

# THE CONTRIBUTION OF ATOMIC ENERGY SCIENCE AND TECHNOLOGY IN MALAYSIA DURING COVID-19 PANDEMIC

Dr. Siti A'iasah Hashim  
FNCA Country Coordinator of Malaysia  
Director General  
Malaysian Nuclear Agency (Nuklear Malaysia)



# OUTLINE

## **A. Introduction**

- **Current Covid-19 pandemic in Malaysia**

## **B. Contribution of Atomic Energy Science and Technology (NST)**

- **Rapid detection and management of Covid-19**
- **Online training and E- Services**
- **Services and research and development**
- **Others**

## **C. Summary**



# A. INTRODUCTION

Current Covid-19 Pandemic in Malaysia (as of 25 November 2020, MOH)



SUMBER: CPRC KEBANGSAAN, KKM

comms@moh



Agensi Nuklear Malaysia



nuklearmalaysia



www.nuclearmalaysia.gov.my



SUMBER: CPRC KEBANGSAAN, KKM

comms@moh

## B. CONTRIBUTION OF ATOMIC ENERGY SCIENCE AND TECHNOLOGY

### RAPID DETECTION AND MANAGEMENT OF COVID-19

#### Assistance received from the IAEA

- **Provision of Equipment**
- *Real time RT-PCR and kits, mobile x-ray, reagents and laboratory consumables, as well as biosafety supplies such as PPE and laboratory cabinets for the safe handling and analysis of samples*
- **Training and Guidance**
- *Web seminars, practical videos on sample collection, handling, processing, RT-PCR use for detection, etc*

**Nuklear  
Malaysia as  
the IAEA  
national  
liaison  
agency**



#### **Ministry of Health (MoH)**

- National Public Health Laboratory
- Hospital Tuanku Fauziah, Kangar Perlis



#### **Ministry of Agriculture and Food Industries (MAFI)**

- Veterinary Research Institute, Ipoh

#### National Capacity

**54,706  
RT-PCR tests  
daily**  
*(as of 15th Oct 2020)*

**64 Laboratories  
nationwide**  
*(as of 18 Nov 2020)*



# B. CONTRIBUTION OF ATOMIC ENERGY SCIENCE AND TECHNOLOGY (cont.)

## Online Training

Centre of Excellence in Nuclear, Nuklear Malaysia has conducted a variety of online training courses in the following sectors to enhance necessary skills, promote greater safety awareness and establish a competent workforce:

- ❑ Awareness Radiation Seminar for OBTL
- ❑ Good Operational Practice in Medical X-Ray
- ❑ Interpretation of Radiographic Image – Chest
- ❑ Training Course on X-Ray for General Practitioner
- ❑ NDT Demonstration for UNITEN
- ❑ Radiation Awareness Seminar for Dental Staff
- ❑ Radiation Safety and Health

**Online Training on Awareness Seminar on Radiation Safety for OBTL, 2 November 2020**



Agensi Nuklear Malaysia



nuklearmalaysia

*Nov 2020*  
7 online trainings,  
262 participants



## E-Services

Atomic Energy Licensing Board (AELB) provides online services for license application/permission/feedback, and examination application for radiation workers

eLesen System  
License Application / Permission /  
Feedback & Radiation Employee  
System / Examination

Nei

>More Information

Sistem Peperiksaan & Pekerja Sinaran

Pegawai Bendahari

SISTEM PEKERJA Sinaran

AMBUKUNCIAN BCI

Dapatkan Maklumat

Keputusan peperiksaan dapat dilihat di email kepada [admin@aelb.gov.my](mailto:admin@aelb.gov.my)



## B. CONTRIBUTION OF ATOMIC ENERGY SCIENCE AND TECHNOLOGY (cont.)

### • Services

- Uninterrupted irradiation and analytical services to local SMEs
- Surge of demand for rubber gloves during pandemic had call for increase in gamma irradiation services
- **Inter-agency research and development related to Covid-19 (e.g. Ministry of Science, Technology and Innovation, Ministry of Health, National Institute of Occupational Safety and Health)**
  - i. Effect of ultraviolet radiation on material integrity of face mask and protective suit
  - ii. Radiation sterilization of PPE for virus disinfection during covid-19 pandemic
  - iii. Development of ultraviolet germicidal irradiation (UVGI) box



## B. CONTRIBUTION OF ATOMIC ENERGY SCIENCE AND TECHNOLOGY (cont.)

- **Others (Corporate Social Responsibility)**

- Production of face shield for national front liners, through inter-agency collaboration including the National Security Council, Ministry of Health, Royal Malaysian Air Force and Royal Malaysia Police



## C. SUMMARY

- The Covid-19 pandemic saw the important contribution of atomic energy science and technology to the detection of the disease
- The pandemic also saw rapid surge on demand for rubber gloves that eventually increase demand for radiation sterilization.
- Nuclear Malaysia remains consistent in carrying out its functions especially in the Research & Development , Training & Education and aspects of Safety & Security for societal well being.

- Thank You -

