Lead in Consumer Goods: A 25 Country Analysis of Lead (Pb) Levels in 5,000+ Products and Foods

Between 2021 and 2023, researchers analyzed lead concentrations in thousands of products and foods from markets across 25 countries. This assessment improves our understanding of which products are most likely to be lead-contaminated, and how contamination levels vary across a diverse set of low- and middle-income countries.

KEY FINDINGS

High-level findings by product type

<table>
<thead>
<tr>
<th>Product Type</th>
<th>% of Samples Above Reference Level</th>
<th>% of Samples</th>
<th>% of Samples</th>
<th>% of Samples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spices</td>
<td>2%</td>
<td>13%</td>
<td>41%</td>
<td>52%</td>
</tr>
<tr>
<td>Metallic Foodware</td>
<td>12%</td>
<td>12%</td>
<td>45%</td>
<td>3%</td>
</tr>
<tr>
<td>Paint (Large Surface)</td>
<td>11%</td>
<td>48%</td>
<td>11%</td>
<td>4%</td>
</tr>
<tr>
<td>Cosmetics</td>
<td>12%</td>
<td>45%</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Ceramic Foodware</td>
<td>1%</td>
<td>52%</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Staple Dry Foods</td>
<td>1%</td>
<td>1%</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Toys</td>
<td>13%</td>
<td>52%</td>
<td>3%</td>
<td>4%</td>
</tr>
</tbody>
</table>

Metallic and ceramic foodware and paints contained the highest levels of lead

High-level findings by country

Read the full report:
**KEY RECOMMENDATIONS**

1. **Blood lead level testing**
   Governments and their development partners should explore and invest in ways to generate primary data on children’s blood lead levels so resources can be allocated appropriately, and so progress can be measured.

2. **Home-based source assessments**
   Blood lead level surveys should be conducted in conjunction with in-home source analyses to establish connections between contaminated products and actual incidents of lead poisoning.

3. **Research into foodware leachability and use**
   Research is needed to tell us concretely what lead dose a person is likely to receive from each use of a pot or pan. Field research is also needed to determine if lead contaminated foodware is used in settings where high concentrations of children could be exposed.

4. **Establish recommended limits for total lead in foodware**
   Regulators should consider setting a maximum allowable concentration for total lead at the lowest achievable level. If exceptions are needed, regulations should force producers to demonstrate that products exceeding the allowable level would not leach lead into food under any condition.

5. **Track cosmetics to production sources**
   There is a need to track commonly contaminated cosmetics to their production facilities and then work with governments and producers to eliminate lead use.

6. **Enact and enforce lead paint laws**
   All governments should enact and enforce regulations limiting lead in paint and consider guidance provided in the UNEP Model Law And Guidance for Regulating Lead Paint developed by the Global Alliance to Eliminate Lead Paint.

7. **Replicate programs to eradicate spice adulteration**
   Successful efforts to stop the adulteration of spices with lead-based pigments in Bangladesh and Georgia should be adapted to other countries with similar challenges, particularly Northern India and Pakistan, where recent assessments suggest a pattern of adulteration.