

Table. Age 60 annual screening

What are chances of benefit and harm from screening mammography (digital tomosynthesis) done every year for 10 years for an American woman age 60? The table presents ranges for each outcome based on the US Preventive Services Task Force and additional published literature.

	No mammogram	Mammogram every year	Range of possible effects of mammograms every year for 10 years for a woman age 60
Benefit			
Chance of death overall	9.24% ¹	9.24% to 9.04% ²	Between 0 and 2 fewer deaths overall per 1000 women screened
Chance of breast cancer death	0.63% ³	0.59% to 0.43% ³	Between 0.4 and 2 fewer breast cancer deaths per 1000 women screened
Harms			
Any false alarm	---	27.6% to 49.0% ⁴	Between 276 and 490 false alarms per 1000 women because of screening
False alarm requiring a biopsy	---	5.2% to 9.3% ⁴	Between 52 and 93 false alarms requiring a biopsy per 1000 women because of screening
Overdiagnosis [diagnosis and treatment of a cancer not destined to cause symptoms or death]	---	0.6% to 1.9% ⁵	Between 6 and 19 overdiagnosed cancers per 1000 women because of screening

¹ The 10-year chance of death from any cause is derived from [Social Security Administration \(2019 "pre-covid" data\)](#) (see *Appendix - Table calculations*)

² The low end of the range assumes all women avoiding a breast-cancer death do not die from another cause; the high end assumes all women who avoid a breast cancer death die from another cause.

³ The 10-year chance of death from breast cancer is from the [National Cancer Institute \(DEVCAN\)](#) (for calculations, see *appendix Table calculations*). The lowest chance of death is based on the [US Preventive Services Task Force modeling](#) report which provides the largest estimated benefit from mammography: a 30.6% relative risk reduction (ages 50-74, annual, digital tomosynthesis); the highest chance of death is based on the Cochrane [Collaboration meta-analysis](#) estimate for the low risk of bias trials for age 50 and older: 6% relative risk reduction (95% CI, 23% reduction to 15% increase).

⁴Data from Ho, et al. JAMA Netw Open. 2022;5:e222440.

⁵Data from Pace, et. al. JAMA. 2014;311:1327-1335.