

# Does the weather cause northerners to get more prostate cancer?

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Cold, dry weather has been linked to an increased incidence of prostate cancer. Researchers writing in BioMed Central's open access *International Journal of Health Geographics* suggest that meteorological effects on persistent organic pollutants, such as some pesticides and industrial by-products, may be to blame.

Sophie St-Hilaire worked with a team of researchers from Idaho State University, USA, to study the correlation between various weather parameters and the incidence of prostate cancer at the County-level across the US. She said, "We found that colder weather, and low rainfall, were strongly correlated with prostate cancer. Although we can't say exactly why this correlation exists, the trends are consistent with what we would expect given the effects of climate on the deposition, absorption, and degradation of [persistent organic pollutants](#) including pesticides".

Approximately one in six men will develop prostate cancer in their lifetime and across the [northern hemisphere](#), it has been reported that incidences are higher in the north than the south. It is known that some persistent organic pollutants cause cancer and researchers believe that cold weather slows their degradation, while also causing them to precipitate towards the ground. Rain and humidity also play important roles in their absorption and degradation. According to St-Hilaire, "This study provides an additional hypothesis for the north-south distribution of prostate cancer, which builds on the existing supposition that individuals at northern latitudes may be deficient in Vitamin D due to low exposure to UV radiation during the winter months. Our study

suggests that in addition to [vitamin D deficiency](#) associated with exposure to [UV radiation](#), other meteorological conditions may also significantly affect the incidence of [prostate cancer](#)".

**More information:** Correlations between meteorological parameters and prostate cancer, Sophie St-Hilaire, Sylvio Mannel, Amy Commendador, Rakesh Mandal and DeWayne Derryberry, International Journal of Health Geographics (in press), [www.ij-healthgeographics.com/](http://www.ij-healthgeographics.com/)

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