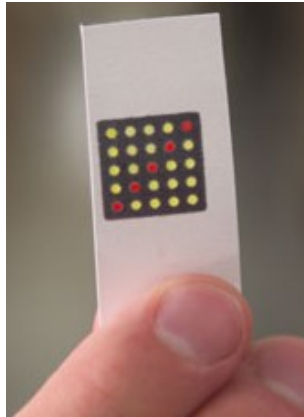




Ultra-low cost paper-based biosensors for arsenic contamination of water in resource limited countries



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Risk of arsenic/mercury contamination

Arsenic contamination of groundwater



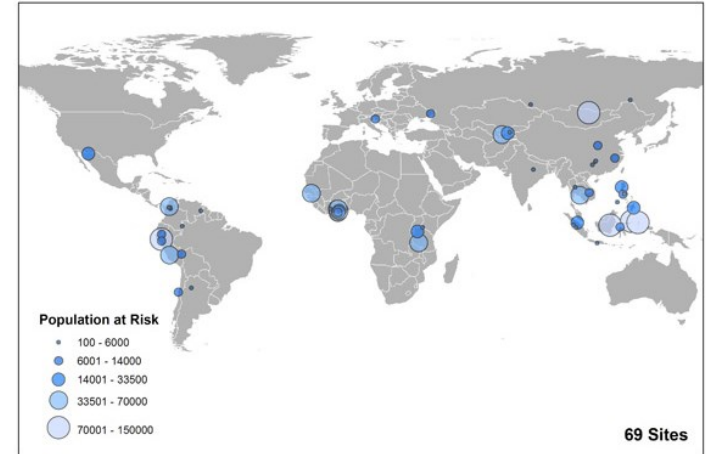
150 million - biggest poisoning in history



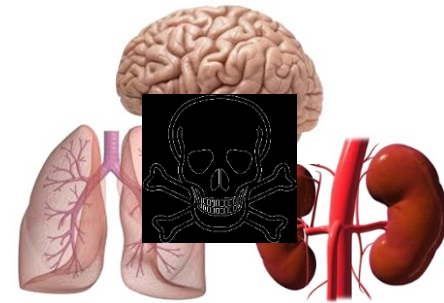
'Blackfoot', high risk of cancer

WHO safety limit:
10 ppb (0.133 μM)

Mercury pollution from mining & ore processing



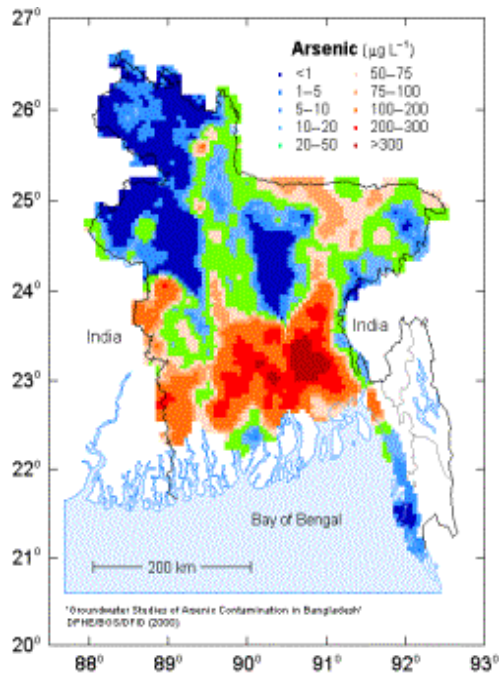
Extremely toxic



Neurotoxic, tissue damage

WHO safety limit:
2 ppb (0.01 μM)

Arsenic water contamination in Bangladesh



**ca. 10 million wells
half over >50 ppb**



- Half of Bangladesh population at risk of arsenic poisoning
- Long-term exposure leads to arsenicosis, cancers and discrimination
- Labour supply in rural Bangladesh 8% smaller and 6% total deaths attributed to arsenic contamination
- GDP loss from arsenic-attributable mortality \$ 6-20 billion over 20 years

New GCRF funding opportunity on water quality



Water Quality in India - Scoping Workshop

Announcement of Workshop – Call for Participants

17 - 18 November 2016, India (the venue will be confirmed in due course)

The deadline for applications is 16:00 (BST) 16 September 2016.

Invited participants will be notified in the week commencing 19 September 2016.

1. Summary

The Natural Environment Research Council (NERC) and the Engineering and Physical Sciences Research Council (EPSRC) are inviting applications from UK scientists to attend a jointly organised workshop with the Indian Department of Science and Technology (DST), in Delhi on 17 - 18 November 2016. Over two days the aims of the workshop will be:

1. To define the scope of a potential new UK/India interdisciplinary programme focussed on research contributing to improved water quality, and through this support the economic development and welfare of India.
2. To facilitate links between the UK and Indian research communities in the area of water quality research.

Acknowledgements

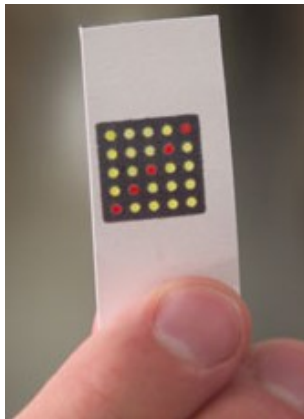
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