

The performance of the eleven required physics tests on a Stereotactic Breast Biopsy (SBB) System as required for accreditation by the American College of Radiology (ACR) will be covered in this presentation covering systems both with and without Automatic Exposure Control Systems. Expected values for Half-Value-Layer (HVL) and patient doses for each matrix size available on SBB systems will be discussed. Clinical advantages/disadvantages of both major systems will be covered relative to approach methods and areas available for sampling. The importance of testing the location of the biopsy needle or tissue sampling device for reproducibility and accuracy will be discussed relative to various phantoms that may be used to verify this location accuracy. Quality Control (QC) tests to be performed by the mammography technologist will be covered in addition to the physics required tests. Requirements for training and education of the staff (physician, physicist, and technologist) required to achieve accreditation by the ACR will be reviewed now that there is a requirement for SBB units to be accredited for breast imaging centers to obtain the ACR designation of a Breast Imaging Center of Excellence.

Educational Objectives:

1. Attendees will be aware of the required physics tests to be performed annually and for acceptance of Stereotactic Breast Biopsy (SBB) System.
2. Attendees will be aware of the expected values of Half-Value Layer and patient doses for SBB systems for common matrix sizes available on these units.
3. Attendees will be aware of the requirements for personnel performing SBB exams or physics evaluations in both Continuing Education and Continuing Experience for accreditation by the American College of Radiology.
4. Attendees will be aware of the required Quality Control Tests to be performed by both the technologist and physicist on SBB units.