





ARSENIC | WHAT YOU NEED TO KNOW


1 Possible sources of exposure


 Food (processed grain-based products)

 Contaminated drinking water (mainly from ground sources)

 Tobacco smoke


 Fumes from copper or lead smelting plants and their residues

 Residues in former agricultural lands treated with arsenic-based pesticides

 Contaminated soil

2 How can arsenic enter your body?

 Via ingestion

 Via inhalation


 Via dermal absorption


Where can it possibly be found?


Arsenic (As) is a natural element that can be found in the environment, being present in rocks and soil, water, air, and in plants and animals.


! There are two types of arsenic forms: inorganic and organic. *Inorganic arsenic* compounds contain arsenic combined with elements other than carbon and this form of arsenic tends to be the very toxic to humans. It may occur in drinking water and in soils, in some parts of the world where it either exists naturally or as a result of human activities in some industries. *Organic arsenic* compounds contain arsenic combined with carbon and other elements.

3 How might arsenic affect your health?

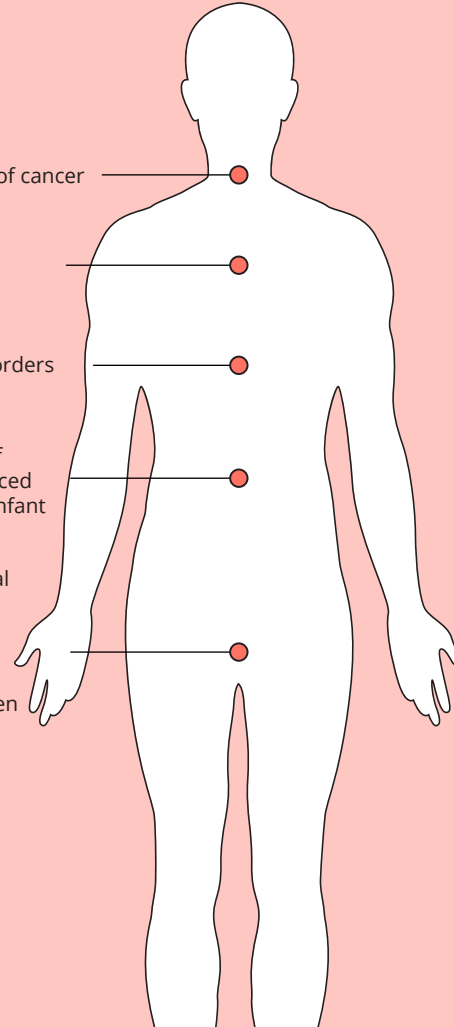
 Several types of cancer

 Skin disorders


 Metabolic disorders


 Reproductive toxicity (risk of stillbirth, reduced birth weight, infant mortality etc.)


 Developmental anomalies and potential neurological damage for unborn children and infants





4 How can you reduce your exposure to arsenic?

 Avoid smoking as well as inhaling tobacco smoke passively

 If you use a well as a drinking water source, have it tested for arsenic


 Eat a well-balanced diet, alternating the consumption of rice with other grains like millet, quinoa, buckwheat, farro or bulgur. Cooking rice in excess water, which is then drained, can reduce inorganic arsenic content by 40 to 60%, although this also reduces the nutritional content (folate, iron, niacin, thiamine)

 Check the recommendations of your national government or paediatric associations for the nutrition of children. In some countries, young children under five are advised to avoid rice milk as a substitute for breast milk, infant formula or cow's milk

 Make sure you and your children wash your hands often, especially before eating

//

The European Union has been taking actions to protect citizens from harmful exposures to arsenic. These include setting maximum levels for arsenic in certain foods and harmonizing requirements for arsenic in drinking water, as well as occupational safety requirements. Arsenic is regulated under EU chemicals legislation and the use of arsenic compounds is restricted under REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals). Arsenic is classified as toxic and carcinogenic under CLP ("Classification, Labelling and Packaging") Regulation.

 For further information on arsenic, please visit the 'HBM4EU Factsheet' section.