**Women who live in more polluted areas 'at higher risk of breast cancer'**

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**Women who live in areas with high**[**pollution**](http://www.standard.co.uk/topic/pollution)**levels are at higher risk of developing**[**breast cancer**](http://www.standard.co.uk/topic/breast-cancer)**, new research showed.**

Those who face high levels of fine particles in the air regularly may have denser breasts, scientists revealed.

Women deemed to have "high breast density" are at a significantly higher risk of developing breast cancer than others, according to doctors.

Denser breasts are made up largely of connective tissue whereas less dense breasts are made up mainly of fat.

The study, published in the journal Breast Cancer Research, examined data from nearly 280,000 women in the [US](http://www.standard.co.uk/topic/america) with an average age of 57.

Six in 10 lived in urban areas and the rest lived in the countryside.

Participants all had a mammogram between 2001 to 2009.

Researchers found women with dense breasts were 19 per cent more likely to have been exposed to higher concentrations of fine particle matter (PM2.5).

For every one unit increase in PM2.5, a woman's chance of having dense breasts was increased by 4 per cent, they said.

Dr Lusine Yaghjyan, from the University of Florida who helped conduct the study, said: "Our findings suggest that previously reported geographic variation in breast density could, in part, be explained by different air pollution patterns in urban and rural areas.

"Breast density is a well-established and strong breast cancer risk factor so future studies are warranted to determine if the observed associations are causal, which if confirmed may have implications for risk prevention."