Community health programs in the mining and metals industry
# Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Typical health issues in mine-affected communities</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>Typology of mining community health initiatives</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>Lessons learned</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>3.1 Cross cutting lessons</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>3.2 Lessons from different types of community health initiatives</td>
<td>23</td>
</tr>
<tr>
<td>4</td>
<td>Conclusion</td>
<td>32</td>
</tr>
<tr>
<td>5</td>
<td>References</td>
<td>34</td>
</tr>
<tr>
<td>6</td>
<td>Annex</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Case studies by typology</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>ACKNOWLEDGEMENTS</td>
<td>65</td>
</tr>
</tbody>
</table>
Addressing community health impacts is increasingly part of the risk management and social responsibility of mining and metals operations. ICMM member companies recognize this and one of ICMM’s core values is to care for the safety, health and well-being of workers, contractors and host communities in the areas where we operate. While our members implement a range of community health initiatives in the countries in which they operate, a number of issues and challenges exist.

The objective of this report is to highlight key lessons learned in relation to engagement, prioritization, partnership arrangements and monitoring and evaluation around community health interventions. It is based on an analysis of a sample of ICMM member companies’ community health programs. The report captures a snapshot of practice in this area and describes initiatives to address issues ranging from communicable and non-communicable diseases to nutritional deficiencies. The guidance can usefully inform ICMM member companies’ health-related interventions.

While the primary audience for the report includes corporate and site level staff with a responsibility for community health investments in the mining and metals sector, companies in other sectors may also find the report useful.

As companies continue to address community health needs in the areas in which they operate they will need to learn from the experience of implementing health programs. We hope this report contributes to this learning and advances practice and performance around establishing programs which support sustainable positive health impacts.

R Anthony Hodge
President, ICMM
Members of the International Council on Mining and Metals (ICMM) implement community health initiatives in a variety of settings across the globe addressing communicable diseases, maternal and perinatal conditions, nutritional deficiencies as well as non-communicable diseases. Such community health initiatives can be categorized as follows:

- global and regional health initiatives usually characterized by investment in an existing program
- communicable disease control initiatives in Africa and Asia addressing diseases such as HIV/AIDS, tuberculosis and malaria among employees, their families and local communities
- primary health care programs implemented by third parties in settings where government health systems are relatively weak, such as around many mine sites in Africa
- support for health programs implemented by local government where district health authorities have sufficient capacity to directly manage the project, such as in Latin America and southern Africa
- specialized health interventions often targeting marginalized communities, usually in remote areas of developed countries.

A review of ICMM members’ health initiatives has identified many lessons that can be applied to future initiatives. These include several cross-cutting lessons, including the importance of:

- engaging with communities so actual and perceived health needs are understood prior to initiative design
- clearly defining company priorities in community health, ideally through corporate policies and standards, and then effectively managing stakeholder expectations
- selecting partners with proven technical and implementation capacity to run health projects
- ensuring respective roles and responsibilities of all partners are clearly articulated through memoranda of understanding, and that co-ordination mechanisms are defined with existing stakeholders, active in community health in the area
- recognizing the role of the government health system in providing oversight, policy and strategy guidance, and stewardship; where district health authority capacity is constrained, attempting to address this as part of the community health initiative
- establishing sound monitoring and evaluation systems, including impact and process indicators that can be used to determine the success of the initiative, as well as to stimulate necessary refinements during project implementation.

Specific lessons are also provided for the five different types of community health initiatives described above.

Finally, community health initiatives require exit strategies to be built in from the onset to increase the likelihood of sustainability. Issues to consider include:

- minimizing dependency creation during the course of the project by working in line with government policies and systems
- planning how to taper interventions during the project while at the same time maintaining health gains
- building local government management capacity to take over the running of company-supported health centres and initiatives.

ICMM members have made significant strides in addressing community health issues. However, changing disease patterns and emerging community health needs will continue to present new issues and challenges. ICMM member community health initiatives will need to continue to learn from experience, to refine and evolve health programming to maximize and sustain health impacts.

“ICMM member community health initiatives will need to continue to learn from experience, to refine and evolve health programming to maximize and sustain health impacts.”
This document presents an analysis of community health initiatives undertaken by ICMM member companies and highlights key lessons learned. These lessons are intended to inform individual members’ engagement in health-related interventions, and provide a platform for collective engagement between members and other stakeholders on health-related issues, if there is appetite and support from members.

The specific objectives are to:

• identify and review the range of health interventions and relationships that ICMM members are involved in, at either an operational, regional, country or international level
• understand the types of arrangements that are in place to deliver these health interventions, and in particular how partnership approaches have been structured
• consider how companies have approached engagement or involvement with public or private sector partners, NGOs or beneficiaries in such interventions
• review the extent to which these health interventions have been undertaken in isolation from or connected into broader health systems or externally led initiatives.

In consultation with ICMM, a survey and related protocol was developed for completion by ICMM members to help identify the range of health interventions and relationships that members are involved in. The responses (from 14 member companies, see Acknowledgements) were collated and analyzed, and follow-up interviews were scheduled with members. These were intended to obtain further information on health initiatives identified in the survey and how partnership approaches had been structured, where applicable. The interviews also explored how companies engaged with partners and beneficiaries in such initiatives, and the extent to which the initiatives had been undertaken in isolation from or connected into broader health systems or externally led initiatives. Based on the survey responses and interviews, a number of candidate case studies were identified. Follow-up interviews were conducted with members in support of the case studies.

The target audience for the final document will include both corporate- and site-level staff with responsibility for community health investments.

The analysis in this lessons-learned document begins with an overview of typical health issues facing the communities located around mining areas and a typology of community health initiatives implemented by ICMM member companies derived from survey responses by 14 of 22 ICMM member companies. This is followed by a section detailing lessons learned, collated from both survey responses and more in-depth interviews conducted with 12 member companies. This section comprises both cross-cutting lessons related to project design, implementation models and monitoring; specific lessons related to different types of community health initiative; and lessons related to exit strategies and sustainability. The Annex presents a series of more detailed case studies of ICMM member community health initiatives collated from the telephone interviews and literature reviews.

“ICMM member community health initiatives will need to continue to learn from experience, to refine and evolve health programming to maximize and sustain health impacts.”
SECTION 1
Typical health issues in mine-affected communities
Mining companies operate globally and work with and near a wide range of communities in a diverse variety of settings. Health issues faced are also diverse, but a typology of typically occurring diseases and health conditions can be categorized as follows.

**Communicable diseases, nutritional deficiencies and maternal and perinatal conditions**

Communicable diseases, nutritional deficiencies and maternal and perinatal conditions are commonly related to the environment, poverty and poor access to health services, and are most prevalent in Africa and, to a lesser extent, Asia and Latin America. Communicable diseases include malaria, dengue, HIV/AIDS, tuberculosis, acute respiratory infections and gastrointestinal diseases such as cholera; nutritional deficiencies comprise stunting, wasting and micronutrient deficiencies; key maternal and perinatal conditions include haemorrhaging, infection, eclampsia, anaemia and low birth weight.

**Non-communicable diseases**

These include diabetes, cancer, lung disease and cardiovascular disease and are often linked to lifestyle, diet, alcohol, tobacco use and physical inactivity. Such diseases are common in North America, Europe and Australasia. However, they are becoming increasingly significant in developing countries as disposable incomes rise and lifestyle changes occur affecting diet and levels of physical activity.

Globally, there are approximately 16 million deaths due to communicable diseases, maternal and perinatal conditions and nutritional deficiencies per annum. For non-communicable diseases, the total number of deaths is 36 million. However, the burden of communicable and non-communicable disease varies markedly between regions.

From Figure 1, it can be seen that in Africa, South-East Asia and Eastern Mediterranean, deaths attributable to communicable diseases (plus maternal and perinatal conditions and nutritional deficiencies) make up, respectively, 70 per cent, 39 per cent and 41 per cent of all deaths. In contrast, in Europe, the Americas and Western Pacific (including Australia, New Zealand and Japan), non-communicable diseases account for the great majority of deaths (between 87 and 94 per cent).

Understanding the geographical, social and environmental context within which a mine is operating can support a mining company in designing and implementing appropriate community health initiatives.

Despite the diverse range of environments within which mining companies operate, and the diverse health issues faced by their surrounding communities, the operational challenges of addressing community health in mine-affected communities carry several common themes.

**Figure 1: Deaths caused by communicable diseases, maternal and perinatal conditions and nutritional deficiencies compared to non-communicable diseases by region**

Typical health issues in mine-affected communities

Community expectations
When a mining company commits to developing a mine site and investing in community health, this raises commensurate expectations about what the company will bring to the area in terms of public services for the community, as well as support to the government. Community expectations can vary considerably depending on the setting. For example, the virtual absence of health care (e.g., parts of Papua New Guinea) can lead to a rapid escalation of expectations to the point at which the mining company is viewed as the default provider of health services. Elsewhere, where health service provision is more developed (e.g., parts of Latin America), a more balanced role, working in partnership with functioning government health systems, can emerge.

Remoteness
Given that mine sites are often remotely located, an issue common to mining communities is poor access to health care, where the health status of the local population is often worse than the national average. In less developed countries, poor access is often compounded by low-quality health care provision affected by factors including insufficient numbers of qualified health personnel, infrequent support and supervision, stockouts of essential medicines and health care supplies and an inadequate health infrastructure. This is particularly the case in communities near remote mine sites in parts of Africa (e.g., North-Eastern Democratic Republic of Congo) and Asia (e.g., highlands of Papua New Guinea).

In-migration and health issues
In-migration to a mine site can lead to epidemiological changes in an area. In particular, it can increase transmission of communicable diseases such as HIV/AIDS and sexually transmitted diseases. Likewise, it can increase demand on health services and lead to a deterioration in access to quality care for the native population. Increased disposable incomes coupled with in-migration can lead to a rise in social and health problems such as alcohol and substance abuse, prostitution and domestic violence.

Health and safety programs going beyond the fence
Due to the nature of the sector, mining companies place a strong focus on the health and safety of their employees. Over time, the occupational health programs run by mining companies have expanded to include other health issues faced by their employees. Given that many employees are drawn from nearby communities, company health initiatives have increasingly evolved to extend “outside the fence” covering employees’ families and their communities.

Implementation models and exit strategies
A mining company’s activities can transform surrounding communities through the creation of employment opportunities, improvements to infrastructure, local supply chain development and investment in social services, including health care. However, their core business is not health and their footprint is not permanent, as inevitably their operations will cease at some stage. Hence, when addressing health issues faced by communities, it is imperative that a workable implementation model is put in place that is not overly burdensome for the company to manage and at the same time includes a feasible exit strategy for the company.

Government capacity
In almost all instances, community health initiatives require communication and partnership with local and national government health authorities. Initiatives should seek to integrate with existing government policies and channels and avoid the creation of parallel structures. Particular care must be taken to ensure the government’s mandate on health care provision is not undermined, particularly where a community health initiative plugs gaps within existing state provision. Initiatives will be affected by government capacity to serve as a partner or facilitate implementation, as well as the extent of strategic planning within the health system. Where government capacity to plan, administer and implement is high, community health initiatives can benefit from a strong partnership approach. Where capacity of the health authorities is weaker, initiatives should seek to support rather than undermine government provision by offering supplementary health initiatives, channeled, where possible, through local government structures. Where government capacity is low, progress on a community initiative is likely to be slower and experience greater administrative delays than instances where government capacity is high and the health strategy clearly articulated and operational.

“When addressing health issues faced by communities, it is imperative that a workable implementation model is put in place that is not overly burdensome for the company to manage and at the same time includes a feasible exit strategy for the company.”
SECTION 2
Typology of mining community health initiatives
ICMM member community health initiatives can be grouped by focus and objectives as outlined in Table 1. At a corporate level, the majority of ICMM member companies do not explicitly mention health in their community or social investment policies. However, community investment programming decisions are largely decentralized to site level, allowing for a diversity in projects, reflective of individual site-specific contexts.

The typology outlined in Table 1 was developed on the basis of survey responses by ICMM member companies relating to the location and type of community health intervention, implementation structure, role of the company and other partners, as well as the extent of alignment with national policies and strategies.

The typology is applicable insofar as it allows for broad categorization of the numerous community health initiatives being pursued by ICMM member companies. However, there is inevitably overlap between categories and some initiatives may fall into more than one category.

Table 1: Typology of mining community health initiatives

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<tr>
<th>Type</th>
<th>Description</th>
<th>Geographic area/examples</th>
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<tr>
<td>Global and regional level health initiatives</td>
<td>Corporate-level health initiatives are often implemented through the company foundation, which are global or regional and not directly linked to a specific site. These initiatives are funded corporately and often involve engagement with one or more strategic global partners, such as an international NGO, UN agency or bilateral donor. Such interventions typically target an identified health issue relevant to the company’s core business or areas of operation, and contribute to the company’s “global” social licence to operate. In addition to field-level projects, these initiatives may involve a mix of global-level advocacy work using social media and other fora, linking on-the-ground activities and results with external relations and advocacy work at corporate level.</td>
<td>Global and regional (multi-country)</td>
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<td></td>
<td></td>
<td>Teck</td>
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<td></td>
<td></td>
<td>BHP Billiton South Africa and Mozambique</td>
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<td>Window of Opportunity</td>
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<tr>
<td>Highly focused communicable disease control programs “inside” and “outside the fence”</td>
<td>Recognizing that communicable diseases are a major contributor to loss of workforce productivity and that transmission can take place both “inside” and “outside the fence”, these projects focus on communicable disease control among employees and mine-affected community populations. Communicable diseases that are typically targeted are malaria, HIV and tuberculosis, often through vertical programs. Implementation is often done by the company directly.</td>
<td>Predominantly sub-Saharan Africa</td>
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<td>Newmont Ghana</td>
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<td></td>
<td></td>
<td>Workplace program for HIV/AIDS and malaria</td>
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<td></td>
<td>AngloGold Ashanti</td>
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<tr>
<td></td>
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<td>HIV and tuberculosis program (South Africa) Malaria (Ghana)</td>
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<td>Rio Tinto Guinea</td>
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<td>Malaria control</td>
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“Community investment programming decisions are largely decentralized to site level, allowing for a diversity in projects, reflective of individual site-specific contexts.”

continued on page 11
## Typology of mining community health initiatives

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<th>Type</th>
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| Primary health care programs implemented by third parties | These health projects are generally broad in scope and address access to primary health care, including communicable diseases, maternal and child health, sexual and reproductive health and adolescent health. Usually, such projects support the aims of the national health sector strategic plan and work closely with district, provincial and national health authorities. Implementation is normally done by a third party, typically a local or international NGO already operating in the area. In some cases, there may be multiple partners with different roles (e.g., an NGO responsible for implementation, a local research institution responsible for program monitoring, and local government for stewardship and policy guidance), as well as co-financing arrangements with bilateral donors. | Sub-Saharan Africa and Asia
Freeport McMoRan DRC
Tenke Fungurume integrated health program
African Barrick Gold Tanzania
Lake Zone Health and Economic Development Initiative
MMG LXML Lao PDR
Mother and child health program |
| Health programs implemented by local government | A diverse range of health interventions addresses locally identified community health issues. These projects are developed and implemented in partnership principally with local government and sometimes supported by community-based organizations. Such community health programs rely on well-functioning government health systems that are appropriately resourced at district level. The partnership arrangement may be defined formally in an memorandum of understanding or take place on an ad hoc, informal basis, and is characterized by flexibility. There is a focus on building partnerships through regularized interaction and managing the roles and responsibilities as they evolve over time. | Predominantly Latin America
AngloGold Ashanti Brazil
Social contributions to health, particularly distribution of equipment and health infrastructure projects
Barrick Gold Peru
Alto Chicama Saludable Project
Lonmin South Africa
Community health infrastructure partnership with provincial Department of Health
Inmet Panama
Community health infrastructure partnership with provincial Department of Health
Anglo American Brazil
Policy to prevent sexually transmitted infections and unwanted pregnancy |
| Specialized health interventions for marginalized and remote communities | These projects target wellness and lifestyle-related non-communicable diseases such as diabetes, mental illness and substance abuse in indigenous and remote communities. They are typically implemented in partnership with civil society organizations and local government. Such interventions may comprise either large, one-time projects with specific objectives designed to meet an identified gap in health service provision, or an ongoing relationship to address a systemic health issue. | Predominantly Latin America
Goldcorp Canada
Support to Timmins and District Hospital nephrology unit
Teck USA
Teck John Baker Youth Leaders Program
Inmet Panama
Community health infrastructure partnership with provincial Department of Health
AngloGold Ashanti Australia
Laverton Shire health professionals’ support |
SECTION 3
Lessons learned
Lessons learned

Following a series of interviews with ICMM member companies and the development of the typology of community health initiatives, a number of lessons related to the various approaches emerged. The lessons learned below are grouped by:

- cross-cutting lessons
- lessons from different types of community health initiatives
- exit strategies and sustainability.

3.1 Cross-cutting lessons

3.1.1 Engaging communities and other partners from the onset

Health needs assessments are an opportunity to systematically assess and understand the health status and health system of a particular community. Assumptions about the prevalence of disease can be verified, the actual capacity of local health services assessed and gaps determined, and community concerns and attitudes towards health investigated and understood in order to generate an appropriately nuanced and targeted health program. Historically, this opportunity was often missed, with health assessments routinely given cursory attention within Environmental and Social Impact Assessments (ESIAs). To compensate for this oversight, many companies have recently begun to undertake comprehensive, stand-alone Health Impact Assessments (HIAs), which assess the epidemiological profile of communities, health care access and quality, priority community health needs, social and behavioural determinants of health and other public health factors. Either way, through a comprehensive ESIA or a stand-alone HIA, it is important that this analysis is performed.\(^1\)

Moreover, HIAs increasingly comprise components on health impact mitigation and broader community health development. For example, impact mitigation measures may focus on prevention of HIV/AIDS due to an influx of migrants coupled with a broader health systems' strengthening objective related to building the capacity of health workers.

As well as collecting quantitative data related to the disease burden and health care provision, HIAs and health needs assessments should also engage communities, to discuss their health status and perceived health needs and priorities. While an informed understanding of community attitudes towards health and health-seeking behaviour is likely only to emerge with sustained interaction between the company and local stakeholders (communities, community-based organizations and government partner), it is at the outset that communities begin to form an opinion on the company’s suitability as an actor in their locality. In general, the more profound the linkages with local health actors and beneficiaries, the higher the likelihood that an appropriate design will emerge, and that such an initiative will be actively supported by all stakeholders.

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\(^1\) Refer to the ICMM publication Good Practice Guidance on Health Impact Assessment. Available at: www.icmm.com/library/hia
“Through dialogue with communities and local government, Newmont developed a “tripartite” approach to a number of community health initiatives, agreeing with communities and local government on the inputs each party would provide.”

**Tripartite approach to engaging local government and communities**

**NEWMONT GHANA**

Newmont in Ghana commissioned needs assessments of the Akyem project area in 2006 and again in 2007, having collected baseline data from the project-affected communities as early as 2004 when the site was initially identified. Construction at Akyem began in 2010, along with the roll-out of Newmont’s initial, three-year community health plan. This reflected approximately six years of experience operating in project-affected communities and assessing health needs, building relationships with local health stakeholders and understanding the social, economic and governance context of the Birim North region. The approach developed from this extensive assessment period aims to improve the quality of primary health care offered in local government clinics and the district hospital, alongside preventive public health measures, including water and sanitation improvements for communities in the project area. Through dialogue with communities and local government, Newmont developed a “tripartite” approach to a number of community health initiatives, agreeing with communities and local government on the inputs each party would provide – for example, communities would often provide labour for the construction of block latrines. Focus group discussions held with project-affected community members in 2012 indicated a high level of critical assessment of, engagement in and knowledge about Newmont’s health program in Akyem, alongside an overall favourable view of what the program was achieving in the target area.

**Fostering partnerships at the needs assessment stage**

**FREEPORT-MCMORAN**

Tenke Fungurume Mining (TFM), located in Katanga Province in DRC, worked closely with the International SOS (I-SOS), a third party private medical services provider, the University of Lubumbashi School of Public Health and the local health authorities to develop a baseline survey for the Fungurume Health Zone – the target area for TFM’s community health project. The 2008 survey was complemented by community focus group discussions to identify additional concerns and health needs of the local population, alongside an assessment of the health zone’s facility infrastructure, medical supply chain and human resources. Early involvement of the local authorities, I-SOS and the university as a monitoring partner generated ownership and buy-in on the initiative from all partners, and ensured that design and implementation phases were rolled out with major partners already informed of the evidence base and identified needs from the assessment work. Alongside the more quantitative data obtained from the baseline survey, community engagement and a health facility survey also gave TFM valuable contact with beneficiaries and health service providers at the assessment stage, when their inputs could be incorporated into program design. This was successful in demonstrating TFM’s prioritization of and responsiveness to community feedback.

“Design and implementation phases were rolled out with major partners already informed of the evidence base and identified needs from the assessment work.”
Lessons learned

Appropriate community consultations provide communities with opportunities to voice their ideas and concerns, to engage in how the program will be approached and to set the stage for their potential participation in project implementation. Such interactions, when appropriately managed, can provide positive social credit for the company with both community and government stakeholders. Such inclusive engagement also allows for an optimal design to emerge, ideally incorporating community needs, baseline indicators and government standards, alongside company priorities and parameters.

Including community health priorities in the project design

NEWMONT GHANA

Due to a delay in the licensing procedure for Newmont’s Akyem project, the company had time to build relationships with local stakeholders active in community health and to determine infrastructure and community health priorities at both influx and development phases of the program. A similar project design may have emerged from a shorter assessment phase, but the case of Newmont in Akyem highlights the advantages of taking adequate time at the outset of design for planning and innovation – determining the “what” of the program’s structure, but also the “how”, in terms of implementation and financing. For instance, the influx phase focused on infrastructure development of the district hospital, upgraded water supply and sanitation provision in project-affected communities, and construction of a community waste disposal site. The design also outlined an implementation approach that included:

- resource inputs that could be expected from local government (technical) and communities (labour), through the tripartite approach
- Outsourcing of regular community health activities, such as long-lasting insecticidal net (LLIN) distribution, to a local NGO with reporting lines to Newmont.

The development phase, though not designed in detail at the same time as the influx plan, included how community health projects could be financed through a sustainable fund once production came online – allowing project-affected communities to choose and manage a community development fund, and lead on their own community development activities, including those related to health.

Ongoing community and civil society involvement in the project cycle

MMG

In 2008, MMG Lane Xang Minerals [LXML], operating in Lao PDR, contracted Burnet Institute, a medical research organization focusing on public health issues, to conduct a community health study to inform project design. Consultation meetings to discuss community health priorities were held involving representatives from the district authorities, representatives of Burnet and MMG LXML. A multi-sectoral project working team consisting of representatives of the Mother and Child Health Department, the district hospital, Health Department, Education Department, Lao Youth Union and Lao Women’s Union was formed and was formally approved by the district governor. Throughout the life of the project, the team met bimonthly and members were tasked with planning, implementing, monitoring and reporting on project activities in collaboration with the Burnet Institute. Community involvement from the outset resulted in improved local ownership for the activities and outcomes.

“Throughout the life of the project, the team met bimonthly and members were tasked with planning, implementing, monitoring and reporting on project activities in collaboration.”
3.1.2 Defining company priorities and managing expectations

During the assessment and design phases of a community health initiative, it is critical for a company to clearly define the parameters of its engagement with communities, district health authorities, community-based organizations and international non-governmental organizations engaged in health activities. The level and type of company engagement will be based upon internal, corporate opportunities and constraints, as well as the long-term vision for the mining site. It is at this stage that expectation management is critical. This may take place through a formalized process with mining authorities as part of the negotiation of various mining agreements, or informally with district health authorities, non-governmental partners and community leaders.

To assist in defining priorities and expectation management around community health, some ICMM members have established corporate policies and standards on community health. Such policies and standards can guide site managers on the type and focus of the mine’s investment in community health.

Likewise, consideration needs to be given to the role previous mining companies have played in the area, which might influence how the mining company’s health intervention is perceived or accepted.

Managing community expectations arising from legacy projects

FREEPORT-MCMORAN

In considering the needs and priorities of the targeted communities when designing its health program, Tenke Fungurume Mining (TFM) took into consideration the legacy of Gécamines, the state-owned mining company that operated in the Fungurume area prior to TFM. Gécamines historically provided extensive social benefits to employees and communities in the mine-affected area – including free health care for the population. These expenditures were not sustainable, but the expectation persisted that mining companies would provide a similar set of benefits to the local population and to local government as Gécamines had. During the initial needs assessment phase, TFM determined that the most effective way to manage expectations in this regard was by negotiating a clear and comprehensive memorandum of understanding (MOU) with the local health authorities, abiding by the roles and responsibilities outlined in the document, and communicating to communities the limits of TFM’s involvement in the provision of health care. TFM was conscious that these parameters were to be set in the early stages of engagement with communities and local authorities, to prevent the formation of unrealistic expectations or setting precedents that could not be met given resource constraints and sustainability considerations of TFM.

Setting standards and expectations through a community health policy

INMET

Inmet has a formal policy on community health at corporate level. Inmet has defined company priorities regarding health projects by explicitly establishing at corporate level the expectations of site-specific community health projects, which must be premised on evidence provided through a comprehensive HIA. These project assessments must also:

- identify opportunities for maximizing community health outcomes, strategies for minimizing risks to community health and for managing negative health impacts should they arise
- in the case of new mining projects, identify particular community health concerns directly impacted by the proposed project, and ensure that all procedures and programs developed by Inmet, and specific to the project, align with the relevant national health policies, regulations, standards and strategies
- ensure that the design and implementation of health projects involves partnership with relevant stakeholders; balances company and local government obligations towards community health; and maximizes opportunities to improve overall well-being of affected communities, for instance, by sourcing labour for health infrastructure projects locally.

Aligning core business with community health programs

TECK

In defining the structure of its global health programs, Teck chose to focus on the health benefits of zinc – the production of which is its primary commercial interest, but also a mineral with known health benefits as a supplement and treatment for diarrhoea. From this prioritization at corporate level, a five-pillar global program was developed, mixing long-term and short-term objectives with global and country-specific programmatic components aiming to advocate for and improve the uptake of zinc in nutrition, crop fortification and child health programming.
Lessons learned

3.1.3 Selecting the right partners

Few health initiatives undertaken by ICMM member companies are unilateral – at a minimum there is a government partner, responsible for providing health services, undertaking implementation and co-ordinating activities [see Section 3.1.6 for discussion of government partnerships]. The success of a community health program is in large part determined by the capacity of the implementing partner. Hence, it is extremely important to carry out due diligence on potential partners.

An internal company dialogue on the pros and cons of various partners and the implications of such an alignment is important. Caution should be exercised in assuming that an NGO operating in the area has the necessary technical capacity to implement a health program. Hence, any potential partner should be adequately vetted both technically and as an organization, as aligning with the wrong partner can have a negative impact on a company’s social licence.

Selecting a partner with on-the-ground experience

BHP BILLITON

BHP Billiton Sustainable Communities (BSC), BHP Billiton’s UK registered charity, researched health issues affecting those communities where BHP had operations, identifying child and maternal health as an outstanding health issue in South Africa and Mozambique. Once these priorities had been defined, BSC then identified and approached the program for Appropriate Technology in Health (PATH) as an implementing partner for what became the Window of Opportunity project in two countries, based largely on PATH’s good track record of reproductive health and maternal/child health programming in South Africa since 2005. The value of partnering with an experienced implementing agency extends beyond knowledge of the local context and experience in community health, to adding value in the navigation of administrative and bureaucratic processes. Establishing the Window of Opportunity project was far simpler in South Africa, where PATH is active and registered, than in Mozambique, where PATH had worked previously but did not have an official presence.

Choosing partners with the right skills and experience

TECK’S ZINC & HEALTH PROGRAM

For each pillar of Teck’s Zinc & Health program, Teck sought to partner with organizations whose experience, resources and technical knowledge would achieve program objectives and contribute to the partnership’s skills mix. In each instance Teck provided financing and oversight to all programs. From this strategy emerged five different partnership alignments under a global program, including:

- chemical company BASF, to partner on the development of zinc food fortification technology
- The International Zinc Association (IZA), which has existing zinc-related programmes with Unicef [child nutrition in Peru and Nepal] and the National Agricultural Technology Extension and Service Centre of the Ministry of Agriculture of China [zinc-enriched fertilizers to enhance zinc levels in crops]
- the Zinc Alliance for Child Health (ZACH), a public–private–civil society alliance created to scale up zinc supplements and oral rehydration salts for the treatment of diarrhoea in children – the first partnership under ZACH, between Teck, the Micronutrient Initiative and the Canadian International Development Agency (CIDA), operates in Senegal, Ethiopia and Burkina Faso, with plans to launch in Kenya in the autumn
- Canadian NGO Free the Children, which partners with Teck to convey advocacy messages alongside its annual “We Day” advocacy event focusing on raising global awareness about issues affecting children.

Selecting a partner with on-the-ground experience

AFRICAN BARRICK GOLD TANZANIA

Based on results from a 2006 study of the area surrounding African Barrick Gold’s (ABG’s) North Mara gold mine, which showed high HIV prevalence rates (10 per cent) within artisanal and small-scale mining communities surrounding the mine, ABG partnered with the United States Agency for International Development (USAid) to support a community HIV/Aids program that is implemented by Africare, an international non-governmental organization with extensive experience in community HIV/Aids programs in the area. The decision to work with Africare is indicative of the value placed by companies in working with implementing partners who have existing geographical and programmatic experience on a community health issue.
Lessons learned

3.1.4
Formalizing roles and responsibilities

Most ICMM member companies have formal agreements in place to govern the respective roles and responsibilities of themselves and their partners in the design and implementation of community health initiatives. As well as serving to clarify roles and responsibilities, formal and explicit agreements help to manage expectations and instil a measure of mutual accountability on the part of the company, partners and the community.

It is important to consider how the community health initiative’s relationship with government will be articulated. In initiatives where government plays a central role, it is particularly important to have a clearly defined agreement such as an MOU with government. In some instances this may form part of the mining lease agreement. In circumstances where the local health authority is strong, this may prove an appropriate partner to formalize the agreement. However, in cases where local government structures are weak, it may be necessary to engage and reach agreement with the ministry of health at national level.

Whether working with state or non-state partners, a thoroughly vetted agreement such as an MOU should be in place. The process will involve extensive discussion with stakeholders and include essential consensus building around company initiatives. Communicating roles and responsibilities, particularly to communities and local community leadership, both traditional and state, is essential for continuing to manage expectations, and may serve as recourse in the event that these roles and responsibilities are contested.

“In initiatives where government plays a central role, it is particularly important to have a clearly defined agreement such as an MOU with government.”

Defining current and future roles and responsibilities through MOUs

FREEPORT-MCMORAN

Presented with the legacy of Gécamines and high expectations of what it would provide in terms of health services to the community, it was critical for Tenke Fungurume Mining to sign an MOU with the provincial health authorities, governing the specific obligations of both parties to the agreement. This five-year MOU provides a road map detailing respective partner responsibilities, increasing the likelihood of partners honouring commitments as well as providing a legal document for recourse in the event of a dispute between partners, or with the community.

NEWMONT GHANA

Newmont’s Akyem project involves a series of MOUs with partners on the various components of the influx mitigation plan – including the district hospital for infrastructure rehabilitation and the district assembly for sanitation and waste removal services. These agreements provide a structure for common understanding between Newmont and the local authorities and communities, and also set the stage for development phase structures. For example, Newmont has signed a social responsibility agreement with project-affected communities (through local traditional leaders) and the district assembly to provide a forum for dispute resolution, mostly pertaining to employment-related grievances. This agreement also sets the stage for the development phase of Newmont’s community health design in Akyem. The Social Responsibility Forum, established by the social responsibility agreement, will be responsible for a fund to be generated by profits and production at the Akyem mine, by reviewing and deciding upon future community health and development plans and proposals tabled by project-affected communities. This arrangement exemplifies how roles and responsibilities, once established, can evolve alongside the program as the needs of the program and partner alignments change.
3.1.5 Co-ordinating with non-governmental, community-based and public stakeholders

In some instances, an ICMM member company is the only community health actor in the mine locality, other than the local government health system. For the majority of companies, however, this is not the case as there are local and/or international NGOs active in health service delivery in the region. Mapping of and co-ordination with these other actors to avoid duplication, capitalize on relative strengths and develop a common planning and response mechanism with regard to community health are important to ensure responsible and efficient programming.

Traditionally, NGOs and, to a lesser extent, local government have tended to avoid co-ordination with mine-led social investment initiatives – in health and other social sectors. This can be attributed to an either perceived, or existent, conflict over mandates, where NGOs and local government have been conceptualized as providers or supporters of the public good, and mining companies as manifestations of big business and the profit motive, only marginally concerned with community welfare. Nevertheless, there is a growing awareness that the mining community is investing in health and other social development areas, and that engagement between the non-profit and private sector is needed, not only to make field-level implementation more effective, but also to pool resources in advocacy and policy development and reform initiatives that may extend beyond local programming activities.

“However, once the scope of organizations involved in the health sector was identified and their activities determined, the process of formulating an appropriate design for TFM’s health programme became simpler.”

Taking the initiative with partner mapping

FREEPORT-MCMORAN

During the design phase, Tenke Fungurume Mining (TFM) undertook a comprehensive health sector mapping for the health zone, and met with health sector actors active at the provincial level to develop a comprehensive picture of “Who is doing what” in the area of health, by local and international NGOs, private sector, the UN system and the government. This mapping initiated linkages between TFM and all major health services actors in the area, and catalyzed a co-ordination forum for the zone to ensure there was ongoing co-ordination related to programming and emergency response, such as for outbreaks. TFM’s initiation of this mapping and stakeholder co-ordination forum set a precedent for private sector involvement in the health sector in the area – previously avoided due to the lack of interest on the part of NGOs and the extractive sector in co-ordinating activities and planning. However, once the scope of organizations involved in the health sector was identified and their activities determined, the process of formulating an appropriate design for TFM’s health program became simpler. A prototype was presented and discussed at a workshop attended by all identified stakeholders, community representatives and local government – minimizing the likelihood of duplication with existing and planned activities by other health actors, and ensuring that the design that emerged was in line with all relevant health plans.

“There is a growing awareness that the mining community is investing in health and other social development areas, and that engagement between the non-profit and private sector is needed.”
3.1.6 Strengthening health systems and district-level oversight

Mining company community health initiatives often focus on “point of delivery” programming, be it expanding immunization programs to reach more children, distributing LLINs, training more community health workers or nursing staff, or expanding health infrastructure so health facilities are better positioned to cope with likely increases in patient numbers.

A focus on delivery is understandable and necessary, particularly in settings where access to and quality of health care is poor. However, an exclusive focus on delivery means broader health systems’ strengthening activities are not addressed, particularly in relation to the oversight and supervisory function provided by district health teams to health services operating in the area. It is the district health authorities, in most cases, that will take over the running of health services from the mine after mine closure.

A thorough assessment of district health authorities’ capacity and systems to oversee a community health initiative is an essential complement to the qualitative and quantitative data gathered from communities and health facilities during the design phase. The capacity of these government institutions will affect how community health initiatives progress and whether health gains can be sustained over the long term. Hence, targeted investments into building district health authority capacity should be considered as part of any mining health investment.

“The high capacity of the local district assembly to oversee infrastructure projects meant that the influx and development plans could be more ambitious than if the district assembly took a neutral position or actively opposed the projects.”

Investing in health systems’ strengthening

FREEPORT-MCMORAN

The Tenke Fungurume Mining (TFM) community health program focuses on the newly created Fungurume Health Zone. Through the baseline assessment, TFM determined that the capacity of the zone’s health administration was low. Having a clear picture about the technical and administrative capacities of the local health authorities helped TFM to design an appropriate program with realistic milestones and targets related to health systems’ strengthening. These targets are included in the MOU that TFM signed with the provincial health authorities related to work undertaken in Fungurume, as part of the roles and responsibilities of the partners towards the health system strengthening component of the program. By assessing the capacity of the local health authorities, TFM was able to develop an MOU with appropriate expectations – ensuring local capacity was built and responsibility for the management of health facilities in the zone assumed.

From a company perspective, such an approach mitigated against TFM assuming the de facto role of the health administration to compensate for local authorities lack of capacity.

Involving local district authorities

NEWMONT GHANA

The lead-up to Newmont Ghana’s implementation of the community health component of influx mitigation at Akyem benefited from a solid understanding of the strengths and weaknesses of local partners for community health programming – namely, the local district assembly, district health authorities and project-affected communities. This understanding went beyond the data gathered in the assessment and included actual experience of working with the local authorities. This experience was incorporated into the project design timeline and financing strategy – reflecting the actual responsiveness and resources that communities and local government would need to contribute towards the various health initiatives. For instance, the high capacity of the local district assembly to oversee infrastructure projects meant that the influx and development plans could be more ambitious than if the district assembly took a neutral position or actively opposed the projects. This understanding of local partners meant that Newmont was able to develop the tripartite approach to financing and implementing health-related infrastructure projects with accurate information about the capacity of the communities and the district assembly as partners.
3.1.7 Phasing health programs

The focus of mining community health initiatives should be tailored to the phases of a mine’s development – exploration, construction, production and closure/reclamation. At each of these stages, impacted communities may have different health needs. For instance, during the construction phase, there may be an influx in migrant labour seeking employment that could lead to a rise in demand for health care and overwhelm existing health infrastructure. Likewise, in-migration may serve to increase the risk of communicable diseases (e.g., sexually transmitted infections, HIV/AIDS). However, once the mine has reached production stage, there will be a change in the demographic and commensurate changes in health needs and behaviours. For example, pressure on local health services may lessen, while other issues such as referral services may become more important.

Community health programs often require long timeframes for substantial changes in major health indicators to occur. For example, in many developing country settings, mining companies are operating in areas with high under-five and maternal mortality rates and their community health programs, by necessity, target child and maternal survival.

Companies have benefited from undertaking initiatives that show some measurable results relatively quickly and that can help show demonstrable benefits to local stakeholders while at the same time making longer-term investments that can result in more substantive changes in the health picture of a local population. Typically, this could include:

- investment in health infrastructure
- support to medicine supply and other interventions
- temporary secondment of health personnel,
- capacity development of government health workers
- health system strengthening of district-level health teams.

Lessons learned

Phasing the assessment

NEWMONT GHANA

Acknowledging the distinct phases of the mine project at Akyem, Newmont Ghana determined the likely needs of project-affected communities in two distinct phases: influx mitigation and development. Influx mitigation assessed the needs of communities in the first three years of the project, roughly corresponding to exploration and construction phases. Characterized by a significant migrant population increase, either through contractors on the construction of the mine or immigration related to potential spin-off economic benefits of mine activity in the area, the local population would swell, overwhelming existing water, sanitation and health infrastructure, in addition to bringing new health challenges, including a likely increase in HIV rates. Inadequate housing could lead to increases in tuberculosis and the community identified increases in teenage pregnancy as a significant community concern. Newmont designed a response to these public and community health challenges in the first three years of the project. In addition, Newmont assessed potential post-construction community health – when the population pressure would ease, when the construction of the mine was completed and production came online.

Balancing quick wins with longer-term systemic interventions

TECK’S ZINC & HEALTH PROGRAM

Teck’s Zinc & Health program intentionally mixes long- and short-term programming, believing that short-term solutions provide “quick wins” in terms of rapid results, but should be complemented by longer-term, systemic projects that invest in sustainable solutions and real change. Teck has sought this balance by partnering on zinc supplementation programs (short term) as well as crop nutrition and food fortification initiatives (longer term). For instance, zinc supplements provided through Teck’s partnership with Unicef in Nepal and Peru have had a rapid effect on reducing stunting in children who receive the supplements. If the program is withdrawn, achievements in terms of improvements in the health of the children in the program are unlikely to be sustained. However, Teck is also involved in developing longer-term, more systemic and market-based interventions through fortified fertilizer and the development of food fortification technology with BASF. This combination of program timelines allows Teck to develop longer-term solutions, with unknown outcomes and longer time horizons, with shorter-term, high-impact programming and with visible results.

“Community health programs often require long timeframes for substantial changes in major health indicators to occur.”
Lessons learned

3.1.8 Monitoring and evaluation

Systematic monitoring of community health initiatives is essential if progress is to be tracked in a meaningful way. Moreover, a sound monitoring system can serve as a legitimate social licence asset for a mining company implementing a community health program, both with local actors, and also the broader public.

At the needs assessment stage, quantitative data will be collected to inform the evidence base on which the design of the project is developed. Existing baseline data from targeted communities or districts in the impact area of the mine may be of variable quality and in some cases it may be necessary to conduct population-based health surveys to measure key indicators. This is more likely in developing country settings where it is often not possible to utilize government health management information systems (HMISs) due to their incompleteness and inaccuracy.

Depending on the type of community health initiative, such population-based health surveys may collect data on child anthropometry; recent illnesses, haemoglobin levels and prevalence of malaria parasitaemia in young children; sexual, reproductive and maternal health; hygiene practices; use of LLINs; treatment-seeking behaviour; access to health services; water sources and sanitation; literacy; and wealth.

Regardless of existent HMIS capacity, community health initiative indicators should be aligned with nationally utilized data indicators. This will serve to reinforce the HMIS by integrating the initiative within existing structures, providing supplementary information for the HMIS and improving data quality, and avoiding the administrative burden created by having to monitor parallel sets of indicators – one for the company, and one for the HMIS.

Effective monitoring of a community health project allows those implementing, overseeing, financing and benefiting from the initiative to see what has been achieved, what remains in terms of project objectives, what has worked in the design and implementation of the project and what has proven challenging.

Armed with this information on program progress, adjustments can be made accordingly to improve the outcomes of the initiative over time. Hard data can also be used by a company to evaluate the cost-benefit of a health intervention. Despite the efficiency and additional benefits accrued establishing monitoring systems, few ICMM member companies have a system in place to undertake these activities. This is starting to change as companies extend relatively comprehensive “inside the fence” employee health monitoring programmes to their “outside the fence” community health programs, and are partnering with academic institutions or third party specialists to monitor the technical data generated by the health program. In the meantime, some companies are unaware of the impact of their community health initiatives on actual health outcomes.

Relying on internal resources or implementing partners to monitor community health initiatives can introduce bias. Hence, for those companies with monitoring plans in place, a third party monitoring entity generally provides a level of objectivity, expertise and credibility to the data collected, since there are no conflicts of interest and the third party is specialized in public health monitoring as its core business.

Establishing a baseline and building local capacity

FREEPORT-MCMORAN

Tenke Fungurume Mining (TFM) conducted a baseline assessment of the epidemiological profile of the Fungurume Health Zone in 2008, to serve as the evidence base for the development of a comprehensive community health program. As the Fungurume Health Zone was only formed in 2003, and the diagnostic capacity of the health facilities within the zone was low, the TFM baseline, complementary community discussions about health needs and health facility survey were the first of their kind in the health zone. The exercise of collecting the baseline and qualitative information about community health and the status of health facilities in the zone provided the local and provincial authorities and the research partner, the University of Lubumbashi, with hands-on experience in survey techniques in a health zone not previously assessed. In addition, the provincial health authorities have entered into a five-year MOU with TFM. This includes addressing the diagnostic capacity of health facilities, providing feedback from the TFM program into the HMIS and developing the database for health indicators in the Fungurume Health Zone. This epidemiological data will also be used to inform the design of the community health action plan of the health zone in line with provincial health priorities.
Measuring impact can be challenging, particularly in remote areas in developing countries. For example, it is often unrealistic to plan to measure changes in under-five mortality and maternal mortality. In such cases, proxy indicators are the most realistic alternative. For maternal health, indicators including antenatal care attendance, quality of antenatal care provided and the proportion of deliveries in an institutional setting attended by a trained practitioner can give a sufficiently accurate picture of the situation with regards to maternal health. While for under-five mortality, immunization rates, LLIN coverage and access to treatment for child febrile illnesses can serve as proxies to measure improvements in child health.

In addition to quantitative monitoring of outcomes from community health initiatives, there is value to be gained in developing a monitoring system that also takes into account outcomes related to the improvement or development of the administrative and managerial capacities of the district health team, which will, in the longer term, assume the management of the health facilities supported by the mine. However incremental progress may be, there is a business case for investing project funds into building this outcome area – a high-functioning district health team can provide benefits to business in terms of easing bureaucracy and facilitating a more functional relationship between the company and local government as well as promoting long-term sustainability.

Outsourcing monitoring

FREEPORT-MCMORAN

Following the roll-out of the program designed for Tenke Fungurume Mining (TFM), the University of Lubumbashi will continue to provide monitoring support to the program and conduct periodic evaluations of TFM’s malaria control program. The university will be overseen by I-SOS in the supervisions, monitoring and evaluation, and will build on the university’s technical expertise in the area and the contextual knowledge of the program, having been involved in the establishment of the baseline.

3.2 Lessons from different types of community health initiatives

3.2.1 Global- and regional-level health initiatives

Global programs involve partnerships as the lynchpin of program design, with the mining company or its foundation working with one or more partners that have a comparative advantage in the health and advocacy sectors. Examples of such partners include the UN Global Compact, GBCHealth, Free the Children’s We Day and the IZA’s Zinc Saves Kids campaign. These programs require extensive internal examination of public relations goals and corporate messages in terms of social investment before a partnership can move forward.

Global programs possess far-reaching public relations implications for a company, and require careful, risk-aware selection of partners, projects and objectives in order to minimize potential negative press. Global initiatives by ICMM member companies are also exemplifying risk taking and innovation with regards to project implementation, through utilization of new communication channels, making extensive, cost-effective use of social media and through a variety of partnership models, such as public-private partnerships and agreements with industry umbrella bodies.

Aligning with a global initiative does not preclude, and in fact may be complemented by, associated local-level initiatives and partnerships to provide a practical project that supports the company’s global advocacy.

While regional programs may not have the scope in terms of publicity that global programs may leverage, they will often tie into a partnership where the partner possesses significant on-the-ground presence and local experience, and the initiative is rationalized by the company’s global, corporate or foundation objectives for social investment. In some cases, the project may already be in operation or in the pipeline – as is the case with other types of community health initiatives. This type of arrangement may be interesting for a company from risk mitigation and exit strategy perspectives – allowing the company to withdraw from the project when it leaves the area, without necessarily affecting the program’s overall performance.
At the global and regional level, project monitoring of outcomes and impacts provides a good example of how monitoring can be used to develop and strengthen advocacy messages. Monitoring through social and other media becomes increasingly affordable as the reach of campaigns is easily measured through in-built monitoring systems in social media software. At the field level, or in the case of regional programs, the implementing partner will often have developed a monitoring system as part of the project design, the outcomes of which can then be fed back into the advocacy work of the company at both regional and global level.

**Partnership and project diversity under one programme**

**TECK’S ZINC & HEALTH PROGRAM**

Teck’s Zinc & Health program combines global and national program “pillars” with an advocacy approach making use of social media campaigns to communicate awareness messages on the importance of zinc supplementation in the healthy development of children, and zinc fortification in agricultural products. The design approach used by Teck for this global program is one of diversity – with program pillars covering therapeutic zinc (Senegal, Ethiopia, Burkina Faso – ZACH with the Canadian International Development Agency [Cida] and the Micronutrient Initiative); zinc supplementation (Nepal and Peru – Unicef); food fortification (BASF partnership); crop nutrition (China – IZA) and the advocacy day, We Day, with the Canadian NGO Free the Children. The partners selected for each of these pillars are well known in their respective fields and represent strategic as well as innovative approaches – Teck is at the forefront of cost-sharing programs between Cida and the extractive industry, and adopted a Twitter campaign for the last We Day event in 2012, reaching an audience of over 4 million Twitter users. Through its Zinc & Health program, Teck has intentionally pulled together a varied group of projects to form its global program.

**Partnerships with experienced implementing agencies**

**BHP BILLITON**

BHP Billiton’s project has gained from Path’s formal presence in South Africa and its experience of working in Mozambique previously. The project has benefited from Path’s ability to co-ordinate with relevant government and non-governmental authorities based on relationships already fostered, and Path’s knowledge of existing health initiatives has prevented duplication. In addition, the project has been able to utilize Path’s local knowledge to develop targeted interventions specific to the districts in which the activities are being implemented. Familiarity with government spending on health – one of BHP Billiton’s due diligence criteria – has enabled Path to assist the relevant authorities to begin planning for BHP Billiton’s exit when the project closes, including identifying alternative funding sources.

**Use of social media to monitor advocacy**

**TECK’S ZINC & HEALTH PROGRAM**

Teck uses results from its country-level projects to inform its global advocacy work, and can further monitor coverage and responses to its global advocacy through tracking programs already incorporated into website, Facebook and Twitter software. Teck has used this traffic data as a programmatic result, alongside those achievements generated by the other projects in the five pillars of its Zinc & Health program – for instance, the 200 per cent increase in traffic on the program’s website during the Zinc & Health Twitter campaign on We Day 2012. Teck’s use of social media to convey key messages around zinc and health has been both cost-effective and reached a different demographic than traditional reporting of results through reports and websites.

**Monitoring a regional initiative**

**BHP BILLITON**

BHP Billiton monitors project progress through an advisory board that meets twice a year and comprises BSC members, representatives from BHP Billiton’s operations in Mozambique and South Africa and senior-level representatives from Path. In addition, the advisory board meets annually to discuss technical inputs and strategic issues related to maternal and child health and to identify other areas for investment.

“Teck’s use of social media to convey key messages around zinc and health has been both cost-effective and reached a different demographic than traditional reporting of results through reports and websites.”
3.2.2 Highly focused communicable disease control programs “inside” and “outside the fence”

ICMM members have made great progress in supporting communicable disease control in different settings, particularly in Africa and Asia. Typically, such programs have originated “inside the fence” and targeted employees at risk of a range of communicable diseases such as HIV/AIDS, tuberculosis, sexually transmitted diseases, malaria and cholera. However, once developed and tested “inside the fence”, these programs often extend to “outside the fence” to include local employee family members, as well as the communities they are from.

When designing communicable disease control programs different interventions of differing intensity may be required “inside” and “outside the fence”. For example, malaria preventive interventions deployed “inside the fence” are likely to be comprehensive in nature and comprise indoor residual spraying, screening of living quarters, use of LLINs and skin repellents, larviciding and environmental management supported by entomological and epidemiological monitoring. “Outside the fence”, preventive interventions may be less intense and focus more on the distribution and utilization of LLINs in communities. Such interventions “outside the fence” may be implemented in partnership with an NGO or local government.

Using monitoring systems as tools for informing program improvements is particularly relevant for initiatives focused on workforce productivity and communicable disease control. The real productivity gains and financial benefits of a healthy workforce can be quantified – similarly to those already measured by the industry related to injury (eg lost time injuries). Accurate measurement of workforce communicable disease, and even lifestyle indicators, can help those responsible for company health, safety and loss prevention design more effective preventive and curative interventions for employees as well as the broader community.

Uniting “inside” and “outside the fence” malaria control

ANGLOGOLD ASHANTI OBUASI

In Obuasi, Ghana, AngloGold Ashanti identified malaria as a leading cause of lost work time due to illness among its workforce in 2005. The main hospital located next to the Obuasi mine was reporting over 6,800 malaria cases each month – 37 per cent of which were Obuasi mine employees. These figures were having a significant negative impact on Obuasi mine’s productivity, and a decision was taken to initiate a workforce malaria control program, which also extended to the mine-affected communities around Obuasi – an explicit recognition that employee health was a business concern, which went hand in hand with a consideration of the health of the communities in the mine-affected area. Extensive research into the figures and epidemiology of malaria in the Obuasi area was undertaken to inform the design that was rolled out in early 2006. By 2008, malaria cases had experienced a 74 per cent reduction from 2005 levels. AngloGold Ashanti has developed the Malaria Lost Time Injury Frequency Rate to monitor malaria-related productivity impacts among employees. At the same time, it expanded its community program in parallel – AngloGold Ashanti is the primary recipient of the Global Fund grant for malaria in Ghana for Round 8 and implementation started in mid-2011. The project covers 40 districts in Ghana, and is financed by a US$154 million grant stream over five years.

Reducing incidence of malaria among the workforce

NEWMONT GHANA

Newmont Ghana developed the Ahafo project in advance of the Akyem project, and intentionally brought lessons learned from the Ahafo community health program to the Akyem project design. For instance, the Ahafo project had a high rate of success in its malaria control program among employees, and the lessons brought to the Akyem project have resulted in a 79 per cent reduction in malaria incidence among employees, at the same stage of construction. Problems with new database software at Akyem has meant glitches in tracking employee illness, but a newly constructed and significantly expanded site clinic at Akyem, staffed by I-SOS, will remedy this situation and resume the employee database tracking system for, among other indicators, malaria, tuberculosis, HIV and sexually transmitted infections.
Lessons learned

3.2.3 Primary health care programs implemented by third parties

Primary health care projects address the basic health needs of the community in terms of preventive and curative care. These initiatives are often characterized by the involvement of several partners, and as such, implementation benefits from an informed and simple design that speaks to the needs, context and comparative strengths of the partners involved. In many cases, the design will involve ICMM members taking a financing and oversight role in the implementation of the project, which will be managed and technically overseen by a third party contractor. For a number of companies, the rationale for this arrangement is to benefit from the technical expertise of a third party primary health care specialist, with a skill set and knowledge base not housed within the company itself. An equally important reason to partner with a third party implementing agency is when the existing district health system lacks the capacity to undertake the project.

Despite frequent gaps in capacity, it is still essential to include district health authorities in project planning, design and oversight. In some cases, this can be a productive and mutually rewarding relationship, although this will be highly dependent on the local context and often the personal dynamics of the government and mine officials involved in managing the relationship. Nevertheless, all primary health care initiatives need to engage and develop relationships with local and district health administration, and incorporate into project design applicable national health strategies and policies, for instance, the relevant malaria control strategy or, more generally, the multi-year health sector strategic plan.

Primary health care projects are likely to monitor outcomes based on the national health management information system, particularly as one of the partners on the program will invariably be a local or regional government body representing the ministry of health. While a company may have an interest in monitoring specific outcomes for its own purposes, efficient programming requires minimizing additional indicators to those already stipulated by the national health management information system, or the shifting of indicators from one reporting period to the next – making it impossible to verify or compare indicators from year to year. The closer the project is aligned with national indicators, the more sustainable and productive the intervention is – by contributing to national strategic goals and data collection, and thus strengthening the overall health system.

“For all primary health care initiatives need to engage and develop relationships with local and district health administration, and incorporate into project design applicable national health strategies and policies.”

Partnering with a local entity with strong networks and linkages

AFRICAN BARRICK GOLD TANZANIA

Africare has been overseeing and implementing HIV/AIDS programs in the Mara Region in Tanzania where ABG has operated since 1994. The Lake Zone Health and Economic Development Initiative (Lazhedi) project thus benefits from the strong networks and relationships that Africare has already developed with district authorities and community members, its knowledge of the implementation environment and its knowledge of similar previous and existing initiatives. This enables the project to target inputs and avoid duplication.

Utilizing different partners for primary health care

FREEPORT-MCMORAN

The Tenke Fungurume Mining (TFM) partnered with I-SOS for the baseline, design and technical oversight of its community health project. I-SOS brings the technical expertise in health programming which is particularly crucial given the low capacity of the zonal and provincial health authorities at the outset of the program. TFM’s work in the health zone is complemented by Path, also active in the zone, targeting communities around the mine for HIV/AIDS prevention and awareness. The TFM program has also relied on FHI 360’s C-Change behaviour change materials, and medical equipment support from Project Cure. The League for Development and Welfare (LIDEAS), a DRC-based multi-sector NGO, has served as a central partner for TFM clean water and sanitation projects.
Lessons learned

3.2.4 Health programs implemented by local government

Health programs implemented by local government are often characteristic of ICMM member companies based in Latin America, but extend to other regions, including southern Africa. Such programs are most feasible when the capacity of the local government is high and a mutually beneficial partnership with the company is possible. Local partnerships tend to be attuned to the capacities and dynamics of the local government system, and are focused on supporting and building the health system from a local level. As a result, these initiatives do not generally have a national or policy-level impact, but rather serve as specific examples of how co-ordination is possible in a public–private partnership at the local level – particularly crucial for the numerous national health systems undergoing decentralization of decision making.

Frequently, agreements between the company and one or two partners, including local government, are not always formalized, leaving potential for difficulty in managing expectations. However, these partnerships tend to also be characterized by more regular and active communication and collaboration between the company and district health authorities, including active community engagement, which to some extent may substitute for the absence of a formal agreement by providing additional clarity on ways of working and alignment with the district or provincial health plan.

Responsive and co-ordinated partnership with the Department of Health

LONMIN SOUTH AFRICA

The Department of Health (DoH) has been involved in all stages of Lonmin’s community health infrastructure projects from design phase through to exit and handover. The DoH in collaboration with community representatives and Lonmin is involved in identifying community health infrastructure needs; all designs for projects are developed and agreed upon with the DoH according to mandated standards; and all projects comply with the DoH’s district health plan. In addition, infrastructure projects are integrated into the company’s other health programming with the DoH, particularly its HIV/Aids treatment and awareness programs. As per the MOU with the DoH, Lonmin’s financial or operational obligations are largely handed over once the construction and equipping of the facility is complete, although Lonmin has intervened when the DoH requests ad hoc support with maintenance.

Policy harmonization with the Department of Health

BARRICK PERU

The La Libertad regional DoH is the main implementing partner in Barrick’s Alto Chicama Saludable project to address the issue of chronic infant malnutrition in Peru. Its involvement includes facilitating the implementation of activities at its health centres, providing medical personnel to implement activities, and training health brigades and technical personnel. The regional DoH is also represented in the management committee that monitors the progress of the project. The regional DoH has adopted as part of its own strategy, Barrick’s interventions to reduce chronic infantile malnutrition and improve maternal health, and is, in addition, training local organizations on the same.

“Lonmin’s financial or operational obligations are largely handed over once the construction and equipping of the facility is complete.”
Community health initiatives targeting specific health concerns affecting communities that are marginalized and remote, both in terms of access to social services and geographical isolation, are highly contextual—and thus require a clear and correct understanding of community dynamics and perceived health needs. Such communities are often located in remote areas of developed countries, and thus exhibit unique health needs that are uncharacteristic of developing countries or more urbanized parts of developed countries. However, this is not always the case [see African Barrick Gold Tanzania example below].

The health needs are often a specific manifestation of societal issues (e.g., substance abuse, poor nutritional practice) and hence a deep understanding of the local community context is required. Specialized interventions are more likely in contexts where the local health administration and health system are functional, and the company does not have to make substantial investments into the local health infrastructure to bring it up to an acceptable standard for employees. Moreover, it is normally implicit in this type of arrangement that the partnerships formed for this intervention are locally based.

Community health initiatives targeting specialized interventions are usually simple to monitor, given the discrete nature of the programming, partners and objectives. Often the activities undertaken by the project, such as the provision of new medical equipment to a hospital, are easy to document and results easily recorded, and the partnership arrangements are straightforward, relative to other types of initiatives. This simplicity and targeted nature allows for clear communication of results to partners, beneficiaries and stakeholders about the value of investing in the program. However, measuring impact is more challenging given the difficult nature of some of the health issues that the initiatives are addressing, such as substance abuse, diabetes and alcoholism.

### Addressing mental health issues among the youth

**TECK ALASKA**

Prior to Teck’s involvement in the Teck John Baker Youth Leaders Program, designed to tackle the roots of high youth suicide rates in the Northwest Arctic Borough School District, the program had already been under way for three years with strong support from the local community and local government. Project implementation has largely remained consistent with local companies, organizations and government continuing to contribute funds and in-kind support alongside Teck as the majority financier. While Teck has indicated that it will likely continue project support after its current five-year funding arrangement ends, the continued involvement of the local community and government serves to enhance ownership and sustainability of the project.

### Reducing substance abuse and promoting healthy lifestyles

**INMET PANAMA**

Drawing on epidemiological profile of the population in the area around the concession from the 2010 ESIA, Minera Panamá, S.A. (MPSA), a Panamanian mining company in which Inmet held an 80 per cent equity interest, found persistent public health and social problems arising from drug dependence, malnutrition, smoking and alcoholism in the population. MPSA’s adolescent high risk behaviour prevention program aims to address and mitigate increases in these behaviours in the local population, particularly those arising from project-induced in-migration. It does so by raising awareness among youth on these issues. The program, which has been designed in collaboration with local NGOs, community-based organizations and educators, employs the use of dramatic arts to engage the students and has so far reached approximately 600 students. The program is aligned with Panama’s national comprehensive health programme for adolescents initiated in 2006, the national Health Plan 2010–15 and Millennium Development Goals 3 and 6 addressing gender equality and empowerment, and HIV/AIDS and other diseases respectively. The project premises that reducing drug and alcohol abuse will support a concomitant reduction in gender violence, as well as reducing the likelihood of engaging in behaviours that could lead to the spread of HIV/AIDS and other diseases.
Lessons learned

Addressing chronic kidney disease in a rural population

GOLDCORP CANADA

The Timmins and District Hospital, located in the immediate vicinity of Goldcorp’s Porcupine Gold Mines, was overdue for an expansion of its renal dialysis unit, which served a large geographic area of pockets of settlements across northern Ontario – including Goldcorp employees. A proposed cost-sharing project with the provincial government of Ontario would see the unit expanded with additional dialysis stations and centralize the peritoneal dialysis, haemodialysis and clinic areas into one unit in the hospital. The project also included education and awareness activities, to promote healthy lifestyle behaviours and reduce the incidence of chronic kidney disease. Goldcorp has a long history with supporting community initiatives in Timmins, including those related to health, and Goldcorp committed approximately C$600,000 towards the local share of the projected cost of C$10 million. In addition, the Goldcorp HR manager was a member of the local fund-raising committee, which raised C$5 million for additional equipment for the operating rooms associated with the expansion.

Addressing congenital conditions in an isolated population

AFRICAN BARRICK GOLDBG TANZANIA

ABG provides financial support to Rafiki Surgical Missions, a team of volunteer doctors from Australia, to carry out reconstructive surgery including cleft lip and cleft palate surgery and procedures to reverse damage caused by burn injuries to communities surrounding ABG’s operations in Tanzania. People born with cleft lips and cleft palates in Tanzania are often shunned by their families and peers who believe the congenital deformity to be a curse, leading them to suffer from low self-esteem and social anxiety. In actuality, the high rates of wife inheritance in the area and subsequent limited genetic pool are said to be the primary cause of the condition. Burn injuries are commonplace in Tanzania where most people cook over open fires or with highly flammable kerosene stoves. As there is only one burn unit in the country, located in Dar es Salaam, most people who suffer from burn injuries have no recourse to treatment. ABG’s community health team identifies patients within the community requiring the surgical procedures and Rafiki Surgical Missions travel twice a year to carry out the surgeries.

Monitoring through engagement

TECK ALASKA

The Teck John Baker Youth Leaders submit end-of-semester and annual reports detailing all activities that have taken place throughout the period and the number of people reached through the various activities conducted. However, the specific focus of the Youth Leaders program has meant that the indicators are easy to measure, if difficult to attribute: Northwest Arctic Borough School District went from having one of the highest youth suicide rates in Alaska, to zero in 2011. However, in terms of qualitative monitoring, Teck is also actively involved in engaging the Youth Leaders in Teck’s community outreach programs where they work side by side with youth trained by the program to address community concerns vis-à-vis Teck operations, and Teck is provided an opportunity to work directly with the outputs of the Leaders program.

“...The project also included education and awareness activities, to promote healthy lifestyle behaviours and reduce the incidence of chronic kidney disease. Goldcorp has a long history with supporting community initiatives in Timmins, including those related to health, and Goldcorp committed approximately C$600,000 towards the local share of the projected cost of C$10 million.”
Lessons learned

3.3 Exit strategies and sustainability

Well-thought-out, practical exit strategies and sustainability measures are most relevant for those community health programs being implemented at site level. Global programs often have exit strategies inbuilt, given that the company is often one of several financing partners in the project for a specified duration.

For the remaining site-level or regional programs, ICMM member companies almost universally incorporate exit strategies into the project design. However, it is less clear how the exit strategies are actually implemented over the life of the mine. There are several variables to consider in planning for an exit strategy and ensuring sustainability of community health programming once the initiative has come to an end.

Dependency minimization

Many initiatives aim to improve community health without creating long-term dependency on the mine to provide financial and technical inputs. This is a particular consideration for those companies on concessions where there was previously a state-owned mine providing generous social benefits. Examining expectations during needs assessment and design phases is important to maintain clarity throughout the life of the project, alongside withdrawal measures that are sensitive to the expectations being managed.

Supporting self-sufficiency at health centre level

FREEPORT-MCMORAN

Tenke Fungurume Mining (TFM) operates in line with the DRC health system, where the health financing modality is that each health facility should generate enough income through services provided to recover costs and pay salaries – essentially, to be self-sufficient. As such, with a view to TFM withdrawing support for the health zone in the long run, TFM will benefit from not having created program dependencies that have detracted from health facilities’ ability to self-finance. Providing support and programming that builds health facilities and local administration towards self-sufficiency is essential, given that this is the likely reality once the company leaves the area.

“Providing support and programming that builds health facilities and local administration towards self-sufficiency is essential.”

Maintaining progress towards health goals

This issue is particularly problematic when exiting from a community health program, as without the inputs the program provides, gains in investment-intensive health indicators may be reversed. For example, in malaria control programs, without a strategy for providing LLINs to a community in a sustainable way, there may be an increase in malaria prevalence when the LLINs from the mine-supported project are discarded, and the exit strategy has not successfully sustained LLIN use in the community.

Sustainability for this type of indicator could include developing a market mechanism for the provision of affordable LLINs, and public education about the effectiveness of LLINs throughout the life of the program, thus creating a change in attitudes towards the importance of LLIN usage within the community.

For a company to transition a health program towards a level that local health authorities or local partners can continue to implement, a degree of rationalization is sometimes required. For example, there may be a need to close some specialized hospital facilities that will incur excessive costs once the company is no longer present to pay the bills.

Balancing temporary gains with long-term change

TECK’S ZINC & HEALTH PROGRAM

Teck’s mix of long- and short-term projects under their Zinc & Health program acknowledges that the consolidation of results in some outcome areas will be problematic – for instance, once Unicef withdraws its supplementary feeding program in Nepal and Peru, there may be a decline in zinc fortification among young children. This decline may be beyond the control of the company. However, Teck has complemented these more rapid results programs with longer, market-based zinc fortification research programs with BASF, and in China in partnership with the IZA. These projects, if successful in developing commercial solutions, are likely to produce more durable results than other, more immediate, project pillars of the Teck program.
Lessons learned

**Sustainability by strengthening the financial and management capacity of district health authorities**
In principle, the responsibility for technical and administrative oversight should be handed over to the district health authorities with a financial management strategy in place. In some instances, this role may be performed by another partner who remains with the program after the company has closed operations and left the area. Regardless of the handover partner – local government or third party – investments in management, administrative and financial capacity should be made at the outset of the program to ensure as smooth a handover as possible.

**Diversified funding helps exiting a health project**

**AFRICAN BARRICK GOLD TANZANIA**
The Lazhedi project supported by ABG in Tanzania is co-financed by USAid, a large bilateral donor. This lends stability to the longevity of the project if ABG should choose to stop funding the initiative in the future.

“Regardless of the handover partner – local government or third party – investments in management, administrative and financial capacity should be made at the outset of the program to ensure as smooth a handover as possible.”
SECTION 4
Conclusion
The health needs of communities living around mining sites are significant, particularly in developing countries, as well as in remote regions of developed countries. ICMM members have made significant progress in addressing community health issues through a diverse range of initiatives that include global micronutrient deficiency and regional maternal and child health programs, highly focused communicable disease control initiatives in and around mine sites, and projects that focus on particular health needs of marginalized and remote communities.

However, it should be recognized that addressing community health will always be a moving target for mining companies given changing disease patterns and the emerging health needs of diverse and developing communities. ICMM members’ community health initiatives will need to continue to implement lessons learned from experience to further refine program design, implementation and monitoring in order to maximize and sustain health impacts. Furthermore, good governance at local government level, the utilization of strong technical and implementation partners, and consistent engagement with affected communities will further increase the success of their community health initiatives.

“ICMM members’ community health initiatives will need to continue to implement lessons learned from experience to further refine program design, implementation and monitoring in order to maximize and sustain health impacts.”
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## Annex
### Case studies by typology

<table>
<thead>
<tr>
<th>Global- and regional-level health initiatives</th>
<th>40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zinc &amp; Health, TECK</td>
<td>40</td>
</tr>
<tr>
<td>Window of Opportunity, BHP BILLITON</td>
<td>43</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Highly focused communicable disease control programmes “inside” and “outside the fence”</th>
<th>45</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workplace program for HIV/AIDS and malaria, NEWMONT GHANA</td>
<td>45</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Primary health care programs implemented by third parties</th>
<th>47</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenke Fungurume integrated health program, FREEPORT MCMORAN</td>
<td>47</td>
</tr>
<tr>
<td>Lake Zone Health and Economic Development Initiative, AFRICAN BARRICK GOLD</td>
<td>50</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Health programs implemented by local government</th>
<th>52</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother and child health program, MMG LXML</td>
<td>52</td>
</tr>
<tr>
<td>Alto Chicama Saludable Project, BARRICK</td>
<td>54</td>
</tr>
<tr>
<td>Community health infrastructure partnership with provincial Department of Health, LONMIN</td>
<td>56</td>
</tr>
<tr>
<td>Community health infrastructure partnership with provincial Department of Health, INMET</td>
<td>58</td>
</tr>
<tr>
<td>Policy to prevent STDs and unwanted pregnancy, ANGLO AMERICAN</td>
<td>61</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Specialized health interventions for marginalized and remote communities</th>
<th>63</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teck John Baker Youth Leaders Program, TECK</td>
<td>63</td>
</tr>
</tbody>
</table>
Global- and regional-level health initiatives

Corporate-level health initiatives are often implemented through the company foundation, which are global or regional and not directly linked to a specific site. These initiatives are funded corporately and often involve engagement with one or more strategic global partners, such as an international NGO, UN agency or bilateral donor. Such interventions typically target an identified health issue relevant to the company’s core business or areas of operation, and contribute to the company’s “global” social licence to operate. In addition to field-level programs, these initiatives may involve a mix of global-level advocacy work using social media and other fora, linking on-the-ground activities and results with external relations and advocacy work at corporate level.

Zinc & Health

**TECK**

**Program rationale**
Teck launched a Zinc & Health program in January 2011 to raise awareness and provide short- and long-term solutions to zinc deficiency, which affects 2 billion people worldwide and contributes to the death of nearly 450,000 children under five each year. Teck’s commercial strengths in the field of zinc production align with the company assuming an active role in the promotion of zinc to improve human health. The Zinc & Health program comprises five sub-component projects involving private, public and non-governmental partnerships.

**Design**
Teck’s Zinc & Health program has been designed as an umbrella program that allows for the addition of new projects that are varied in nature, objectives and geographical focus. The current portfolio of projects comprises five projects targeting four beneficiary countries, in addition to a global advocacy initiative and a public–private partnership developing nutrition solutions:

- **The Zinc Alliance for Child Health (ZACH)** is a public–private–civil society alliance created to develop and sustain zinc treatment programs that will help save children’s lives. The first partnership under ZACH is between Teck, the Micronutrient Initiative and the Government of Canada, aimed at scaling up zinc and oral rehydration salts as a diarrhoea treatment in countries with high under-five death rates in sub-Saharan Africa. The project currently operates in Senegal, Burkina Faso and Ethiopia, with plans to launch in Kenya in 2013.

- **Zinc Saves Kids** is an initiative of the International Zinc Association (IZA), partnering with Unicef in Nepal and Peru on a zinc supplement program for children in collaboration with the respective national ministries of health. Teck is an advocacy, awareness and fund-raising partner in this initiative. The initiative began in 2007 and Teck’s entry in 2011 assisted in scaling up treatment programs.

- Through a food fortification partnership with BASF, zinc from Teck Trail Operations will be turned into high-grade zinc oxide by GH Chemicals in Montreal, which BASF will use to make food fortification supplements. Teck and BASF are developing the iCheck, a photometer able to quickly and precisely measure the zinc content to ensure products fortified with zinc deliver what they promise.

- Teck is encouraging crop nutrition to increase the zinc content of agricultural soils through a two-year partnership agreement with the National Agricultural Technology Extension and Service Centre of the Ministry of Agriculture of China (Natesc), which complements existing work of the IZA by encouraging the introduction...
of zinc fertilizers to promote crop production through education and demonstration projects. In China, zinc deficiency occurs in over half of the agricultural soils and these regions register high rates of zinc deficiency in humans leading to significant health issues. The project is working towards a long-term solution with significant health implications.

- Educating Teck employees and the public about zinc deficiency and the health benefits of zinc is a key driver of the Zinc & Health program. To promote zinc deficiency awareness, Teck uses numerous social media platforms as well as a variety of employee-driven initiatives and partnerships – most notably with the Canadian NGO Free the Children and their annual We Day advocacy drive. To date, @ZincSavesLives, the Zinc & Health Twitter account, has 3,177 Twitter followers.

The Zinc & Health program works with relevant public sector partners, either directly or through implementing partners, such as Unicef and the Micronutrient Initiative. As the program’s overall goals address root causes of poor nutrition and the use of zinc to treat diarrhoea in children – a leading cause of under-five mortality and morbidity in developing countries – the Zinc & Health program is designed to contribute directly to the achievement of the UN Millennium Development Goals 1 (eradicate extreme poverty and hunger) and 4 (reduce child mortality). Indirectly, promotion of zinc supplements may also improve pre-natal maternal health (Goal 5) and help reduce the severity of the symptoms of malaria as well as communicable illness related to HIV (Goal 6).

The five project areas involve a range of financing modalities for Teck. The first partnership under the ZACH umbrella is funded by contributions from the Government of Canada (C$15 million) and Teck (C$5 million), for a total envelope of C$20 million over five years. Teck has a fund-matching agreement with Natesc, providing C$500,000 over two years for the project to conduct up to 50 field trial demonstration projects and promote widespread education on the benefits of zinc fertilizer. On the Unicef/IZA project, Teck has committed to C$225,000 over three years, contributing to advocacy campaigns and complementary projects as part of the other four “pillars”. Awareness and advocacy work are all fully funded by Teck.

**Partnerships**

Partner selection was informed by a needs assessment for each project. Teck aims for partnerships which can leverage core competencies and combine expertise for a particular project. Key partners in the program “pillars” are:

- ZACH: The main implementing partner is the Micronutrient Initiative, an international not-for-profit that works to eliminate vitamin and mineral deficiencies in vulnerable populations, with financing from the Canadian International Development Agency (Cida), Canada’s leading agency for international assistance, and Teck. Local implementing partners, in addition to ministry of health partnerships, are selected for expertise in social marketing and are managed through the Micronutrient Initiative, which has a strong presence in Senegal and has developed close relationships with the government and Ministry of Health.

- Zinc Saves Kids: The main partners are the IZA and Unicef, the implementing partner in Nepal and Peru. Zinc Saves Kids advocates for behaviour change and policy reform related to the use of zinc with oral rehydration salts in the treatment of diarrhoea. The IZA created the initiative on behalf of its member companies to fund Unicef’s zinc supplementation programs for the prevention and treatment of malnutrition and diarrhoea in young children in Nepal and Peru. Teck’s role includes fund-raising, advocacy and awareness campaigns.

- Food fortification: Teck’s partnership with BASF, a leading chemical company, leverages the strengths and competencies of each company, including BASF’s cost-effective micronutrient products, analytical and formulation expertise, application and quality control know-how, and distribution partnerships, and Teck’s zinc products, to create a sustainable, food-based solution to zinc deficiency. This partnership forms part of the “Scaling-Up Nutrition” process and it aims to help the United Nations in their efforts to meet the UN Millennium Development Goals, particularly the goal to halve poverty and hunger by 2015, by contributing to the realization of the Human Right to Food.

- Crop Nutrition: Teck is partnering with Natesc, who are responsible for introducing, field testing, demonstrating and extending the important agricultural technologies nationwide. Natesc has already conducted over 40 field trials of zinc fertilizer in China, in partnership with the IZA. The recently signed memorandum of understanding (MOU) between Teck and Natesc builds on this existing partnership, financing demonstration projects and further education campaigns.

- Awareness and advocacy: Teck is a National Platinum sponsor of Free the Children’s We Day events. We Day is a free, day-long event that youth must earn their ticket to through local or global activism. As a sponsor, Teck provides funding to Free the Children in exchange for sponsorship activation at five We Day events across Canada, including educational material for teachers, a 60-second CEO speaking opportunity and the presentation of a video highlighting the Zinc & Health program, shown to 60,000 youth in attendance and thousands more across Canada who watch the live webcast.
Integration and sustainability

Community investment is a part of Teck’s sustainability strategy, and involvement in zinc awareness initiatives is part of a long-term community investment vision. As such, while contracts in place for the current projects have finite timeframes, there is no exit strategy for Zinc & Health in general, and no immediate plans to exit from current initiatives.

Zinc is integral to both Teck’s core business and health and nutrition. The combination of business and community investment interests creates a natural longer-term association.

A combination of short- and long-term initiatives contribute to the program’s overall sustainability. For instance, ZACH is a zinc supplement initiative that involves regular uptake of zinc “sprinkles” by children – and compliance – to reap the benefits. Teck’s longer-term projects are addressing the uptake of zinc into zinc-deficient diets more systemically – for example, adding zinc to fertilizer in China to increase crop yield and the nutritional value of food, where 45 per cent of children are zinc deficient. Blending short- and longer-term projects, with outputs at various intervals, achieves a balance of sustainable results and immediate benefits for recipients.

Outcomes and impact

The Zinc & Health program has been operational for almost two years, and progress towards outcomes, both quantitative and qualitative, are evident, including:

- more than 800,000 zinc treatments have been provided to health centres in Senegal since May 2012
- in Nepal, more than 100,000 children between 6 and 23 months have received micronutrient supplements
- more than 70 per cent of targeted children received the first micronutrient supplement dose and over 50 per cent received the second dose in Nepal
- in Peru, stunting, an indicator of zinc deficiency, dropped by an average of 1.8 per cent per year between 2007 and 2011, compared to an average annual reduction rate of 0.4 per cent in previous years – based on positive outcomes, the supplementation program has been expanded to 16 of the 24 regions of Peru
- using Twitter, Teck’s Our One Tweet, One Life Twitter campaign for We Day in November 2012 received 21,156 retweets of their message about zinc deficiency and reached an audience of 4,175,873 Twitter users, in addition to an increase in website traffic of 200 per cent during We Day events.

Lessons learned

- The choice of partners is an important process and requires not only commitment but also a combination of strengths that ensure the right expertise is brought to the initiative by each partner. For example, the Micronutrient Initiative is on the ground and has strong relationships with governments and ministries of health in the countries in which it operates; and Free the Children provides an audience of engaged youth that are interested in global health issues.
- The relevance and scope for the use of social media to promote Teck’s Zinc & Health was a public relations risk for a mining company that paid off. Teck has found the use of Twitter, Facebook and a comprehensive website to be cost-effective and far-reaching in terms of raising awareness to a global audience.
- Short-term solutions provide quick wins, but should be complemented by longer-term, systemic projects that invest in durable solutions and real change. Teck has sought this balance by partnering on zinc supplements as well as crop nutrition and food fortification initiatives.
Window of Opportunity

BHP BILLITON

Program rationale

While child mortality rates are on the decline in developing countries, large numbers of children continue to die from preventable illnesses such as diarrhoea, malnutrition and pneumonia. BHP Billiton, through its independent UK-based charity BHP Billiton Sustainable Communities (BSC), is providing a US$25 million grant to the Program for Appropriate Technology in Health (Path), an international non-profit organization that creates sustainable, culturally relevant solutions for community health in developing nations, to implement its Window of Opportunity project. This focuses on improving the health and development of children under the age of two years in four districts in South Africa and one district in Mozambique. The project recognizes that the first two years of a child’s life present a critical “window of opportunity” to shape their development.

While both Mozambique and South Africa have significantly increased public spending on child health and adopted relevant policies, there is still insufficient local capacity to implement these policies.

Design

Project design was informed by:

- an internal literature review of health and development issues in BHP Billiton’s areas of operation, which identified Mozambique and South Africa as target countries for the BSC-funded health intervention
- consultations with the site community health teams to assess if there were any opportunities for alignment with ongoing site-managed interventions or if there was a need for a new intervention altogether
- an assessment of health needs in the areas of operation which, identified child and maternal health as the focus of BSC’s intervention.

The project, which has been implemented since 2011 and targets 750,000 women and children, aims to:

- strengthen local health and development systems and community structures to provide services responsive to community needs
- improve the quality and range of clinical and community-based services addressing the health and development needs of young children
- increase behaviours among carers and community members that positively affect the health and development of young children
- expand the knowledge base and foster widespread adoption of project findings.

The project builds on existing policies, structures and programs and engages government authorities at the national, provincial and district level in Mozambique and South Africa as well as local health and social services providers, and non-governmental and community-based organizations.

Project implementation is undertaken by Path; however, it maintains ongoing dialogue and liaison with the site’s community and health teams. The first year of implementation has mainly focused on building relationships with government at the district, provincial and national level as well as with communities.

BSC’s main role, in addition to funding, is to monitor the project, which it does through advisory board meetings including:

- six-monthly monitoring meetings attended by a BSC member, representatives from BHP Billiton’s operations in Mozambique and South Africa, and senior-level representatives from Path
- an annual international advisory board meeting to discuss technical inputs and strategic issues related to maternal and child health, to identify more areas for investment and to discuss additional ways in which Path can support the project.

Partnerships

BSC formulates its own projects in collaboration with site community teams and identifies prospective partners based on its due diligence criteria, which in this case included:

- experience working in Mozambique and South Africa, including ability to work with relevant government authorities, knowledge of existing health initiatives so as to prevent duplication of efforts, and familiarity with government spending on health
- expertise in child and maternal health
- suitable capacity to implement a project of similar size and scope
- a development methodology in line with BSC’s approach.

Path was the only organization that fully satisfied BSC’s due diligence criteria. It submitted three high-level concept papers to BSC that were reviewed by the site’s community and health teams and the BSC directors in order to determine manageability and suitability. Following the review, BSC asked Path to submit a detailed project proposal. Community-specific project designs were developed by Path in consultation with the specific communities.
Community health programming is not one of BHP Billiton’s core competencies. However, child and maternal health is a key focus area of its corporate charity, so this kind of partnership approach leverages Path’s expertise and BHP Billiton staff’s existing knowledge and relationships to help the charity to meet its community health objectives. Path also brings with it local knowledge and networks and co-ordinates with the site’s community and health teams to build on relationships already fostered. The close collaboration with the site’s community and health teams ensures that mission creep is avoided and that Path only implements activities that adhere to charity objectives and that are agreed to in the contract.

Integration and sustainability
The Window of Opportunity project works within existing policies, structures and programs in close collaboration with government at national, provincial and district level. It is focused on capacity building of government health personnel, thereby promoting ownership of the program, and ensures that health personnel are well equipped to sustain the key activities after the conclusion of the project. In addition, the project promotes behavioural change among health personnel and community members that will sustain the desired health outcomes of the project.

The project has communicated to the relevant authorities that BSC’s support will cease after five years and is working closely with them to plan their budgets and identify alternative funding flows in anticipation of this.

Outcomes and impact
As the project is only in its first year of implementation, impact is difficult to quantify at this stage. However, positive relationships have been built with government authorities at national, provincial and district level, as well as with local organizations, that will ensure smooth implementation of activities and sustainability after the project’s completion. The project has built a strong foundation to date and has delivered the following outputs:

• completion of rapid assessments of health and development needs and priorities at the national, provincial, and district levels in South Africa and Mozambique
• sharing research findings through community feedback sessions and by publishing a series of two-page profiles on each South African target district
• collaboration with stakeholders to develop targeted intervention packages and beginning to adapt these based on needs identified in each district
• progressing development of district-level plans in collaboration with national, provincial and district stakeholders
• development of an operational research agenda and preliminary timeline for year two, starting with an evaluation of the effect of peer support on exclusive breastfeeding practices and adherence to prevention of mother-to-child transmission of HIV recommendations in collaboration with the University of KwaZulu-Natal.

Lessons learned
• While Path is well known in South Africa, it was not registered as an independent non-governmental organization in Mozambique prior to the implementation of this project. Even with several years of experience in Mozambique, having not been formally registered in the country, bureaucracy surrounding registration and office start-up resulted in delays in the implementation of the project in Mozambique. This highlights the benefit of selecting partners with experience, expertise and capacity in the country of implementation.
• Initiating systematic communications with multiple levels of stakeholders early in the project has been critical to move plans forward and build support. Holding regular meetings and phone calls and sharing the project’s progress helps establish strong communications with all stakeholders.
• Identifying health and development interventions working well in each district has enabled the project to leverage and expand on successful programs.
• Community involvement is an essential component of project design and planning of activities. The community has been instrumental in identifying problems and developing solutions. This kind of involvement cultivates ownership of the projects among the community members and guarantees sustainability of activities.
• As the project team has engaged with the governments at multiple levels, it has become apparent that the project’s needs assessment and documentation activities are also facilitating the governments’ ability to map their own processes and future activities. This joint assessment of needs and technical support will contribute to promoting sustainability and facilitate mentoring of government officials. In addition, the project team’s engagement has reinforced the importance of treating the integration of different levels of government structures and services as an incremental process of change.
Highly focused communicable disease control programmes “inside” and “outside the fence”

Recognizing that communicable diseases are a major contributor to loss of workforce productivity and that transmission can take place both “inside” and “outside the fence”, these projects focus on communicable disease control among employees and mine-affected community populations. Communicable diseases that are typically targeted are malaria, HIV and tuberculosis, often through vertical programs. Implementation is often done by the company directly.

Workplace program for HIV/AIDS and malaria

**NEWMONT GHANA**

**Program rationale**
Following a Newmont-initiated health survey conducted in the area around the Ahafo mine concession in 2005, Newmont Ghana Gold studied the gaps in health care provision and the burden of disease in the area, choosing to focus on malaria and HIV/AIDS awareness, prevention and treatment, given that the prevalence rate of malaria among employees was 8 per cent in 2006, and the HIV prevalence in the Brong Ahafo Region, where the Ahafo mine is located, was 3.3 per cent. Recognizing that both of these communicable illnesses could have an unacceptable impact on the well-being and productivity of Newmont’s employees, the leadership of Newmont Ghana decided to begin with workplace vertical programs before expanding the tested model into the wider, project-affected communities.

**Design**
In consultation with the Ghana Health Service and district authorities, the HIV/AIDS workplace program began in 2005, and the malaria workplace program in 2007. The HIV/AIDS program is centred on Newmont’s corporate HIV/AIDS policy of prevention, non-discrimination and support. The program comprises a voluntary counselling and testing service and a peer education initiative. The latter has trained a selection of educators from among the Newmont employee population and its contractors, delivering awareness campaigns on HIV/AIDS and malaria to over 10,000 people each year. The voluntary counselling and testing service also includes blood sugar and blood pressure tests for non-communicable diseases such as diabetes and heart disease. Other major components of the HIV program include:

- prevention messages through routine workplace update meetings and peer education
- condom promotion and distribution
- sexually transmitted infection counseling and management
- treatment and support for workers with HIV
- counseling and testing.
Outcomes and impact
Malaria prevalence has dropped from 8 per cent for employees per year at the outset of the program, to 1.1 per cent in 2012, and voluntary counselling and testing for Newmont Ghana employees in Ahafo has risen from 172 employees getting testing to 1,011 employees in 2012.

In 2010, the Global Business Coalition on HIV/AIDS, Tuberculosis and Malaria voted Newmont Ghana as the leading HIV/AIDS and malaria workplace program.

These results are likely to be sustained as long as the program is actively implemented. Sustaining results, particularly once the mine exits and the NADF is overseeing the vast majority of the communities’ development projects, will be a challenge for district health directorates.

Lessons learned
• Working with a number of global standard organizations allows the program to benefit from and be recognized by global good practice in a programmatic area.
• While the malaria program has been successful for the communities associated with the Newmont Ghana workforce, the expansion into the general community in terms of design, implementation and partnerships is beyond the resources of the company and expansion options will require government and other partnership support.
• Though the district authorities were involved in the design of the malaria and HIV programs, they have not been active in the implementation or monitoring of the program and have cited a lack of financing as their main barrier to participation, characteristic of a dependency issue between Newmont and the government partner. Developing a more equal partnership with the local authorities in advance of handover remains a challenge for the Ahafo project.
• A multiplicity of partnerships has allowed the Ahafo program to benefit from the experience of other organizations. To maximize these partnership benefits, current lessons learned, from programming, financing, partnership and management perspectives, should be documented and shared actively.

Partnerships
Since the program’s inception, Newmont Ghana has partnered with a number of local NGOs, government bodies and international organizations to roll out these workplace programs. These partners have included:

• co-ordination with and support of government, particularly in the expansion of the workplace programs into communities “outside the fence”:
  – Ghana Health Service and district health directorates (Asutifi and Tano North Districts)
  – Ghana AIDS Commission

• memoranda of understanding with standard-setting international organizations to establish globally compliant HIV/AIDS workplace policies and expansion into project-affected communities:
  – the International Finance Corporation (community programming through IFC Against AIDS)
  – the International Labour Organization (standard setting)
  – GIZ Regional Coordination Unit for HIV and Tuberculosis (ReCHT – integrated workplace HIV prevention education and well-being programming, including personal financial management).

Integration and sustainability
Newmont Ghana has worked closely with local authorities to expand the program into several communities surrounding the mine. Sustainability of these interventions is assured financially by the Newmont Ahafo Development Foundation (NADF), established to finance community-led development projects in the 10 host communities surrounding the Ahafo mine. The NADF is governed by the Ahafo Social Responsibility Forum, composed of representatives from the host communities. Decisions on which community-initiated programs to fund are made by the Sustainable Development Committee, in co-ordination with the respective communities. Newmont Ghana funds the NADF with US$1 from every ounce of gold sold by the Ahafo mine, and with 1 per cent of annual net profits from Ahafo. Thus far, the NADF has over US$7.5 million in available financing.

While Newmont will not be able to dictate in the long term what the community chooses to finance in terms of development projects, the financing and decision-making structures will be in place to sustain HIV and malaria projects in the communities, building on the achievements of the international-standard workplace program. Handover to the district health directorates of community health programs will require an increase in the level of ownership by both parties, ie communities and district health directorate.
Primary health care programs implemented by third parties

These health projects are generally broad in scope and address access to primary health care, including communicable diseases, maternal and child health, sexual and reproductive health and adolescent health. Usually, such projects support the aims of the national health sector strategic plan and work closely with district, provincial and national health authorities. Implementation is normally done by a third party, typically a local or international NGO already operating in the area. In some cases, there may be multiple partners with different roles (eg an NGO responsible for implementation, a local research institution responsible for program monitoring, and local government for stewardship and policy guidance), as well as co-financing arrangements with bilateral donors.

Tenke Fungurume integrated health program

FREEPORT MCMORAN

Program rationale
Freeport-McMoRan Copper & Gold’s Tenke Fungurume Mining (TFM) project is located in Katanga Province in the Democratic Republic of Congo (DRC) and was a greenfield site that started commercial production in 2009. TFM recognized the importance of developing an integrated approach to health management, which covered the health of the workforce and extended to the local community, due to poor living standards and inadequate health services available in the area to meet the needs of the local community.

To further this agenda, TFM commissioned a baseline health survey of the communities in the vicinity of the TFM concession in 2008. The baseline showed high rates of malaria, anaemia, parasite infection and malnutrition among the population, as well as poor health-seeking behaviours and risky behavioural practices, coupled with low levels of access to clean water and sanitation – cholera is endemic in Katanga Province. The Fungurume Health zone, where the TFM concession is located, had only been created as a zone in 2003 and until that time had limited information related to health indicators, owing to low diagnostic capacities at the few existing health facilities in the health zone. The population of the health zone is estimated at over 205,000 people, with approximately 7,000 TFM employees and contractors living within the concession area. Based on the results of the baseline survey, TFM developed an integrated community health program that addressed clean water and sanitation, malaria, HIV/AIDS, tuberculosis and capacity building of local health facilities and services.

Design
The baseline survey in 2008 included a biological survey of key health indicators, complemented by key informant interviews and focus group discussions among communities to collect perceptions, views, beliefs, behaviours and concerns regarding different determinants of health and an assessment of health facilities in the health zone. The International SOS, a third party private medical services provider, led the survey, supported by the Schools of Public Health and Sociology from the University of Lubumbashi and the local health authorities.

After the baseline was completed, a design workshop was held for other health services stakeholders and community representatives to present and develop a prototype health program that ensured alignment with the general health system strengthening program in the province and at the health zone level, along with all vertical and infectious disease control programs being implemented in the area. This consultation fed into the TFM community health action plan, managed by the TFM Community Development Department. The goals and objectives of the plan are consistent with the DRC Ministry of Health strategy for the...
Partnerships

As part of the integrated nature of the TFM program in health zone, there are a number of partnerships involved in both the design and implementation of the many facets of the program. Community involvement in the implementation of projects varies according to the specific program – for instance, water and sanitation programming is community led, but medical training is, not surprisingly, in co-ordination with health facility staff and zonal health administration. Outside of the MOU with the provincial health authorities for the health zone, TFM has five main partnerships for the implementation of its integrated health initiative:

• The United States Agency for International Development (USAid)/Path: Covering the Fungurume Health Zone as well as the area bordering Zambia, this USAid project aims to reduce the incidence and prevalence of HIV/Aids and mitigate its impact on communities by establishing community prevention and mitigation programs in the areas surrounding the mine. The arrangement is part of USAid’s Global Development Alliance program, whereby USAid and TFM each contributes 50 per cent of the initiative’s total US$ 2.5 million budget. The project, scheduled to run until June 2014, specifically finances health infrastructure, equipment, medicines and other medical consumables.

• USAid/Project Cure: Following a site needs assessment by Project Cure, who provides surplus medical supplies from US health facilities, TFM signed a three-year agreement with USAid to match containers of medical equipment and supplies to new and renovated facilities in the health zone. A total of eight containers are included in the agreement.

• FHI 360 C-Change: Through an MOU between TFM and C-Change, the program provides open-source social and behavioural change communication materials related to family planning, reproductive health, malaria prevention and gender-based violence in schools in the health zone.

• University of Lubumbashi (UNILU): The university provides support for baseline and regular surveys on health indicators, including supervisors for epidemiological studies from the School of Public Health, allowing TFM to capitalize on local expertise and the university to expand the capacity and experience of the School of Public Health. A formal agreement between TFM and the university is in process for this support.

• International SOS: The company is currently the medical provider for TFM. The International SOS team provided the technical inputs for both the 2008 baseline and the program design. They are currently overseeing the technical and medical aspects of the program, complementing the skill set of the community development department with technical skills and knowledge in medicine and public health.
Sustainability

The health program as a whole is still in the early stages of implementation, and sustainability of achievements will depend on the capacity of the health system to take over the work of TFM and its partners. The TFM program supports a relatively new health zone, and also one in an area where the mines have traditionally covered most costs and inputs required for public services – making sustainable ownership of the provision of quality health services all the more challenging. At the same time, the expected lifespan of the TFM operations exceeds 40 years, allowing the implementation of a long-term plan, which envisages creating local capacity and expertise as a starting point for establishing effective implementation and sustainability.

In the short to medium term, TFM is supporting the health management information system (HMIS) of the health zone as well as its planning capacity. The initial baseline carried out in 2008 was used by the health zone for their annual planning and they are currently following the DRC norms for the HMIS. TFM has also provided office equipment and training to the health zone to improve its HMIS capacity, and the results of the program are shared regularly with the health zone authorities through (co-ordination) meetings convened with other health services actors in the health zone.

Outcomes and impact

Implementation of the community health action plan began in 2009, but regular surveys are planned for all aspects of the program to measure achievements against planned results. For instance, the malaria program plans comprehensive surveys, in co-ordination with the School of Public Health at the University of Lubumbashi, to measure impact. A malaria prevalence survey, among local schoolchildren, is conducted twice a year to establish the impact of the implementation of the community malaria program. The average community malaria prevalence rate of 38 per cent from the May 2012 school survey after the rainy season indicated a decrease of 51 per cent, compared with the baseline (pre-control) survey conducted in 2007 of 77 per cent. The October 2012 school survey results at the end of the dry season indicated an average malaria prevalence rate of 22 per cent and a decrease of 71 per cent compared to the 2007 baseline survey (note that seasonal differences may account for some variance).

As mentioned above, cholera is endemic in Katanga Province, and the 2008/9 rainy season ended with 17 deaths due to a major cholera outbreak in the TFM concession. Since then, potentially attributable to the water and sanitation programs rolled out in the area including construction of 94 rural wells located in 64 out of 111 rural villages and hamlets, cholera has not been present in the TFM concession.

General support to the health zone also covers the capacity of the health zone team to collect reliable indicator data as per the HMIS, and all data from the TFM-supported programs will be integrated into this system, as part of support for the strengthening of the DRC health system.

Lessons learned

Managing expectations

- Due to the legacy of parastatal mining companies in DRC providing free access to public services in general, TFM engaged in extensive consultation with stakeholders before implementing the current program. A clear MOU with the provincial health authority in Katanga for the health zone establishes where the obligations of TFM will be, and where those of the government health services should be. It is likely that expectation management will be an ongoing issue for TFM as long as there are capacity gaps in the administration of government health services and public financial flows to the health zone are intermittent and/or insufficient.

- Expectation management also provides an opportunity for TFM in the long run to allow the partnerships to develop a self-sustaining and skilled workforce in the local health system. Appropriate human resources and managerial capacities could oversee a cost-recovery system within the health zone once operations at the mine ceases. As such, managing expectations and sustainability of the interventions are closely linked.

Building managerial capacity in health facilities

- Health facilities often struggle with internal management and administration. These tasks are delegated to clinical staff who have skill sets better used for attending to patients. However, by necessity, due to lack of human resources, clinical staff are drawn into administrative and managerial duties. This can pose a real challenge for the long-term viability of a health facility, and the overall coherence of the health system. It is a challenge faced in the health zone and posed to TFM in program design and implementation.

- Through the MOU with the provincial health authorities, TFM is taking a systemic approach to working with higher-level government actors in the health system, as well as on the ground in the health facilities directly impacted by its programming. Already, TFM has organized knowledge-sharing sessions between government health facility staff and TFM on-site facilities, to facilitate behaviour change among health care providers. Extending this approach to the administration and oversight of health facilities could, over time, produce good results for managerial capacities of lower-level facilities in a health system that requires these facilities to fundamentally rely on their own devices to sustain operations.

Community health programs in the mining and metals industry
Health services and health services stakeholder co-ordination

- Due to its relatively recent formation in 2003, formalized co-ordination mechanisms institutionalized in older health zones have not yet reached maturity in the Fungurume Health Zone.

- When TFM began its baseline assessment in 2008, it became imperative for efficient program design to know who was doing what, and where, with regard to health-related programming in the health zone, so as to maximize on potential partnerships and avoid duplication of efforts. Out of this necessity was born the de facto co-ordination forum for the health zone. Such a forum not only assists with planning and program co-ordination, but also enables actors to respond to health issues arising in the health zone in a collaborative manner. The involvement of TFM as a stakeholder in this forum is notable; as the private sector is not traditionally included in such fora dealing with public sector provision such as health.

Importance of foundational evidence base and documentation

- TFM conducted an extensive qualitative and quantitative baseline study, which preceded the detailed MOU signed with the Katanga provincial health authorities. These two key documents provide a simple framework on which to objectively base interventions that are responsive to the needs of the population and the health system, and also to detail the roles and responsibilities of each partner to this arrangement over the subsequent years of the agreement. Although the program is still in the early stages of implementation, this evidence base, along with a single partnership agreement with the government, sets the stage for a high level of transparency and co-operation on delivering improved health results for the target population. Elaborate and multi-tiered partnership agreements with multiple actors can confuse and conflate the responsibilities of those involved in the partnership, potentially leading to tensions within the partnership, beneficiaries and other stakeholders.

- By having a simple framework MOU, complemented by vertical programs and horizontal system support, alongside a baseline aligned with the HMIS, TFM has based its partnership on a straightforward design, which has the potential to mitigate the inevitable complications that arise in the implementation phase.

Lake Zone Health and Economic Development Initiative

AFRICAN BARRICK GOLD

Program rationale

A 2006 study conducted by the African Medical and Research Foundation Relief (Amref) at African Barrick Gold’s (ABG’s) operations at its North Mara gold mine in Tarime District in Tanzania revealed that the prevalence of HIV among the artisanal and small-scale mining communities surrounding the mine was 10 per cent compared to the district’s rate of 3 per cent. Amref implemented a health program from 2006 to 2009 mainly focusing on HIV/AIDS testing and treatment. However, ABG wanted to further explore an innovative and comprehensive approach to provision of HIV/AIDS services including livelihoods support to the communities in its concession area. ABG, in partnership with USAid, Africare and the Tanzania Chamber of Minerals and Energy, began implementation of the Lake Zone Health and Economic Development Initiative (Lazhedi) in order to improve the health and economic outcomes of these communities. The three-year project, which began in October 2011, is being implemented in five wards and seven villages around the mine, targeting about 75,000 people.

Design

The Lazhedi project was designed to build on the strengths and fill the gaps of a previously implemented project that mainly focused on HIV/AIDS testing and treatment. The Lazhedi project goes beyond this to include capacity building of health workers, refurbishment of health centres and enterprise development for artisanal mining communities. Project design was informed by health risk and impact assessments and anecdotal data collected from the previous project. It works to strengthen the linkage between HIV community-based care services and clinical services provided at six government health facilities in Tarime by building the capacity of the district health system to deliver HIV/AIDS, tuberculosis sexual and reproductive health, and malaria services to the community. The project also aims to develop alternative economic activities for the artisanal and small-scale miners in order to better integrate them into the formal district economy.

A steering committee consisting of representatives from ABG, USAid, Africare and the Tanzania Chamber of Minerals and Energy is in place to oversee and monitor the project. A consultative committee that further includes district authorities and representatives from the beneficiary communities is also in place to ensure that the project continues to address community needs.
Partnerships
The project follows a multi-partite partnership approach. Africare is the primary implementing partner with ABG and USAid co-financing the project. ABG provides US$300,000 while USAid provides US$333,000 in funding to the project; the Tanzania Chamber of Minerals and Energy is the principal recipient of the funds and makes disbursements to Africare. In addition, ABG provides oversight and strategic support to the project.

Africare was selected as the primary implementing partner given its role as the primary co-ordinator of HIV/AIDS programs in the Mara Region where the project is being implemented. This meant that it already had a presence in the area and was well accepted; it had built and developed networks and relationships with the district health teams and community members; and it had the relevant expertise and capacity to implement the project, making it a suitable choice for partner. ABG through its community relations team and representation on the steering committee is able to closely monitor the project and ensure that implementation adheres to the company’s values and the project objectives.

Sustainability
To support sustainability, the project co-ordinates regularly with the National AIDS Control Programme ensuring that objectives and activities are in alignment with guidelines set by the Ministry of Health and Social Welfare. In addition, the district health team is involved in all activities – the project is implemented at government health facilities and capacity building is targeted at government health workers. This increases ownership and willingness to take over the project once ABG and its partners’ support ends.

Outcomes and impact
The first year of implementation has been focused on on-the-ground mobilization. Key outputs from the year include:

• initiation of a peer education program for artisanal miners with particular focus on training, materials development and capacity building for outreach activities
• HIV/AIDS awareness campaign for artisanal miners to ensure that they have access to the right information on HIV/AIDS care, treatment and prevention
• strengthening of local health facilities to provide anti-retroviral therapy, primary health care and sexually transmitted infection management
• strengthening of the voluntary counselling and testing service and provision of mobile services
• creation of a referral system for initiation of HIV-positive miners to commence anti-retroviral therapy
• home-based care support for HIV-positive artisanal miners.

The first year has also focused on relationship building with the district health teams and increasing willingness and ownership of the project.

Lessons learned
• Selecting implementing partners with experience on the ground enables the project to gain from respective networks and relationships already built. As community health is not one of ABG’s core competencies, it has benefited from Africare’s technical expertise, knowledge, capacities and networks, which underlines the importance of careful partner selection.

• The multi-partite partnership approach enables cost sharing; leverages outside skills, knowledge, resources and networks; and enhances ownership and sustainability. However, as all parties have their own interests and modalities, it sometimes results in delays in decision making and implementation. For instance, varied fiscal years could result in delays in disbursement of funds from the different funding partners, which would necessarily delay implementation of activities.

• In order to avoid creating dependencies, it is important to build sustainability into project design. The project is inherently sustainable as one of its key components is the development of the capacity of the district health teams. This ensures that the health workers will be able to continue to deliver health services even after ABG ceases to be involved. This is further achieved by aligning activities with the National AIDS Control Programme as activities are implemented in line with the government’s plans and priorities, thereby facilitating the transfer of ownership of the project from ABG to the government.

• Community involvement generates buy-in for the project, enhances ownership and subsequently sustainability and ensures that all activities implemented are in line with their needs. This is ensured through community representation on the consultative committee, which also includes district authorities and representatives from the various partners.

• Combining both health and economic aspects into one project prevents duplication of efforts, for instance in terms of community engagement as well as wastage of funds in trying to reach the same audience albeit with varied messages. As the audience for both aspects of the project is one and the same, it can be introduced to the different components simultaneously. Having two different projects does not facilitate this as easily.
Health programs implemented by local government

A diverse range of health interventions addresses locally identified community health issues. These are developed and implemented in partnership principally with local government and sometimes supported by community-based organizations. Such community health programs rely on well-functioning government health systems that are appropriately resourced at district level. The partnership arrangement may be defined formally in a memorandum of understanding or take place on an ad hoc, informal basis, and is characterized by flexibility. There is a focus on building partnerships through regularized interaction and managing the roles and responsibilities as they evolve over time.

Mother and child health program

**MMG LXML**

**Program rationale**
In 2008, Lane Xang Minerals (LXML), operating in the remote Vilabouly District of the Lao People’s Democratic Republic, commissioned the Burnet Institute to conduct a community health survey in the area. Vilabouly is one of the poorest districts in the country, lacking essential infrastructure and services. The health study found high levels of malnutrition and food insecurity; significant levels of preventable diseases such as malaria, diarrhoea and respiratory infections; lack of parental knowledge and skills to prevent illness and identify sick children; poor immunization coverage; and reluctance among women to use antenatal, natal and post-natal services.

LXML contracted Burnet to design a three-year mother and child health program (MCH) with three objectives:

- to improve the health status of mothers and children
- to extend the capacity of District health care personnel, especially in planning and management of primary health care
- to improve the nutritional status of infants and children.

It was conceived as a three-year program but funding was initially approved for one year. The program was successfully drawn to a close in December 2011. The project was implemented in initially 14, and later 16, host community villages in the immediate mine vicinity.

**Design**
At the project’s commencement, a series of consultation meetings were held, bringing together representatives of Burnet, LXML and the district authorities. In addition to ensuring the involvement of the local authorities, all of whom expressed their support for the project, these initiatives resulted in the formation and approval of a multi-sectoral project working team. The team consisted of nine people. It was led by the representative of the Mother and Child Health Department, and included representatives of the district hospital, Health Department, Education Department, Lao Youth Union and Lao Women’s Union, and was formally approved by the Vilabouly District governor.

This team met on average once every two months, and was tasked with planning, implementing and monitoring project activities in collaboration with the Burnet Institute, as well as supporting the local community nutrition teams and reporting to the provincial Mother and Child Health Services.
Partnerships
The project was built on a solid foundation of partnership with both an NGO and the district. LXML contracted Burnet to conduct the assessment. The findings were used to develop a two-pronged intervention focused on capacity building of local health staff and community health/nutrition education, which commenced in 2009. District staff participation was intrinsic to successfully achieving each stage of the project. The MCH outreach activities were conducted by district health staff and facilitated by the Burnet team.

LXML funded the full costs of the project and selected Burnet as a partner based on its reputation for combining research and practice coupled with its experience in Laos. LXML retained oversight control of the project and required annual work plans and budgets before approving the following year’s funding.

Sustainability
To support sustainability, the project was designed in line with the Lao Ministry of Health guidelines and continually referred back to Lao’s Millennium Development Goals and MCH priorities. Specifying building the capacity of district health personnel as the second objective ensured that focus was equally shared between health outcomes and the long-term capability of the Health Department to implement the project themselves. This was reinforced by resisting the urge to directly implement the health outreach and instead ensure that the outreach was conducted by the district.

The project working team consisted of Burnet and key district departments ensuring that the Lao authorities were continually aware of progress and retained ownership of the activities.

Outcomes and impact
In only three and a half years of implementation the project saw remarkable successes with the following indicators:

Antenatal care
- more pregnant women could access antenatal care: 88% had at least one visit by a skilled health professional (up from 69%), while 53% had 4 or more visits (up from 32%)
- more pregnant women received supplements: 86% received iron tablets compared with 55% in 2008, and 79% received Vitamin B1 compared with 0%
- more newborns are protected from tetanus: 79% of women were immune to tetanus compared with just 38% in 2008

Care during childbirth
- more women delivered at the district hospital: 52% had a baby at the hospital, increased from 38%
- fewer women gave birth at home: 39% compared with 53%
- more deliveries were attended by a trained health professional: 62% compared with 52% in 2008

Feeding behaviours and child nutrition
- more new mothers feed their child soon after birth: 72% breastfed within two hours of delivery compared with 40% in 2008
- fewer women throw the colostrum away: 92% fed their baby colostrum, up from 69%
- fewer women feed their baby solids before six months: 41% down from 87% in 2008
- far fewer children suffer from acute malnutrition: 12.4% of children were malnourished in 2008 compared with 5.3% in 2011

Child immunizations
- more children have immunization cards, improving from 30% to 51%.
- more children received birth doses of BCG and hepatitis B: coverage of BCG vaccine went from 62% to 83%, and hepatitis B from 24% to 64%
- more children are protected against measles: from 31% in 2008 to 87% in 2011.

However, there was mixed success with sustainability. When the funding ceased for the project, the district did not have the funds to fully maintain the outreach activities and the project slowed significantly. LXML is restarting funding in 2013 and has begun the process with Burnet to design a follow-on multi-annual program based on the effectiveness and learning of the MCH partnership.
Lessons learned

- Monthly MCH outreach activities that are well designed and implemented together with the district staff are able to have a significant positive impact on nutrition, breastfeeding, antenatal care and child health in only three years.

- Sustainable MCH provision is a long process that requires more than three years of funding. The district retained the capability of implementing the project after it closed but either did not have the funds, or chose not to use their limited resources, to continue the project at the same level. Monthly outreach activities became smaller visits once a quarter. Ensuring sustainability requires ensuring access to funding beyond the immediate project. LXML will restart funding for the project in 2013.

- Agreeing to a three-year project but only releasing funding based on annual work plans and budgets occasionally undermined the stability of the program. Changing management at LXML resulted in changes to project priorities with each annual plan submission. A full three-year contract including plan and budget – with pre-agreed payment triggers – at the beginning of the project would have resulted in a more stable project environment.

- Involving the district in the assessment and project design from the outset results in improved local ownership for the activities and outcomes.

Alto Chicama Saludable Project

BARRICK

Program rationale

Since 2008, Barrick has been implementing the Alto Chicama Saludable project at its operations in La Libertad, Peru. The project aims to address the issue of chronic infantile malnutrition, a national problem, brought on by a variety of factors and determinants such as poverty, nutritional deficiencies, illiteracy (principally of the mothers), poor quality of education, poor housing standards and poor lifestyle habits.

The main objective of the project is to eliminate chronic malnutrition in children under three years of age and to improve health and nutrition practices in the community with the participation of the community members and local governments of 59 communities surrounding Barrick’s operations.

The project has worked with 2,985 families over a period of 33 months.

Design

The project began as an outcome of the first technical regional multi-sectors’ meeting: “Successful experiences against chronic infantile malnutrition” held in Trujillo in September 2007. The project was designed as part of a collaborative effort by La Libertad Regional Government, national Department of Health (DoH), local governments, communal authorities and community members. In July 2008, Barrick Misquichilca mining company signed an agreement with La Libertad Regional Government to execute the program.

This project is aligned with national, sub-national and local government efforts to reduce poverty, hunger, child malnutrition and mother–child mortality, and is linked to national health policies and programs, including:

- Millennium Development Goals 1, 4, 5 and 6 that address extreme poverty and hunger, child mortality rates, maternal health, and combating HIV/Aids, malaria and other diseases
- state, regional and national policies promoting food security and nutrition, strategies for overcoming poverty and economic opportunities for the poor.

Barrick and La Libertad Regional Government are jointly implementing the project with active participation from the national DoH and the Asociación Civil Neoandina. Barrick has contracted ASDE, a local organization, to oversee implementation. A management committee comprising representatives from Barrick and La Libertad Regional Government is also in place to monitor the project.
The project was fully financed by Barrick until 2011 when the Regional Government took over financing. In addition, the regional health department provides the health facilities in which the activities take place, as well as the medical personnel, and the national DoH through the National Centre of Nutrition trains health brigades and technical personnel.

**Partnerships**
The partners selected were national, regional or local organizations directly involved in or responsible for health and food security programs, with the aim of strengthening their capabilities in order to sustain activities even after project closure.

The main partners are:

- La Libertad Regional Government’s DoH, which has been involved from project design and throughout implementation – activities are implemented by regional government-employed health personnel in regional government-owned health facilities
- The national DoH through the National Centre of Nutrition, which trains health and technical personnel to implement activities
- ASDE, the local organization overseeing the implementation of activities.

**Integration and sustainability**
To ensure that the project remains sustainable beyond Barrick’s engagement, the project works closely with local government and organizations and health facilities to ensure that they can continue to implement activities and through training of medical and technical personnel. Local and regional organizations working in health and food security programs have also adopted the main project activities as part of their regular practices.

Barrick has successfully transitioned the funding of the program to the Regional Government as of 2011, which indicates that the project is financially sustainable.

The implementation of culturally appropriate behaviour change activities among community members also ensures that individuals can continue to sustain the positive health outcomes of the project.

**Outcomes and impact**
A baseline survey conducted in 2008 by La Libertad College of Nutritionists identified 46.8 per cent of children under the age of five years in La Libertad as suffering from infantile malnutrition. By 2011, this figure had dropped to 37.6 per cent. In addition, acute respiratory infection incidence in children three years old and younger has reduced from 45.7 per cent to 39.7 per cent and Acute Diarrhoeal Disease incidence has reduced from 30.3 per cent to 18.6 per cent.

**Lessons learned**
- Ensuring sustainability of health interventions requires strengthening local capacity to continue implementation of activities. This includes regional and local governments as well as all local organizations involved in community health
- It is important to implement strategies that are culturally appropriate and accepted by the community. This will increase the willingness of the communities to participate in project activities
- Behaviour change activities are crucial to ensure that the community members continue to sustain positive health practices even after direct interventions cease.
Community health infrastructure partnership with provincial Department of Health

LONMIN

Program rationale
Lonmin has embarked on several community health infrastructure projects at its operations in Marikana, South Africa as part of its larger community health program aiming to provide access to comprehensive quality primary health care for the residents of the communities surrounding its operations. This area, more commonly known as the Greater Lonmin Community (GLC), covers a total population of approximately 150,000 people. Prior to Lonmin’s interventions, the GLC was characterized by lack of or inadequate health infrastructure with community members having to travel long distances for health services, often on foot. To address this, Lonmin’s health infrastructure projects are situated within five kilometres of all the community members’ homes with any individual facility covering a catchment population of between 10,000 and 20,000 people. The health infrastructure projects integrate other Lonmin community health projects, particularly its HIV/AIDS and tuberculosis awareness and treatment programs – for instance, peer educators build awareness among community members and encourage them to seek testing and treatment at the Lonmin-constructed clinics.

The GLC area and the Marikana mining operation are within North West Province, where life expectancy at birth is 58.1 years, infant mortality rate is 29.6 deaths per 1,000 live births and the HIV prevalence rate is 12.5 per cent.

Design
Community health infrastructure needs were identified by Lonmin beginning in 2005, in consultation with community representatives and the DoH. Together with these stakeholders, Lonmin prioritized areas where the infrastructure was inadequate and the need greatest within the GLC in 2009.

Lonmin follows a process of community engagement and input in the implementation of all infrastructure projects. For instance, each clinic in the GLC has a steering committee that includes community representatives – Lonmin engages the community through these representatives regarding community health infrastructure.

Needs are discussed and vetted with communities and the DoH, and ultimately all infrastructure projects are developed in line with the DoH’s district health plan. The plan includes the revitalization of health infrastructure as one of 10 major target priorities for 2009–14, and identifies public–private partnerships as a vehicle for achieving infrastructure development goals.

In addition to complying with the district health plan, Lonmin’s health infrastructure projects are integrated into the company’s other health programming with the DoH – for instance, the Modderspruit Clinic extension was part of a collective effort to address high rates of HIV in the immediate catchment area, and the possibility of ensuring that the clinic was open and accessible for five days per week, versus 2 days per week prior to the renovations and upgrade.

The implementation of health infrastructure projects capitalize on Lonmin’s other non-health community investments in the GLC. The designs for projects are developed and agreed upon with the DoH according to mandated standards, and the designs tendered according to standard Lonmin practices for local contractors – many of whom may have benefited from Lonmin-financed training and business development programs in the past. While Lonmin appoints a technical oversight team composed of engineers to ensure quality control, local contractors responsible for actual construction work are contractually obliged to hire unskilled labour for the construction projects from the local community.

Lonmin provides the financing for the capital investments in the health facilities – the structure itself as well as required equipment. As per the MOU with the DoH, Lonmin’s financial or operational obligations are largely handed over once the construction and equipping of the facility is complete, although Lonmin has intervened when the DoH requests ad hoc support with maintenance.
Partnerships
From the outset of its work in community health in the GLC, Lonmin has worked directly with the DoH through an MOU. Beyond using local contractors through a tendering process, Lonmin has not worked with any other organizations to implement its community health infrastructure projects, though Lonmin’s community health investments have been discussed through community consultations and engagement.

Integration and sustainability
Once construction is complete and the facility or upgrade is handed over to the DoH, the operation of the facility is under the jurisdiction of the DoH and Department of Public Works. The MOU between Lonmin and the DoH is explicit about roles and responsibilities of each signatory, and while Lonmin will monitor the performance of the facility as part of an ongoing relationship with the DoH, the DoH is responsible for the facility as a whole.

Lonmin will continue to invest in health facilities that reinforce the health system in the GLC, according to the district health plans relevant to the respective mine sites. The sustainability of infrastructure investments is not an immediate concern, but will hinge on the longer-term capacity of the DoH to operate and maintain these new or expanded facilities.

Outcomes and impact
A total of 12 health infrastructure projects at the GLC have been undertaken by Lonmin since 2007:

- construction of two health clinics of which one is in Lebowakgomo at the Limpopo operations
- extension of two existing health clinics
- provision of two mobile clinics for school health services
- upgrading of five GLC clinics, including the installation of a mobile building at a clinic
- provision of one obstetric ambulance.

Lonmin-financed infrastructure projects are well received by the GLC and are a highly visible social investment. They have had an indirect impact on employee wellness, since it is the families of local employees who have greater access to health care and the health status of the entire community is likely to improve with this increased health services capacity – although specific data is not available.

Lessons learned
- The value of stakeholders and project implementer involvement throughout a health infrastructure project life cycle is a lesson learned from the implementation of infrastructure projects in the GLC. Ensuring both the technical oversight staff and end-users alike are engaged, informed and their input sought and integrated can contribute greatly to the quality, relevance and ownership of a project. This extends to the engineering aspects of the project, DoH buy-in and support, the community input and needs assessments, as well as the budgeting and project management required to ensure that an infrastructure project is on time and on budget.

- Active community participation is crucial to enhancing ownership and sustainability of the projects. Lonmin has involved the community by engaging them in identification of health needs and project locations, providing them with membership in the community health program steering committee, and providing employment opportunities in terms of unskilled labour for the construction of the health facilities and as health workers once the facilities are complete and operational.

- The element of sustainability in partnering exclusively with the DoH on community health infrastructure projects is a strong argument in favour of the DoH as a primary partner, as is a focus on using local contractors to do the construction of these facilities – by creating and supporting local skilled-trade expertise and developing the supply chain. This approach allows Lonmin to invest in a handover strategy to the government for health investments from the outset, working hand in hand with the DoH to address common issues.
Community health infrastructure partnership with provincial Department of Health

**INMET**

**Program rationale**

Drawing on epidemiological profile of the population in the area around the Cobre Panama concession from the 2010 Environmental and Social Impact Assessment (ESIA), Minera Panamá, S.A. (MPSA) found persistent public health and social problems arising from drug dependence, malnutrition, smoking and alcoholism in the population. In addition, MPSA had received anecdotal evidence of increased co-habitation between adolescents and adults in the project development area, as reported by local authorities and MPSA’s community relations team, which had been active in the project development area for several years prior to construction phase on the Cobre Panama concession. Consequently, MPSA undertook to develop an adolescent high-risk behaviour prevention program, as part of their social development action plan, to address and mitigate increases in these behaviours in the local population, particularly those arising from project-induced in-migration.

The target populations for the program are adolescents aged between 12 and 19 years who attend Instituto Profesional y Técnico (Professional and Technical Institute or IPT) of Coclesito, the only secondary school in the area. Coclesito has approximately 900 inhabitants and is the hub of community life for other villages in MPSA’s project development area. Located 12 kilometres from the mine site, most students from the 106 elementary schools and 16 middle-grade schools in the area travel to and live in Coclesito to finish high school.

**Design**

MPSA’s social development action plan is jointly determined and agreed upon by MPSA, government authorities and community representatives, and promotes and supports community development and outlines immediate and future commitments to protect and potentially improve the social well-being of stakeholders within its area of influence.

After receiving information about social behaviour changes due to in-migration, MPSA worked closely with a Panamanian NGO, Eureka, and several line ministries to develop and initiate a pilot program designed to engage youth on social issues and risky behaviours. Eureka, a local NGO specialized in promoting positive social behaviour among children and youth through art and culture, was invited to develop a pilot study to assess youth attitudes and behaviours towards a number of social issues, including safe sex, teenage pregnancy, domestic violence, sexually transmitted infections and, more generally, healthy life choices. An arts-based approach to addressing these issues was viewed as the most effective by MPSA’s community development team, who were overseeing the development and implementation of the pilot.

The methodology developed by Eureka for the pilot was rolled out after consultation with a number of partners and stakeholders in the community, including local authorities, parents’ associations, the Ministries of Education, Health and Social Development as well as the students at IPT. The pilot program involved 120 students, aged 12–18 years, divided by gender, for an arts-based workshop conducted by teachers at the IPT, who had been briefed and trained by Eureka during the preparation phase. In this initial workshop, art and culture were used as means of expression by the students, providing a platform for expressing social concerns and needs through theatre, dance, painting and music, and allowing MPSA’s community development team and other local stakeholders to understand youth needs in their own environment and through their own culture.

A subsequent workshop included the entire student body of 480 students, and involved a performance by students from the initial workshop about the potential consequences of adolescent couples engaging in high-risk social behaviour. This participatory methodology concluded with a Q&A session where students expressed their points of view regarding the behaviour portrayed in the play. Through public meetings and participatory workshops, MPSA also consulted adolescents, parents, the school community, local authorities such as the corregidor, the National Police, director of the college, the manager of the school’s boarding program, and local authorities including Coclesito Maternal and Child Centre and the Parent Club. Results of the pilot study are currently being evaluated for potential scale-up, in collaboration and co-ordination with existing government-led initiatives on adolescent health and well-being.

The pilot was carried out with funding from MPSA’s community development department, with technical expertise and oversight provided by the appropriate government agencies. Eventually, as the Cobre Panama project begins operation, all of MPSA’s community development department will transition into an independent foundation, directed by the community, with multiple sources of funding including a set percentage from MPSA’s profits.

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2. Until March 2013, MPSA was 80 per cent owned by Inmet, a member of ICMC from 2012 to 2013, before being bought by First Quantum Minerals.
Partnerships
As part of MPSA’s standard operating procedure, the pilot and any subsequent programming will be implemented through a public–private partnership with MPSA’s two government partners, the Ministries of Health and Social Development, civil society partners (Eureka), local community stakeholders including teachers and parents, and international organizations such as the United Nations Populations Fund (Unfpa). The public–private partnership approach is adopted for community development programs because MPSA recognizes that sustainable development will not be achieved without the participation of the private sector, local governments and the communities that will benefit from the implemented programs. As such, MPSA sought out government institutions and NGO partners with the most competence in program goals and experience in the area of rural community health and education in high-risk adolescent behaviour. In several cases, the NGOs involved in MPSA’s programs, including Eureka, did not have a presence in the area prior to their involvement with MPSA’s initiatives.

During the public consultation processes for the adolescent high-risk behaviour prevention program, MPSA worked with:

- the Ministry of Health, Directorate of Coclé, which provided background information to ensure the program targeted common problems among youth in the region; the Ministry also provided technical guidance to ensure the design and intent of the pilot program aligned with its own adolescent youth programs and complied with national standards
- the Ministry of Education, which provided support for teacher participation in the pilot and the use of its facilities and infrastructure
- the Ministry of Social Development, Directorate of Coclé, which is directly responsible for the implementation of social development programs in the Cobre Panama project area of influence and which provided strategic technical and human resources for the design of the pilot
- Unfpa and Eureka, were approached by MPSA to help with the public consultation workshop at IPT, including preparation of the methodology for the pilot, and provide technical advice
- local authorities and community leaders, who acted as facilitators of the processes within the community.

While MPSA has worked closely with the Ministry of Health on issues such as access to health services and access to water, the partnership with the ministry through the adolescent high-risk behaviour prevention programme pilot has resulted in a closer alliance between the ministry and the IPT of Coclesito. The ministry currently imparts high-risk behaviour prevention programs to students at the IPT of Coclesito without MPSA involvement. In addition, the ministry has spread its programs to educational facilities in the district of La Pintada, a district adjacent to the mine site and impacted by linear infrastructure. Similarly, the Ministry of Social Development has begun providing high-risk behaviour prevention programs to students of the IPT of Coclesito, as well as to adults in the local community. As a result, MPSA will have to carefully evaluate the most efficient design of future programming on reducing adolescent risk behaviours to be in line with, and not duplicate, the efforts of both ministries in addressing adolescent behavioural issues, to be agreed upon explicitly in a formal agreement to be finalized in early 2013.

Integration and sustainability
When the mine comes online and operations begin, MPSA will have a community development foundation whose main objective will be to invest in sustainable development programs in the local communities. MPSA’s vision is that the long life of the mining project, coupled with the sustainable income stream generated from the mine to the foundation, will result in the development of sustainable communities over the estimated 30 to 40 years of mine life. With responsible investment practices, the foundation should continue to have significant income that can be used to further economic and community development for many years after the mine is closed.

In the short to medium term, an integral part of MPSA’s approach to sustainability is to align the company’s programs with national and local government development plans. In the case of the adolescent high-risk behaviour prevention program, MPSA took into consideration the technical and administrative standards of Panama’s national comprehensive health programme for adolescents initiated in 2006 and Panama’s national Health Plan 2010–15, which is aligned with the Millennium Development Goals. Indeed, a consequence of the adolescent high-risk behaviour prevention programme is the creation of multiple alliances between local government and community stakeholders resulting in greater government involvement in adolescent health-related issues. Sustainability will be measured by the ongoing strength of the partnerships developed through the project.
Outcomes and impact
Through this program MPSA has strengthened its partnership with the Ministries of Health, Education and Social Development and is currently engaging with them in the development of future joint projects.

The program has also resulted in positive outcomes for government and community stakeholders. Thus far, MPSA’s adolescent high-risk prevention programme has met with positive community feedback, as reported by Eureka, following the pilot program and the community relations team, who have regular interaction with the communities in the project development area. Moreover, through MPSA’s engagement with government institutions, the ministries have greater access to communities and are better able to provide government services. Engagement of parents and parental organizations in the development of adolescent-related programming may have a longer-term impact of changing attitudes and behaviours towards parental involvement in decision making and empowerment of young people in the project development area communities.

Lessons learned
• By piloting the program rather than rolling out a program and adjusting it, based on information from the ESIA, MPSA has built in the possibility of revising the structure and design of the program entirely, based on the data and feedback generated by the pilot. This specific feedback complements the more general anecdotal and epidemiological information already available, and allows MPSA to tailor a larger and more comprehensive program according to highly contextual feedback from the future beneficiaries.

• Multi-stakeholder partnerships are also the key to identifying and meeting the needs of specific stakeholder groups. In the case of the adolescent high-risk behaviour prevention programme pilot, the company, local community groups, NGOs and government institutions identified the need of local teenagers for self-expression and sharing, as well as having access to health services and information that meets their needs and customs and respects their unique identity. As a result of this partnership, multiple alliances were created that allow community needs to be met through the community’s own initiatives and without requiring future company involvement, assisting in the sustainability of the initiative.

Through MPSA’s partnership with the Ministry of Social Development, awareness has been brought to local population needs and the government has begun imparting workshops to MPSA construction workers on prevention of high-risk social behaviour. The rationale behind working closely with government institutions is to give sustainability to the program over time, ensure alignment with the national policy framework on adolescent health, bring attention to population needs that might otherwise be ignored or unrecognized, and contribute to the achievement of the Millennium Development Goals.
Policy to prevent STDs and unwanted pregnancy

ANGLO AMERICAN

Program rationale
Anglo American’s approach to socio-economic investments centres around an explicit acknowledgement that the company and the mine constitute one party among groups of stakeholders with an interest in promoting and growing a community which is healthy and robust for all concerned. Nearby to Anglo American’s nickel mine in the rural state of Goias in central Brazil, the city of Barro Alto had a population of 8,700 people in 2010, of which an estimated 18.5 per cent were adolescents. High levels of pregnancy among these adolescents had raised a flag for Anglo American, who anticipated an influx of approximately 6,000 additional workers during the construction phase in Barro Alto. Accordingly, Anglo American developed an approach to promoting a culture of healthy reproductive and sexual life among residents of Barro Alto, focusing on youth.

Design
Anglo American developed and implemented a youth reproductive and sexual health project in Barro Alto in 2007, based on feedback from community consultations regarding issues around the pre-feasibility and construction phases of the mine at Barro Alto. Lacking municipal support for the project and competing for funds with other Anglo American priority investment areas at the time, the project failed to take off.

In 2008, a new round of the company’s Socio-Economic Assessment Toolbox (SEAT) consultations, which incorporates impact assessment into the ongoing management of mining operations consultations showed the situation for youth and sexual/reproductive health had worsened. Taking action, a similar project was designed after Anglo American approached Reprolatina, a sexual and reproductive health NGO focused on the education of youth and adolescents, to design a program for Barro Alto. A needs assessment carried out in 2010 revealed that of all pregnancies reported in Barro Alto, 40 per cent of these were adolescents. The assessment also revealed that the national health and reproductive policy was not being implemented, there was lack of access to contraception, limited contraception options, unavailability of STI tests, lack of educational programs in schools on sexual and reproductive health, and lack of technical capacity among health workers on how to assist adolescents.

Through extensive community and school consultations, Reprolatina developed a model that specifically addressed high rates of teen pregnancy and female empowerment issues. The assessment included a baseline study against which project achievements are measured. Following this assessment, action points and priorities were drawn up targeting health professionals, schools and the community.

In contrast to the earlier manifestation of the project, an agreement between Reprolatina and the municipality was signed, outlining the roles and responsibilities of the NGO and the public sector in delivering the project to the community, including training of and participation by health workers, education and social welfare professionals working at the municipality. The Memorandum of Understanding constitutes an important component of the sustainability of the program and its results in Barro Alto, and was a missing component in the earlier manifestation of the project.

The project design is integrated within prevailing public policies related to health and social welfare. The design process was intentional in this respect, in order to ensure that the project could be easily subsumed under the municipality or another level of government, because of the compatibility with broader public health objectives. On a micro level, the project is also highly responsive to community concerns, using feedback from awareness and education sessions activities by the project, as well as through regular community fora which are attended by Reprolatina as well as Anglo American’s community relations team.

The project is implemented by Reprolatina in coordination with Anglo American and the municipality, and involves joint planning of activities, participation in field activities, funding, follow-up and quarterly monitoring by the Anglo American community relations team.

On the part of the public sector, the main actions implemented by health professionals are the creation of a schedule specific to visits from adolescents, offering of confidential health care consultations to adolescents, development of informative brochures to be placed in waiting areas in collaborating health facilities, free access to contraception, development of posters detailing the scope of services available to adolescents regarding sexual and reproductive health, and participation of health workers in trainings.

In schools, trainings are carried out in classes, posters have been developed with FAQs and placed in different parts of the schools, training of students as volunteers and peer educators, and placement of boxes in the school where students could submit anonymous questions regarding sexual and reproductive health.

Community members and in particular women are trained as peer educators on topics of sexual and reproductive health and carry out house visits, public information sessions, and distribution and demonstration of the use of condoms and other health materials.
Partnerships

Reprolatina was recommended to Anglo American as a Brazilian NGO with a strong track record of designing and implementing adolescent sexual and reproductive health programs. While there is no fixed method for identification of partners by Anglo American, the company’s SEAT methodology, which incorporates impact assessment into the ongoing management of mining operations, sets criteria for partnerships and stresses the importance of engaging in partnerships throughout the assessment document.

Recommendations of partner organizations with the required specific expertise through reputable sources and contacts is an approach tested by the Brazil operations – earlier socio-economic studies involved collaboration with CARE Brazil, setting the stage for an entrepreneurship and education program also for Barro Alto. This was made possible when CARE International and corporate Anglo American signed a global MOU. Another essential partnership in Barro Alto is the NGO Agenda Publica, whose work is on building institutional, and public sector capacity, in order to strategically plan the development of the municipality.

Integration and sustainability

As the construction phase of Barro Alto eases off into production, the focus of the project will be shifting from Barro Alto to Niquelandia, where Anglo American has another operation and where these development projects could also provide benefits to the local community and where the local municipal government has decided to support such interventions.

While the project will continue in Barro Alto for the foreseeable future, the sustainability of the project will be highly dependent on the buy-in of the municipal government, which is elected every four years. Should the next municipal government choose not to support the project in the same standards as in the past two years, the project will not achieve many of its planned outcomes. Anglo American and Reprolatina are currently engaging with the newly-elected municipal government to determine the future of the project over the coming four years.

Outcomes and impact

By 2012, the number of adolescent pregnancies registered for ante-natal care in Barro Alto had decreased to 16 per cent of the baseline in 2010, and the use of contraceptives among adolescents had sharply increased. The cumulative number of participants in the educational activities of the program reached over 17,500 by the end of 2012.

During the same time period, approximately 13,319 people had benefited from education activities and campaigns. Trainings were delivered to 238 health professionals, teenagers, and women from the community on various subjects including health consultations for adolescents, peer education, implementation of the Daily Attendance Map (MDA), data entry and research. Several educational workshops were also held on the promotion of sexual and reproductive health of women in the community.

Monthly activities awareness activities reached 13,019 people including health campaigns on sexual and reproductive health, breast self-examinations, prevention of alcohol and drug use and maternal mortality; school visits; and distribution of information, education, and communication (IEC) materials and condoms.

Lessons learned

• While Teck has informally indicated that it will likely continue to fund the project even after its current funding arrangement expires, having diversified funding sources mitigates the risk of losing Teck’s support.

• Active participation in the project beyond funding has promoted positive visibility for Teck among community members, generating buy-in for the project and for Teck’s activities. Additionally, involving the youth leaders in Teck’s community outreach campaigns has enabled employees who would ordinarily have no interface with the project to do so. This means that Teck’s sustainability aims are not only witnessed and felt by those working in the community and sustainability departments but by employees across the whole company.
Specialized health interventions for marginalized and remote communities

These projects target wellness and lifestyle-related non-communicable diseases such as diabetes, mental illness and substance abuse in indigenous and remote communities. They are typically implemented in partnership with civil society organizations and local government. Such interventions may comprise either large, one-time projects with specific objectives designed to meet an identified gap in health service provision, or an ongoing relationship to address a systemic health issue.

Teck John Baker Youth Leaders Program

**Program rationale**
The Youth Leaders program was formed in 2008, in the predominantly Inupiat Eskimo school district of the Northwest Arctic Borough, in response to the high rate of youth suicides affecting the area (seven to nine completed suicides annually). The project is based on the premise that youth are more likely to confide in their peers about issues of concern to them than anyone else. In that regard, initially, approximately 75 high school students from 11 schools were trained to detect when peers needed help, how to contact their peers and how to access help for those who need it. No completed suicides have been reported since the 2010–11 school year and the project has expanded to include middle school students and over 100 students are trained every year.

In 2011, the project risked closure due to lack of sufficient funding. On hearing about the success of the programme, Teck decided to get involved and pledged US$1.25 million over five years in funding. The project name was subsequently changed to Teck John Baker Youth Leaders Program, after the local Inupiat Iditarod champion and supporter of the program.

**Design**
Teck was not involved in the initial design process and the project elements have largely remained the same since Teck’s entry into the project. The project is run primarily by the youth leaders with activities overseen by a Teck-funded project co-ordinator. There is also a high level of involvement from the teachers and parents.

The youth leaders are selected by their peers – each student fills out a form indicating who among them they would turn to for advice if they had a problem. Those students selected by the majority are appointed youth leaders and a team captain assigned from among them. Each school has approximately three to seven youth leaders.

The youth leaders are trained in a variety of topics, including service leadership theory, consensus building, motivation, social marketing, and organization and management skills. Some of the activities they have led and sponsored include sports tournaments, cultural presentations, public speaking engagements, academic tutoring, career exploration activities, social skills presentations, social networking, and fund-raising and awareness walks.
The project is funded primarily by Teck but it also receives contributions and grants from the Department of Education, the school district and other private companies. The youth leaders also often engage in fund-raising activities. Teck’s financial support goes towards travel expenses, trainings, workshops and retreats.

The youth leaders are also involved in Teck’s community outreach programs, including giving community tours to non-indigenous Teck employees, venue set-up for community meetings and babysitting for parents wishing to attend community meetings. This arrangement promotes interface between Teck employees and the project beyond the Teck sustainability team.

Partnerships
The project has benefited from local partnerships that have provided some funding and in-kind support, including the Northwest Arctic Borough, which has contributed funds for a variety of activities and events, and Maniilaq Association’s Project Life, which sponsors conferences and retreats. Other partners include the State of Alaska Division of Behavioural Health, State of Alaska Division of Juvenile Justice, Alaska State Troopers, United States Army, Alaska Native Tribal Health Consortium, Alaska Youth and Family Network, Future Educators of Alaska and the Association of Alaska School Boards. These partnerships are separate from Teck’s arrangement with the project.

Integration and sustainability
The high level of local support and involvement has enabled a large cross-section of the community to participate in the project, thereby generating buy-in and promoting sustainability of the project’s aims. Additionally, while Teck has informally indicated that it would likely continue to support the project beyond its current five-year funding arrangement, the project has identified alternative funding sources due to its numerous partnerships.

Outcomes and impact
The most significant impact realized has been the total elimination of youth suicides from as high as seven to nine annually.

One element of the program involves youth leaders accompanying perpetually late and/or absent students to school, which has led to an increase in punctuality and attendance rates, especially among the middle school cohort. Incidents of bullying among the student body have also been reduced, potentially a result of the Youth Leaders program targeting the importance of positive social behaviours among students.

Notably, the Youth Leaders program is recognized as one of the most successful youth programs in the state of Alaska with support and recognition at the local, state and national level. Youth leaders are often invited to interact with and make presentations to state legislators. The project has been selected to the US Substance Abuse and Mental Health Services Administration’s federal assistance program “Service to Science”, which is expected to assist in having the program be recognized as a national “promising practice” curriculum/program. As the name implies, the program targets and enhances youth leadership skills and develops self-confidence, while targeting peer-related social issues.

Lessons learned
• Buy-in by the municipality in the form of a signed agreement between parties has been crucial in allowing the project to be implemented, and set the stage for the sustainability of the initiative’s achievements in the future. This buy-in is facilitated by the consistent and ongoing advocacy efforts of Anglo American and their partner NGOs Reprolatina and Agenda Publica, on the local public sector to invest in the improvement of local public policies and services.
• The community-centred approach adopted by Anglo American has been central to developing a highly-participatory and beneficial program for the whole community, including the company, residents, government and the local population.
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ICMM members participating in the survey

Anglo American
AngloGold Ashanti
Barrick
BHP Billiton
Codelco
Freeport-McMoRan Copper & Gold
Goldcorp
Inmet
Lonmin
Minerals and Metals Group (MMG)
Newmont
Rio Tinto
Teck
Vale

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The development of the report was overseen by an ICMM working group chaired by Frank Fox (Anglo American). ICMM is grateful to the members of the working group for their engagement on iterative drafts that resulted in the current document.

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Claire White and Aidan Davy, supported by Eva Kirch led the process to develop this report on behalf of the ICMM Secretariat.

Consultant team

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