

| NUMBER OF CASES PER YEAR (2012-2016) ¹ | | | NUMBER OF DEATHS PER YEAR (2012-2016) | | |
|--|--------|------------|--|--------|------------|
| Male | Female | Both sexes | Male | Female | Both sexes |
| 11 | 1,367 | 1,378 | 3 | 306 | 313 |
| FIVE-YEAR SURVIVAL (2006-2010) | | | 24-YEAR PREVALENCE (2016) | | |
| Male | Female | Both sexes | Male | Female | Both sexes |
| - | 81.7% | - | - | 15,374 | - |

¹ Mean yearly incidence data for period 2012-2016 has been rounded to nearest integer, and thus some numbers in tables will not add to give the exact total.

INCIDENCE

In 2012-2016 there were 1,367 female patients diagnosed with breast cancer each year. The lifetime risk of developing a breast cancer was 1 in 10 for women.

Incidence trends

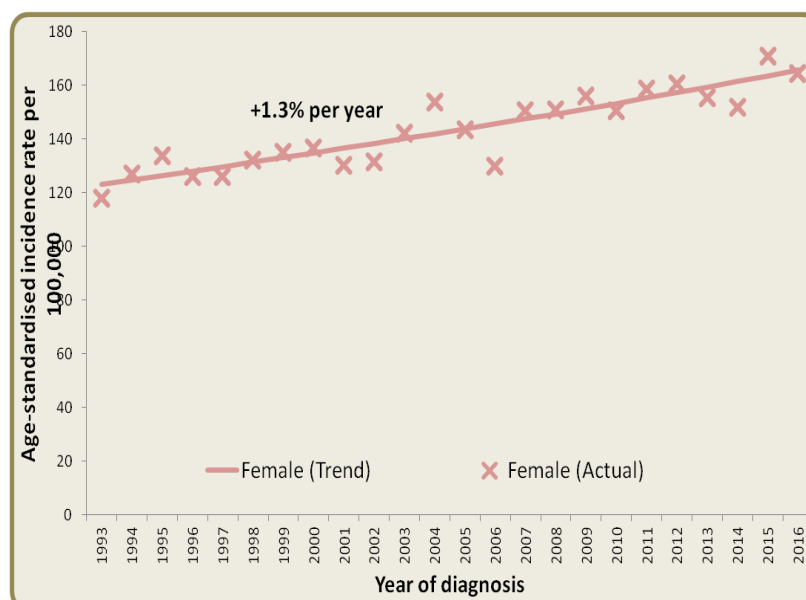
Table 1: Incidence of female breast cancer and year of diagnosis: 2007-2016

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Female | 1,159 | 1,180 | 1,232 | 1,214 | 1,297 | 1,327 | 1,302 | 1,299 | 1,469 | 1,437 |

Over the last ten years the number of breast cancers cases in women has increased from 1,159 in 2007 to 1,437 in 2016.

After accounting for the increasing number of older people in the NI population, breast cancer incidence rates in women have increased during 1993-2016 by an average of +1.3% per year.

Figure 1: Trends in female breast cancer incidence rates: 1993-2016



Incidence and age

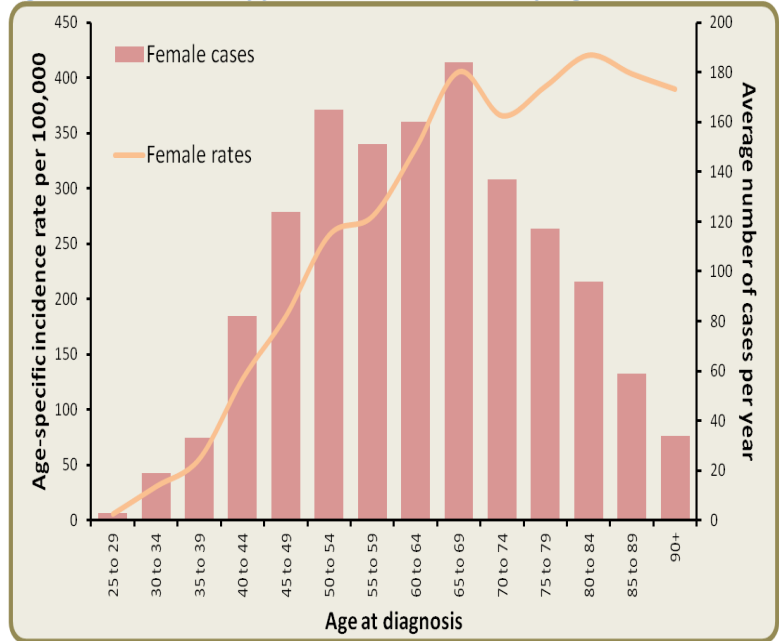
Breast cancer risk is strongly related to age with 81% of cases occurring in females over the age of 50 years and incidence rates greatest among women aged 80-89.

Table 2: Average annual number of breast cancers diagnosed by age: 2012-2016

| Age | Female |
|-------------|--------|
| 0 to 49 | 262 |
| 50 to 64 | 476 |
| 65 to 74 | 321 |
| 75 and over | 306 |
| All ages | 1,367 |

Due to rounding of yearly averages, 'All ages' may not equal the sum of age categories in tables.

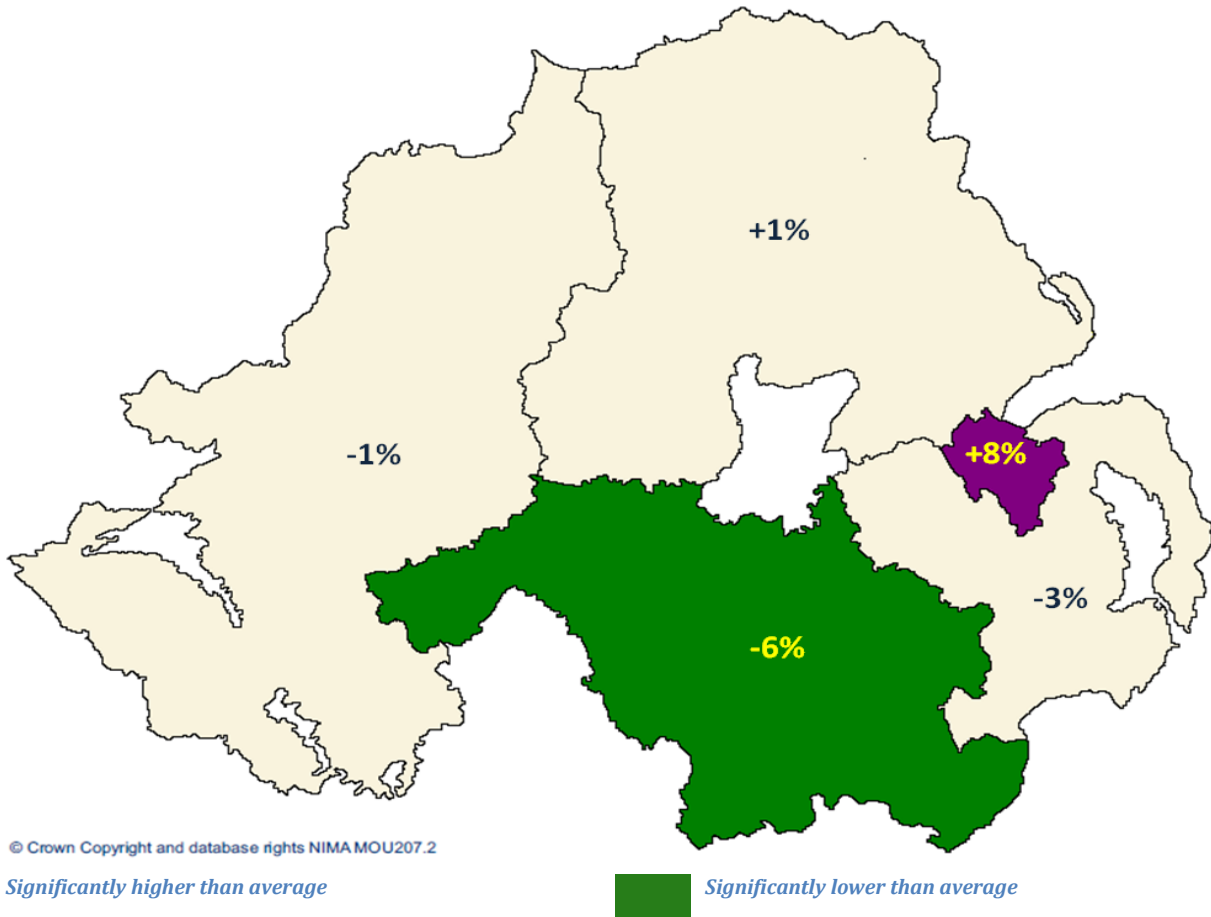
Figure 2: Incidence of female breast cancer by age: 2012-2016



Incidence by Trust area

Breast cancer incidence rates in 2012-2016 varied significantly across two HSCT Trusts in Northern Ireland. The Southern Trust saw rates lower than the NI average while Belfast saw higher rates than the NI average.

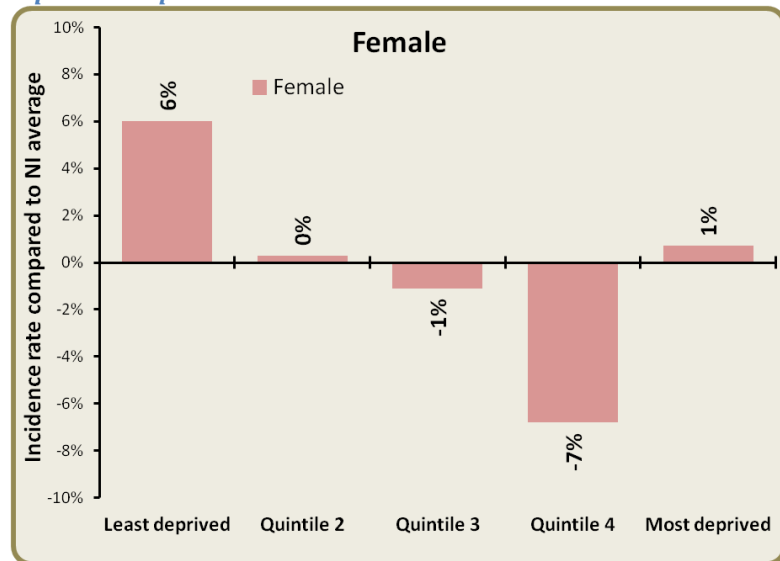
Figure 3: Female breast cancer incidence rates compared to the NI average by sex and HSC Trust of residence: 2012-2016



Incidence by deprivation

While incidence of many cancers vary by socio economic deprivation, there is no evidence of this association for breast cancer incidence rates in Northern Ireland since 2011.

Figure 4: Breast cancer incidence rates compared to the NI average by deprivation quintile: 2012-2016

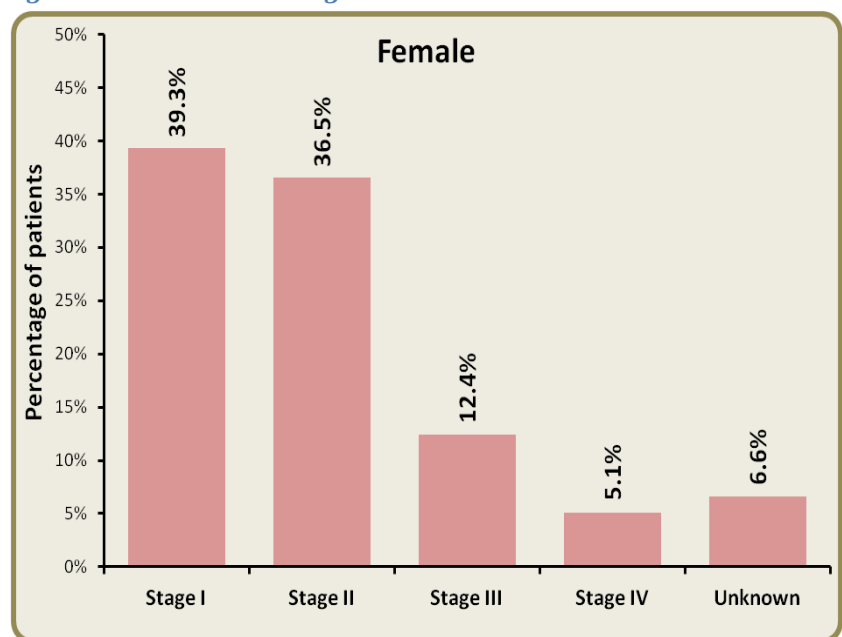


Incidence by stage

Cancer stage is a way of describing the size of a cancer and how far it has grown and spread. This information is important in helping decide what treatments are needed and stage of disease at diagnosis is strongly associated with survival.

In 2012-2016 over 90% of female breast cancer patients in Northern Ireland were assigned a stage at diagnosis.

Figure 5: Breast cancer stage distribution: 2012-2016



The majority of breast cancer patients were diagnosed at Stage I (39.3%) and Stage II (36.5%) with 5.1% diagnosed at stage IV.

SURVIVAL

The net survival for women with breast cancer was 95.0% at one year, and 81.7% at five years for patients diagnosed in 2006 to 2010.

Table 3: Five-year female breast cancer survival by survival time: patients diagnosed 2006-2010

| Time since diagnosis | Diagnosed 2006-2010 |
|----------------------|---------------------|
| | Female |
| 6 months | 96.5% |
| 1 year | 95.0% |
| 5 years | 81.7% |

Survival Trends

Five-year survival for breast cancer in women has improved over time with survival increasing from 75.9% in the 1993-2000 diagnosis period to 81.7% in the 2006-2010 diagnosis period.

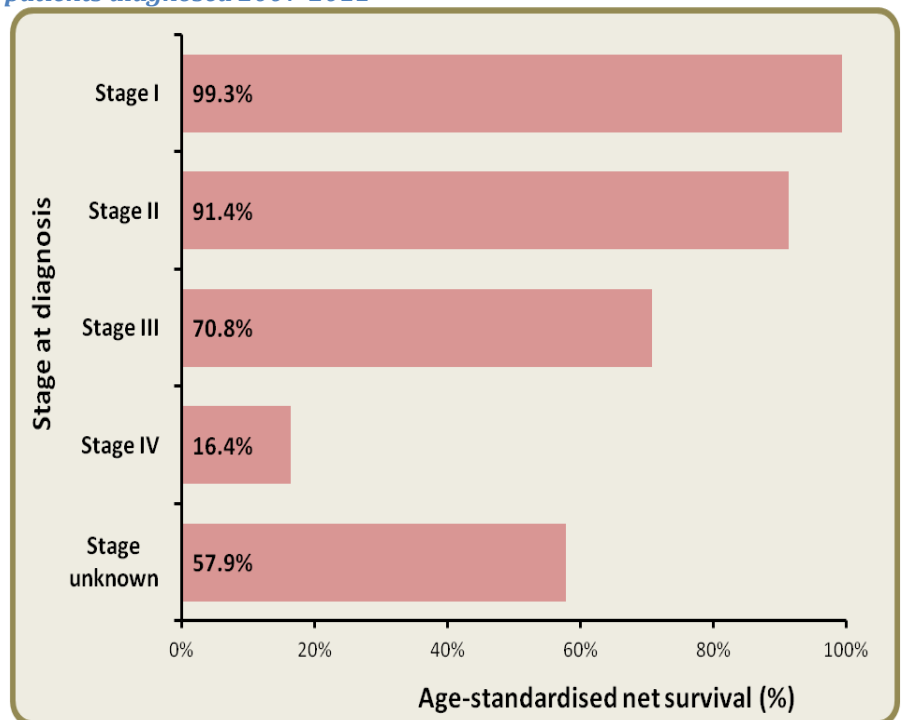
Table 4: Five-year breast cancer survival by period of diagnosis

| Period of diagnosis | Female |
|---------------------|--------|
| 1993-2000 | 75.9% |
| 2001-2005 | 78.7% |
| 2006-2010 | 81.7% |

Survival and stage

Stage at diagnosis is one of the most important factors in breast cancer survival with five year survival decreasing as stage at diagnosis increases. Five-year survival ranged from 99.3% for early (stage I) disease to 16.4% for late (stage IV) disease highlighting the importance of early diagnosis.

Figure 6: Five year survival from breast cancer by stage of diagnosis: patients diagnosed 2007-2011



MORTALITY

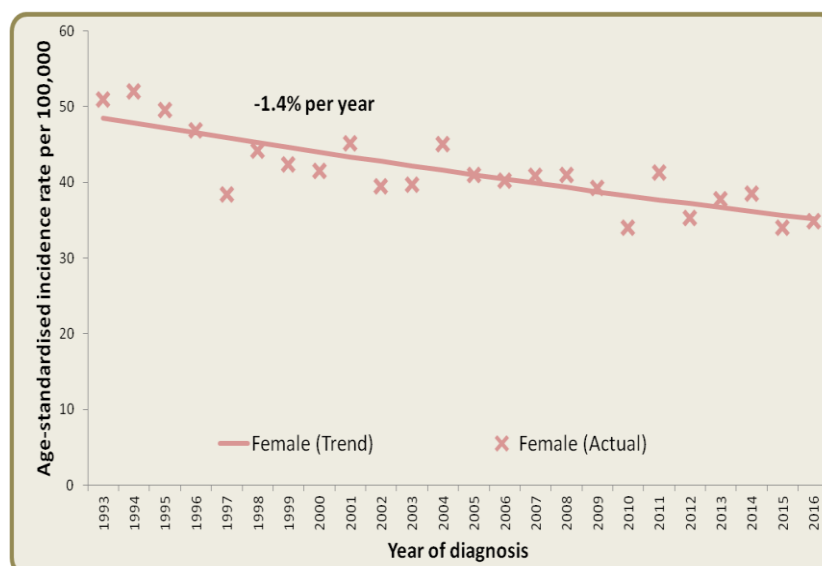
Mortality statistics are provided by the Northern Ireland General Registrar's Office. In 2012-2016 there were 306 female deaths from breast cancer each year.

Mortality trends

Over the last ten years, the number of breast cancer deaths have changed from 309 among women in 2007 to 307 among women in 2016.

When adjusted for age and population change, female breast cancer mortality rates decreased by -1.4% per year during 1993-2016.

Figure 7: Trends in female breast cancer mortality rates: 1993-2016



At the end of 2016 there were 15,374 females living in NI who had been diagnosed with breast cancer from 1993-2016 (Table 5). Of these, 42.1% were aged 70 and over and 8.3% had been diagnosed in the previous year.

PREVALENCE

Table 5: Number of people living with breast cancer at the end of 2016 who were diagnosed from 1993-2016 by time since diagnosis

| Sex | Age | Time since diagnosis | | | | 24-year Prevalence |
|--------|----------|----------------------|-----------|------------|-------------|--------------------|
| | | 0-1 year | 1-5 years | 5-10 years | 10-24 years | |
| Female | 0-69 | 883 | 2,854 | 2,508 | 2,643 | 8,888 |
| | 70+ | 400 | 1,518 | 1,552 | 3,016 | 6,486 |
| | All ages | 1,283 | 4,372 | 4,060 | 5,659 | 15,374 |

FURTHER INFORMATION

Further data is available from the Northern Ireland Cancer Registry web site: www.qub.ac.uk/nicr

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