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TOXIC TOIL

Child Labor and Mercury Exposure in Tanzania's Small-Scale Gold Mines

Summary and Key Recommendations



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A gold processing site in Mbeya Region.
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Four-year-old girl plays in an amalgamation pond contaminated with mercury while adults process gold at a gold rush site in Shinyanga Region.

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Rahim T. is a small, soft-spoken, 13-year-old boy who lives with his aunt in a village in Chunya district in southern Tanzania. His father died and his mother lives in a larger town in the same district. Rahim T. started working on mining sites over the weekends and during the school holidays, around the age of 11, because he was sometimes left at home alone without enough money or food to eat. He told Human Rights Watch, “My parents were not present at home. I saw my friends going there. I was hungry and in need of money so I decided to go there.”

Rahim T. uses mercury, a highly toxic silvery liquid metal, to extract the gold at home. He mixes roughly half a tablespoon of mercury with ground gold ore. He then stands a few meters away from an open flame where he burns the gold-mercury amalgam on a soda cap for about 15 minutes, releasing dangerous mercury vapor into the environment. Until our interview, no one had ever told him mercury can cause serious ill-health, including brain damage, and even death.

Soon after Rahim T. started mining, he was involved in a pit accident:

I was digging with my colleague. I entered into a short pit. When I was digging he told me to come out, and when I was about to come out, the shaft collapsed on me, reaching the level of my chest ... they started rescuing me by digging the pit and sent me to Chunya hospital.

The accident, Rahim T. told Human Rights Watch, knocked him unconscious and caused internal injuries. He remained in the hospital for about a week and still occasionally feels pain in his waist when he sits. After the accident, he was scared of returning to the pits, but he felt he had no choice, explaining: “Whenever my aunt travels is when I go, because I need something to sustain myself.”

Mining, the type of work described by Rahim T., is one of the most hazardous forms of child labor. Thousands of children in Tanzania, some as young as eight years old, risk serious injury and even death from work in this industry. Many children, especially orphans, lack basic necessities such as food, clothing, and shelter, and seek employment to support themselves and their relatives.



A miner lowers down a deep pit by holding onto a rope in a small-scale mining site in Mbeya Region.

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This report examines child labor and exposure to mercury in small-scale gold mining in Tanzania, Africa's fourth-largest gold producer. It documents the harmful effects of mining on children, including its impact on the enjoyment of their rights to health, education, and protection from violence and abuse. The report focuses on hard rock mining, whereby small-scale miners remove and process rocks from pits to extract the ore. Human Rights Watch conducted research in Chunya district (southern Tanzania), in Geita and Kahama districts (northwestern Tanzania), and in the cities of Dar es Salaam, Mwanza, and Mbeya.

Small-scale gold mining is labor-intensive and requires little technology. Mining operations in Tanzania typically involve people who control the mine, pit holders (who lease pits from the people who control the mine), and workers, including children.



Children are involved in every phase of the mining process. They dig and drill in deep, unstable pits during shifts of up to 24 hours. They transport heavy bags of gold ore and crush the ore into powder. After concentrating the gold further, children mix the powder with mercury and water in a pan. The mercury attracts the gold particles, creating a gold-mercury amalgam. Children burn the amalgam to evaporate the mercury and recover the gold. Children who work in mining are exposed to serious health risks, including: accidents in deep pits, injuries from dangerous tools, respiratory diseases, and musculoskeletal problems.

Mercury poses a threat to children and adults who work in mining, as well as to surrounding communities. Miners, including children, risk mercury poisoning from touching the mercury and breathing the mercury vapor. People who live in mining areas may also be exposed to mercury when

Miner holds basin with mercury to mix with ground gold ore at a gold rush site in Shinyanga Region.

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A 13-year-old boy digging and lifting gold ore and other rocks at a small-scale mining site in Mbeya Region.

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A 13-year-old boy, who mines gold, attends classes in a small-scale mining area in Mbeya Region. Work in mining impacts children's performance and attendance at school.

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community or family members process the gold at home, or from eating mercury-contaminated fish from nearby rivers. Mercury attacks the central nervous system and can cause developmental and neurological problems. It is particularly dangerous to fetuses and infants, because their young bodies are still developing. Most adult and child miners are unaware of the grave health risks connected to the use of mercury.

Girls on and around mining sites in Chunya and Kahama districts face sexual harassment, including pressure to engage in sex work. As a result, some girls become victims of commercial sexual exploitation and risk contracting HIV and other sexually transmitted infections.

Children who work in mining sometimes miss out on important educational opportunities and experiences. In some cases, mining causes children to skip classes or drop out of school. It can also impact students' time and motivation for study.

This report also examines how gold traders may contribute to child labor in mining. Small traders purchase gold directly



at the mines or in mining towns—including from children—and sell it to larger traders. Sometimes the gold passes through several intermediaries before reaching the largest traders who export gold. The top destination for artisanal gold from Tanzania is the United Arab Emirates (UAE); gold is also exported to Switzerland, South Africa, China, and the United Kingdom.

Under international and domestic law, the Tanzanian government is obligated to protect children from violations of their rights, including the worst forms of child labor such as mining and commercial sexual exploitation. Tanzania should provide free primary education and make secondary education, including vocational training, available and accessible. The government should also take measures to avoid occupational accidents and diseases, and reduce the population's exposure to harmful substances. Scientific evidence shows that mercury is a harmful substance.

While the Tanzanian government has taken some important steps to reduce child labor and mercury exposure in gold

Two 13-year-old boys dig for gold ore at a small-scale mine in Mbeya Region.

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A miner holding a small piece of gold ore at a small-scale mining site in Mbeya Region.

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A boy holds his tool to crush gold ore at a gold rush site in Shinyanga Region.

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mining, it has failed to adequately enforce its child labor laws and address some of the socioeconomic problems contributing to child labor.

In June 2009, the Tanzanian government launched the National Action Plan on the Elimination of Child Labour. Under its mining, child protection, and employment laws, the government also prohibits children under the age of 18 from engaging in hazardous work, including mining. Occasionally government officials inspect mines for child labor.

Despite these positive actions, the government's 2009 child labor action plan remains unimplemented, its child labor inspection process is flawed, and key ministries are failing to prioritize and devote resources to enforce child labor laws.

The Ministry of Labour and Employment is the lead ministry on child labor, but it has taken limited action to counter child labor in mining. Its labor officers rarely, if ever, visit licensed small-scale mines for child labor inspections, and virtually never conduct child labor inspections on unlicensed, informal mines—the majority of sites. The Ministry of Energy and Minerals is also failing to carry out its responsibilities under the mining regulations, which authorize mining officials to order mining license holders who have hired children to pay a fine or take remedial action. Both ministries lack adequate staff and means to visit remote mining areas. When labor or mining officials did carry out child labor inspections, they sent younger-looking children away from the mines, but did not properly assess the ages of older children or follow up to support the children's transition out of child labor. Mining officials often prioritized revenue collection and other health and safety issues over child labor when visiting licensed and unlicensed mines. Both ministries seldom penalized employers who hired children.

The government has also failed to adequately address some of the underlying socioeconomic causes of child labor. In particular, the government provides too little support to orphans and other vulnerable children, many of whom seek employment in mining to cover their basic needs. Moreover, weaknesses in the education system indirectly contribute to child labor. In particular, despite the official abolition of school fees through the 2002-2006 Education Development Plan, schools sometimes request illegal financial contributions, prompting students whose parents are unable to pay such expenses to either seek additional income on the mines or to drop out of school. Also, many children across Tanzania do not transition from primary to secondary or vocational school and start full-time work in sectors such as mining. This is partly because of the cost of attending secondary school and limited vocational training opportunities.

The threat of mercury is recognized by Tanzania, but its use in small-scale mining continues unabated. Tanzania has laws and institutions in place to regulate the mercury trade and



A girl carrying her mining tools at a gold rush site in Shinyanga Region.

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Two boys crush gold ore on a gold rush site in Shinyanga Region.

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Two 13-year-old boys and one 15-year-old boy pour crushed gold ore over a sisal sack to concentrate the particles of gold at a processing site in Mbeya Region.

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promote safer mercury use in mining. In 2009 the government developed a National Strategic Plan for Mercury Management, which includes strategies to raise awareness on the hazards of mercury and introduce mercury-free technology to extract gold. Under the mining regulations, an owner of a licensed mine must use a retort—a device that captures harmful mercury vapor—and provide employees with protective gear. The government also requires those who intend to import, export, transport, store, and deal in chemicals to register specified quantities of mercury with the Chief Government Chemist. By controlling the flow and use of mercury in the country, the government can incentivize miners to explore alternative gold extraction methods.

However, the government has done little to put these laws and policies into action. It almost never enforces the regulations that require the registration of mercury for small-scale gold mining or the use of retorts and protective gear on mining sites. It has also failed to launch the Mercury



Management Plan and to devise a health sector response to mercury poisoning.

Donors, United Nations agencies, international financial institutions, and civil society organizations play an important role in assisting poorer nations to fulfill their obligations under international law. These groups have taken some steps to support initiatives on child labor, mercury use, and mining generally, but only a handful of donor initiatives specifically address child labor or mercury use in small-scale gold mining. Some programs, such as the World Bank's Sustainable Management of Mineral Resources Project (SMMRP), which supports Tanzania's small-scale miners, could potentially do more to target child labor in small-scale gold mining.

Businesses, under international law and other norms, also have a responsibility to identify, prevent, mitigate and account for the impact of their activities on human rights, and to adequately address abuses connected to their operations. Gold traders in Tanzania who were interviewed for this report lacked specific due diligence procedures to avoid supporting

A 17-year-old boy mixes mercury and ground gold ore at a gold processing area in Mbeya Region.

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Miners mixing mercury and ground gold ore in an amalgamation pond in Geita Region.
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A miner holds processed gold at a small-scale mining site in Mbeya Region.
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unlawful child labor. Meanwhile, international standards for human rights due diligence have largely focused on due diligence for “conflict gold”—gold which benefits conflict parties and hence contributes to armed conflict. As a result, companies have done less to prevent supply chains from becoming entangled with suppliers who exploit unlawful child labor.

Ending child labor in gold mining requires the government, UN agencies, donors, artisanal miners, gold traders, and companies to prioritize and fully support its elimination. Failure to act places children at risk of serious injury or death and may destroy their educational opportunities. Additionally, failure to limit the use of mercury may cause devastating health and environmental effects for both children and adults.



Gold processing at a trader's workshop
in Geita Region.

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KEY RECOMMENDATIONS

TO THE TANZANIAN GOVERNMENT

CHILD LABOR

- Instruct mining and labor officials to regularly inspect and withdraw children from mining work on licensed mines and impose penalties on those who employ child labor. Government measures must respect human rights and should not lead to retribution or severe punishments;
- Instruct labor officers to inspect unlicensed mines. If mining officials informally visit an unlicensed mine, they should remind employers of child labor laws, encourage them to comply, and request the Ministry of Labour and Employment to conduct further inspections and, where necessary, impose penalties;
- Instruct labor officers, social welfare officers, and parasocial workers to identify and protect girls who work in mining from sexual abuse;
- Conduct awareness-raising and outreach activities on the hazards of child labor in mining;
- Support orphans and other vulnerable children by, for example, implementing the National Costed Action Plan on the Most Vulnerable Children and expanding the Tanzania Social Action Fund which provides grants and conditional cash transfers to vulnerable populations;
- Instruct district officers to investigate and eliminate illegal primary school fees to ensure they do not thwart access to education in mining areas;
- Increase access to post-primary education in mining areas by allowing children to retake the Primary School Leaving Examination and compete for a place at a secondary school and by increasing opportunities for vocational training;
- Strengthen and intensify efforts to formalize the artisanal and small-scale gold mining sector without engaging in a mass clampdown on unlicensed mining activity;
- Explicitly address child labor and mercury exposure in current efforts to promote the development and professionalization of artisanal mining, including through the government-led Strategy to Support Artisanal and Small-Scale Mining Development and the Multi-Stakeholder Partnership between the government, World Bank, Anglo-Gold Ashanti, and African Barrick Gold.

MERCURY EXPOSURE

- Urge an immediate end to mercury use by anyone under age 18 as part of broader efforts to raise awareness and enforce safe mining practices and to promote mercury-free alternatives;
- Develop a health response to address mercury exposure and poisoning in artisanal mining communities, with a focus on child health, including by revising and launching the National Strategic Plan on Mercury Management.

TO DONOR COUNTRIES, THE WORLD BANK, AND RELEVANT UN AGENCIES

- **Provide financial, political, and technical assistance to address child labor and mercury exposure in mining, including through programs on artisanal mining.**

TO TANZANIAN AND INTERNATIONAL COMPANIES TRADING IN ARTISANAL GOLD

- **National and international companies buying gold from Tanzania’s small-scale gold mines should have due diligence procedures in place to ensure that their supply chains are free from child labor. If child labor is found, companies should work with their suppliers to end child labor in the supply chain within a defined timeframe and cease working with suppliers who are unable or unwilling to comply.**

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Child Labor and Mercury Exposure in Tanzania's Small-Scale Gold Mines

Thousands of children, some as young as eight-years-old, risk serious injury and even death from work in small-scale gold mining in Tanzania. Many children, especially orphans, lack basic necessities and seek employment in mining to support themselves and their relatives.

This report, based on over 200 interviews, examines child labor and exposure to mercury in small-scale gold mining in Tanzania, Africa's fourth-largest gold producer. Children dig and drill in deep, unstable pits for shifts of up to 24 hours, transport and crush heavy bags of gold ore, and process the gold with mercury. Exposure to mercury vapor can cause neurological and developmental problems and it is particularly harmful to children. In some cases work in mining also affects children's attendance and performance at school and places girls at risk of sexual harassment and exploitation.

While the Tanzanian government has taken some important steps to reduce child labor and mercury exposure in gold mining, it has failed to adequately enforce its child labor laws and address some of the socioeconomic problems contributing to child labor. The government has also failed to develop and implement a comprehensive strategy to address the harmful effects of mercury.

Despite some funding to assist small-scale miners and to reduce child labor in sectors such as agriculture and domestic work, few donor initiatives specifically address child labor or mercury use in small-scale gold mining. Moreover, Tanzanian traders and international companies have not done enough to eliminate unlawful child labor in their supply chains.

The Tanzanian government, with the support of the international community, should end child labor in small-scale gold mining, improve support for orphans and other vulnerable children, strengthen access to education, and reduce mercury use and exposure.



A 15-year-old boy mixes mercury and ground gold ore at a processing site in Mbeya Region, Tanzania.

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