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Global Alliance on Health and Pollution (GAHP)

A collaborative body tasked with coordinating resources and activities to assist low- and middle-income countries to take concrete action to address chemicals, wastes and toxic pollution and their impacts on human health, including remediation and prevention of future contamination.
24 Members and Growing

Countries: Cameroon, Ghana, Indonesia, Madagascar, Mexico, Peru, Philippines, Senegal, Tajikistan, Uruguay
As many as 200 million people exposed
  - at **dangerous** levels
  - in the low- and middle-income countries.

Wealthy countries
  - shifted manufacturing and mining overseas
  - poorer countries have inadequate pollution controls.

Poorest bear the burden

Smaller local companies, abandoned sites, or artisanal sites are the main source of exposure – **not** multinationals.
Chemicals and Waste

- Is best understood by thinking about the places where people (especially children) are harmed

- Solutions can then be designed appropriately
  - Regulation, enforcement, controls
  - Education
  - Remediation

- Focus on prevention before remediation

- Polluter pays (where possible)
Impacts on Poverty & Economic Growth

- Poor disproportionately impacted, especially women, fetuses and children
- Exposures can cause long-term developmental and health problems
- Toxic chemicals can bioaccumulate up the food chain, impacting agricultural production
- Urban contamination can drive down property value and economic investment potential
Lead (Pb) can significantly decrease intelligence quotient (IQ) of communities and contribute to societal violence.

Caravanos et al. (2013) showed lead exposures at 82 sites in 7 Asian countries were associated with significant loss in IQ.
Burden of Disease

- Amount of disease in three countries (India, Indonesia, Philippines) is at least as large as malaria or outdoor air pollution (Chatham Stevens et al, Environmental Health Perspectives Feb 2014)

- Pending research indicates more significant global health impact

- Issue has been largely solved in the developed world

- Developing country governments and the international community just beginning to recognize the problem’s scale
Ten Key Types of Toxic Sites

- Lead – Battery recycling and smelters
- Mercury – Artisanal gold mining
- Chromium – Tanneries and industry
- Heavy metals – Mine drainage
- Pesticides – Storage and misuse
- Chemicals weapons residuals
- Industrial estates runoff
- Hazardous waste dumpsites
- E-waste
- Uranium processing
Toxic Site Identification Program

- Purpose:
  - to understand the global scale of the problem
  - to prioritize sites for cleanup
- Rapid evaluation of toxins and population affected by local investigators
- Only examines sites where people are at risk
- Allows ranking according to a relative health risk
- First database of its kind
- 48 countries to date, but far from comprehensive
- Partners: EC, UNIDO, World Bank, ADB, Blacksmith, others
More than 3,200 Sites have been Identified and more than 2,600 of these have been assessed on-site.
Strategies for Success

- **Senegal: Lead Remediation in Dakar:** 18 children age 5 died from lead poisoning from lead acid battery recycling. Multistakeholder intervention cleaned up the neighborhood, conducted awareness raising and alternative livelihood training.

- **Nigeria: Emergency Intervention in Zamfara:** >400 children died from lead poisoning from artisanal gold mining. International multistakeholder intervention trained local government in health monitoring, remediation, and miner training.

- **Bolivia, Indonesia: Promoting Mercury-Free Gold Mining:** direct smelting practices that yield more gold without using mercury are being tested and promoted.
Summary

- Toxic pollution affect more than 200 million – global health problem of scale.

- The poor are most affected and vulnerable

- Interventions and clean up can:
  - Improve environment
  - Reduce human health risks
  - Improve access to clean soil, water and air
  - Improve recovery of resources such as gold, lead
  - Free up land for other purposes (agriculture, businesses/development, parks, housing) and relieve pressure from rapid urbanization
  - Lead to positive implications for poverty reduction, productivity and economic growth; and thus

- Help fuel growth and sustainable development
Sustainable Development Goals

- Need to incorporate chemicals, wastes and toxic pollution into the SDGs in order to achieve sustainable development in the 21st century.

- Review UNEP’s ideas for details on indicators and language

- Chemicals and wastes, especially from contaminated sites, should not be a burden on the health of local populations and children.

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