



Quality Assurance Program Reduces Radiation Exposure to Patients

National studies have indicated that exposure to radiation from medical imaging has increased 600% between 1980 and 2006. DEP's innovative Radiographic Quality Assurance Program has developed equipment and a program that has successfully reduced radiation exposure to patients while improving image quality for certain types of radiographic exams. The Bureau of Radiological Health developed this program with the specific goals of reducing unnecessary patient radiation exposure and improving image quality.

Prior to this program, exposure levels from radiographic exams in New Jersey were substantially above the national average, based on surveys published by the Nationwide Evaluation of X-ray Trends. After five years of implementation, New Jersey levels are now lower than the national average.

Building on Success

The New Jersey QA Program has been expanded to include fluoroscopy and computed tomography (CT). Although CT accounts for a small percentage of radiological procedure, it contributes an estimated 65% of patient radiation dose. Monitoring radiation exposure from this exam is especially important. The program may also be expanded to include dental radiography and is working with the NJ Dental Association to reduce patient ESE (Entrance Skin Exposure).

The goal of the Bureau of Radiological Health is to protect the public and radiation workers from unnecessary exposure to radiation from machines and reduce medical misdiagnosis caused by faulty x-ray equipment and operator error. The bureau accomplishes this goal by registering and inspecting radiation sources and administering a technologist licensure program to ensure that competent technologies are available to operate x-ray equipment and to administer nuclear medicine.

For more information, visit www.nj.gov/dep/rpp/brh/index.htm



The x-rays above show the most common radiographic exams which include dental radiography, fluoroscopy and computed tomography (CT)