



The American College of Radiology (ACR) and Society of Breast Imaging Statement on Radiation Received to the Thyroid from Mammography

April 4, 2011

Some Americans have expressed concern, due to an **erroneous media report**, that the small amount of radiation a patient receives from a mammogram may significantly increase the likelihood of developing thyroid cancer. This concern simply is *not* supported in scientific literature.

The radiation dose to the thyroid from a mammogram is extremely low. The thyroid is not exposed to the direct X-ray beam used to image the breast and receives only a tiny amount of scattered X-rays (less than 0.005 milligray). This is equivalent to only 30 minutes of natural background radiation received by all Americans from natural sources.

For annual screening mammography from ages 40-80, the cancer risk from this tiny amount of radiation scattered to the thyroid is incredibly small (less than 1 in 17.1 million women screened). This minute risk should be balanced with the fact that thyroid shield usage could interfere with optimal positioning and could result in artifacts - shadows that might appear on the mammography image. Both of these factors could reduce the quality of the image and interfere with diagnosis.

Therefore, use of a thyroid shield during mammography is *not* recommended.

Patients are urged not to put off or forego necessary breast imaging care based on this erroneous media report.

For more information on this issue, please see [Summary of Thyroid Cancer Risks Due to Mammography](#) by R. Edward Hendrick, PhD, FACR.

For more information on why you should start annual mammograms at 40 years of age, please visit www.MammographySavesLives.org.