Committee SC-72 of the National Council on Radiation Protection and Measurements (NCRP) has prepared a new report entitled "Mammography 2002". This report will replace NCRP Report No. 85, "Mammography - A User's Guide" published in 1986. The committee consists of various mammography specialists - radiologists, medical physicists, and an epidemiologist. (Because the new report is currently under review by the Council, the material presented here represents only the views of the committee members, not those of the Council.)

Many aspects of Mammography are addressed in the report:

An overview of the uses of modern mammography

The clinical aspects of mammography including breast anatomy. patient positioning, and proper viewing techniques

The equipment requirements of the x-ray unit - x-ray tubes, gantry, positioning devices, anti-scatter grids; and the image receptors - screens, films, film processors, digital receptors, and stereotactic breast biopsy units.

The many factors affecting image quality - resolution factors, contrast factors, noise, and artifacts

Mammography dose evaluation - calculation of mean glandular dose from measured and tabulated quantities

Quality assurance including a quality control program and a quality administration program

Benefits from screening mammography, the risks from radiation, and a method for comparison of risk vs. benefits

A description and evaluation of other breast imaging modalities including ultrasound, thermography, transillumination, computed tomography, magnetic resonance imaging, and magnetic resonance spectroscopy

The proposed recommendations of Committee SC-72. The committee attempted to make its recommendations regarding equipment specifications and quality control activities consistent with those put forth in the Federal Mammography Quality Standards Act and its clarifying documents.

Educational Objectives:

1. Become familiar with NCRP Activities related to mammography
2. Learn about the many important functions of a properly operating clinical mammography facility
3. Understand the radiation risks and mortality reduction benefits of mammography