

Lasker award-winner urges wider genetic tests for cancer

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An American scientist Monday was awarded a top prize for discovering the location of the BRCA1 gene for breast cancer, and used the occasion to call for wider genetic testing of women.

Mary-Claire King was given the Lasker-Koshland Special Achievement Award in Medical Science for her lifetime of work. The award is among the top honors in the field of science, and is often called the "American Nobel."

In an article published in the *Journal of the American Medical Association* to coincide with the award, King said more [genetic testing](#) should be done to catch inherited cancers before it is too late.

"Based on our 20 years' experience working with families with cancer-predisposing mutations in BRCA1 and BRCA2, it is time to offer [genetic screening](#) of these genes to every woman, at about age 30, in the course of routine medical care," she wrote.

"To identify a woman as a carrier only after she develops cancer is a failure of cancer prevention," said King, a professor of genome sciences at the University of Washington School of Medicine in Seattle.

Actress Angelina Jolie raised attention to the issue of inherited gene flaws when she announced she had tested positive for the mutations and had undergone a preventive double mastectomy last year.

Between one in 300 to one in 500 women in the United States is believed to carry what King described in her article as an "actionable mutation in BRCA1 and BRCA2."

That means between "250,000 and 415,000 adult women for whom breast and [ovarian cancer](#) is both highly likely and potentially preventable," she said.

Breast cancer affects about 12 percent of women overall, but among [women](#) who inherit an abnormal version of BRCA1 or BRCA2, 45-65 percent will develop [cancer](#) by age 70.

Currently, the US Preventive Services Task Force (USPSTF) supports BRCA1 and BRCA2 testing based on family history and ancestry, but not for the entire female population.

King was honored with the award for "bold, imaginative, and diverse contributions to medical science and human rights," the Lasker website said.

She was also recognized for using DNA technology to help reunite missing children in Argentina with their mothers and grandmothers by developing a forensics approach relying on mitochondrial DNA, which passes from mother to child.

"King helped prove genetic relationships and thus facilitated the reunion of more than 100 of the children with their families," the Lasker Foundation said.

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