

Exploration, construction, operations and postclosure processes in the mining industry can be intrinsically dangerous – especially for children, who often have different perceptions and understanding of personal risk compared to adults. Because children are particularly vulnerable and are usually less well placed to advocate for their rights, mining companies have a vital role to fulfil in their management of health and safety impacts in the surrounding community.



Where does your company stand on respecting and advancing every child's right to health and safety? The figure below illustrates a continuum from the lack of effective systems up to a leadership position in responsible and proactive management.



Tool 7 is designed to support mining companies to understand, anticipate, manage and mitigate potential negative impacts on children in order to better protect and promote children's rights through their community health and safety plans. It complements Good International Industrial Practice (GIIP) requirements (such as IFC Performance Standard 4 – Community Health, Safety and Security). Companies that have not yet integrated these guidelines into their management systems should address that gap as a priority.

7.1 Overview of the issues and related standards

Companies can be directly and indirectly responsible for or complicit in violations of children's rights through their approach to managing children's health and safety at the site of operations and around it. Understanding the context, assessing risks and managing them appropriately can help lower the likelihood of this risk and protect the company's social licence to operate, reputation and business continuity.

IFC Performance Standard 4: Community Health, Safety, and Security provides a solid foundation for establishing a management approach that incorporates human rights, including by conducting risk assessments that examine the potential dangers for communities in relation to mining operations.



To supplement this approach with a specific focus on children, it is important to understand how they will be more vulnerable compared to adults – for example, by being unable to read warning signs, which increases the risk of accidents, and less able to protect themselves from sexual abuse and exploitation (see Annex A. Child vulnerability matrix and Tool 9. Protecting Children from Sexual Violence).

Two main areas of concern are covered in this tool – on-site health and safety, and transportation infrastructure surrounding the mine site.

Resources for health and safety

IFC Performance Standard 4: Community Health, Safety, and Security, available at <<u>www.ifc.</u> org/wps/wcm/connect/Topics Ext Content/IFC External Corporate Site/IFC+Sustainability/ Our+Approach/Risk+Management/Performance+Standards>

Voluntary Principles on Security and Human Rights, 2000, <www.voluntaryprinciples.org>

7.2 On-site health and safety

Risks to children can originate from exposure to machinery, open pits, mine shafts, ponds, blasting and other aspects of mining operations. Sites will typically have a health and safety management plan to deal with these general risks, including such factors as the physical infrastructure that is in place/planned. While physical infrastructure can alter the risks that children may be exposed to, it is also important to understand the context regarding children in order to choose the most appropriate safety measures.

Scenario Child rights impacts linked to on-site health and safety are illustrated in the following scenario:

A disused quarry on a long-term existing concession contains a deep pool of water. Underwater tunnels in the quarry create a suction effect and make swimming exceptionally dangerous. The area is unfenced, due to its size, and the quarry is unguarded. A single sign, as required by the health and safety plan, displays text only to explain the dangers of swimming in the quarry. However, two 10-year-old girls access the quarry to take a swim, like many children in the area have been known to do in the past. Unable to read the sign and unaware of the dangers, one of the girls is sucked into the tunnels and drowns.

This fatality could have been avoided in a variety of ways. Understanding of local levels of education – for instance, through socio-economic baselines and/or stakeholder engagement – would have indicated that the text-only sign was an ineffective risk-control measure because children might not have been able to read the warning. In this case, the company could have used a sign that includes easily understood pictures or symbols. It might also have constructed a secure fence, collapsed the underwater tunnels, or engaged with local communities to ensure the dangers were fully understood. These options would have resulted in a financial investment for the company, but would have removed or mitigated the risk.

The actions proposed in Table 15 offer solutions to companies confronted with such a scenario that could be implemented according to the local context and the particular risks for children. It is assumed that the company is already implementing a responsible approach to health and safety management and human rights, for instance, by fully implementing the Voluntary Principles and/or IFC Performance Standard 4.



Table 15. Managing on-site health and safety risks specific to children

Risks: If the company does not anticipate the risks that children are exposed to on site and take adequate measures to lower these risks, it might have to face significant financial prosecutions or compensations, poor local and international reputation, and possibly tensions with the communities and as a result threats to business continuity.

Questions	Strategies and action
What health and safety risks could children be exposed to?	• Engage with the health and safety department to identify the risks that are relevant for children in the context of mining activities, e.g., sites with blasting, open pits, ponds, shafts or heavy machinery.
Are there children in the vicinity of the camp, lease or operation?	• Engage with community relations to understand the area demographics.
<i>Is there a history of children gaining access to the site, regardless of their intent? Are children likely to enter the site at night?</i>	 Consult previous safety records and community relations to understand past access issues and children's relationship with the area (trespassing, exploring, thefts). Assess the likelihood of children attempting to access the site in the future. Consider what hazards are markedly increased at night.
Are the children in the area literate?	 Engage with community relations to understand literacy rates. Engage with the health and safety department to assess if any existing or planned signage is appropriate for the context. Consider changing existing or planned signage to account for literacy.
What engagement with children has happened concerning the dangers of access to sites? (See Tool 2. Stakeholder Engagement.)	 Confirm with community relations the engagement that has happened or is planned concerning children, access and hazards on the site. Consider increasing the level and type of engagement, including community/school workshops, site tours or education campaigns.
What measures are in place to address these risks? Fences, access controls, signage, patrols?	 Engage with health and safety department and list the risks that are mitigated and how they are addressed, e.g., signage as opposed to fencing. Consider increasing current or planned physical infrastructure, such as fences, in high-risk areas.
What measures are in place to ensure the continuous prevention of risks for children after site closure?	 Implement safety systems adapted to the post-closure context (signage, fences, surveillance personnel). Research has found that this can be particularly important for children, for example, nearly 40 per cent of deaths at abandoned mine sites in the United States were among people under age 20.³⁴ Ensure appropriate communication with authorities for the maintenance of safety features. Ensure safety during post-closure rehabilitation.

Mine Safety and Health Administration, 'Fatal Accidents Reported' (2014–1999), United States Department of Labor, Arlington, Va., http://arlweb.msha.gov/sosa/previousfatalstats.asp.



Box 10. Securing the social licence to operate through community engagement in Madagascar Canadian mining company Sherritt International's Ambatovy nickel mine and refinery is the largest industrial complex in Madagascar, where a high proportion of the population is under age 20. Because its presence would extend for more than 30 years, the company undertook a broad-based approach to community outreach that included children, teachers, parents and community leaders in order to build trust and raise awareness.

The awareness-building sessions for young people that were implemented entailed: small and large group visits to the operation, and presentations on Ambatovy and mining in general that were adapted for children, using videos, photos, comic books and music, among other communication tools. To this day, Ambatovy continues to organize visits and information sessions for youth, particularly student groups.

Source: United Nations Children's Fund, *Engaging Stakeholders on Children's Rights: A tool for companies*, UNICEF, Geneva, September 2014, p. 12.

7.3 Transportation infrastructure

Because mining operations also lead to changing environments outside the site of operations, companies will want to ensure that children are also protected beyond the perimeter. New transportation infrastructure, and the increase in use of existing infrastructure such as roads and railways, can particularly pose a threat to the safety of children living in the area.

Better understanding, awareness raising and adequate warning measures will alter the risks that children may be exposed to in terms of safety associated with transportation infrastructure, and thus will protect corporate stability, as well as protect children. The following scenario illustrates child rights impacts linked to road safety:

Scenario

A new road has been built to facilitate the transportation of construction materials to the mine site, and will later be used to transport minerals outside the site. The road passes next to a village, where children from surrounding villages go to school. Children are not used to busy traffic and are not aware of the risks associated with it, even though signs indicate the danger. At the end of the day, children usually play football near the school and now, near the new road. Chasing the ball, two 8-year-old boys are hit by a truck transporting pipes.

This accident could have been avoided in a variety of ways. Understanding local levels of literacy, for example, would have indicated that children might not have been able to read the warning signs. These signs would have been more effective if they included easily understood pictures/symbols. The company could also have built a fence at that specific location, knowing that it is a high-risk location for children, and engaged with the local community to raise awareness and understanding of the dangers.

Although these options would require financial investment for the company, they would remove or mitigate the risks. Table 16 presents a series of issues and related possible strategies and actions to be taken for managing infrastructure-related risks to children's health and safety.



Table 16. Managing health and safety risks for children related to transportation infrastructure

Risks: If the company does not anticipate the risks that children are exposed to along transportation routes and take adequate measures to lower these risks, it might have to face financial compensations, poor reputation, tensions with the communities and as a result threats to business continuity.

Questions	Strategies and action
What risks associated with transportation infrastructure could children be exposed to?	• Engage with the health and safety department to identify the risks that are particularly relevant for children regarding new transportation infrastructure – increased traffic, dangerous drivers, close proximity with areas where children spend time, sexual exploitation and abuse along transportation routes <i>(see Tool 9. Protecting Children from Sexual Violence).</i>
Is transportation infrastructure passing by areas where children are likely to spend time? Villages, schools, markets, playgrounds?	 Engage with community relations to understand the area's demographics and child-focused infrastructure/patterns of use, e.g., informal play- grounds, village recreation sites, school buildings.
Does the highway code of the country deal with all the risks children can be exposed to and is enforced by an accountable public agency?	• Ensure that a clause linked to dangerous driving (drunk driving, maximum driving time) is included in the contract signed with the company's internal drivers – and with contractors recruiting drivers – if the national highway code does not provide adequate coverage of these risks.
Are drivers trained and aware of the threats they might pose to communities, including particular risks to children such as drunk driving or sexual exploitation?	 Engage with the contractors recruiting drivers to ensure that they commit to respect the highway code. Set up training sessions if gaps are identified to raise awareness among drivers.
	 Engage with community relations to understand literacy rates. Engage with the health and safety department to assess if any existing or planned signage is appropriate for the context. Consider changing existing or planned signage to account for literacy.
What engagement with children has taken place concerning the dangers of new transportation infrastructure?	 Confirm with community relations the engagement that has happened or is planned concerning children living near transportation infrastructure. Consider increasing the level and type of engagement, including community/school workshops, site tours, education campaigns or training.
What measures are in place to address these risks, e.g., signage, fences in high-risk areas, patrols or training?	 Engage with the health and safety department and list the risks that can be avoided or mitigated by signage or fencing at high-risk areas of the transportation routes. If signage is chosen, ensure that drivers and children can understand them (training). Ensure that sanctions will be implemented if drivers do not respect the highway code or contract clauses. Cooperate with the local traffic police department for ensuring road safety.



Box 11. Health and safety management for children

Case Study I: Anglo American, Brazil – Safe Streets and Roads project³⁵

It is estimated that more than 43,800 people are killed in traffic accidents in Brazil every year and that approximately 2,000 are children under 14 years old. The NGO Safe Kids argues that 90 per cent of these accidents could be avoided if better information on policy changes and adequate legislation were available. Anglo American identified increased transport safety risks associated with the Boa Vista Fresh Rock projects due to a temporary contractor workforce, increase in transport of heavy equipment and increase in transport of ore from the mine to the plant. Anglo American inaugurated the Safe Streets and Roads project in 2013, which focuses on activities such as communication campaigns to the community to raise awareness on the five main causes of deaths on roads (overtaking, distracted drivers, speeding, motorbikes and drunk driving), engaging with the government, businesses and other stakeholders on road safety issues affecting children, influencing the government to improve road infrastructure, programmes to educate children on responsible road usage, presentations, workshops and newsletters dissemination into the community to raise awareness on road safety issues and defensive driver trainings. As a result of these actions, it was estimated that information on road safety reached approximately 4,500 families. The Safe Streets and Roads project was nominated for an Anglo American Applaud in 2013 and has been recognized for a substantial reduction in deaths on public roads.

Case Study II: Barrick Gold – Children's safety on the road³⁶

Barrick Gold has developed guidance in collaboration with impacted communities to identify and manage the risks linked to road safety through a Community Safety Management Plan. This guidance will also be used to develop specific Community Safety Management Plans in other sites where increased traffic around mines has been identified as a high risk, for example, in Pueblo Viejo (Dominican Republic), Lumwana (Zambia) and Veladero (Argentina).

Additionally, the Cowal mine, in Australia, has developed an annual programme called RoadSafe September, which involves a variety of local stakeholders such as police, schools and local governments in educating local communities and aims at promoting road safety in the community. Similarly, the Lumwana mine in Zambia supports an ongoing Community Road Safety programme, which includes road safety education activities for schoolchildren. In 2013, the programme reached more than 1,000 students at 13 schools.

³⁶ Example drawn from interview with Barrick Gold as part of the 2015 UNICEF Extractive Pilot. United Nations Children's Fund, Children's Rights and the Mining Sector: UNICEF Extractive Pilot, UNICEF, Geneva, March 2015, available at www.unicef.org/csr.

¹⁵ Example drawn from interview with Anglo American as part of the 2015 UNICEF Extractive Pilot. United Nations Children's Fund, Children's Rights and the Mining Sector: UNICEF Extractive Pilot, UNICEF, Geneva, March 2015, available at www.unicef.org/csr.