



ILPPWA 2019 report - CEPHED, Nepal

Celebrating International Lead Poisoning Prevention Week 2019, Nepal

Name of NGO: Center for Public Health and Environmental Development (CEPHED)

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List of activities undertaken and any important milestones achieved from organizing series of events in Nepal towards celebrating International Lead Poisoning Prevention Week (ILPPW-2019) organized by CEPHED with the support of World Health Organization (WHO), Country Officer for Nepal & International Pollutants Elimination Network (IPEN).

1. PRESS MEET KICK OF ILPPW 2019 in Nepal

A press meet on 20th October 2019 to kick off press meet to formally launched ILPPW 2019 were organized by CEPHED at Reporters Clubs of Kathmandu participated by some 30 participants representing Government Agencies(Health and Environment), Paint Industry, Industry Federation, Consumers association and Media (Paper, Electronic-TV/Radio, Online etc. This event was supported by World Health Organization (WHO), Country Officer for Nepal & International Pollutants Elimination Network (IPEN).

Milestone:

- Wide media coverage on Newspaper, Electronic-TV/Radio, Online and Social media etc.
- Paint Industry (Fashion Paint) committed to produce only Lead Free Paints.
- Government Agency, Department of Environment, Ministry of Forest and Environment Committed to do regular monitoring
- Government Agency, Nepal Health Research Council committed to do more BLL research and also called for BLL Abatement program.
- Federation of Nepalese Small and Cottage Industry committed for responsible production and marketing of lead free paints.
- Consumer Associations committed for regular market monitoring, consumer awareness and warned the government & Paint industries about the substandard products and mal advertisement.

2. Training and Orientation Program on Lead Safe Kids, Lead Safe School and Chemical Safety

A detail training and Orientation program at Subhakamna Academy, Kirtipur on 21st October has been organized to raise awareness about lead in paints and other chemical safety issues among school teachers, administration and students well participated by about 60 students and Teachers. This event was supported by IPEN

Milestone:

- School principal committed to go for lead safe paints and continue this kinds of awareness program about lead in paints and chemical safety in years to come.
- They also start coordination with CEPHED for other environmental activities

3. Stakeholder Workshop on Effective Implementation of Lead Paint Standards in Nepal



A stakeholder workshop on 24th October 2019 organized to enhance the effective implementation of the lead paint standards in Pokhara, Gandaki Province of Nepal well participated by some 70 participants from paint industries, retailers, dealers, government agencies (provincial government), local government, Lawyers, journalists, academia, health care professionals, consumers associations etc supported by WHO Country Officer for Nepal.

Milestone:

- Provincial Government committed to do regular monitoring of lead in paints.
- Provincial Government (Health) committed to envision program to Blood Lead Level Abatement among Nepalese children
- Local Government (Metropolitan City) committed to do the market monitoring and public awareness
- Local Government (Education) committed to consider the lead in paint issues while painting the schools, furniture and toys etc.
- Consumer Association committed to monitor the paint industries and sales/distribution of paints.
- Health communities /Academia committed to take up new nationwide research and BLL abatement programs.
- Paint Industries committed to produce, sale and distribute lead free paints.

4 Training and Orientation Program on Lead Safe Kids, Lead Safe School and Chemical Safety

A detail training and Orientation program at Rastriya Secondary School, Pokhara, Nepal on 2th October 2019 has been organized to raise awareness about lead in paints and other chemical safety issues among school teachers, administration and students well participated by about 74 students and Teachers. Students were oriented about Lead in Paint, Chemicals in Products (toys, cosmetics), Asbestos, POPs, Mercury free health care and dentistry were presented and shared among all teachers and students. This events was supported by IPEN.

Milestone:

- School principal and teachers committed to go for lead safe paints.
- School committed to continue this kinds of awareness program about lead in paints and other chemical safety and environmental issue in years to come.
- They also started coordination with CEPHED & Department of Environment for other environmental awareness activities.

5 Interaction Program on "Abatement of Blood Lead Level (BLL) among Nepalese Children

A day long interaction workshop mainly among the health care professionals, doctors, resident doctors, medical students, academia, research organizations and NGOs were organized to raise awareness among medical fraternity about lead in paint, blood lead level and thus preparing them for envision BLL abatement through advocating for required policy of National Blood Lead Level Screening program as well as develop required infrastructures to test lead in blood of each and every children of Nepal and suspected patients with lead poisoning symptoms. This events was supported by WHO Country Officer for Nepal.

Milestone:

- Health institution higher authorities (Dean, Campus Chief, Professor, Lecturers) etc. were made aware on the source of lead exposure thus convinced them to initiate and envision abatement programs.
- Medical students, Residential Doctors and others are trained and informed about the various sources of lead exposure, its sign and symptoms and thus convinced to increasingly do as well as refer for the BLL testing in the suspected patients with lead poisoning.
- Medical Fraternity is made think too well prepared and envision the proper diagnosis and treatment of



blood lead level and associated health implications.

6. PRESS RELEASE and Wider Dissemination supported by IPEN & WHO

At the end of each events, press release were prepared and widely shared among different media houses.

Milestone:

- *There were large number of media coverage on News Paper, Radio, Television and other online media sources.*

7. Advocacy letter for effective implementation of lead paint standard and addressing high BLL problem

Advocacy letter for effective implementation of lead paint standard and addressing high BLL problem among Nepalese children has been written to Ministry of Forest and Environment (MOFE) , Ministry of Finance, Ministry of Industry, Department of environment, Department of Custom and Ministry of Health and Population etc. Follow up will be made from the respective agencies to address the problem.

Milestone:

During the week of action, a high level of commitments from Department of Environment, Department of Custom, Local government, provincial government as well as health care professional has been solicited to address these problems.

MEDIA OUTREACHES

<http://therisingnepal.org.np/epaper/showimage?img=uploads/epaper/2019-11-17/7f398df12015c09b2cc65f1a6facfa21.jpg>

<https://myrepublica.nagariknetwork.com/amp/celebration-of-int-l-lead-poisoning-prevention-week-2019-begins-in-nepal/>

<https://www.nepal24hours.com/high-level-of-lead-paint-among-nepali-children-study/>

<http://www.setoghar.com/archives/56765/10/>

https://www.reportersnepal.com/2019/10/355964?fbclid=IwAR1M3dSOI-xgcud6v06SywKNHaafaq0Vm1HyvSBuyHwlypHRHqkwQ0E_CaQ

<https://www.facebook.com/ReportersNepal/videos/960910014266930/>

<https://www.facebook.com/100015321855431/videos/684386298748759/>

In addition, there are number of news coverage from TV and Radio

TV News from: Prime TV, Janta TV, New 24

Radio Interview and news: Thaha Sanchar, Radio Sagarmatha, Image FM , Rajdhani FM etc.

Photos

- Also, please provide three to five high-resolution photos (file size of 1 MB or more) as separate files (any photo format such as .jpg, .png or other can be used) together with a brief description of what the photo shows. The photos could be of anything of relevance to your campaign, such as meetings with influential government officials or paint industry executives, visits to paint factories, awareness raising events with children, etc. Please also indicate who IPEN should use as photo credit if used on IPEN's website or in other materials.



Figure 1. Mr. Ram Charitra Sah, Executive Director & Environment Scientist of CEPHED welcoming and presenting LEAD IN PAINT issues in KICKOFF PRESS MEET ILPW 2019 with Mr. Govind Subedi, Vice President, Nepal Consumer Forum (NCF); Mr. Mohan Katuwal, Vice President, Federation of Nepalese Cottage and Small Industries (FNCSI); Mr. Madhav Timilsena, President, Nepal Consumer Right Investigation Forum (CRIF); Dr. Meghnath Dhimal, Senior Research Officer, Nepal Health Research Council (NHRC); Mr. Shankar Banjade, CEO of Fashion Paints Over Ltd





Figure 2. Banner of School Training and Orientation Program at Subhkamna Academy, Kirtipur



Figure 3. Participants of School training and orientation program at Subhkamna Academy, Kirtipur



Figure 4. Teachers participated (from left) in School Training and Orientation program with CEPHED Team (right)



Figure 5. Students with Banner and several IEC materials on Lead in Paints and other chemicals issues



Figure 6. Students with Lead SAFE KIDS and LEAD SAFER School banner after the training and orientation program



Figure 7. Stakeholder Workshop for Effective implementation of Lead Paint Standards in Nepal



Figure 8. Participants of Stakeholder Workshop on effective implementation of Lead paint standards in Pokhara, Nepal



Figure 9. School Program Banner at Rastriya Secondary School, Pokhara, Kaski, Nepal



Figure 10. *1 natural session with MOFE Guest, CEPHEC Executive Director, School Principal and Teachers*



Figure 11. *Participants of School training and orientation program at Rastriya Secondary School, Pokhara, Kaski, Nepal*



Figure 12 Group picture with Participants of School training and orientation program at Rastriya Secondary School, Pokhara, Kaski, Nepal



Figure 13 Figure 12 Group picture with Participants of School training and orientation program at Rastriya Secondary School, Pokhara, Kaski, Nepal



Figure 14. Banner of Blood Lead Level Abatement Program



Figure 15. Participants (Professor, Doctors, Resident Doctors, and MBBS & MPH Students) of Interaction program on Blood Lead Level Abatement among Nepalese Children



Figure 16 Group Pictures with Participants (Professor, Doctors, Resident Doctors, and MBBS & MPH Students) of Interaction program on Blood Lead Level Abatement among Nepalese Children

MEDIA COVERAGE

Celebration of Int'l Lead Poisoning Prevention Week 2019 begins in Nepal

Published On: October 22, 2019 11:35 AM NPT By: [Republica](https://myrepublica.nagariknetwork.com/amp/celebration-of-int-l-lead-poisoning-prevention-week-2019-begins-in-nepal/) <https://myrepublica.nagariknetwork.com/amp/celebration-of-int-l-lead-poisoning-prevention-week-2019-begins-in-nepal/>

KATHMANDU, Oct 22: Environmental health, child health advocates, governments, and paint industries are uniting this week from October 20 to 26 for the International Lead Poisoning Prevention Week of Action. Issuing a press statement on Sunday, Center for Public Health and Environmental Development (CEPHED) said that it is calling for protections for the 857 million children aged zero to nine years who live in countries with no protective lead paint regulations, organizations in 30 countries, coordinating with the Global Alliance to Eliminate Lead Paint, a voluntary partnership hosted by the UN Environment Program and the World Health Organization, urge governments to adopt and effectively implement legislation to protect children's health.

In Nepal, CEPHED jointly with the National Health Education, Information and Communication Center (NHEICC), MoHP, Department of Environment, Ministry of Forest and Environment (MoFE) and with the support of WHO country Office for Nepal are organizing a series of awareness and policy influence programs.

“The series of studies in Nepal including one conducted by Nepal Health Research Council (NHRC) have found elevated level of lead in Nepali Children. Over 65 % of the Nepali children have more than 5 microgram of blood lead level that calls for immediate response,” said Dr Meghnath Dhimal, senior research officer at NHRC. Lead paint, a major source of childhood lead exposure, can cause permanent and irreversible brain damage in children. Lead exposure globally accounted for 540,000 deaths and 13.9



million years lost to disability and death due to long-term effects on health, with highest burden in developing regions. Some 857 million children worldwide are at the risk of lead exposure. Nearly 65 to 100 percent children are under high risk of lead exposure in Nepal.

A series of lead paint studies in Nepal clearly revealed that the amount of lead content in the paints produced, imported, marketed and used in Nepal have decreased. The compliance monitoring of lead paint standard carried out by the MoFE in 2016 showed only 30 percent paints comply with the standard.

However, a similar study carried out by CEPHED a year later in 2017 and 2018 of 56 enamel paint samples from 27 paint industries shows increased compliance of lead paint standard by 60 percent of paints. This is a very remarkable achievement by the paint industries in Nepal. It however needs to be continued towards reaching 100 per cent compliance so as to eliminate leaded paints from Nepal thus protecting public health and environment.

“Research indicates that legislation alone is not enough to keep children safe. Not only should regulation set total lead limits below 90 ppm in all paints, but also enforcement and monitoring are essential,” said Bhupendra Sharma, senior environment inspector at the Department of Environment.

High Level of Blood Lead Among Nepali Children: Study

<https://www.nepal24hours.com/high-level-of-lead-paint-among-nepali-children-study/>

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Chyawabesi, Nepal

KATHMANDU: A week-long International Lead Poisoning Prevention Week of Action began from Sunday with an aim of making effective implementation of lead paint standards.

Lead paint, a major source of childhood lead exposure, can cause permanent and irreversible brain damage among the children.



Lead exposure globally accounted for 540, 000 deaths and 13.9 million for disability due to long-term effects on health, with highest burden in the developing regions. About 857 million children worldwide are at the risk of lead exposure and 65 to 100 per cent are under high risk of lead exposure in Nepal.

The study conducted by Nepal Health Research Council (NHRC) has found an elevated level of lead in Nepalese children.

Over 65 per cent of the Nepalese children have more than 5 microgram/deciliter of blood lead level that calls for immediate response of BLL Abatement programme from Ministry of Health and Population, Government urgent needs for the health communities to prepare and response to this problem, said Dr. Meghnath Dhimal, Research Officer at NHRC.

Ram Charitra Sah, executive director and environment scientist of CEPHED, said that series of lead paint studies in Nepal revealed that the amount of lead content in the paint produced, imported, marketed and used in Nepal has decreased.

The compliance monitoring of lead paint standard carried out by Ministry of Forest and Environment (MOFE) in the year 2016 showed only 30 per cent paints comply with the standard.

However, similar study carried out by CEPHED in 2017 and 2018 of 56 enamel paint samples from 27 paint industries shows increased compliance of lead paint standard by 60 per cent of paints over earlier MOFE's. This is a very remarkable achievement by the paints industries in Nepal and however needs to be continued improvement towards reaching 100 per cent full compliance, he said.

Bhupendra Sharma, Environment Inspector at of Department of Environment, said that research indicates that legislation alone is not enough to keep children safe. Not only should regulation set total lead limits below 90 ppm in all paints, but enforcement and monitoring are essential.

Mohan Katuwal, Senior Vice President, Federation of Small and Cottage Industry Nepal, applauded the efforts of paints industries moving towards lead free achieved higher rate of compliance than previous years.

Prem Lal Maharjan, President of National Consumer Protection Forum, said that it is illegal and unethical to do mal-advertisement about products and practices that caused health damage and environmental degradation.

Madav Timilsena, President of Consumer Rights Investigation Forum, said that no industries and enterprises advertise their substandard, low quality and quantity paints and other products so as to damage the public health.

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Call For Lead-Safe Environment



Prof. Dr. Shyam P. Lohani

We are well aware that heavy metal toxicity is still contributing considerably to the global burden of disease. The scientific community is advocating for the ban on the use of such metals in many of the products in daily use. Although there is no standard definition assigning metals as heavy metals, most heavy metals have a high atomic number, atomic weight and specific gravity greater than 5.0. Heavy metals include metalloids, transition metals, basic metals, lanthanides, and actinides. Among many heavy metals, elemental mercury, boron, and lead are toxic metals with relatively high density and less commonly, iron, copper, zinc, aluminum, beryllium, cobalt, manganese, and arsenic may also be considered heavy metals.

Amid growing concern of heavy metal toxicities last month, Nepal celebrated international lead poisoning prevention week (ILPPW) of action from 20 to 26 October 2019 with a series of awareness campaigns, seminars, and workshops throughout the country. The 2019 ILPPW aimed at increasing awareness among the public about the detrimental effects of lead in human health, called for the promotion of actions to address

human health effects of lead exposure, especially for children, and urging further actions to eliminate lead in paint through regulatory action at country level.

Scenario

Lead exposure contributes to 6.6 per cent of the global burden of disease or 14 million disability-adjusted life years (DALY) which accounts to 74 per cent of cardiovascular diseases, 21 per cent of idiopathic developmental intellectual disability and 5 per cent chronic kidney disease (Wardena and Fritsch, 2018). The Institute of Health Metrics and Evaluation (IHME) in 2017 estimated that 1.66 million deaths were attributed to lead exposure (IHME, 2017). The highest burden due to lead exposure is in low and middle-income countries, according to the World Health Organisation (WHO, 2019).

Lead has been mined for more than 6,000 years and the metal itself and its compounds are used throughout history. This easily worked and corrosion-resistant metal has been used in pipes, pewter, and paint since Roman times. Lead is still widely used for car batteries, pigments, ammunition, cable sheathing, lead crystal glass, radiation protection, jewelry, cosmetics, and solders. It has also been used in lead glazes for pottery, as an insecticide, hair dye and as an anti-knocking additive in petrol. All such uses have been banned, replaced or discouraged in many countries in recent times. Lead has no known biological role and it has an accumulative property and can cause

serious health problems.

Since 26 December 1989, only unleaded gasoline has been distributed in Nepal. It is expected that the present problem of lead exposure in Nepal is mainly from lead-painted toys, furniture, walls, lead-contaminated foods, and inhalation of lead fumes as well as from occupational exposure.

Children younger than 6 years are especially vulnerable to lead poisoning affecting their mental as well as physical development. At very high levels, lead poisoning can be fatal if untreated. Lead-based paint and lead-contaminated dust in older buildings are the most common sources of lead exposure in children. Adults who work in battery industries, home renovation works and auto repair shops might be

at higher risk of lead poisoning are from the economically disadvantaged population.

Lead toxicity is one of the most common preventable causes of neurological morbidity from an environmental toxin. It is ubiquitous and produces insidious hazards with the potential of causing irreversible effects on human health. It primarily affects central nervous, hematopoietic, hepatic and renal systems producing serious consequences. Acute toxicity primarily occurs with occupational exposure and is relatively uncommon while chronic toxicity is much more common. Lead poisoning occurs when lead builds up in the body over the months or years. Even small amounts of lead can cause serious health problems and many of those effects are irreversible.

At high levels, lead can affect the brain and central nervous system to cause convulsions, coma and even death. In particular, lead can cause developmental disorders in children resulting in reduced intelligence quotient, behavioral changes such as reduced attention span, antisocial behavior, and thus reduced educational achievement. Lead exposure also causes anemia, hypertension, immunotoxicity, and reproductive toxicity. Both the neurological and behavioral effects are irreversible.

Several studies conducted over different periods and in different parts of the country have shown elevated levels lead in children. Similarly, time-series studies conducted on lead in paint found that most of the

paints, especially enamel paints, then available in the Nepalese market contained high levels of lead, well above the Nepalese government set standard of lead in paints, i.e. 90 ppm.

Standard

The Government of Nepal has set standard limiting lead in paints imported and produced in Nepal to ninety parts per million (90 ppm) or ninety milligrams per liter (90 milligrams per litre) effective from 20 June 2015, and mandated label paints can with lead content and protective precautionary measures to prevent occupational exposure. The above endeavor by the government is expected to abate the lead exposure to children and occupational workers up to some extent. Since the enactment of standard the Ministry of Education, Science and Technology has published notice to use only lead paint containing less than 90 ppm for the use in all community and institutional schools.

Now, it is time for all stakeholders from governmental to non-governmental organisations to private and retailers to distributors to the manufacturers of paint to abide by the set standards and raise awareness for the abatement of human lead exposure. It is also called upon to all health professionals involved in prevention to treatment of lead poisoning for seriously taking up this preventable public health problem to making our children lead-safe.

(Prof. Lohani is the Clinical Director of the Nepal Drug and Poison Information Centre and can be reached at lohani@gnail.com)

Children younger than 6 years are especially vulnerable to lead poisoning affecting their mental as well as physical development.

exposed to lead. The main route of exposure of lead is either ingestion or inhalation and once absorbed, lead is distributed to many organs from the brain, kidney to liver and bones. The human body mainly stores lead in teeth and bones and accumulates over time. The remobilisation of lead from bones during pregnancy exposes the fetus. Undernourished children are more susceptible to absorb more lead because other nutrients such as calcium and iron are lacking. Thus, children

Figure 17. News Article on Call for Lead-Safe Environment, published in the Rising Nepal National daily dated 17th November 2019



Figure 18: Leaded paints is harmful for public health, published from Pokhara