NCRP Releases Report No. 149,  
A Guide to Mammography and Other Breast Imaging Procedures

“Mammography, in conjunction with physical examination, is the method of choice for early detection of breast cancer. Other methods should not be substituted for mammography in diagnosis or screening, but may be useful adjuncts in specific diagnostic situations.”

That affirmation of more than 40 years of experience with mammography for clinical detection, surveillance, and population screening is the primary conclusion of an intensive review of mammography practice by an expert committee of the National Council on Radiation Protection and Measurements as published in Report No. 149.


Since the publication of the 1986 NCRP report on mammography, federal standards for all mammography facilities have been enacted and implemented. The 1992 passage of the Mammography Quality Standards Act made compulsory the voluntary standards developed in 1987 by the American College of Radiology (ACR). A combined certification and accreditation program involves the Center for Devices and Radiological Health of the Food and Drug Administration, inspections by state radiation control programs and performance reviews by the ACR program.

The NCRP Scientific Committee reviewed the use of ultrasound, magnetic resonance, thermography, transillumination, computed tomography, and nuclear imaging. It observed that an extensive study of the value of digital mammography was underway by the ACR Imaging Network at the time of publication and that conclusions were not available. However, with many x-ray departments replacing screen-film procedures with digital imaging and electronic image handling and retrieval, significant changeovers are happening. The bulk of the Report contains detailed reviews and recommendations for technical factors of producing and processing mammograms. Quality assurance programs and periodic medical audits are recommended strongly.

The report is available from the NCRP website, http://NCRPpublications.org, in both soft- and hardcopy formats. For additional information contact David A. Schauer, ScD, CHP at schauer@NCRPonline.org, 301.657.2652 (x20) or 301.907.8768 (fax).