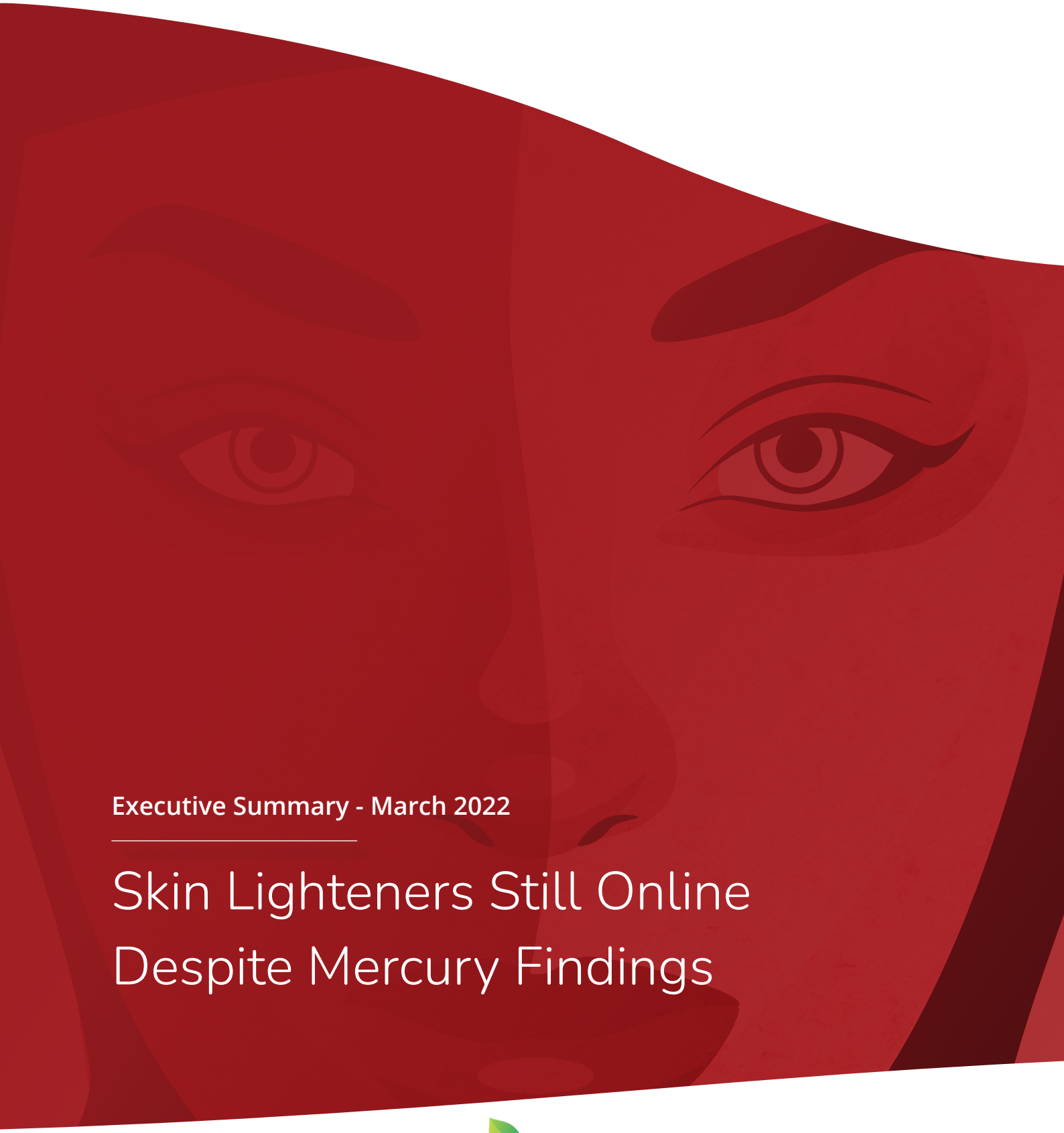
zero Hg
mercury working group



Executive Summary - March 2022

Skin Lighteners Still Online Despite Mercury Findings

Mercury Policy Project

EEB European Environmental Bureau

Naturskyddsföreningen

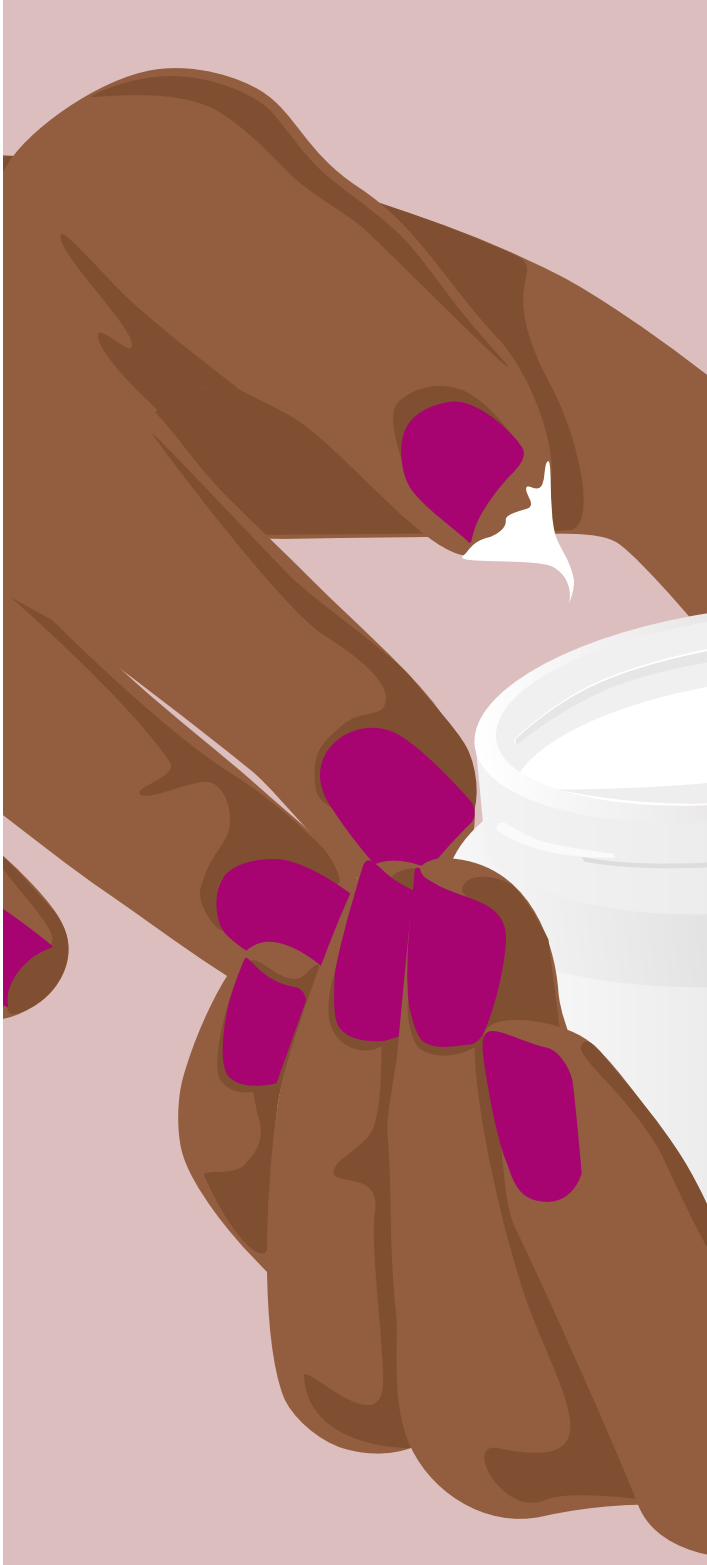
Context

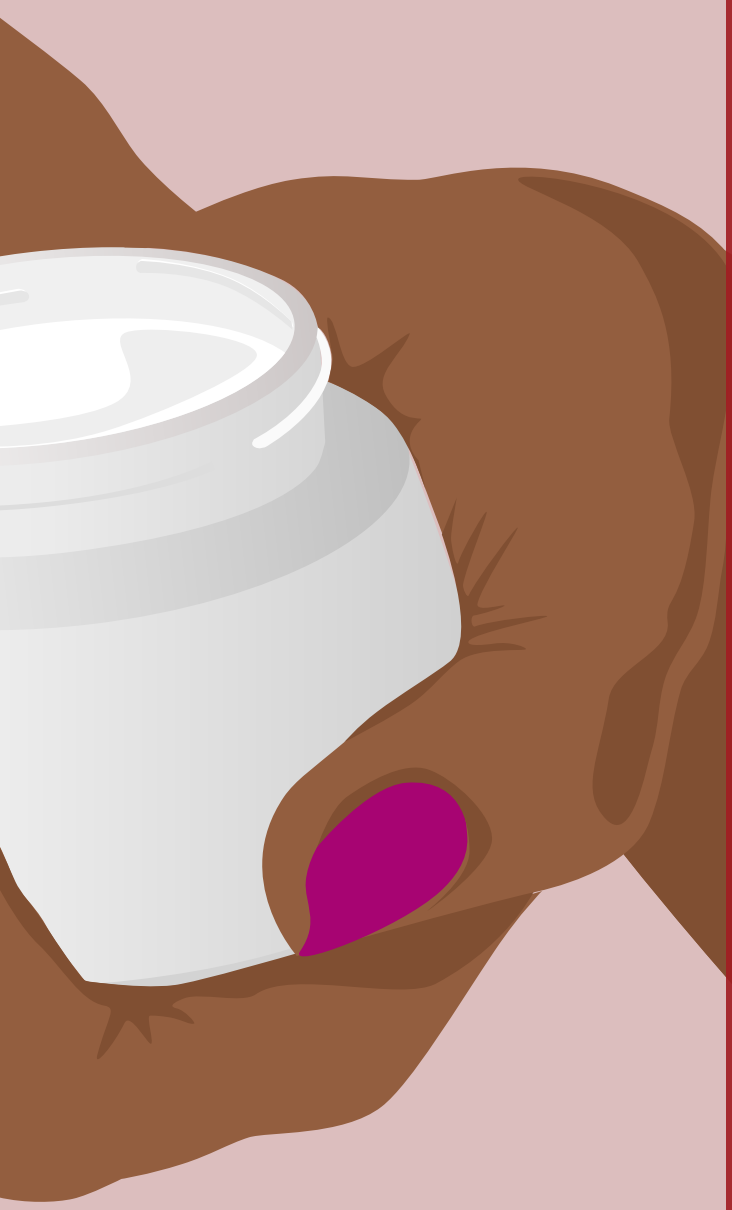
The Zero Mercury Working Group (ZMWG) has been investigating mercury-added skin lightening products (SLPs) for several years, primarily due to their health risks, their illegality under many national laws, and the prohibition by the Minamata Convention on Mercury against the manufacture and trade of mercury-added SLPs, which generally became effective in 2021. Between 2017 and 2022, our three separate investigations confirmed continued worldwide availability of illegal SLPs containing high mercury concentrations, as well as the urgent need for legal and programmatic reforms to better protect consumers and their families from unsafe, illegal and counterfeit products.

Despite substantial health risks, mercury compounds are frequently added to SLPs because mercury lightens the skin by suppressing the production of melanin. SLPs have received significant attention in the scientific literature—with countless studies outlining their negative impacts on health and well-being. The World Health Organization has also recognized that mercury—added to some SLPs—is a "major public health concern."

The regular use of SLPs containing mercury can lead to rashes, skin discoloration and blotching. Long-term exposure may also damage the eyes, lungs, kidneys, digestive, immune and nervous systems. An adult's use of SLPs laden with mercury can also expose other family members, such as through close contact, and may even require decontamination of the home.

The widespread use of SLPs – with or without mercury – is particularly concerning because they are a symbol of societies grappling with internalized racism and colorism. The global market for SLPs is estimated at USD 8.8 billion in 2022 and is projected to reach USD 11.8 billion by 2026.





In some populations, more than 50% of individuals use SLPs regularly, and one analysis estimated that 27.7% of individuals globally have used them at one time or another.

SLPs containing mercury are sold through local markets and online. The importance of e-commerce is particularly concerning, given the growing market share of e-commerce generally, and the challenges of regulating online sales especially where the seller is outside the country. Violations of health and safety laws facilitated by e-commerce sites not only threaten public health, but also create an uneven playing field since “brick and mortar” stores must comply with domestic laws that may be evaded by non-domestic sellers.

In 2017 and 2018, ZMWG purchased 338 SLPs from local shops in 22 different countries. These products were analyzed and 10% were found to contain mercury levels above 1 ppm (part per million), the limit established by the Minamata Convention and followed by an increasing number of governments. A follow-up study was conducted by ZMWG in 2019, targeting again the high-mercury products identified during the 2017-2018 study, as well as others identified by additional government agencies and researchers. Of the 166 samples analyzed, 56% had mercury concentrations over 1 ppm.

Following publication of the 2019 ZMWG study, most of the 13 online platforms selling high-mercury SLPs were asked to take down the products in question. Some did so, while others did not respond or claimed that they had no legal obligations to ensure that the products on their platforms were compliant with national or international law. Even in cases where high-mercury products were initially taken down, the products sometimes reappeared later on the same e-commerce platforms.

Findings

The 2020-2022 ZMWG investigation of SLPs offered by over 40 online platforms, and accessed in 17 countries by our partner NGOs, confirmed yet again that high-mercury SLPs are widely available from a range of popular e-commerce platforms globally. Of the 271 SLPs tested, 129 were found to have mercury levels over 1 ppm.

The following table lists all of the SLPs offered online and found to contain more than 1 ppm mercury, and also lists the countries where these products were purchased.

Table a: SLPs with mercury exceeding 1 ppm

Brand name	Product name	Country of purchase
Aneeza Gold	Beauty Cream; Beauty Cream with Avocado & Aloe Vera	Kenya, India, Nigeria, South Africa, Thailand, Uganda
Arché	Formula AA Pearl Cream	Belgium, USA
CCM Special Cream	Anti-Melasma Dark-Spots Cream	USA
Chandni	Whitening Cream	Kenya, Uganda
Cleo Me'	White - Lemon Formula	Thailand
Collagen Plus - Vit E	Night Cream	Bangladesh, Belgium, India, Indonesia, Mexico, Nepal, Philippines
Dr. Japan	Nano	Kenya, Thailand, Uganda
Due	Beauty Cream	Belgium, Indonesia, Côte d'Ivoire
Egg White & Cherry	7 Days Specific Eliminating Freckle Whitening Cream	Bangladesh, India
Erna	Whitening Cream	Indonesia
Face Fresh	Beauty Cream;	Belgium, India, South Africa, Thailand, USA
Face Fresh Plus	Gold Beauty Cream	South Africa
Faiza	Beauty Cream	India, Indonesia, Kenya, Thailand, Uganda, USA
Gluta White	Skin Whitening Cream - Advanced Glutathione Formula	India
Golden Pearl	Beauty Cream	Bangladesh, India, Kenya, Philippines, Thailand
Goree	Beauty Cream with Lycopene; Day & Night Whitening Cream	Bangladesh, India, Indonesia, Mexico, Nigeria, Philippines
Green Tea	Seven-Day - Whitening Anti-Freckle Cream	Bangladesh
Jiaobi	Whitening & Moisturizing Set: • Whitening Day Cream • Whitening Make-up Base • Whitening Night Cream	Bangladesh, Belgium, India, Indonesia, Philippines, Thailand

Jiaoli	Bird's Nest - Whitening Spot-Removing Scheme Suit; HuiChuSu Face Cream 7 Days Specific Eliminating Freckle: • Day • Night Miraculous Day and Night Cream: • Day Cream • Night Cream Speckle Dispelling & Whitening Cream	Belgium, Philippines, Thailand
Jolié	Beauty Cream	Belgium
Kim	Whitening Anti-Spot Night Cream; Whitening Ginseng and Pearl Cream; Whitening Pearl and Snow Lotus Cream	Bangladesh, Mexico, Nigeria, Thailand
La Crema de Rebeca	Crema Facial	Mexico
La Tia Mana	Crema Limpiadora y Curativa	Antigua & Barbuda, Mexico
Natural 99	Vitamin E Plus: • White canister • Yellow canister	Indonesia, Philippines
New Face	Whitening Cream	Belgium and India
Noor	Herbal Beauty Cream; Herbal Whitening Cream	Bangladesh, India, Côte d'Ivoire, Kenya
Noor Gold	Beauty Cream	Uganda
Nunn Care	Crema Limpiadora	Bahrain, Mexico
O White Extra	Whitening Cream	Mexico
Papaya	Whitening & Freckle-Eliminating package	USA
Parley	Beauty Cream; Goldie Advanced Beauty Cream; Goldie Pearl Shine; Herbal Beauty Cream with Avocado	Belgium, Philippines, Thailand, Uganda, USA
RDL	Whitening cream - Night Cream	Indonesia
Sakura	Gluta Speed White	Thailand
Sandal	Whitening Beauty Cream	Belgium, India, Thailand
Temulawak	Day & Night Cream - Beauty Whitening Cream - Night Cream	Indonesia, Thailand
Yinni - Green Tea	Quickacting Whitener and Speckle Remover	USA

The following two tables identify all countries and e-commerce platforms where SLPs were purchased during the 2020-2022 ZMWG investigation, as well as showing products in relation to the 1 ppm mercury threshold. As discussed in the body of the report, these tables are presented separately due to the different testing methods employed in different regions.

Table b.1: Mercury content (according to lab test results) of SLPs purchased on various platforms in Europe, North America and Latin America & the Caribbean

	Country of purchase	E-commerce platform	Mercury content in relation to the 1 ppm threshold
EUROPE	**Belgium**	amazon.fr	Below 1 ppm
		befr.ebay.be	Below & above 1 ppm
		best.aliexpress.com	Below & above 1 ppm
		bol.com	Below 1 ppm
NORTH AMERICA	**United States**	amazon.com	Below 1 ppm
		ebay.com	Below & above 1 ppm
LATIN AMERICA and THE CARIBBEAN	**Antigua & Barbuda**	amazon.com	Below & above 1 ppm
	Brazil	produto.mercadolivre.com.br	Below 1 ppm
		shopee.com.br	Below 1 ppm
	Mexico	aliexpress.com	Below or above 1 ppm
		amazon.com.mx	Below 1 ppm
		articulo.mercadolibre.com.mx	Below & above 1 ppm
		ebay.com	Above 1 ppm
		wish.com	Below 1 ppm

Table b.2: Mercury content (according to XRF test results) of SLPs purchased on various platforms in Africa, Asia and the Middle East

	Country of purchase	E-commerce platform	Mercury content in relation to the 1 ppm threshold
AFRICA	**Côte d'Ivoire**	jumia.ci	Below 1 ppm
		ubuy.ci	Above 1 ppm
	Kenya	jiji.co.ke	Below & above 1 ppm
		jumia.co.ke	Below & above 1 ppm
		kilimall.co.ke	Above 1 ppm
		sky.garden	Below 1 ppm
	Nigeria	jiji.ng	Below & above 1 ppm
		jumia.com.ng	Below 1 ppm
	South Africa	bidorbuy.co.za	Above 1 ppm
	Uganda	jiji.ug	Below & above 1 ppm

ASIA	**Bangladesh**	ajkerdeal.com	Above 1 ppm
		apsarah.com	Above 1 ppm
		clickbd.com	Below & above 1 ppm
		daraz.com.bd	Below & above 1 ppm
		Kablewala.com.bd	Above 1 ppm
		vinnobd.com	Above 1 ppm
	India	amazon.in	Below & above 1 ppm
		flipkart.com	Below & above 1 ppm
	Indonesia	bukalapak.com	Below & above 1 ppm
		shopee.co.id	Below & above 1 ppm
		tokopedia.com	Below & above 1 ppm
	Nepal	daraz.com.np	Below & above 1 ppm
	Philippines	lazada.com.ph	Below & above 1 ppm
		shopee.ph	Below & above 1 ppm
	Thailand	aliexpress.com	Below & above 1 ppm
		desertcart.co.th	Above 1 ppm
		ebay.com	Below & above 1 ppm
		lazada.co.th	Below & above 1 ppm
		shopee.co.th	Below & above 1 ppm
		ubuy.co.th	Below & above 1 ppm
MIDDLE EAST	**Bahrain**	ubuy.com.bh	Below & above 1 ppm

This investigation confirmed that most e-commerce platforms are not sufficiently motivated to verify the legality of products sold. When these platforms were notified in the past of sales of illegal high-mercury products, a common response was that they voluntarily removed those products from sale, and that they put more filters in place as a deterrent. Yet in most cases those measures did little to deter online sellers. As noted in the 2019 ZMWG report, follow-up investigations during 2018 showed that the same brands were found to contain high mercury concentrations on several consecutive sampling occasions in both physical shops and via e-commerce platforms.

To better understand this phenomenon, our 2020-2022 investigation included regular monitoring over 13 months of e-commerce platforms in 15 countries to assess the ongoing availability of many of the high-mercury SLPs identified. We found that more of the targeted high-mercury SLPs were regularly available on eBay (Belgium, Mexico, Thailand, United States), Ubuy (Bahrain, Thailand), Shopee (Philippines) and Flipkart (India).

Worse yet, nearly all of the SLPs listed in our 2019 report with mercury levels over 1 ppm continue to be available from over three times as many e-commerce platforms as those targeted in 2019.

Policy Implications

The current legal regulatory framework in most countries fails to adequately protect consumers from hazardous, counterfeit and illegal products sold online. A primary reason for this failure is that national laws in many countries allow online platforms to evade responsibility for the products sold on their platforms. This lack of accountability removes incentives for platforms to ensure product safety and produces, at best, voluntary episodic efforts to remove illegal products from a platform – efforts which are short-lived and ineffective at protecting consumers.

The safety risks of online platforms have been well documented, and extend well beyond mercury-added SLPs.

Consequently, policymakers and the courts are increasingly challenging a legal framework where consumers are left inadequately protected.

Furthermore, the illegal production and trade of mercury-added SLPs continues unimpeded because of weak enforcement, insufficient international cooperation and inadequate resources devoted to this issue. Our research confirms that the global availability of mercury-added SLPs remains robust, whether purchased online or in local markets.

Policy Recommendations

A. Online platforms

Simply stated, national governments should ensure that sales of products prohibited in stores are also prohibited online; and online platforms should bear the legal responsibility for ensuring that products sold on their platforms fully comply with health and safety laws. The platforms act very much like stores in that they profit from each sale, dictate the terms of the sales transactions, control the website content, influence the price of the products, and often distribute the products themselves.

Moreover, in cases where the third-party seller on the platform is located outside the country, the online platform is typically the only option for a consumer seeking legal redress for injuries incurred from an unsafe product. The same may be true for regulatory agencies enforcing health and safety laws.

Online legal reforms should adhere to the following principles in order to better protect consumers:

1. Clear liability rules should be established by national governments to cover violations of consumer product, health and safety laws for products sold over e-commerce platforms, with fines and penalties comparable to those imposed for sales in stores. Liability for consumer injuries and lack of contract performance should be similarly established.

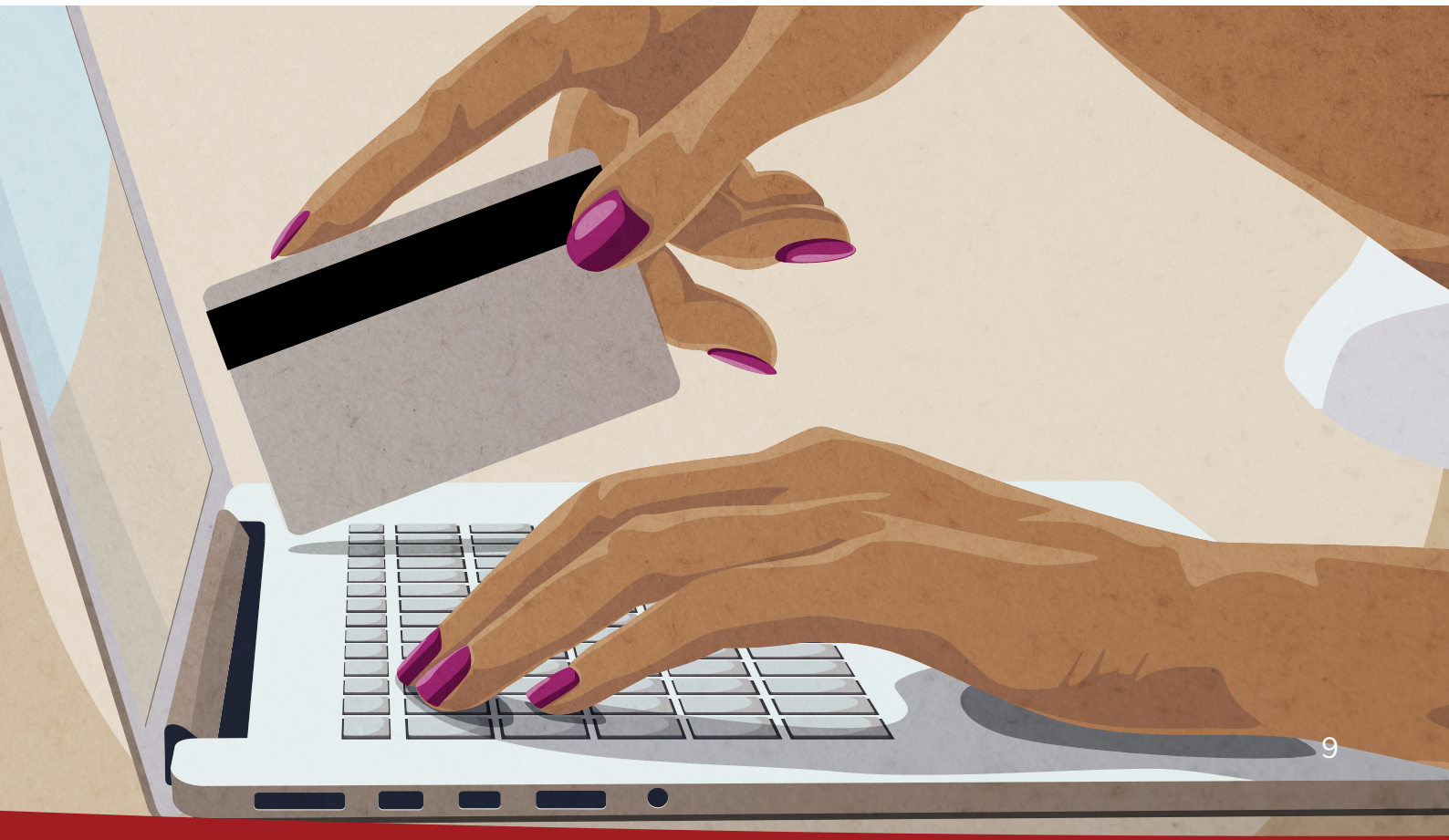
2. As a consequence of liability reform, e-commerce platforms should be required to screen and vet sellers and their products. Evidence of health and safety law compliance should be provided by the seller to the internet platforms, including proof that the product is genuine as labelled, disclosure of ingredients, and certifications of compliance with content requirements. Repeat violators should be prevented from re-joining or remaining on the platform. And online platforms should be required to share an infringing seller's information with law enforcement.

3. E-commerce platforms should publish their compliance measures in a place where these can be independently verified by regulators, including the establishment of a timeline for compliance.

4. Consumers should have access to the same information online as is required for sales in stores, including labelling information.

5. Online platforms should be required to verify foreign third-party sellers, including name, geographic location and other identifying data. Third-party sellers should also be obligated to consent to the jurisdiction of the platform country's courts, and to appoint home-country legal representatives who would be authorized to act on behalf of the supplier in the case of regulatory proceedings or lawsuits from injured consumers.

6. Online platforms should be held responsible for ensuring compliance with third-party seller verification, and information/ingredient disclosure requirements.



B. Illegal production and trade

Here we reiterate and expand upon our recommendations in the ZMWG 2018 and 2019 Testing Reports and the 2019 Enforcement Report. To address illegal production and trade, a strong program for controlling the legal trade of mercury-added products, including SLPs, is required so that violations of law can be clearly established and prosecuted. Once the enforcement infrastructure is in place, detection and investigation strategies can be implemented, in collaboration with all relevant government agencies, civil society and international partners. Regional collaboration and global coordination will facilitate enforcement. The essential elements include:

1. Licensing/registration requirements to import/use mercury or mercury compounds. Note the import and use approval authority must cover mercury compounds, not just elemental mercury, since mercury compounds are more often used to produce mercury-added SLPs. Fees associated with licensing and registration may be a source of revenue for supporting the surveillance program.

2. Labeling requirements for cosmetics requiring full disclosure of ingredients. All cosmetics should be labelled according to national regulations where SLPs are destined, with accurate information on the ingredients, producer, address and country of manufacture. The labeling language must be understandable in the destination country.

3. Severe fines and penalties imposed for illegal uses of mercury in products, lack of compliance with licensing/registration or labeling requirements, and/or providing false information, including confiscation of illegal profits, transferring prosecution and seized goods storage costs to the defendants upon conviction, and imprisonment.

4. Capacity building of customs agencies, including training, materials (quick reference guide/checklist/manual), purchase of field detection equipment (see below), technical support, risk profiling (scrutinize free trade zones), management of seized goods, and coordination with the licensing/registration system administrator.

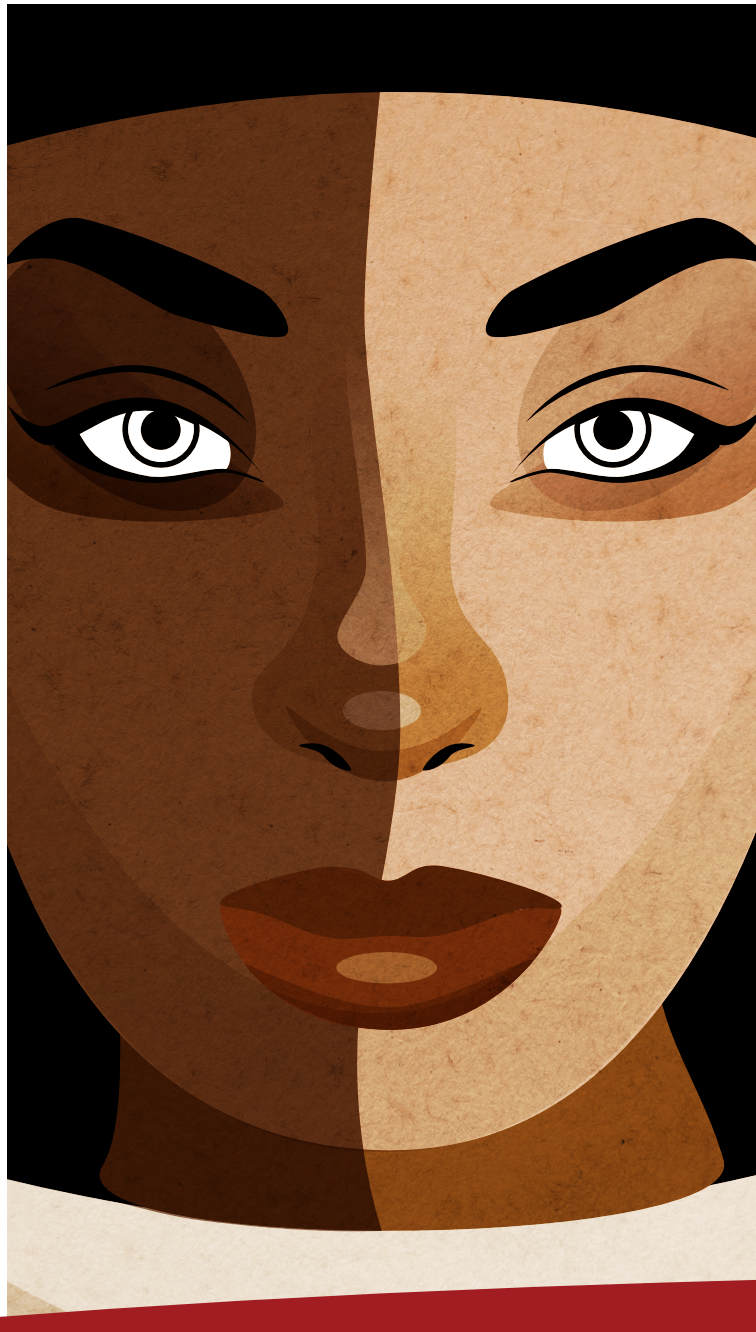
5. Cross-border collaborations with countries exporting SLPs to your country. Collaboration between countries is essential and can help leverage limited resources to share costs and technical expertise, e.g., for market surveillance and enforcement, information-sharing, product inspection and analysis, and training.

6. Detection and measurement capabilities, both in the field and supported by certified laboratory access as needed for confirmatory evidence. Field measurements of SLPs are typically performed using an X-ray fluorescence (XRF) spectrometer. This is essentially a hand-held “point and shoot” device that measures the presence of metals in solids and liquids. Training is required to use this device, both to use it accurately and to ensure the safety of the person(s) using the device, which is a source of radiation. Laboratory support may be necessary to obtain precise measurements or to calibrate XRF results, such as when mercury crystals or salts are observed in an SLP, indicating that the product is non-homogeneous.

7. Collaboration with legal SLP producers and NGOs on program implementation, and education/outreach to the general public.

8. Regional and global information sharing and cooperation, such as product alert or detention mechanisms, market investigations and capacity building. Regional alert systems, such as the EU RAPEX system, can be used to rapidly share information among collaborating countries about non-compliant products. Market investigation cooperation, such as "Operation Pangea" coordinated by organizations such as INTERPOL, the World Customs Organization (WCO), and the Permanent Forum of International Pharmaceutical Crime (PFIPC), etc., can enhance enforcement efforts.

Finally, priority attention to this issue will be required from the various subsidiary bodies of the Minamata Convention on Mercury. Convention resources should be devoted to creating an information exchange platform, developing materials and resources such as a training manual for customs and enforcement officers, capacity building to promote and support regional collaboration, and XRF group purchasing and training. The Implementation and Compliance Committee of the Minamata Convention should target this issue as a Convention priority need, and should develop immediate and longer term strategies for addressing this issue, including quantifying resource needs. In addition, the Conference of the Parties should initiate activities to "evaluate whether the trade in specific mercury compounds compromises the objective of this Convention and consider whether specific mercury compounds" should be subject to trade restrictions, in accordance with Article 3, Paragraph 13 of the Convention. The first step of this process may be an assessment of the global supply, trade and use of mercury compounds, comparable to studies previously published on elemental mercury.



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This report is dedicated to our friend, colleague and mentor,
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