World Health Organization

UN environment programme

Global elimination of lead paint

why and how countries should take action

Technical brief

World Health Organization

UN environment programme

Global elimination of lead paint

why and how countries should take action

Technical brief

Global elimination of lead paint: why and how countries should take action. Technical brief

ISBN 978-92-4-000514-3 (electronic version)
ISBN 978-92-4-000515-0 (print version)

Suggested citation. Global elimination of lead paint: why and how countries should take action. Technical brief. Geneva: World Health Organization; 2020. Licence: CC BY-NC-SA 3.0 IGO.

Cataloguing-in-Publication (CIP) data. CIP data are available at http://apps.who.int/iris.

Cover photo: Unsplash/Yasmin Dangor

Design by Inis Communication

Contents

Acknowledgements

Development of this document was led by Joanna Tempowski, with the assistance of Elena Jardan (consultant), Department of Environment, Climate Change and Health at the World Health Organization (WHO), Geneva, Switzerland.

The following people reviewed and provided comments on the document, and their contributions are gratefully acknowledged:

Charles Akong, Technical Officer, Climate Change, Health and Environment unit, WHO Regional Office for Africa, Brazzaville, Congo.

Angela Bandemehr, Senior International Environmental Protection Specialist, Office of Global Affairs and Policy of the Office of International and Tribal Affairs, Environmental Protection Agency, Washington DC, United States of America.

Ana Boischio, Advisor Chemical safety, Climate Change and Environmental Determinants of Health unit, Pan American Health Organization/WHO, Washington DC, United States of America.

Sara Brosché, Global Lead Paint Elimination Campaign Manager, International Pollutants Elimination Network (IPEN), Gothenburg, Sweden.

Nicoline Lavanchy, Consultant, United Nations Environment Programme (UNEP) Chemicals and Health Branch, Geneva, Switzerland.

Eleanor McCann, Senior Policy Advisor, Office of Pollution Prevention and Toxics, United States Environmental Protection Agency, Washington DC, United States of America.

Mazen Malkawi, Regional Adviser, WHO Eastern Mediterranean Regional Centre for Environmental Health Action, Amman, Jordan.

Desiree Montecillo-Narvaez, Programme Officer, UNEP Chemicals and Health Branch, Geneva, Switzerland.

Amanda Rawls, Project Director-Lead Paint Project, American Bar Association, Rule of Law Initiative, Amman, Jordan.

Stephen Sides, Secretary, World Coatings Council, Washington DC, United States of America.

Irina Zastenskaya, Technical Officer, WHO Regional Office for Europe, WHO European Centre for Environment and Health, Bonn, Germany.

The document was edited by Teresa Lander.

Supported by:

This document was prepared by WHO under the Global Environment Facility (GEF) full sized project 9771: *Global best practices on emerging chemical policy issues of concern under the Strategic Approach to International Chemicals Management (SAICM)*. This project is funded by the GEF, implemented by UNEP and executed by the SAICM Secretariat. WHO acknowledges the financial contribution of the Global Environment Facility for the development, editing and design of the document.

Abbreviations

DALY	disability-adjusted life year
GEF	Global Environment Facility
ICCM	International Conference on Chemicals Management
IHME	Institute for Health Metrics and Evaluation
ILO	International Labour Organization
IQ	intelligence quotient
ppm	parts per million
SAICM	Strategic Approach to International Chemicals Management
SDG	Sustainable Development Goal
SMEs	small- and medium-sized enterprises
UNEP	United Nations Environment Programme
WHO	World Health Organization

Executive summary

This document has been developed for officials in government who have a role in regulating lead paint, to provide them with concise technical information on the rationale and steps required to phase out lead paint. “Lead paint” or “lead-based paint” is paint to which one or more lead compounds have been intentionally added by the manufacturer to obtain specific characteristics. This document explains the health and economic importance of preventing lead exposure by establishing legally binding controls to stop the addition of lead to paint. It also describes the support available to countries to take this action. It is complemented by a policy brief for the information of policy-makers.[1]

International efforts to eliminate lead paint

Governments are working together to promote policy action to protect human health from exposure to lead. The Global Alliance to Eliminate Lead Paint (the Lead Paint Alliance) was established following the second session of the International Conference on Chemicals Management (ICCM2, Geneva, 11–15 May 2009) under the joint leadership of the United Nations Environment Programme (UNEP) and the World Health Organization (WHO). The primary goal of the Alliance is to promote the global phase-out of lead paint through the establishment of legally binding control measures in every country to limit these are referred to in this document as “lead paint laws”. Regulatory controls on a range of sources of lead exposure have been demonstrated to protect public health, as reflected in declining population-level blood lead concentrations in many countries.

Lead exposure causes wide-ranging health effects and environmental impacts

The toxicity of lead has been known for centuries; however, it is only in recent decades that the impact of chronic low-level lead exposure on multiple body systems has been understood. Studies to date have been unable to identify any level of exposure that has no harmful effects in children or adults. Young children are especially vulnerable to lead toxicity, and even low levels of exposure can result in reduced intelligence quotient (IQ), reduced attention span, increased antisocial behaviour and reduced educational attainment. Exposure in adults is associated with increased risk of cardiovascular disease, including hypertension and coronary heart disease.

As a consequence of these health impacts, the burden of disease from lead exposure is high: the Institute for Health Metrics and Evaluation (IHME) estimated that, in 2017, lead exposure accounted for 1.06 million deaths and the loss of 24.4 million years of healthy life (disability-adjusted life years (DALYs)) worldwide. Lead is, furthermore, a well-documented