

Arsenic in Goldfields soil needs monitoring

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Exposure to arsenic in soil and mine waste may have contributed to a slight increase in past cancer risk in socio-economically disadvantaged areas in the Goldfields region of Victoria, according to new research published in the *Journal of Exposure Science and Environmental Epidemiology*.

Researchers from the University of Ballarat have released findings showing that the incidence of some cancers between 1984 and 2003 was slightly higher in areas with higher <u>arsenic levels</u>.

Dr Dora Pearce, now at the Melbourne School of Population Health, University of Melbourne, explored how <u>soil</u> arsenic levels and cancer rates varied across central Victoria.

By using 20 years of data from the Victorian <u>Cancer</u> Registry and a measure of soil arsenic derived from geochemical data provided by the University of Ballarat and GeoScience Victoria, Dr Pearce has concluded that ongoing recorded monitoring of environmental sources of arsenic is needed.

"Arsenic is naturally occurring around gold mineralisation and is even used as an indicator in gold exploration, so it can be concentrated in soil and mine waste dumps that are still scattered across our landscape," Dr Dora Pearce said.

In the Goldfields region, many residential communities have grown up around historical gold mining areas.



"Our previous research detected small traces of arsenic in toenail clippings from children living in this region, showing that exposure to arsenic in soil could be an ongoing problem and that we should not be too complacent.

"We hope that by raising community awareness of this issue, childhood exposures to <u>arsenic</u> in soil, and future <u>cancer risk</u>, will be reduced in the Goldfields region of Victoria," Dr Pearce said.

Provided by University of Melbourne

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