

#### **Brunei Darussalam**

IAEA Member State since February 2014



## Key achievements in Brunei Darussalam

- 2018: The Safety, Health and Environment National Authority (SHENA) is established.
- 2018: The Radiation Protection Order is adopted by the Government of Brunei Darussalam.

# Atoms for peace and development

Widely known as the world's 'Atoms for Peace and Development' organization within the United Nations family, the IAEA is the international centre for cooperation in the nuclear field. The Agency works with its Member States and multiple partners worldwide to promote the safe, secure and peaceful use of nuclear technologies.

The IAEA's technical cooperation (TC) programme helps countries to use nuclear science and technology to address key development priorities in areas including health, agriculture, water, the environment and industry. The programme also helps countries to identify and meet future energy needs. It supports greater radiation safety and nuclear security, and provides legislative assistance.



### Recent project successes

#### Human health

The IAEA has been working with the Brunei Cancer Centre since 2016 on strengthening the Centre's Nuclear Medicine Department. Today, 98 per cent of the country's cancer patients are able to receive treatment locally.

Support was provided for the commissioning of two linear accelerators (LINACs) with additional radiotherapy and associated dosimetry equipment, which have been in clinical use since June 2016. Clinical protocols, quality assurance and quality control policies and procedures for the LINACs were also completed and adopted for clinical use.

In addition, an awareness programme on radiation safety measures in nuclear medicine and treatment was put in place for health care staff and the public.

Medical staff were trained in the use of equipment, and radiation safety advice was provided through expert missions and fellowship training. A total of 290 patients was treated at the Centre in the first 9 months following the start of radiotherapy services in June 2016. In 2019, the Centre received and installed a Gallium-68 (Ga-68) generator and related equipment, provided through the IAEA, and began its clinical Ga-68 imaging services in February 2020.

The IAEA's continued support will enable the Centre to treat all of Brunei Darussalam's cancer patients, eliminating the need for government expenditure on treatment overseas.

#### Infrastructure for radiation safety

The IAEA supported the development of infrastructure for the Safety, Health and Environment National Authority (SHENA) in Brunei Darussalam. A complete set of capacities in radiation emergency preparedness for the Radiation Regulatory Agency were established, with inspection instruments and personal radiation detectors also provided.

The IAEA provided the Brunei Cancer Centre with a Gallium-68 generator and related equipment to provide radiopharmaceuticals for the diagnosis and treatment of prostate and neuroendocrine tumours. (Photo: Brunei Cancer Centre)



### Active national projects

- Strengthening the Nuclear Medicine Department at the Brunei Cancer Centre (BRU6003)
- Improving Clinical Management of Patients by Strengthening Access to Theranostic Nuclear Medicine Technology (BRU6004)
- Establishing the National Regulatory Infrastructure and Developing Technical Capacity for Radiological Emergency Preparedness and Response (BRU9001)
- Strengthening Regulatory Radiation Control and Emergency Preparedness and Technical Monitoring Capability to Handle Any Radiological Accident (BRU9002)

Brunei Darussalam also participates in 5 regional projects, mostly in the area of health and nutrition, and radiation protection and nuclear safety.

## Previous IAEA support to Brunei Darussalam

Previous support to Brunei Darussalam has focused on human health, nuclear applications and radiation safety.

The IAEA supported four expert missions to the Brunei Cancer Centre in the Brunei-Muara District, including on-site training for nuclear medicine specialists. (Photo: Brunei Cancer Centre)

### IAEA support to Brunei Darussalam, 2009–2019



14

trained (including 9 women)

nternationa

international experts provided

attended specialist meetings (including 8 women)

Based on data available as of April 2020

#### **Priority areas of support**

- Strengthening radiation safety and security
- Supporting human health and nutrition
- Improving the food and agriculture sector
- Supporting the management of water resources and the environment
- Facilitating sustainable energy development

#### Strategic documents supported

- Country Programme Framework 2018–2022, signed in September 2018
- Radiation Protection Order, came into effect October 2018



### www.iaea.org/technicalcooperation

The IAEA collaborates with National Liaison Officers and Permanent Missions to deliver its TC programme.