

# Lead: IQ Alert

The toxic effects of lead have been known for centuries: severe anaemia was common among aristocratic women who relied on lead-based powder to meet their desire for a fair complexion. Workers in lead mines, constantly exposed to high doses of lead, frequently suffered convulsions and even death.

Lead continues to be present in our surroundings as an additive to gasoline, an ingredient of paint and pottery glaze, or the main material of old water pipes. Children are at the greatest risk because lead is more easily absorbed by their growing bodies, and because their tissues are especially sensitive to damage. They may swallow lead in dust from decaying lead-based paint or suck the ceramic beads of necklaces. Even blood lead levels as low as 5 micrograms per decilitre can irreversibly impair the development of children's brains, reducing their IQ.

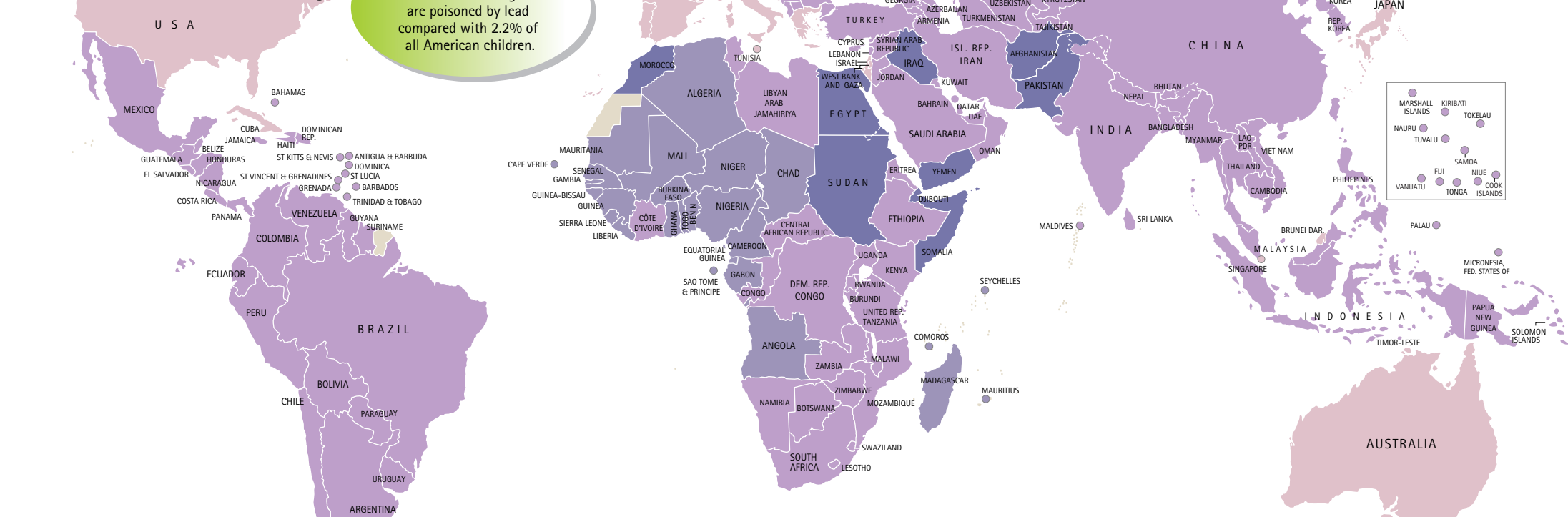
This threshold level is still exceeded around the world, particularly in children in the cities of developing countries. Industrialized countries have made progress by phasing lead out of gasoline, banning lead in many consumer goods and replacing lead pipes with copper pipes. Lead-based paint, however, continues to be a considerable problem in North America.

A potential link between elevated lead levels and antisocial behaviour and delinquency makes tackling this problem even more urgent.



Lead-free environments enable successful learning.

21.9% of African-American children in older housing are poisoned by lead compared with 2.2% of all American children.



**Lead in children's blood**

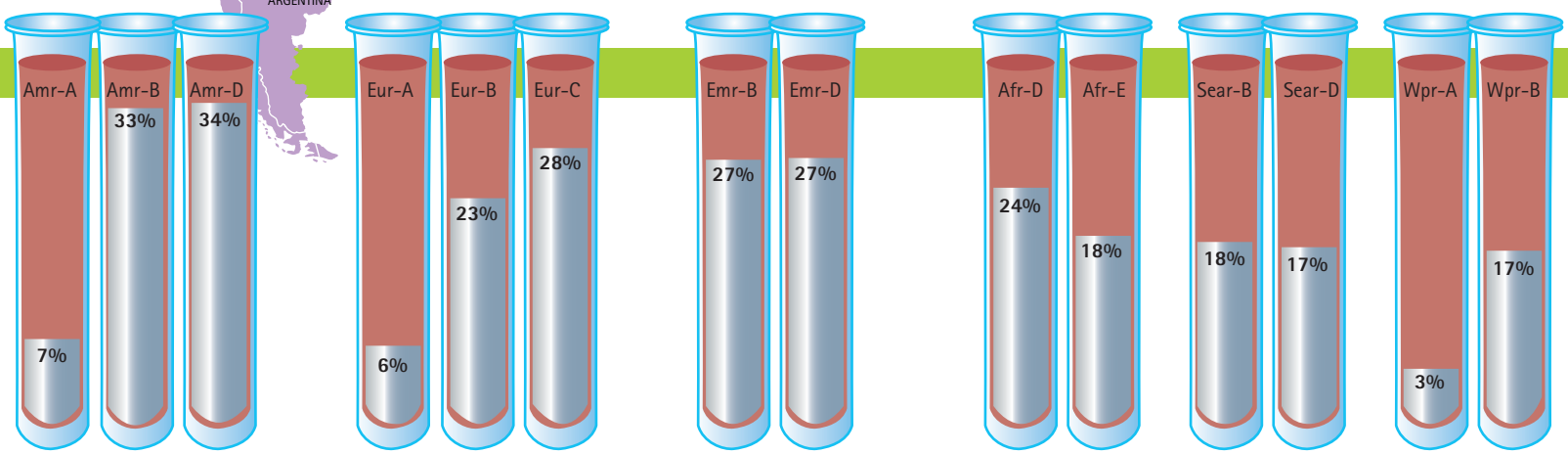
Mean blood lead level in urban children by WHO sub-region 2002 or latest available data micrograms per decilitre (µg/dl)

- over 15.0
- 10.1 - 15.0
- 5.1 - 10.0
- 5.0 and under
- no data

**Blood and lead**

Percentage of children with blood lead levels above 10 micrograms per decilitre (µg/dl) 2002 or latest available data by WHO sub-region

Blood lead levels above 10 µg/dl are a serious cause for concern.



The Americas Europe Eastern Mediterranean Africa South-East Asia Western Pacific