



# Surgery and trauma

## Under the COVID-19 situation

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Surgery Center, Bangkok Trauma Center

**Bangkok Hospital Headquarter**

## **Ekkrit Surakarn, M.D.**

**Board of Surgery**

**Fields of interest**

- Trauma Surgery
- Acute Care Surgery
- Aviation Medicine

## **Jobs**

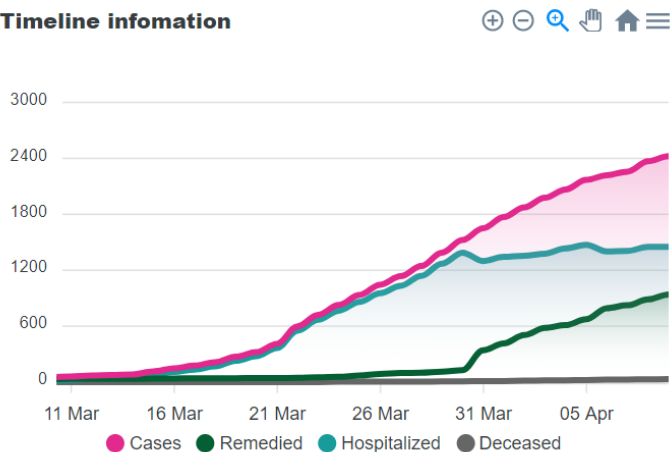
**Medical Director**

- Surgery Center
- Bangkok Trauma Center

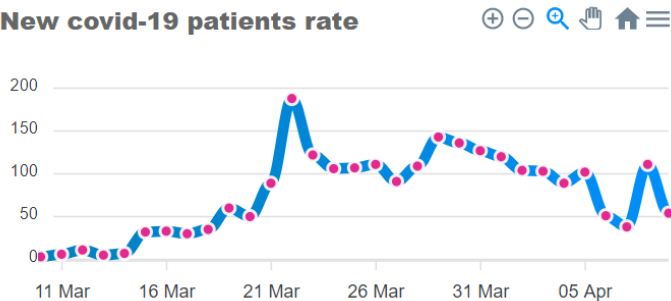


# Situation in Thailand

Timeline information



New covid-19 patients rate



COVID-19 Infected  
Situation Reports  
Last update : 09/04/2020

Cases

**2,423**

[Increase 54]

Remedied

**940**

[Increase 52]

Hospitalized

**1,451**

Deceased

**32**

[Increase 2]

Surge ... Patients, Panic, Awareness

Limited ... Medical resource

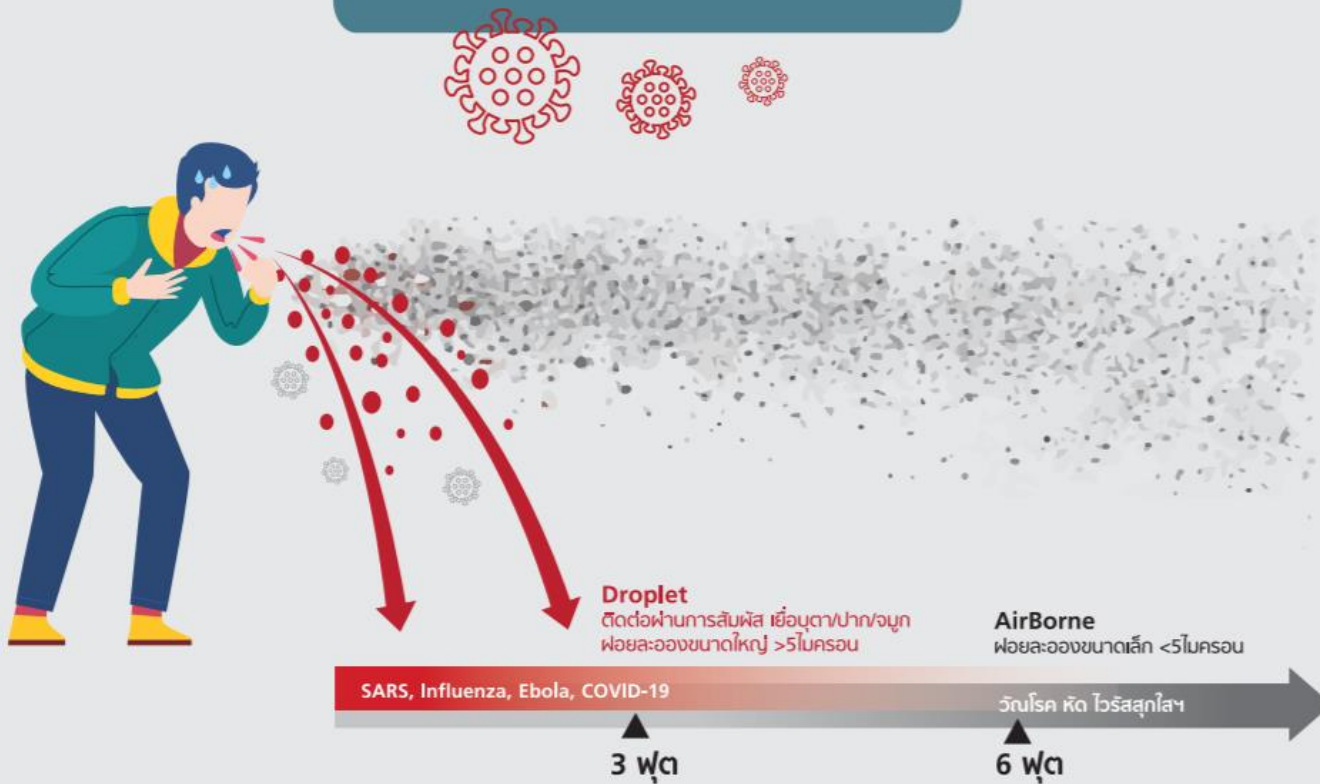
Limited ... Access to care

Not only COVID-19 patients.

All patients are affected.



# Transmission



## How we provide appropriate care

# Sorting of patients for proper care, isolation, and protection

Access control: Screening prior to entrance

**High risk** cases will be directed to isolation service areas

**Low risk** patients: Universal precaution for droplet

- Flu free buildings ?
- Flu signs & symptoms free building

*Emergency cases get care by ER staff under airborne PPE.*

## Droplet Precaution



Hand hygiene



Surgical mask



Face shield



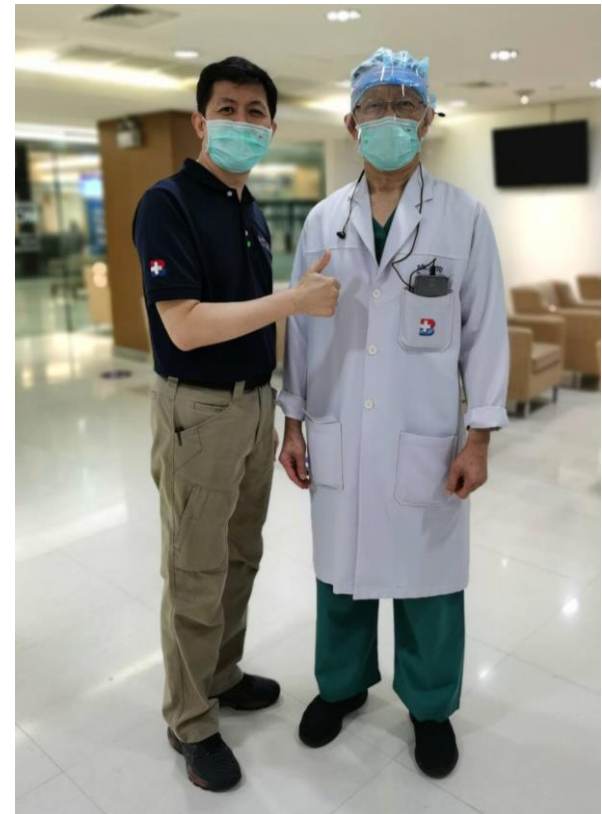
Gloves, gown



Social distance



## Personal Protective Equipment, PPE







## Airborne Precaution



Hand hygiene



Mouth and nose protection



Eye and face protection



Hand and body protection

### Mouth and nose protection

mask N95 respirator

### Eye and face protection

Full Face shield/Goggles

### Hand and body protection

Gloves, gown, legs cover



# OPERATING ROOM





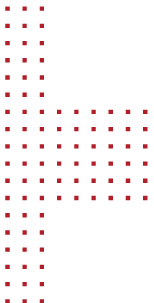


## COHORT WARD



# How we provide appropriate care

## Preparedness and quick response to changes

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- Knowledge and skills of healthcare providers
  - Supporting resource eg. PPE, COVID-19 Test
  - Isolation facility for PUI.
    - Acute Respiratory Infection(ARI) Clinic and Non-ARI Clinic
    - Dedicated operating room
    - Cohort ward/ICU

# How we provide appropriate care

## Prioritization: Elective surgery vs Emergency surgery

- Emergency surgical conditions: No delay.
- Urgent conditions should be managed to prevent emergency needs.
- *Not all* elective surgeries should be postponed.
  - Warning symptoms or high risk of serious complication
  - Not responds to proper medical management
  - Progression of tumor or diseases

# FAQs: Test for COVID-19, It's me?

## Who

Respiratory tract symptoms + Risk of contact

Emergency case, or history and risk cannot be assessed

## How and how long

Looking for the body of viruses, RNA. Nose & throat swab

Detection of our body reaction, the immunity to viruses in blood.



# FAQs: Test for COVID-19, It's me?

## Mild

- Symptomatic treatment
- Isolation: Self quarantine or cohort ward, and follow up

## Serious

- Cohort ICU: High end ventilator, Heart-Lung machine(ECMO)
- Anti-viral drugs and immunomodulation
- Definitive care: in progress, full throttle R&D.

# FAQs: Test for COVID-19, It's me?

**It depends on risk of transmission**

## **Aerosol generating procedures(AGP)**

e.g. General anesthesia, endoscopy

**Yes** - Test before operation.

Perioperative management depends on result.

## **Non-AGP**

**No** - Droplet precaution is OK.

# FAQs: Biohazards and safety in hospital

**Fears:** Corona viruses in hospital environment and workers

**Facts:** Possibility and risk of viral transmission

- COVID patients in hospitals, and in the communities
- Healthcare providers contact COVID patients, so do you.

**Actions:** Infection control in hospitals and communities.

- Screening, sorting and isolation of patients at risk
- Protection by proper PPE



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Thank you  
for your attention