



COVID-19 Crisis: Impact on Thai society and public health

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Outline



- Overview of COVID-19 crisis
- Situation timeline in Thailand
- Impact on Thai society and reaction of Thai people
- Impact on Thai public health

Overview



- COVID-19 = Coronavirus Infectious Disease 2019
- SARS-CoV-2 = Severe Acute Respiratory Syndrome Coronavirus 2



Overview



- **Transmission**

- Spread easily (**highly contagious**)
- initially assumed to spread via respiratory droplets from coughs and sneezes
- later proved to be **an airborne spread**
- Indirect contact via **contaminated surface** is another possible cause of infection.

- **Infection**

- Asymptomatic and symptomatic
- Symptomatic cases: varied in severity
- **Asymptomatic person can also spread the disease.**
- Death rate **higher** than Flu

Overview



- **Treatment**
 - To date, there are **no specific medicines** for COVID-19.
 - Supportive treatment in mild case
 - Antiviral drugs in clinical trial: remdesivir, favipiravir
- **Prevention: most important**
 - Social distancing; at least 2 meters apart
 - Face mask, face shield
 - Hand hygiene: soap, alcohol gel
 - Vaccine: under investigation

Situation 6th July 2020



#	Country, Other	Total Cases	New Cases	Total Deaths	New Deaths	Total Recovered	Active Cases
	World	11,550,542	+175,499	536,445	+3,572	6,531,107	4,482,990
1	USA	2,982,928	+44,530	132,569	+251	1,289,564	1,560,795
2	Brazil	1,604,585	+26,209	64,900	+535	978,615	561,070
3	India	697,836	+23,932	19,700	+421	424,891	253,245
4	Russia	681,251	+6,736	10,161	+134	450,750	220,340
5	Peru	302,718	+3,638	10,589	+177	193,957	98,172
97	Thailand	3,190	+5	58		3,071	61

Timeline in Thailand



- 12th Jan: **first confirmed** case in Thailand (Chinese tourist)
- 31st Jan: **first Thai** patient (taxi driver)
- 10th Feb: 34 cases
- 1st March: **first dead case** in Thailand
- 6th March: cluster infection from boxing stadium
- 12th March: cluster infection from night clubs in Bangkok
- 13th -20th March: Thai celebrities got infected, total 322 cases
- 21st March: closure of department stores and markets in Bangkok
- 23rd March: 122 new cases, cumulative 721 cases, led to a panic

Timeline in Thailand



- 26th March: **declaration of an Emergency Situation**
- 3rd April: **Declaration of curfew**
- 8th April: 111 new cases, 2,369 cumulative cases, 30 deaths
- 27th April: new case < 10
- 3rd May: **Phase 1 lockdown relaxation**
- 13th May: **No new case**, 3,017 cumulative cases, 56 deaths
- 28th June: No domestic new case for 34 consecutive days, 3,162 cumulative cases, 58 cumulative deaths
- 1st July: **Phase 5 relaxation** (schools, pubs, bars, nightclubs)
- 6th July: **No domestic new case** for 42 consecutive days, **3,195** cumulative cases, **58** cumulative deaths(**1.82%**)

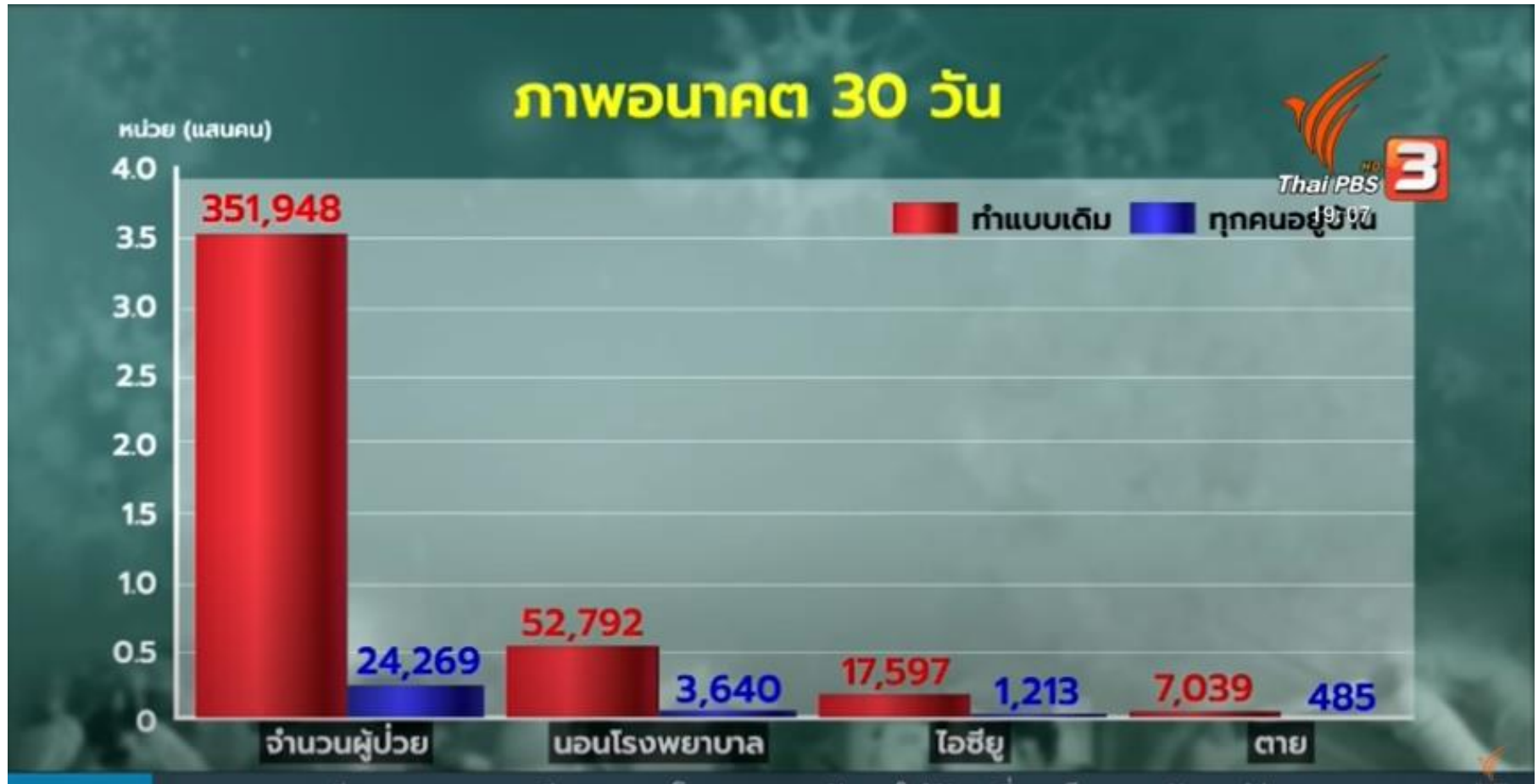
The turning point



- 16th March: Meeting between Prime Minister and 5 medical professors



The turning point



The turning point



18th March:

- Partial Lockdown
 - Schools, colleges, universities
 - Fitness centers, swimming pools, stadiums
 - Pubs, bars, theaters, cinemas, concerts, exhibitions
- Promote working from home, teleconferences
- No Songkran festival

26th March

- Declaration of an Emergency Situation under the Emergency Decree on Public Administration in Emergency Situations (2005)
- Center for Covid-19 Situation Administration (CCSA)

The popular spokesman of CCSA



Strategies



- Semi-lockdown policy
- Prohibitions from entering or departing the Kingdom
- Stay at home, stop the COVID-19, help the nation
- Social distancing
- Wearing fabric face mask
- Hand hygiene
- No gathering of people, avoid movement of people
- Contact tracing of the infected person
- Free screening and swab test for suspected person
- Free hospital care for patient (public hospital)
- State quarantine (free of charge)
- Home quarantine

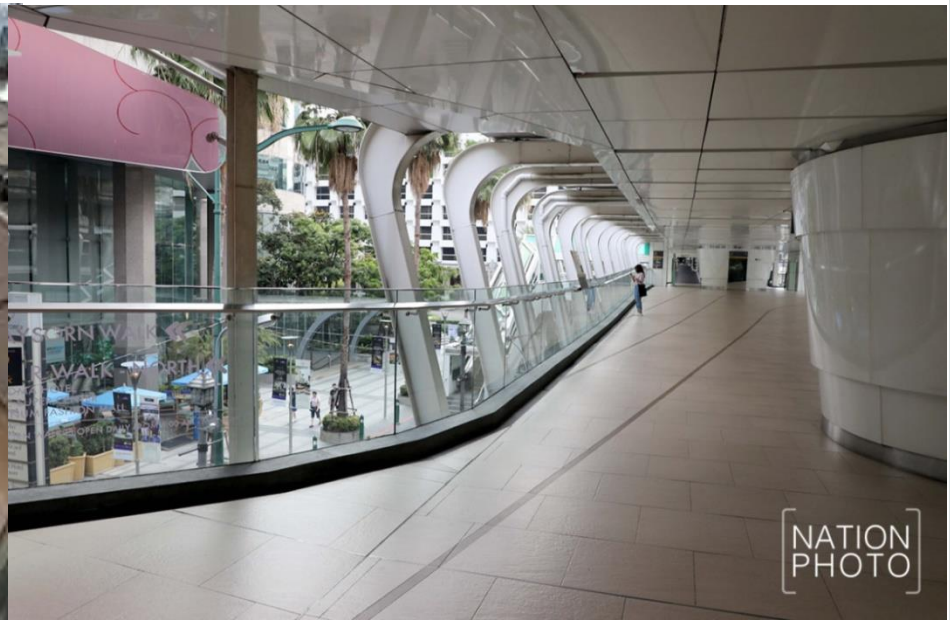
REGIONAL NEWS

Bangkok School Closed After Student Diagnosed with Coronavirus



Published 4 months ago on February 27, 2020
By CTN News





[NATION
PHOTO]



Mask/face shield wearing



Mask/face shield wearing



Hand hygiene, serving spoon



Social distancing





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รีวิว อาหาร3มือ

#กักตัว14วัน

#ค่ายทหารอากาศ รร.การบินกำแพงแสน

#กุดดียงวะ

#เผื่อระวังโควิด19



ได้เพิ่ม 7 รูปภาพใหม่

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รีวิว การกักตัวครั้งแรกที่รัฐบาลจัดเตรียมสถานที่กักตัวไว้ให้

*จะลูกเด็กเล็กแดง คนหนุ่มสาววัยทำงานหรือหรือคนชรา ใครก็ตามที่เดินทางข้ามประเทศเข้ามายังประเทศไทยจะโดนกักตัวหมดนี่จะ ดันะไม่ใช่มันนอนรวม ถือว่าโอเคเลย หนังกอยู่ได้ ออดทนหน่อย ก็แค่คิดถึงบ้าน😭😭😭

*กว่าจะเข้ามาอยู่ตรงนี้ได้ผ่านด่านสาหัสเหมือนกัน ด่านในสนามบิน7 ด้านกว่าจะผ่านมาถึง ดม.

*เจ้าหน้าที่ตามประกบไม่ให้นอกสายตาจนออกจากสนามบิน

*มาถึงสถานีดับเพลิงสุวรรณภูมิ จุดคัดแยกระหว่างสถานกักกัน2แห่ง ตามภูมิสำเนา

*จุดสุดท้าย สถานที่กักตัว

#วัดใช้ทั้งวันจริงนะ

#เผื่อระวังโควิด19

#ค่ายทหารอากาศ รร.การบินกำแพงแสน





Lockdown relaxation/ Lockdown lift



- Phase 1 (3rd May): restaurant, café, street food vender, supermarket, market, dental office, outdoor sport
- Phase 2 (17th May): department stores, library, gallery, museum, swimming pool, dental office, ↓curfew period
- Phase 3 (1st June): zoo, department stores, fitness club, spa, theatre, ↓curfew period
- Phase 4 (15th June): meetings, events, exhibition, zoo, no curfew
- Phase 5 (1st July): schools, pubs, bars, nightclubs

Impact on Thai society



- Economy
- Social behavior
- Education
- Politics
- Environment
- Public health

Impact on economy



- No income from tourism
- Close down of businesses
- Lay off of workers, employee
- Very high unemployment rate
- non-performing loan (NPL) or bad debt
- Poverty
- Great deflation
- Economic recession
 - The World Bank downgraded Thailand's economic growth outlook for this year from 2.7% to -5%.

700,000 employees unemployed as more factories suspend production



Published 3 months ago on 18-04-2020
By **Anukul**

According to the Thai Department of Labour Protection and Welfare, thousands of factory workers have now become unemployed due to manufacturing shutting up shop because of the **Covid-19** pandemic. The number of

Bangkok Post



BUSINESS

Commercial banks' NPLs hit 9-year high at end of March

PUBLISHED : 19 MAY 2020 AT 08:08
NEWSPAPER SECTION: **BUSINESS**
WRITER: **ORANAN PAWEEWUN**

Local commercial banks' non-performing loans (NPLs) climbed to a nine-year high at 3.05% of loans outstanding at the end of March, with consumer bad loans outpacing commercial NPLs for the first time in four years.

ThailandBusinessNews



Jobless Thais queue for food as pandemic hits economy

Thais are becoming increasingly desperate as the pandemic destroys the economy and the government struggles to respond.



Published 2 months ago on April 22, 2020
By **Agence France-Presse**



Impact on social behavior



- Mask wearing
- Hand hygiene
- Use of serving spoon
- Social distancing
- Food delivery service
- Online shopping
- Work from home
- Study from home
- Teleconference
- Social discrimination

Food delivery service



Bangkok Post

App orders projected to see 17% growth

PUBLISHED : 25 MAR 2020 AT 07:45

NEWSPAPER SECTION: [BUSINESS](#)

WRITER: [SUCHIT LEESA-NGUANSUK](#)

Online shopping

Bangkok Post

2020 online trade set to hit B220bn

Covid-19 outbreak drives growth

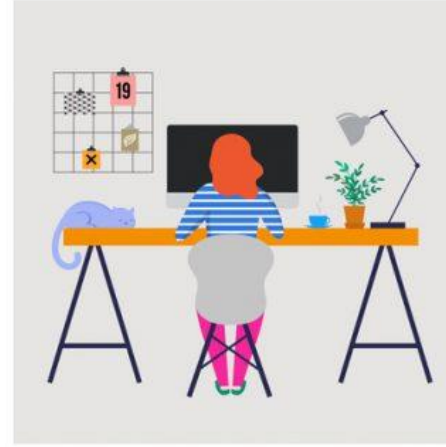
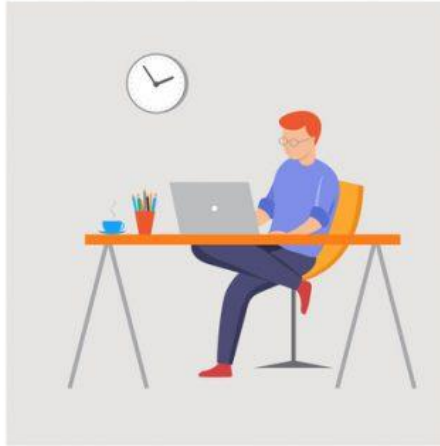
PUBLISHED : 21 MAY 2020 AT 04:00
NEWSPAPER SECTION: BUSINESS
WRITER: SUCHIT LEESA-NGUANSUK



Thailand's e-commerce, excluding business-to-business engagement, is expected to grow 35% to 220 billion baht in 2020, driven by the coronavirus outbreak, says Priceza, a price comparison shopping website.



Work from home



Work from home



Impact on education

- Study from home/online education



Impact on education



- Teleconference/online seminar



Teleconference/online seminar



"I'LL BE GLAD WHEN OUR TELECONFERENCING IS WORKING AGAIN."



"Okay, who invited that clown to this meeting?"

Social discrimination



Impact on politics



The opposition's side

Bangkok Post



THAILAND > GENERAL

Government extends emergency despite opposition criticism

PUBLISHED : 26 MAY 2020 AT 16:23

WRITER: BLOOMBERG NEWS

“The latest extension is a consolidation of power, and an unnecessary use of power,” said Anusorn Iamsa-ard, a spokesman for Pheu Thai, the largest opposition party. Pheu Thai said it could ask the Constitutional Court to assess the validity of the stimulus legislation if a debate in parliament from Wednesday fails to bring clarity.

- Declaration of an Emergency Situation was criticized by the oppositions as;
 - Use of absolute power for controlling of the oppositions
 - Unnecessary measures
 - Not democratic

The opposition's side

Bangkok Post



THAILAND > POLITICS

Loan decree debate timeline 'too short'

PUBLISHED : 21 MAY 2020 AT 05:00

NEWSPAPER SECTION: NEWS

WRITER: AEKARACH SATTABURUTH

Phumtham Wechayachai, adviser to opposition leader, said the committee taking care of the loan should be elected by parliament instead. Pita Limjaroenrat, leader of the opposition Move Forward Party, likened the 1.97 trillion baht loan to a "great storm" and said three days would never be enough for scrutinising the decrees.

- 3 executive loan decrees permitting 1.9 trillion baht in loan was criticized by the oppositions:
 - Too much debt
 - Improper use of 1.9 trillion baht loan
 - A way of corruption

The opposition's side



- “lockdown” policy was criticized by the oppositions as;
 - Unnecessary measures
 - Limitation of freedom and human rights
 - Destroy economy and education for children

The government's side



- Shortage of mask, alcohol, N95 mask and PPE for health personnel led to criticism at the Minister of Commerce and the Minister of Public Health
- No mobs
- Distraction of people's concern from political issues to the pandemic crisis
- Good control of COVID-19 situation → good image of Thailand internationally → good credit of the government
- Measures used to help people during and post-lockdown → popularity gain for Gen. Prayut

Bangkok Post



Outrage over mask shortages

Panic buying spurred by first Thai fatality

PUBLISHED : 3 MAR 2020 AT 05:31

NEWSPAPER SECTION: [NEWS](#)

WRITER: [DUMRONGKIAT MALA](#) AND [PHUSADEE ARUNMAS](#)

A store in Thailand repackaged and sold up to 200,000 used face masks for coronavirus, police chief says

Isaac Scher Mar 10, 2020, 10:56 PM



Mask, hand sanitiser shortages anger people across Thailand



Published 4 months ago on 03-03-2020

By [Jack Burton](#)



PHOTO: The Arabian Post

Across the kingdom people are rattled by shortages of face masks and hand sanitiser amid the **COVID-19 coronavirus outbreak**. Public demand has skyrocketed since the announcement of Thailand's virus-related death. The Private Hospital Association says its medical personnel are

Impact on environment

Single Use Plastic Making a Comeback in Thailand Thanks to Covid-19



Published 2 months ago on April 21, 2020
By CTN News



Single-use plastic is making a comeback, as Thais order takeout and delivery in soaring volumes because of the pandemic.

Bangkok Post



THAILAND > GENERAL

Covid-19 pushes plastic waste rise

Virus is not only harming public health but the environment as well

Demand for plastic bags growing rapidly

Surasak Luangaramsri, vice-chairman and the spokesperson of the plastic industry club under the Federation of Thai Industries (FTI), said demand for food packaging products and the flexible packaging has grown rapidly in the past few months.

“The plastic industry in Thailand, especially for food and beverage, has benefited from the outbreak,” he says.

Impact on environment

NEWS

Waste Possibly Infected With Covid-19 Becoming a Concern



Published 2 months ago on April 20, 2020
By CTN News



Impact on environment

- provides time for many tourist destinations to recover

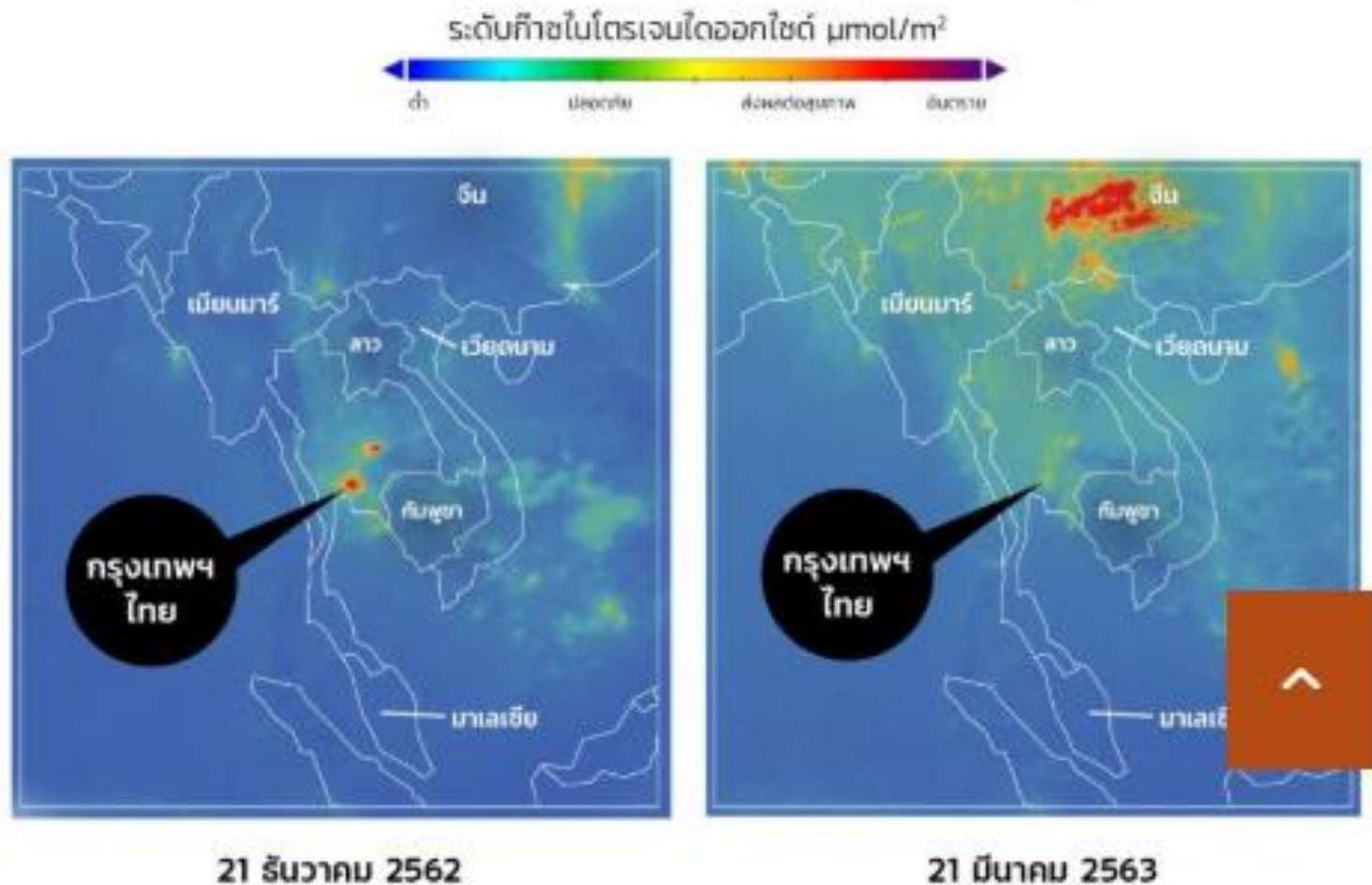


Impact on environment



Impact on environment

- Reduce CO₂, NO₂ emission and air pollution

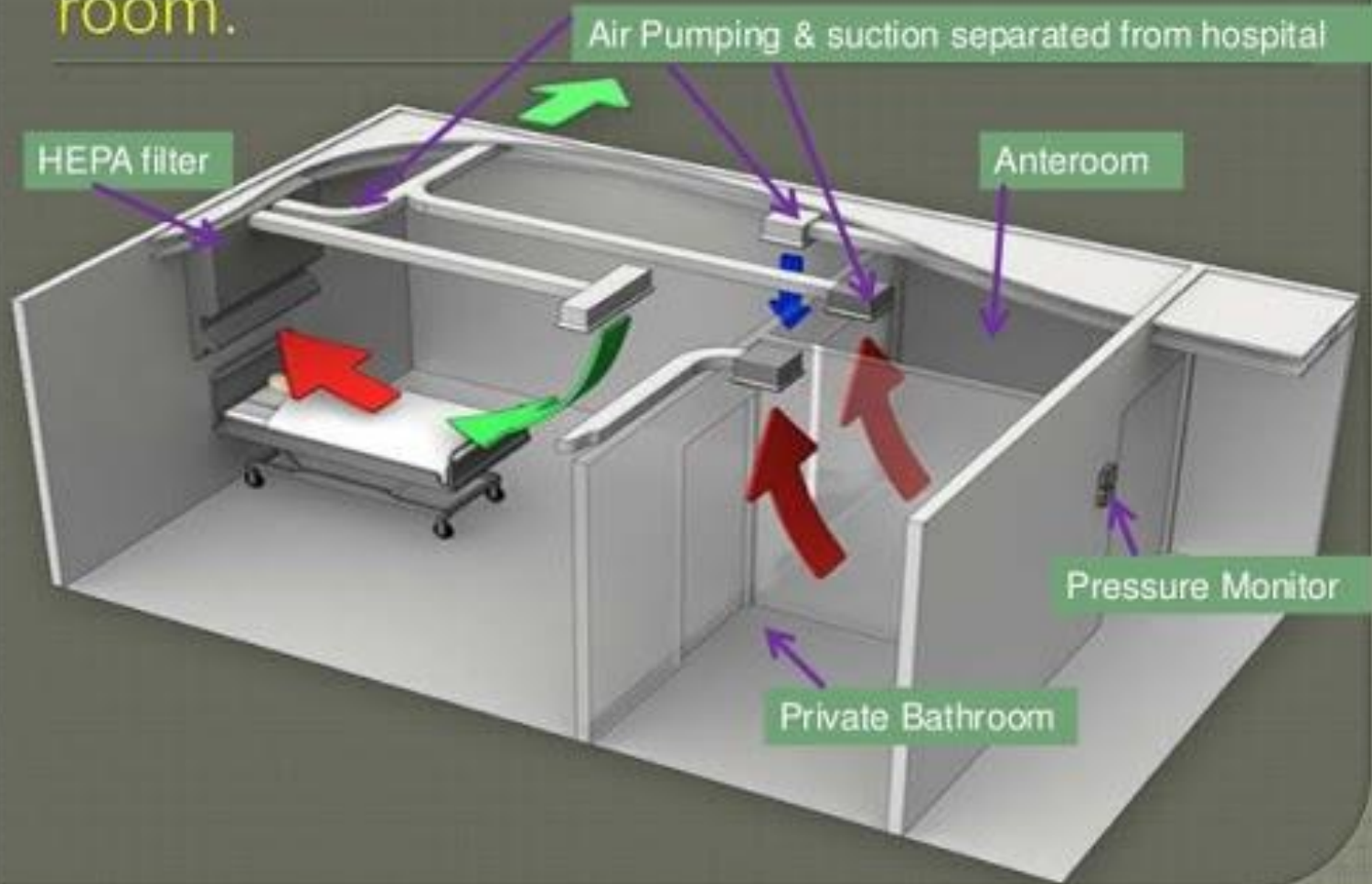


Impact on Thai public health system



- Important lesson in coping with emerging (new) pandemic disease
 - Medical center/University hospital
 - Provincial hospital
 - Community (District) hospital
 - Subdistrict Health Promotion Hospital
 - Village: Village Health Volunteer
- Risk for health personnel due to shortage of personal protective equipment (PPE): N95, surgical mask, face shield, gown, hood, leg cover
- Burden on personnel, financial burden
- Innovation associated with medicine
- Marked reduction of influenza infection and traffic accident cases during lockdown period

Negative pressure airborne isolation room.



Negative pressure isolation room



Problem: There are less than 200 negative pressure rooms in Thailand.

Screening and swab unit



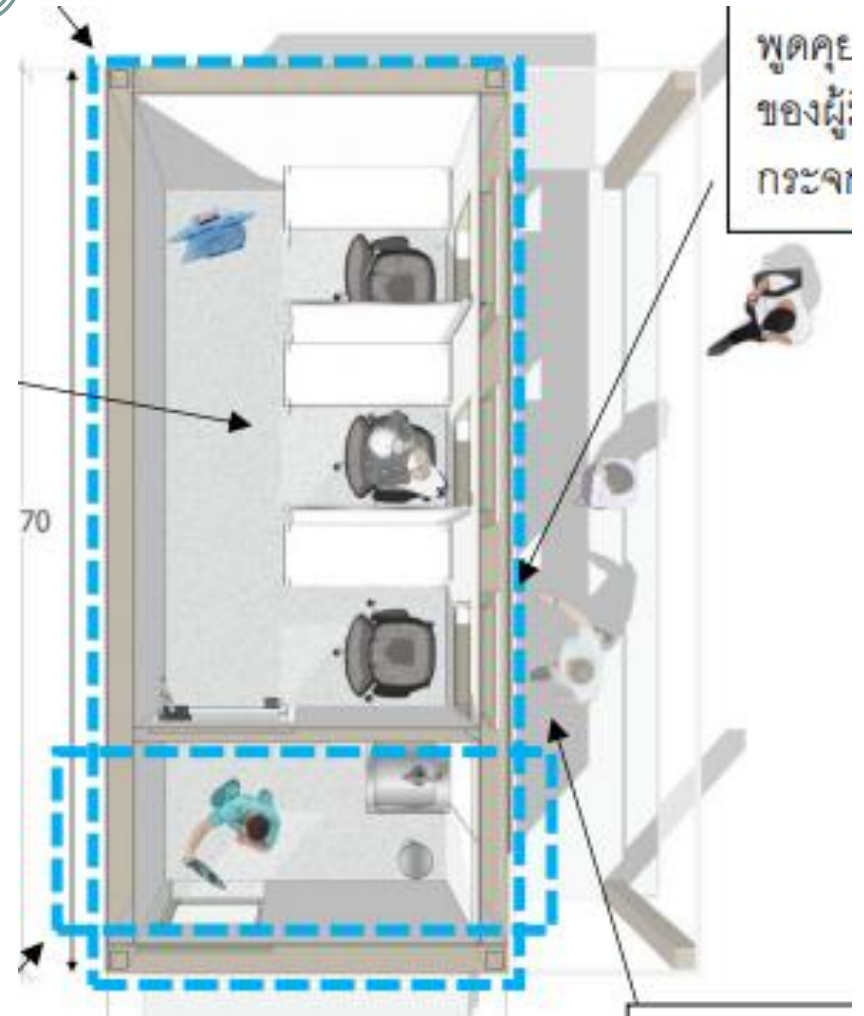
Problem: requires negative pressure room and full PPE, which are scarce

Innovations made in Thailand

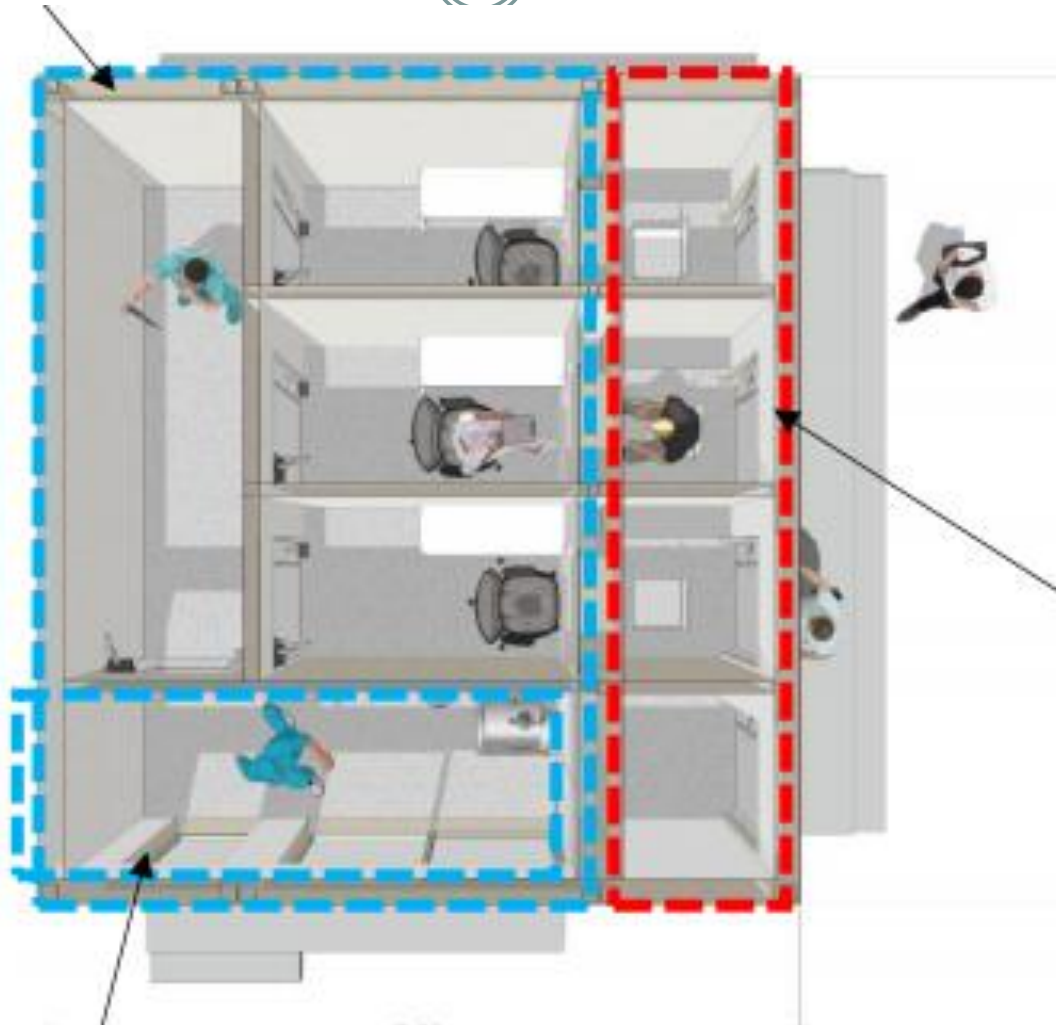


- Modular screening and swab unit
- Temporary negative pressure room
- Mini Emergency Ventilator
- Robots
 - Interactive monitoring robot
 - Transporter robot
 - Robot for disinfection

Modular screening unit by private company



Modular swab unit by private company



Medical center/University hospital



Conventional swab
technique with full PPE



Innovation: modular
swab unit by SCG company

Temporary negative pressure room



KKU model

TEMPORARY NEGATIVE
PRESSURE ROOM

40,000 บาท

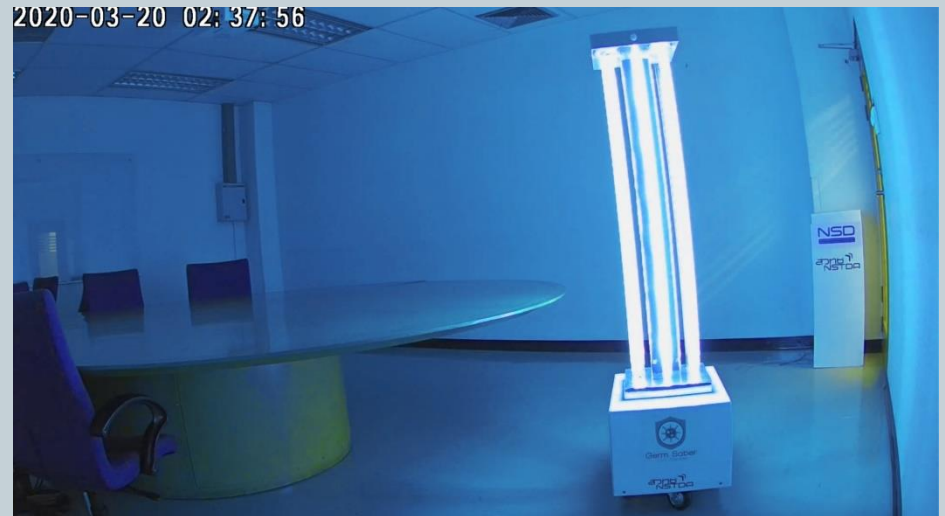
Robots



Robots



Robots for disinfection



Lesson learned



- Even with limited resource, Thailand could cope well with Covid-19 pandemic owing to people's participation and cooperation at all levels of the society.
- Be prepared for the uncertainty and disruption.
- Regional problem (epidemic disease, financial crisis) may become global problem
- Adaptation or extinction
- Self sufficiency vs. capitalism