

ZAMFARA LEAD POISONING OUTBREAK – THE CHALLENGES OF RESPONDING TO MASSIVE MORTALITY FROM ENVIRONMENTAL CONTAMINATION IN A LOW RESOURCE SETTING

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In March 2010 a Médecins Sans Frontières team doing endemic disease surveillance in Zamfara state, Northern Nigeria uncovered an outbreak of severe lead poisoning with over 400 deaths in children ≤ 5 years. In April 2015 severe lead poisoning with child deaths was also discovered in 2 villages in Niger state. The source is primarily ingestion of soil contaminated with lead from artisanal gold mining. A relatively recent shift from alluvial mining to deep ore rock gold mining and mechanised grinding in the context of geological areas of lead-rich ore is thought to be the cause. Areas in 3 other states are also heavily contaminated making future outbreaks likely.

The geographical areas concerned are remote and the populations affected already very marginal. Diagnosing the outbreaks, source control, remediation and chelation present unique challenges in this context. This talk explores the lessons learned and future challenges for Nigeria in addressing this complex issue.