



## **Submission to the Special Rapporteur on Toxics and Human Rights on Mercury, Artisanal and Small-Scale Gold Mining March 2022**

Human Rights Watch welcomes the opportunity to provide input into the Special Rapporteur's report on mercury and human rights.

Mercury attacks the central nervous system and can cause lifelong disability, including brain damage, and even death. It is particularly harmful to children, as their systems are still developing; the younger the child, the more serious the risk.<sup>1</sup> Human Rights Watch has documented serious violations of children's health rights in artisanal and small-scale gold mining as a result of mercury use. Specifically, we have documented mercury use by child laborers working in artisanal and small-scale gold mining in Mali, Tanzania, Ghana, and the Philippines, and children's exposure to mercury when they live near mine sites or are taken to mine sites.<sup>2</sup> This submission draws on our research findings and some more recent updates.

### **Child Laborers' Exposure to Mercury**

Mercury is used in artisanal and small-scale mining to retrieve the gold from the ore. When it gets mixed into gold ore, it forms an amalgam. This is subsequently burned, leaving behind raw gold. The most serious health hazard comes from exposure to mercury vapor during the burning of the amalgam. Children often mix the mercury into the ore with their bare hands and also burn the amalgam, with nothing to protect them from the toxic fumes. Across our research, we found that traders sold mercury directly to children. Traders provided children with little to no information on using mercury.

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<sup>1</sup> Herman Gibb and Keri Grace O'Leary, "Mercury Exposure and Health Impacts among Individuals in the Artisanal and Small-Scale Gold Mining Community: A Comprehensive Review," *Environmental Health Perspectives*, 122 (7) (2014), accessed February 25, 2022, doi: 10.1289/ehp.1307864.

<sup>2</sup> Human Rights Watch, *A Poisonous Mix: Child Labor, Mercury, and Artisanal Gold Mining in Mali* (New York: Human Rights Watch, 2011); *Toxic Toil: Child Labor and Mercury Exposure in Tanzania's Small-Scale Gold Mines* (New York: Human Rights Watch, 2013); *Precious Metal, Cheap Labor: Child Labor and Corporate Responsibility in Ghana's Artisanal Gold Mines* (New York: Human Rights Watch, 2015); *"What ... if Something Went Wrong?": Hazardous Child Labor in Small-Scale Gold Mining in the Philippines* (New York: Human Rights Watch, 2015); *"I Must Work to Eat": Covid-19, Poverty, and Child Labor in Ghana, Nepal, and Uganda* (New York: Human Rights Watch/Friends of the Nation/ISER 2021).

Our research also found that child laborers had limited, and sometimes false information about mercury, and usually did not know its risks or how to protect themselves. Some child and adult miners in Tanzania, Ghana, and the Philippines told Human Rights Watch that they suffered dizziness, headaches, tremors, and spasms. Yet, none of them had been tested for mercury exposure. Local health centers often lack the ability to test for mercury poisoning.

### Mercury Exposure of Children in Nearby Communities

Small children who do not work can still be exposed to inhaling mercury vapor if they are present near amalgamation sites, for example when parents take children to the mines. We found that traders, miners, and child workers sometimes conduct the amalgamation in their own homes.<sup>3</sup>

Children are also exposed to mercury through contaminated waters and the consumption of fish.<sup>4</sup> In water, mercury can convert into methylmercury, which collects in fish and puts communities that eat fish at risk of mercury poisoning. One method of gold processing using mercury that contributes to contamination of water is “whole ore amalgamation,” whereby large amounts of mercury are dumped into mills filled with the whole (unconcentrated) ore. Human Rights Watch researchers observed the unrestricted flow of tailings from whole ore amalgamation in the Philippines, for example at the Bosigon River in Camarines Norte province, where children played, swam, and panned for gold.

### Government Responses

Mali ratified the Minamata Convention on Mercury in 2016; Tanzania and the Philippines ratified the convention in 2020; and Ghana ratified the convention in 2017.<sup>5</sup> However, the illegal trade in mercury continues to hamper efforts to reduce mercury use in artisanal and small-scale gold mining. The United Nations Environment Programme (UNEP) estimates that about half of the mercury used in artisanal and small-scale mining is traded illegally.<sup>6</sup> In Tanzania, most artisanal and small-scale gold miners acquire mercury through illegal trade.<sup>7</sup>

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<sup>3</sup> Human Rights Watch, *Toxic Toil*; Human Rights Watch, *Precious Metal, Cheap Labor*; Human Rights Watch, “*What ... if Something Went Wrong?*”: *Hazardous Child Labor in Small-Scale Gold Mining in the Philippines*.

<sup>4</sup> Stephan Bose-O’Reilly et al., “Mercury Exposure and Children’s Health,” *Current Problems in Pediatric and Adolescent Health Care*, vol. 40, (2010), pp. 188-189.

<sup>5</sup> “Parties and Signatories,” Minamata Convention on Mercury, undated, <https://www.mercuryconvention.org/en/parties> (accessed February 24, 2022); “Ghana Ratifies Mercury Convention,” Human Rights Watch news release, March 29, 2017, <https://www.hrw.org/news/2017/03/29/ghana-ratifies-mercury-convention>.

<sup>6</sup> United Nations Environment Programme and GRID-Arendal, *The Illegal Trade in Chemicals*, April 1, 2020, <https://www.unep.org/resources/assessment/illegal-trade-chemicals> (accessed March 1, 2022); for West Africa, see also, United Nations Industrial Development Organization, *Curbing Illicit Mercury and Gold Flows in West Africa: Options for a Regional Approach*, November 2018, <https://www.unido.org/sites/default/files/files/2018-11/UNIDO%20ECOWAS.pdf> (accessed March 1, 2022).

<sup>7</sup> Email from Haji T. Rehani, AGENDA for Environment and Responsible Development, to Human Rights Watch, March 2022.

In Mali, the government has conducted sensitization programs on the use of mercury in specific communities.<sup>8</sup> In 2020, the government published an action plan in line with the Minamata Convention on Mercury, outlining strategies to reduce the emissions of mercury and reduce exposure to vulnerable populations, including children.<sup>9</sup>

In the Philippines, the government launched a five-year project to eliminate the use of mercury in artisanal and small-scale gold mining in 2019.<sup>10</sup> In November 2019, the Philippines Department of Environment and Natural Resources published a revised Chemical Control Order on mercury and mercury compounds, where it included a section on the prohibition of mercury in artisanal and small-scale gold mining.<sup>11</sup>

In 2021, the government of Ghana launched a program to phase out the use of mercury in artisanal small-scale gold mining over a five-year period.<sup>12</sup> The government has also made mercury-free mining equipment available to small-scale miners.<sup>13</sup> However, Ghana has not banned the trade in mercury.<sup>14</sup>

In 2020, the Tanzanian government created a five-year national action plan to reduce the use of mercury among miners.<sup>15</sup> The action plan involves alternative technology and education on the health effects of mercury.

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<sup>8</sup> Boris Ngounou, "MALI : le gouvernement mène une croisade contre l'usage du cyanure dans l'orpaillage," September 20, 2019, <https://www.afrik21.africa/mali-le-gouvernement-mene-une-croisade-contre-lusage-du-cyanure-dans-lorpaillage/> (accessed February 25, 2022).

<sup>9</sup> "Plan d'Action National pour l'Extraction Minière Artisanale et à Petite Échelle d'Or au Mali Conformément à la Convention de Minamata sur le Mercure," Government of Mali, March 2020, [https://www.mercuryconvention.org/sites/default/files/documents/national\\_action\\_plan/Mali-ASGM-NAP-Mar2020-FR.pdf](https://www.mercuryconvention.org/sites/default/files/documents/national_action_plan/Mali-ASGM-NAP-Mar2020-FR.pdf) (accessed February 25, 2022).

<sup>10</sup> "PH Begins Work to Eliminate Mercury in Small-Scale Gold Mining," Republic of the Philippines, May 4, 2019, <https://www.denr.gov.ph/index.php/news-events/press-releases/1019-ph-begins-work-to-eliminate-mercury-in-small-scale-mining> (accessed February 25, 2022).

<sup>11</sup> "Republic of the Philippines, "Revised Chemical Control Order (CCO) for Mercury and Mercury Compounds (Revising DAO 1997-38), DENR Administrative Order No. 2019-20," Department of Environment and Natural Resources, November 20, 2019, <https://chemical.emb.gov.ph/wp-content/uploads/2019/11/DAO201920MERCURY.pdf> (accessed March 1, 2022).

<sup>12</sup> Inès Magoum, "GHANA: AEHPMP to reduce mercury pollution and e-waste," *Afrik21*, May 28, 2021, <https://www.afrik21.africa/en/ghana-aehpmp-to-reduce-mercury-pollution-and-e-waste/> (accessed February 24, 2022).

<sup>13</sup> "Government to supply mercury-free mining equipment to small-scale miners," *Modern Ghana*, May 31, 2021, <https://www.modernghana.com/news/1084657/government-to-supply-mercury-free-mining-equipment.html> (accessed February 24, 2022).

<sup>14</sup> Information provided on March 1, 2022, by Friends of the Nation, a nongovernmental organization working on mercury in Ghana's gold mines.

<sup>15</sup> United Republic of Tanzania, Vice President's Office, *National Action Plan for Artisanal and Small-Scale Gold Mining 2020-2025*, February 2020, [https://www.vpo.go.tz/uploads/publications/en-1592551170-ASGM%20National%20Action%20Plan\\_Tanzania\\_2020.pdf](https://www.vpo.go.tz/uploads/publications/en-1592551170-ASGM%20National%20Action%20Plan_Tanzania_2020.pdf) (accessed March 2, 2022).