

A conversation with the International Pollutants Elimination Network (IPEN), December 8, 2019

Participants

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Note: These notes were compiled by GiveWell and give an overview of the major points made by Dr. Brosché and Mr. Beeler.

Summary

GiveWell spoke with Mr. Beeler and Dr. Brosché of IPEN for a status update on the grant for Global Health and Development in Southeast Asia and Bangladesh, recommended by GiveWell and funded by Affinity Impact, to fund campaigns to regulate or eliminate lead paint. Conversation topics included global progress made to date on lead paint regulation, IPEN's decision to prioritize lead paint over other sources of lead exposure, IPEN's funding needs and proposed use of Affinity Impact funds, and what activities are needed to eliminate lead paint globally.

Overview of IPEN

Organizational structure

The International Pollutants Elimination Network (IPEN), formerly the International POPs [Persistent Organic Pollutants] Elimination Network, has two global offices: IPEN's headquarters in Sweden, where Dr. Brosché is based, and one in Berkeley, CA, where Mr. Beeler is based. The global offices perform mostly administrative functions, such as financial accounting, project support, communication and resource mobilization. IPEN also has a global research center based in an IPEN Partner organization in the Czech Republic, which provides logistical support for collecting samples and arranging lab analysis. IPEN has eight regional hub offices, representing the geographic or linguistic regions (e.g., Anglophone and Francophone Africa, Latin America and the Caribbean, and Middle East and North Africa), which are based in IPEN Partner organizations and support regional coordination among IPEN's members within their geographic regions across the IPEN global network.

IPEN currently supports 80 non-governmental organizations (NGOs) working on approximately 135 projects in 70 countries.

Areas of focus

IPEN has four areas of work, which will be adjusted for 2030:

- Participating in and contributing to the development of international treaties and conventions that aim to control and eliminate hazardous chemicals
- Promoting stronger international chemical standards, including highlighting links between sustainable development and the sound management of chemicals and waste
- Halting the spread of toxic metals, with a focus reducing exposures to lead and mercury
- Capacity building among IPEN's participating organizations (most IPEN members run on annual budgets of less than \$50,000/year) and expansion of the movement and strategic partners

Funding sources

IPEN has raised several million dollars of funding for lead paint elimination, including E.U. aid and two projects with Global Environment Facility (GEF) funding, which is administered by the World Bank. In addition to funding from Affinity Impact and other private foundations. In addition, IPEN receives funding from international aid agencies, governments and United Nations (UN) agencies.

IPEN is currently receiving \$300,000 from the UN Environment Programme (UNEP) and World Health Organization (WHO). This funding is a portion of a larger, \$3 million project. IPEN will use the funds to conduct specific activities that push paint industries to regulate lead levels voluntarily, primarily in Indonesia and Nigeria. IPEN is also collaborating with the project to conduct activities in Vietnam to promote adoption of a lead paint regulation. In addition to UNEP and WHO, IPEN is working on this project with the US Environmental Protection Agency (EPA) and the World Coatings Council, a global trade organization representing the paint industry. Due to its expertise in the area of lead paint regulation, IPEN is an Executing Partner for this project and contributes to decision-making about the project.

IPEN sees this as an opportunity to create a collaborative framework to support national governments to adopt new lead paint regulations aimed at protecting human health. The involvement of large international organizations, such as the UN and WHO, enables IPEN and its members to leverage these relationships to advance lead paint regulations. The credibility lent by these organizations' involvement is especially important in a country like Vietnam, where NGOs face many restrictions (under this project, IPEN is promoting NGO-government cooperation in Vietnam). IPEN does not receive much funding for on-the-ground activities of its participating organizations, making a project like the UNEP/WHO collaboration a useful avenue. However, receiving funding through these large UN organizations often means

dealing with inefficient and at times highly bureaucratic processes that require extra time and effort.

History of IPEN's work on lead paint regulation

Awareness-raising and fundraising

Lead in paint has been a public health problem for hundreds of years. Testing conducted by IPEN in 10 countries, followed by a report released in 2008, revealed that lead paint remains on the market in many locations. IPEN brought the issue and the data it had gathered to the attention of the UN and other global policy actors. UNEP and WHO subsequently created the Global Alliance to Eliminate Lead Paint (GAELP) to begin to address this issue.

Working with industry to set standards

In 2015, IPEN launched the third-party Lead Safe Paint Certification program. Participating paint manufacturers can have their paints analyzed and receive the right to use the certification mark if their paints contain less than 90 parts per million (ppm) lead. The certification program is managed by SCS Global, an independent certification company in the US. This is one example of how IPEN prefers to work cooperatively with paint industry leaders to facilitate voluntary shifts rather than assuming an antagonistic position, on the premise that the effects of lead paint are undesirable for everyone.

In the Philippines, for example, where a ban on decorative lead paint came into force in January 2017 and a ban on industrial lead paint will go into effect in 2020, IPEN and its local NGO partner (EcoWaste Coalition) have worked directly with the Paint Manufacturers Association and several paint manufacturers in the country, such as Boysen Paints and Davies Paints. IPEN and EcoWaste also worked closely with the country's Secretary of Environment and Natural Resources during the development of the lead paint regulation. Boysen and others have been helpful in demonstrating to other manufacturers that eliminating lead from their products is a business opportunity, not only because they can receive certification but because the future of the industry is inevitably trending toward the elimination of lead.

In many developing countries and countries in transition, many manufacturers are still unaware that lead paint is a problem, but IPEN has found that once they are made to understand the dangers of lead, they are willing to make the shift voluntarily. Working through a paint manufacturers association can be helpful for harnessing the power of peer pressure among businesses who depend on the strength of their reputations. In the Philippines, for example, IPEN's partner analyzed industrial paints sold on the market and discovered that paint manufacturers that belonged to the association had all voluntarily eliminated lead from their paints, while smaller paint makers who were not association members had not yet done so.

Working with governments

IPEN has a country-driven approach, which means IPEN works with and supports its local participating organizations to communicate with government officials charged with lead regulation, rather than communicating directly with governments itself. This allows the main issue to be owned by local organizations, which serve as the driving force to protect their communities. Additionally, one of IPEN's goals is to strengthen the capacity of its participating organizations, which allows for more productive collaborations and lends the participating organizations greater credibility. Moreover, this approach avoids a "donor driven" model, where some organizations seek funding to do projects that may not be their priority. Nonetheless, Dr. Brosché maintains contacts with government representatives that IPEN meets via international conferences and in other venues.

Because many governments are highly under-resourced, most welcome or seek IPEN's technical advice, data, and support through IPEN's in-country partners. For example, for the playground equipment testing that IPEN conducted in Indonesia, IPEN's partner organization simply borrowed the X-ray fluorescence (XRF) machine from the government, which it owned but had not used in five years. This event highlights one way that lead paint regulation can foster good relationships between participating organizations and governments.

IPEN's recent activities around lead paint

Dr. Brosché manages IPEN's campaign against lead paint, working with a global team based in Manila and, for this project, IPEN's regional coordinator for Southeast Asia. Work specifically related to GiveWell's grant to IPEN is also done by IPEN's participating organizations in Vietnam and Indonesia, and there has been progress on activities in both of those countries.

International Lead Poisoning Prevention Week of Action

Starting in July 2019, IPEN's primary focus was preparing for the International Lead Poisoning Prevention Week of Action, held October 20-26, 2019. Organized by WHO, this is a campaign intended to raise awareness about the dangers of lead paint exposure and to advocate for further regulatory action by individual countries.

IPEN and its participating organizations spend a lot of time and effort on this week of events. IPEN works with WHO, UNEP, and the US EPA to develop materials for public use and coordinate messaging.

In addition, IPEN provides very small grants (\$500 to \$1,000) to NGOs around the world for media or visibility-increasing activities, or other activities related to lead paint that the NGOs consider a priority in their countries. In order to prioritize funding for activities, IPEN has an internal process in which the NGOs submit proposals to IPEN explaining why these activities are needed. For the 2019 Week of Action, IPEN made grants to approximately 40 NGOs. IPEN estimates that this constituted about half of all activities conducted during the Week of Action, while

the remaining half were led by governments or industry. (Groups conducting activities for the Week of Action are asked to register them on the WHO website, which is how IPEN arrived at this estimate.)

Screening playground equipment for lead paint

IPEN worked with partners in five countries to screen playground equipment for the presence of lead paint, using a handheld XRF machine. The XRF machine resembles a large hair dryer; pointing it at any object (playground equipment, toys, etc.) and clicking allows it to detect heavy metals. IPEN's partners in the five countries, two of which (Indonesia and the Philippines) are the focus of the GiveWell grant, released reports containing the findings from this investigation.

IPEN did this to emphasize the need to ban lead paint, because the knowledge of its presence in areas where children play is likely to be a powerful motivator. (Especially in areas with high heat and humidity, such as Vietnam and Indonesia, the paint is likely to flake quickly, thus increasing the risk of environmental contamination and accidental ingestion.) The visuals of IPEN testing playground equipment for lead, combined with the universal desire to protect children, made a compelling story that attracted media attention, including stories by several large media outlets in Indonesia. In response, the Governor of Jakarta made a statement calling for action on lead paint. IPEN sees this as a good first step, but one that its in-country partners must repeatedly follow up on until lead in paint is eliminated in Indonesia.

This multi-country initiative by IPEN was inspired by its partner organization in the Philippines, which owns an XRF machine for the purpose of detecting lead paint within the country. The Filipino partner suggested to IPEN that it could carry out a broader project using XRF machines on playground equipment in several countries. Other organizations IPEN works with in other countries also have their own XRF machines, and there are still other partners who IPEN thinks may be able to collaborate with the supplier of the machine to gain access to the equipment. Having ready or potential access to the necessary equipment and a partner organization already doing this work made IPEN more inclined to initiate this project.

Status of Affinity Impact grant funds

Because IPEN has committed to certain activities in Indonesia as part of the UNEP/WHO-funded project to advocate within the paint industry, IPEN is coordinating its overall efforts with the larger UNEP/WHO project. IPEN has not yet started any on-the-ground activities with the Affinity Impact funds in Indonesia and Vietnam, as the UNEP/WHO project is delayed and currently progressing slowly.

However, IPEN has been communicating with its participating organizations about how to use the funds for the past two months, and is in the process of finalizing a plan for these activities. The proposed activities resemble those that IPEN and its participating organizations have conducted in other countries, as IPEN believes that certain activities, including providing opportunities for stakeholders on the issue to

come together and discuss, are crucial regardless of setting (although modifications may be required depending on the country).

Proposed activities: Indonesia

IPEN would like to conduct a new study on the prevalence of lead paint in the Indonesian market, as the most recent study is from 2015 and is thus already somewhat dated. This study would allow IPEN to determine what percentage of the paint on the market is lead paint and compare this to the number documented five years ago, thus determining how exposure levels have changed. IPEN's partner organization in Indonesia is very good at collaboration and is planning on conducting a legal review with the help of lawyers that it frequently works with.

Another study that could be useful would investigate facilities where lead paint is produced, looking at contamination in the vicinity of the facilities and at workers' blood lead levels, as IPEN suspects protections for these workers are very weak. The results of this study could be an effective tool to convince the government to act.

Proposed activities: Vietnam

IPEN's partner organization in Vietnam is smaller, so IPEN would like to put some funding toward administrative capacity building and other capacity building. One important aspect of IPEN's model is ensuring that participating organizations are equipped to work effectively and handle a greater flow of funding and larger grants, including from outside funders.

The government of Vietnam has identified specific activities related to lead paint regulation that would be most useful in the country, so IPEN is currently in talks with UNEP and the US EPA about how these groups can collaborate. Otherwise, IPEN is considering similar activities to what it conducts in other countries, including stakeholder meetings to review existing policies in the country and discuss options for how to address the issue within the Vietnamese context. IPEN is also considering more studies in Vietnam on lead exposure, possibly looking at day care facilities, playgrounds, and other routes by which children are exposed; this is likely to generate useful media attention.

Possible expansion into other countries

IPEN is also looking at a potential new partner in Cambodia and possible enforcement activities in Bangladesh, and is currently looking at possible opportunities in Myanmar. IPEN does not currently have NGO partners in any of these countries, but is in the process of exploring contacts.

Lead paint vs. other sources of lead

Within the realm of lead exposure, IPEN focuses on lead paint as opposed to exposure to lead via other sources since lead paint is the most widespread source of lead exposure for children. IPEN in contact with industry stakeholders that occasionally provide information about the market for the specific lead compounds

that are found in lead paint, many of which are produced in China. These pigments are also used in other applications, such as plastic. While China has been making some progress on lead paint elimination, it is unclear how this will impact the market.

There are other significant sources of lead exposure on the market; for example, lead acid batteries are responsible for a large portion of the demand for lead compounds, but the suppliers of lead for batteries are different from those for paint. Lead paint elimination is the most efficient and effective approach to prevent lead exposure to children.

Why IPEN prioritizes lead paint

IPEN's focus on promoting regulation of lead paint, rather than other sources of lead contamination or other issues, is in part a strategic prioritization to help its participating organizations gain leverage. Many of the organizations in IPEN's network work on other issues related to pollutants, such as toxic plastics, waste incineration, and pesticides. However, many of these issues are very complex. Lead paint regulation has proven to be tractable in comparison, because there is no case to be made for lead in paint. This means messaging around the issue is relatively easy, and campaigns are more winnable. Participating organizations that present data on lead paint gain important visibility and increased credibility with their countries' governments and with the media.

Moreover, IPEN recognizes that implementation of lead paint regulations is a tractable goal, initially via securing lead paint bans, which shift the market to lead-safe paints and prevents future exposures. IPEN's approach has helped secure national regulations in over 20 countries. On the other hand, limiting lead exposure from lead acid batteries (for example) is a much more challenging issue which requires international regulation to control the international trade of lead.

Lead paint's significance as a source of lead exposure

It is widely accepted that lead paint is one of the most widespread sources of lead exposure for children in low-income countries; however, this is hard to verify directly since there is only indirect evidence and there are no country-wide studies on the issue from developing countries and countries in transition.

Part of the challenge is that the global paint market is still growing, especially in Asia and Africa. (IPEN expects to receive some data from the World Coatings Council on estimated growth in the industry, but one factor is that the rise of the middle classes in those regions suggests increased demand for paint to use on their homes.) Organizations that aim to reduce lead exposure are therefore tasked with both addressing existing lead paint and preventing the introduction of new lead paint products onto the market, and it is difficult to calculate the value of preventing lead paint that does not yet exist.

Nevertheless, because of the growth in the paint market, IPEN believes that, absent any interventions, lead paint would certainly be the biggest single source of lead exposure for children in 10 years' time. One contributing factor is that some areas where the paint market is expected to grow include cities with very large populations, meaning that many more people will be exposed. Another is the climate in some of the places where the market is growing, as high temperature and humidity are likely to accelerate paint deterioration and flaking, making it more likely that the paint will be ingested by children and extending the lead's legacy in the surrounding environment.

The US example is instructive: the US EPA and the Centers for Disease Control and Prevention (CDC) are still addressing the negative effects of lead several decades after banning it in paint and gasoline, and these effects are likely to be magnified in areas with denser populations. The negative health effects of lead include neurological effects that [reduce IQ and can be correlated with decreases in lifetime earning potential](#); this adds an economic development and social development argument to the public health argument.

Other lead exposure scenarios may be more dangerous than lead paint exposure, but also comparatively rare. For instance, lead acid battery recycling facilities without proper pollution controls produce extremely high lead levels in their communities, as they require the lead to be melted and particles emitted into the air. Those living in such communities suffer very high and chronic lead exposure, but this exposure is more localized and less widespread than lead paint.

Lead paint exposure's effect on blood lead levels

There is scientific consensus that there is a strong causal link between the presence of lead paint and elevated concentrations of lead in the blood. This is based on evidence from several sources, primarily nationwide studies of blood lead levels among children in the US, which is widely seen as the global "guinea pig" country for lead abatement. These studies have shown that children with high blood lead levels tend to live in low-income areas where lead paint is more common.

Although it is not possible to quantify the exact effect on blood lead levels of a given degree of lead paint exposure, if we know that an area contains paint with a high concentration of lead, we can predict that on average, blood lead concentration will have reached an elevated level in that area's children. The idea that lead paint on walls is ingested via paint dust particles and then enters the bloodstream is fairly widely accepted.

IPEN has high confidence in the above descriptions of how lead paint affects blood lead levels because leading health organizations, such as WHO and the CDC, consider this to be established science. The lack of recent or large-scale studies that have been conducted to verify this may be due to the fact that these conclusions are already so widely accepted that it would now be difficult to get research funding for such studies, as opposed to in the 1940s and 1950s in the US, when lead paint's

effects were still relatively unknown. The studies from that earlier era are now largely inaccessible, as they exist in print only.

Decorative paint vs. industrial paint

There is broad consensus around the need to eliminate lead from decorative/household paint. Banning lead in industrial paint (which typically refers to paint that includes protective elements such as anti-corrosives, though no international consensus exists for a definition of industrial paint) is more debated in some countries; some industry actors claim that the uses of these paints are highly controlled, and the public is therefore unlikely to be exposed to lead via industrial paints.

However, in many countries, and especially in developing countries, industrial paints are still used on playground equipment. Industrial paints often have some of the highest lead levels; lead can make up as much as 40% of the contents of industrial paint, although even 10% lead content is very high and can lend significant, readily detectable extra weight to a can of paint.

It is unclear whether the paint on the playground equipment in which IPEN detected high lead levels was decorative or industrial. Rather than focusing on one category of paint or the other, IPEN chooses to emphasize particularly dangerous exposure scenarios (e.g., children ingesting paint flakes from playground equipment) and use them as evidence for banning lead in paint of either variety. The Global Alliance to Eliminate Lead Paint, hosted by UNEP and WHO, recommends a 90 ppm lead limit for all types of paint, a recommendation supported by the World Coatings Council (the global paint industry association).

Global progress on lead paint regulation

IPEN has identified ~120 countries with weak or no regulation against lead paint. However, it may not be necessary for IPEN to actively work toward lead paint elimination in each one of these countries, under the presumption that once a critical mass of countries have banned lead paint, the supply chain for lead components may simply collapse.

Between 2009 and 2019, 21 countries passed laws regulating lead paint, a significant achievement, as passing new legislation is very difficult in most countries and especially in LMIC. IPEN attributes this action in part to its work. In the same time period, IPEN also generated data on lead paint in 55 countries, many of which had no data on lead paint previously, and began paint industry certification programs for labeling of lead-free products in three countries.

Lead paint regulation in Indonesia and Vietnam

Indonesia and Vietnam do not yet have laws regulating lead in industrial paint or decorative paint. Like some other countries, Indonesia has set a voluntary standard

for the maximum amount of lead in its paint, but because it is voluntary, few to no manufacturers abide by this standard.

Despite widespread agreement that decorative lead paint should be banned, political inertia and political instability in Indonesia, as in some other developing countries, have prevented the necessary laws from being put in place. In Indonesia, the government was ready to eliminate lead from paint a few years ago, but once a new government was installed, advocacy for lead paint regulation had to begin anew.

IPEN believes lead exposure in Indonesia is already higher than it should be, and because it is a large and growing country with a fast-growing economy, there is a good chance that exposure will be much worse in 10 years if no action is taken. In addition, Indonesia has not yet reached the point of discussing activities like lead abatement (removal of lead from an already-contaminated area) to address existing contamination. This is in contrast to settings such as the present-day US, where significant lead exposure tends to be concentrated in low- and middle-income areas (including inadequately maintained military housing, as described in [a recent Reuters report](#)) but where lead abatement activities are taking place in wealthier areas.

How lead paint is regulated in each country

Depending on the country, regulation of paint in lead is handled by the Ministry of Industry, Ministry of Health, or Ministry of Environment. Most countries already have some sort of chemicals regulation, if not necessarily a law passed by the legislature. However, these regulations are often general and lack specific references to lead paint. Lead paint regulations must include definitions and limits, requiring that, for example, lead concentration in paint must not exceed 90 parts per million (ppm). Where there is a possibility of utilizing an already existing regulatory system for chemicals, IPEN seeks to get an annex or specification added to the regulation.

In some cases there are inadequate regulations on lead paint. For instance, Tanzania has a regulation that says lead paint should not be used, but it does not define the maximum lead concentration. IPEN, together with its NGO partner, worked with the government to add a technical standard to the regulation, which includes adding a specification of a maximum lead content of 90 ppm to the existing regulation in Tanzania, making the regulation enforceable.

Rather than passing new laws, some countries attempt to regulate lead via an agency responsible for setting industrial standards, as this is sometimes an easier route. In Indonesia, for instance, the voluntary chemical regulation regarding lead paint was set by an agency housed within the Ministry of Industry.

Alternative supply chains

IPEN would like to explore in greater depth the supply chain that provides paint manufacturers with lead components, and work more closely with suppliers of lead-free compounds, who have expressed interest in collaboration. IPEN has

already worked with some such suppliers within Indonesia, but on an international level, suppliers as a group are now a part of the UNEP/WHO-funded project to shift the paint industry away from lead. This would be one way of attempting to effect change through international trade, instead of on the country level.

Role of UNEP, WHO, and US EPA in lead paint elimination

UNEP and WHO

UNEP and WHO's role in lead paint regulation centers on bringing together relevant players (e.g., by hosting workshops). These organizations also have a unique capacity to lend credibility to the issue. For instance, WHO has named lead exposure one of its top 10 "priority toxic substances," and UNEP was able to bring together 120 countries to make a resolution on lead paint. UNEP and WHO are thus vital for helping to get this issue onto national policy agendas.

The governing council for each of these bodies adopts resolution to determine its priorities. In the case of UNEP, this happens once every year or two years, and lead paint regulation is an item that regularly appears on its agenda, meaning UNEP has a mandate and a budget to address lead paint.

However, because the global policy on lead paint elimination has already been adopted and a framework now exists, the most important component is to elevate the issue to push for national lead paint bans that will shift the market away from lead paint production and prevent future exposures. As neutral entities, UNEP and WHO cannot carry out in-country interventions against lead exposure; these types of activities are catalyzed by NGOs such as the ones in IPEN's network. UNEP and WHO also cannot advocate for policies at the country level. They can advise countries as well as advocate internationally, but IPEN has observed that in-country work (such as lead paint testing, media/communication activities, and other work that elevates the issue and creates an environment for regulations) is the most necessary prerequisite for political progress.

As an illustration of this point, many governments across the globe have committed to lead paint regulation since the adoption of the 1921 International Labour Organization Convention on white lead paint; however, most countries of the world still produce, sell, and use lead paint. There had been little tangible progress, especially in developing and transitional countries, until IPEN began an international lead paint study which revealed that lead paint was still being sold on the public market. The report on IPEN's testing, released in 2008 and brought to the attention of international organizations, encouraged further movement and provided a venue in which to highlight the momentum generated by individual countries' progress, but the in-country activities were a prerequisite to get to that point. IPEN's report and proposal to the UN system for a new policy approach moved swiftly and was adopted in 2009 at the 2nd International Conference on Chemicals Management. In addition, though many governments are receptive to getting data on lead paint in their countries, their priority health issues (which could

include malaria, HIV, etc.) are often so numerous that lead exposure and other complex, hard-to-observe threats risk falling to the bottom of the list without in-country encouragement.

US EPA

The US EPA has a strong commitment to reducing lead exposure, especially given the history of widespread exposure to lead via paint in the US. Although the EPA officially cannot intervene directly in country lead paint regulation unless invited, it maintains a diplomatic presence in other countries and bilateral relationships with other countries' environmental regulators, giving it many paths by which to provide advice on the issue.

The EPA can also lend credibility through its support of IPEN's participating organizations, and has been vocal in its support for IPEN's work. When the EPA speaks to the government in Vietnam, for example, and mentions the work of IPEN's partner NGO in Vietnam, this lends credibility not only to IPEN but to the NGO on the ground, due to the size and influence of the US.

It is possible that the EPA adds more value to conversations about lead paint regulation when the country in question is either a significant trade partner or recipient of US aid. For instance, Israel recently passed legislation banning lead in paint in concentrations above 90 ppm. The EPA played a significant collaborative role in the process of getting this legislation passed. (In this case, the EPA referred the Israeli government to IPEN because IPEN is more knowledgeable about lead paint testing and was able to provide the government with the appropriate technical support. The Israeli government's research included testing playground equipment for lead paint, under IPEN's guidance.) The EPA also has helped ensure that IPEN's partner in Vietnam was invited to a high-level meeting on the issue, and has an active presence in several African countries as well.

Funding opportunities

Network expansion

IPEN has the capacity to expand its network and scale up the capacity of its participating organizations. With new and additional resources, IPEN has effectively secured new national regulations via its country-driven project model with the local organizations taking the lead. This is illustrated by the multi-year Africa and Asia projects managed by IPEN. IPEN has found that in-country partner organizations are most effective at making progress on lead paint legislation. While UN agencies (for example) typically offer guidance and information to governments, and provide passive support, IPEN's in-country partner organizations work on the ground, are well-placed to draw the media attention and build the political support necessary for the issue to be taken up by national governments, and are mission-driven to protect public health and effectively secure results. UN agencies generally offer

guidance and manage processes, while local organizations push more directly for effective results to end lead paint production, sales, and use.

Actions and funding needed to eliminate lead paint globally

Funding

Following some discussion between IPEN and GiveWell of what kind of resources and steps would be needed to eliminate lead paint worldwide, and how much funding IPEN could absorb, IPEN has completed some rough calculations and estimates that eliminating lead paint globally in five years would cost a total of around \$14 million. This amount is based on efforts designed and managed by IPEN. If this amount were committed over a period of time, it would enable IPEN to take advantage of predictable funding and efficiently scale up its approach.

Country-level costs

IPEN has roughly estimated a cost of \$50,000 per year to enter a country with weak or no regulation against lead paint, or lack of enforcement, and begin conducting activities there. IPEN has decided to target 50 of the roughly 120 countries with weak or no regulation against lead paint.

This estimate includes funding for advocacy to put a ban on lead paint into effect and conduct very minor follow-up, but does not include significant monitoring activity (i.e., returning to a location 10 years after a law is passed to do follow-up testing; see "Enforcement and monitoring," below).

Regional costs

Many of the countries in which IPEN and its partner organizations work are part of distinct regions (such as East Africa or West Africa), in which the constituent countries trade heavily with each other and often conduct global trade as a bloc. In these regions, IPEN would like to begin taking a regional approach to lead paint regulation, alongside an individual country-level approach. This would involve equipping partner organizations in these countries to communicate and work together, including through videoconferencing and creating networks, in addition to the existing work done by IPEN's regional coordinators.

In order to have a greater impact on lead paint regulation, it could be helpful to hire a regional coordinator to focus exclusively on lead paint in the region and support partners there who are working on this issue.

Dedicated long-term NGO staff

One important step toward eliminating lead paint, which IPEN is already planning to do in Vietnam and Indonesia, is enabling participating organizations to hire dedicated staff to work on this issue over longer periods of time. Currently most of the NGOs with which IPEN works operate on very small budgets, and staff often are brought on for a short time when a grant is won and depart when the grant period ends. Maintaining the same person in a stable position is important for building a

relationship between that person and their contacts in government. A long-term staffer will be able to build networks with both government and industry representatives. This creates what IPEN informally refers to as a "national working group," a coalition of various stakeholders across the country working toward regulation of lead paint. This is a model that IPEN has found to be very effective and that it encourages its partners to use.

Data collection and advising/equipping governments to act

Adequate data is crucial to IPEN's work; many stakeholders it has worked with, including governments, have said that without data nothing can be done. IPEN has found that many governments do not have the capacity to take action on issues such as lead paint, and that this is related to either a lack of necessary data or an inability to analyze the data.

Most governments and the public are not attentive to the issue of lead paint. Many governments were not aware that they had a lead paint problem until IPEN had conducted lead paint studies in their countries. Moreover, toxic hazards to public health are also a problem for governments who tend to react to poisonings after the fact. Governments often seem reluctant to learn about issues related to toxic pollution in their countries because this then impels them to take action. For instance, IPEN tested free-range chicken eggs that were gathered from communities in Indonesia where plastics are burned for fuel, and found very high levels of dioxin in the eggs. While the Indonesian government seemed to appreciate the data IPEN had gathered, and the news reached the President and Minister of Environment, the next steps needed to address the issue within the communities were unclear.

In these cases, IPEN acts to some extent as a research center, both collecting data and advising governments on how to understand it. This becomes more essential when advocating on issues that are more complex than lead paint, which is relatively easy to comprehend.

Increased visibility, media attention, and improved communication

IPEN is also interested in increasing visibility of its work through drawing more media attention, and improving how it translates raw data into a format that people can easily grasp and use to make decisions. A social media campaign or infographic with simple visuals can make more of an impact than a long written report.

Enforcement and monitoring

One element that is currently missing from IPEN's campaign to eliminate lead paint is systematic enforcement of laws once they are passed. Low-capacity countries require a multi-pronged approach to ensure that lead paint is eliminated from the market, starting with passing a law, since it is necessary to have a law on the books to begin enforcement. Follow-up studies to monitor the continued prevalence of lead paint are also helpful, and would not be that complicated to conduct given a baseline study of what was on the market prior to the law. However, IPEN has not had the resources so far to do compliance monitoring in a consistent manner. To pave the

way for successful implementation, IPEN believes it is important to encourage the paint industry to voluntarily shift away from lead paint.

Currently any monitoring to ensure compliance with lead paint regulations is done on an ad hoc basis (this is done in the Philippines, for instance). The model IPEN and its participating organizations have tended to use focuses on getting anti-lead-paint laws passed, then leveraging those laws. It also emphasizes partnership with paint industry actors, some of whom have chosen to participate in IPEN's Lead Safe Paint certification programs. (However, there have been instances of fraudulent lead-free labels: in many countries where IPEN has conducted paint studies, cans with self-claims such as "lead-free" and "no added lead" have been shown to contain high levels of lead. One brand in the Philippines even copied IPEN's certification logo without being a member of the program. While its paint was later verified to meet the certification requirements, IPEN intervened to protect its mark. Both these types of false labeling illustrate the fact that there is a perceived value to lead-free paint, as someone is willing to invest effort in falsifying the certification.)

IPEN can provide examples of its progress over time; for instance, since it began its lead-free certification program for paint manufacturers in the Philippines, 85% of the paint industry there (which is dominated by just a few manufacturers) is now lead-free certified. However, multiple rounds of returning to priority countries after a law goes into effect and systematically gathering data on the continued presence of lead paint on the market is not currently part of its activities due to a lack of resources. Because IPEN has generated data on the prevalence of lead paint in 55 countries, it could conceivably use that data as a benchmark from which to test whether the prevalence of lead paint decreases after a regulation is passed.

In Sri Lanka and a few other countries, IPEN has conducted second rounds of testing after laws were passed. Occasionally, follow-up testing has been conducted by IPEN's partners at the request of the industry; for instance, if IPEN's partner tells paint manufacturers that it has found high lead levels in their products and that it is planning to announce these findings in a report, the manufacturers might ask the partner to give them time to reduce the levels, then check again.

*All GiveWell conversations are available at
<http://www.givewell.org/research/conversations>*