

# Overburdened

## Understanding the Impacts of Mineral Extraction on Women's Health in Mining Communities

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*L'impact environnemental et social de l'industrie minière sur les femmes et leur famille peut être dévastateur. Cet article examine l'intérêt grandissant des recherches sur cette industrie en Amérique du Nord.*

For communities related to mining operations, mining affects their health in many ways, from environmental exposures to air, water, soil, and noise pollution, to disasters and pit closures. The "community" may include residents next to the mine, but it may be enlarged by the transport of pollutants over long distances, or by the migration and long distance commuting of workers. Women, as members of their communities, are at the forefront of knowing how mining projects affect the health of the environment, families and communities. "Often they are also agents who address, contemplate and cope with the social and environmental impacts of mineral resource development" (Yukon Conservation Society 4). Yet, little research has been undertaken on the impact of mining on community health, or on ways to enhance women's capacity to protect their families and communities.

In Canada, mining has had a significant impact on our communities. The residents of Thetford Mines in Quebec have an excess of mortality from respiratory disease (Koike). Children in open cast coal mine communities have more respiratory problems than other children (Stephens and Ahern).<sup>1</sup> Residents of Port Colborne, Ontario are dealing with dangerously elevated levels of nickel oxide (Environmental Defense Canada). Trail, British Columbia has formed a task force to make recom-

mendations to deal with lead contamination of soils and food pathways (Environmental Mining Coun-

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cil of British Columbia). Living near copper-lead-zinc smelters has been shown in a number of studies to have adverse effects on health, including excess mortality and lung and stomach cancers (Hartwell and Handy). In Sudbury, arsenic at levels of 100-155 ppm have been found in the soils (*Sudbury Soils Study*). Further, mental health is affected by the boom and bust cycle of mining, the danger, and shift work. And, violence against women is frequently higher in mining communities as is prostitution and drug use (Weitzner).

Although mining is known to be a dangerous occupation that often inflicts serious injury, industrial disease, and death on its workers, less is known about the impacts of mining, milling and smelting on the communities in which they are located. A

few Canadian studies, have pointed out some the relationships (i.e., Jacobsen and Ellis; Archibald and Crnkovich; Mergler). However, as the Yukon Conversation Society points out:

While technical and economic issues are carefully reviewed in the mine planning and environmental assessment stages of a (mining) project, how the project will affect individual, family, and community health is seldom scrutinized.... (4)

A recent study undertaken for the mining industry's Mines, Minerals and Sustainable Development (MMSD) project reviewed available scientific literature on worker and community health impacts related to mining internationally and concluded that:

Mining remains one of the most hazardous occupations in the world, both in terms of short-term injuries and fatalities, but also due to long-term impacts such as cancers, respiratory conditions such as silicosis, asbestosis and pneumoconiosis. (Stephens and Adhern 7).

The study also indicates that by sector, the most studied metals are asbestos, coal, uranium and gold although there were also some on copper, zinc, quartz and sand. In many cases, the types of metals mined and their associated health effects are complex and inter-related. Yet, compared to the number of studies on occupational exposures, the number of articles that focused on non-occupation-

ally related exposed populations was limited.

Community health impacts of the mining and minerals sector are less well defined than those faced by workers. There are problems not only in defining community, but also in conducting the kinds of epidemiological studies that might provide evidence of links between mining activities and health outcomes.... Only 80 studies covered aspects of community health around mines. (Stephens and Adhern).

A recent study by the Yukon Conservation Society specifically examines the problem from the perspective of the affected women and found that the women (and other citizens) in mining communities know very little about epidemiological or toxicological impacts of the mines/smelters in their communities; "even if the information exists, it is located in language and forms that they cannot use. Compounding the problem is the fear and feelings of powerlessness that the knowledge may bring with it" (41). Their study recommends that:

Because women generally do not approach issues—especially those related to mining—with a sense of entitlement and confidence, any strategy for action towards positive social change will often coincide with a journey into examining what will help a woman achieve the personal empowerment or sense of urgency to come forward and "take up space" to speak her truth. (40)

Recognizing the urgent need for more study in this area, MiningWatch Canada is undertaking a study on Women, Mining and Health, entitled *Overburdened*. The objective of the study is to heal and protect women and the communities they live in from the adverse health impacts of

mineral extraction by enhancing the level of knowledge about the impact of mineral extraction on human health (particularly that of women) as well as developing the capacity of women in mining communities to protect themselves and their families from these effects.

MiningWatch Canada is a coalition of labour, Aboriginal, environmental, social justice, and development organizations from across Canada with a mandate to support communities affected by mining in Canada, and affected by Canadian mining companies around the world. Its agenda is a response to the threats to public health, water and air quality, fish and wildlife habitat and community interests posed by irresponsible mineral policies and practices.

MiningWatch Canada works on many levels: support for communities affected by mining through research, technical assistance and accompaniment; research and analysis of specific mining companies, corporate trends and government regulation; advocacy with other civil society actors for change.

We hope that the "Overburdened" project will stimulate academic study and the resources to carry it out in the crucial area of mining and community health.

The "Overburdened" project began in September 2003. It incorporates the eco-system approach developed by Dr. Donna Mergler (2000) and uses a participatory action research model at the community level. Although a Canadian community will be the pilot study, the literature review will include Canadian and international English-language sources.

The project has a number of aspects:

- a literature review of books, articles and web-based information about the relationship of mineral extraction (mining, milling and smelting) on the health of people living near, and/or working in, mines and smelters. This will include references to

the health effects of specific metals and toxins related to mining, references to impacts on the determinants of women's health (such as AIDS, low-birth weight babies, malaria, violence, and prostitution), references to studies on women and mining in general, as well as references to community organization to deal with these issues;

- the identification of those scientists, academics, and technical experts who have recognized knowledge and interest in this field, and creation of a Technical Advisory Team for the project;

- Using a participatory action research approach, analysis of the impacts of mining/smelting on women's health in particular communities while building women's capacity to protect themselves; and

- development of a series of detailed scientific research proposals for components of the project.

MiningWatch hopes the project will lead to increased interest in looking at mineral extraction impacts on health, as well as enhance the capacity of women in mining communities to protect themselves and their families. As of February 2004, the draft literature review is completed and is in the process of peer review. The community project is about to begin. We look forward to releasing the results from this study in the fall of 2004. In the meantime, we are seeking resources to continue and expand this important work.

*Joan Newman Kuyek has been one of Canada's leading community organizers since the 1960s. The author of Fighting for Hope: Organizing to Realize Our Dreams, Joan has worked with many different groups and issues from welfare recipients and tenants, to mining activists in Africa. In 1999, she was hired to set up Mining Watch Canada and build a strong coalition of environmental, social justice, labour*

and Indigenous organization to hold the Canadian mining industry to account..

'Stephens and Ahern's literature review found 20 studies with reference to dust effects from open cast mines.

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## IRENE GOLAS

### She lost

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| the baby,<br>they said.   | stray dog<br>from the pound.  |
| like it was<br>a glove<br>lost<br>on a bus,<br>a two-dollar<br>bet  | she lost<br>the baby,<br>they said.   |
| at the track,<br>a coin<br>in a defective<br>candy machine.   | as if<br>she misread<br>the owner's manual,<br>miscalculated<br>the formula,<br>botched<br>the process<br>of gestation. |
| she lost<br>the baby,<br>they said.   | she lost<br>the baby,<br>they said.   |
| as if<br>it could be<br>found again,<br>like a<br>misplaced<br>set of keys,<br>replaced<br>like a<br>mislaid pencil,<br>retrieved<br>like a | as if<br>her heart<br>was not<br>a ragged<br>wound<br>still beating<br>without<br>reason.                               |

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