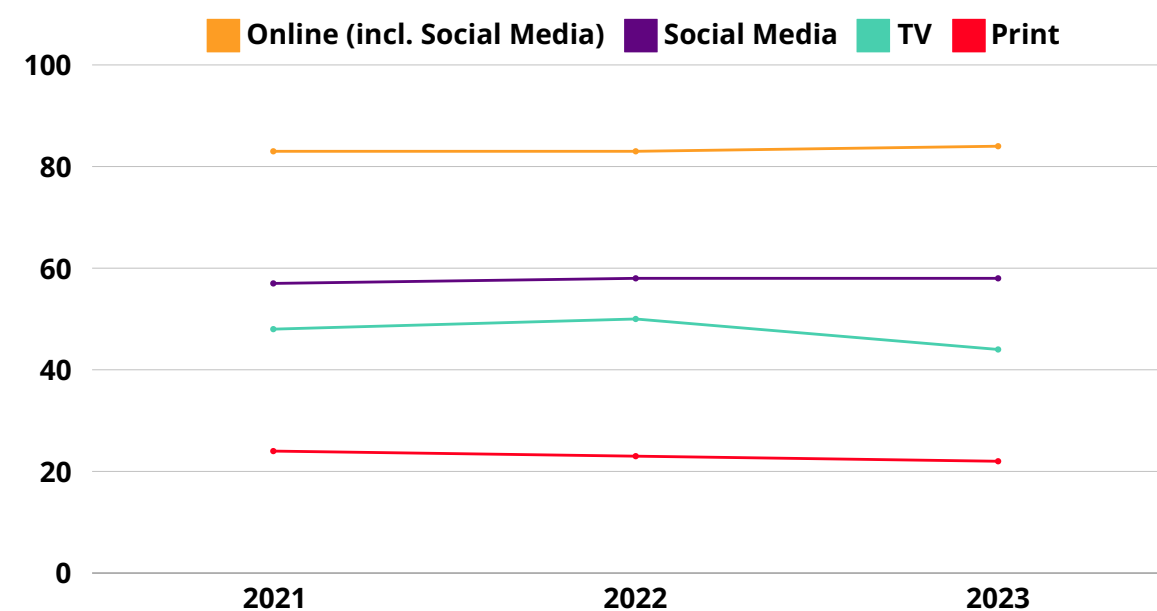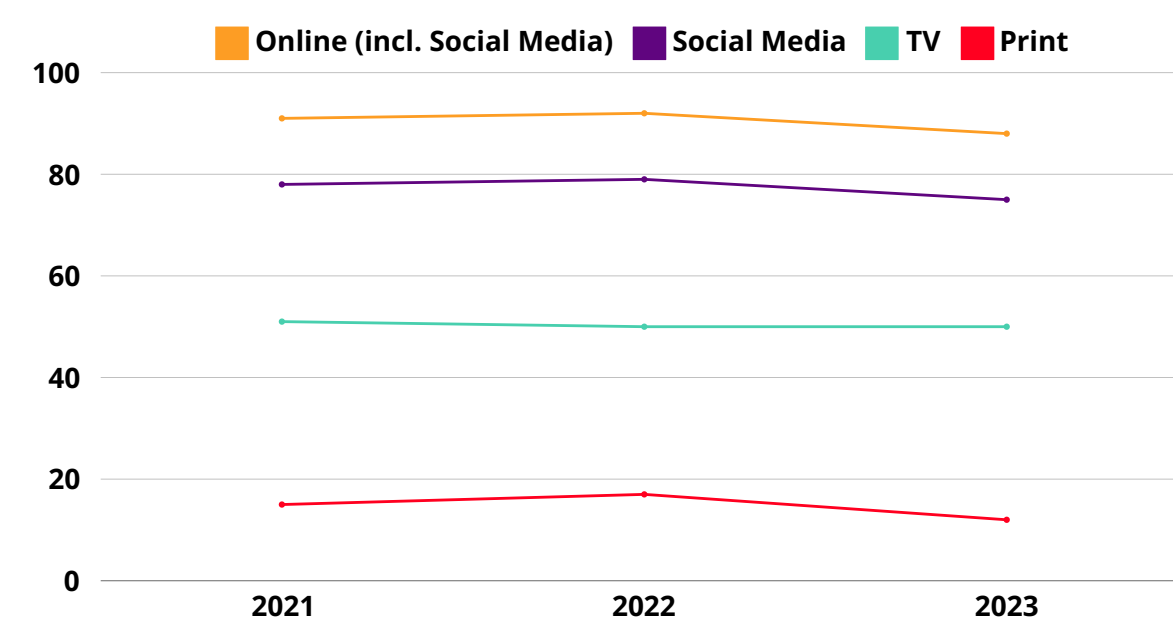
U.S. News Consumers Survey Data, December 2020

Are Social Media Platforms Trusted to Deliver Accurate News?

Legend: Yes (red), No (blue)

Y-axis: Share of Respondents (0 to 60)

X-axis: Twitter, Facebook, Instagram, TikTok, Reddit, Youtube

- Twitter: Yes 16, No 45
- Facebook: Yes 11, No 57
- Instagram: Yes 10, No 36
- TikTok: Yes 6, No 36
- Reddit: Yes 11, No 27
- Youtube: Yes 19, No 33

Recall of **Fake News Incidents** by Media Outlets

Legend: Yes (cyan), No (magenta), I don't use this (purple)

X-axis: 0 to 100

- Facebook
- Social Media Generally
- A Website
- Youtube
- Television
- Video Sharing Services Generally
- A Mainstream Media Sources
- Print Media
- A blog
- Twitter
- Other

Data Source: Security.org, Redline Digital, Ipsos MORI Social Research Institute

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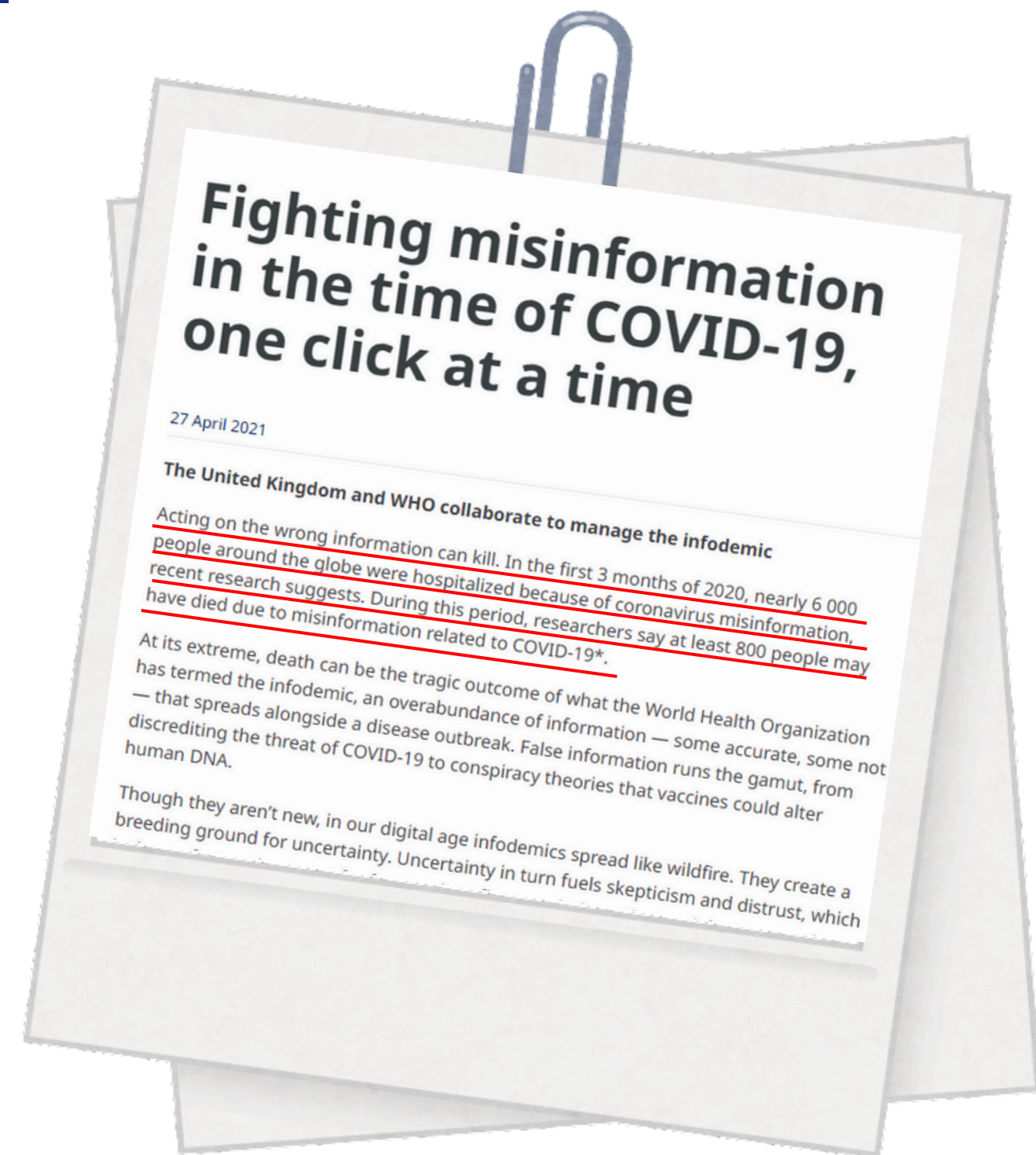
Imapct of Misinformation During Covid-19 Pandemic

Bots and Misinformation

Understanding the role of bots in spreading misinformation during crises like the COVID-19 pandemic is crucial for combatting the resulting "infodemic" and its potential impacts on public health outcomes. The following statistics highlight the scope of bot involvement in propagating inaccurate pandemic content and the techniques they employ to spread falsehoods.

- The rapid spread of COVID-19 was accompanied by an "infodemic" - an overwhelming proliferation of accurate and inaccurate information on social media platforms.
- The proliferation of COVID-19 misinformation by bots, coupled with the human tendency to believe and share false information, may impact the trajectory of the pandemic. Past literature has shown that automated accounts, or bots, play a significant role in spreading misinformation during crises like the pandemic. Analysis of known bot datasets found up to 66% of bots discussing COVID-19, indicating their heavy involvement in spreading pandemic (mis)information. Strategies used by bots to spread misinformation include amplification, phishing links, discrediting legitimate sources, and promoting unproven treatments.
- A March 2020 study found that around 47% of surveyed U.S. adults had encountered a lot or some made-up news about coronavirus, showing the circulation of fake pandemic news.
- More right-leaning audiences reported seeing made-up pandemic news than Democrats - 16% of Republicans vs 23% of left-leaning news consumers.
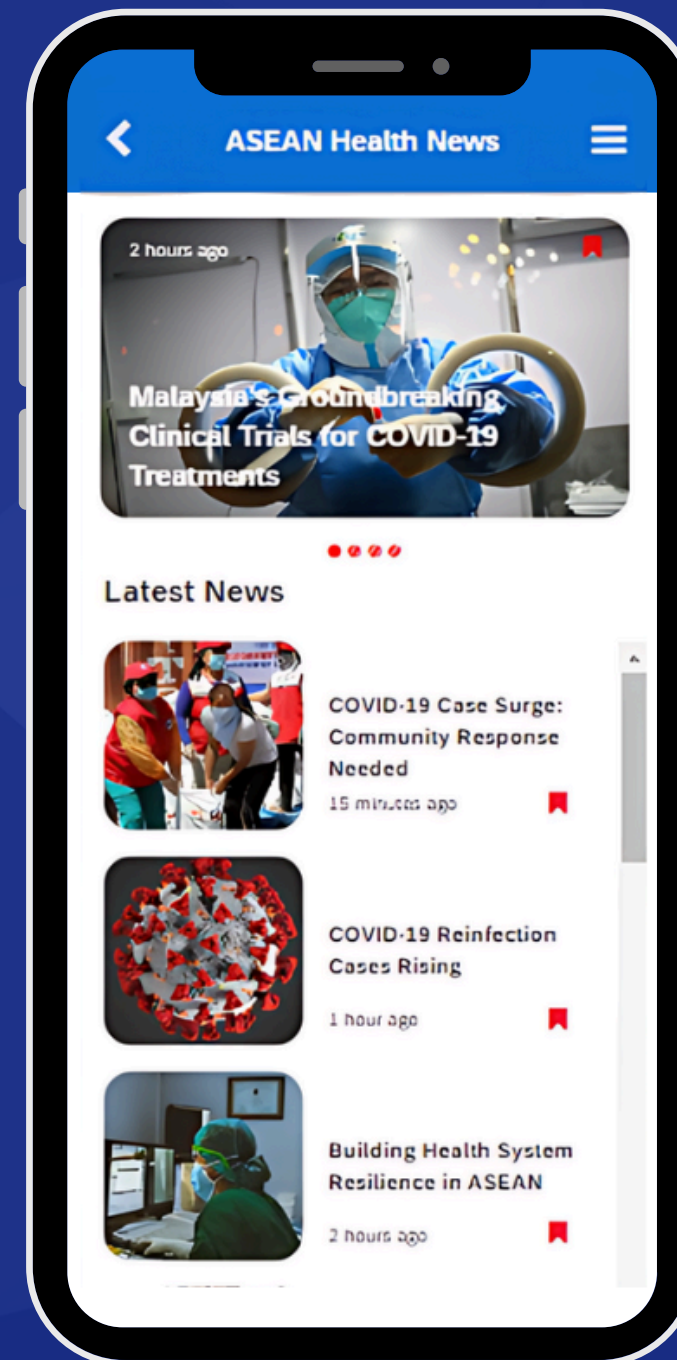
Data Source: Redline Digital

Fighting misinformation in the time of COVID-19, one click at a time

27 April 2021

The United Kingdom and WHO collaborate to manage the infodemic

Acting on the wrong information can kill. In the first 3 months of 2020, nearly 6 000 people around the globe were hospitalized because of coronavirus misinformation, recent research suggests. During this period, researchers say at least 800 people may have died due to misinformation related to COVID-19*.

At its extreme, death can be the tragic outcome of what the World Health Organization has termed the infodemic, an overabundance of information — some accurate, some not — that spreads alongside a disease outbreak. False information runs the gamut, from discrediting the threat of COVID-19 to conspiracy theories that vaccines could alter human DNA.

Though they aren't new, in our digital age infodemics spread like wildfire. They create a breeding ground for uncertainty. Uncertainty in turn fuels skepticism and distrust, which

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ASEAN Health News

Heath Status of ASEAN

Updates on regional health trends

Insights into scientific research advancements

ASEAN Health News

2 hours ago

Malaysia's Groundbreaking Clinical Trials for COVID-19 Treatments

Latest News

COVID-19 Case Surge: Community Response Needed
15 minutes ago

COVID-19 Reinfection Cases Rising
1 hour ago

Building Health System Resilience in ASEAN
2 hours ago

✓ Enhance awareness of the health landscape in ASEAN countries

✓ Stay informed about regional health trends

✓ Keep updated on public health initiatives

✓ Learn from scientific research advancements

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3

Info
HEALTH

Symptom Assessment Surveys

The Importance and Function of This Feature

Pandemic Prepareness

Daily Use

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Sustainable Development Goals 3, 11 & 13

3 GOOD HEALTH AND WELL-BEING   11 SUSTAINABLE CITIES AND COMMUNITIES   13 CLIMATE ACTION

Symptom Assessment Surveys

Choose the health condition you wish to assess.

>>>

Evaluate health status by answering structured symptom questions.

>>>

Receive guidance on potential health conditions and recommended actions.

>>>

Book appointments at the nearest hospital or healthcare facility.
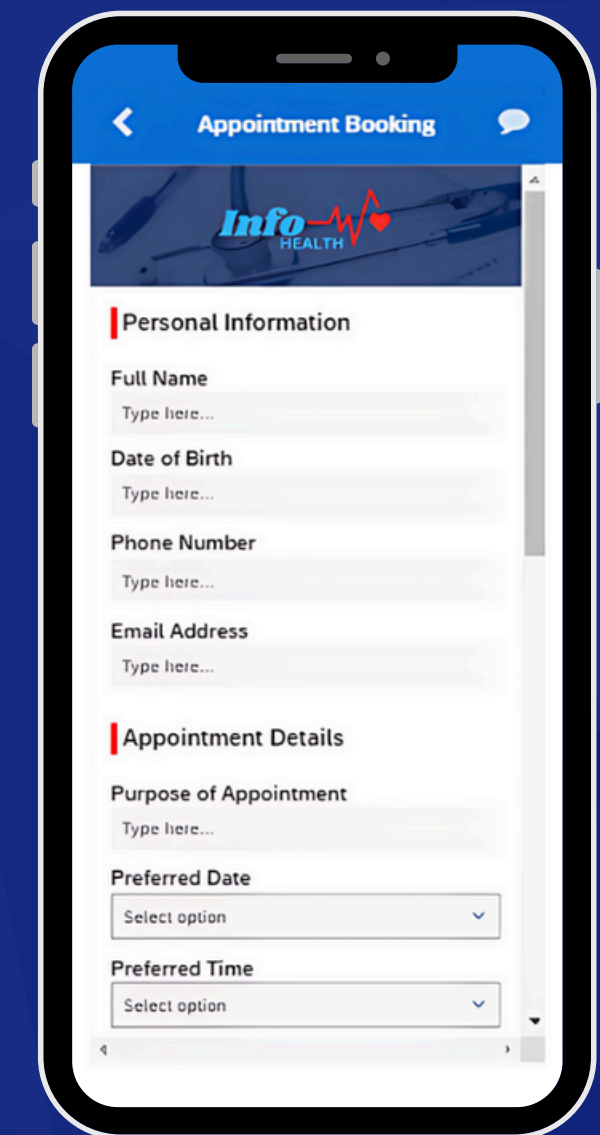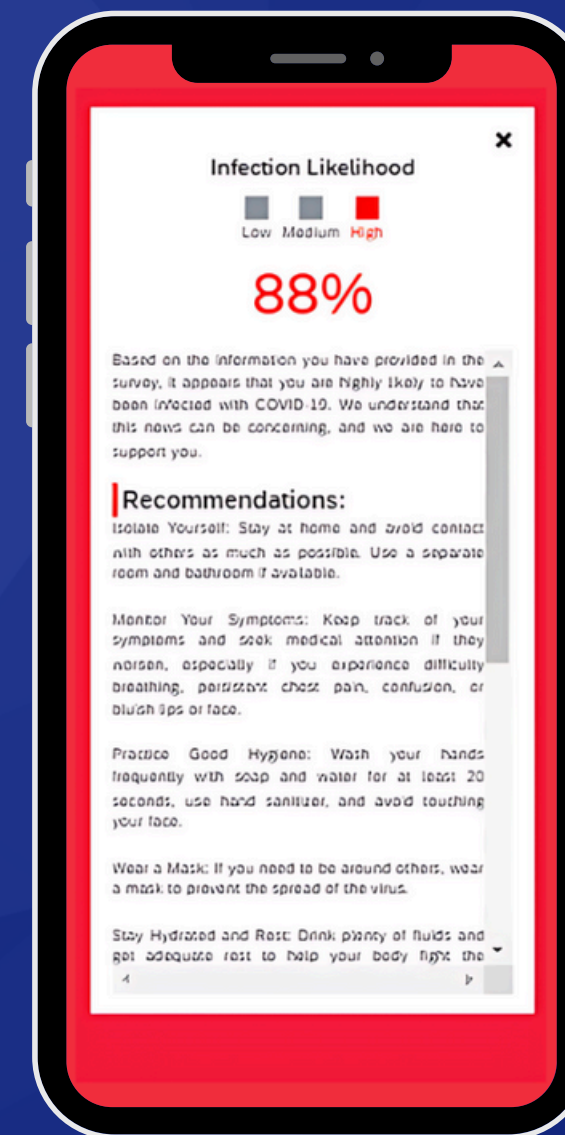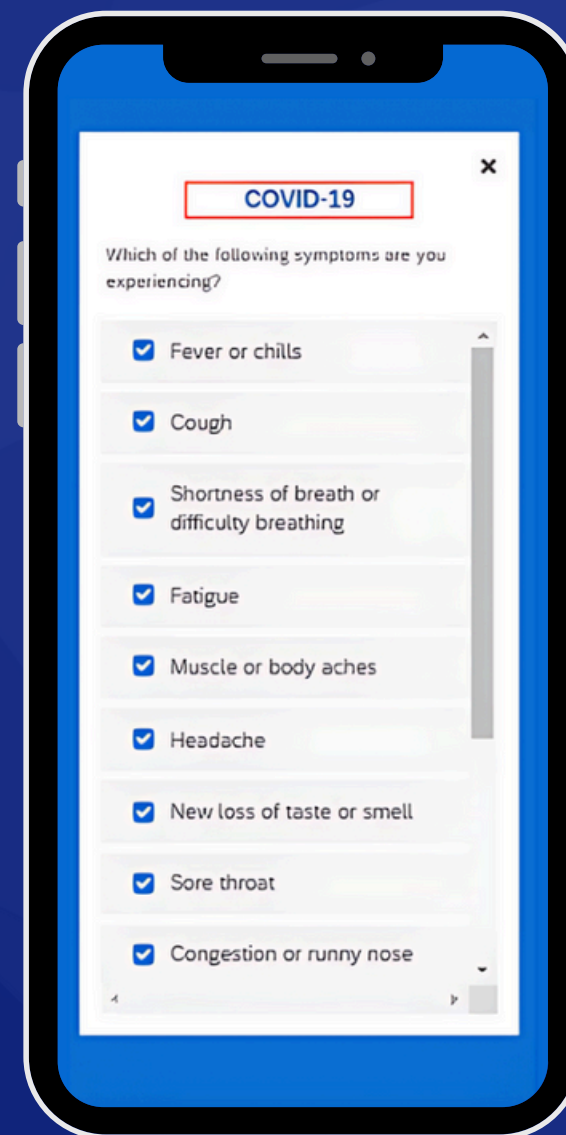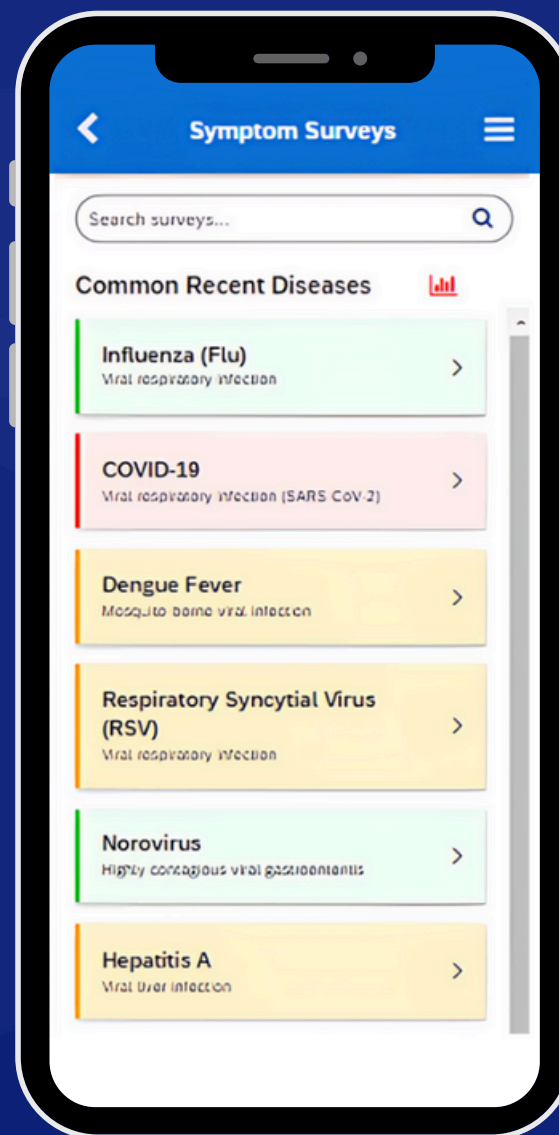
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Food Safety Scanner

Scan food products for safety information

Access to nutritional details

Promotes food safety awareness

Food Safety Scanner

Scan Product

Product Information

Product Name: Lakritsi Original
Brand: Fazer
Category: Snacks, Sweet snacks,
                  Confectioneries, Candies,
                  Liquorice candies
Kilocalories: 323
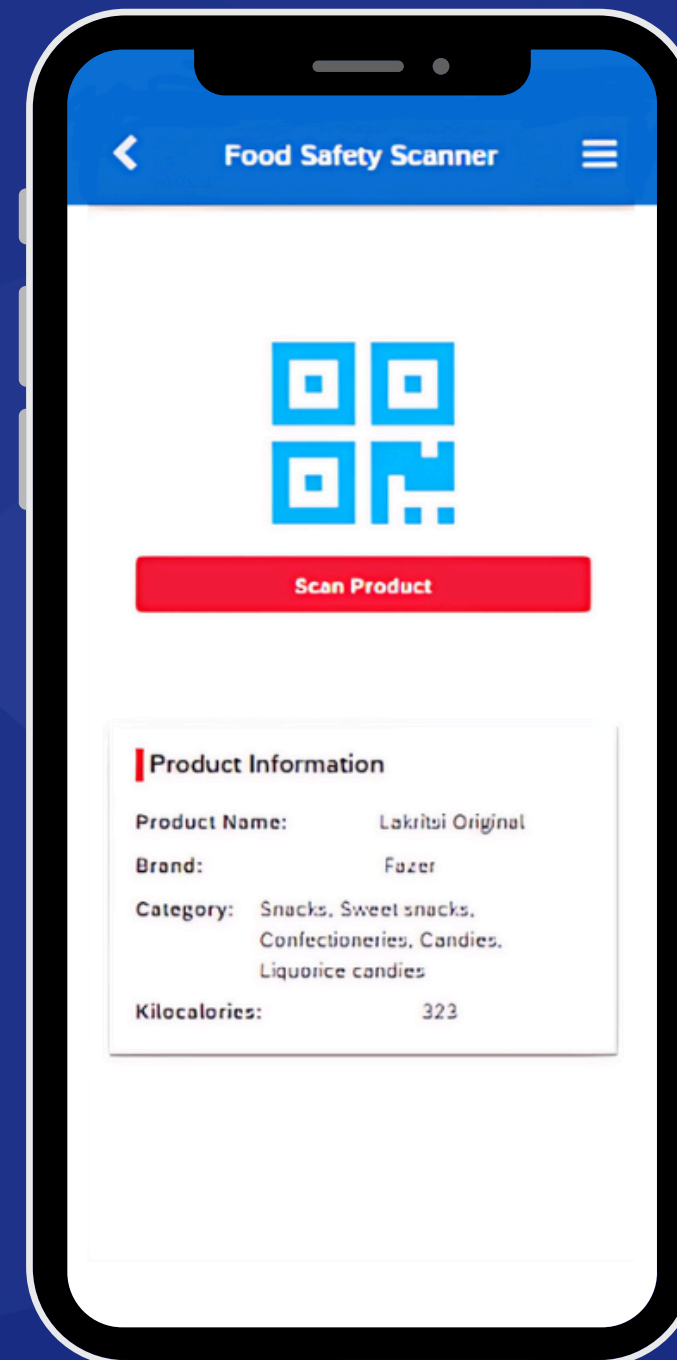
Check the following things!

▶ Product Name

▶ Brand

▶ Category

▶ Kilocalories

5

Info
HEALTH

Health Consultation and Chatbot

The Importance and Function of This Feature

Pandemic Prepareness   Daily Use

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<u>Mental Health Conditions in ASEAN</u>

Suicide Rates in ASEAN Countries in 2017, 2018 and 2019 (per 100,000 Population)
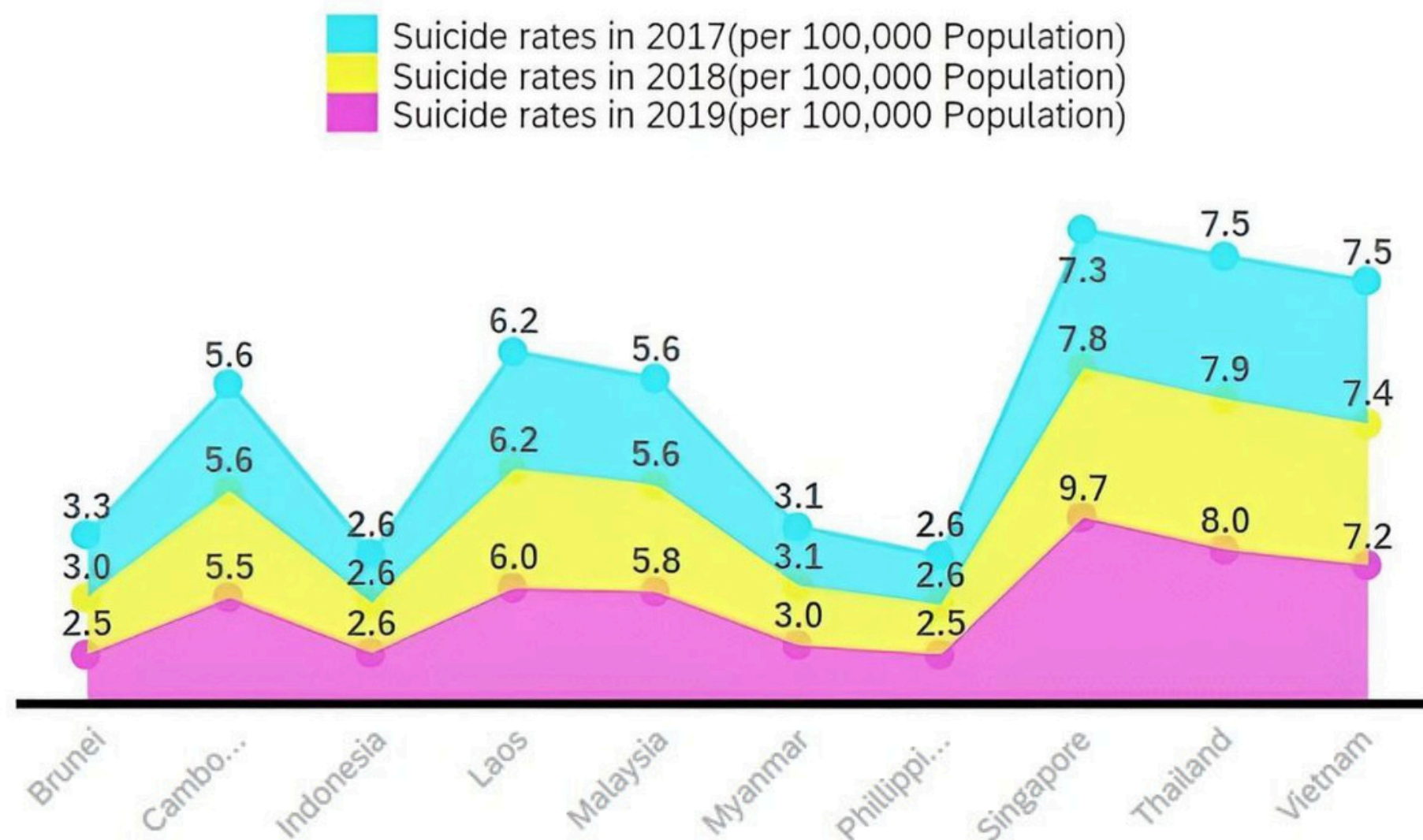
Before the pandemic, the media stated that there are some 53,000 suicide attempts in the ASEAN member state every year. World Health Organisation (WHO) data in 2019 showed that the Land of Smiles' annual suicide rate was 14.4 per 100,000 of the population, while the global age-standardised average is 10.4 per 100,000.
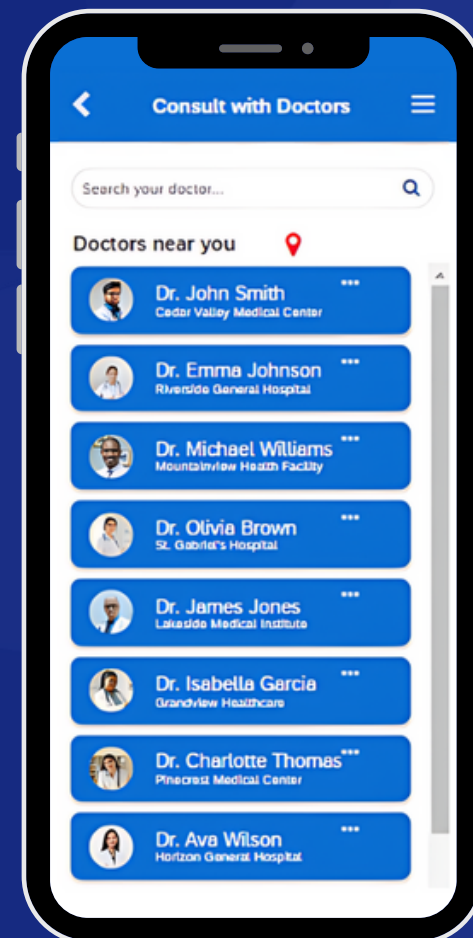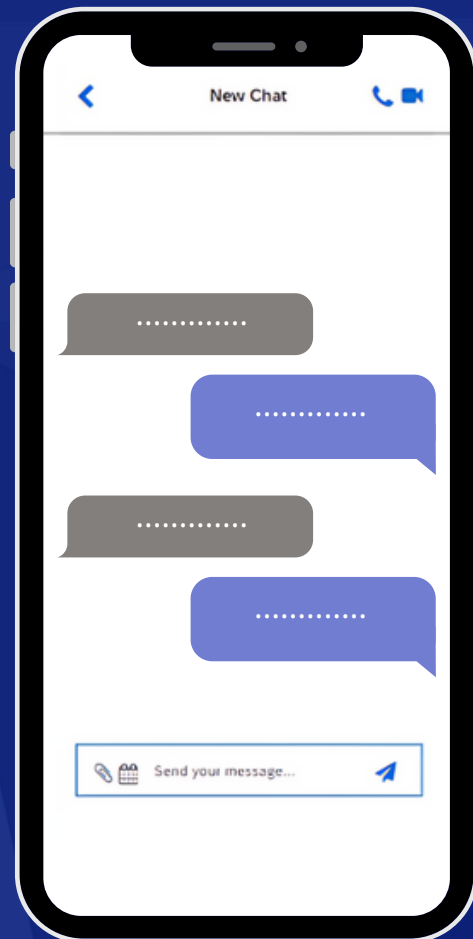
Unfortunately, the COVID-19 pandemic has exacerbated the suicide epidemic in Thailand.

Data Source: World Health Organization, Mortality and Global Health Estimates/ Mental Health, The ASEAN Post

Health Consultation and Chatbot

Chat Interface

Chat Options

"SAP Conversational AI would be a suitable choice"

AI Chatbot

Consult with doctors near you
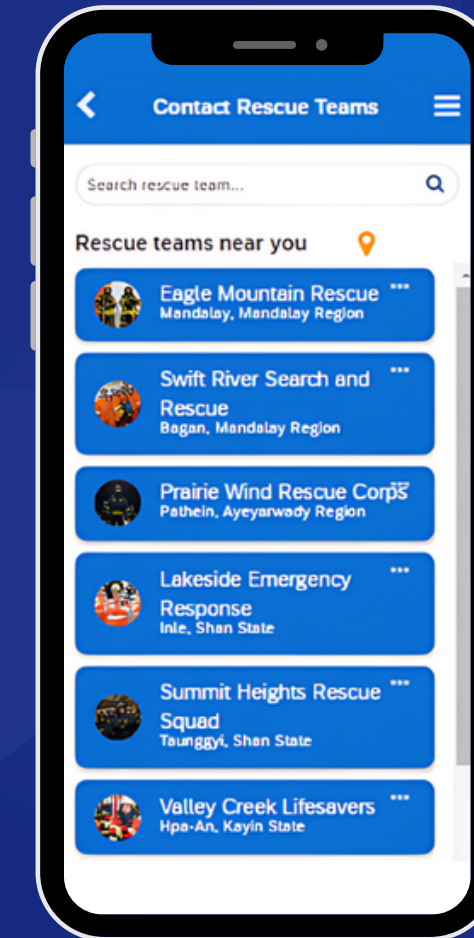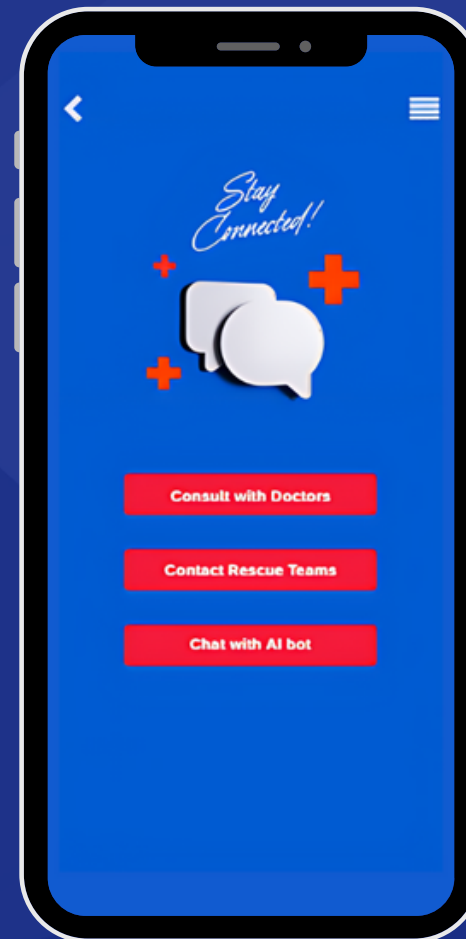
Contact rescue teams near you

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6

Info
HEALTH

Real-time Location Tracking

The Importance and Function of This Feature

Pandemic Prepareness   Daily Use

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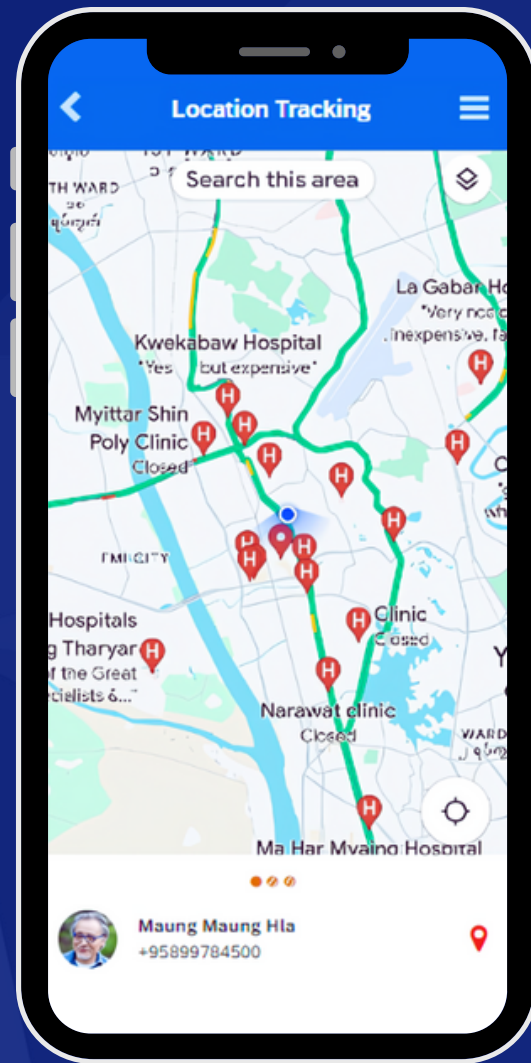Sein Lae Lae Hlaine, Yoon Ya Mone Naing

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3 GOOD HEALTH AND WELL-BEING   11 SUSTAINABLE CITIES AND COMMUNITIES   13 CLIMATE ACTION
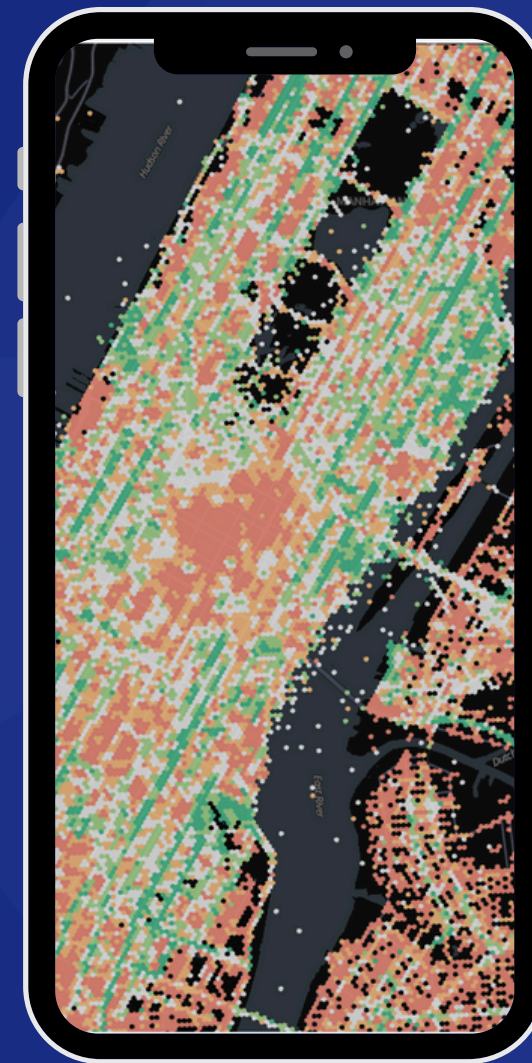
Real-time Location Tracking

Map of nearest hospitals and clinics based on current location

Visual map of areas/routes visited by infected patients to avoid high-risk zones

ASEAN health risk map Visualization

Key Integrations Needed

- Geolocation Services
- Data Collection and Processing
- Database Management
- Interactive Map
- APIs and Integration
- Healthcare Facility Mapping

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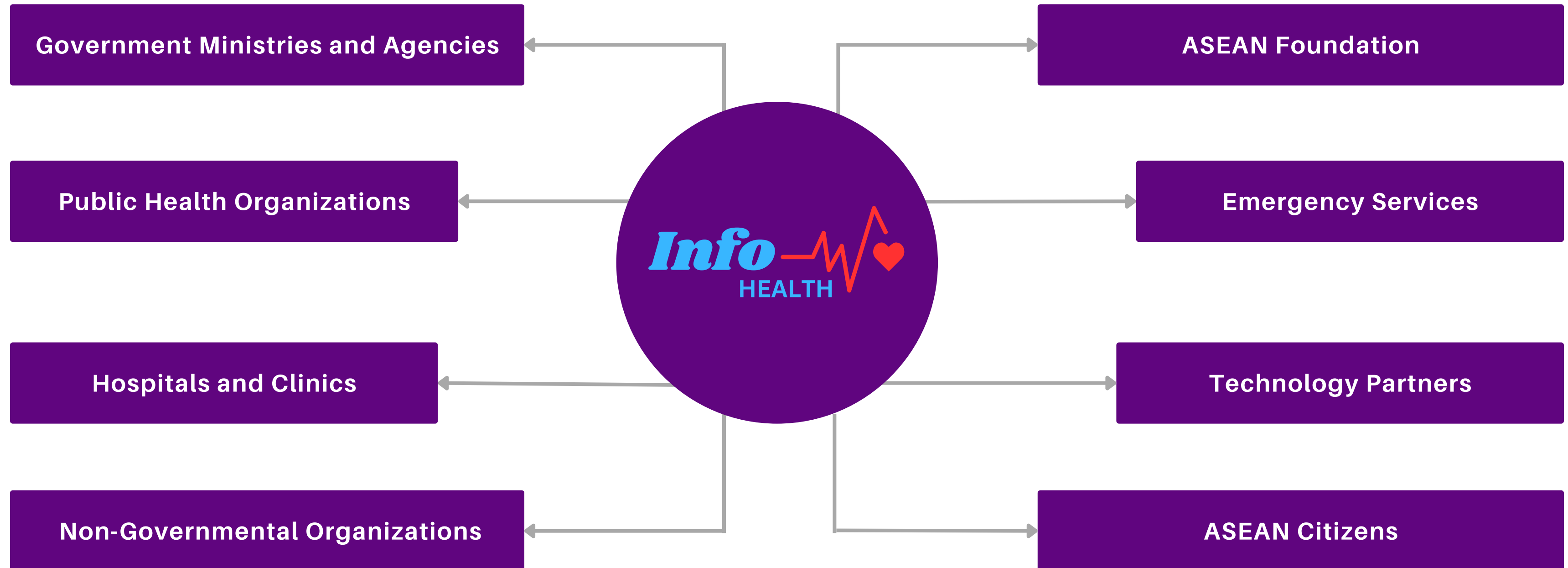
5-year Implementation Plan 2025-2030

2025

Planning and Initial Development

Conduct feasibility study and stakeholder analysis, define technical specifications and architecture, and start development of core functionalities and hybrid server setup.

2026

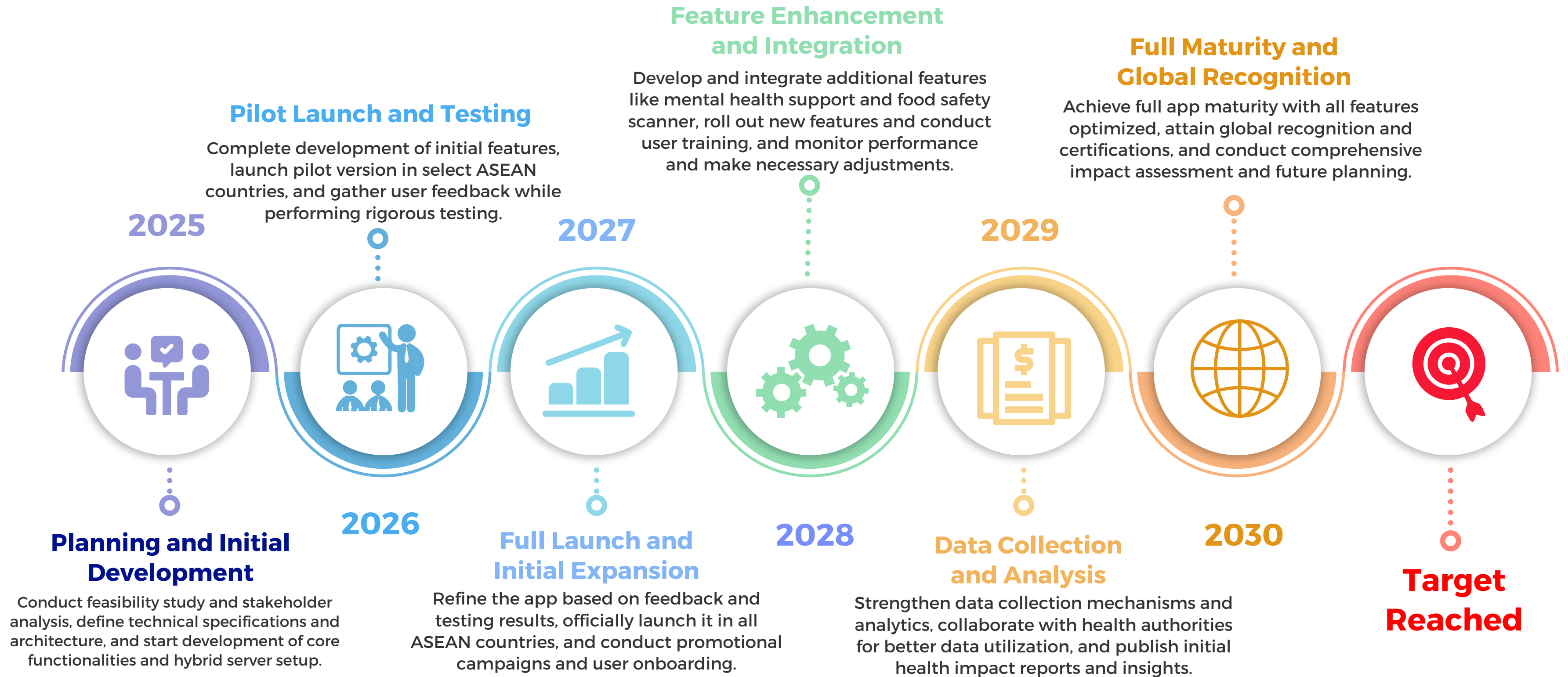## Pilot Launch and Testing

Complete development of initial features, launch pilot version in select ASEAN countries, and gather user feedback while performing rigorous testing.

2027

Full Launch and Initial Expansion

Refine the app based on feedback and testing results, officially launch it in all ASEAN countries, and conduct promotional campaigns and user onboarding.

2028

Feature Enhancement and Integration

Develop and integrate additional features like mental health support and food safety scanner, roll out new features and conduct user training, and monitor performance and make necessary adjustments.

2029

Data Collection and Analysis

Strengthen data collection mechanisms and analytics, collaborate with health authorities for better data utilization, and publish initial health impact reports and insights.

2030

Full Maturity and Global Recognition

Achieve full app maturity with all features optimized, attain global recognition and certifications, and conduct comprehensive impact assessment and future planning.

Target Reached

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Thank You!

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