

**Conclusions** Given the paucity of information about historical levels of As in the air, it was not possible to demonstrate any effect on the observed added risk of cancer. We have strong evidence of cancer risk as being associated to the presence of As in drinking water. Ingested As was selectively related to lung, bladder, liver, kidney and skin cancers, but no effect was observed for gastric cancer. Ingested As explains most of the cancer risk differences between Chilean municipalities.

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## **Arsenic and its impact on health**

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Arsenic contamination of groundwater is increasingly recognized as a health concern. Overwithdrawal of groundwater appears to be the cause of the contamination by arsenic. The arsenic in groundwater occurs as As(III) and As(V), in varying proportions. As(III) is much more toxic than As(V). After it is ingested, most arsenic undergoes detoxification in the liver and is excreted through the kidney. The remaining arsenic is responsible for the health hazard. Dhaka Community Hospital and the School of Environmental Studies (SOES), Calcutta, jointly carried out a survey of tube-wells in 60 districts of Bangladesh, and of patients in 21 districts. So far, we have found 41 districts with wells contaminated with arsenic above the maximum permissible limit (0.05 ppm), and we have identified more than two thousand patients. The total area and population of these 41 districts are 89 186 km<sup>2</sup> and 76.9 million respectively.

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