

# How many women are diagnosed with breast cancer?

Dr Jackie Walton, Dr Gill Lawrence

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#### **BACKGROUND**



Breast cancer mortality rates measure the number of people (men or women) per 100,000 population who have breast cancer recorded on their death certificate as the cause of death



If a person has an invasive breast cancer (C50) and a non-invasive breast cancer (D05), they will appear in the incidence rates for both types of breast cancer



Breast cancer incidence rates measure the number of breast cancers registered per 100,000 population



If a person has an invasive breast cancer (C50) in both breasts, they will appear twice in the incidence rates for invasive breast cancer

#### **METHOD**

This study analyses breast cancers diagnosed in England in 2008 (Source: National Cancer Data Repository 1985-09). Two cancer registrations were considered to be duplicates or recurrences and were eliminated from the dataset if they were:

- (1) two invasive breast cancers in the same patient with the same morphology and laterality
- (2) two non-invasive breast cancers in the same patient with the same morphology and laterality
- (3) non-invasive breast cancer after or within 3 months of invasive breast cancer in the same patient with the same morphology and laterality. Following de-duplication, two breast cancers in the same patient are assumed to be multiple primary breast cancers.

#### RESULTS

## How many women are diagnosed with breast cancer?

In 2008 in England, 43,433 women were diagnosed with breast cancer. Of these, 91.7% had their only breast cancer diagnosed in 2008.

Of the 43,433 women diagnosed with breast cancer in 2008,

35,749 (82.3%) had a single invasive breast cancer and 4,064 (9.4%) had a single non-invasive breast cancer.

# How many women have multiple primary breast cancer?

Of the 39,032 women diagnosed with invasive breast cancer:

- ❖ 3.4% had multiple primary breast cancer registrations in 2008
- ❖ 8.4% had multiple primary breast cancer registrations in 1985-2008.

Of the 4,401 women diagnosed with non-invasive breast cancer without invasive breast cancer:

- ❖ 1.0% had multiple primary noninvasive breast cancer registrations in 2008
- ❖ 7.7% had multiple primary breast cancer registrations in 1985-2008.

The number of breast cancer patients diagnosed in 2008 according to whether they presented with multiple primaries in 2008 and multiple primaries in 1985-2008							
	Invasive breast cancer patients		Non-invasive breast cancer patients (no invasive breast cancer in 2008)		All breast cancer patients diagnosed in 2008		
One breast cancer in 2008	37,708	96.6%	4,355	99.0%	42,063	96.8%	
Multiple primary breast cancers in 2008	1,324	3.4%	46	1.0%	1,370	3.2%	
Total	39,032		4,401		43,433		
One breast cancer in 2008 and no breast cancers in 1985-2007	35,749	91.6%	4,064	92.3%	39,813	91.7%	
Multiple primary breast cancers in 1985-2008	3,283	8.4%	337	7.7%	3,620	8.3%	
Total	39,032		4,401		43,433		

The number of breast cancers diagnosed in 2008							
	Invasive breast cancer patients *	Non-invasive breast cancer patients *	All breast cancer patients diagnosed in 2008				
Number of women	39,032	4,768	43,433				
Invasive (C50) breast cancers	40,017	380	40,017				
Non-invasive (D05) breast cancers	373	4,822	4,822				
*367 women were both invasive and non-invasive breast cancer patients in 2008							

### CONCLUSION

Annual breast cancer incidence rates calculated using the number of breast cancers diagnosed each year are 2.5% higher for invasive cancers (40,017 cancers, 39,032 women) and 1.1% higher for non-invasive breast cancers (4,822 cancers, 4,768 women) than incidence rates based on the number of women diagnosed each year.

Contact: Jackie Walton, Public Health England, jackie.walton@phe.gov.uk