Selected achievements

2023: Jordan's King Hussein Cancer Center is formally established as a Rays of Hope Anchor Centre at a side event held during the IAEA's 67th General Conference in Vienna.

2023: BEATS, the BEAmline for Tomography at the SESAME (Synchrotron-light for Experimental Science and Applications in the Middle East) synchrotron is inaugurated.

2021: Jordan's uranium mining pilot plant becomes fully operational.

2019: The Jordan Research and Training Reactor at the University of Science and Technology produces its first radioisotopes (I-131) for cancer treatment.



The Mediterranean Fruit Fly is successfully controlled in Jordan through the application of the sterile insect technique (SIT). In this photo, the pupae weight, percent emergence of sterile adult flies and flight ability are checked at the SIT Emergence Facility in Jordan Valley. (Photo: D. Calma/IAEA)

National priorities

- Development of human resources
- Human health
- Water resource management

Main areas of IAEA support

- Research reactor
- Extraction of uranium
- Water and the environment
- Nuclear regulatory authority
- Nuclear safety

Project successes

Human health and nutrition

The King Hussein Cancer Center (KHCC) received IAEA guidance to launch nuclear medicine and diagnostics training programmes for family doctors, radiologists, radiotherapists, and medical physicists. Further assistance was provided through expert advice and fellowships. These efforts have bolstered Jordan's capacity to meet its current and future needs for cancer services.

In addition, in September 2023, KHCC was recognized as an Anchor Centre under the IAEA's Rays of Hope initiative. These specialized centres pave the way for regional advances in cancer control through training and research.

Human capacity building

In 2021, Jordan hosted the Postgraduate Educational Course in Radiation Protection and the Safety of Radiation Sources (PGEC) for radiation professionals from around the region.

This six-month course was the IAEA's biggest radiation protection training course in Arabic. It gathered 19 young professionals from Arabicspeaking countries in Asia to Jordan to train them in radiation protection and safety.

This initiative bolstered the radiation protection and safety infrastructure in numerous countries in a sustainable manner, providing a long term positive impact on regional safety standards.

Human health

Cancer diagnosis and treatment services have improved in Jordan with the installation and commissioning of advanced radiotherapy machines at Al-Bashir hospital in Amman.

The newly commissioned equipment, including a linear accelerator (linac) and Single Photon Emission Computed Tomography/ Computed Tomography (SPECT/CT) machine, are expected to increase survival rates in the country and enhance the overall quality of life for patients living with cancer.

Participation in the major initiatives

- NUTEC Plastics
- Rays of Hope
- ZODIAC



Successful control of the Mediterranean Fruit Fly in Jordan — careful attention is paid when the sterilized pupae are placed in bags that will be stored in the incubation room for six days. (Photo: D. Calma/IAEA)

Date of imPACT Review(s)

2023, 2012

IAEA support received in the 21st century



Contributions to South-South and triangular cooperation

