

BREAST CANCER INCIDENCE AND MORTALITY RATES BY COUNTRY OR REGION

For each country or region, its BC incidence rate is presented first followed by the associated mortality rate. Overall, female BC incidence trends in the USA can be further observed in Figure 2 (38). Breast Cancer Incidence in the United States of America (USA) The 1950s expansion of BC educational programs and rise in BC awareness, paired with the introduction and promotion of breast self-exams by the American Cancer Society, highlighted the beginning rise of BC incidence in the USA (33). Further, the use of postmenopausal hormone replacement therapy in women over 50 years increased women's lifetime exposure to estrogen and contributed to the rise of invasive BC incidence from 1980 to early 2000s (4, 35, 36). According to the Connecticut Surveillance, Epidemiology, and End Results Programs (SEER) database, from 1950 to 1975, the USA incidence of BC cases per 100,000 increased from 66.6 cases/100,000 to 119.2 cases/100,000 (34). In addition, from 1980 to 2008, the use of mammography screening increased by 41% in women over 50 years, increasing newly diagnosed DCIS incidence from 7 cases/100,000 in 1980 to 83 cases/100,000 in 2008 (4, 35, 36). During the late 1990s, a study conducted by the Women's Health Initiative reported a link between postmenopausal hormone therapy use, heart disease, and BC (37). This was associated with a 13% decline in BC incidence from 1999 to 2004, in the USA (4, 35, 36). These numbers further increased with the introduction of mammography screening from 1975 to 1987 (34). Since 2004, invasive BC incidence has increased by less than 0.5% per year, while the incidence of local BC increased by 1.1% per year from 2012 to 2016 (4). According to the National Cancer Institute, BC is the most common cancer in US women, accounting for 15% of new annual female cancer cases today (31). The current lifelong probability of being diagnosed with BC is 12.9% (31). In 2022, approximately 287,850 new female and 2,710 new male invasive BC cases will be diagnosed (21). The median age of women at diagnosis is 63 years making up 26.5% of new cases (amongst women ages 65–74 years (31