THE HARD FACTS

For women worldwide, breast cancer is the most common cancer diagnosed and has the highest death toll. With improvements in screening and treatments over the past 50 years, more women are living longer, but the numbers reveal some tough challenges. By Amy Maxmen.

Age-standardized breast cancer incidence rates vary internationally by more than 13-fold. Disease diagnoses are more common in industrialized, Western countries that have high rates of screening; extremely low incidence rates in many developing countries in part reflect low screening rates and incomplete reporting.

> 72.3	25.9–36.2	Cases per 100,000
50.3–72.2	17.2–25.8	
36.3–50.2	≤ 17.1

GROWING PAINS

Women in the United States have a roughly 12% chance of developing breast cancer at some point in their life. But that risk increases when breast cancer runs in the family. Hereditary mutations in the tumour-suppressor genes *BRCA1* and *BRCA2* raise an individual's risks of developing breast cancer to 60% and 85%, respectively. Disregarding heritable factors, the likelihood of breast cancer through the decades is as follows:

11% Proportion of all cancer (men and women) that is breast cancer, second only to lung cancer (13%)

458,503

The number of women who died from breast cancer worldwide in 2008

ADVANCES FOR SOME

Increased screening and improved therapies have resulted in lower mortality rates in some population segments. But, although the decline is steep for white women, it is more gradual for African-Americans. The reasons range from inadequate access to healthcare services to biological differences that might reflect genes or environmental exposures.

SURVIVAL FACTORS

Many factors influence a woman's chance of survival, including how early the tumour is detected and the molecular profile of the tumour. Even so, women diagnosed now are much more likely to survive than women in decades past.

THE MALE FACTOR

Male breast cancer accounts for about 1% of all breast cancers. Although the incidence appears to be increasing, death rates have decreased by 3.3% a year since 2000.

BITTERSWEET SUCCESS

The cost of breast cancer is expected to rise as the population ages and patients live longer because of better — and more expensive — drugs. Because breast cancer is highly prevalent, it might have the highest price tag of any cancer by 2020. The chart projects the costs assuming a 2% increase in the initial treatment phase and a 2% increase in the final year of life.