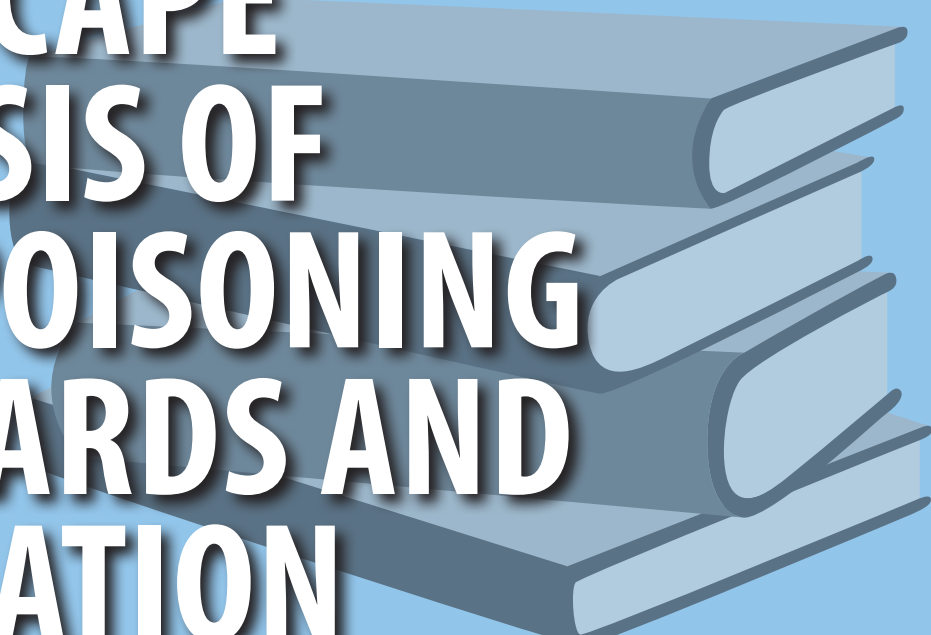


LANDSCAPE ANALYSIS OF LEAD POISONING STANDARDS AND LEGISLATION

A 3D illustration of a stack of four books, rendered in shades of blue and grey, positioned behind the title text.

BACKGROUND

Lead poisoning poses a significant and growing threat in Bangladesh, with profound impacts on public health and the environment. Exposure to lead, even at low levels, can result in severe health issues, including cognitive impairments in children, cardiovascular problems, and kidney damage in adults. The environmental consequences are equally alarming, as lead contaminates soil and water, affecting ecosystems and food safety. Although Bangladesh has issued the “Notification on Mandatory Standards for Household Paints” (SRO No. 218-Ain/2018) and the updated “Lead-Acid Battery Recycling and Management Rules, 2021” (SRO No. 29-Law/2021), these measures fall

short of fully addressing the health, environmental, and occupational safety impacts.

PURPOSE

Recognizing these challenges, the Environment and Social Development Organization (ESDO) is preparing a policy brief to recommend comprehensive strategies for the effective implementation of lead regulations. This policy brief will address current legislative gaps, propose actionable solutions, and outline measures to enhance enforcement and monitoring, ultimately aiming to safeguard public health and the environment from the detrimental effects of lead exposure.

CURRENT STANDARDS AND LEGISLATION

Existing Regulations	Gaps in the Regulations
<p>1. Mandatory Standard for Household Paints (SRO No. 43-Law/2018): This SRO limits the lead content in decorative paint. It sets a maximum allowable limit of 90 parts per million (ppm) for lead in paints, aligning with international best practices.</p>	<ol style="list-style-type: none"> 1. The SRO doesn't outline clear mechanisms for enforcing the 90 ppm limit. 2. Lack of infrastructure for systematic monitoring and testing of lead content in paints, including accredited laboratories and standardized testing procedures. 3. No mention of manufacturers and importers regularly reporting compliance data or submitting samples for testing. 4. No Differentiation by Color and no mention of mandatory labeling 5. The SRO is limited to decorative paints and does not set standards for lead content in industrial paints 6. The SRO does not address other products that may contain lead, such as varnishes, coatings, and certain types of plastic or metal finishes.
<p>2. The Environment Conservation Act, 1995 & Environment Conservation Rule, 2023: These two parental laws oversee the environmental regulations that indirectly impact paint manufacturing and disposal. These also address the ecological management of hazardous substances used in paint production.</p>	<ol style="list-style-type: none"> 1. Insufficient infrastructure for systematic monitoring of lead levels in the environment, including laboratories and field equipment. 2. The rule doesn't mandate comprehensive reporting of lead contamination data by industries, municipalities, or other relevant entities.
<p>3. Lead-Acid Battery Recycling and Management Rules (SRO-45-Law/2021): This SRO addresses the institutions associated with lead acid battery preparation and recycling. This provides a binding guideline for the safe collection, transportation as well as aims to minimize environmental contamination and occupational health risks associated with lead exposure.</p>	<ol style="list-style-type: none"> 1. Absence of Technology Standards. 2. Inadequate Environmental Safeguards. 3. Insufficient Safety Protocols. 4. The SRO lacks mechanisms to bring informal recyclers under regulatory oversight. 5. The SRO might not include policies to integrate informal recyclers into the formal economy 6. No mention of Mandatory Health Screenings for the recyclers
<p>4. Bangladesh Food Safety Act 2013: This Act has been enacted to achieve the framework of sustainable economic growth (Goal 2) to ensure access to safe food.</p>	<ol style="list-style-type: none"> 1. The act does not specify permissible limits for lead in food colors 2. There may be no comprehensive standards governing the presence of lead in all types of food additives, including artificial colors used in processed foods. 3. No MRL (Maximum residue limit) for spice, egg, chocolate 4. No limit for daily/weekly/monthly intake of foods containing lead. 5. Lack of coordination between authorities 6. Only Punishment (fine) exists for food adulteration

Existing Regulations	Gaps in the Regulations
<p>5. Hazardous Waste (Control of Export, Import and Transit) Rules, 2003: The Rules contain the import, export, and transit of hazardous wastes, including those containing lead. It also ensures proper management and disposal of hazardous wastes to prevent environmental contamination.</p>	<ol style="list-style-type: none"> 1. The regulation lacks comprehensive mechanisms for continuous monitoring and reporting of lead levels in imported, exported, and transited hazardous wastes, making it difficult to track and manage lead contamination effectively. 2. The regulation does not mandate thorough environmental impact assessments (EIAs) specifically focused on lead contamination, which can lead to inadequate identification and mitigation of potential environmental and health risks associated with lead in hazardous wastes.
<p>6. The Occupational Health and Safety Policy, 2013: It aims to protect workers from health risks associated with occupational exposure to hazardous substances, including lead. It also ensures safer working conditions in industries that handle lead-containing products.</p>	<ol style="list-style-type: none"> 1. Inadequate Specificity in Lead Exposure Limits 2. Limited Risk Assessment Procedures 3. Insufficient Training and Awareness Programs 4. Lack of Monitoring and Enforcement Mechanisms

Recommendations for Addressing Gaps

(Recommendations from the Stakeholder Consultation on Landscaping Legislations, Policies, and Standards on Lead Poisoning in Bangladesh)

Bangladesh Food Safety Act, 2013

1. For **Infrastructure Development**, designated laboratories are needed (at least 10 laboratories), and the capacity should be improved to maintain the international standard and research purpose for public interest. Well-trained experts are needed. ISO Certified 3rd party recognition for Lab selection should be there. Tax benefits can bring the small companies or informal sectors into formal ones
2. Introducing a clear **enforcement mechanism** along with coordination with all stakeholders. BSTI and other government agencies shall have the enforcement power. Authorized agencies should create awareness building from the farmer level and provide training

3. A baseline data is needed to set the limit, especially for daily or weekly food intake. MRL has to set maximum food.
4. Proper waste management is crucial, especially e-waste so that the hazardous materials can't mix with our food chain. We should also think of Transboundary waste or revisiting the land of the pollution. Also, should take proper action to prevent soil adulteration or pollution.

SRO No. 43-Law/2021: Lead Paint Standards for the Decorative Paint

1. New binding standard for lead paint should be imposed to 40 to 50 ppm including the industrial paint. The price and standard should be fixed for color-based products as the lead-level may vary from product to product. Also, specialized standards on toys, children's color, and other children's products are needed
2. Certification for lead-importing products should be mandatorily required from the affiliated organization. Testing from 3rd party labs should be mandatory. Testing should follow the standard testing regulation. Also, the test report should

be publicly accessible. Availability of the test equipment, and more research should be initiated by establishing lead control cells.

3. Reform tax on lead-free products, impose a tax on lead-bearing imported products and consider lead as a necessary product, not a luxurious one. Statutory Duties should be withdrawn or restructured from lead-free paint
4. 3R in the paint industry (reuse, recycle, and rework) should be implemented. Monitoring at the field level is necessary

SRO-45-Law/2021: This SRO addresses the institutions associated with lead acid battery preparation and recycling

1. To **strengthen enforcement and compliance**, the Government should establish a dedicated regulatory body with adequate resources and trained personnel to monitor and enforce compliance with the SRO. Also, in need for the formalization of many informal sectors. Formalize the electric vehicle sector under monitoring and legislation. For enforcement mechanisms, need for inspections of recycling facilities, coupled with substantial penalties for non-compliance.
2. **Protocol** should be developed and shared with the different stakeholders. Also, need to develop checklist of lead-related companies. The industries must implement the rules framed in labor laws. Develop and implement the zonal guideline.
3. For **Improving Environmental Protections**, the government and industries need to develop detailed guidelines for the safe handling, storage, and disposal of hazardous waste. Along with, require regular monitoring and reporting. Related VAT should be reduced from 15% to

5%. Encourage the adoption of sustainable technologies and best practices in the recycling process. Focus on data collection and share data with the mass people about lead exposure.

4. To **Integrate the Informal Sector**, the government should create programs to formalize informal recyclers, including training, certification, and financial support for upgrading their operations to meet regulatory standards. In addition, listing and mapping informal sectors with the help of 8 formal and business sectors. Provide incentives such as grants or low-interest loans to informal recyclers to help them transition into the formal sector. Create awareness as own corporate liability regarding development program related to health issues against lead pollution.

Successful policies from other developing countries can Bangladesh adopt to reduce lead poisoning from various sources, and how can these be adapted to the local context

- ▶ Monitor that the 90 ppm standard in household paints remains the same.
- ▶ Identify the products with the highest chance of lead contamination, and list them according to their hazards and extent of environmental contamination.
- ▶ Protocol should be developed and shared with the different stakeholders like – formal and informal sectors.
- ▶ Inspection under labor law should check the lead level in the blood of the workers.
- ▶ Check the list of lead-related companies.
- ▶ Develop and implement the zonal guideline.
- ▶ Tax/VAT exemption on both risks for mass people.

For further information:

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