



Key achievements in Moldova

- 2019: A computed tomography (CT) simulator is commissioned at the Radiotherapy Department of the Oncological Institute in Chişinău.
- 2018: The IAEA conducts an Integrated Regulatory Review Services (IRRS) mission.
- 2017: Positron emission tomography (PET) is inaugurated at the Republican Clinical Hospital in Chişinău.

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.



The IAEA supported the procurement of a new computerized tomographic simulator at the Oncological Institute of Moldova in Chişinău to help plan cancer treatment and increase the efficiency of cancer services overall.
(Photo: Oncological Institute of Moldova)

Recent project successes

Human health

In 2017, the IAEA supported the installation of Moldova's first positron emission tomography (PET) imaging machine to help detect the early onset of diseases. This assistance to establish PET/computed tomography (CT) diagnostic facilities with relevant training helped to increase the efficiency of clinical diagnosis, processing and review at the Nuclear Medicine Department of the Republican Clinical Hospital in Chişinău.

Hybrid systems such as single-photon emission computed tomography (SPECT)/CT and PET/CT combine functional and anatomical information into a single scan, increasing the ability to identify where and what anomalies occur in a patient.

Radiation protection and nuclear safety

Moldova is committed to strengthening its regulatory framework for radiation safety. A key challenge was to establish the necessary infrastructure to decommission a 'RADON' type disposal facility at the Central Radioactive Disposal Facility 'Special Objects No 5101, 5102'.

In 2017, the Government developed and approved the National Strategy for Radioactive Waste Management with Action Plan 2017–2026, outlining the main principles for implementing related radiological and nuclear activities. The strategy also established methods for the safe handling of radioactive waste and mechanisms for the operator in line with measures defined by the regulator. An IAEA-supported Integrated Regulatory Review Services mission was conducted the following year with a peer review of the national regulatory framework for radiation safety in 2019.

Human health

The IAEA supported the establishment and upgrade of the country's first radiotherapy centre at the Oncological Institute in Chişinău. Assistance included the procurement and installation of a linear accelerator (LINAC) radiotherapy machine in 2009, as well as the upgrade of clinical equipment and the provision of staff training. This enabled the Moldovan Government to modernise its nuclear medicine department and significantly increased the efficiency of cancer treatment in the country.

Active national projects

- Establishing a Radiotherapy Department at the Balti Municipal Clinical Hospital (MOL6010)
- Improving Radiotherapy Services in the Oncology Institute (MOL6011)
- Establishing Capacities for Isotope Hydrology Techniques for Water Resources and Climate Change Impact Evaluation (MOL7001)
- Developing a Radon Programme and Strategy (MOL9007)
- Building Operational and Institutional Capacity in Decommissioning, Remediation and Radioactive Waste Management Processes (MOL9008)
- Enhancing Technical Capabilities for Decommissioning of Near Surface Radon Type Facility and Environmental Remediation (MOL9009)

Moldova also participates in 33 regional projects and 2 interregional projects, mostly in the areas of health and nutrition.

Previous IAEA support to Moldova

Previous IAEA support has focused on cancer diagnosis and treatment, radioactive waste management, strengthening the national radiation protection infrastructure and emergency preparedness.



The IAEA conducted an Integrated Regulatory Review Service mission to Moldova to review the national regulatory framework for radiation safety according to the IAEA's Safety Standards. (Photo: NARNRA)

IAEA support to Moldova, 2009–2019



268 trained
(including 107 women)

60 international experts provided

115 attended specialist meetings
(including 35 women)

Priority areas of support

- Developing and maintaining human resources for nuclear and isotope technologies
- Improving capacity for environmental monitoring
- Increasing and diversifying access to radiation and nuclear technologies
- Strengthening the domestic regulatory infrastructure
- Upgrading radiodiagnostic and radiotherapy techniques

Moldova's contribution to South-South and triangular cooperation, 2009–2019

21 expert and lecturer assignments provided by Moldova

3 training courses hosted

1 fellow or scientific visitor hosted

Based on data available as of April 2020

Cancer control imPACT Review conducted: April 2008

Strategic documents supported

- Country Programme Framework 2012–2017, signed in November 2012
- IAEA Integrated Nuclear Security Support Plans, signed in 2008 and renewed in 2017

www.iaea.org/technicalcooperation

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