Visioning Document of the G7 Expert Meeting on Concrete International Cooperation to Address Lead Pollution and Exposure in Low- and Middle-Income Countries

I. Executive Summary

In 2023, G7 Environment Ministers reiterated their commitment to reduce lead pollution and exposure in the 2023 Environment Ministers Communique, agreed to in Sapporo, Japan in April 2023.[1] The 2023 Communique reaffirms Ministers' commitment to "support […] capacity building for sound management of chemicals and waste through multilateral financial mechanisms, and regional and bilateral technical assistance," in addition to taking into account relevant elements of the outcome document in a previous workshop.

The Communique also welcomed a second experts meeting, to be held by Germany, the EU, and the US. This meeting took place on November 21, 2023, and builds on the outcomes of the 2022 workshop, aiming to identify concrete activities that G7 countries can take under the various actions identified in the 2022 G7 lead workshop to reduce lead pollution and exposure.

This visioning document was developed to help guide the discussions of the expert meeting and is an outcome of the expert meeting. It lays out potential opportunities for future concrete action by G7 Members and others to address lead pollution and exposure in low- and middle-income countries (LMICs). This document was informed by a rapid screening assessment of major, known existing work, and from discussions held at the expert meeting.

II. Introduction

Lead is a potent neurotoxin and exposure to lead, even at very low levels, can cause chronic and debilitating impacts on multiple body systems leading to personal, societal, and economic impacts. Exposure of young children and pregnant women is of particular concern, as lead can impact child neurodevelopment and IQ. There is no safe level of lead exposure, and one in three children is estimated to have elevated levels of lead.[2] A recent estimate by the World Bank indicates that the global cost of the health effects of lead exposure to be US$6 trillion dollars or 6.9 percent of global gross domestic product (GDP) with economic costs higher in low- and middle-income countries (10 percent GDP). Lead exposure is estimated to cause 5.5 million premature deaths per year, primarily due to cardiovascular disease, which has been linked to chronic exposure to lead.[3, 4] Lead was identified as one

[1] G7 2023 Hiroshima Summit (2023). G7 Hiroshima Leaders' Communique. https://www.g7hiroshima.go.jp/documents/pdf/Leaders_Communique_01_en.pdf

[2] UNICEF 2020. Toxic Truth report. https://www.unicef.org/reports/toxic-truth-childrens-exposure-to-lead-pollution-2020

[3] Larsen, B., E. Sanchez-Triana (2023). Global health burden and cost of lead exposure in children and adults: a health impact and economic modelling analysis. Lancet Planet Health 7: e831–40. https://doi.org/10.1016/S2542-5196(23)00166-3

[4] Lamas et. al. (2023) Contaminant Metals as Cardiovascular Risk Factors: A Scientific Statement from the American Heart Association. Journal of the American Heart Association. Vol. 12, No. 13. https://www.ahajournals.org/doi/10.1161/JAHA.123.029852

of ten chemicals of major public health concern globally,[5] and it was recognized as an important issue for action by the World Health Organization (WHO) and its Member States in the 2023 World Health Assembly.[6] Communities in low and middle income countries (LMICs), especially underserved and vulnerable populations with children living in poverty, are disproportionately at risk for health impacts from exposures to lead.[7]

The successful global phaseout of lead from petrol and current work to address other sources, such as lead in spices, paint, batteries, and industrial releases, have shown that interventions are needed and can be effective to reduce exposure to lead. More work needs to be done to identify and reduce lead exposure in LMICs.

To this end, Environment Ministers of Group of 7 (G7) Members signaled a strong commitment to reduce lead pollution and exposure in their 2022 and 2023 Communiqués. A G7 workshop in 2022 identified potential actions that could be included in a shared vision of G7 work to support addressing pollution to achieve a world free of lead poisoning. In 2023, G7 Ministers called for a second experts meeting co-hosted by Germany, the United States of America (US), and the European Union (EU) to build on the workshop outcomes and further elaborate concrete actions to address lead pollution and exposure.

III. Background

A. Overview of G7 commitments and discussions

1. 2022 Communique

The 2022 G7 Communique encouraged domestic regulation of lead sources and acknowledged the potential role of G7 countries in reducing lead exposure in developing countries.

In addition to domestic and bilateral efforts, the 2022 Communique emphasized the need for G7 governments to work cooperatively with existing international efforts, particularly the Strategic Approach to International Chemicals Management (SAICM), and to continue working with multilateral organizations involved in work to eliminate or reduce lead pollution and exposure, including the World Health Organization (WHO), the United Nations Environment Programme (UNEP), and the United Nations International Children's Emergency Fund (UNICEF).

To begin exploring potential G7 contributions to reducing lead pollution and exposure, the 2022 Communique endorsed a workshop under the German Presidency to be hosted by the EU and the US to "take stock of G7 activities and develop possible options for future work and cooperation." The goal was to identify concrete areas of action on minimizing lead pollution and exposure globally.

[5] World Health Organization (2019). Preventing disease through healthy environments: exposure to lead: a major public health concern. https://apps.who.int/iris/handle/10665/329953

[6] World Health Organization (2023). The impact of chemicals, waste and pollution on human health. Seventy-Sixth World Health Assembly. A76/A/CONF./2. 24 May 2023. https://apps.who.int/gb/ebwha/pdf_files/WHA76/A76_ACONF2-en.pdf

[7] World Health Organization (2019). Preventing disease through healthy environments: exposure to lead: a major public health concern. https://apps.who.int/iris/handle/10665/329953

2. *G7 workshop in 2022 & outcome document*

The EU, Germany and the US hosted the first G7 lead workshop in November 2022,[8] with participation from G7 countries, LMICs, key stakeholders, and multilateral organizations. The workshop was informed by a stocktaking report by the Center for Global Development (CGD)[9] which noted that "lead poisoning may be among the most pressing public health challenges faced by LMICs and is certainly one of the least recognized and most neglected." Following the workshop, G7 members utilized the recommendations from the workshop as a basis to develop a Report to G7 Ministers on Key Workshop Outcomes.[10] The Report noted that a shared vision of G7 work to support addressing pollution to achieve a world free of lead poisoning, could include, inter alia, the **actions** below[11]:

Strengthen Linkages and Institutional Capacities

1. Strengthen the linkages between environment, health and development officials of G7 members and LMICs to promote effective coordinated action in LMICs to reduce lead poisoning;
2. Strengthen institutional capacities in LMICs and assist them to develop, implement, and enforce domestic actions to prevent pollution and reduce lead exposure, including by setting limits on lead exposure. For example, G7 countries could assist LMICs by:
    a. sharing guidance on best available techniques and best environmental practices (BAT/BEP);
    b. supporting capacity building and promoting international cooperation to develop, strengthen compliance with and enforce legal requirements aimed at reducing lead exposure and preventing pollution;
    c. promoting pollution prevention and management of contaminated sites including, where necessary, remediation;
    d. building capacities within LMICs toward the establishment of national source inventories for lead, and implementation of BAT/BEP for reduction of these releases from sources identified during inventory development;
    e. assisting in the development and implementation of best economically achievable pollution prevention practices for management and disposal of wastes containing or contaminated with lead;

[8] G7 Lead Workshop (2022). Lead as a major threat for human health and the environment – an integrated approach strengthening cooperation toward solutions. https://www.bmuv.de/fileadmin/Daten_BMU/Download_PDF/Europa___International/outcome_g7_workshop_lead_2022_bf.pdf.

[9] Silverman Bonnifield, Rachel, and Rory Todd (2023). Opportunities or the G7 to Address the Global Crisis of Lead Poisoning in the 21st Century: A Rapid Stocktaking Report. Washington DC: Center for Global Development. www.cgdev.org/sites/default/files/opportunities-g7-address-global-crisis-leadpoisoning-21st-century-rapid-stocktaking.pdf

[10] Report to Ministers on Key Workshop Outcomes (2023). https://www.bmuv.de/fileadmin/Daten_BMU/Download_PDF/Europa___International/outcome_g7_workshop_lead_2022_bf.pdf

[11] Numbering of actions added by authors to facilitate the rapid screening assessment of current actions on lead in LMICs, which was intended by G7 members to be an indicative list only.

Alternatives

3. Encourage development and uptake of safer alternatives, substitutes, and processes and substitution where alternatives are already available to reduce lead exposure in LMICs, including by providing support and information resources to artisanal and small- and medium-sized manufacturers, lead recyclers and disposal operators;

Awareness Raising

4. Increase awareness among government officials in LMICs, development assistance agencies and international organizations and institutions about the problem of lead poisoning and cost-effective solutions to reduce exposure within LMICs;

Monitoring and Surveillance

5. Support LMICs to conduct initial diagnostic assessments about the prevalence of lead poisoning and identification and ranking of relevant sources of exposure including monitoring and reporting of lead poisoning at the national level and/or at-risk subgroups. To this end laboratory capacity and surveillance systems should be supported to enable systematic monitoring of blood lead levels and exposure pathways, assisted by relevant international organizations and institutions, including WHO and OECD;

Strengthen Action by Stakeholders

6. Strengthen action by stakeholders, notably concerning prevention, including through multi-sectoral and multi-stakeholder approaches, involving academia, the health sector, industry, civil society and local universities, research institutes and national agencies to address lead exposure especially in LMICs; including by:
    a. Identifying and exploring ways to involve producers, industry and trade associations of G7 Members and others to exercise product stewardship and sustainable and responsible supply chain management for their products and relevant lead-contaminated articles, including through extended producer responsibility schemes;
    b. Developing awareness of and supporting local communities and civil society on how to advocate for policies to prevent, and to protect themselves from lead pollution via air, water, food, and soil;

Strengthen Capacity Building

7. Encourage Global Environment Facility (GEF) implementing agencies and other actors in GEF projects, together with recipient countries, to continue and strengthen work to build capacity to reduce lead poisoning from relevant sources, building on the progress achieved on lead paint under the SAICM GEF Project and taking note of the United Nations Environment Assembly Resolution 3/9 on lead-acid batteries and lead paint (UNEP/EA.3/Res.9);

G7 Bilateral Cooperation

8. Pursue the opportunities for bilateral cooperation to meet the priorities and needs in LMICs, in addressing lead pollution in their specific circumstances and identify areas of joint cooperation among interested G7 members for interventions in one or more LMICs; and

G7 Discussions

9. Recommend to G7 Ministers to consider further discussions on the issue of lead pollution and poisoning in LMICs among the G7, where appropriate.

3. 2023 Communique & G7 expert meeting

Building on the outcomes of the first G7 Lead Workshop, G7 Environment Ministers reiterated their commitment to reduce lead pollution and exposure in the 2023 Environment Ministers Communique, agreed to in Sapporo, Japan in April 2023.[12] The 2023 Communique reaffirms Ministers' commitment to "support […] capacity building for sound management of chemicals and waste through multilateral financial mechanisms, and regional and bilateral technical assistance," in addition to taking into account relevant elements of the outcome document from the 2022 workshop.

The Communique also welcomed a second experts meeting, to be held by Germany, the EU, and the US. This meeting took place on November 21, 2023, and builds on the outcomes of the 2022 workshop, aiming to identify concrete activities that G7 countries can take under the various actions identified in the 2022 G7 lead workshop to reduce lead pollution and exposure.

This visioning document was developed to help guide the discussions of the expert meeting and is an outcome of the expert meeting. It lays out potential opportunities for future concrete action by G7 Members and others to address lead pollution and exposure reduction activities in low- and middle-income countries. This document was informed by a rapid screening assessment of major, known existing work, and from discussions held at the expert meeting.

The next section outlines the sources of lead in LMICs and gives an overview of the current, known activities to address them.

B. Sources of Lead in LMICs and Activities to Address Them

Although the precise impact of lead pollution and exposure remains unquantified and undocumented in many countries, especially LMICs, current evidence points to several sources that are likely widespread and important. These include unsound recycling of lead acid batteries, paint, mining and smelting, ceramic and aluminum cookware, and contaminated spices. In addition, lead exposure may occur via food, cosmetics (such as kohl eyeliner); toys, jewelry, and consumer goods; drinking water (via PVC or lead pipes or service lines); religious powders and traditional medicines; lead ammunition and fishing

[12] G7 2023 Hiroshima Summit (2023). G7 Hiroshima Leaders' Communique. https://www.g7hiroshima.go.jp/documents/pdf/Leaders_Communique_01_en.pdf

weights; e-waste recycling; light aviation fuel; residual pollution from leaded gasoline; and folkloric traditions (including a lead-based form of fortune-telling common in Eastern Europe).[13, 14]

Among 5,010 household products and food samples reviewed by Pure Earth, approximately 18% exhibited lead levels surpassing the established reference levels across different product categories.[15]

IV. Potential Activities with a Focus on Capacity Building in LMICs

The potential activities suggested in the visioning document are informed by the findings of a rapid screening assessment of current activities to address some of these sources in LMICs (see Appendix A).

A. Potential opportunities for future overarching activities

Based on the results of the rapid screening assessment and discussion held during the G7 expert meeting, some potential opportunities for future activities for lead source and exposure reduction were identified to reduce impacts and to provide capacity building in LMICs, inter alia:

1. Provide status updates to G7 ministers potentially through the G7 Presidency on any progress on cooperation on lead and ask G7 Ministers to endorse a cross-ministerial technical discussion on lead to, among other things, examine ways to better align available resources/expertise/experiences amongst relevant stakeholders, including environment, health and development agencies.
2. Share information with the G20 Presidency, for example, through a joint G7-G20 cross-ministerial technical discussion about the work of the G7 in this regard and explore options for joint awareness raising and collaboration.
3. Identify and explore ways to involve producers, industry and trade associations of G7 Members and others to exercise product stewardship and sustainable and responsible supply chain management for their products and relevant lead-contaminated articles, including through extended producer responsibility schemes[16] and consider the nexus with resource efficiency through a possible workshop of the G7 Alliance on Resource Efficiency.
4. Increase focus on blood lead surveillance and testing, including in food, drinking water and consumer products. This could include working to increase laboratory capacity in LMICs.
5. Explore cross-sectoral bilateral (joint) cooperation between G7 Members on these and other activities.

[13] Collado-López S, Betanzos-Robledo L, Téllez-Rojo MM, Lamadrid-Figueroa H, Reyes M, Ríos C, Cantoral A. Heavy Metals in Unprocessed or Minimally Processed Foods Consumed by Humans Worldwide: A Scoping Review. Int J Environ Res Public Health. 2022 Jul 16;19(14):8651. doi:10.3390/ijerph19148651. PMID: 35886506; PMCID: PMC9319294. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9319294/.

[14] Silverman Bonnifield, Rachel, and Rory Todd (2023). Opportunities or the G7 to Address the Global Crisis of Lead Poisoning in the 21st Century: A Rapid Stocktaking Report. Washington DC: Center for Global Development. https://www.cgdev.org/publication/opportunities-g7-address-global-crisis-lead-poisoning-21st-century-rapid-stocktaking

[15] Pure Earth. 2023. The Global Impact of Lead Contamination: A Comprehensive Analysis. https://www.pureearth.org/wp-content/uploads/2023/11/Pure-Earth-RMS-Final-Report.pdf.

[16] See the 2014 study by Ecologic on Development of Guidance on Extended Producer Responsibility as well as work by the OECD on Extended Producer Responsibility.

B. Potential opportunities for future source-specific interventions

The actions identified by G7 members in the rapid screening assessment were broad categories under which specific sources can be addressed (such as Actions 2, 3, 6, 7 and 8 listed in Appendix A). This section provides a suggested framework within which to consider future activities on specific sources and to stimulate discussion. Some of the proposed activities are informed by the recommendations for interventions discussed in the 2022 G7 Lead Workshop.[17]

Sources of lead and their potential interventions can be divided into three categories:

1. Known issue, straightforward solutions

Sources in this category can be addressed through available, accepted, and relatively straightforward solutions, including because lead is not a necessary component of the product or food. Examples of these sources are lead in paint, ceramic cookware, and spices (e.g., subject to coloration practices using lead chromate). Previous work on removing lead from gasoline and the subsequent reduction in detected blood lead levels indicates how powerful these legal requirements can be when it comes to addressing the problem of lead exposure. There are still at least 70 countries without legal limits for paint and there are many other potential sources of lead that may need to be reduced through establishing regulations.

Potential activities include:

1. Identify and explore ways to ensure that producers, industry and trade associations of G7 Members and others exercise product stewardship and sustainable and responsible supply chain management for lead paint and, as appropriate, ceramic cookware and spices.
2. Continue the work on assisting LMICs to establish and enforce legal requirements on lead paint and consider expanding beyond lead paint to other sources, as appropriate, such as PVC articles, ceramic cookware, spices (including existing enforcement of standards to curtail coloration practices using lead chromate and promote use of safe alternatives to lead) and food in general.[18]

2. Known issue, highly complex solutions

In this category, the issue is currently relatively well understood, though recent studies show the manufacture and use of lead-contaminated cookware is significant.[19, 20] The solutions are highly complex, as they go beyond pure technical and legal interventions and necessitate taking into account such aspects as cultural and economic considerations (possible focus areas include electronic waste recycling and smelting and recycling of lead acid batteries). The solutions are also complex because in

[17] G7 Lead Workshop Summary Report (2022). https://www.bmuv.de/fileadmin/Daten_BMU/Download_PDF/Chemikaliensicherheit/g7_workshop_report_lead_as_major_threat_bf.pdf

[18] Legal limits for lead in various foods help to limit consumer exposure and allow to carry out investigations towards sources of food contamination, so that mitigation measures can be implemented. The Codex Alimentarius has established maximum levels for lead in a wide range of food and is currently also discussing maximum levels for lead in spices.

[19] Pure Earth. 2023. The Global Impact of Lead Contamination: A Comprehensive Analysis. https://www.pureearth.org/wp-content/uploads/2023/11/Pure-Earth-RMS-Final-Report.pdf.

[20] Mathee, A., R. Street (2020). Recycled aluminium cooking pots: a growing public health concern in poorly resourced countries. BMC Public Health. 20. Article number: 1411. https://doi.org/10.1186/s12889-020-09485-9

some instances there is no alternative for lead (such as in lead acid batteries), and thus these sources must be managed in an environmentally sound way to prevent exposure, including from backyard smelting of used lead acid batteries. In some cases, there is a strong cultural component which complicates efforts to change use or manufacturing practices to reduce lead exposure (cosmetics, ceremonial powders).

Potential activities include:

1. Identify and explore ways, including through working across industry sectors as needed, to ensure that producers, industry and trade associations of G7 Members and others exercise product stewardship and sustainable and responsible supply chain management for lead acid batteries and cosmetics.
2. Raise awareness so that affected communities, regulators, investors, consumers, and others know about and can avoid the harm of lead exposure from used lead acid battery recycling processes and from using cosmetics and ceremonial powders containing lead.
3. Expand the sharing of best practices from G7 members, such as on closed-loop recycling schemes and standard operating procedures to guide safer processes, including the CEC guidelines on Environmental Sound Management of Lead Acid Batteries.[21]

3. Relatively unknown issue, solutions emerging

The understanding of the impact and solutions to addressing sources in this category is still emerging. One example of this is a relatively recent finding that there is lead in aluminum pots produced in LMICs from scrap metal containing high levels of lead. Though the extent of lead exposure resulting from this source is not yet fully understood, recent data indicated that the lead can leach from the pots into food, especially when the food is cooked at high temperatures or is highly acidic.[22] The extent of their manufacture and use is still unknown.

1. Support the continued study of the extent of the problem, both in terms of how common these pots are and what causes higher level of leaching.
2. Evaluate the growing body of information on lead exposure from aluminum pots to inform potential effective interventions.

[21] Commission for Environmental Cooperation (2016). Environmentally Sound Management of Spent Lead-acid Batteries in North America, Technical Guidelines. http://www.cec.org/publications/environmentally-sound-management-of-spent-lead-acid-batteries-in-north-america

[22] Silverman Bonnifield, Rachel, and Rory Todd (2023). Opportunities or the G7 to Address the Global Crisis of Lead Poisoning in the 21st Century: A Rapid Stocktaking Report. Washington DC: Center for Global Development. www.cgdev.org/sites/default/files/opportunities-g7-address-global-crisis-leadpoisoning-21st-century-rapid-stocktaking.pdf.

Appendix A: Rapid screening assessment of current activities on lead in LMICs

A. Methodology

This analysis was informed by data from a variety of sources including lead-related workshops and meetings (e.g., the Center for Global Development's (CGD's) Working Group on Understanding and Mitigating the Global Burden of Lead Poisoning), information provided to the Global Alliance to Eliminate Lead Paint, conversations with experts, internet searches, and from CGD's "*Opportunities for the G7 to Address the Global Crisis of Lead Poisoning in the 21st Century*" report.[23] This analysis is a surface-level investigation and should not be considered comprehensive. Rather it is a starting point for discussion.

The data sources were reviewed to identify relevant activities from groups such as governments, NGOs, civil society, and academia to address the issue of lead exposure. Each activity was then categorized under one or more of the recommended actions from the "Report to G7 Ministers on Key Workshop Outcomes" (and cited in Section ii of this document).

There are various limitations to this methodology:

- This is a rapid screening assessment, and thus the results should not be considered as comprehensive. Any omission of relevant information was not intentional.
- Each activity identified was weighted the same. Some activities can have a larger impact in addressing the issue of lead poisoning; however, given the limited amount of time and resources for this gap analysis, no attempt to "weight" the activities was made.

B. Results

This section provides an overview of the actions with the most and least activities. This Appendix provides a list of the actions along with an associated number of estimated activities (see Table 1). These results were used to develop potential opportunities for future work.

1. Actions with the most activities

The actions with the most activities identified by the rapid screening assessment are listed below. Based on the results of the rapid screening assessment, it appears that current activities are clustered around the following actions:

- *Action 2: Strengthen institutional capacities in LMICs and assist them to develop, implement, and enforce domestic actions to prevent pollution and reduce lead exposure, including by setting limits on lead exposure.* Some of the activities under this action include: sharing best available techniques and best environmental practices (BAT/BEP); working with governments in LMICs to establish lead paint laws; and, working to identify and clean up lead contaminated sites.

- *Action 4: Increase awareness among government officials in LMICs, development assistance agencies and international organizations and institutions about the problem of lead poisoning and cost-effective solutions to reduce exposure within LMICs.* Some activities under this action include: International Lead Pollution Prevention Week (ILPPW); various NGOs and other

[23] Ibid.

organizations working to educate and inform governments about the dangers of lead exposure and the specific risks in their country; and the Lead in Paint Community of Practice (LiP COP).

- *Actions 5: Support LMICs to conduct initial diagnostic assessments about the prevalence of lead poisoning and identification and ranking of relevant sources of exposure including monitoring and reporting of lead poisoning at the national level and/or at-risk subgroups. To this end laboratory capacity and surveillance systems should be supported to enable systematic monitoring of blood lead levels and exposure pathways, assisted by relevant international organizations and institutions, including WHO and OECD.* Some activities under this action include: Working with countries to conduct blood lead level testing; working with countries to scale up their engagement on childhood lead poisoning; and testing of products to determine their lead content.

2. *Actions with the least activities*

Below are the actions where the least associated activities were identified through the rapid screening assessment. These could indicate several potential gaps. These gaps appear to include:

- *Action 3: Encourage development and uptake of safer alternatives, substitutes, and processes and substitution where alternatives are already available to reduce lead exposure in LMICs, including by providing support and information resources to artisanal and small- and medium-sized manufacturers, lead recyclers and disposal operators.* While slightly less activities were identified for this action, some are occuring. Many of the current activities under this action focus on removing lead from paint and the safe recycling of used lead acid batteries (ULABs), though some work is being done to address other sources (i.e., spices, cookware, etc).

- *Action 7: Encourage Global Environment Facility (GEF) implementing agencies and other actors in GEF projects, together with recipient countries, to continue and strengthen work to build capacity to reduce lead poisoning from relevant sources, building on the progress achieved on lead paint under the SAICM GEF Project and taking note of the United Nations Environment Assembly Resolution 3/9 on lead-acid batteries and lead paint (UNEP/EA.3/Res.9).* The GEF project resulted in 21 countries enacting lead paint laws, with many more in the process of drafting these laws. In addition, many small and medium enterprises (SMEs) worked towards reformulation of their paint to remove lead. In light of other near-term priorities in both SAICM and GEF, and the need for further awareness raising on the scale of the lead poisoning problem, it might take some time for this to come to fruition. Moreover, given the scale of the problem, Identification of other sources of funding is likely to be important as well.

- *Action 1: Strengthen the linkages between environment, health, and development officials of G7 members and LMICs to promote effective coordinated action in LMICs to reduce lead poisoning.* The rapid screening assessment found only a few activities focused on strengthening linkages between environment, health, and development officials in G7 and LMIC country. Those activities include the work of the Lead Paint Alliance, SAICM and various NGOs.

- *Action 8: Pursue the opportunities for bilateral cooperation to meet the priorities and needs in LMICs, in addressing lead pollution in their specific circumstances and identify areas of joint*

cooperation among interested G7 members for interventions in one or more LMICs, as described above. This rapid screening assessments appear to indicate that there are opportunities for more G7 bilateral cooperation. The work identified under the action is ongoing development of cooperation between the US and EC on addressing lead exposure in Africa.

Continuing the current work and finding ways to address the gaps identified in this rapid screening assessment would be helpful in addressing the issue of lead exposure and lead poisoning. The following section discusses the potential opportunities in the future.

Table 1: Number of Activities by Key Workshop Outcome from the November, 2022 G7 Workshop

Key Workshop Outcomes from the November, 2022 G7 Workshop	Number of Activities
1. Strengthen the linkages between environment, health and development officials of G7 members and LMICs to promote effective coordinated action in LMICs to reduce lead poisoning	4
2. Strengthen institutional capacities in LMICs and assist them to develop, implement, and enforce domestic actions to prevent pollution and reduce lead exposure, including by setting limits on lead exposure. For example, G7 countries could assist LMICs by:	31
2a. sharing guidance on best available techniques and best environmental practices (BAT/BEP);	17
2b. supporting capacity building and promoting international cooperation to develop, strengthen compliance with and enforce legal requirements aimed at reducing lead exposure and preventing pollution	12
2c. promoting pollution prevention and management of contaminated sites including, where necessary, remediation	3
2d. building capacities within LMICs toward the establishment of national source inventories for lead, and implementation of BAT/BEP for reduction of these releases from sources identified during inventory development	0
2e. assisting in the development and implementation of best economically achievable pollution prevention practices for management and disposal of wastes containing or contaminated with lead	7
3. Encourage development and uptake of safer alternatives, substitutes, and processes and substitution where alternatives are already available to reduce lead exposure in LMICs, including by providing support and information resources to artisanal and small- and medium-sized manufacturers, lead recyclers and disposal operators[a];	9
4. Increase awareness among government officials in LMICs, development assistance agencies and international organizations and institutions about the problem of lead poisoning and cost-effective solutions to reduce exposure within LMICs;	14
5. Support LMICs to conduct initial diagnostic assessment about[b]:	13
5a. The prevalence of lead poisoning including monitoring and reporting of lead poisoning at the national level and/or at-risk subgroups. To this end laboratory capacity and surveillance systems should be supported to enable systematic monitoring of blood lead levels assisted by relevant international organisations and institutions, including WHO and OECD;	8
5b. Identification and ranking of relevant sources of exposures. To this end laboratory capacity and surveillance systems should be supported to enable systematic monitoring of exposure pathways, assisted by relevant international organisations and institutions, including WHO and OECD;	6

6. Strengthen action by stakeholders, notably concerning prevention, including through multi-sectoral and multi-stakeholder approaches, involving academia, the health sector, industry, civil society and local universities, research institutes and national agencies to address lead exposure especially in LMICs; including by	7
6a. Identifying and exploring ways to involve producers, industry and trade associations to exercise product stewardship and sustainable and responsible supply chain management for their products and relevant lead-contaminated articles, including through extended producer responsibility schemes;	4
6b. Developing awareness of and supporting local communities and civil society on how to advocate for policies to prevent, and to protect themselves from lead pollution via air, water, food, and soil.	2
7. Encourage Global Environment Facility (GEF) implementing agencies and other actors in GEF projects, together with recipient countries, to continue and strengthen work to build capacity to reduce lead poisoning from relevant sources, building on the progress achieved on lead paint under the SAICM GEF Project and taking note of the United Nations Environment Assembly Resolution 3/9 on lead-acid batteries and lead paint (UNEP/EA.3/Res.9).	3
8. Pursue the opportunities for bilateral cooperation to meet the priorities and needs in LMICs, in addressing lead pollution in their specific circumstances and identify areas of joint cooperation among interested G7 members for interventions in one or more LMICs, as described above.	1
9. Recommend to G7 Ministers to consider further discussions on the issue of lead pollution and poisoning in LMICs among the G7, where appropriate.	3

[a]Actions related to used-lead acid batteries (ULABs) were placed under Outcome 3 which discusses lead recyclers, rather than 2e. This was because 2e discusses work that is relate to the management and disposal of wastes containing or contaminated with lead and ULABs are not considered wastes under this definition.

[b]Outcome 5 focuses on supporting LMICs in their diagnostic assessment of both lead poisoning and sources of said poisoning. To that effect, Outcome 5 was split into two categories. Outcome 5a deals with work related to the testing of blood lead levels (BLL) and the health impacts of lead poisoning. Outcome 5b deals with work related to the testing of products for source determination.