

## Lifetime risk estimates

The risk estimates shown below represent the proportion of people expected to develop a given cancer during their lifetime. Estimates for the general population are based on observed cancers among people in the United States. Estimates for people with a BRCA1 or BRCA2 variant are based primarily on studies of people of European and Ashkenazi Jewish descent. Estimates for people with a BRCA1 or BRCA2 variant represent the risk of developing cancer by the age of 70 (for females) or during their lifetime (for males).

Cancer type	General population	BRCA1 variant	BRCA2 variant
Breast (female)	12.9%	45-85%	45-85%
Ovarian	1.1%	39-46%	10-27%
Breast (male)	0.1%	1-2%	7-8%
Prostate	12.6%	May have an increased risk*	Increased risk
Pancreatic	1.7%	May have an increased risk	Increased risk
Melanoma	2.1%	Research ongoing	Research ongoing

\* For males with a BRCA1 variant, some studies did not observe an increased risk for prostate cancer.

### References

1. Committee on Practice Bulletins–Gynecology, Committee on Genetics, Society of Gynecologic Oncology. (2017). "Practice Bulletin No 182: Hereditary Breast and Ovarian Cancer Syndrome." Obstet Gynecol. 130(3):e110-e126.
2. Evans DG et al. (2010). "Risk of breast cancer in male BRCA2 carriers." J Med Genet. 47(10): 10-1.
3. Surveillance Research Program, National Cancer Institute. "SEER\*Explorer: An interactive website for SEER cancer statistics." 2017-2019. Retrieved Dec 6, 2022, from <https://seer.cancer.gov/statistics-network/explorer/>
4. Tai YC et al. (2007). "Breast cancer risk among male BRCA1 and BRCA2 mutation carriers." J Natl Cancer Inst. 99(23):1811-4.