Methodology

Data Collection

Data on nuclear medicine facilities contained in the NUMDAB database are obtained from centres around the world from them submitting their own information to the IAEA directly. The database is continuously updated with the information supplied to the IAEA. Once data is collected and shared with the NUMDAB team, a process of data review and verification is undertaken to remove any inconsistencies and ensure completeness.

Individual Users

Professionals working in any nuclear medicine centre throughout the Member States can enter data of their institutions in NUMDAB, through the submission of electronic questionnaires. A new data entry can be done anytime to introduce modifications and updates or report changes in the facility.

Other Sources of Data

Various organizations in given countries maintain registries or databases on nuclear medicine facilities, services and equipment. Reports from these organizations are reviewed and included in NUMDAB where applicable in order to further consolidate and strengthen available data.

The membership directories of scientific or professional societies are used for establishing contacts within individual hospitals to update their NUMDAB data. IAEA staff and experts traveling on missions with tasks related to nuclear medicine also collect information for NUMDAB. This includes, but is not limited to advisory and technical missions, and participants in IAEA-organized training courses are individually contacted and requested to update data for their centres in NUMDAB.

Data Limitations

NUMDAB data is collected based on the voluntary contribution of collaborators across the world working in the field of nuclear medicine. Although the IAEA has systems for quality control in place to ensure the maximum level of consistency regardless of the data source, accuracy is strongly dependent on the initial input provided by the NUMDAB collaborators. The nuclear medicine centres in NUMDAB have had their data included over various periods since the inception of NUMDAB. As there might be other nuclear medicine centres providing nuclear medicine diagnostics and therapy to cancer patients worldwide that are not included in NUMDAB, the list of centres should not be considered complete. Furthermore, the absence of specific data for a given country or a centre does not automatically determine that this particular country or centre is not equipped for provision of nuclear medicine services; thus, global, regional and national conclusions using NUMDAB data should take into account such considerations.