

Introduction: The Standards for Medical Exposure Quality Assurance, derived from Ionizing Radiation Protection Act, was enforced in Taiwan since July 1, 2005. The first diagnostic facility, mammography, was included in the regulation since July 1, 2008. The Atomic Energy Council plans to include computed tomography (CT) in the next stage. Before that, the national survey for realizing the current level of CT quality assurance is necessary. The purpose of this study is to survey the image quality and patient doses for CT in Taiwan. **Methods and Materials:** Trained investigators conducted on-site measurements, started from March 2009. An ACR CT accreditation phantom (Model 464, Gammex) was used to evaluate CT image quality, including slice thickness accuracy, CT number accuracy, image uniformity, artifact, spatial resolution, and low contrast detectability. Computed tomography dose indexes (CTDI) in head and body phantoms were measured by a pencil-type ionization chamber (10X6-3CT, Radcal). Radiation beam width was assessed by chromic films (XR-CT Dosimetry film, Gafchromic). Representative patient doses for adult head, adult abdomen, and 5-years pediatric abdomen examinations were evaluated, including volume CTDI ($CTDI_{vol}$). **Results:** There are 425 CT scanners, including CT, PET/CT, SPECT/CT, and CT simulator, in 241 hospitals in Taiwan. The preliminary results, obtained from March to December 2009, included 222 units in 142 hospitals. The fail rates of image quality items are low. The $CTDI_{vol}$ for adult head, adult abdomen, and 5-years pediatric abdomen examinations are 58, 18, and 26 mGy. The rates of $CTDI_{vol}$ for adult head, adult abdomen, and 5-years pediatric abdomen examinations over the ACR limits are 10%, 25%, and 32%. **Conclusion:** The preliminary results give us a view of current level in miniature of CT image quality and patient doses in Taiwan. Once the survey is complete, final results will be useful and helpful references for the Atomic Energy Council.